Seco

uemme TOOLS and EQUIPMENT

Catalogo e guida tecnica

Fresatura 2025.2



Seco è una realtà multinazionale operante nel settore metalmeccanico, che realizza utensili, tecnologie e soluzioni per le sfide produttive più avanzate.

La sostenibilità, la produttività, l'innovazione tecnologica, le competenze e la passione per i clienti sono il cuore pulsante dell'azienda.

Sviluppiamo e forniamo tecnologie, processi e supporto su cui potrai sempre contare per massimizzare la tua produttività e la redditività con uno sguardo al futuro. L'elemento umano per noi di Seco è fondamentale. Lavoriamo a stretto contatto coi clienti per comprendere le loro necessità.

Intraprendiamo collaborazioni con università e associazioni di settore per monitorare tendenze e sviluppare soluzioni che soddisfino le esigenze di segmenti specifici. Collaboriamo strettamente coi fornitori di tecnologie complementari per garantire che i produttori abbiano accesso a soluzioni completamente ottimizzate.

Made for Makers

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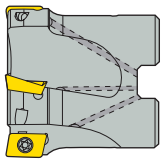
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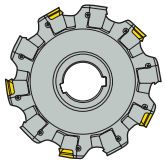
Tipo di attacco

Tipo - Attacco (a manicotto)



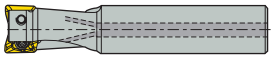
Es.: R220.69-0050-12-5AN

Tipo - Foro di centraggio



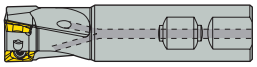
Es.: 335.25-160.15.40-7N

Tipo 0 – Cilindrico



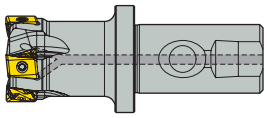
Es.: R217.69-1616.**0**-10-2A

Tipo 3 – Mandrini Weldon a norma ISO 5414 DIN 1835



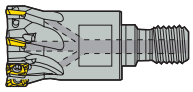
Es.: R217.69-2525.**3**-12-3AN

Tipo 3S – Mandrini Seco/Weldon® a norma ISO 5414 DIN 1835



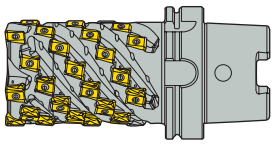
Es.: R217.69-2532.**3S**-12-4AN

Tipo RE - Combimaster



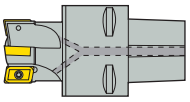
Es.: R217.69-1225.**RE**-12-3AN

Tipo HSK



Es.: R217.94-**HSK**100A-080-104-12.5SA

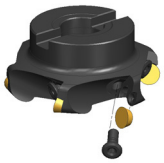
Tipo Cx - Seco-Capto™



Es.: **C5**-R217.69-054-10-5A

Sistema di bloccaggio inserto

Bloccaggio mediante vite a testa tonda -S



Gli inserti sono bloccati da una vite inclinata che spinge l'inserto contro la spalla posteriore.

Bloccaggio mediante cuneo -W o -M



Gli inserti sono bloccati da un cuneo azionato da una vite che serra l'inserto alla sede. (L'esempio mostra una fresa a moduli).

Bloccaggio mediante vite di bloccaggio centrale -S



Gli inserti, dotati di foro centrale, sono fissati contro la spalla posteriore da una vite.

Bloccaggio con azione elastica



Gli inserti vengono bloccati tramite l'azione elastica della sede di alloggiamento

Square T4



Gli inserti, dotati di foro centrale, sono fissati contro la spalla posteriore da una vite.

Chiave di codifica inserti

S	E	M	X	12	04	AF	T	N	-	ME12
1	2	3	4	5	6	7	8	9		10

1. Forma inserto

A 

B 

C 

D 

E 

H 

K 

L 

M 

O 

P 

R 

S 

T 

V 

W 

X=Profili speciali

Z=Profili speciali

2. Spoglia laterale inserto

A 

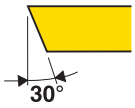
B 

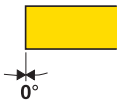
C 

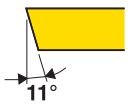
D 

E 

F 

G 

N 

P 

O = Speciale

Chiave di codifica inserti

3. Tolleranze

Classe di tolleranza	Tolleranze: +/- mm/pollici				Per IC, dimensione in mm/poll.											
	S mm	IC mm	S inch	IC inch	0.125 3,175*	3,969	4,064	0.187 4,760	0.250 6,350	0.375 9,525	0.500 12,700	0.625 15,875	0.750 19,050	20,000	1.000 25,400	1.250 31,750	1.500 38,100
A	0,025	0,025	0.0010	0.0010	•			•	•	•	•	•	•	•	•	•	•
C	0,025	0,025	0.0010	0.0010	•	•	•	•	•	•	•	•	•	•	•	•	•
E	0,025	0,025	0.0010	0.0010	•			•	•	•	•	•	•	•	•	•	•
F	0,025	0,013	0.0010	0.0005	•			•	•	•	•	•	•	•	•	•	•
G	0,050*	0,025	0.0020	0.0010	•			•	•								
G	0,130	0,025	0.0051	0.0010						•	•	•	•	•	•	•	•
H	0,025	0,013	0.0010	0.0005	•			•	•	•	•	•	•	•	•	•	•
J	0,025	0,050	0.0010	0.0020	•			•	•	•							
J	0,025	0,080	0.0010	0.0031							•						
J	0,025	0,100	0.0010	0.0039								•	•	•			
J	0,025	0,130	0.0010	0.0051											•		
J	0,025	0,150	0.0010	0.0059												•	•
K	0,025	0,050	0.0010	0.0020	•			•	•	•							
K	0,025	0,080	0.0010	0.0031							•						
K	0,025	0,100	0.0010	0.0039								•	•	•			
K	0,025	0,130	0.0010	0.0051											•		
K	0,025	0,150	0.0010	0.0059												•	•
M	0,050*	0,050	0.0020	0.0020	•			•	•								
M	0,130	0,050	0.0051	0.0020						•							
M	0,130	0,080	0.0051	0.0031							•						
M	0,130	0,100	0.0051	0.0039								•	•	•			
M	0,130	0,130	0.0051	0.0051											•		
M	0,130	0,150	0.0051	0.0059												•	•
U	0,050*	0,080	0.0020	0.0031	•			•	•								
U	0,130	0,080	0.0051	0.0031						•							
U	0,130	0,130	0.0051	0.0051							•						
U	0,130	0,180	0.0051	0.0071								•	•	•			
U	0,130	0,250	0.0051	0.0098											•	•	•

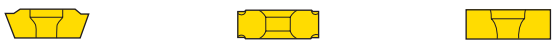
* non ISO

4. Tipo

A B G M N R



T U W



X=Profili speciali

Z=Profili speciali

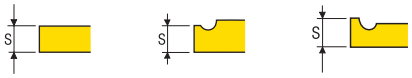
5. Lunghezza del tagliente

A, B, K C, D, E, M, V H, O, P L R S T W



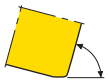
Chiave di codifica inserti

6. Spessore



01 = 1,59 mm	01 = 0.0626 Pollici	T3 = 3,97 mm	T3 = 0.1563 Pollici	07 = 7,94 mm	07 = 0.3126 Pollici
T1 = 1,98 mm	T1 = 0.0780 Pollici	04 = 4,76 mm	04 = 0.1874 Pollici	08 = 8,00 mm	08 = 0.3150 Pollici
02 = 2,38 mm	02 = 0.0937 Pollici	05 = 5,56 mm	05 = 0.2189 Pollici	09 = 9,52 mm	09 = 0.3748 Pollici
03 = 3,18 mm	03 = 0.1252 Pollici	06 = 6,35 mm	06 = 0.2500 Pollici		

7. Inserti con smusso/raggio di punta

1a lettera		2a lettera		raggio di punta		
	A = 45° D = 60° E = 75° F = 85° P = 90° Z = Speciale		A = 45° B = 5° C = 7° D = 15° E = 20° F = 25° G = 30° N = 0° P = 11° Z = Speciale		M0 = inserti tondi 005 = 0,05 mm 01 = 0,1 mm 02 = 0,2 mm 04 = 0,4 mm 08 = 0,8 mm 12 = 1,2 mm ecc.	M0 = inserti tondi 005 = 0.0020 Pollici 01 = 0.0039 Pollici 02 = 0.0079 Pollici 04 = 0.0157 Pollici 08 = 0.0315 Pollici 12 = 0.0472 Pollici ecc.

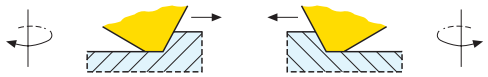
8. Forma del tagliente

F E T S



9. Direzione di taglio

R L N



Neutro (rotazione destra e sinistra)

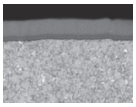
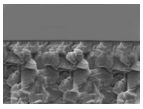
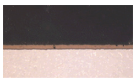
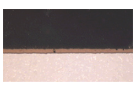
10. Designazioni interne

Condizioni di lavoro

E = Facili
ME=Medie-facili
M = Medie
MD=Medie-difficili
D = Difficili

Qualità inserto

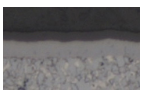
Qualità rivestite in PVD

MH1051			Qualità di resistenza all'usura estremamente elevata per la fresatura di acciai temprati. Anche ideale per le operazioni di finitura con ghisa. (Ti,Si)N – (Ti,Al)N
F15M			Qualità estremamente dura con elevata resistenza all'usura per fresatura di alluminio e leghe non ferrose. Qualità eccezionale, in combinazione con inserti con taglienti rinforzati, è ideale per la lavorazione di acciai temprati. (Ti, Al) N – TiN
MK2050			Qualità rivestita in PVD per ghisa, integrità del tagliente migliorata. Prima scelta per lavorazione di tutte le ghise. Eccellente per fresatura con e senza refrigerante. (Ti,Si)N/(Ti,Al)N
F30M			Qualità di base per testine Minimaster e inserti di filettatura. È inoltre idonea per la lavorazione di acciaio inossidabile, acciaio temprato e superleghe. (Ti, Al) N – TiN
F32M			Qualità universale per le testine R335.14, con un'eccellente combinazione di resistenza e tenacità. La qualità F32M ha un ampio campo applicativo ed è adatta a tutti i materiali. (Ti, Al) N – TiN
MP3000			Qualità altamente resistente all'usura per la fresatura dell'acciaio. (Ti;Al)N
MS2050			Qualità rivestita in PVD, prima scelta per lavorazione di leghe in titanio. Può anche essere utilizzata come qualità complementare per fresatura di acciai inossidabili, quando è richiesta una maggiore tenacità. (Ti;Al) N – NbN
F40M			Qualità rivestita in PVD per operazioni di sgrossatura. Prima scelta per fresatura con bassi avanzamenti e/o basse velocità di taglio. Eccellente in operazioni di fresatura con rischio di vibrazioni e in lavorazioni con utilizzo di refrigerante. Consigliata per la lavorazione di superleghe. (Ti, Al) N – TiN
MP2050			Qualità rivestita in PVD per applicazioni in condizioni gravose e con temperature elevate su acciai inossidabili martensitici ed austenitici; è possibile effettuare lavorazioni con e senza refrigerante. Alternativa per lavorazione di superleghe in condizioni instabili. (Ti,Si)N/(Ti,Al)N
MP2051			Qualità rivestita PVD con elevata resistenza al calore e buona durezza, per sgrossatura su acciaio altamente legato, acciaio indurito per precipitazione e acciaio inossidabile martensitico (Ti,Si)N/(Ti,Al)N

Per ulteriori informazioni, visitare il sito Web all'indirizzo www.secotools.com

Qualità inserto

Qualità rivestite in CVD

MK1501			Qualità con rivestimento CVD basata sulla tecnologia Duratomic™. Qualità ad alte prestazioni per fresatura di ghisa e ghisa nodulare, con o senza refrigerante. Ti (C, N) – Al_2O_3
MP1501			Qualità con rivestimento CVD basata sulla tecnologia Duratomic™. Qualità per lavorazioni ad elevate prestazioni e per massimizzare la produttività su acciaio in condizioni stabili, e per la fresatura di acciai temprati. Qualità ottima anche su ghisa grigia e ghisa sferoidale. Ti (C, N) – Al_2O_3
MP2501			Qualità con rivestimento CVD basata sulla tecnologia Duratomic™. Qualità ad alta versatilità per gestire variazioni nella produttività, parametri di taglio e requisiti dei materiali da lavorare in acciaio e acciaio inossidabile Ti (C, N) – Al_2O_3
MS2500			Qualità ottimizzata per lavorazione di superleghe; adatta anche per sgrossatura di acciai per utensili. Ti (C, N) – Al_2O_3
MP3501			Qualità con rivestimento CVD basata sulla tecnologia Duratomic™. Scelta di base per condizioni instabili per acciaio e ghisa, scelta alternativa per la lavorazione di acciai inossidabili. Ti (C, N) – Al_2O_3
MM4500			Qualità estremamente tenace per acciai inossidabili duplex. Può essere utilizzata anche per lavorare diversi tipi di materiali in condizioni instabili. Ti(C, N)-Al_2O_3

Qualità non rivestite

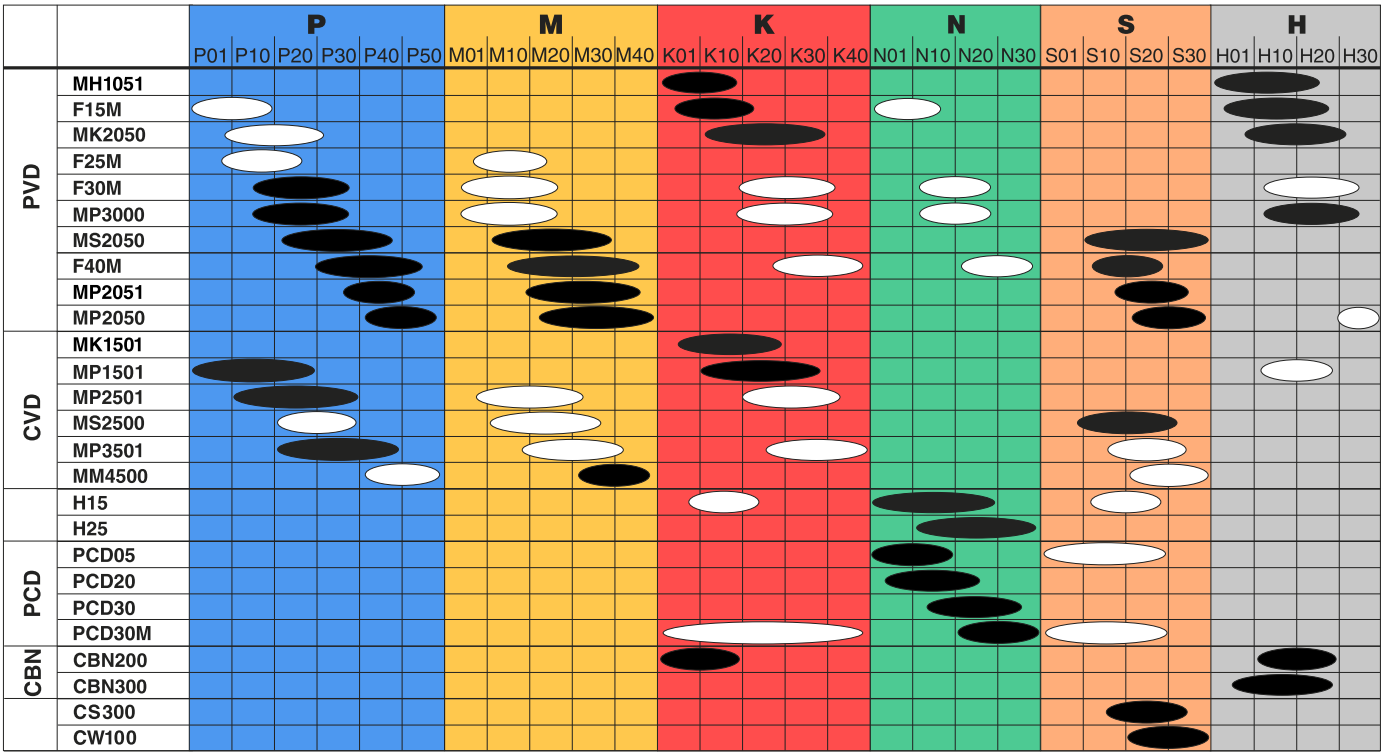
H15			Qualità estremamente dura e resistente all'usura per la fresatura di alluminio.
H25			Qualità micrograna estremamente tenace per la fresatura di superleghe ed alluminio.

Per ulteriori informazioni, visitare il sito Web all'indirizzo www.secotools.com

Qualità inserto

Il metallo duro è sostanzialmente costituito da una lega di carburo di tungsteno (WC) e cobalto (Co). Per migliorarne le proprietà di durezza a caldo, resistenza alla deformazione e resistenza all'usura possono essere aggiunti altri elementi quali: carburo di tantalio (TaC), carburo di titanio (TiC) e carburo di niobio (NbC). Il carburo di tungsteno è l'elemento predominante ed è quello che conferisce la durezza. Il cobalto ha invece la funzione di legante ed influenza la tenacità. I carburi cubici sono aggiunti per aumentare proprietà quali resistenza al calore, resistenza alla deformazione plastica e resistenza chimica.

La maggior parte delle qualità moderne sono rivestite con le tecniche CVD (Chemical Vapour Deposition) o PVD (Physical Vapour Deposition).
Il rivestimento migliora la resistenza all'usura.
Il rivestimento CVD ha uno spessore relativamente elevato ed è raccomandato per le lavorazioni di sgrossatura dove è necessario impiegare un inserto resistente all'usura.
Le qualità rivestite PVD sono consigliate per le applicazioni con bassi avanzamenti, dove è necessario disporre di un inserto affilato ma con tenacità elevata. Sono inoltre adatte e per operazioni con velocità di taglio medio-bassa.

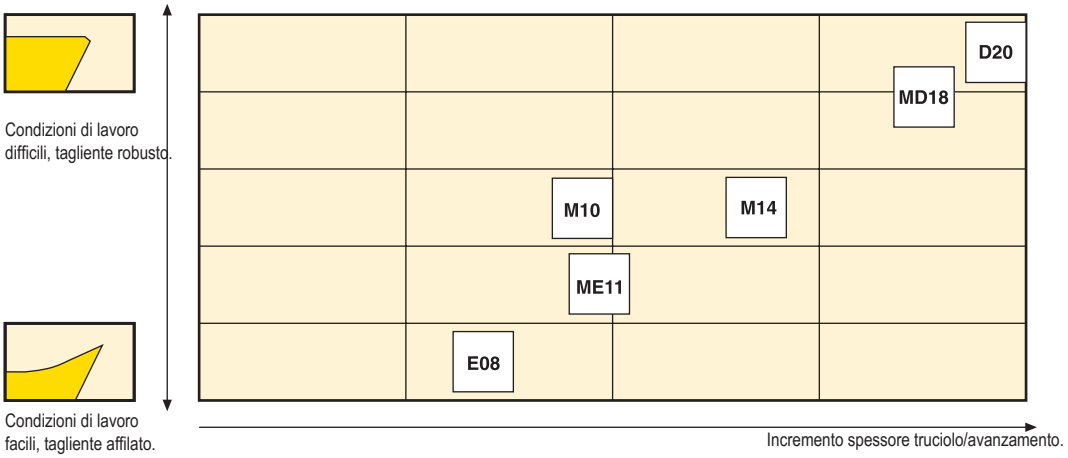


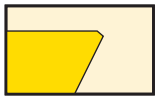
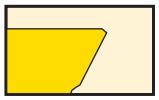
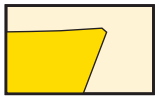
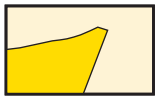
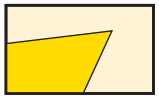
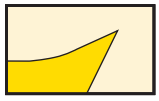
H15 e H25 = non rivestita
CS300 e CW100 = ceramica

Le aree nere ovali del grafico indicano le principali aree applicative ISO di un inserto.
Le aree bianche ovali del grafico indicano le aree applicative ISO complementari di un inserto.

Per TGP45 utilizzare l'area di applicazione ISO per MP2501
Per CP500 e CP600 utilizzare l'area di applicazione ISO rispettivamente per F30M e F40M

Geometrie inserto – Sistema di designazione



	..AFTN-D20	Tagliente con fascetta di rinforzo negativa estremamente protetta
	..AFTN-MD18	Tagliente negativo con fascetta di rinforzo
	..AFTN-M14	Tagliente positivo con fascetta di rinforzo
	..AFTN-ME11	Tagliente estremamente positivo con fascetta di rinforzo
	..AFN-M10	Tagliente positivo ed affilato
	..AFN-E08	Tagliente estremamente positivo ed estremamente affilato

Attributo ISO

Attributo ISO	Spiegazione
APMXE	Profondità di taglio massima in direzione assiale
APMXS	Profondità di taglio massima in direzione radiale
AZ	Profondità massima penetrazione
BD	Diametro corpo
BHTA	Semi-angolo conicità corpo
BS	Lunghezza tratto raschiante
C	Profondità chiavetta
CBTHN	Spessore anello di trascinamento
CCER	Raggio tagliente curvo
CDX	Profondità di taglio massima
CF	Smusso a punti
CHW	Larghezza smusso frontale
Cmax	Diametro massimo del foro in interpolazione elicoidale
Cmin	Diametro minimo del foro in interpolazione elicoidale
CPNDIA	Diametro spina di connessione
CTMS	Connessione lato macchina
CW	Larghezza di taglio
CWN	Larghezza di taglio minima
CWX	Larghezza di taglio massima
DC	Diametro
DCB	Diametro centraggio
DCB1	Diametro centraggio 1
DCSFMS	Diametro superficie di contatto lato macchina
DCSFWS	Diametro superficie di contatto lato utensile
DCX	Diametro di taglio massimo
DMM	Diametro stelo
FDESU	Capacità di avanzamento in direzione assiale
FDP	Direzione di avanzamento primaria
FDSSU	Capacità di avanzamento in direzione radiale
GAMF	Angolo di spoglia radiale
GAMO	Angolo di spoglia superiore
GAMP	Angolo di spoglia assiale
HC	Altezza effettiva filettatura
IC	Diametro del cerchio inscritto
INSD	Diametro inserto
INSL	Lunghezza dell'inserto
KAPRE	Angolo di attacco assiale
KAPRS	Angolo di attacco radiale
KCH	Angolo smusso frontale
KWW	Dimensione chiave a brugola
L	Lunghezza del tagliente
LB	Lunghezza corpo
LE	Lunghezza effettiva del tagliente
LF	Lunghezza funzionale
LS	Lunghezza dello stelo
LUX	Lunghezza utile massima
OAL	Lunghezza totale
PDX	Distanza profilo ex
PNA	Angolo profilo incluso
RE	Raggio di punta
RP	Raggio di programmazione
RMPX	Massimo angolo di rampa
RPMX	Massima velocità di rotazione
S	Spessore inserto
S1	Spessore 1 inserto
UTCN	Sezione non asportata
TDZ	Dimensione diametro filettatura
THUB	Spessore del disco
TTL	Lunghezza placchetta
W1	Larghezza inserto
ZEFP	Conteggio periferico effettivo del tagliente
ZNP	Conteggio inserti montati periferici
SA	Angolo sfera
TACH	Semi-angolo di conicità
DC1	Diametro 1
LPR	Lunghezza sporgenza
FHA	Angolo dell'elica
PL	Lunghezza di punta
SIG	Angolo di punta
BEC	Angolo smusso in tiro
DN	Diametro stelo
RA	Angolo di scarico

Chiavi di codifica in mm e in pollici

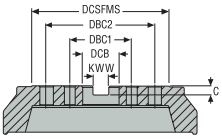
R	217	.	69	-	25	32	.	3S	-	12	-	4	AN
1	2		3		4	5		6		7		8	9

R	217	.	69	-	01.25	.	3S	-	12	-	4	AN
1	2		3		5		6		7		8	9

1.	2.	3
Rotazione destra Cx = Seco-Capto	217 = Attacco a stelo 220 = Attacco a manicotto	Tipo di fresa

4. (Non applicabile per la designazione in pollici)	5.	6.
Diametro stelo	Diametro fresa	Tipo di stelo 0 = cilindrico 3 = Weldon 3S = Seco Weldon RE = Combimaster

7.	8.	9.
Dimensione dell'inserto	Numero di denti effettivo (ZEFP)	A = Adduzione interna refrigerante AD = Materiale anti-vibrante con fori per adduzione liquido refrigerante T = A passo stretto per operazioni di contornatura C = Con moduli regolabili N = Rivestita



Dimensioni in mm

DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

Fresa	Inserto	a_p consigliata		Capacità di lavorare materiali						Raggio di punta (mm)					
				P	M	K	N	S	H						
Double Turbo	ZOMX11	5	10	■	◩	■	□	◩	◩	0,8	■	◩	–	◩	◩
	ZOMX16	7	15	■	◩	■	□	◩	◩	0,8/1,6	□	■	–	–	◩
Turbo	XO..06	3	5	■	■	■	■	■	◩	0,2/0,4/0,8/1,6	■	□	■	■	◩
	XO..10	5	9	■	■	■	■	■	◩	0,2/0,4/0,8/1,2/ 1,6/2,0/2,4/3,1	■	◩	■	■	◩
	XO..12	6	11	■	■	■	■	■	◩	0,2/0,4/0,8/1,2/1,6/ 2,0/2,4/3,1/4,0/ 5,0/6,3	◩	■	■	■	◩
	XOMX16	8	15	■	■	■	■	■	◩	0,2/0,4/0,8/1,2/ 1,6/2,0/2,4/3,1 4,0/5,0/6,3	□	■	■	■	◩
	XO..18	9	17	■	◩	■	■	◩	◩	0,4/0,8/1,2/1,6/2,0/ 2,4/3,1/4,0/5,0/6,3	□	■	■	■	◩
ABEX26	ABEX26	13	20	■	◩	■	-	-	◩	1,6	□	■	■	□	□
Square T4	LO..08	3	7	■	◩	■	□	□	◩	0,4/0,8/1,2/1,6	■	◩	◩	-	□
	LO..12	6	10	■	■	■	■	■	◩	0,4/0,8/1,2/1,6/2,0/ 2,4/3,1/4,0/5,0/6,3	■	◩	◩	-	□
Square 6	XN..04..R	2	3	■	◩	■	-	□	◩	0,4/0,8	■	□	◩	-	◩
	XN..08..R	4	7	■	◩	■	-	□	◩	0,4/0,8/1,2/1,6	□	■	□	-	◩

1a scelta ■

Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

Non consigliata –

Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

Selezione – In mm

Fresa	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti																								Vedere pagina
			10	12	14	16	18	20	22	25	32	40	44	50	52 54	63	66	80	84	100	125	160	200	250	315		
Double Turbo 11	4							2		2	3	4		5		6		7		8	11	12	14				23
										3	4	5		6		8		9		11	13	12	14				
Double Turbo 16	4										2	3		4		5		6		8	10	12	14				
											3	4		5		6		8		10	12	14	16				
Turbo 06	2		2	2	3	3	4	4																			38, 39
				3		4		5		7	8	10															
Turbo 10	2					2	2	2		3	3	4	4	5	5	5	5	8									45
								3		4	5	6		7		8		10		12							
Turbo 12	2							2		2	3	4	4	5	5	6	6	7	7	8	8	10	12	16			53
										3	4	5		7		8		10		12	14						
Turbo 16	2									2	2	3		4	5	5	6	6		8	8	10	12	16			63
											3	4		5/6		6/7		8/9	8	10	12	13					
Turbo 18	2										2	3		4	4	4/5	5	5/6	6	7	8	7/8	7/9	10	12	16	73
											3	4		5		6		8		9	11		12				
ABEX	2															5		5			7	8	10	12	14		84
																6											
Square T4 08	4					2	2	2	3	3	3	4		5	5	6											89
								3		4	5	6		7		9											
Square T4 12	4									2	3	3/4	4	5	5	6	6	7		9	12						96
												5		6		8		10		12							
Square 6 04	6									4	5	5		6		7											105
								3		5	6	7		8/9		9											
Square 6 08	6											3	3	4	4	6	7	5/7	7	6/8	7/11	12	8	10			112
												4	4	5	5	7		9		11	14	16	12				

x — A sedi fisse (x indica il numero di denti)

x — A moduli (x indica il numero di denti)

Scanalatura e contornatura

Ottimizzata per contornatura

Selezione – Pollici

Fresa	Inserto	a_p consigliata		Capacità di lavorare materiali						Raggio di punta (pollici)					
				P	M	K	N	S	H						
Double Turbo	ZOMX11 	0.197	0.394	■	◩	■	□	◩	◩	.031	□	◩	–	◩	◩
	ZOMX16 	0.276	0.590	■	◩	■	□	◩	◩	.031/.063	□	■	–	–	◩
Turbo	XO..06 	0.118	0.197	■	■	■	■	■	◩	.008/.016 .031/.063	■	□	■	■	◩
	XO..10 	0.197	0.354	■	■	■	■	■	◩	016/.031 .047/.063 .079/.094 .122	■	◩	■	■	◩
	XO..12 	0.236	0.433	■	■	■	■	■	◩	.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	◩	■	■	■	◩
	XOMX16 	0.315	0.590	■	■	■	■	■	◩	.016/.031 .047/.063 .079/.095 .122/.157 .197/.248	◩	■	■	■	◩
	XO..18 	0.354	0.669	■	◩	■	■	◩	◩	.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	□	■	■	■	◩
Square T4	LO..08 	0.118	0.276	■	◩	■	□	□	◩	.016/.031 .047/.063	■	◩	◩	-	□
	LO..12 	0.276	0.393	■	■	■	■	■	◩	.079/.031/.047 .063/.094	■	◩	◩	-	□
Square 6	XN..04..R 	0.079	0.118	■	◩	■	-	□	◩	.016/.031	■	□	◩	-	◩
	XN..08..R 	0.157	0.276	■	◩	■	-	□	◩	.016/.031 .047/.063	□	■	□	-	◩

1a scelta ■

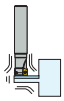
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata –

Capacità di lavorare in condizioni instabili 

Capacità di effettuare lavorazioni di entrata in rampa 

Capacità di effettuare lavorazioni di penetrazione assiale 

Selezione – Pollici

Fresa	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici)/numero di denti															Vedere pagina
			0.375	0.50	0.625	0.75	0.875	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	
Double Turbo 11	4							2 3		4 5	5 6	6 8	7 9	8 11					23
Double Turbo 16	4								2 3	3 4	4 5	5 6	6 8	8 10	10 12				30
Turbo 06	2		2	2 3	3 4	4 5	5	6 7	8	10									38, 39
Turbo 10	2			1	2	2 3	3	3 4	5	4 6	5 7		10						45
Turbo 12	2					2	2	2 3	3/4 4	4 5	4/5 7	4 6	4/7 10	5/8 12					53
Turbo 16	2							2	2 3	3 4	4 5/6	5 6	6 8	8 10	9	12			63
Turbo 18	2							2	2 3	3 4	3/4 5	5 6	4/6 8	5 7/9	8 11	9 12			73
Square T4 08	4				2			3 4	4	4	5								89
Square T4 12	4							2	3	4	5 6	6 8	8	10	12	14			96
Square 6 04	6					3		5	5	6	9								105
Square 6 08	6									3	4 5	4 6/7	5 7/9	6 8/11	7 11	12			112

x — A sedi fisse (x indica il numero di denti)

x — A moduli (x indica il numero di denti)

Scanalatura e contornatura

Ottimizzata per contornatura



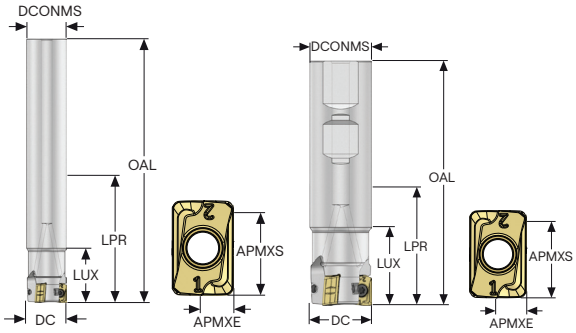
Double Turbo

L'utilizzo della geometria dell'angolo di taglio dell'elica più positiva attualmente sul mercato comporta un minore consumo energetico, un taglio più dolce e una maggiore durata utensile. Oltre alla notevole precisione dell'angolo di 90 gradi e agli inserti bilaterali con 4 taglienti, genera una buona finitura superficiale riducendo al contempo i costi. Gli inserti ZOMX11 hanno una capacità di profondità di taglio fino a 10 mm (0,39"), mentre gli inserti ZOMX16 possono gestire una profondità di taglio fino a 15 mm (0,59"), offrendo versatilità per diverse esigenze di lavorazione.

- Double Turbo 11, inserto tipo ZOMX11, gamma utensili in versione metrica, Ø 20-125 mm (In pollici Ø 1.000-4.000")
- Double Turbo 16, inserti tipo ZOMX16, gamma utensili in versione metrica, Ø 32-200 mm (In pollici Ø 1.250-5.000")

Double Turbo 11 – R217.64-ZO11 – In mm

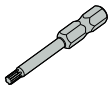




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 28-29
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.64-2020.3-ZO11-2A	10310365	Weldon	20,0	2	10,0	3,4	20,0	65,0	29,0	40,0	90,0	1,7	33,8	39,1	19400	0,2	ZOMX1107
R217.64-2525.3-ZO11-2A	10310366	Weldon	25,0	2	10,0	3,4	25,0	68,0	32,0	44,0	100,0	1,2	43,8	49,1	17400	0,4	ZOMX1107
R217.64-2525.3-ZO11-3A	10310367	Weldon	25,0	3	10,0	3,4	25,0	68,0	32,0	44,0	100,0	1,2	43,8	49,1	17400	0,4	ZOMX1107
R217.64-3232.3-ZO11-4A	10310368	Weldon	32,0	4	10,0	3,4	32,0	74,0	37,0	50,0	110,0	0,8	57,8	63,1	15400	0,7	ZOMX1107
R217.64-1820.0-ZO11-2A	10310355	Cilindrico	20,0	2	10,0	3,4	18,0	–	70,0	70,0	120,0	1,7	33,8	39,1	19400	0,3	ZOMX1107
R217.64-2020.0-ZO11-2A	10310356	Cilindrico	20,0	2	10,0	3,4	20,0	–	30,0	70,0	120,0	1,7	33,8	39,1	19400	0,3	ZOMX1107
R217.64-2525.0-ZO11-2A	10310357	Cilindrico	25,0	2	10,0	3,4	25,0	–	35,0	94,0	150,0	1,2	43,8	49,1	17400	0,6	ZOMX1107
R217.64-2525.0-ZO11-3A	10310358	Cilindrico	25,0	3	10,0	3,4	25,0	–	35,0	94,0	150,0	1,2	43,8	49,1	17400	0,6	ZOMX1107
R217.64-3232.0-ZO11-3A	10310359	Cilindrico	32,0	3	10,0	3,4	32,0	–	40,0	110,0	170,0	0,8	57,8	63,1	15400	1,1	ZOMX1107
R217.64-3232.0-ZO11-4A	10310360	Cilindrico	32,0	4	10,0	3,4	32,0	–	40,0	110,0	170,0	0,8	57,8	63,1	15400	1,0	ZOMX1107

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217/220.64-..	1/4HEX-T10PX50	C03509-T10P

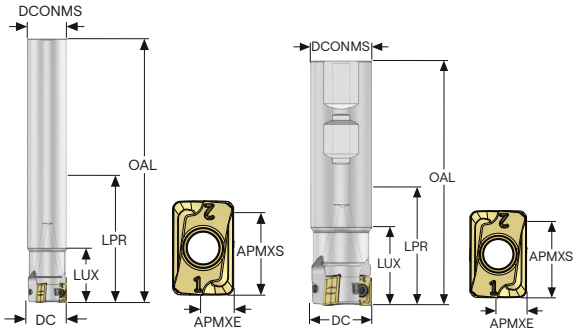
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 11 – R217.64-ZO11 – Pollici

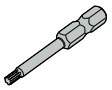




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 28-29
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.64-01.00-3-ZO11-3A	10310384	Weldon	1.000	3	0.394	0.134	1.000	2.795	1.260	1.732	3.937	1,2	1.795	1.965	17200	0.880	ZOMX1107
R217.64-01.25-3-ZO11-4A	10310385	Weldon	1.250	4	0.394	0.134	1.250	3.189	1.457	1.969	4.331	0,8	2.256	2.465	15400	1.540	ZOMX1107
R217.64-01.00-0-ZO11-2A	10310379	Cilindrico	1.000	2	0.394	0.134	1.000	–	1.378	3.701	5.906	1,2	1.795	1.965	17200	1.320	ZOMX1107
R217.64-01.00-0-ZO11-3A	10310380	Cilindrico	1.000	3	0.394	0.134	1.000	–	1.378	3.701	5.906	1,2	1.795	1.965	17200	1.320	ZOMX1107
R217.64-01.25-0-ZO11-4A	10310381	Cilindrico	1.250	4	0.394	0.134	1.250	–	1.575	4.331	6.693	0,8	2.256	2.465	15200	2.200	ZOMX1107

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217/220.64-..	1/4HEX-T10PX50	C03509-T10P

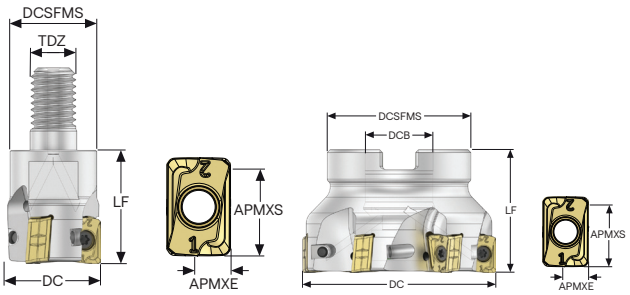
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 11 – R217.64-ZO11 – In mm

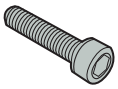
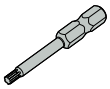




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 28-29
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm		mm	mm		kg	
R220.64-0040-ZO11-4A	10310341	Manicotto	40,0	4	10,0	3,4	16,0	35,0	–	40,0	0,5	73,8	79,1	13600	0,3	ZOMX1107
R220.64-0040-ZO11-5A	10310342	Manicotto	40,0	5	10,0	3,4	16,0	35,0	–	40,0	0,5	73,8	79,1	13600	0,3	ZOMX1107
R220.64-0050-ZO11-5A	10310343	Manicotto	50,0	5	10,0	3,4	22,0	47,0	–	40,0	0,4	93,8	99,1	12300	0,4	ZOMX1107
R220.64-0050-ZO11-6A	10310344	Manicotto	50,0	6	10,0	3,4	22,0	47,0	–	40,0	0,4	93,8	99,1	12300	0,4	ZOMX1107
R220.64-0063-ZO11-6A	10310345	Manicotto	63,0	6	10,0	3,4	22,0	47,0	–	40,0	0,3	119,8	125,1	10900	0,6	ZOMX1107
R220.64-0063-ZO11-6A-27	10310347	Manicotto	63,0	6	10,0	3,4	27,0	56,0	–	40,0	0,3	119,8	125,1	10900	0,6	ZOMX1107
R220.64-0063-ZO11-8A	10310346	Manicotto	63,0	8	10,0	3,4	22,0	47,0	–	40,0	0,3	119,8	125,1	10900	0,6	ZOMX1107
R220.64-0063-ZO11-8A-27	10310348	Manicotto	63,0	8	10,0	3,4	27,0	56,0	–	40,0	0,3	119,8	125,1	10900	0,7	ZOMX1107
R220.64-0080-ZO11-7A	10310349	Manicotto	80,0	7	10,0	3,4	27,0	62,0	–	50,0	0,23	153,8	159,1	9700	1,3	ZOMX1107
R220.64-0080-ZO11-9A	10310350	Manicotto	80,0	9	10,0	3,4	27,0	62,0	–	50,0	0,23	153,8	159,1	9700	1,2	ZOMX1107
R220.64-0100-ZO11-11A	10310352	Manicotto	100,0	11	10,0	3,4	32,0	77,0	–	50,0	0,18	193,8	199,1	8700	2,0	ZOMX1107
R220.64-0100-ZO11-8A	10310351	Manicotto	100,0	8	10,0	3,4	32,0	77,0	–	50,0	0,18	193,8	199,1	8700	2,2	ZOMX1107
R220.64-0125-ZO11-11A	10310353	Manicotto	125,0	11	10,0	3,4	40,0	90,0	–	63,0	0,1	243,8	249,1	7800	3,9	ZOMX1107
R220.64-0125-ZO11-13A	10310354	Manicotto	125,0	13	10,0	3,4	40,0	90,0	–	63,0	0,1	243,8	249,1	7800	3,7	ZOMX1107
R217.64-1020.RE-ZO11-2A	10310361	Combimaster	20,0	2	10,0	3,4	–	19,0	M10	28,0	1,7	33,8	39,1	19400	0,1	ZOMX1107
R217.64-1225.RE-ZO11-2A	10310362	Combimaster	25,0	2	10,0	3,4	–	23,0	M12	30,0	1,2	43,8	49,1	17400	0,2	ZOMX1107
R217.64-1225.RE-ZO11-3A	10310363	Combimaster	25,0	3	10,0	3,4	–	23,0	M12	30,0	1,2	43,8	49,1	17400	0,1	ZOMX1107
R217.64-1632.RE-ZO11-4A	10310364	Combimaster	32,0	4	10,0	3,4	–	30,0	M16	40,0	0,8	57,8	63,1	15400	0,3	ZOMX1107

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.64-..	–	1/4HEX-T10PX50	C03509-T10P
R220.64-0040	TCEI0825	1/4HEX-T10PX50	C03509-T10P
R220.64-0050-0063	220.17-692	1/4HEX-T10PX50	C03509-T10P
R220.64-0063-27	MLC6S12X30	1/4HEX-T10PX50	C03509-T10P
R220.64-0080	MC6S12X35	1/4HEX-T10PX50	C03509-T10P
R220.64-0100	MC6S16X35	1/4HEX-T10PX50	C03509-T10P
R220.64-0125	MC6S20X40	1/4HEX-T10PX50	C03509-T10P

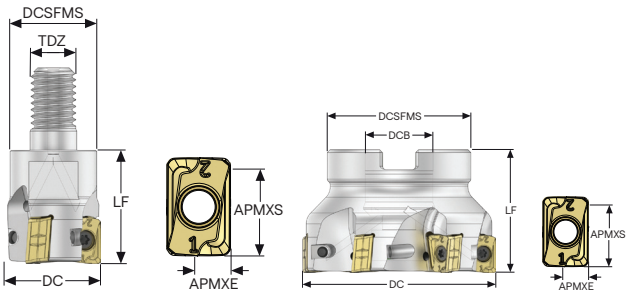
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 11 – R217.64-ZO11 – Pollici

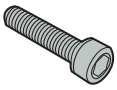
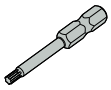




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 28-29
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch		inch	inch		lb	
R220.64-01.50-ZO11-4A	10310369	Manicotto	1.500	4	0.394	0.134	0.750	1.378	–	1.575	0,55	2.756	2.965	14000	0.660	ZOMX1107
R220.64-01.50-ZO11-5A	10310370	Manicotto	1.500	5	0.394	0.134	0.750	1.378	–	1.575	0,55	2.756	2.965	14000	0.660	ZOMX1107
R220.64-02.00-ZO11-5A	10310371	Manicotto	2.000	5	0.394	0.134	0.750	1.850	–	1.575	0,4	3.756	3.965	12200	1.100	ZOMX1107
R220.64-02.00-ZO11-6A	10310372	Manicotto	2.000	6	0.394	0.134	0.750	1.850	–	1.575	0,4	3.756	3.965	12200	1.100	ZOMX1107
R220.64-02.50-ZO11-6A	10310373	Manicotto	2.500	6	0.394	0.134	0.750	1.850	–	1.575	0,3	4.756	4.965	10900	1.100	ZOMX1107
R220.64-02.50-ZO11-8A	10310374	Manicotto	2.500	8	0.394	0.134	0.750	1.850	–	1.575	0,3	4.756	4.965	10900	2.200	ZOMX1107
R220.64-03.00-ZO11-7A	10310375	Manicotto	3.000	7	0.394	0.134	1.000	2.441	–	1.969	0,2	5.756	5.965	9900	2.650	ZOMX1107
R220.64-03.00-ZO11-9A	10310376	Manicotto	3.000	9	0.394	0.134	1.000	2.441	–	1.969	0,2	5.756	5.965	9900	2.650	ZOMX1107
R220.64-04.00-ZO11-11A	10310378	Manicotto	4.000	11	0.394	0.134	1.500	3.031	–	1.969	0,18	7.756	7.965	8700	5.070	ZOMX1107
R220.64-04.00-ZO11-8A	10310377	Manicotto	4.000	8	0.394	0.134	1.500	3.031	–	1.969	0,18	7.756	7.965	8700	4.850	ZOMX1107
R217.64-01.00-12RE-ZO11-3A	10310382	Combimaster	1.000	3	0.394	0.134	–	0.906	M12	1.575	1,2	1.795	1.965	17200	0.440	ZOMX1107
R217.64-01.25-16RE-ZO11-4A	10310383	Combimaster	1.250	4	0.394	0.134	–	1.181	M16	1.575	0,8	2.256	2.465	15400	0.660	ZOMX1107

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.64-..	–	1/4HEX-T10PX50	C03509-T10P
R220.64-01.50	UC6S3/8UNFX1-1/4	1/4HEX-T10PX50	C03509-T10P
R220.64-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T10PX50	C03509-T10P
R220.64-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T10PX50	C03509-T10P
R220.64-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T10PX50	C03509-T10P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.64-11 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	ZOMX110708TR-ME10 F40M	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
P2	ZOMX110708TR-ME10 F40M	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
P3	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,28 0.011
P4	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,28 0.011
P5	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P6	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P7	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P8	ZOMX110708TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,28 0.011
P11	ZOMX110708TR-M12 MP3501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P12	ZOMX110708TR-M12 MP3501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M1	ZOMX110708R-M08 F40M	5,0 *0.20*	0,12 0.0048	0,13 0.0050	0,19 0.0075
M2	ZOMX110708R-M08 F40M	5,0 *0.20*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M3	ZOMX110708R-M08 F40M	4,0 *0.16*	0,085 0.0034	0,095 0.0038	0,14 0.0055
M4	ZOMX110708R-M08 MS2050	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,13 0.0050
M5	ZOMX110708R-M08 MS2050	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,13 0.0050
K1	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,17 0.0065	0,19 0.0075	0,30 0.012
K2	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K3	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K4	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K5	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
K6	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K7	ZOMX110708TR-M12 MK2050	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
S1	ZOMX110708R-M08 F40M	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,13 0.0050
S2	ZOMX110708R-M08 F40M	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,13 0.0050
S3	ZOMX110708R-M08 F40M	3,0 *0.12*	0,070 0.0028	0,075 0.0030	0,12 0.0048
S11	ZOMX110708R-M08 MS2050	3,5 *0.14*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S12	ZOMX110708R-M08 MS2050	3,5 *0.14*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S13	ZOMX110708R-M08 MS2050	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,13 0.0050
H5	ZOMX110708TR-MD14 MP3000	4,0 *0.16*	0,13 0.0050	0,14 0.0055	0,22 0.0085
H8	ZOMX110708TR-MD14 MP3000	3,5 *0.14*	0,095 0.0038	0,11 0.0044	0,16 0.0065
H11	ZOMX110708TR-MD14 MP1501	4,0 *0.16*	0,13 0.0050	0,14 0.0055	0,22 0.0085
H12	ZOMX110708TR-MD14 MP1501	3,5 *0.14*	0,095 0.0038	0,11 0.0044	0,16 0.0065
H21	ZOMX110708TR-MD14 MP1501	3,5 *0.14*	0,095 0.0038	0,11 0.0044	0,16 0.0065

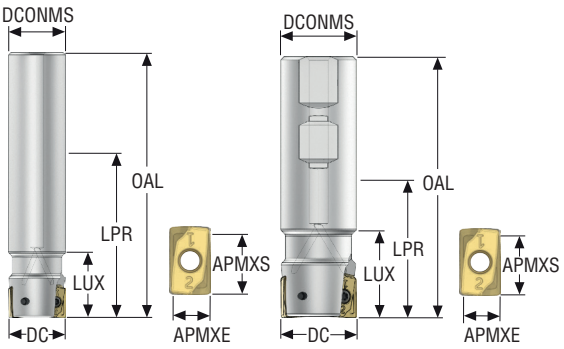
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.64-11 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	265 *870*	345 *1125*	415 *1350*	245 *800*	330 *1075*	390 *1275*	290 *950*	370 *1225*	425 *1400*	230 *750*	285 *940*	325 *1075*	385 *1275*	475 *1550*	550 *1800*	390 *1275*	485 *1600*	560 *1825*	400 *1300*	490 *1600*	550 *1800*
P2	255 *840*	340 *1125*	405 *1325*	240 *790*	320 *1050*	380 *1250*	275 *900*	355 *1175*	415 *1350*	225 *740*	275 *900*	320 *1050*	375 *1225*	465 *1525*	530 *1750*	380 *1250*	470 *1550*	540 *1775*	380 *1250*	470 *1550*	530 *1750*
P3	225 *740*	295 *970*	350 *1150*	210 *690*	290 *950*	335 *1100*	245 *800*	310 *1025*	360 *1175*	200 *660*	245 *800*	275 *900*	330 *1075*	405 *1325*	460 *1500*	335 *1100*	410 *1350*	465 *1525*	335 *1100*	410 *1350*	460 *1500*
P4	200 *660*	260 *850*	315 *1025*	185 *610*	255 *840*	295 *970*	215 *710*	275 *900*	320 *1050*	180 *590*	225 *740*	265 *870*	290 *950*	355 *1175*	410 *1350*	295 *970*	360 *1175*	420 *1375*	295 *970*	360 *1175*	405 *1325*
P5	190 *620*	255 *840*	300 *980*	185 *610*	245 *800*	290 *950*	205 *670*	270 *890*	305 *1000*	170 *560*	210 *690*	235 *770*	280 *920*	345 *1125*	390 *1275*	280 *920*	350 *1150*	400 *1300*	280 *920*	350 *1150*	390 *1275*
P6	215 *710*	285 *940*	335 *1100*	205 *670*	270 *890*	325 *1075*	240 *790*	300 *980*	345 *1125*	190 *620*	235 *770*	265 *870*	310 *1025*	390 *1275*	440 *1450*	315 *1025*	395 *1300*	450 *1475*	325 *1075*	395 *1300*	440 *1450*
P7	200 *660*	270 *890*	315 *1025*	195 *640*	255 *840*	310 *1025*	225 *740*	285 *940*	325 *1075*	180 *590*	220 *720*	250 *820*	295 *970*	365 *1200*	415 *1350*	300 *980*	375 *1225*	425 *1400*	305 *1000*	370 *1225*	415 *1350*
P8	190 *620*	250 *820*	295 *970*	180 *590*	245 *800*	285 *940*	205 *670*	260 *850*	305 *1000*	170 *560*	205 *670*	230 *750*	280 *920*	340 *1125*	385 *1275*	280 *920*	345 *1125*	390 *1275*	280 *920*	345 *1125*	390 *1275*
P11	195 *640*	260 *850*	310 *1025*	190 *620*	250 *820*	300 *980*	220 *720*	275 *900*	315 *1025*	175 *570*	215 *710*	245 *800*	285 *940*	355 *1175*	405 *1325*	290 *950*	360 *1175*	410 *1350*	295 *970*	360 *1175*	405 *1325*
P12	130 *425*	170 *560*	200 *660*	130 *425*	170 *560*	205 *670*	140 *460*	175 *570*	200 *660*	120 *395*	145 *475*	160 *520*	185 *610*	230 *750*	255 *840*	190 *620*	235 *770*	260 *850*	185 *610*	225 *740*	250 *820*
M1	— —	— —	— —	175 *570*	230 *750*	270 *890*	200 *660*	265 *870*	320 *1050*	160 *520*	210 *690*	250 *820*	— —	— —	— —	195 *640*	255 *840*	305 *1000*	200 *660*	265 *870*	320 *1050*
M2	— —	— —	— —	145 *475*	190 *620*	225 *740*	165 *540*	225 *740*	260 *850*	130 *425*	175 *570*	205 *670*	— —	— —	— —	160 *520*	215 *710*	255 *840*	165 *540*	225 *740*	260 *850*
M3	— —	— —	— —	115 *375*	155 *510*	180 *590*	135 *445*	180 *590*	210 *690*	105 *345*	140 *460*	165 *540*	— —	— —	— —	130 *425*	175 *570*	200 *660*	135 *445*	180 *590*	210 *690*
M4	— —	— —	— —	95 *310*	120 *395*	140 *460*	105 *345*	140 *460*	165 *540*	85 *280*	110 *360*	130 *425*	— —	— —	— —	105 *345*	135 *445*	160 *520*	105 *345*	140 *460*	165 *540*
M5	— —	— —	— —	75 *245*	100 *330*	120 *395*	90 *295*	115 *375*	135 *445*	70 *230*	95 *310*	110 *360*	— —	— —	— —	85 *280*	115 *375*	135 *445*	90 *295*	115 *375*	135 *445*
K1	280 *920*	365 *1200*	435 *1425*	185 *610*	245 *800*	285 *940*	— —	— —	— —	155 *510*	205 *670*	245 *800*	380 *1250*	470 *1550*	540 *1775*	385 *1275*	475 *1550*	550 *1800*	385 *1275*	470 *1550*	540 *1775*
K2	245 *800*	325 *1075*	385 *1275*	165 *540*	215 *710*	260 *850*	— —	— —	— —	140 *460*	185 *610*	220 *720*	335 *1100*	420 *1375*	475 *1550*	340 *1125*	425 *1400*	485 *1600*	340 *1125*	425 *1400*	470 *1550*
K3	205 *670*	275 *900*	325 *1075*	140 *460*	185 *610*	220 *720*	— —	— —	— —	115 *375*	155 *510*	185 *610*	285 *940*	355 *1175*	400 *1300*	290 *950*	360 *1175*	410 *1350*	290 *950*	360 *1175*	400 *1300*
K4	200 *660*	265 *870*	310 *1025*	135 *445*	175 *570*	210 *690*	— —	— —	— —	110 *360*	150 *490*	175 *570*	270 *890*	340 *1125*	385 *1275*	275 *900*	345 *1125*	390 *1275*	275 *900*	340 *1125*	380 *1250*
K5	120 *395*	165 *540*	190 *620*	80 *260*	105 *345*	125 *410*	— —	— —	— —	70 *230*	90 *295*	105 *345*	170 *560*	205 *670*	230 *750*	170 *560*	210 *690*	235 *770*	170 *560*	205 *670*	230 *750*
K6	175 *570*	230 *750*	275 *900*	115 *375*	155 *510*	185 *610*	— —	— —	— —	100 *330*	130 *425*	155 *510*	240 *790*	295 *970*	335 *1100*	240 *790*	305 *1000*	345 *1125*	245 *800*	300 *980*	335 *1100*
K7	155 *510*	210 *690*	245 *800*	105 *345*	140 *460*	160 *520*	— —	— —	— —	90 *295*	120 *395*	135 *445*	215 *710*	265 *870*	295 *970*	220 *720*	270 *890*	305 *1000*	215 *710*	265 *870*	295 *970*
S1	— —	— —	— —	43 *140*	55 *180*	65 *215*	50 *165*	65 *215*	75 *245*	40 *130*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	50 *165*	65 *215*	75 *245*
S2	— —	— —	— —	35 *115*	46 *150*	55 *180*	40 *130*	50 *165*	60 *195*	32 *105*	42 *140*	49 *160*	— —	— —	— —	— —	— —	— —	40 *130*	50 *165*	60 *195*
S3	— —	— —	— —	31 *100*	40 *130*	47 *155*	35 *115*	46 *150*	55 *180*	28 *90*	37 *120*	43 *140*	— —	— —	— —	— —	— —	— —	35 *115*	46 *150*	55 *180*
S11	— —	— —	— —	60 *195*	80 *260*	90 *295*	70 *230*	90 *295*	105 *345*	55 *180*	70 *230*	85 *280*	— —	— —	— —	— —	— —	— —	70 *230*	90 *295*	105 *345*
S12	— —	— —	— —	41 *135*	55 *180*	65 *215*	48 *155*	65 *215*	75 *245*	38 *125*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	48 *155*	65 *215*	75 *245*
S13	— —	— —	— —	24 *80*	32 *105*	37 *120*	28 *90*	37 *120*	43 *140*	22 *70*	29 *95*	34 *110*	— —	— —	— —	— —	— —	— —	28 *90*	37 *120*	43 *140*
H5	44 *145*	60 *195*	70 *230*	36 *120*	48 *155*	55 *180*	— —	— —	— —	33 *110*	43 *140*	50 *165*	49 *160*	65 *215*	75 *245*	— —	— —	— —	44 *145*	55 *180*	65 *215*
H8	47 *155*	60 *195*	75 *245*	40 *130*	50 *165*	60 *195*	— —	— —	— —	35 *115*	47 *155*	55 *180*	55 *180*	70 *230*	80 *260*	— —	— —	— —	46 *150*	60 *195*	70 *230*
H11	55 *180*	75 *245*	85 *280*	46 *150*	60 *195*	75 *245*	— —	— —	— —	42 *140*	55 *180*	65 *215*	60 *195*	80 *260*	95 *310*	— —	— —	— —	55 *180*	70 *230*	85 *280*
H12	80 *260*	110 *360*	125 *410*	75 *245*	100 *330*	115 *375*	— —	— —	— —	65 *215*	85 *280*	100 *330*	95 *310*	125 *410*	145 *475*	— —	— —	— —	85 *280*	110 *360*	130 *425*
H21	47 *155*	60 *195*	75 *245*	40 *130*	50 *165*	60 *195*	— —	— —	— —	35 *115*	47 *155*	55 *180*	55 *180*	70 *230*	80 *260*	— —	— —	— —	46 *150*	60 *195*	70 *230*

Double Turbo 16 – R217.64-ZO16 – In mm

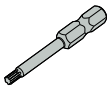




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 35–36
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.64-3232.3-ZO16-2A	03290222	Weldon	32,0	2	15,0	5,0	32,0	74,0	37,0	50,0	110,0	0,35	49,0	62,0	11400	0,6	ZOMX1607
R217.64-3232.3-ZO16-3A	10107617	Weldon	32,0	3	15,0	5,0	32,0	74,0	37,0	50,0	110,0	0,35	49,0	62,0	11400	0,6	ZOMX1607
R217.64-3240.3-ZO16-3A	03290223	Weldon	40,0	3	15,0	5,0	32,0	74,0	50,0	50,0	110,0	0,25	65,0	78,0	10000	0,7	ZOMX1607
R217.64-3240.3-ZO16-4A	03290224	Weldon	40,0	4	15,0	5,0	32,0	74,0	50,0	50,0	110,0	0,25	65,0	78,0	10000	0,7	ZOMX1607
R217.64-3232.0-ZO16-2A	03290227	Cilindrico	32,0	2	15,0	5,0	32,0	–	37,0	94,0	150,0	0,35	49,0	62,0	11400	0,9	ZOMX1607
R217.64-3232.0-ZO16-3A	10107618	Cilindrico	32,0	3	15,0	5,0	32,0	–	37,0	94,0	150,0	0,35	49,0	62,0	11400	0,8	ZOMX1607
R217.64-3240.0-ZO16-3A	03290228	Cilindrico	40,0	3	15,0	5,0	32,0	–	94,0	94,0	150,0	0,25	65,0	78,0	11400	0,9	ZOMX1607
R217.64-3240.0-ZO16-4A	03290229	Cilindrico	40,0	4	15,0	5,0	32,0	–	94,0	94,0	150,0	0,25	65,0	78,0	11400	0,8	ZOMX1607

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.64-3232-3240	1/4HEX-T15PX50	C04011B-T15P

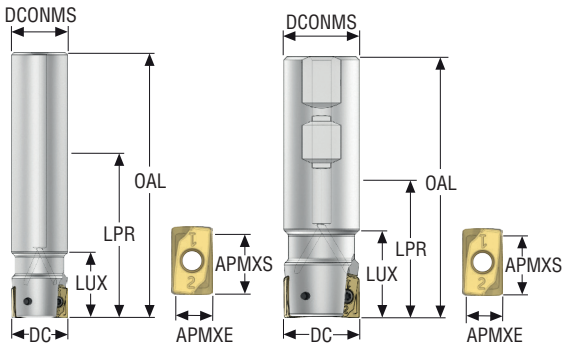
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 16 – R217.64-ZO16 – Pollici

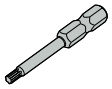




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 35-36
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.64-01.25-3-ZO16-2A	03290225	Weldon	1.250	2	0.591	0.197	1.250	3.189	1.457	1.969	4.331	0,25	1.890	2.402	11400	1.320	ZOMX1607
R217.64-01.25-3-ZO16-3A	10107620	Weldon	1.250	3	0.591	0.197	1.250	3.189	1.457	1.969	4.331	0,25	1.890	2.402	11400	1.320	ZOMX1607
R217.64-01.50-3-ZO16-3A	03290226	Weldon	1.500	3	0.591	0.197	1.250	3.189	1.969	1.969	4.331	0,25	2.402	2.913	10000	1.320	ZOMX1607
R217.64-01.50-3-ZO16-4A	10107621	Weldon	1.500	4	0.591	0.197	1.250	3.189	1.969	1.969	4.331	0,25	2.402	2.913	10000	1.320	ZOMX1607
R217.64-01.25-0-ZO16-2A	03290230	Cilindrico	1.250	2	0.591	0.197	1.250	–	1.378	3.701	7.677	0,35	1.890	2.402	11400	2.430	ZOMX1607
R217.64-01.50-0-ZO16-3A	03290231	Cilindrico	1.500	3	0.591	0.197	1.250	–	3.701	3.701	7.677	0,25	2.402	2.913	10000	2.650	ZOMX1607

Parti di ricambio, comprese nella fornitura

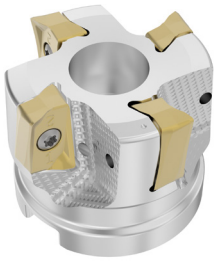
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.64-..	1/4HEX-T15PX50	C04011B-T15P

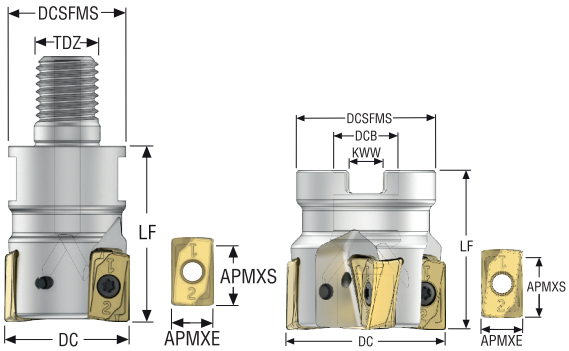
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 16 – R217/220.64-ZO16 – In mm



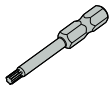
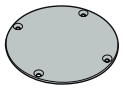


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 35–36
–Per il programma inserti completo, vedere le pagine 914
–Per la spiegazione degli attributi ISO, vedere pag. 16
–KAPRS 90°

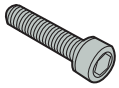
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ		LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm		mm	mm		kg	
R220.64-0040-ZO16-3A	03290237	Manicotto	40,0	3	15,0	5,0	16,0	35,0	–	16,0	40,0	0,25	65,0	78,0	10000	0,3	ZOMX1607
R220.64-0040-ZO16-4A	03290238	Manicotto	40,0	4	15,0	5,0	16,0	35,0	–	16,0	40,0	0,25	65,0	78,0	10000	0,3	ZOMX1607
R220.64-0050-ZO16-4A	03290239	Manicotto	50,0	4	15,0	5,0	22,0	47,0	–	22,0	40,0	0,2	85,0	98,0	9000	0,3	ZOMX1607
R220.64-0050-ZO16-5A	03290240	Manicotto	50,0	5	15,0	5,0	22,0	47,0	–	22,0	40,0	0,2	85,0	98,0	9000	0,3	ZOMX1607
R220.64-0063-ZO16-5A	03290241	Manicotto	63,0	5	15,0	5,0	22,0	47,0	–	22,0	40,0	0,2	111,0	124,0	8200	0,5	ZOMX1607
R220.64-0063-ZO16-5A-27	10000039	Manicotto	63,0	5	15,0	5,0	27,0	56,0	–	27,0	40,0	0,15	111,0	124,0	8200	0,5	ZOMX1607
R220.64-0063-ZO16-6A	03290242	Manicotto	63,0	6	15,0	5,0	22,0	47,0	–	22,0	40,0	0,2	111,0	124,0	8200	0,5	ZOMX1607
R220.64-0063-ZO16-6A-27	10000040	Manicotto	63,0	6	15,0	5,0	27,0	56,0	–	27,0	40,0	0,15	111,0	124,0	8200	0,6	ZOMX1607
R220.64-0080-ZO16-6A	03290243	Manicotto	80,0	6	15,0	5,0	27,0	62,0	–	27,0	50,0	0,1	145,0	158,0	7200	0,9	ZOMX1607
R220.64-0080-ZO16-8A	03290244	Manicotto	80,0	8	15,0	5,0	27,0	62,0	–	27,0	50,0	0,1	145,0	158,0	7200	1,0	ZOMX1607
R220.64-0100-ZO16-8A	03290245	Manicotto	100,0	8	15,0	5,0	32,0	77,0	–	32,0	50,0	0,0	–	–	6500	1,6	ZOMX1607
R220.64-0100-ZO16-10A	03290246	Manicotto	100,0	10	15,0	5,0	32,0	77,0	–	32,0	50,0	0,0	–	–	6500	1,5	ZOMX1607
R220.64-0125-ZO16-10A	03290247	Manicotto	125,0	10	15,0	5,0	40,0	90,0	–	40,0	63,0	0,0	–	–	5800	3,0	ZOMX1607
R220.64-0125-ZO16-12A	03290248	Manicotto	125,0	12	15,0	5,0	40,0	90,0	–	40,0	63,0	0,0	–	–	5800	2,9	ZOMX1607
R220.64-8160-ZO16-12A	03307754	Manicotto	160,0	12	15,0	5,0	40,0	90,0	–	40,0	63,0	0,0	–	–	5100	5,1	ZOMX1607
R220.64-8160-ZO16-14A	03307755	Manicotto	160,0	14	15,0	5,0	40,0	90,0	–	40,0	63,0	0,0	–	–	5100	9,6	ZOMX1607
R220.64-8200-ZO16-14A	03307756	Manicotto	200,0	14	15,0	5,0	60,0	130,0	–	60,0	63,0	0,0	–	–	4500	6,7	ZOMX1607
R220.64-8200-ZO16-16A	03307757	Manicotto	200,0	16	15,0	5,0	60,0	130,0	–	60,0	63,0	0,0	–	–	4500	6,8	ZOMX1607
R217.64-1632.RE-ZO16-3A	10107619	Combimaster	32,0	3	15,0	5,0	–	30,0	M16	–	45,0	0,35	49,0	62,0	11400	0,3	ZOMX1607
R217.64-2040.RE-ZO16-3A	03290233	Combimaster	40,0	3	15,0	5,0	–	36,5	M20	–	45,0	0,25	65,0	78,0	10000	0,3	ZOMX1607
R217.64-2040.RE-ZO16-4A	03290234	Combimaster	40,0	4	15,0	5,0	–	36,5	M20	–	45,0	0,25	65,0	78,0	10000	0,3	ZOMX1607

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

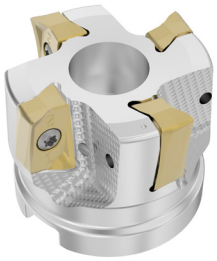
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.64-1632-2040	–	1/4HEX-T15PX50	C04011B-T15P	–	–
R220.64-0040	220.17-690	1/4HEX-T15PX50	C04011B-T15P	–	–
R220.64-0050-0063	220.17-692	1/4HEX-T15PX50	C04011B-T15P	–	–
R220.64-0063-27	MLC6S12X30	1/4HEX-T15PX50	C04011B-T15P	–	–
R220.64-0080-0125	–	1/4HEX-T15PX50	C04011B-T15P	–	–
R220.64-8160	–	1/4HEX-T15PX90	C04011B-T15P	SC-160-90	MF6S4X10
R220.64-8200	–	1/4HEX-T15PX90	C04011B-T15P	SC-200-90	MF6S4X10

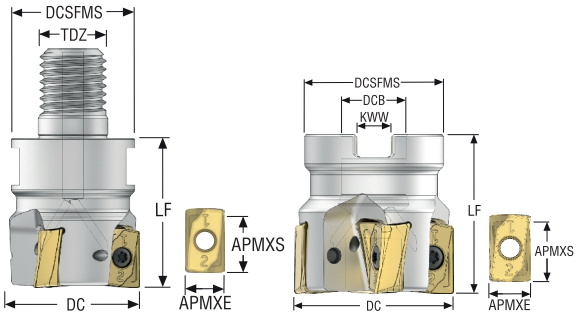
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.64-1632-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.64-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.64-8200	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Turbo 16 – R217/220.64-ZO16 – Pollici



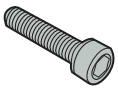
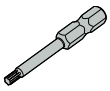


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 35–36
—Per il programma inserti completo, vedere le pagine 914
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.64-02.00-ZO16-4A	03290250	Manicotto	2.000	4	0.591	0.197	0.750	1.850	–	0.750	1.575	0,2	3.386	3.898	9000	0.880	ZOMX1607
R220.64-02.00-ZO16-5A	03290251	Manicotto	2.000	5	0.591	0.197	0.750	1.850	–	0.750	1.575	0,2	3.386	3.898	9000	0.880	ZOMX1607
R220.64-02.50-ZO16-5A	03290252	Manicotto	2.500	5	0.591	0.197	0.750	1.850	–	0.750	1.575	0,15	4.409	4.921	8200	1.320	ZOMX1607
R220.64-02.50-ZO16-6A	03290253	Manicotto	2.500	6	0.591	0.197	0.750	1.850	–	0.750	1.575	0,15	4.409	4.921	8200	1.100	ZOMX1607
R220.64-03.00-ZO16-6A	03290254	Manicotto	3.000	6	0.591	0.197	1.000	2.441	–	1.000	1.969	0,1	5.394	5.906	7200	2.200	ZOMX1607
R220.64-03.00-ZO16-8A	03290255	Manicotto	3.000	8	0.591	0.197	1.000	2.441	–	1.000	1.969	0,1	5.394	5.906	7200	1.980	ZOMX1607
R220.64-04.00-ZO16-8A	03290256	Manicotto	4.000	8	0.591	0.197	1.500	3.031	–	1.500	1.969	0,0	–	–	6500	3.970	ZOMX1607
R220.64-04.00-ZO16-10A	03290257	Manicotto	4.000	10	0.591	0.197	1.500	3.031	–	1.500	1.969	0,0	–	–	6500	3.530	ZOMX1607
R220.64-05.00-ZO16-10A	03290258	Manicotto	5.000	10	0.591	0.197	1.500	3.543	–	1.500	2.480	0,0	–	–	5800	5.730	ZOMX1607
R220.64-05.00-ZO16-12A	03290259	Manicotto	5.000	12	0.591	0.197	1.500	3.543	–	1.500	2.480	0,0	–	–	5800	7.500	ZOMX1607
R217.64-01.25-16RE-ZO16-2A	03290235	Combimaster	1.250	2	0.591	0.197	–	1.181	M16	–	1.772	0,35	1.890	2.402	11400	0.660	ZOMX1607
R217.64-01.50-20RE-ZO16-3A	03290236	Combimaster	1.500	3	0.591	0.197	–	1.437	M20	–	1.772	0,25	2.402	2.913	10000	0.660	ZOMX1607

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.64-..	–	1/4HEX-T15PX50	C04011B-T15P
R220.64-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04011B-T15P
R220.64-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011B-T15P
R220.64-04.00-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	C04011B-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.64-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

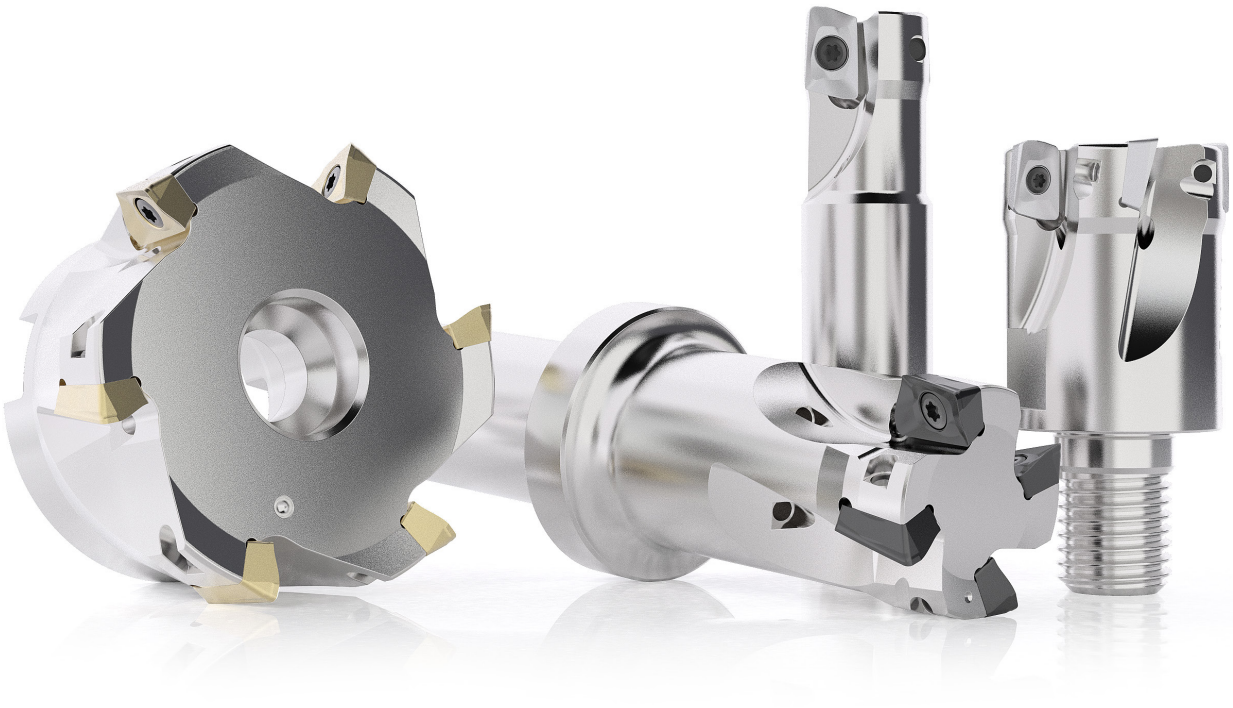
R217/220.64-16 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	ZOMX160708TR-ME10 F40M	7,0 *0.28*	0,14 0.0055	0,15 0.0060	0,24 0.0095
P2	ZOMX160708TR-ME10 F40M	7,0 *0.28*	0,14 0.0055	0,16 0.0065	0,24 0.0095
P3	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,18 0.0070	0,28 0.011
P4	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P5	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P6	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P7	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P8	ZOMX160708TR-M12 MP2501	7,0 *0.28*	0,16 0.0065	0,18 0.0070	0,28 0.011
P11	ZOMX160708TR-M12 MS2500	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P12	ZOMX160708TR-M12 MS2500	6,0 *0.24*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M1	ZOMX160708TR-ME10 F40M	7,0 *0.28*	0,14 0.0055	0,16 0.0065	0,24 0.0095
M2	ZOMX160708TR-ME10 F40M	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
M3	ZOMX160708TR-ME10 F40M	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,18 0.0070
M4	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
M5	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
K1	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
K2	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
K3	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
K4	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
K5	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,14 0.0055	0,15 0.0060	0,24 0.0095
K6	ZOMX160708TR-M12 MK2050	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
K7	ZOMX160708TR-M12 MP3000	7,0 *0.28*	0,14 0.0055	0,15 0.0060	0,24 0.0095
S1	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
S2	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
S3	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S11	ZOMX160708TR-ME10 MS2050	5,0 *0.20*	0,11 0.0044	0,12 0.0048	0,18 0.0070
S12	ZOMX160708TR-ME10 MS2050	5,0 *0.20*	0,11 0.0044	0,12 0.0048	0,18 0.0070
S13	ZOMX160708TR-ME10 MS2050	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
H5	ZOMX160708TR-M12 MP3000	6,0 *0.24*	0,11 0.0044	0,12 0.0048	0,18 0.0070
H8	ZOMX160708TR-M12 MP3000	5,0 *0.20*	0,080 0.0032	0,090 0.0036	0,14 0.0055
H11	ZOMX160708TR-M12 MP1501	6,0 *0.24*	0,11 0.0044	0,12 0.0048	0,18 0.0070
H12	ZOMX160708TR-M12 MP1501	5,0 *0.20*	0,080 0.0032	0,090 0.0036	0,14 0.0055
H21	ZOMX160708TR-M12 MP1501	5,0 *0.20*	0,080 0.0032	0,090 0.0036	0,14 0.0055

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.64-16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	265 *870*	355 *1175*	420 *1375*	275 *900*	370 *1225*	435 *1425*	280 *920*	365 *1200*	420 *1375*	235 *770*	295 *970*	330 *1075*	390 *1275*	490 *1600*	550 *1800*	380 *1250*	480 *1575*	540 *1775*	340 *1125*	430 *1400*	485 *1600*
P2	260 *850*	340 *1125*	410 *1350*	265 *870*	350 *1150*	425 *1400*	275 *900*	350 *1150*	405 *1325*	230 *750*	280 *920*	320 *1050*	380 *1250*	470 *1550*	540 *1775*	370 *1225*	460 *1500*	530 *1750*	330 *1075*	410 *1350*	475 *1550*
P3	230 *750*	300 *980*	355 *1175*	235 *770*	310 *1025*	365 *1200*	235 *770*	305 *1000*	360 *1175*	200 *660*	245 *800*	275 *900*	335 *1100*	410 *1350*	465 *1525*	325 *1075*	400 *1300*	455 *1500*	290 *950*	360 *1175*	410 *1350*
P4	200 *660*	270 *890*	315 *1025*	205 *670*	280 *920*	330 *1075*	215 *710*	270 *890*	315 *1025*	180 *590*	230 *750*	265 *870*	295 *970*	365 *1200*	415 *1350*	285 *940*	360 *1175*	410 *1350*	255 *840*	325 *1075*	365 *1200*
P5	190 *620*	255 *840*	305 *1000*	200 *660*	265 *870*	315 *1025*	205 *670*	265 *870*	300 *980*	170 *560*	210 *690*	240 *790*	280 *920*	350 *1150*	395 *1300*	275 *900*	345 *1125*	390 *1275*	245 *800*	310 *1025*	350 *1150*
P6	215 *710*	285 *940*	340 *1125*	220 *720*	300 *980*	355 *1175*	230 *750*	295 *970*	340 *1125*	190 *620*	235 *770*	270 *890*	315 *1025*	395 *1300*	445 *1450*	310 *1025*	385 *1275*	440 *1450*	275 *900*	345 *1125*	395 *1300*
P7	205 *670*	270 *890*	320 *1050*	210 *690*	285 *940*	335 *1100*	215 *710*	280 *920*	320 *1050*	180 *590*	225 *740*	255 *840*	295 *970*	370 *1225*	420 *1375*	290 *950*	365 *1200*	415 *1350*	260 *850*	325 *1075*	370 *1225*
P8	190 *620*	250 *820*	295 *970*	200 *660*	260 *850*	305 *1000*	200 *660*	255 *840*	300 *980*	170 *560*	205 *670*	235 *770*	280 *920*	345 *1125*	390 *1275*	275 *900*	340 *1125*	385 *1275*	245 *800*	305 *1000*	345 *1125*
P11	195 *640*	265 *870*	310 *1025*	205 *670*	275 *900*	325 *1075*	210 *690*	270 *890*	310 *1025*	175 *570*	215 *710*	245 *800*	290 *950*	360 *1175*	410 *1350*	285 *940*	355 *1175*	400 *1300*	250 *820*	315 *1025*	360 *1175*
P12	130 *425*	170 *560*	205 *670*	140 *460*	185 *610*	215 *710*	140 *460*	175 *570*	200 *660*	120 *395*	145 *475*	160 *520*	190 *620*	230 *750*	260 *850*	185 *610*	230 *750*	255 *840*	170 *560*	205 *670*	230 *750*
M1	— —	— —	— —	185 *610*	245 *800*	295 *970*	200 *660*	265 *870*	315 *1025*	160 *520*	210 *690*	255 *840*	— —	— —	— —	190 *620*	250 *820*	300 *980*	175 *570*	235 *770*	280 *920*
M2	— —	— —	— —	155 *510*	205 *670*	245 *800*	165 *540*	220 *720*	260 *850*	135 *445*	175 *570*	210 *690*	— —	— —	— —	155 *510*	210 *690*	245 *800*	145 *475*	195 *640*	230 *750*
M3	— —	— —	— —	125 *410*	165 *540*	200 *660*	135 *445*	180 *590*	210 *690*	110 *360*	145 *475*	170 *560*	— —	— —	— —	125 *410*	170 *560*	205 *670*	120 *395*	155 *510*	190 *620*
M4	— —	— —	— —	100 *330*	130 *425*	155 *510*	105 *345*	140 *460*	165 *540*	85 *280*	110 *360*	130 *425*	— —	— —	— —	100 *330*	130 *425*	155 *510*	95 *310*	125 *410*	145 *475*
M5	— —	— —	— —	80 *260*	110 *360*	130 *425*	90 *295*	115 *375*	135 *445*	70 *230*	95 *310*	110 *360*	— —	— —	— —	85 *280*	110 *360*	130 *425*	80 *260*	105 *345*	120 *395*
K1	280 *920*	370 *1225*	440 *1450*	200 *660*	260 *850*	310 *1025*	— —	— —	— —	160 *520*	210 *690*	250 *820*	385 *1275*	475 *1550*	540 *1775*	375 *1225*	465 *1525*	530 *1750*	335 *1100*	415 *1350*	480 *1575*
K2	245 *800*	330 *1075*	390 *1275*	175 *570*	235 *770*	275 *900*	— —	— —	— —	140 *460*	185 *610*	220 *720*	340 *1125*	425 *1400*	480 *1575*	330 *1075*	415 *1350*	470 *1550*	295 *970*	370 *1225*	425 *1400*
K3	210 *690*	280 *920*	330 *1075*	150 *490*	200 *660*	235 *770*	— —	— —	— —	120 *395*	160 *520*	185 *610*	285 *940*	360 *1175*	405 *1325*	280 *920*	350 *1150*	400 *1300*	250 *820*	315 *1025*	360 *1175*
K4	200 *660*	265 *870*	315 *1025*	140 *460*	190 *620*	225 *740*	— —	— —	— —	115 *375*	150 *490*	180 *590*	275 *900*	340 *1125*	390 *1275*	270 *890*	335 *1100*	380 *1250*	240 *790*	300 *980*	340 *1125*
K5	125 *410*	165 *540*	190 *620*	85 *280*	115 *375*	135 *445*	— —	— —	— —	70 *230*	95 *310*	110 *360*	170 *560*	210 *690*	235 *770*	165 *540*	205 *670*	230 *750*	150 *490*	185 *610*	210 *690*
K6	175 *570*	235 *770*	280 *920*	125 *410*	165 *540*	195 *640*	— —	— —	— —	100 *330*	135 *445*	155 *510*	240 *790*	300 *980*	340 *1125*	235 *770*	295 *970*	335 *1100*	210 *690*	265 *870*	300 *980*
K7	160 *520*	210 *690*	245 *800*	110 *360*	150 *490*	175 *570*	— —	— —	— —	90 *295*	120 *395*	140 *460*	215 *710*	270 *890*	300 *980*	215 *710*	265 *870*	295 *970*	190 *620*	240 *790*	265 *870*
S1	— —	— —	— —	46 *150*	60 *195*	70 *230*	49 *160*	65 *215*	75 *245*	40 *130*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	44 *145*	60 *195*	70 *230*
S2	— —	— —	— —	37 *120*	49 *160*	60 *195*	40 *130*	50 *165*	60 *195*	32 *105*	42 *140*	50 *165*	— —	— —	— —	— —	— —	— —	35 *115*	46 *150*	55 *180*
S3	— —	— —	— —	33 *110*	43 *140*	50 *165*	35 *115*	45 *150*	55 *180*	28 *90*	37 *120*	43 *140*	— —	— —	— —	— —	— —	— —	31 *100*	41 *135*	48 *155*
S11	— —	— —	— —	— —	— —	— —	70 *230*	90 *295*	105 *345*	55 *180*	70 *230*	85 *280*	— —	— —	— —	— —	— —	— —	60 *195*	80 *260*	95 *310*
S12	— —	— —	— —	— —	— —	— —	47 *155*	65 *215*	75 *245*	38 *125*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	42 *140*	55 *180*	65 *215*
S13	— —	— —	— —	— —	— —	— —	28 *90*	36 *120*	43 *140*	22 *70*	29 *95*	35 *115*	— —	— —	— —	— —	— —	— —	25 *80*	32 *105*	38 *125*
H5	44 *145*	60 *195*	70 *230*	39 *130*	50 *165*	60 *195*	— —	— —	— —	33 *110*	44 *145*	50 *165*	49 *160*	65 *215*	75 *245*	— —	— —	— —	38 *125*	50 *165*	60 *195*
H8	48 *155*	65 *215*	75 *245*	42 *140*	55 *180*	65 *215*	— —	— —	— —	36 *120*	47 *155*	55 *180*	55 *180*	70 *230*	80 *260*	— —	— —	— —	42 *140*	55 *180*	65 *215*
H11	55 *180*	75 *245*	90 *295*	49 *160*	65 *215*	75 *245*	— —	— —	— —	42 *140*	55 *180*	65 *215*	65 *215*	85 *280*	100 *330*	— —	— —	— —	49 *160*	65 *215*	75 *245*
H12	85 *280*	110 *360*	130 *425*	80 *260*	105 *345*	125 *410*	— —	— —	— —	65 *215*	85 *280*	100 *330*	95 *310*	125 *410*	145 *475*	— —	— —	— —	75 *245*	95 *310*	115 *375*
H21	48 *155*	65 *215*	75 *245*	42 *140*	55 *180*	65 *215*	— —	— —	— —	36 *120*	47 *155*	55 *180*	55 *180*	70 *230*	80 *260*	— —	— —	— —	42 *140*	55 *180*	65 *215*



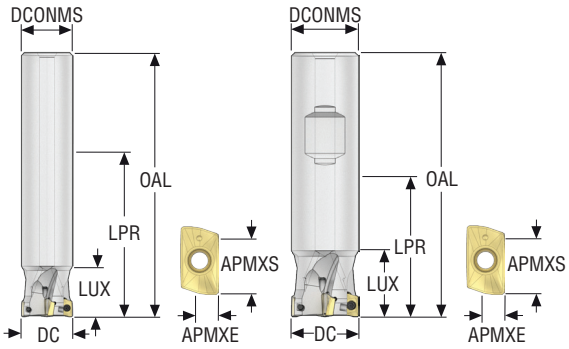
FRESE TURBO

La famiglia Turbo porta la fresatura a spallamento retto ai massimi livelli. Adatte per la maggior parte delle operazioni di sgrossatura, semi-finitura e finitura, queste frese estremamente versatili offrono una lunga durata dell'utensile e un'elevata precisione grazie alle proprietà ottimizzate che riducono la generazione di calore e le forze di taglio.

– Turbo 06 misura inserto 06, gamma di frese metriche, Ø 10-40 mm (misure in pollici Ø 0,375-1,500")
– Turbo 10 misura inserto 10, gamma di frese metriche, Ø 16-100 mm (misure in pollici Ø 0,500-3,000")
– Turbo 12 misura inserto 12, gamma di frese metriche, Ø 20-250 mm (misure in pollici Ø 0,750-4,000")
– Turbo 16 misura inserto 16, gamma di frese metriche, Ø 25-250 mm (misure in pollici Ø 1,000-6,000")
– Turbo 18 misura inserto 18, gamma di frese metriche, Ø 32-250 mm (misure in pollici Ø 1,000-6,000")

Turbo 06 – R217.69-06 – In mm



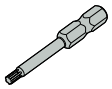


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 43-44
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.69-1616.3-06-3AN	02690646	Weldon	16,0	3	5,0	3,0	16,0	46,0	20,0	22,0	70,0	4,0	26,5	31,0	48000	0,2	XO.X0602
R217.69-1616.3-06-4AN	02690647	Weldon	16,0	4	5,0	3,0	16,0	46,0	20,0	42,0	70,0	4,0	26,5	31,0	48000	0,1	XO.X0602
R217.69-2020.3-06-4AN	02690648	Weldon	20,0	4	5,0	3,0	20,0	55,0	20,0	30,0	80,0	2,5	34,5	39,0	44000	0,2	XO.X0602
R217.69-2020.3-06-5AN	02690649	Weldon	20,0	5	5,0	3,0	20,0	60,0	20,0	35,0	85,0	2,5	34,5	39,0	44000	0,2	XO.X0602
R217.69-2025.3-06-7AN	02690650	Weldon	25,0	7	5,0	3,0	20,0	65,0	40,0	40,0	90,0	2,5	44,5	49,0	37600	0,2	XO.X0602
R217.69-0810.0-06-2AN	02690707	Cilindrico	10,0	2	5,0	3,0	8,0	–	64,0	64,0	100,0	10,0	14,5	19,0	60000	0,1	XO.X0602
R217.69-0810.0-06-2N	02690736	Cilindrico	10,0	2	5,0	3,0	8,0	–	64,0	64,0	100,0	10,0	14,5	19,0	60000	0,1	XO.X0602
R217.69-1010.0-06-2AD	00035456	Cilindrico	10,0	2	5,0	3,0	10,0	–	17,0	17,0	55,0	10,0	14,5	19,0	60000	0,1	XO.X0602
R217.69-1010.0-06-2AN	02690714	Cilindrico	10,0	2	5,0	3,0	10,0	–	17,0	17,0	55,0	10,0	14,5	19,0	60000	0,1	XO.X0602
R217.69-1010.0-06-2N	02690737	Cilindrico	10,0	2	5,0	3,0	10,0	–	18,0	62,0	100,0	10,0	14,5	19,0	60000	0,1	XO.X0602
R217.69-1012.0-06-2AN	02690712	Cilindrico	12,0	2	5,0	3,0	10,0	–	80,0	80,0	120,0	6,5	18,5	23,0	54400	0,1	XO.X0602
R217.69-1012.0-06-2N	02690738	Cilindrico	12,0	2	5,0	3,0	10,0	–	80,0	80,0	120,0	6,5	18,5	23,0	54400	0,1	XO.X0602
R217.69-1212.0-06-2AN	02690715	Cilindrico	12,0	2	5,0	3,0	12,0	–	18,0	35,0	80,0	6,5	18,5	23,0	54400	0,1	XO.X0602
R217.69-1212.0-06-2N	02690739	Cilindrico	12,0	2	5,0	3,0	12,0	–	18,0	75,0	120,0	6,5	18,5	23,0	54400	0,1	XO.X0602
R217.69-1212.0-06-3AD	00035457	Cilindrico	12,0	3	5,0	3,0	12,0	–	18,0	35,0	80,0	6,5	18,5	23,0	54400	0,2	XO.X0602
R217.69-1212.0-06-3AN	02690724	Cilindrico	12,0	3	5,0	3,0	12,0	–	18,0	18,0	60,0	6,5	18,5	23,0	54400	0,1	XO.X0602
R217.69-1214.0-06-3AN	02690708	Cilindrico	14,0	3	5,0	3,0	12,0	–	95,0	95,0	140,0	5,0	22,5	27,0	51200	0,2	XO.X0602
R217.69-1416.0-06-3AN	02690713	Cilindrico	16,0	3	5,0	3,0	14,0	–	115,0	115,0	160,0	4,0	26,5	31,0	48000	0,2	XO.X0602
R217.69-1616.0-06-3AN	02690717	Cilindrico	16,0	3	5,0	3,0	16,0	–	20,0	42,0	90,0	4,0	26,5	31,0	48000	0,2	XO.X0602
R217.69-1616.0-06-4AD	00035458	Cilindrico	16,0	4	5,0	3,0	16,0	–	20,0	42,0	90,0	4,0	26,5	31,0	48000	0,3	XO.X0602
R217.69-1616.0-06-4AN	02690718	Cilindrico	16,0	4	5,0	3,0	16,0	–	20,0	42,0	90,0	4,0	26,5	31,0	48000	0,2	XO.X0602
R217.69-1618.0-06-4AN	02690710	Cilindrico	18,0	4	5,0	3,0	16,0	–	132,0	132,0	180,0	3,0	30,5	35,0	45600	0,3	XO.X0602
R217.69-1820.0-06-4AN	02690711	Cilindrico	20,0	4	5,0	3,0	18,0	–	150,0	150,0	200,0	2,5	34,5	39,0	44000	0,4	XO.X0602
R217.69-2020.0-06-4AN	02690703	Cilindrico	20,0	4	5,0	3,0	20,0	–	20,0	55,0	105,0	2,5	34,5	39,0	44000	0,3	XO.X0602
R217.69-2020.0-06-5AD	00035459	Cilindrico	20,0	5	5,0	3,0	20,0	–	20,0	55,0	105,0	2,5	34,5	39,0	44000	0,5	XO.X0602
R217.69-2020.0-06-5AN	02690720	Cilindrico	20,0	5	5,0	3,0	20,0	–	20,0	55,0	105,0	2,5	34,5	39,0	44000	0,3	XO.X0602
R217.69-2025.0-06-7AN	02690721	Cilindrico	25,0	7	5,0	3,0	20,0	–	65,0	65,0	115,0	2,5	44,5	49,0	37600	0,3	XO.X0602
R217.69-2532.0-06-8AN	02690723	Cilindrico	32,0	8	5,0	3,0	25,0	–	74,0	74,0	130,0	1,5	58,5	63,0	33600	0,5	XO.X0602
R217.69-3240.0-06-10AN	02690725	Cilindrico	40,0	10	5,0	3,0	32,0	–	80,0	80,0	140,0	1,0	74,5	79,0	28000	0,9	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,8 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T06PX50	C01804-T06P

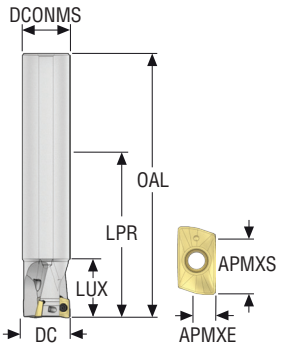
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 06 – R217.69-06 – Pollici



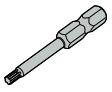


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 43-44
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.69-00.375-0-06-2AN	02694880	Cilindrico	0.375	2	0.197	0.118	0.375	0.669	0.669	2.165	10,0	0.531	0.709	60000	0.220	XO.X0602
R217.69-00.375-0-06-2LAN	02694883	Cilindrico	0.375	2	0.197	0.118	0.313	2.362	2.362	3.937	10,0	0.531	0.709	60000	0.220	XO.X0602
R217.69-00.50-0-06-2AN	02694884	Cilindrico	0.500	2	0.197	0.118	0.500	0.709	1.378	3.150	6,5	0.768	0.945	54000	0.220	XO.X0602
R217.69-00.50-0-06-2LAN	02694886	Cilindrico	0.500	2	0.197	0.118	0.375	2.362	2.362	3.937	6,5	0.768	0.945	54000	0.220	XO.X0602
R217.69-00.50-0-06-3AN	02694887	Cilindrico	0.500	3	0.197	0.118	0.500	0.709	0.709	2.362	6,0	0.768	0.945	54000	0.220	XO.X0602
R217.69-00.625-0-06-3AN	02694889	Cilindrico	0.625	3	0.197	0.118	0.625	0.787	1.654	3.543	4,0	1.024	1.201	48000	0.440	XO.X0602
R217.69-00.625-0-06-3LAN	02694890	Cilindrico	0.625	3	0.197	0.118	0.500	3.150	3.150	4.921	4,0	1.024	1.201	48000	0.440	XO.X0602
R217.69-00.625-0-06-4AN	02694891	Cilindrico	0.625	4	0.197	0.118	0.625	0.787	1.654	3.543	4,0	1.024	1.201	48000	0.440	XO.X0602
R217.69-00.75-0-06-4AN	02694892	Cilindrico	0.750	4	0.197	0.118	0.750	0.787	1.969	3.937	2,0	1.280	1.457	44000	0.660	XO.X0602
R217.69-00.75-0-06-4LAN	02694898	Cilindrico	0.750	4	0.197	0.118	0.625	4.016	4.016	5.906	2,0	1.280	1.457	44000	0.440	XO.X0602
R217.69-00.75-0-06-5AN	02694896	Cilindrico	0.750	5	0.197	0.118	0.750	0.787	1.969	3.937	2,5	1.280	1.457	44000	0.440	XO.X0602
R217.69-00.875-0-06-5LAN	02694899	Cilindrico	0.875	5	0.197	0.118	0.750	3.937	3.937	5.906	2,0	1.535	1.713	44000	0.880	XO.X0602
R217.69-01.00-0-06-6LAN	02694903	Cilindrico	1.000	6	0.197	0.118	0.750	5.906	5.906	7.874	1,0	1.772	1.949	37600	0.880	XO.X0602
R217.69-01.25-0-06-8AN	02694907	Cilindrico	1.250	8	0.197	0.118	1.000	2.913	2.913	5.118	1,0	2.283	2.461	33600	1.100	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,031"

Parti di ricambio, comprese nella fornitura

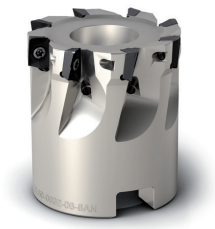
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T06PX50	C01804-T06P

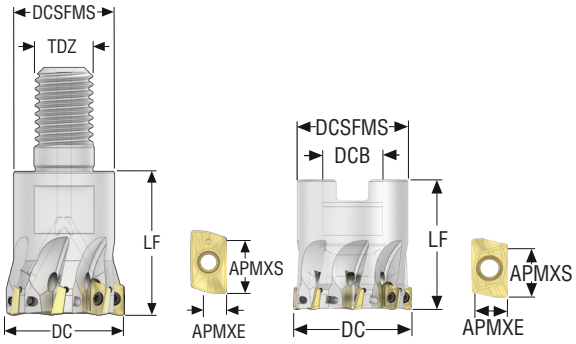
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 06 – R217/220.69-06 – In mm



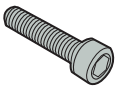
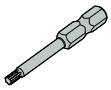


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 43-44
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ		LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm		mm	mm		kg	
R220.69-0032-06-8AN	02690741	Manicotto	32,0	8	5,0	3,0	16,0	30,0	–	16,0	35,0	1,5	58,5	63,0	33600	0,2	XO.X0602
R220.69-0040-06-10AN	02690742	Manicotto	40,0	10	5,0	3,0	16,0	35,0	–	16,0	35,0	1,0	74,5	79,0	18600	0,2	XO.X0602
R217.69-0816.RE-06-4AN	02690643	Combimaster	16,0	4	5,0	3,0	–	13,5	M8	–	23,0	7,5	26,5	31,0	48000	0,1	XO.X0602
R217.69-1020.RE-06-5AN	02690641	Combimaster	20,0	5	5,0	3,0	–	18,0	M10	–	28,0	4,5	34,5	39,0	44000	0,1	XO.X0602
R217.69-1225.RE-06-7AN	02690642	Combimaster	25,0	7	5,0	3,0	–	21,0	M12	–	30,0	2,5	44,5	49,0	37600	0,1	XO.X0602
R217.69-1632.RE-06-8AN	02690638	Combimaster	32,0	8	5,0	3,0	–	28,0	M16	–	35,0	1,5	58,5	63,0	33600	0,2	XO.X0602
R217.69-1640.RE-06-10AN	02690639	Combimaster	40,0	10	5,0	3,0	–	28,0	M16	–	40,0	1,0	74,5	79,0	28000	0,3	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,8 mm
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

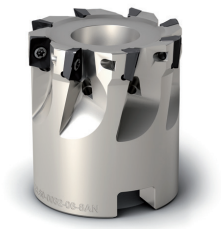
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.69-..	–	1/4HEX-T06PX50	C01804-T06P
R220.69-..	TCEI0825	1/4HEX-T06PX50	C01804-T06P

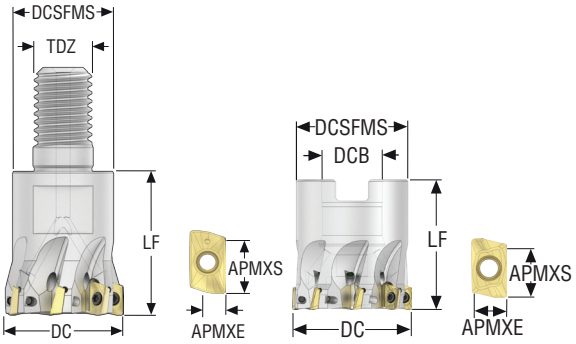
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 06 – R217/220.69-06 – Pollici



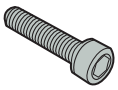
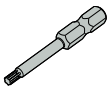


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 43-44
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.69-01.50-06-10AN	02694915	Manicotto	1.500	10	0.197	0.118	0.500	1.378	–	0.500	1.378	1,0	2.776	2.953	28000	0.660	XO.X0602
R217.69-01.00-12RE-06-7AN	02695013	Combimaster	1.000	7	0.197	0.118	–	0.906	M12	–	1.378	1,5	1.772	1.949	37600	0.220	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,031"
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.69-..	–	1/4HEX-T06PX50	C01804-T06P
R220.69-..	UC6S1/4UNFX1	1/4HEX-T06PX50	C01804-T06P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XOMX060204R-M05 F40M	2,5 *0.10*	0,070 0.0028	0,080 0.0032	0,12 0.0048
P2	XOMX060204R-M05 F40M	2,5 *0.10*	0,070 0.0028	0,080 0.0032	0,12 0.0048
P3	XOMX060204R-M05 F40M	2,5 *0.10*	0,070 0.0028	0,075 0.0030	0,12 0.0048
P4	XOMX060204R-M05 F40M	2,5 *0.10*	0,065 0.0026	0,075 0.0030	0,11 0.0044
P5	XOMX060204R-M05 F40M	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
P6	XOMX060204R-M05 F40M	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
P7	XOMX060204R-M05 F40M	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
P8	XOMX060204R-M05 F40M	2,5 *0.10*	0,070 0.0028	0,075 0.0030	0,12 0.0048
P11	XOMX060204R-M05 MP3000	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
P12	XOMX060204R-M05 MP3000	2,0 *0.080*	0,046 0.0018	0,050 0.0020	0,075 0.0030
M1	XOMX060204R-M05 F40M	2,5 *0.10*	0,070 0.0028	0,080 0.0032	0,12 0.0048
M2	XOMX060204R-M05 F40M	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
M3	XOMX060204R-M05 F40M	2,0 *0.080*	0,055 0.0022	0,060 0.0024	0,090 0.0036
M4	XOMX060204R-M05 MS2050	1,5 *0.060*	0,048 0.0019	0,050 0.0020	0,080 0.0032
M5	XOMX060204R-M05 MS2050	1,5 *0.060*	0,048 0.0019	0,050 0.0020	0,080 0.0032
K1	XOMX060204R-M05 MP3000	2,5 *0.10*	0,070 0.0028	0,080 0.0032	0,12 0.0048
K2	XOMX060204R-M05 MP3000	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
K3	XOMX060204R-M05 MP3000	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
K4	XOMX060204R-M05 MP3000	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
K5	XOMX060204R-M05 MP3000	2,5 *0.10*	0,060 0.0024	0,065 0.0026	0,10 0.0040
K6	XOMX060204R-M05 MP3000	2,5 *0.10*	0,065 0.0026	0,070 0.0028	0,11 0.0044
K7	XOMX060204R-M05 MP3000	2,5 *0.10*	0,060 0.0024	0,065 0.0026	0,10 0.0040
N1	XOEX060204FR-E03 H15	2,5 *0.10*	0,075 0.0030	0,080 0.0032	0,12 0.0048
N2	XOEX060204FR-E03 H15	2,5 *0.10*	0,075 0.0030	0,080 0.0032	0,12 0.0048
N3	XOEX060204FR-E03 H15	2,5 *0.10*	0,075 0.0030	0,080 0.0032	0,12 0.0048
N11	XOEX060204FR-E03 H15	2,5 *0.10*	0,075 0.0030	0,080 0.0032	0,12 0.0048
S1	XOMX060204R-M05 F40M	1,5 *0.060*	0,048 0.0019	0,050 0.0020	0,080 0.0032
S2	XOMX060204R-M05 F40M	1,5 *0.060*	0,048 0.0019	0,050 0.0020	0,080 0.0032
S3	XOMX060204R-M05 F40M	1,5 *0.060*	0,044 0.0017	0,048 0.0019	0,075 0.0030
S11	XOMX060204R-M05 MS2050	1,7 *0.065*	0,055 0.0022	0,060 0.0024	0,090 0.0036
S12	XOMX060204R-M05 MS2050	1,7 *0.065*	0,055 0.0022	0,060 0.0024	0,090 0.0036
S13	XOMX060208R-M05 MS2050	1,5 *0.060*	0,050 0.0020	0,055 0.0022	0,085 0.0034
H5	XOMX060208R-M05 MH1051	2,0 *0.080*	0,048 0.0019	0,050 0.0020	0,080 0.0032
H8	XOMX060208R-M05 MH1051	1,7 *0.065*	0,038 0.0015	0,040 0.0016	0,065 0.0026
H11	XOMX060208R-M05 MH1051	2,0 *0.080*	0,048 0.0019	0,050 0.0020	0,080 0.0032
H12	XOMX060208R-M05 MH1051	1,7 *0.065*	0,038 0.0015	0,040 0.0016	0,065 0.0026
H21	XOMX060208R-M05 MH1051	1,7 *0.065*	0,038 0.0015	0,040 0.0016	0,065 0.0026

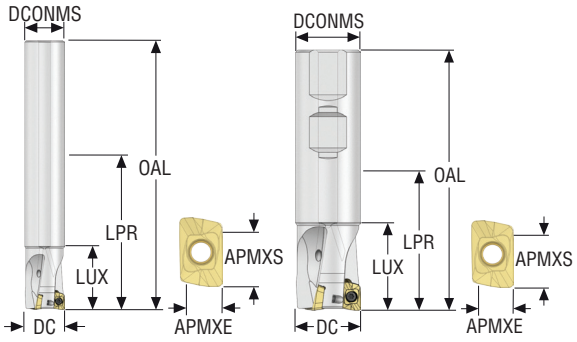
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			F30M			MP3000			MS2050			F40M			MM4500			H15		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	290	380	450	395	495	570	335	420	475	335	395	440	275	335	375	—	—	—
	—	—	—	*950*	*1250*	*1475*	*1300*	*1625*	*1875*	*1100*	*1375*	*1550*	*1100*	*1300*	*1450*	*900*	*1100*	*1225*	—	—	—
P2	—	—	—	280	370	435	385	485	550	330	405	465	325	385	430	265	325	365	—	—	—
	—	—	—	*920*	*1225*	*1425*	*1275*	*1600*	*1800*	*1075*	*1325*	*1525*	*1075*	*1275*	*1400*	*870*	*1075*	*1200*	—	—	—
P3	—	—	—	245	325	375	335	420	475	280	355	405	285	335	370	230	280	315	—	—	—
	—	—	—	*800*	*1075*	*1225*	*1100*	*1375*	*1550*	*920*	*1175*	*1325*	*940*	*1100*	*1225*	*750*	*920*	*1025*	—	—	—
P4	—	—	—	215	285	335	295	370	420	255	310	355	250	305	345	220	265	300	—	—	—
	—	—	—	*710*	*940*	*1100*	*970*	*1225*	*1375*	*840*	*1025*	*1175*	*820*	*1000*	*1125*	*720*	*870*	*980*	—	—	—
P5	550	710	830	205	270	320	280	350	400	240	300	340	240	285	315	195	235	265	—	—	—
	1800	*2325*	*2725*	*670*	*890*	*1050*	*920*	*1150*	*1300*	*790*	*980*	*1125*	*790*	*940*	*1025*	*640*	*770*	*870*	—	—	—
P6	620	800	930	235	305	360	315	395	450	270	340	380	265	320	355	215	265	295	—	—	—
	2025	*2625*	*3050*	*770*	*1000*	*1175*	*1025*	*1300*	*1475*	*890*	*1125*	*1250*	*870*	*1050*	*1175*	*710*	*870*	*970*	—	—	—
P7	590	750	880	220	290	340	295	375	425	255	320	360	250	300	335	205	250	280	—	—	—
	1925	*2450*	*2875*	*720*	*950*	*1125*	*970*	*1225*	*1400*	*840*	*1050*	*1175*	*820*	*980*	*1100*	*670*	*820*	*920*	—	—	—
P8	550	710	810	205	270	315	280	350	400	235	295	340	240	285	310	190	235	265	—	—	—
	1800	*2325*	*2650*	*670*	*890*	*1025*	*920*	*1150*	*1300*	*770*	*970*	*1125*	*790*	*940*	*1025*	*620*	*770*	*870*	—	—	—
P11	570	730	850	215	280	330	290	360	415	250	310	350	245	290	325	200	240	270	—	—	—
	1875	*2400*	*2800*	*710*	*920*	*1075*	*950*	*1175*	*1350*	*820*	*1025*	*1150*	*800*	*950*	*1075*	*660*	*790*	*890*	—	—	—
P12	365	460	520	140	180	210	175	215	240	155	195	215	155	185	200	115	135	150	—	—	—
	1200	*1500*	*1700*	*460*	*590*	*690*	*570*	*710*	*790*	*510*	*640*	*710*	*510*	*610*	*660*	*375*	*445*	*490*	—	—	—
M1	—	—	—	225	300	350	250	330	390	235	305	360	215	285	335	185	240	285	—	—	—
	—	—	—	*740*	*980*	*1150*	*820*	*1075*	*1275*	*770*	*1000*	*1175*	*710*	*940*	*1100*	*610*	*790*	*940*	—	—	—
M2	—	—	—	185	245	290	205	270	320	195	255	295	180	235	275	150	200	235	—	—	—
	—	—	—	*610*	*800*	*950*	*670*	*890*	*1050*	*640*	*840*	*970*	*590*	*770*	*900*	*490*	*660*	*770*	—	—	—
M3	—	—	—	150	195	230	165	215	255	155	205	235	145	185	220	120	160	185	—	—	—
	—	—	—	*490*	*640*	*750*	*540*	*710*	*840*	*510*	*670*	*770*	*475*	*610*	*720*	*395*	*520*	*610*	—	—	—
M4	—	—	—	120	150	175	130	170	195	120	155	185	110	145	165	95	125	145	—	—	—
	—	—	—	*395*	*490*	*570*	*425*	*560*	*640*	*395*	*510*	*610*	*360*	*475*	*540*	*310*	*410*	*475*	—	—	—
M5	—	—	—	100	125	145	110	140	160	100	130	150	95	120	140	80	105	120	—	—	—
	—	—	—	*330*	*410*	*475*	*360*	*460*	*520*	*330*	*425*	*490*	*310*	*395*	*460*	*260*	*345*	*395*	—	—	—
K1	760	980	1125	225	295	345	265	350	410	—	—	—	215	280	330	—	—	—	—	—	—
	2500	*3225*	*3700*	*740*	*970*	*1125*	*870*	*1150*	*1350*	—	—	—	*710*	*920*	*1075*	—	—	—	—	—	—
K2	670	860	1000	195	260	305	235	305	365	—	—	—	185	245	290	—	—	—	—	—	—
	2200	*2825*	*3275*	*640*	*850*	*1000*	*770*	*1000*	*1200*	—	—	—	*610*	*800*	*950*	—	—	—	—	—	—
K3	570	730	850	165	220	260	200	260	305	—	—	—	160	210	245	—	—	—	—	—	—
	1875	*2400*	*2800*	*540*	*720*	*850*	*660*	*850*	*1000*	—	—	—	*520*	*690*	*800*	—	—	—	—	—	—
K4	540	690	810	160	210	245	190	250	295	—	—	—	150	200	235	—	—	—	—	—	—
	1775	*2275*	*2650*	*520*	*690*	*800*	*620*	*820*	*970*	—	—	—	*490*	*660*	*770*	—	—	—	—	—	—
K5	335	425	485	100	130	150	115	150	180	—	—	—	95	120	140	—	—	—	—	—	—
	1100	*1400*	*1600*	*330*	*425*	*490*	*375*	*490*	*590*	—	—	—	*310*	*395*	*460*	—	—	—	—	—	—
K6	475	610	710	140	185	215	165	220	260	—	—	—	135	175	205	—	—	—	—	—	—
	1550	*2000*	*2325*	*460*	*610*	*710*	*540*	*720*	*850*	—	—	—	*445*	*570*	*670*	—	—	—	—	—	—
K7	425	540	620	125	165	190	150	195	230	—	—	—	120	155	180	—	—	—	—	—	—
	1400	*1775*	*2025*	*410*	*540*	*620*	*490*	*640*	*750*	—	—	—	*395*	*510*	*590*	—	—	—	—	—	—
N1	—	—	—	1675	2200	2575	—	—	—	—	—	—	1600	2100	2450	—	—	—	1650	2175	2575
	—	—	—	*5500*	*7225*	*8450*	—	—	—	—	—	—	*5250*	*6900*	*8050*	—	—	—	*5425*	*7125*	*8450*
N2	—	—	—	680	890	1025	—	—	—	—	—	—	640	850	990	—	—	—	660	880	1050
	—	—	—	*2225*	*2925*	*3375*	—	—	—	—	—	—	*2100*	*2800*	*3250*	—	—	—	*2175*	*2875*	*3450*
N3	—	—	—	450	590	690	—	—	—	—	—	—	430	570	660	—	—	—	445	590	690
	—	—	—	*1475*	*1925*	*2275*	—	—	—	—	—	—	*1400*	*1875*	*2175*	—	—	—	*1450*	*1925*	*2275*
N11	—	—	—	510	680	790	—	—	—	—	—	—	490	650	750	—	—	—	510	670	790
	—	—	—	*1675*	*2225*	*2600*	—	—	—	—	—	—	*1600*	*2125*	*2450*	—	—	—	*1675*	*2200*	*2600*
S1	—	—	—	—	—	—	—	—	—	55	75	85	50	65	80	29	38	44	—	—	—
	—	—	—	—	—	—	—	—	—	*180*	*245*	*280*	*165*	*215*	*260*	*95*	*125*	*145*	—	—	—
S2	—	—	—	—	—	—	—	—	—	45	60	70	42	55	65	23	30	35	—	—	—
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*140*	*180*	*215*	*75*	*100*	*115*	—	—	—
S3	—	—	—	—	—	—	—	—	—	39	50	60	37	48	55	20	26	31	—	—	—
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*	*120*	*155*	*180*	*65*	*85*	*100*	—	—	—
S11	—	—	—	—	—	—	—	—	—	80	100	120	75	95	110	40	55	60	—	—	—
	—	—	—	—	—	—	—	—	—	*260*	*330*	*395*	*245*	*310*	*360*	*130*	*180*	*195*	—	—	—
S12	—	—	—	—	—	—	—	—	—	55	70	80	50	65	75	37	48	55	—	—	—
	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*	*165*	*215*	*245*	*120*	*155*	*180*	—	—	—
S13	—	—	—	—	—	—	—	—	—	31	41	48	30	38	44	22	28	33	—	—	—
	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*	*100*	*125*	*145*	*70*	*90*	*110*	—	—	—
H5	185	235	265	46	60	70	50	65	80	—	—	—	—	—	—	—	—	—	—	—	—
	610	*770*	*870*	*150*	*195*	*230*	*165*	*215*	*260*	—	—	—	—	—	—	—	—	—	—	—	—
H8	190	240	265	48	65	70	55	70	80	—	—	—	—	—	—	—	—	—	—	—	—
	620	*790*	*870*	*155*	*215*	*230*	*180*	*230*	*260*	—	—	—	—	—	—	—	—	—	—	—	—
H11	240	300	340	60	75	90	65	85	100	—	—	—	—	—	—	—	—	—	—	—	—
	790	*980*	*1125*	*195*	*245*	*295*	*215*	*280*	*330*	—	—	—	—	—	—	—	—	—	—	—	—
H12	225	275	310	85	115	130	105	135	155	—	—	—	—	—	—	—	—	—	—	—	—
	740	*900*	*1025*	*280*	*375*	*425*	*345*	*445*	*510*	—	—	—	—	—	—	—	—	—	—	—	—
H21	190	240	265	48	65	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	620	*790*	*870*	*155*	*215*	*230*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Turbo 10 – R217.69-10 – In mm



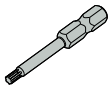


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 50-52
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.69-1616.3-10-2A	02769180	Weldon	16,0	2	9,0	6,0	16,0	54,0	24,0	30,0	78,0	7,5	21,0	30,5	29400	0,1	XO.X10T3
R217.69-2018.3-10-2A	02772254	Weldon	18,0	2	9,0	6,0	20,0	60,0	29,0	30,0	85,0	6,0	25,0	34,5	27800	0,2	XO.X10T3
R217.69-2020.3-10-2A	02769210	Weldon	20,0	2	9,0	6,0	20,0	65,0	29,0	40,0	90,0	4,5	29,0	38,5	26300	0,2	XO.X10T3
R217.69-2020.3-10-3A	02769212	Weldon	20,0	3	9,0	6,0	20,0	65,0	29,0	40,0	90,0	4,5	29,0	38,5	26300	0,2	XO.X10T3
R217.69-2525.3-10-3A	02769225	Weldon	25,0	3	9,0	6,0	25,0	69,0	34,0	45,0	101,0	3,0	39,0	48,5	23500	0,3	XO.X10T3
R217.69-2525.3-10-4A	02769227	Weldon	25,0	4	9,0	6,0	25,0	69,0	34,0	45,0	101,0	3,0	39,0	48,5	23500	0,3	XO.X10T3
R217.69-3232.3-10-3A	02769232	Weldon	32,0	3	9,0	6,0	32,0	74,0	35,0	45,0	110,0	2,0	53,0	62,5	20800	0,7	XO.X10T3
R217.69-3232.3-10-5A	02769233	Weldon	32,0	5	9,0	6,0	32,0	74,0	35,0	45,0	110,0	2,0	53,0	62,5	20800	0,6	XO.X10T3
R217.69-1416.0-10-2A	02772250	Cilindrico	16,0	2	9,0	6,0	14,0	–	112,0	112,0	160,0	7,5	21,0	30,5	29400	0,2	XO.X10T3
R217.69-1616.0-10-2A	02769179	Cilindrico	16,0	2	9,0	6,0	16,0	–	30,0	87,0	135,0	7,5	21,0	30,5	29400	0,2	XO.X10T3
R217.69-1618.0-10-2A	02772252	Cilindrico	18,0	2	9,0	6,0	16,0	–	112,0	112,0	160,0	6,0	25,0	34,5	27800	0,3	XO.X10T3
R217.69-1820.0-10-2A	02769205	Cilindrico	20,0	2	9,0	6,0	18,0	–	150,0	150,0	200,0	4,5	29,0	38,5	26300	0,4	XO.X10T3
R217.69-2020.0-10-2A	02769206	Cilindrico	20,0	2	9,0	6,0	20,0	–	35,0	100,0	150,0	4,5	29,0	38,5	26300	0,3	XO.X10T3
R217.69-2020.0-10-3A	02769209	Cilindrico	20,0	3	9,0	6,0	20,0	–	35,0	100,0	150,0	4,5	29,0	38,5	26300	0,4	XO.X10T3
R217.69-2225.0-10-3A	02772253	Cilindrico	25,0	3	9,0	6,0	22,0	–	150,0	150,0	200,0	3,0	39,0	48,5	23500	0,6	XO.X10T3
R217.69-2525.0-10-3A	02769218	Cilindrico	25,0	3	9,0	6,0	25,0	–	40,0	114,0	170,0	3,0	39,0	48,5	23500	0,6	XO.X10T3
R217.69-2525.0-10-4A	02769224	Cilindrico	25,0	4	9,0	6,0	25,0	–	40,0	114,0	170,0	3,0	39,0	48,5	23500	0,6	XO.X10T3
R217.69-3232.0-10-3A	02769230	Cilindrico	32,0	3	9,0	6,0	32,0	–	40,0	135,0	195,0	2,0	53,0	62,5	20800	1,1	XO.X10T3
R217.69-3232.0-10-5A	02769231	Cilindrico	32,0	5	9,0	6,0	32,0	–	40,0	135,0	195,0	2,0	53,0	62,5	20800	1,1	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T07PX50	C02506-T07P

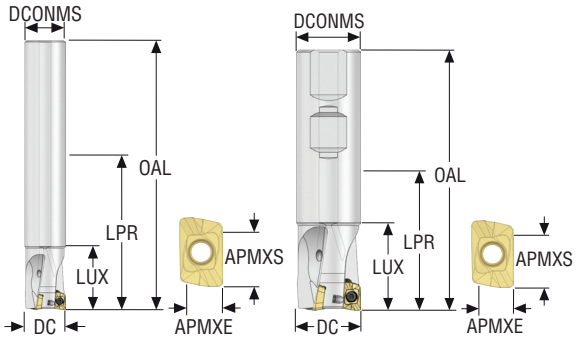
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 10 – R217.69-10 – Pollici



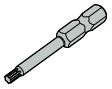


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 50-52
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.69-00.50-3-10-1A	03058730	Weldon	0.500	1	0.354	0.236	0.625	2.299	1.083	1.378	3.252	3,0	1.516	1.890	33100	0.440	XO.X10T3
R217.69-00.62-3-10-2A	02772634	Weldon	0.625	2	0.354	0.236	0.625	2.299	1.083	1.362	3.252	7,5	0.827	1.201	29400	0.440	XO.X10T3
R217.69-00.75-3-10-2A	02772637	Weldon	0.750	2	0.354	0.236	0.750	2.374	1.189	1.374	3.390	5,0	1.063	1.437	26300	0.440	XO.X10T3
R217.69-00.750-3-10-3A	02903111	Weldon	0.750	3	0.354	0.236	0.750	2.374	1.189	1.575	3.390	4,5	1.083	1.457	26300	0.440	XO.X10T3
R217.69-00.87-3-10-3A	02772720	Weldon	0.875	3	0.354	0.236	0.750	2.374	1.421	1.421	3.390	5,0	1.319	1.693	25000	0.440	XO.X10T3
R217.69-01.00-3-10-3A	02772711	Weldon	1.000	3	0.354	0.236	1.000	2.638	1.280	1.575	3.780	3,0	1.575	1.949	23500	0.660	XO.X10T3
R217.69-01.00-3-10-4A	02772713	Weldon	1.000	4	0.354	0.236	1.000	2.638	1.280	1.575	3.780	3,0	1.575	1.949	23500	0.880	XO.X10T3
R217.69-01.25-3-10-5A	02772731	Weldon	1.250	5	0.354	0.236	1.250	2.858	1.240	1.736	4.000	2,0	2.067	2.441	20800	1.100	XO.X10T3
R217.69-01.50-3-10-4A	02773428	Weldon	1.500	4	0.354	0.236	1.250	2.858	1.736	1.736	4.000	1,5	2.579	2.953	18600	1.320	XO.X10T3
R217.69-00.62-0-10-2A	02772633	Cilindrico	0.625	2	0.354	0.236	0.625	–	1.083	3.425	5.315	7,5	0.807	1.181	29400	0.440	XO.X10T3
R217.69-00.75-0-10-2A	02772636	Cilindrico	0.750	2	0.354	0.236	0.750	–	1.181	3.937	5.906	5,0	1.063	1.437	26300	0.660	XO.X10T3
R217.69-00.87-0-10-3A	02772719	Cilindrico	0.875	3	0.354	0.236	0.750	–	3.937	3.937	5.906	5,0	1.299	1.673	26300	0.880	XO.X10T3
R217.69-01.00-0-10-3A	02772707	Cilindrico	1.000	3	0.354	0.236	1.000	–	1.280	4.488	6.693	3,0	1.555	1.929	23500	1.540	XO.X10T3
R217.69-01.00-0-10-4A	02772710	Cilindrico	1.000	4	0.354	0.236	1.000	–	1.280	4.488	6.693	3,0	1.555	1.929	23500	1.320	XO.X10T3
R217.69-01.25-0-10-5A	02772728	Cilindrico	1.250	5	0.354	0.236	1.250	–	1.240	5.315	7.677	2,0	2.067	2.441	20800	2.650	XO.X10T3
R217.69-01.50-0-10-4A	02773425	Cilindrico	1.500	4	0.354	0.236	1.250	–	5.315	5.315	7.677	1,5	2.559	2.933	18600	2.650	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 0,094"

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T07PX50	C02506-T07P

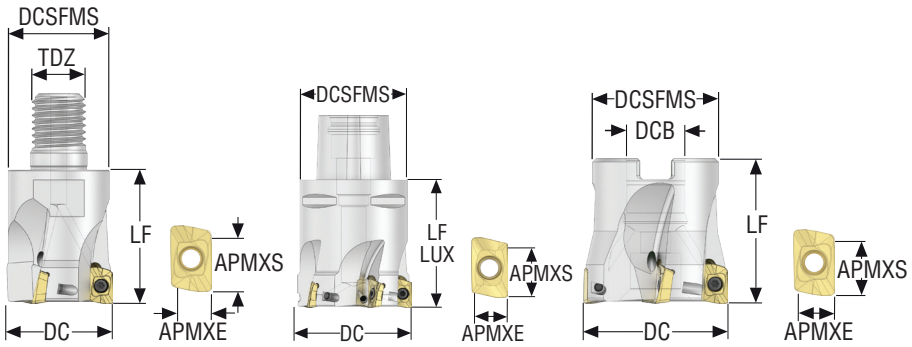
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 10 – R217/220.69-10 – In mm



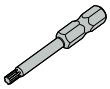


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 50-52
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	LUX	RMPX°	Cmin		RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm	mm			mm		kg	
C4-R217.69-044-10-4A	02824179	Seco-Capto	44,0	4	9,0	6,0	–	40,0	–	–	60,0	60,0	1,3	77,0	86,5	28000	0,6	XO.X10T3
C5-R217.69-054-10-5A	02824181	Seco-Capto	54,0	5	9,0	6,0	–	50,0	–	–	60,0	60,0	1,2	97,0	106,5	14200	1,0	XO.X10T3
R220.69-0032-10-4A	02840940	Manicotto	32,0	4	9,0	6,0	16,0	30,0	–	16,0	35,0	–	2,0	53,0	62,5	20800	0,2	XO.X10T3
R220.69-0032-10-5A	02841295	Manicotto	32,0	5	9,0	6,0	16,0	30,0	–	16,0	35,0	–	2,0	53,0	62,5	20800	0,2	XO.X10T3
R220.69-0040-10-4A	02769302	Manicotto	40,0	4	9,0	6,0	16,0	35,0	–	16,0	40,0	–	1,5	69,0	78,5	18600	0,3	XO.X10T3
R220.69-0040-10-6A	02769304	Manicotto	40,0	6	9,0	6,0	16,0	35,0	–	16,0	40,0	–	1,5	69,0	78,5	18600	0,3	XO.X10T3
R220.69-0044-10-4A	02969079	Manicotto	44,0	4	9,0	6,0	16,0	35,0	–	16,0	40,0	–	1,3	77,0	86,5	18600	0,3	XO.X10T3
R220.69-0050-10-5A	02769710	Manicotto	50,0	5	9,0	6,0	22,0	47,0	–	22,0	40,0	–	1,2	89,0	98,5	16600	0,4	XO.X10T3
R220.69-0050-10-7A	02769713	Manicotto	50,0	7	9,0	6,0	22,0	47,0	–	22,0	40,0	–	1,2	89,0	98,5	16600	0,4	XO.X10T3
R220.69-0052-10-5A	02969080	Manicotto	52,0	5	9,0	6,0	22,0	47,0	–	22,0	40,0	–	1,2	93,0	102,5	16400	0,5	XO.X10T3
R220.69-0063-10-5A	02770205	Manicotto	63,0	5	9,0	6,0	27,0	52,0	–	27,0	40,0	–	0,9	115,0	124,5	14800	0,6	XO.X10T3
R220.69-0063-10-8A	02770206	Manicotto	63,0	8	9,0	6,0	27,0	52,0	–	27,0	40,0	–	0,9	115,0	124,5	14800	0,6	XO.X10T3
R220.69-0066-10-5A	02969081	Manicotto	66,0	5	9,0	6,0	27,0	52,0	–	27,0	40,0	–	0,9	121,0	130,5	14800	0,6	XO.X10T3
R220.69-0080-10-8A	02770207	Manicotto	80,0	8	9,0	6,0	27,0	62,0	–	27,0	50,0	–	0,5	149,0	158,5	13200	1,1	XO.X10T3
R220.69-0080-10-10A	02770208	Manicotto	80,0	10	9,0	6,0	27,0	62,0	–	27,0	50,0	–	0,5	149,0	158,5	13200	1,0	XO.X10T3
R220.69-0100-10-12A	02770209	Manicotto	100,0	12	9,0	6,0	32,0	77,0	–	32,0	50,0	–	0,5	189,0	198,5	11800	1,8	XO.X10T3
R217.69-0816.RE-10-2A	02769181	Combimaster	16,0	2	9,0	6,0	–	14,0	M8	–	23,0	–	7,5	21,0	30,5	29400	0,1	XO.X10T3
R217.69-1020.RE-10-2A	02769213	Combimaster	20,0	2	9,0	6,0	–	19,0	M10	–	28,0	–	4,5	29,0	38,5	26300	0,1	XO.X10T3
R217.69-1020.RE-10-3A	02769214	Combimaster	20,0	3	9,0	6,0	–	19,0	M10	–	28,0	–	4,5	29,0	38,5	26300	0,1	XO.X10T3
R217.69-1225.RE-10-3A	02769228	Combimaster	25,0	3	9,0	6,0	–	23,0	M12	–	30,0	–	3,0	39,0	48,5	23500	0,1	XO.X10T3
R217.69-1225.RE-10-4A	02769229	Combimaster	25,0	4	9,0	6,0	–	23,0	M12	–	30,0	–	3,0	39,0	48,5	23500	0,1	XO.X10T3
R217.69-1632.RE-10-3A	02769234	Combimaster	32,0	3	9,0	6,0	–	30,0	M16	–	40,0	–	2,0	53,0	62,5	20800	0,2	XO.X10T3
R217.69-1632.RE-10-5A	02769235	Combimaster	32,0	5	9,0	6,0	–	30,0	M16	–	40,0	–	2,0	53,0	62,5	20800	0,2	XO.X10T3
R217.69-2040.RE-10-4A	02769295	Combimaster	40,0	4	9,0	6,0	–	36,5	M20	–	40,0	–	1,5	69,0	78,5	18600	0,3	XO.X10T3
R217.69-2040.RE-10-6A	02769296	Combimaster	40,0	6	9,0	6,0	–	36,5	M20	–	40,0	–	1,5	69,0	78,5	18600	0,3	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
Cx/R217.69/220.69-0080-0100	–	1/4HEX-T07PX50	C02506-T07P
R220.69-0032	220.17-690	1/4HEX-T07PX50	C02506-T07P
R220.69-0040-0044	MC6S8X30	1/4HEX-T07PX50	C02506-T07P
R220.69-0050-0052	220.17-692	1/4HEX-T07PX50	C02506-T07P
R220.69-0063-0066	220.17-693	1/4HEX-T07PX50	C02506-T07P

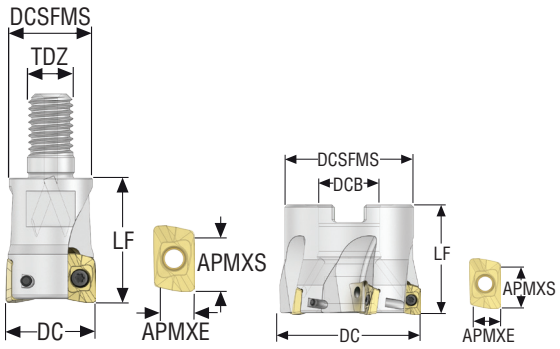
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
Cx-R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 10 – R217/220.69-10 – Pollici



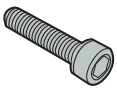
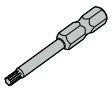


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 50-52
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.69-01.50-10-4A	02773432	Manicotto	1.500	4	0.354	0.236	0.750	1.378	–	0.750	1.575	1,5	2.559	2.933	18600	0.440	XO.X10T3
R220.69-01.50-10-6A	02773433	Manicotto	1.500	6	0.354	0.236	0.750	1.378	–	0.750	1.575	1,5	2.559	2.933	18600	0.660	XO.X10T3
R220.69-02.00-10-5A	02773434	Manicotto	2.000	5	0.354	0.236	0.750	1.850	–	0.750	1.575	1,0	3.563	3.937	16600	1.100	XO.X10T3
R220.69-02.00-10-7A	02773435	Manicotto	2.000	7	0.354	0.236	0.750	1.850	–	0.750	1.575	1,0	3.563	3.937	16600	0.880	XO.X10T3
R220.69-03.00-10-10A	02773438	Manicotto	3.000	10	0.354	0.236	1.000	2.441	–	1.000	1.969	0,5	5.551	5.925	13200	2.430	XO.X10T3
R217.69-00.62-08RE-10-2A	02772627	Combimaster	0.625	2	0.354	0.236	–	0.531	M8	–	0.906	7,5	0.807	1.181	29400	0.220	XO.X10T3
R217.69-00.75-10RE-10-2A	02772635	Combimaster	0.750	2	0.354	0.236	–	0.728	M10	–	1.378	5,0	1.063	1.437	26300	0.220	XO.X10T3
R217.69-01.00-12RE-10-3A	02772703	Combimaster	1.000	3	0.354	0.236	–	0.906	M12	–	1.575	2,5	1.555	1.929	23500	0.220	XO.X10T3
R217.69-01.00-12RE-10-4A	02772705	Combimaster	1.000	4	0.354	0.236	–	0.906	M12	–	1.575	2,5	1.555	1.929	23500	0.220	XO.X10T3
R217.69-01.25-16RE-10-5A	02772725	Combimaster	1.250	5	0.354	0.236	–	1.181	M16	–	1.575	1,5	2.067	2.441	20800	0.440	XO.X10T3
R217.69-01.50-20RE-10-6A	03170244	Combimaster	1.500	6	0.354	0.236	–	1.457	M20	–	1.575	1,5	2.559	2.933	18600	0.880	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 0,094"
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.69-..	–	1/4HEX-T07PX50	C02506-T07P
R220.69-01.50 - 02.00	UC6S3/8UNFX1	1/4HEX-T07PX50	C02506-T07P
R220.69-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T07PX50	C02506-T07P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-10 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XOMX10T308TR-ME07 F40M	4,5 *0.18*	0,10 0.0040	0,11 0.0044	0,17 0.0065
P2	XOMX10T308TR-ME07 F40M	4,5 *0.18*	0,10 0.0040	0,11 0.0044	0,17 0.0065
P3	XOMX10T308TR-ME07 MP2501	4,5 *0.18*	0,095 0.0038	0,11 0.0044	0,16 0.0065
P4	XOMX10T308TR-ME07 MP2501	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,16 0.0065
P5	XOMX10T308TR-M09 MP2501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P6	XOMX10T308TR-M09 MP2501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P7	XOMX10T308TR-M09 MP2501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P8	XOMX10T308TR-M09 MP2501	4,5 *0.18*	0,12 0.0048	0,14 0.0055	0,20 0.0080
P11	XOMX10T308TR-M09 MP3501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P12	XOMX10T308TR-M09 MS2500	3,5 *0.14*	0,080 0.0032	0,090 0.0036	0,14 0.0055
M1	XOEX10T308R-M06 F40M	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,15 0.0060
M2	XOEX10T308R-M06 F40M	4,5 *0.18*	0,080 0.0032	0,085 0.0034	0,13 0.0050
M3	XOEX10T308R-M06 F40M	3,5 *0.14*	0,065 0.0026	0,070 0.0028	0,11 0.0044
M4	XOEX10T308R-M06 MS2050	2,5 *0.10*	0,055 0.0022	0,065 0.0026	0,095 0.0038
M5	XOEX10T304R-M06 MS2050	2,5 *0.10*	0,055 0.0022	0,060 0.0024	0,090 0.0036
K1	XOMX10T308TR-M09 MK1501	4,5 *0.18*	0,13 0.0050	0,14 0.0055	0,22 0.0085
K2	XOMX10T308TR-M09 MK1501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K3	XOMX10T308TR-M09 MK2050	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K4	XOMX10T308TR-M09 MK2050	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K5	XOMX10T308TR-M09 MK2050	4,5 *0.18*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K6	XOMX10T308TR-M09 MK2050	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K7	XOMX10T308TR-M09 MK2050	4,5 *0.18*	0,11 0.0044	0,12 0.0048	0,18 0.0070
N1	XOEX10T308FR-E05 H15	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
N2	XOEX10T308FR-E05 H15	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
N3	XOEX10T308FR-E05 H15	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
N11	XOEX10T308FR-E05 H15	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,15 0.0060
S1	XOEX10T308R-M06 F40M	2,5 *0.10*	0,055 0.0022	0,065 0.0026	0,095 0.0038
S2	XOEX10T308R-M06 F40M	2,5 *0.10*	0,055 0.0022	0,065 0.0026	0,095 0.0038
S3	XOEX10T308R-M06 F40M	2,5 *0.10*	0,055 0.0022	0,060 0.0024	0,090 0.0036
S11	XOEX10T308R-M06 MS2050	3,0 *0.12*	0,065 0.0026	0,070 0.0028	0,11 0.0044
S12	XOEX10T308R-M06 MS2050	3,0 *0.12*	0,065 0.0026	0,070 0.0028	0,11 0.0044
S13	XOEX10T308R-M06 MS2050	2,5 *0.10*	0,055 0.0022	0,065 0.0026	0,095 0.0038
H5	XOMX10T308TR-M09 MH1051	3,5 *0.14*	0,080 0.0032	0,090 0.0036	0,14 0.0055
H8	XOMX10T308TR-M09 MH1051	3,0 *0.12*	0,065 0.0026	0,070 0.0028	0,11 0.0044
H11	XOMX10T308TR-M09 MH1051	3,5 *0.14*	0,080 0.0032	0,090 0.0036	0,14 0.0055
H12	XOMX10T308TR-M09 MH1051	3,0 *0.12*	0,065 0.0026	0,070 0.0028	0,11 0.0044
H21	XOMX10T308TR-M09 MH1051	3,0 *0.12*	0,065 0.0026	0,070 0.0028	0,11 0.0044

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-10 – Parametri di taglio v_c = (m/min)/(sf/min)

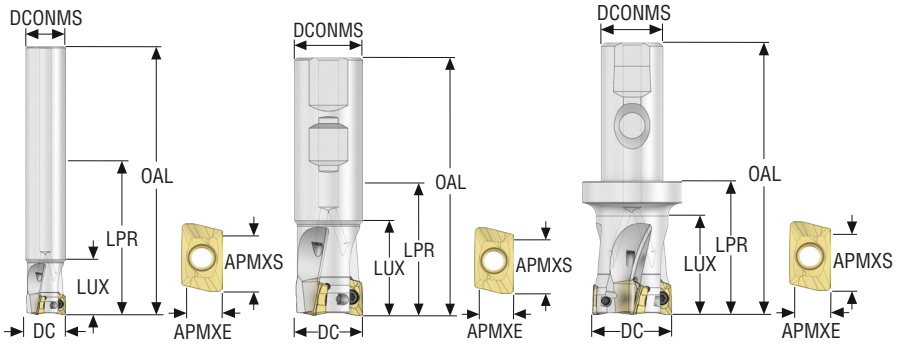
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H15		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	285	380	445	300	395	460	315	395	455	305	365	410	430	530	590	330	430	510	—	—	—
	—	—	—	*940*	*1250*	*1450*	*980*	*1300*	*1500*	*1025*	*1300*	*1500*	*1000*	*1200*	*1350*	*1400*	*1750*	*1925*	*1075*	*1400*	*1675*	—	—	—
P2	—	—	—	280	370	435	290	385	450	305	385	440	300	355	400	420	520	580	320	420	500	—	—	—
	—	—	—	*920*	*1225*	*1425*	*950*	*1275*	*1475*	*1000*	*1275*	*1450*	*980*	*1175*	*1300*	*1375*	*1700*	*1900*	*1050*	*1375*	*1650*	—	—	—
P3	—	—	—	245	325	380	260	340	400	265	335	380	260	310	345	365	445	495	280	365	430	—	—	—
	—	—	—	*800*	*1075*	*1250*	*850*	*1125*	*1300*	*870*	*1100*	*1250*	*850*	*1025*	*1125*	*1200*	*1450*	*1625*	*920*	*1200*	*1400*	—	—	—
P4	—	—	—	215	285	335	230	300	350	235	295	340	230	280	320	325	395	435	245	320	385	—	—	—
	—	—	—	*710*	*940*	*1100*	*750*	*980*	*1150*	*770*	*970*	*1125*	*750*	*920*	*1050*	*1075*	*1300*	*1425*	*800*	*1050*	*1275*	—	—	—
P5	415	550	650	205	275	320	220	285	335	225	285	325	220	265	295	310	375	415	235	310	365	—	—	—
	1350	*1800*	*2125*	*670*	*900*	*1050*	*720*	*940*	*1100*	*740*	*940*	*1075*	*720*	*870*	*970*	*1025*	*1225*	*1350*	*770*	*1025*	*1200*	—	—	—
P6	465	620	730	230	305	360	245	320	380	250	320	365	245	295	330	345	425	465	265	350	410	—	—	—
	1525	*2025*	*2400*	*750*	*1000*	*1175*	*800*	*1050*	*1250*	*820*	*1050*	*1200*	*800*	*970*	*1075*	*1125*	*1400*	*1525*	*870*	*1150*	*1350*	—	—	—
P7	440	590	690	220	290	340	230	305	360	240	300	345	230	280	310	325	400	440	250	330	390	—	—	—
	1450	*1925*	*2275*	*720*	*950*	*1125*	*750*	*1000*	*1175*	*790*	*980*	*1125*	*750*	*920*	*1025*	*1075*	*1300*	*1450*	*820*	*1075*	*1275*	—	—	—
P8	415	550	650	205	275	320	220	285	335	225	280	320	220	260	290	310	375	415	235	310	360	—	—	—
	1350	*1800*	*2125*	*670*	*900*	*1050*	*720*	*940*	*1100*	*740*	*920*	*1050*	*720*	*850*	*950*	*1025*	*1225*	*1350*	*770*	*1025*	*1175*	—	—	—
P11	425	570	670	210	280	330	225	295	350	230	290	335	225	270	300	285	430	540	240	320	375	—	—	—
	1400	*1875*	*2200*	*690*	*920*	*1075*	*740*	*970*	*1150*	*750*	*950*	*1100*	*740*	*890*	*980*	*940*	*1400*	*1775*	*790*	*1050*	*1225*	—	—	—
P12	300	385	450	140	180	215	150	195	220	150	185	205	145	170	190	170	245	295	155	205	240	—	—	—
	980	*1275*	*1475*	*460*	*590*	*710*	*490*	*640*	*720*	*490*	*610*	*670*	*475*	*560*	*620*	*560*	*800*	*970*	*510*	*670*	*790*	—	—	—
M1	—	—	—	—	—	—	195	260	305	220	285	340	200	260	310	335	500	630	230	300	355	—	—	—
	—	—	—	—	—	—	*640*	*850*	*1000*	*720*	*940*	*1125*	*660*	*850*	*1025*	*1100*	*1650*	*2075*	*750*	*980*	*1175*	—	—	—
M2	—	—	—	—	—	—	165	215	255	180	240	280	165	215	255	270	405	510	190	250	295	—	—	—
	—	—	—	—	—	—	*540*	*710*	*840*	*590*	*790*	*920*	*540*	*710*	*840*	*890*	*1325*	*1675*	*620*	*820*	*970*	—	—	—
M3	—	—	—	—	—	—	135	175	205	145	190	220	130	175	200	210	305	380	150	200	230	—	—	—
	—	—	—	—	—	—	*445*	*570*	*670*	*475*	*620*	*720*	*425*	*570*	*660*	*690*	*1000*	*1250*	*490*	*660*	*750*	—	—	—
M4	—	—	—	—	—	—	105	135	160	115	150	175	105	135	155	155	220	270	120	155	180	—	—	—
	—	—	—	—	—	—	*345*	*445*	*520*	*375*	*490*	*570*	*345*	*445*	*510*	*510*	*720*	*890*	*395*	*510*	*590*	—	—	—
M5	—	—	—	—	—	—	85	115	130	95	125	145	85	110	130	130	185	225	100	130	150	—	—	—
	—	—	—	—	—	—	*280*	*375*	*425*	*310*	*410*	*475*	*280*	*360*	*425*	*425*	*610*	*740*	*330*	*425*	*490*	—	—	—
K1	560	750	880	300	400	465	210	275	325	—	—	—	195	255	305	—	—	—	—	—	—	—	—	—
	1825	*2450*	*2875*	*980*	*1300*	*1525*	*690*	*900*	*1075*	—	—	—	*640*	*840*	*1000*	—	—	—	—	—	—	—	—	—
K2	500	670	790	265	355	415	185	245	290	—	—	—	175	230	270	—	—	—	—	—	—	—	—	—
	1650	*2200*	*2600*	*870*	*1175*	*1350*	*610*	*800*	*950*	—	—	—	*570*	*750*	*890*	—	—	—	—	—	—	—	—	—
K3	425	570	670	225	300	350	155	205	245	—	—	—	145	195	225	—	—	—	—	—	—	—	—	—
	1400	*1875*	*2200*	*740*	*980*	*1150*	*510*	*670*	*800*	—	—	—	*475*	*640*	*740*	—	—	—	—	—	—	—	—	—
K4	405	540	640	215	285	335	150	200	235	—	—	—	140	185	215	—	—	—	—	—	—	—	—	—
	1325	*1775*	*2100*	*710*	*940*	*1100*	*490*	*660*	*770*	—	—	—	*460*	*610*	*710*	—	—	—	—	—	—	—	—	—
K5	250	330	395	130	175	205	90	120	145	—	—	—	85	110	130	—	—	—	—	—	—	—	—	—
	820	*1075*	*1300*	*425*	*570*	*670*	*295*	*395*	*475*	—	—	—	*280*	*360*	*425*	—	—	—	—	—	—	—	—	—
K6	355	475	560	190	250	295	130	175	205	—	—	—	125	160	190	—	—	—	—	—	—	—	—	—
	1175	*1550*	*1825*	*620*	*820*	*970*	*425*	*570*	*670*	—	—	—	*410*	*520*	*620*	—	—	—	—	—	—	—	—	—
K7	320	425	500	170	220	260	115	155	185	—	—	—	110	140	170	—	—	—	—	—	—	—	—	—
	1050	*1400*	*1650*	*560*	*720*	*850*	*375*	*510*	*610*	—	—	—	*360*	*460*	*560*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1450	1925	2275	—	—	—	—	—	—	1525	2000	2350
	—	—	—	—	—	—	—	—	—	—	—	—	*4750*	*6325*	*7475*	—	—	—	—	—	—	*5000*	*6550*	*7700*
N2	—	—	—	—	—	—	—	—	—	—	—	—	590	770	920	—	—	—	—	—	—	610	800	950
	—	—	—	—	—	—	—	—	—	—	—	—	*1925*	*2525*	*3025*	—	—	—	—	—	—	*2000*	*2625*	*3125*
N3	—	—	—	—	—	—	—	—	—	—	—	—	390	520	610	—	—	—	—	—	—	410	540	630
	—	—	—	—	—	—	—	—	—	—	—	—	*1275*	*1700*	*2000*	—	—	—	—	—	—	*1350*	*1775*	*2075*
N11	—	—	—	—	—	—	—	—	—	—	—	—	445	590	700	—	—	—	—	—	—	470	610	720
	—	—	—	—	—	—	—	—	—	—	—	—	*1450*	*1925*	*2300*	—	—	—	—	—	—	*1550*	*2000*	*2350*
S1	—	—	—	—	—	—	48	65	75	55	70	80	49	65	75	60	75	90	60	75	90	—	—	—
	—	—	—	—	—	—	*155*	*215*	*245*	*180*	*230*	*260*	*160*	*215*	*245*	*195*	*245*	*295*	*195*	*245*	*295*	—	—	—
S2	—	—	—	—	—	—	39	50	60	43	55	65	39	50	60	47	60	70	47	60	70	—	—	—
	—	—	—	—	—	—	*130*	*165*	*195*	*140*	*180*	*215*	*130*	*165*	*195*	*155*	*195*	*230*	*155*	*195*	*230*	—	—	—
S3	—	—	—	—	—	—	34	45	50	37	49	55	34	44	50	41	55	60	41	55	60	—	—	—
	—	—	—	—	—	—	*110*	*150*	*165*	*120*	*160*	*180*	*110*	*145*	*165*	*135*	*180*	*195*	*135*	*180*	*195*	—	—	—
S11	—	—	—	—	—	—	—	—	—	75	95	110	65	90	100	80	105	125	80	105	125	—	—	—
	—	—	—	—	—	—	—	—	—	*245*	*310*	*360*	*215*	*295*	*330*	*260*	*345*	*410*	*260*	*345*	*410*	—	—	—
S12	—	—	—	—	—	—	—	—	—	50	65	75	46	60	70	55	75	85	55	75	85	—	—	—
	—	—	—	—	—	—	—	—	—	*165*	*215*	*245*	*150*	*195*	*230*	*180*	*245*	*280*	*180*	*245*	*280*	—	—	—
S13	—	—	—	—	—	—	—	—	—	30	39	45	27	35	41	33	43	50	33	43	50	—	—	—
	—	—	—	—	—	—	—	—	—	*100*	*130*	*150*	*90*	*115*	*135*	*110*	*140*	*165*	*110*	*140*	*165*	—	—	—
H5	155	195	230	48	60	75	41	55	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	510	*640*	*750*	*155*	*195*	*245*	*135*	*180*	*215*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	165	210	245	50	65	80	44	60	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	540	*690*	*800*	*165*	*215*	*260*	*145*	*195*	*230*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	195	250	295	60	80	95	50	70	80	—	—	—	—	—	—	110	160	190	60	80	90	—	—	—
	640	*820*	*970*	*195*	*260*	*310*	*165*	*230*	*260*	—	—	—	—	—	—	*360*	*520*	*620*	*195*	*260*	*295*	—	—	—
H12	190	245	280	90	115	135	85	110	130	—	—	—	—	—	—	95	130	155	100	130	150	—	—	—
	620	*800*	*920*	*295*	*375*	*445*	*280*	*360*	*425*	—	—	—	—	—	—	*310*	*425*	*510*	*330*	*425*	*490*	—	—	—
H21	165	210	245	50	65	80	44	60	70	—	—	—	—	—	—	100	105	110	50	65	75	—	—	—
	540	*690*	*800*	*165*	*215*	*260*	*145*	*195*	*230*	—	—	—	—	—	—	*330*	*345*	*360*	*165*	*215*	*245*	—	—	—

R217/220.69-10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	420	510	580	410	510	570	395	490	550	370	455	510	235	300	345
	—	—	—	*1375*	*1675*	*1900*	*1350*	*1675*	*1875*	*1300*	*1600*	*1800*	*1225*	*1500*	*1675*	*770*	*980*	*1125*
P2	—	—	—	410	500	560	400	495	550	385	475	540	360	445	495	230	290	335
	—	—	—	*1350*	*1650*	*1825*	*1300*	*1625*	*1800*	*1275*	*1550*	*1775*	*1175*	*1450*	*1625*	*750*	*950*	*1100*
P3	—	—	—	360	440	490	355	430	485	335	415	470	315	390	435	200	255	290
	—	—	—	*1175*	*1450*	*1600*	*1175*	*1400*	*1600*	*1100*	*1350*	*1550*	*1025*	*1275*	*1425*	*660*	*840*	*950*
P4	—	—	—	315	385	430	310	380	425	295	365	415	280	340	385	190	245	280
	—	—	—	*1025*	*1275*	*1400*	*1025*	*1250*	*1400*	*970*	*1200*	*1350*	*920*	*1125*	*1275*	*620*	*800*	*920*
P5	—	—	—	300	370	415	295	365	410	285	350	395	265	325	365	170	215	245
	—	—	—	*980*	*1225*	*1350*	*970*	*1200*	*1350*	*940*	*1150*	*1300*	*870*	*1075*	*1200*	*560*	*710*	*800*
P6	—	—	—	340	415	465	335	410	460	320	395	445	300	365	410	190	240	275
	—	—	—	*1125*	*1350*	*1525*	*1100*	*1350*	*1500*	*1050*	*1300*	*1450*	*980*	*1200*	*1350*	*620*	*790*	*900*
P7	—	—	—	320	390	435	315	385	430	300	370	420	280	345	390	180	225	260
	—	—	—	*1050*	*1275*	*1425*	*1025*	*1275*	*1400*	*980*	*1225*	*1375*	*920*	*1125*	*1275*	*590*	*740*	*850*
P8	—	—	—	300	370	415	295	365	410	285	350	395	265	325	365	170	215	245
	—	—	—	*980*	*1225*	*1350*	*970*	*1200*	*1350*	*940*	*1150*	*1300*	*870*	*1075*	*1200*	*560*	*710*	*800*
P11	—	—	—	310	380	425	305	375	420	290	360	405	275	335	380	175	220	250
	—	—	—	*1025*	*1250*	*1400*	*1000*	*1225*	*1375*	*950*	*1175*	*1325*	*900*	*1100*	*1250*	*570*	*720*	*820*
P12	—	—	—	200	240	265	195	235	260	190	225	255	180	210	235	110	135	155
	—	—	—	*660*	*790*	*870*	*640*	*770*	*850*	*620*	*740*	*840*	*590*	*690*	*770*	*360*	*445*	*510*
M1	—	—	—	—	—	—	205	270	315	220	295	345	190	250	295	150	200	230
	—	—	—	—	—	—	*670*	*890*	*1025*	*720*	*970*	*1125*	*620*	*820*	*970*	*490*	*660*	*750*
M2	—	—	—	—	—	—	170	225	260	185	240	285	155	210	245	125	165	190
	—	—	—	—	—	—	*560*	*740*	*850*	*610*	*790*	*940*	*510*	*690*	*800*	*410*	*540*	*620*
M3	—	—	—	—	—	—	140	180	210	150	195	230	130	170	195	100	135	155
	—	—	—	—	—	—	*460*	*590*	*690*	*490*	*640*	*750*	*425*	*560*	*640*	*330*	*445*	*510*
M4	—	—	—	—	—	—	110	140	165	115	155	175	100	130	150	80	105	120
	—	—	—	—	—	—	*360*	*460*	*540*	*375*	*510*	*570*	*330*	*425*	*490*	*260*	*345*	*395*
M5	—	—	—	—	—	—	90	120	135	100	130	150	85	110	125	65	85	100
	—	—	—	—	—	—	*295*	*395*	*445*	*330*	*425*	*490*	*280*	*360*	*410*	*215*	*280*	*330*
K1	350	610	830	410	510	570	405	500	560	245	325	380	365	450	500	—	—	—
	1150	*2000*	*2725*	*1350*	*1675*	*1875*	*1325*	*1650*	*1825*	*800*	*1075*	*1250*	*1200*	*1475*	*1650*	—	—	—
K2	310	530	730	365	445	500	360	440	495	215	285	335	320	395	445	—	—	—
	1025	*1750*	*2400*	*1200*	*1450*	*1650*	*1175*	*1450*	*1625*	*710*	*940*	*1100*	*1050*	*1300*	*1450*	—	—	—
K3	245	360	445	310	375	420	305	370	415	185	245	285	270	335	375	—	—	—
	800	*1175*	*1450*	*1025*	*1225*	*1375*	*1000*	*1225*	*1350*	*610*	*800*	*940*	*890*	*1100*	*1225*	—	—	—
K4	235	345	425	295	360	405	290	355	400	175	230	270	260	320	360	—	—	—
	770	*1125*	*1400*	*970*	*1175*	*1325*	*950*	*1175*	*1300*	*570*	*750*	*890*	*850*	*1050*	*1175*	—	—	—
K5	145	210	260	180	215	245	175	215	240	105	140	165	160	195	220	—	—	—
	475	*690*	*850*	*590*	*710*	*800*	*570*	*710*	*790*	*345*	*460*	*540*	*520*	*640*	*720*	—	—	—
K6	210	300	375	260	315	355	255	315	350	155	205	240	230	280	315	—	—	—
	690	*980*	*1225*	*850*	*1025*	*1175*	*840*	*1025*	*1150*	*510*	*670*	*790*	*750*	*920*	*1025*	—	—	—
K7	185	265	330	230	280	310	225	275	310	135	180	215	205	245	280	—	—	—
	610	*870*	*1075*	*750*	*920*	*1025*	*740*	*900*	*1025*	*445*	*590*	*710*	*670*	*800*	*920*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	55	75	85	47	60	70	24	32	37
	—	—	—	—	—	—	—	—	—	*180*	*245*	*280*	*155*	*195*	*230*	*80*	*105*	*120*
S2	—	—	—	—	—	—	—	—	—	46	60	70	38	50	55	19	25	29
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*125*	*165*	*180*	*60*	*80*	*95*
S3	—	—	—	—	—	—	—	—	—	40	55	60	33	43	50	17	22	26
	—	—	—	—	—	—	—	—	—	*130*	*180*	*195*	*110*	*140*	*165*	*55*	*70*	*85*
S11	—	—	—	—	—	—	—	—	—	80	105	120	65	85	100	34	44	50
	—	—	—	—	—	—	—	—	—	*260*	*345*	*395*	*215*	*280*	*330*	*110*	*145*	*165*
S12	—	—	—	—	—	—	—	—	—	55	75	85	45	60	70	31	41	47
	—	—	—	—	—	—	—	—	—	*180*	*245*	*280*	*150*	*195*	*230*	*100*	*135*	*155*
S13	—	—	—	—	—	—	—	—	—	32	42	49	26	35	40	18	24	27
	—	—	—	—	—	—	—	—	—	*105*	*140*	*160*	*85*	*115*	*130*	*60*	*80*	*90*
H5	—	—	—	55	70	80	—	—	—	47	60	70	41	55	65	—	—	—
	—	—	—	*180*	*230*	*260*	—	—	—	*155*	*195*	*230*	*135*	*180*	*215*	—	—	—
H8	—	—	—	55	75	85	—	—	—	49	65	75	44	55	65	—	—	—
	—	—	—	*180*	*245*	*280*	—	—	—	*160*	*215*	*245*	*145*	*180*	*215*	—	—	—
H11	—	—	—	70	90	105	—	—	—	60	75	90	50	70	80	—	—	—
	—	—	—	*230*	*295*	*345*	—	—	—	*195*	*245*	*295*	*165*	*230*	*260*	—	—	—
H12	—	—	—	100	130	155	—	—	—	100	130	150	80	100	120	—	—	—
	—	—	—	*330*	*425*	*510*	—	—	—	*330*	*425*	*490*	*260*	*330*	*395*	—	—	—
H21	—	—	—	55	75	85	—	—	—	49	65	75	44	55	65	—	—	—
	—	—	—	*180*	*245*	*280*	—	—	—	*160*	*215*	*245*	*145*	*180*	*215*	—	—	—

Turbo 12 – R217.69-12 – In mm



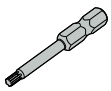


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 60-62
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.69-2020.3-12-2AN	02676817	Weldon	20,0	2	11,0	7,0	–	20,0	60,0	30,0	35,0	85,0	8,0	27,5	38,0	23200	0,2	XO.X1204
R217.69-2525.3-12-3AN	02676819	Weldon	25,0	3	11,0	7,0	–	25,0	63,0	32,0	39,0	95,0	5,0	37,5	48,0	20800	0,3	XO.X1204
R217.69-3232.3-12-3AN	02676820	Weldon	32,0	3	11,0	7,0	–	32,0	69,0	37,0	45,0	105,0	3,0	51,5	62,0	18400	0,5	XO.X1204
R217.69-3232.3-12-4AN	02676823	Weldon	32,0	4	11,0	7,0	–	32,0	69,0	37,0	45,0	105,0	3,0	51,5	62,0	18400	0,5	XO.X1204
R217.69-2025.3S-12-3AN	02676812	Seco-Weldon	25,0	3	11,0	7,0	35,0	20,0	–	36,0	50,0	100,0	5,0	37,5	48,0	20800	0,3	XO.X1204
R217.69-2532.3S-12-4AN	02676814	Seco-Weldon	32,0	4	11,0	7,0	40,0	25,0	–	40,0	54,0	110,0	3,0	51,5	62,0	18400	0,5	XO.X1204
R217.69-3240.3S-12-5AN	02676815	Seco-Weldon	40,0	5	11,0	7,0	50,0	32,0	–	46,0	60,0	120,0	2,5	67,5	78,0	16400	0,8	XO.X1204
R217.69-1820.0-12-2AN	02676791	Cilindrico	20,0	2	11,0	7,0	–	18,0	–	100,0	100,0	150,0	8,0	27,5	38,0	23200	0,3	XO.X1204
R217.69-2020.0-12-2AN	02676793	Cilindrico	20,0	2	11,0	7,0	–	20,0	–	30,0	100,0	150,0	8,0	27,5	38,0	23200	0,4	XO.X1204
R217.69-2225.0-12-2AN	02676794	Cilindrico	25,0	2	11,0	7,0	–	22,0	–	114,0	114,0	170,0	5,0	37,5	48,0	20800	0,5	XO.X1204
R217.69-2525.0-12-2AN	02676795	Cilindrico	25,0	2	11,0	7,0	–	25,0	–	35,0	114,0	170,0	5,0	37,5	48,0	20800	0,6	XO.X1204
R217.69-2525.0-12-3AN	02676800	Cilindrico	25,0	3	11,0	7,0	–	25,0	–	35,0	114,0	170,0	5,0	37,5	48,0	20800	0,6	XO.X1204
R217.69-3032.0-12-3AN	02676801	Cilindrico	32,0	3	11,0	7,0	–	30,0	–	135,0	135,0	195,0	3,0	51,5	62,0	18400	1,0	XO.X1204
R217.69-3232.0-12-3AN	02676802	Cilindrico	32,0	3	11,0	7,0	–	32,0	–	40,0	135,0	195,0	3,0	51,5	62,0	18400	1,0	XO.X1204
R217.69-3232.0-12-4AN	02676803	Cilindrico	32,0	4	11,0	7,0	–	32,0	–	40,0	135,0	195,0	3,0	51,5	62,0	18400	1,0	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-.. Ø20-25	1/4HEX-T10PX50	C03507-T10P
R217.69-.. Ø32	1/4HEX-T10PX50	C03508-T10P
R217.69-.. Ø40	1/4HEX-T10PX50	C03509-T10P

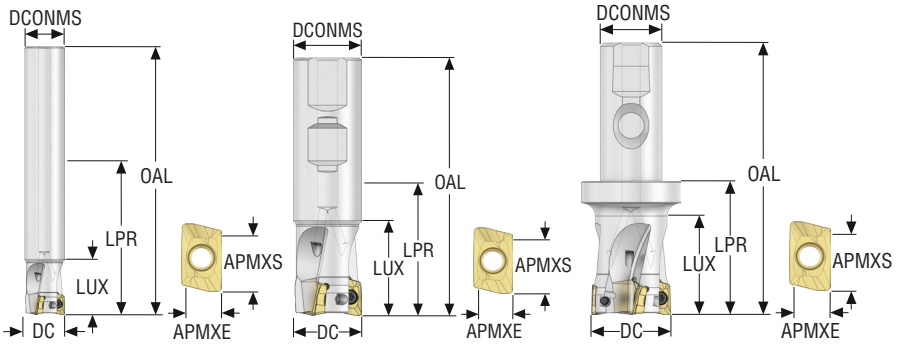
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217.69-12 – Pollici



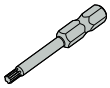


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 60-62
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.69-00.75-3-12-2AN	02688950	Weldon	0.750	2	0.433	0.276	–	0.750	2.362	1.170	1.417	3.378	8,0	1.004	1.417	23200	0.440	XO.X1204
R217.69-00.87-3-12-2AN	02688951	Weldon	0.875	2	0.433	0.276	–	0.750	2.362	1.409	1.409	3.378	6,0	1.240	1.654	22000	0.440	XO.X1204
R217.69-01.00-3-12-3AN	02688954	Weldon	1.000	3	0.433	0.276	–	1.000	2.858	1.575	1.795	4.000	5,0	1.496	1.909	20800	0.660	XO.X1204
R217.69-01.25-3-12-3AN	02688957	Weldon	1.250	3	0.433	0.276	–	1.250	3.110	1.339	1.890	4.252	3,0	2.008	2.421	18400	1.320	XO.X1204
R217.69-01.25-3-12-4AN	02688960	Weldon	1.250	4	0.433	0.276	–	1.250	3.110	1.339	1.890	4.252	3,0	2.008	2.421	18400	1.320	XO.X1204
R217.69-01.00-3S-12-3AN	02688974	Seco/Weldon	1.000	3	0.433	0.276	1.378	0.750	–	1.480	2.031	4.000	5,0	1.496	1.909	20800	0.660	XO.X1204
R217.69-01.25-3S-12-4AN	02688976	Seco/Weldon	1.250	4	0.433	0.276	1.575	1.000	–	1.260	1.811	4.252	3,0	2.008	2.421	18400	1.100	XO.X1204
R217.69-01.50-3S-12-5AN	02688996	Seco/Weldon	1.500	5	0.433	0.276	1.969	1.250	–	1.787	2.339	4.780	2,5	2.500	2.913	16400	1.760	XO.X1204
R217.69-00.75-0-12-2AN	02688842	Cilindrico	0.750	2	0.433	0.276	–	0.750	–	1.181	3.937	5.906	8,0	1.004	1.417	23200	0.660	XO.X1204
R217.69-00.87-0-12-2AN	02688849	Cilindrico	0.875	2	0.433	0.276	–	0.750	–	3.937	3.937	5.906	6,0	1.240	1.654	22000	0.660	XO.X1204
R217.69-01.00-0-12-2AN	02688853	Cilindrico	1.000	2	0.433	0.276	–	1.000	–	1.378	4.488	6.693	5,0	1.476	1.890	20800	1.540	XO.X1204
R217.69-01.00-0-12-3AN	02688854	Cilindrico	1.000	3	0.433	0.276	–	1.000	–	1.378	4.488	6.693	5,0	1.476	1.890	20800	1.320	XO.X1204
R217.69-01.25-0-12-3AN	02688855	Cilindrico	1.250	3	0.433	0.276	–	1.250	–	1.575	5.315	7.677	3,0	1.988	2.421	18400	2.430	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 0,094"

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T10PX50	C03507-T10P

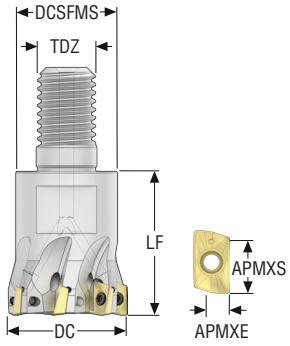
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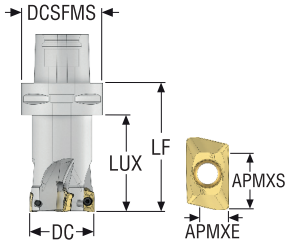
Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

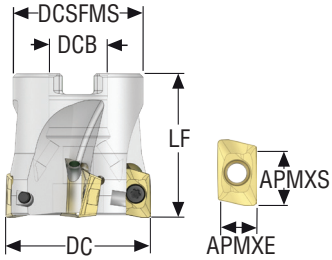
Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – In mm







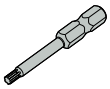


– Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 60-62
– Per il programma inserti completo, vedere le pagine 907, 908
– Per la spiegazione degli attributi ISO, vedere pag. 16
– KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	LF	LUX	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm		mm	mm		kg	
C5-R217.69-040-12-4AN	02677616	Seco-Capto	40,0	4	11,0	7,0	–	50,0	–	80,0	57,0	2,5	67,5	78,0	16400	0,9	XO.X12..
C5-R217.69-054-12-5AN	02677619	Seco-Capto	54,0	5	11,0	7,0	–	50,0	–	60,0	60,0	1,7	95,5	106,0	14200	1,0	XO.X12..
R220.69-0032-12-3AN	02841296	Manicotto	32,0	3	11,0	7,0	16,0	30,0	–	35,0	–	3,0	51,5	62,0	18400	0,1	XO.X12..
R220.69-0032-12-4AN	02841297	Manicotto	32,0	4	11,0	7,0	16,0	30,0	–	35,0	–	3,0	51,5	62,0	18400	0,1	XO.X12..
R220.69-0040-12-4AN	02677566	Manicotto	40,0	4	11,0	7,0	16,0	35,0	–	40,0	–	2,5	67,5	78,0	16400	0,2	XO.X12..
R220.69-0040-12-5AN	02677570	Manicotto	40,0	5	11,0	7,0	16,0	35,0	–	40,0	–	2,5	67,5	78,0	16400	0,2	XO.X12..
R220.69-0044-12-4AN	02969083	Manicotto	44,0	4	11,0	7,0	16,0	36,0	–	40,0	–	2,2	75,5	86,0	15600	0,3	XO.X12..
R220.69-0050-12-5AN	02677572	Manicotto	50,0	5	11,0	7,0	22,0	47,0	–	40,0	–	2,0	87,5	98,0	14800	0,4	XO.X12..
R220.69-0050-12-7AN	02677573	Manicotto	50,0	7	11,0	7,0	22,0	47,0	–	40,0	–	2,0	87,5	98,0	14800	0,4	XO.X12..
R220.69-0052-12-5AN	02497527	Manicotto	52,0	5	11,0	7,0	22,0	47,0	–	40,0	–	1,7	91,5	102,0	14200	0,4	XO.X12..
R220.69-0063-12-6AN	02677576	Manicotto	63,0	6	11,0	7,0	27,0	52,0	–	40,0	–	1,5	113,5	124,0	13200	0,6	XO.X12..
R220.69-0063-12-8AN	02677578	Manicotto	63,0	8	11,0	7,0	27,0	52,0	–	40,0	–	1,5	113,5	124,0	13200	0,6	XO.X12..
R220.69-0066-12-6AN	02969085	Manicotto	66,0	6	11,0	7,0	27,0	52,0	–	40,0	–	1,5	119,5	130,0	13200	0,6	XO.X12..
R220.69-0080-12-7AN	02677608	Manicotto	80,0	7	11,0	7,0	27,0	62,0	–	50,0	–	1,0	147,5	158,0	11600	1,0	XO.X12..
R220.69-0080-12-10AN	02677581	Manicotto	80,0	10	11,0	7,0	27,0	62,0	–	50,0	–	1,0	147,5	158,0	11600	1,0	XO.X12..
R220.69-0084-12-7AN	02969086	Manicotto	84,0	7	11,0	7,0	27,0	62,0	–	50,0	–	1,0	155,5	166,0	11300	1,1	XO.X12..
R220.69-0100-12-8AN	02677610	Manicotto	100,0	8	11,0	7,0	32,0	77,0	–	50,0	–	0,5	187,5	198,0	10400	1,7	XO.X12..
R220.69-0100-12-12AN	02677609	Manicotto	100,0	12	11,0	7,0	32,0	77,0	–	50,0	–	0,5	187,5	198,0	10400	1,7	XO.X12..
R220.69-0125-12-10AN	02677611	Manicotto	125,0	10	11,0	7,0	40,0	90,0	–	63,0	–	0,5	237,5	248,0	9200	3,2	XO.X12..
R220.69-0125-12-14AN	02677613	Manicotto	125,0	14	11,0	7,0	40,0	90,0	–	63,0	–	0,5	237,5	248,0	9200	2,9	XO.X12..
R217.69-1020.RE-12-2AN	02676828	Combimaster	20,0	2	11,0	7,0	–	18,0	M10	28,0	–	8,0	27,5	38,0	23200	0,1	XO.X12..
R217.69-1225.RE-12-3AN	02676833	Combimaster	25,0	3	11,0	7,0	–	23,0	M12	30,0	–	5,0	37,5	48,0	20800	0,1	XO.X12..
R217.69-1632.RE-12-3AN	02676838	Combimaster	32,0	3	11,0	7,0	–	30,0	M16	40,0	–	3,0	51,5	62,0	18400	0,2	XO.X12..
R217.69-1632.RE-12-4AN	02676839	Combimaster	32,0	4	11,0	7,0	–	30,0	M16	40,0	–	3,0	51,5	62,0	18400	0,2	XO.X12..
R217.69-1640.RE-12-4AN	02676840	Combimaster	40,0	4	11,0	7,0	–	30,0	M16	40,0	–	2,5	67,5	78,0	16400	0,3	XO.X12..
R217.69-1640.RE-12-5AN	02676845	Combimaster	40,0	5	11,0	7,0	–	30,0	M16	40,0	–	2,5	67,5	78,0	16400	0,3	XO.X12..
R217.69-2040.RE-12-4AN	02972700	Combimaster	40,0	4	11,0	7,0	–	36,5	M20	40,0	–	2,5	67,5	78,0	16400	0,3	XO.X12..
R217.69-2040.RE-12-5AN	02972704	Combimaster	40,0	5	11,0	7,0	–	36,5	M20	40,0	–	2,5	67,5	78,0	16400	0,3	XO.X12..

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

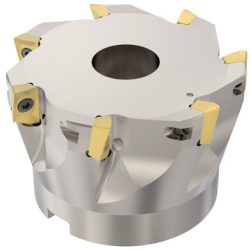
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
C5-R217.69-..	–	1/4HEX-T10PX50	C03509-T10P
R217.69-.. Ø20-25	–	1/4HEX-T10PX50	C03507-T10P
R217.69- Ø32	–	1/4HEX-T10PX50	C03508-T10P
R217.69- Ø40	–	1/4HEX-T10PX50	C03509-T10P
R220.69-0032	220.17-690	1/4HEX-T10PX50	C03507-T10P
R220.69-0040-0044	MC6S8X30	1/4HEX-T10PX50	C03509-T10P
R220.69-0050-0052	220.17-692	1/4HEX-T10PX50	C03509-T10P
R220.69-0063-0066	220.17-693	1/4HEX-T10PX50	C03509-T10P
R220.69-0080-0084	–	1/4HEX-T10PX50	C03509-T10P
R220.69-0100-0125	–	1/4HEX-T10PX90	C03509-T10P

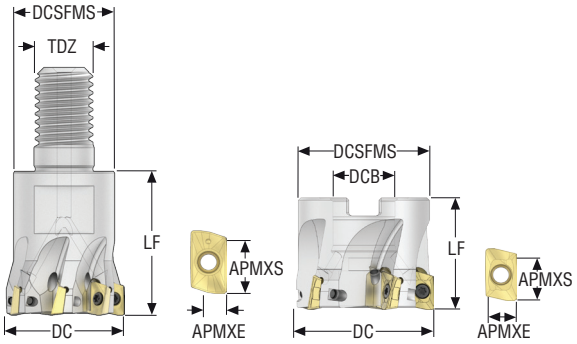
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – Pollici



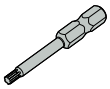


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 60-62
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.69-01.50-12-4AN	02689808	Manicotto	1.500	4	0.433	0.276	0.750	1.378	–	0.750	1.575	2,5	2.500	2.913	16400	0.660	XO.X1204
R220.69-01.50-12-5AN	02689809	Manicotto	1.500	5	0.433	0.276	0.750	1.378	–	0.750	1.575	2,5	2.500	2.913	16400	0.440	XO.X1204
R220.69-02.00-12-4AN	02689812	Manicotto	2.000	4	0.433	0.276	0.750	1.850	–	0.750	1.575	2,0	3.504	3.917	14800	1.100	XO.X1204
R220.69-02.00-12-5AN	02689813	Manicotto	2.000	5	0.433	0.276	0.750	1.850	–	0.750	1.575	2,0	3.504	3.917	14800	0.880	XO.X1204
R220.69-02.00-12-7AN	02689815	Manicotto	2.000	7	0.433	0.276	0.750	1.850	–	0.750	1.575	2,0	3.504	3.917	14800	1.100	XO.X1204
R220.69-02.50-12-4AN	02689816	Manicotto	2.500	4	0.433	0.276	0.750	1.850	–	0.750	1.575	1,5	4.508	4.921	13200	1.320	XO.X1204
R220.69-02.50-12-6AN	02689817	Manicotto	2.500	6	0.433	0.276	0.750	1.850	–	0.750	1.575	1,5	4.508	4.921	13200	1.320	XO.X1204
R220.69-03.00-12-4AN	02689820	Manicotto	3.000	4	0.433	0.276	1.000	2.441	–	1.000	2.000	1,0	5.492	5.906	11600	2.200	XO.X1204
R220.69-03.00-12-7AN	02689822	Manicotto	3.000	7	0.433	0.276	1.000	2.441	–	1.000	2.000	1,0	5.492	5.906	11600	2.430	XO.X1204
R220.69-03.00-12-10AN	02689821	Manicotto	3.000	10	0.433	0.276	1.000	2.441	–	1.000	2.000	1,0	5.492	5.906	11600	2.650	XO.X1204
R220.69-04.00-12-5AN	02689824	Manicotto	4.000	5	0.433	0.276	1.500	3.543	–	1.500	2.000	0,5	7.500	7.913	10400	4.850	XO.X1204
R220.69-04.00-12-8AN	02689826	Manicotto	4.000	8	0.433	0.276	1.500	3.543	–	1.500	2.000	0,5	7.500	7.913	10400	5.070	XO.X1204
R220.69-04.00-12-12AN	02689825	Manicotto	4.000	12	0.433	0.276	1.500	3.543	–	1.500	2.000	0,5	7.500	7.913	10400	5.070	XO.X1204
R217.69-00.75-10RE-12-2AN	02689794	Combimaster	0.750	2	0.433	0.276	–	0.709	M10	–	1.378	8,0	1.004	1.417	23200	0.440	XO.X1204
R217.69-01.00-12RE-12-3AN	02689797	Combimaster	1.000	3	0.433	0.276	–	0.906	M12	–	1.575	5,0	1.496	1.909	20800	0.220	XO.X1204
R217.69-01.25-16RE-12-3AN	02689799	Combimaster	1.250	3	0.433	0.276	–	1.181	M16	–	1.575	3,0	2.008	2.421	18400	0.660	XO.X1204
R217.69-01.25-16RE-12-4AN	02689801	Combimaster	1.250	4	0.433	0.276	–	1.181	M16	–	1.575	3,0	2.008	2.421	18400	0.660	XO.X1204
R217.69-01.50-16RE-12-4AN	02689802	Combimaster	1.500	4	0.433	0.276	–	1.181	M16	–	1.575	2,5	2.500	2.913	16400	0.880	XO.X1204
R217.69-01.50-16RE-12-5AN	02689805	Combimaster	1.500	5	0.433	0.276	–	1.181	M16	–	1.575	2,5	2.500	2.913	16400	0.660	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 0,094"
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.69-00.75 - 01.25	–	1/4HEX-T10PX50	C03507-T10P
R217.69- 01.50	–	1/4HEX-T10PX50	C03509-T10P
R220.69-01.50	220.17-698	1/4HEX-T10PX50	C03509-T10P
R220.69-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T10PX50	C03509-T10P
R220.69-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T10PX50	C03509-T10P
R220.69-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T10PX90	C03509-T10P

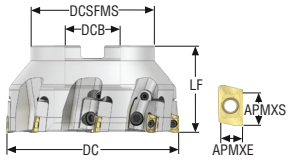
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – In mm



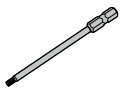


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 60-62
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

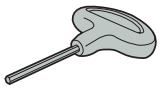
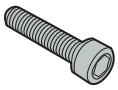
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.69-0125-12-8CN	02706936	Manicotto	125,0	8	11,0	7,0	40,0	90,0	40,0	63,0	0,5	237,5	248,0	9200	3,1	XO.X1204
R220.69-8160-12-10CN	02706940	Manicotto	160,0	10	11,0	7,0	40,0	90,0	40,0	63,0	0,3	307,5	318,0	8200	5,3	XO.X1204
R220.69-8200-12-12CN	02706943	Manicotto	200,0	12	11,0	7,0	60,0	130,0	60,0	63,0	0,3	387,5	398,0	7300	7,4	XO.X1204
R220.69-8250-12-16CN	02706945	Manicotto	250,0	16	11,0	7,0	60,0	130,0	60,0	63,0	0,2	487,5	498,0	6500	14,8	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto
					
R220.69-0125-8250	AU1114T-T15P	XO12PRN	FS96018	1/4HEX-T10PX90	C03509-T10P

Accessori

Per fresa	Chiave dinamometrica regolabile	Chiave esagonale	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R220.69-0125	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	–	1/4HEX-S-HANDLE	3.0NM	T00-10P30
R220.69-8160	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S12X40	1/4HEX-S-HANDLE	3.0NM	T00-10P30
R220.69-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S16X50	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XOMX120408TR-ME08 F40M	5,0 *0.20*	0,11 0.0044	0,12 0.0048	0,19 0.0075
P2	XOMX120408TR-ME08 F40M	5,0 *0.20*	0,12 0.0048	0,13 0.0050	0,19 0.0075
P3	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,28 0.011
P4	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,26 0.010
P5	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P6	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P7	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P8	XOMX120408TR-M12 MP2501	5,0 *0.20*	0,16 0.0065	0,18 0.0070	0,28 0.011
P11	XOMX120408TR-M12 MP3501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
P12	XOMX120408TR-M12 MP3000	4,5 *0.18*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M1	XOEX120408R-M07 F40M	5,0 *0.20*	0,13 0.0050	0,14 0.0055	0,22 0.0085
M2	XOEX120408R-M07 F40M	5,0 *0.20*	0,12 0.0048	0,13 0.0050	0,20 0.0080
M3	XOEX120408R-M07 F40M	4,5 *0.18*	0,095 0.0038	0,10 0.0040	0,16 0.0065
M4	XOEX120408R-M07 MS2050	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
M5	XOEX120408R-M07 MS2050	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
K1	XOMX120408TR-M12 MK1501	5,0 *0.20*	0,17 0.0065	0,19 0.0075	0,30 0.012
K2	XOMX120408TR-M12 MK1501	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K3	XOMX120408TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K4	XOMX120408TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K5	XOMX120408TR-M12 MK2050	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
K6	XOMX120408TR-M12 MK2050	5,0 *0.20*	0,16 0.0065	0,17 0.0065	0,26 0.010
K7	XOMX120408TR-M12 MK2050	5,0 *0.20*	0,14 0.0055	0,16 0.0065	0,24 0.0095
N1	XOEX120408FR-E06 H15	5,0 *0.20*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N2	XOEX120408FR-E06 H15	5,0 *0.20*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N3	XOEX120408FR-E06 H15	5,0 *0.20*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N11	XOEX120408FR-E06 H15	5,0 *0.20*	0,13 0.0050	0,14 0.0055	0,22 0.0085
S1	XOEX120408R-M07 F40M	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S2	XOEX120408R-M07 F40M	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S3	XOEX120408R-M07 F40M	3,0 *0.12*	0,080 0.0032	0,085 0.0034	0,13 0.0050
S11	XOEX120408R-M07 MS2050	4,0 *0.16*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S12	XOEX120408R-M07 MS2050	4,0 *0.16*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S13	XOEX120408R-M07 MS2050	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
H5	XOMX120408TR-MD13 MH1051	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
H8	XOMX120408TR-MD13 MH1051	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060
H11	XOMX120408TR-MD13 MH1051	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
H12	XOMX120408TR-MD13 MH1051	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060
H21	XOMX120408TR-MD13 MH1051	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-12 – Parametri di taglio v_c = (m/min)/(sf/min)

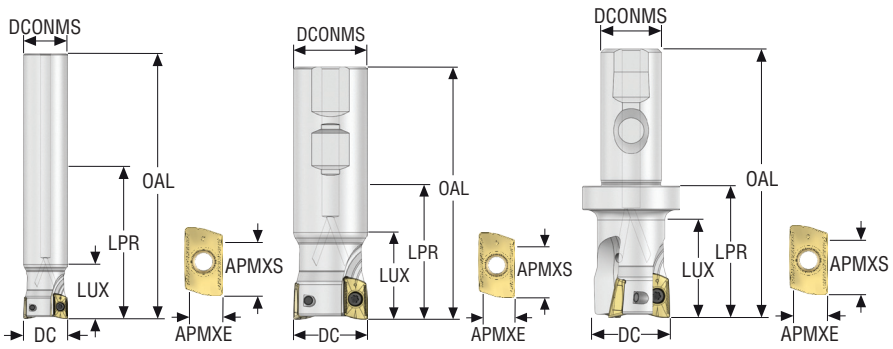
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H15		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	260	340	405	265	350	420	280	360	410	270	330	370	410	520	600	300	395	465	—	—	—
	—	—	—	*850*	*1125*	*1325*	*870*	*1150*	*1375*	*920*	*1175*	*1350*	*890*	*1075*	*1225*	*1350*	*1700*	*1975*	*980*	*1300*	*1525*	—	—	—
P2	—	—	—	255	330	395	260	340	410	275	350	400	265	325	360	400	510	580	290	385	450	—	—	—
	—	—	—	*840*	*1075*	*1300*	*850*	*1125*	*1350*	*900*	*1150*	*1300*	*870*	*1075*	*1175*	*1300*	*1675*	*1900*	*950*	*1275*	*1475*	—	—	—
P3	—	—	—	220	290	340	230	300	350	240	310	355	235	285	320	350	445	500	255	340	400	—	—	—
	—	—	—	*720*	*950*	*1125*	*750*	*980*	*1150*	*790*	*1025*	*1175*	*770*	*940*	*1050*	*1150*	*1450*	*1650*	*840*	*1125*	*1300*	—	—	—
P4	—	—	—	195	255	305	205	265	320	215	270	310	210	260	295	310	395	440	225	300	350	—	—	—
	—	—	—	*640*	*840*	*1000*	*670*	*870*	*1050*	*710*	*890*	*1025*	*690*	*850*	*970*	*1025*	*1300*	*1450*	*740*	*980*	*1150*	—	—	—
P5	350	465	570	185	250	290	195	260	305	205	260	300	195	240	270	300	375	425	215	285	335	—	—	—
	1150	*1525*	*1875*	*610*	*820*	*950*	*640*	*850*	*1000*	*670*	*850*	*980*	*640*	*790*	*890*	*980*	*1225*	*1400*	*710*	*940*	*1100*	—	—	—
P6	390	540	640	210	280	325	215	290	340	230	290	340	220	270	305	340	420	475	240	320	380	—	—	—
	1275	*1775*	*2100*	*690*	*920*	*1075*	*710*	*950*	*1125*	*750*	*950*	*1125*	*720*	*890*	*1000*	*1125*	*1375*	*1550*	*790*	*1050*	*1250*	—	—	—
P7	370	510	600	195	260	310	205	275	320	215	275	320	210	255	290	320	400	450	230	300	360	—	—	—
	1225	*1675*	*1975*	*640*	*850*	*1025*	*670*	*900*	*1050*	*710*	*900*	*1050*	*690*	*840*	*950*	*1050*	*1300*	*1475*	*750*	*980*	*1175*	—	—	—
P8	340	465	550	185	245	285	195	255	295	205	260	300	195	240	270	295	375	420	215	285	335	—	—	—
	1125	*1525*	*1800*	*610*	*800*	*940*	*640*	*840*	*970*	*670*	*850*	*980*	*640*	*790*	*890*	*970*	*1225*	*1375*	*710*	*940*	*1100*	—	—	—
P11	360	495	580	190	255	300	200	265	315	210	265	310	200	245	280	285	430	540	220	295	350	—	—	—
	1175	*1625*	*1900*	*620*	*840*	*980*	*660*	*870*	*1025*	*690*	*870*	*1025*	*660*	*800*	*920*	*940*	*1400*	*1775*	*720*	*970*	*1150*	—	—	—
P12	255	340	405	125	165	195	135	180	205	140	175	200	135	160	180	175	255	310	145	190	225	—	—	—
	840	*1125*	*1325*	*410*	*540*	*640*	*445*	*590*	*670*	*460*	*570*	*660*	*445*	*520*	*590*	*570*	*840*	*1025*	*475*	*620*	*740*	—	—	—
M1	—	—	—	—	—	—	180	240	285	200	265	310	180	240	280	325	495	630	210	275	325	—	—	—
	—	—	—	—	—	—	*590*	*790*	*940*	*660*	*870*	*1025*	*590*	*790*	*920*	*1075*	*1625*	*2075*	*690*	*900*	*1075*	—	—	—
M2	—	—	—	—	—	—	150	200	235	165	215	255	150	200	230	270	405	520	170	230	265	—	—	—
	—	—	—	—	—	—	*490*	*660*	*770*	*540*	*710*	*840*	*490*	*660*	*750*	*890*	*1325*	*1700*	*560*	*750*	*870*	—	—	—
M3	—	—	—	—	—	—	120	160	190	135	180	205	120	160	185	215	315	390	140	185	215	—	—	—
	—	—	—	—	—	—	*395*	*520*	*620*	*445*	*590*	*670*	*395*	*520*	*610*	*710*	*1025*	*1275*	*460*	*610*	*710*	—	—	—
M4	—	—	—	—	—	—	95	125	150	105	135	160	95	125	145	160	235	290	110	145	165	—	—	—
	—	—	—	—	—	—	*310*	*410*	*490*	*345*	*445*	*520*	*310*	*410*	*475*	*520*	*770*	*950*	*360*	*475*	*540*	—	—	—
M5	—	—	—	—	—	—	80	105	125	90	115	135	80	105	120	135	195	240	90	120	140	—	—	—
	—	—	—	—	—	—	*260*	*345*	*410*	*295*	*375*	*445*	*260*	*345*	*395*	*445*	*640*	*790*	*295*	*395*	*460*	—	—	—
K1	455	630	740	270	355	425	190	250	300	—	—	—	180	235	275	—	—	—	—	—	—	—	—	—
	1500	*2075*	*2425*	*890*	*1175*	*1400*	*620*	*820*	*980*	—	—	—	*590*	*770*	*900*	—	—	—	—	—	—	—	—	—
K2	420	560	690	240	320	375	170	225	265	—	—	—	160	210	245	—	—	—	—	—	—	—	—	—
	1375	*1825*	*2275*	*790*	*1050*	*1225*	*560*	*740*	*870*	—	—	—	*520*	*690*	*800*	—	—	—	—	—	—	—	—	—
K3	355	475	580	205	270	320	145	190	225	—	—	—	135	175	205	—	—	—	—	—	—	—	—	—
	1175	*1550*	*1900*	*670*	*890*	*1050*	*475*	*620*	*740*	—	—	—	*445*	*570*	*670*	—	—	—	—	—	—	—	—	—
K4	340	455	550	195	260	305	135	185	215	—	—	—	130	170	200	—	—	—	—	—	—	—	—	—
	1125	*1500*	*1800*	*640*	*850*	*1000*	*445*	*610*	*710*	—	—	—	*425*	*560*	*660*	—	—	—	—	—	—	—	—	—
K5	220	285	340	120	160	185	85	115	130	—	—	—	80	100	120	—	—	—	—	—	—	—	—	—
	720	*940*	*1125*	*395*	*520*	*610*	*280*	*375*	*425*	—	—	—	*260*	*330*	*395*	—	—	—	—	—	—	—	—	—
K6	300	400	490	170	230	270	120	160	190	—	—	—	110	150	175	—	—	—	—	—	—	—	—	—
	980	*1300*	*1600*	*560*	*750*	*890*	*395*	*520*	*620*	—	—	—	*360*	*490*	*570*	—	—	—	—	—	—	—	—	—
K7	280	365	435	155	205	235	110	145	170	—	—	—	100	130	155	—	—	—	—	—	—	—	—	—
	920	*1200*	*1425*	*510*	*670*	*770*	*360*	*475*	*560*	—	—	—	*330*	*425*	*510*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1300	1725	2025	—	—	—	—	—	—	1400	1850	2175
	—	—	—	—	—	—	—	—	—	—	—	—	*4275*	*5650*	*6650*	—	—	—	—	—	—	*4600*	*6075*	*7125*
N2	—	—	—	—	—	—	—	—	—	—	—	—	530	700	820	—	—	—	—	—	—	570	750	880
	—	—	—	—	—	—	—	—	—	—	—	—	*1750*	*2300*	*2700*	—	—	—	—	—	—	*1875*	*2450*	*2875*
N3	—	—	—	—	—	—	—	—	—	—	—	—	350	470	550	—	—	—	—	—	—	380	500	580
	—	—	—	—	—	—	—	—	—	—	—	—	*1150*	*1550*	*1800*	—	—	—	—	—	—	*1250*	*1650*	*1900*
N11	—	—	—	—	—	—	—	—	—	—	—	—	400	530	630	—	—	—	—	—	—	430	570	670
	—	—	—	—	—	—	—	—	—	—	—	—	*1300*	*1750*	*2075*	—	—	—	—	—	—	*1400*	*1875*	*2200*
S1	—	—	—	—	—	—	45	60	70	49	65	75	45	60	70	55	75	85	55	70	80	—	—	—
	—	—	—	—	—	—	*150*	*195*	*230*	*160*	*215*	*245*	*150*	*195*	*230*	*180*	*245*	*280*	*180*	*230*	*260*	—	—	—
S2	—	—	—	—	—	—	37	47	55	40	50	60	36	47	55	46	60	70	43	55	65	—	—	—
	—	—	—	—	—	—	*120*	*155*	*180*	*130*	*165*	*195*	*120*	*155*	*180*	*150*	*195*	*230*	*140*	*180*	*215*	—	—	—
S3	—	—	—	—	—	—	32	42	49	35	45	55	31	41	48	40	50	60	38	49	60	—	—	—
	—	—	—	—	—	—	*105*	*140*	*160*	*115*	*150*	*180*	*100*	*135*	*155*	*130*	*165*	*195*	*125*	*160*	*195*	—	—	—
S11	—	—	—	—	—	—	—	—	—	70	90	105	60	80	95	80	105	120	75	100	115	—	—	—
	—	—	—	—	—	—	—	—	—	*230*	*295*	*345*	*195*	*260*	*310*	*260*	*345*	*395*	*245*	*330*	*375*	—	—	—
S12	—	—	—	—	—	—	—	—	—	47	60	70	43	55	65	55	70	85	50	70	80	—	—	—
	—	—	—	—	—	—	—	—	—	*155*	*195*	*230*	*140*	*180*	*215*	*180*	*230*	*280*	*165*	*230*	*260*	—	—	—
S13	—	—	—	—	—	—	—	—	—	28	36	42	25	33	38	32	42	48	30	40	46	—	—	—
	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*	*80*	*110*	*125*	*105*	*140*	*155*	*100*	*130*	*150*	—	—	—
H5	130	175	210	43	55	65	38	50	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	425	*570*	*690*	*140*	*180*	*215*	*125*	*165*	*195*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	150	195	225	46	60	70	40	55	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	490	*640*	*740*	*150*	*195*	*230*	*130*	*180*	*195*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	165	225	265	55	75	85	48	65	75	—	—	—	—	—	—	115	165	205	55	75	85	—	—	—
	540	*740*	*870*	*180*	*245*	*280*	*155*	*215*	*245*	—	—	—	—	—	—	*375*	*540*	*670*	*180*	*245*	*280*	—	—	—
H12	170	225	260	80	105	125	80	100	120	—	—	—	—	—	—	100	140	170	95	120	140	—	—	—
	560	*740*	*850*	*260*	*345*	*410*	*260*	*330*	*395*	—	—	—	—	—	—	*330*	*460*	*560*	*310*	*395*	*460*	—	—	—
H21	150	195	225	46	60	70	40	55	60	—	—	—	—	—	—	100	110	120	47	60	70	—	—	—
	490	*640*	*740*	*150*	*195*	*230*	*130*	*180*	*195*	—	—	—	—	—	—	*330*	*360*	*395*	*155*	*195*	*230*	—	—	—

R217/220.69-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	380	465	530	370	455	520	415	510	580	330	410	470	245	315	360
	—	—	—	*1250*	*1525*	*1750*	*1225*	*1500*	*1700*	*1350*	*1675*	*1900*	*1075*	*1350*	*1550*	*800*	*1025*	*1175*
P2	—	—	—	370	455	520	360	445	510	400	500	560	325	400	455	240	305	350
	—	—	—	*1225*	*1500*	*1700*	*1175*	*1450*	*1675*	*1300*	*1650*	*1825*	*1075*	*1300*	*1500*	*790*	*1000*	*1150*
P3	—	—	—	325	395	445	320	390	440	355	435	490	285	350	395	210	265	305
	—	—	—	*1075*	*1300*	*1450*	*1050*	*1275*	*1450*	*1175*	*1425*	*1600*	*940*	*1150*	*1300*	*690*	*870*	*1000*
P4	—	—	—	285	350	400	280	345	395	310	385	435	250	305	355	200	255	290
	—	—	—	*940*	*1150*	*1300*	*920*	*1125*	*1300*	*1025*	*1275*	*1425*	*820*	*1000*	*1175*	*660*	*840*	*950*
P5	—	—	—	270	340	380	265	335	375	295	365	415	240	300	335	175	225	255
	—	—	—	*890*	*1125*	*1250*	*870*	*1100*	*1225*	*970*	*1200*	*1350*	*790*	*980*	*1100*	*570*	*740*	*840*
P6	—	—	—	305	380	430	300	375	420	335	410	470	270	335	380	200	250	290
	—	—	—	*1000*	*1250*	*1400*	*980*	*1225*	*1375*	*1100*	*1350*	*1550*	*890*	*1100*	*1250*	*660*	*820*	*950*
P7	—	—	—	290	360	405	285	355	400	315	390	445	255	315	355	190	240	275
	—	—	—	*950*	*1175*	*1325*	*940*	*1175*	*1300*	*1025*	*1275*	*1450*	*840*	*1025*	*1175*	*620*	*790*	*900*
P8	—	—	—	270	335	375	265	325	370	295	365	415	240	295	330	175	225	255
	—	—	—	*890*	*1100*	*1225*	*870*	*1075*	*1225*	*970*	*1200*	*1350*	*790*	*970*	*1075*	*570*	*740*	*840*
P11	—	—	—	280	350	395	275	340	385	305	380	430	245	305	345	185	230	265
	—	—	—	*920*	*1150*	*1300*	*900*	*1125*	*1275*	*1000*	*1250*	*1400*	*800*	*1000*	*1125*	*610*	*750*	*870*
P12	—	—	—	185	225	250	180	220	245	195	240	265	165	200	220	115	140	160
	—	—	—	*610*	*740*	*820*	*590*	*720*	*800*	*640*	*790*	*870*	*540*	*660*	*720*	*375*	*460*	*520*
M1	—	—	—	—	—	—	185	240	290	230	305	360	170	225	270	155	205	240
	—	—	—	—	—	—	*610*	*790*	*950*	*750*	*1000*	*1175*	*560*	*740*	*890*	*510*	*670*	*790*
M2	—	—	—	—	—	—	150	200	240	190	255	295	140	190	220	130	170	200
	—	—	—	—	—	—	*490*	*660*	*790*	*620*	*840*	*970*	*460*	*620*	*720*	*425*	*560*	*660*
M3	—	—	—	—	—	—	125	165	195	155	205	240	115	155	180	105	140	160
	—	—	—	—	—	—	*410*	*540*	*640*	*510*	*670*	*790*	*375*	*510*	*590*	*345*	*460*	*520*
M4	—	—	—	—	—	—	100	130	150	120	160	185	90	120	140	80	110	125
	—	—	—	—	—	—	*330*	*425*	*490*	*395*	*520*	*610*	*295*	*395*	*460*	*260*	*360*	*410*
M5	—	—	—	—	—	—	80	105	125	100	135	155	75	100	115	70	90	105
	—	—	—	—	—	—	*260*	*345*	*410*	*330*	*445*	*510*	*245*	*330*	*375*	*230*	*295*	*345*
K1	325	570	790	375	460	520	365	450	510	255	340	395	325	400	460	—	—	—
	1075	*1875*	*2600*	*1225*	*1500*	*1700*	*1200*	*1475*	*1675*	*840*	*1125*	*1300*	*1075*	*1300*	*1500*	—	—	—
K2	285	500	690	330	410	460	325	400	455	225	300	355	290	360	410	—	—	—
	940	*1650*	*2275*	*1075*	*1350*	*1500*	*1075*	*1300*	*1500*	*740*	*980*	*1175*	*950*	*1175*	*1350*	—	—	—
K3	225	330	410	280	345	390	275	340	385	190	255	300	245	305	345	—	—	—
	740	*1075*	*1350*	*920*	*1125*	*1275*	*900*	*1125*	*1275*	*620*	*840*	*980*	*800*	*1000*	*1125*	—	—	—
K4	215	315	390	265	330	375	260	325	365	185	240	285	235	290	330	—	—	—
	710	*1025*	*1275*	*870*	*1075*	*1225*	*850*	*1075*	*1200*	*610*	*790*	*940*	*770*	*950*	*1075*	—	—	—
K5	130	195	235	165	205	225	160	200	225	110	145	175	145	180	200	—	—	—
	425	*640*	*770*	*540*	*670*	*740*	*520*	*660*	*740*	*360*	*475*	*570*	*475*	*590*	*660*	—	—	—
K6	185	275	345	235	290	330	230	285	325	160	215	250	205	255	290	—	—	—
	610	*900*	*1125*	*770*	*950*	*1075*	*750*	*940*	*1075*	*520*	*710*	*820*	*670*	*840*	*950*	—	—	—
K7	170	245	305	210	260	290	205	255	285	145	190	225	185	230	255	—	—	—
	560	*800*	*1000*	*690*	*850*	*950*	*670*	*840*	*940*	*475*	*620*	*740*	*610*	*750*	*840*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	60	80	90	43	55	65	25	33	38
	—	—	—	—	—	—	—	—	—	*195*	*260*	*295*	*140*	*180*	*215*	*80*	*110*	*125*
S2	—	—	—	—	—	—	—	—	—	48	65	75	35	45	55	20	27	31
	—	—	—	—	—	—	—	—	—	*155*	*215*	*245*	*115*	*150*	*180*	*65*	*90*	*100*
S3	—	—	—	—	—	—	—	—	—	42	55	65	31	40	46	18	23	27
	—	—	—	—	—	—	—	—	—	*140*	*180*	*215*	*100*	*130*	*150*	*60*	*75*	*90*
S11	—	—	—	—	—	—	—	—	—	85	110	125	60	75	90	35	46	55
	—	—	—	—	—	—	—	—	—	*280*	*360*	*410*	*195*	*245*	*295*	*115*	*150*	*180*
S12	—	—	—	—	—	—	—	—	—	55	75	90	41	55	65	32	43	49
	—	—	—	—	—	—	—	—	—	*180*	*245*	*295*	*135*	*180*	*215*	*105*	*140*	*160*
S13	—	—	—	—	—	—	—	—	—	34	44	50	24	31	37	19	25	29
	—	—	—	—	—	—	—	—	—	*110*	*145*	*165*	*80*	*100*	*120*	*60*	*80*	*95*
H5	—	—	—	48	65	75	—	—	—	—	—	—	37	49	55	—	—	—
	—	—	—	*155*	*215*	*245*	—	—	—	—	—	—	*120*	*160*	*180*	—	—	—
H8	—	—	—	50	70	80	—	—	—	—	—	—	40	50	60	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	—	—	—	*130*	*165*	*195*	—	—	—
H11	—	—	—	60	80	95	—	—	—	—	—	—	47	60	75	—	—	—
	—	—	—	*195*	*260*	*310*	—	—	—	—	—	—	*155*	*195*	*245*	—	—	—
H12	—	—	—	95	120	140	—	—	—	—	—	—	70	95	110	—	—	—
	—	—	—	*310*	*395*	*460*	—	—	—	—	—	—	*230*	*310*	*360*	—	—	—
H21	—	—	—	50	70	80	—	—	—	—	—	—	40	50	60	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	—	—	—	*130*	*165*	*195*	—	—	—

Turbo 16 – R217.69-XO16 – In mm



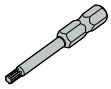


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 70-72
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.69-2525.3-XO16-2A	03336092	Weldon	25,0	2	15,0	9,0	–	25,0	68,0	38,0	44,0	100,0	11,0	33,5	47,7	16700	0,3	XO.X1605
R217.69-3232.3-XO16-2A	03336093	Weldon	32,0	2	15,0	9,0	–	32,0	74,0	38,0	50,0	110,0	6,0	47,5	61,7	14800	0,6	XO.X1605
R217.69-3232.3-XO16-3A	03336094	Weldon	32,0	3	15,0	9,0	–	32,0	74,0	38,0	50,0	110,0	6,0	47,5	61,7	14800	0,6	XO.X1605
R217.69-2532.3S-XO16-2A	03336096	Seco-Weldon	32,0	2	15,0	9,0	40,0	25,0	–	40,0	54,0	110,0	6,0	47,5	61,7	14800	0,5	XO.X1605
R217.69-2532.3S-XO16-3A	03336097	Seco-Weldon	32,0	3	15,0	9,0	40,0	25,0	–	40,0	54,0	110,0	6,0	47,5	61,7	14800	0,5	XO.X1605
R217.69-3240.3S-XO16-3A	03336098	Seco-Weldon	40,0	3	15,0	9,0	50,0	32,0	–	46,0	60,0	120,0	3,5	63,5	77,7	13200	0,8	XO.X1605
R217.69-3240.3S-XO16-4A	03336099	Seco-Weldon	40,0	4	15,0	9,0	50,0	32,0	–	46,0	60,0	120,0	3,5	63,5	77,7	13200	0,8	XO.X1605
R217.69-2025.3S-XO16-2A	03336095	Seco/Weldon	25,0	2	15,0	9,0	35,0	20,0	–	40,0	50,0	100,0	11,0	33,5	47,7	16700	0,3	XO.X1605
R217.69-2525.0-XO16-2A	03336100	Cilindrico	25,0	2	15,0	9,0	–	25,0	–	35,0	114,0	170,0	11,0	33,5	47,7	16700	0,6	XO.X1605
R217.69-3232.0-XO16-2A	03336101	Cilindrico	32,0	2	15,0	9,0	–	32,0	–	40,0	135,0	195,0	6,0	47,5	61,7	14800	1,1	XO.X1605
R217.69-3232.0-XO16-3A	03336102	Cilindrico	32,0	3	15,0	9,0	–	32,0	–	40,0	135,0	195,0	6,0	47,5	61,7	14800	1,1	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-2525-2532	1/4HEX-T15PX50	C04008-T15P
R217.69-3240	1/4HEX-T15PX50	C04009-T15P

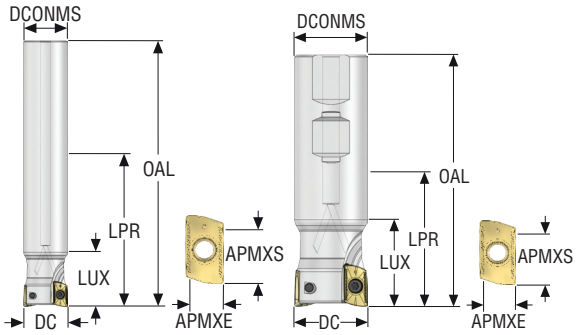
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R217.69-XO16 – Pollici



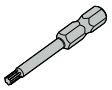


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 70-72
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.69-01.00-3-XO16-2A	03336130	Weldon	1.000	2	0.591	0.354	1.000	2.795	1.575	1.732	3.937	10,0	1.350	1.909	16600	0.660	XO.X1605
R217.69-01.25-3-XO16-3A	03336131	Weldon	1.250	3	0.591	0.354	1.250	3.189	1.575	1.969	4.331	6,0	1.850	2.409	14800	1.320	XO.X1605
R217.69-01.50-3-XO16-3A	03336132	Weldon	1.500	3	0.591	0.354	1.250	3.583	2.362	2.362	4.724	4,0	2.350	2.909	13500	1.540	XO.X1605
R217.69-01.50-3-XO16-4A	03336133	Weldon	1.500	4	0.591	0.354	1.250	3.583	2.362	2.362	4.724	4,0	2.350	2.909	13500	1.540	XO.X1605
R217.69-01.00-0-XO16-2A	03336134	Cilindrico	1.000	2	0.591	0.354	1.000	–	1.378	4.488	6.693	9,0	1.350	1.909	16600	1.320	XO.X1605
R217.69-01.50-0-XO16-3A	03336136	Cilindrico	1.500	3	0.591	0.354	1.250	–	5.906	5.906	8.268	4,0	2.350	2.909	13500	2.650	XO.X1605
R217.69-01.50-0-XO16-4A	03336137	Cilindrico	1.500	4	0.591	0.354	1.250	–	5.906	5.906	8.268	4,0	2.350	2.909	13500	2.650	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 0,158"

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-01.00-01.25	1/4HEX-T15PX50	C04008-T15P
R217.69-01.50	1/4HEX-T15PX50	C04009-T15P

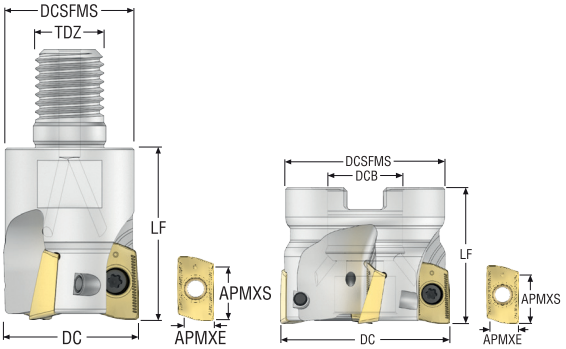
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R217/220.69-XO16 – In mm



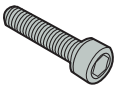
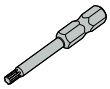
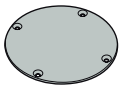


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 70-72
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

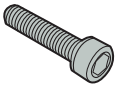
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ		LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm		mm	mm		kg	
R220.69-0040-XO16-3A	03336108	Manicotto	40,0	3	15,0	9,0	16,0	35,0	–	16,0	40,0	3,5	63,5	77,7	13200	0,2	XO.X1605
R220.69-0040-XO16-4A	03336109	Manicotto	40,0	4	15,0	9,0	16,0	35,0	–	16,0	40,0	3,5	63,5	77,7	13200	0,2	XO.X1605
R220.69-0050-XO16-4A	03336110	Manicotto	50,0	4	15,0	9,0	22,0	47,0	–	22,0	40,0	2,6	83,5	97,7	11800	0,3	XO.X1605
R220.69-0050-XO16-5A	03336111	Manicotto	50,0	5	15,0	9,0	22,0	47,0	–	22,0	40,0	2,6	83,5	97,7	11800	0,3	XO.X1605
R220.69-0050-XO16-6A	10010246	Manicotto	50,0	6	15,0	9,0	22,0	47,0	–	22,0	40,0	2,6	83,5	97,7	11800	0,4	XO.X1605
R220.69-0052-XO16-5A	03336112	Manicotto	52,0	5	15,0	9,0	22,0	47,0	–	22,0	40,0	2,5	87,5	101,7	11600	0,4	XO.X1605
R220.69-0063-XO16-5A	03336113	Manicotto	63,0	5	15,0	9,0	27,0	56,0	–	27,0	40,0	2,0	109,5	123,7	10500	0,5	XO.X1605
R220.69-0063-XO16-6A	03336115	Manicotto	63,0	6	15,0	9,0	27,0	56,0	–	27,0	40,0	2,0	109,5	123,7	10500	0,5	XO.X1605
R220.69-0063-XO16-7A	10010247	Manicotto	63,0	7	15,0	9,0	27,0	56,0	–	27,0	40,0	2,0	109,5	123,7	10549	0,6	XO.X1605
R220.69-0066-XO16-6A	03336117	Manicotto	66,0	6	15,0	9,0	27,0	56,0	–	27,0	40,0	1,8	115,5	129,7	10300	0,6	XO.X1605
R220.69-0080-XO16-6A	03336118	Manicotto	80,0	6	15,0	9,0	27,0	62,0	–	27,0	50,0	1,5	143,5	157,7	9300	1,0	XO.X1605
R220.69-0080-XO16-8A	03336119	Manicotto	80,0	8	15,0	9,0	27,0	62,0	–	27,0	50,0	1,5	143,5	157,7	9300	1,0	XO.X1605
R220.69-0080-XO16-9A	10010248	Manicotto	80,0	9	15,0	9,0	27,0	62,0	–	27,0	50,0	1,5	143,5	157,7	9300	1,0	XO.X1605
R220.69-0084-XO16-8A	03336120	Manicotto	84,0	8	15,0	9,0	27,0	62,0	–	27,0	50,0	1,3	151,5	165,7	9100	1,1	XO.X1605
R220.69-0100-XO16-8A	03336121	Manicotto	100,0	8	15,0	9,0	32,0	77,0	–	32,0	50,0	1,1	183,5	197,7	8300	1,6	XO.X1605
R220.69-0100-XO16-10A	03336122	Manicotto	100,0	10	15,0	9,0	32,0	77,0	–	32,0	50,0	1,1	183,5	197,7	8300	1,6	XO.X1605
R220.69-0125-XO16-10A	03336123	Manicotto	125,0	10	15,0	9,0	40,0	90,0	–	40,0	63,0	0,85	233,5	247,7	7400	3,0	XO.X1605
R220.69-0125-XO16-12A	03336124	Manicotto	125,0	12	15,0	9,0	40,0	90,0	–	40,0	63,0	0,85	233,5	247,7	7400	3,0	XO.X1605
R220.69-8160-XO16-11A	03336125	Manicotto	160,0	11	15,0	9,0	40,0	90,0	–	40,0	63,0	0,65	303,5	317,7	6600	5,0	XO.X1605
R220.69-8160-XO16-13A	03336126	Manicotto	160,0	13	15,0	9,0	40,0	90,0	–	40,0	63,0	0,65	303,5	317,7	6600	5,1	XO.X1605
R217.69-1225.RE-XO16-2A	03336103	Combimaster	25,0	2	15,0	9,0	–	23,0	M12	–	40,0	11,0	33,5	47,7	16700	0,2	XO.X1605
R217.69-1632.RE-XO16-2A	03336104	Combimaster	32,0	2	15,0	9,0	–	30,0	M16	–	40,0	6,0	47,5	61,7	14800	0,2	XO.X1605
R217.69-1632.RE-XO16-3A	03336105	Combimaster	32,0	3	15,0	9,0	–	30,0	M16	–	40,0	6,0	47,5	61,7	14800	0,2	XO.X1605
R217.69-2040.RE-XO16-3A	03336106	Combimaster	40,0	3	15,0	9,0	–	36,5	M20	–	45,0	3,5	63,5	77,7	13200	0,4	XO.X1605
R217.69-2040.RE-XO16-4A	03336107	Combimaster	40,0	4	15,0	9,0	–	36,5	M20	–	45,0	3,5	63,5	77,7	13200	0,4	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

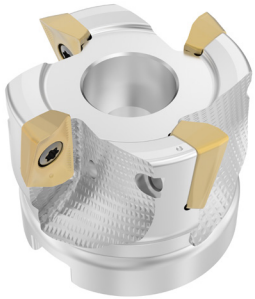
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.69-1225-1632	–	1/4HEX-T15PX50	C04008-T15P	–	–
R217.69-2040	–	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-0040	TCEI0825	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-0050-0052	220.17-692	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-0063-0066	MLC6S12X30	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-0080-0084	MC6S12X35	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-0100-0125	MLC6S16X35	1/4HEX-T15PX90	C04009-T15P	–	–
R220.69-0100-0125	MC6S20X40	1/4HEX-T15PX90	C04009-T15P	–	–
R220.69-8160	–	1/4HEX-T15PX90	C04009-T15P	SC-160-90	MF6S4X10

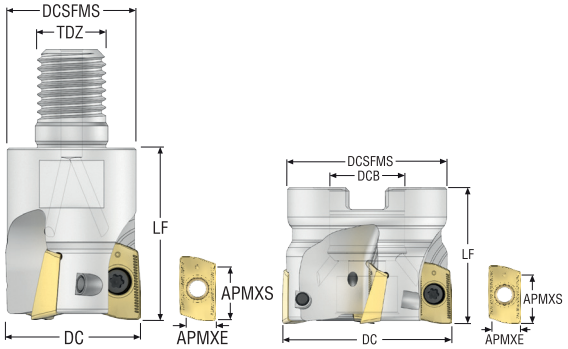
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.69-1225-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.69-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R217/220.69-XO16 – Pollici



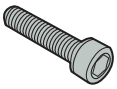
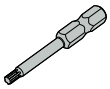
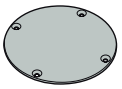


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 70-72
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.69-01.50-XO16-4A	03336141	Manicotto	1.500	4	0.591	0.354	0.500	1.378	–	0.500	1.575	4,0	2.350	2.909	13500	0.660	XO.X1605
R220.69-02.00-XO16-4A	03336142	Manicotto	2.000	4	0.591	0.354	0.750	1.850	–	0.750	1.575	2,5	3.350	3.909	11700	0.880	XO.X1605
R220.69-02.00-XO16-5A	03336143	Manicotto	2.000	5	0.591	0.354	0.750	1.850	–	0.750	1.575	2,5	3.350	3.909	11700	0.880	XO.X1605
R220.69-02.00-XO16-6A	03336144	Manicotto	2.000	6	0.591	0.354	0.750	1.850	–	0.750	1.575	2,5	3.350	3.909	11700	0.660	XO.X1605
R220.69-02.50-XO16-5A	03336145	Manicotto	2.500	5	0.591	0.354	0.750	1.850	–	0.750	1.575	2,0	4.350	4.909	10500	1.320	XO.X1605
R220.69-02.50-XO16-6A	03336146	Manicotto	2.500	6	0.591	0.354	0.750	1.850	–	0.750	1.575	2,0	4.370	4.882	10500	1.320	XO.X1605
R220.69-03.00-XO16-6A	03336147	Manicotto	3.000	6	0.591	0.354	1.000	2.441	–	1.000	1.969	1,5	5.354	5.906	9500	2.430	XO.X1605
R220.69-03.00-XO16-8A	03336148	Manicotto	3.000	8	0.591	0.354	1.000	2.441	–	1.000	1.969	1,5	5.354	5.906	9500	2.430	XO.X1605
R220.69-04.00-XO16-8A	03336149	Manicotto	4.000	8	0.591	0.354	1.500	3.543	–	1.500	1.969	1,1	7.362	7.874	8300	4.410	XO.X1605
R220.69-04.00-XO16-10A	03336150	Manicotto	4.000	10	0.591	0.354	1.500	3.543	–	1.500	1.969	1,1	7.362	7.874	8300	5.070	XO.X1605
R220.69-05.00-XO16-9A	03336151	Manicotto	5.000	9	0.591	0.354	1.500	3.543	–	1.500	2.480	0,85	9.370	9.882	7400	7.940	XO.X1605
R220.69-06.00-XO16-12A	10000967	Manicotto	6.000	12	0.591	0.354	2.000	4.331	–	2.000	2.480	0,7	11.378	11.890	6700	10.360	XO.X1605
R217.69-01.00-12RE-XO16-2A	03336138	Combimaster	1.000	2	0.591	0.354	–	0.906	M12	–	1.575	11,0	1.350	1.909	16600	0.440	XO.X1605
R217.69-01.25-16RE-XO16-3A	03336139	Combimaster	1.250	3	0.591	0.354	–	1.181	M16	–	1.575	6,0	1.850	2.409	14800	0.440	XO.X1605
R217.69-01.50-20RE-XO16-4A	03336140	Combimaster	1.500	4	0.591	0.354	–	1.437	M20	–	1.772	4,0	2.350	2.909	13500	0.880	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 0,158"
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.69-01.00-01.25	–	1/4HEX-T15PX50	C04008-T15P	–	–
R217.69-01.50	–	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-01.50	UC6S1/4UNFX1	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04009-T15P	–	–
R220.69-04.00	UF6S3/4UNFX2	1/4HEX-T15PX90	C04009-T15P	–	–
R220.69-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX90	C04009-T15P	–	–
R220.69-06.00	–	1/4HEX-T15PX90	C04009-T15P	SC-160-90	MF6S4X10

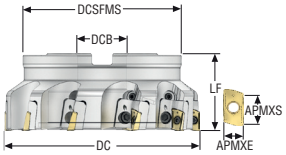
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.69-01.00-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.69-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R220.69-XO16 – In mm



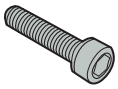
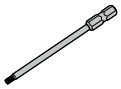
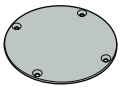


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 70-72
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

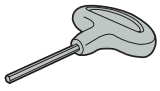
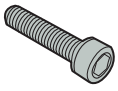
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.69-0125-XO16-8CA	03336127	Manicotto	125,0	8	15,0	9,0	40,0	90,0	40,0	63,0	0,85	233,5	247,7	7400	2,8	XO.X1605
R220.69-8160-XO16-10CA	10000966	Manicotto	160,0	10	15,0	9,0	40,0	90,0	40,0	63,0	0,65	303,5	317,7	6600	0,2	XO.X1605
R220.69-8200-XO16-12CA	03336128	Manicotto	200,0	12	15,0	9,0	60,0	130,0	60,0	63,0	0,5	383,5	397,7	5900	6,6	XO.X1605
R220.69-8250-XO16-16CA	03336129	Manicotto	250,0	16	15,0	9,0	60,0	130,0	60,0	63,0	0,4	483,5	497,7	5200	13,3	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
								
R220.69-0125	AU1114T-T15P	MC6S20X40	XO16PRA	FS96018	1/4HEX-T15PX90	C04009-T15P	–	–
R220.69-8160	AU1114T-T15P	–	XO16PRA	FS96018	1/4HEX-T15PX90	C04009-T15P	SC-160-90	MF6S4X10
R220.69-8200	AU1114T-T15P	–	XO16PRA	FS96018	1/4HEX-T15PX90	C04009-T15P	SC-200-90	MF6S4X8
R220.69-8250	AU1114T-T15P	–	XO16PRA	FS96018	1/4HEX-T15PX90	C04009-T15P	SC-250-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Chiave esagonale	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R220.69-0125	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.69-8160-8200	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.69-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S16X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-16 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XOMX160508TR-ME11 F40M	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P2	XOMX160508TR-ME11 F40M	7,0 *0.28*	0,16 0.0065	0,17 0.0065	0,26 0.010
P3	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,18 0.0070	0,19 0.0075	0,30 0.012
P4	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,30 0.012
P5	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
P6	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,17 0.0065	0,18 0.0070	0,28 0.011
P7	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,17 0.0065	0,18 0.0070	0,28 0.011
P8	XOMX160508TR-M13 MP2501	7,0 *0.28*	0,18 0.0070	0,19 0.0075	0,30 0.012
P11	XOMX160508TR-M13 MP3501	7,0 *0.28*	0,17 0.0065	0,18 0.0070	0,28 0.011
P12	XOMX160508TR-M13 MP3000	6,0 *0.24*	0,12 0.0048	0,13 0.0050	0,19 0.0075
M1	XOEX160508R-M09 F40M	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
M2	XOEX160508R-M09 F40M	7,0 *0.28*	0,12 0.0048	0,13 0.0050	0,20 0.0080
M3	XOEX160508R-M09 F40M	6,0 *0.24*	0,095 0.0038	0,10 0.0040	0,16 0.0065
M4	XOEX160516R-M09 MS2050	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,15 0.0060
M5	XOEX160516R-M09 MS2050	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,15 0.0060
K1	XOMX160508TR-M13 MK1501	7,0 *0.28*	0,19 0.0075	0,20 0.0080	0,32 0.013
K2	XOMX160508TR-M13 MK1501	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
K3	XOMX160508TR-M13 MK2050	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
K4	XOMX160508TR-M13 MK2050	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
K5	XOMX160508TR-M13 MK2050	7,0 *0.28*	0,15 0.0060	0,17 0.0065	0,26 0.010
K6	XOMX160508TR-M13 MK2050	7,0 *0.28*	0,17 0.0065	0,19 0.0075	0,28 0.011
K7	XOMX160508TR-M13 MK2050	7,0 *0.28*	0,15 0.0060	0,17 0.0065	0,26 0.010
N1	XOEX160508FR-E07 H25	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N2	XOEX160508FR-E07 H25	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N3	XOEX160508FR-E07 H25	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
N11	XOEX160508FR-E07 H25	7,0 *0.28*	0,13 0.0050	0,14 0.0055	0,22 0.0085
S1	XOEX160516R-M09 F40M	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S2	XOEX160516R-M09 F40M	4,5 *0.18*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S3	XOEX160516R-M09 F40M	4,5 *0.18*	0,080 0.0032	0,090 0.0036	0,13 0.0050
S11	XOEX160508R-M09 MS2050	5,0 *0.20*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S12	XOEX160508R-M09 MS2050	5,0 *0.20*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S13	XOEX160508R-M09 MS2050	4,5 *0.18*	0,085 0.0034	0,090 0.0036	0,14 0.0055
H5	XOMX160508TR-MD14 MH1051	6,0 *0.24*	0,12 0.0048	0,14 0.0055	0,20 0.0080
H8	XOMX160508TR-MD14 MH1051	5,0 *0.20*	0,095 0.0038	0,10 0.0040	0,16 0.0065
H11	XOMX160508TR-MD14 MH1051	6,0 *0.24*	0,12 0.0048	0,14 0.0055	0,20 0.0080
H12	XOMX160508TR-MD14 MH1051	5,0 *0.20*	0,095 0.0038	0,10 0.0040	0,16 0.0065
H21	XOMX160508TR-MD14 MH1051	5,0 *0.20*	0,095 0.0038	0,10 0.0040	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-16 – Parametri di taglio v_c = (m/min)/(sf/min)

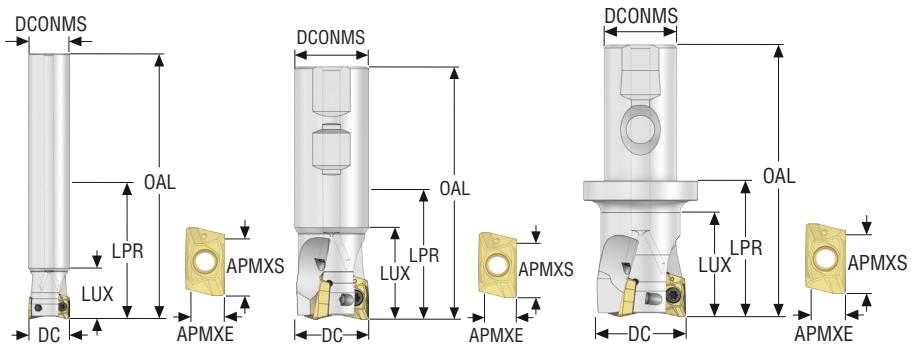
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H25		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	250	330	390	305	405	470	270	345	395	260	320	355	340	465	540	285	380	445	—	—	—
	—	—	—	*820*	*1075*	*1275*	*1000*	*1325*	*1550*	*890*	*1125*	*1300*	*850*	*1050*	*1175*	*1125*	*1525*	*1775*	*940*	*1250*	*1450*	—	—	—
P2	—	—	—	240	320	375	300	395	455	260	335	385	250	310	345	335	450	530	280	370	435	—	—	—
	—	—	—	*790*	*1050*	*1225*	*980*	*1300*	*1500*	*850*	*1100*	*1275*	*820*	*1025*	*1125*	*1100*	*1475*	*1750*	*920*	*1225*	*1425*	—	—	—
P3	—	—	—	210	280	330	265	345	405	230	295	340	225	275	305	300	400	465	245	325	380	—	—	—
	—	—	—	*690*	*920*	*1075*	*870*	*1125*	*1325*	*750*	*970*	*1125*	*740*	*900*	*1000*	*980*	*1300*	*1525*	*800*	*1075*	*1250*	—	—	—
P4	—	—	—	185	245	295	235	305	355	205	260	300	200	250	285	265	355	410	215	285	335	—	—	—
	—	—	—	*610*	*800*	*970*	*770*	*1000*	*1175*	*670*	*850*	*980*	*660*	*820*	*940*	*870*	*1175*	*1350*	*710*	*940*	*1100*	—	—	—
P5	310	415	510	180	235	280	220	290	340	195	250	285	185	230	255	250	335	390	205	275	320	—	—	—
	1025	*1350*	*1675*	*590*	*770*	*920*	*720*	*950*	*1125*	*640*	*820*	*940*	*610*	*750*	*840*	*820*	*1100*	*1275*	*670*	*900*	*1050*	—	—	—
P6	345	470	570	200	270	315	250	330	390	215	280	325	210	255	295	285	380	445	230	305	365	—	—	—
	1125	*1550*	*1875*	*660*	*890*	*1025*	*820*	*1075*	*1275*	*710*	*920*	*1075*	*690*	*840*	*970*	*940*	*1250*	*1450*	*750*	*1000*	*1200*	—	—	—
P7	325	440	540	190	255	300	235	310	365	205	265	305	200	245	275	265	355	420	220	290	345	—	—	—
	1075	*1450*	*1775*	*620*	*840*	*980*	*770*	*1025*	*1200*	*670*	*870*	*1000*	*660*	*800*	*900*	*870*	*1175*	*1375*	*720*	*950*	*1125*	—	—	—
P8	300	415	490	175	235	275	220	290	340	195	250	285	185	230	255	250	335	390	205	275	320	—	—	—
	980	*1350*	*1600*	*570*	*770*	*900*	*720*	*950*	*1125*	*640*	*820*	*940*	*610*	*750*	*840*	*820*	*1100*	*1275*	*670*	*900*	*1050*	—	—	—
P11	320	430	520	185	245	290	230	300	355	200	255	300	195	235	270	240	380	500	210	280	335	—	—	—
	1050	*1400*	*1700*	*610*	*800*	*950*	*750*	*980*	*1175*	*660*	*840*	*980*	*640*	*770*	*890*	*790*	*1250*	*1650*	*690*	*920*	*1100*	—	—	—
P12	235	305	370	120	160	190	155	195	225	135	170	190	130	155	175	165	245	310	140	185	215	—	—	—
	770	*1000*	*1225*	*395*	*520*	*620*	*510*	*640*	*740*	*445*	*560*	*620*	*425*	*510*	*570*	*540*	*800*	*1025*	*460*	*610*	*710*	—	—	—
M1	—	—	—	—	—	—	200	265	310	190	255	295	175	230	270	270	435	560	200	265	310	—	—	—
	—	—	—	—	—	—	*660*	*870*	*1025*	*620*	*840*	*970*	*570*	*750*	*890*	*890*	*1425*	*1825*	*660*	*870*	*1025*	—	—	—
M2	—	—	—	—	—	—	165	220	260	155	210	245	145	190	225	230	360	470	165	220	255	—	—	—
	—	—	—	—	—	—	*540*	*720*	*850*	*510*	*690*	*800*	*475*	*620*	*740*	*750*	*1175*	*1550*	*540*	*720*	*840*	—	—	—
M3	—	—	—	—	—	—	135	180	210	130	170	200	115	155	180	195	300	375	135	180	205	—	—	—
	—	—	—	—	—	—	*445*	*590*	*690*	*425*	*560*	*660*	*375*	*510*	*590*	*640*	*980*	*1225*	*445*	*590*	*670*	—	—	—
M4	—	—	—	—	—	—	105	140	160	100	130	155	90	120	140	150	225	285	105	140	160	—	—	—
	—	—	—	—	—	—	*345*	*460*	*520*	*330*	*425*	*510*	*295*	*395*	*460*	*490*	*740*	*940*	*345*	*460*	*520*	—	—	—
M5	—	—	—	—	—	—	90	115	135	85	110	130	75	100	115	125	190	235	85	115	135	—	—	—
	—	—	—	—	—	—	*295*	*375*	*445*	*280*	*360*	*425*	*245*	*330*	*375*	*410*	*620*	*770*	*280*	*375*	*445*	—	—	—
K1	405	550	660	255	345	405	215	280	330	—	—	—	170	225	265	—	—	—	—	—	—	—	—	—
	1325	*1800*	*2175*	*840*	*1125*	*1325*	*710*	*920*	*1075*	—	—	—	*560*	*740*	*870*	—	—	—	—	—	—	—	—	—
K2	375	500	610	230	305	365	190	250	295	—	—	—	150	200	235	—	—	—	—	—	—	—	—	—
	1225	*1650*	*2000*	*750*	*1000*	*1200*	*620*	*820*	*970*	—	—	—	*490*	*660*	*770*	—	—	—	—	—	—	—	—	—
K3	315	425	520	195	255	305	160	210	250	—	—	—	130	170	200	—	—	—	—	—	—	—	—	—
	1025	*1400*	*1700*	*640*	*840*	*1000*	*520*	*690*	*820*	—	—	—	*425*	*560*	*660*	—	—	—	—	—	—	—	—	—
K4	300	405	495	185	245	295	150	200	235	—	—	—	120	160	190	—	—	—	—	—	—	—	—	—
	980	*1325*	*1625*	*610*	*800*	*970*	*490*	*660*	*770*	—	—	—	*395*	*520*	*620*	—	—	—	—	—	—	—	—	—
K5	190	255	305	115	150	180	95	125	145	—	—	—	75	100	115	—	—	—	—	—	—	—	—	—
	620	*840*	*1000*	*375*	*490*	*590*	*310*	*410*	*475*	—	—	—	*245*	*330*	*375*	—	—	—	—	—	—	—	—	—
K6	265	360	435	165	215	260	135	180	210	—	—	—	105	140	165	—	—	—	—	—	—	—	—	—
	870	*1175*	*1425*	*540*	*710*	*850*	*445*	*590*	*690*	—	—	—	*345*	*460*	*540*	—	—	—	—	—	—	—	—	—
K7	245	330	390	150	195	230	120	155	185	—	—	—	95	125	150	—	—	—	—	—	—	—	—	—
	800	*1075*	*1275*	*490*	*640*	*750*	*395*	*510*	*610*	—	—	—	*310*	*410*	*490*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1275	1675	1950	—	—	—	—	—	—	1350	1775	2100
	—	—	—	—	—	—	—	—	—	—	—	—	*4175*	*5500*	*6400*	—	—	—	—	—	—	*4425*	*5825*	*6900*
N2	—	—	—	—	—	—	—	—	—	—	—	—	510	670	790	—	—	—	—	—	—	540	720	850
	—	—	—	—	—	—	—	—	—	—	—	—	*1675*	*2200*	*2600*	—	—	—	—	—	—	*1775*	*2350*	*2800*
N3	—	—	—	—	—	—	—	—	—	—	—	—	340	450	530	—	—	—	—	—	—	360	480	560
	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1475*	*1750*	—	—	—	—	—	—	*1175*	*1575*	*1825*
N11	—	—	—	—	—	—	—	—	—	—	—	—	390	510	600	—	—	—	—	—	—	415	550	650
	—	—	—	—	—	—	—	—	—	—	—	—	*1275*	*1675*	*1975*	—	—	—	—	—	—	*1350*	*1800*	*2125*
S1	—	—	—	—	—	—	—	—	—	47	60	70	42	55	65	50	65	80	50	65	80	—	—	—
	—	—	—	—	—	—	—	—	—	*155*	*195*	*230*	*140*	*180*	*215*	*165*	*215*	*260*	*165*	*215*	*260*	—	—	—
S2	—	—	—	—	—	—	—	—	—	37	49	60	34	45	50	41	55	65	41	55	65	—	—	—
	—	—	—	—	—	—	—	—	—	*120*	*160*	*195*	*110*	*150*	*165*	*135*	*180*	*215*	*135*	*180*	*215*	—	—	—
S3	—	—	—	—	—	—	—	—	—	33	43	50	30	39	46	37	47	55	37	47	55	—	—	—
	—	—	—	—	—	—	—	—	—	*110*	*140*	*165*	*100*	*130*	*150*	*120*	*155*	*180*	*120*	*155*	*180*	—	—	—
S11	—	—	—	—	—	—	—	—	—	65	85	100	60	80	90	70	95	110	70	95	110	—	—	—
	—	—	—	—	—	—	—	—	—	*215*	*280*	*330*	*195*	*260*	*295*	*230*	*310*	*360*	*230*	*310*	*360*	—	—	—
S12	—	—	—	—	—	—	—	—	—	45	60	70	41	55	65	49	65	75	49	65	75	—	—	—
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*135*	*180*	*215*	*160*	*215*	*245*	*160*	*215*	*245*	—	—	—
S13	—	—	—	—	—	—	—	—	—	26	35	40	24	31	37	29	38	44	29	38	44	—	—	—
	—	—	—	—	—	—	—	—	—	*85*	*115*	*130*	*80*	*100*	*120*	*95*	*125*	*145*	*95*	*125*	*145*	—	—	—
H5	120	155	190	41	55	65	42	55	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	395	*510*	*620*	*135*	*180*	*215*	*140*	*180*	*215*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	135	175	205	45	60	70	45	60	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	445	*570*	*670*	*150*	*195*	*230*	*150*	*195*	*230*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	155	200	240	55	70	85	55	70	85	—	—	—	—	—	—	110	160	205	55	70	85	—	—	—
	510	*660*	*790*	*180*	*230*	*280*	*180*	*230*	*280*	—	—	—	—	—	—	*360*	*520*	*670*	*180*	*230*	*280*	—	—	—
H12	155	205	235	80	105	120	85	115	130	—	—	—	—	—	—	100	145	180	90	115	135	—	—	—
	510	*670*	*770*	*260*	*345*	*395*	*280*	*375*	*425*	—	—	—	—	—	—	*330*	*475*	*590*	*295*	*375*	*445*	—	—	—
H21	135	175	205	45	60	70	—	—	—	—	—	—	—	—	—	100	115	120	45	60	70	—	—	—
	445	*570*	*670*	*150*	*195*	*230*	—	—	—	—	—	—	—	—	—	*330*	*375*	*395*	*150*	*195*	*230*	—	—	—

R217/220.69-16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	365	450	510	355	440	510	315	395	450
	—	—	—	*1200*	*1475*	*1675*	*1175*	*1450*	*1675*	*1025*	*1300*	*1475*
P2	—	—	—	350	440	490	340	430	480	300	385	430
	—	—	—	*1150*	*1450*	*1600*	*1125*	*1400*	*1575*	*980*	*1275*	*1400*
P3	—	—	—	305	385	430	300	375	425	265	335	380
	—	—	—	*1000*	*1275*	*1400*	*980*	*1225*	*1400*	*870*	*1100*	*1250*
P4	—	—	—	275	335	385	270	330	380	240	295	340
	—	—	—	*900*	*1100*	*1275*	*890*	*1075*	*1250*	*790*	*970*	*1125*
P5	—	—	—	260	320	370	255	315	365	230	280	325
	—	—	—	*850*	*1050*	*1225*	*840*	*1025*	*1200*	*750*	*920*	*1075*
P6	—	—	—	295	365	415	285	360	405	255	320	365
	—	—	—	*970*	*1200*	*1350*	*940*	*1175*	*1325*	*840*	*1050*	*1200*
P7	—	—	—	275	345	390	270	340	385	240	305	345
	—	—	—	*900*	*1125*	*1275*	*890*	*1125*	*1275*	*790*	*1000*	*1125*
P8	—	—	—	255	320	365	250	315	355	225	280	320
	—	—	—	*840*	*1050*	*1200*	*820*	*1025*	*1175*	*740*	*920*	*1050*
P11	—	—	—	270	335	380	265	330	375	235	295	335
	—	—	—	*890*	*1100*	*1250*	*870*	*1075*	*1225*	*770*	*970*	*1100*
P12	—	—	—	175	215	245	175	215	240	155	190	215
	—	—	—	*570*	*710*	*800*	*570*	*710*	*790*	*510*	*620*	*710*
M1	—	—	—	—	—	—	175	235	275	165	220	255
	—	—	—	—	—	—	*570*	*770*	*900*	*540*	*720*	*840*
M2	—	—	—	—	—	—	145	190	230	135	180	215
	—	—	—	—	—	—	*475*	*620*	*750*	*445*	*590*	*710*
M3	—	—	—	—	—	—	120	155	185	110	145	175
	—	—	—	—	—	—	*395*	*510*	*610*	*360*	*475*	*570*
M4	—	—	—	—	—	—	95	125	145	85	115	135
	—	—	—	—	—	—	*310*	*410*	*475*	*280*	*375*	*445*
M5	—	—	—	—	—	—	80	105	120	75	95	110
	—	—	—	—	—	—	*260*	*345*	*395*	*245*	*310*	*360*
K1	315	550	760	350	445	495	340	435	485	305	385	435
	1025	*1800*	*2500*	*1150*	*1450*	*1625*	*1125*	*1425*	*1600*	*1000*	*1275*	*1425*
K2	280	485	670	315	390	445	310	380	440	275	340	395
	920	*1600*	*2200*	*1025*	*1275*	*1450*	*1025*	*1250*	*1450*	*900*	*1125*	*1300*
K3	215	310	395	265	330	380	260	325	370	235	290	330
	710	*1025*	*1300*	*870*	*1075*	*1250*	*850*	*1075*	*1225*	*770*	*950*	*1075*
K4	205	300	375	255	315	360	250	310	355	225	275	315
	670	*980*	*1225*	*840*	*1025*	*1175*	*820*	*1025*	*1175*	*740*	*900*	*1025*
K5	125	185	230	160	195	220	155	190	215	140	170	195
	410	*610*	*750*	*520*	*640*	*720*	*510*	*620*	*710*	*460*	*560*	*640*
K6	180	265	330	225	275	320	220	270	310	195	245	280
	590	*870*	*1075*	*740*	*900*	*1050*	*720*	*890*	*1025*	*640*	*800*	*920*
K7	160	235	295	200	245	280	200	245	275	175	220	245
	520	*770*	*970*	*660*	*800*	*920*	*660*	*800*	*900*	*570*	*720*	*800*
N1	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	41	55	65
	—	—	—	—	—	—	—	—	—	*135*	*180*	*215*
S2	—	—	—	—	—	—	—	—	—	33	43	50
	—	—	—	—	—	—	—	—	—	*110*	*140*	*165*
S3	—	—	—	—	—	—	—	—	—	29	38	45
	—	—	—	—	—	—	—	—	—	*95*	*125*	*150*
S11	—	—	—	—	—	—	—	—	—	55	75	90
	—	—	—	—	—	—	—	—	—	*180*	*245*	*295*
S12	—	—	—	—	—	—	—	—	—	39	50	60
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*
S13	—	—	—	—	—	—	—	—	—	23	30	35
	—	—	—	—	—	—	—	—	—	*75*	*100*	*115*
H5	—	—	—	46	60	70	—	—	—	35	47	55
	—	—	—	*150*	*195*	*230*	—	—	—	*115*	*155*	*180*
H8	—	—	—	50	65	75	—	—	—	38	50	60
	—	—	—	*165*	*215*	*245*	—	—	—	*125*	*165*	*195*
H11	—	—	—	60	75	90	—	—	—	45	60	70
	—	—	—	*195*	*245*	*295*	—	—	—	*150*	*195*	*230*
H12	—	—	—	90	120	140	—	—	—	70	90	105
	—	—	—	*295*	*395*	*460*	—	—	—	*230*	*295*	*345*
H21	—	—	—	50	65	75	—	—	—	38	50	60
	—	—	—	*165*	*215*	*245*	—	—	—	*125*	*165*	*195*

Turbo 18 – R217.69-18 – In mm



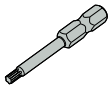


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 80-82
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

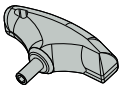
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	Cmin		RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.69-3232.3-18-2AN	02691792	Weldon	32,0	2	17,0	10,0	–	32,0	74,0	38,0	50,0	110,0	7,0	46,0	61,5	11100	0,6	XO.X1806
R217.69-3232.3-18-3AN	02691793	Weldon	32,0	3	17,0	10,0	–	32,0	74,0	38,0	50,0	110,0	7,0	46,0	61,5	11100	0,5	XO.X1806
R217.69-2532.3S-18-2AN	02691790	Seco-Weldon	32,0	2	17,0	10,0	40,0	25,0	–	40,0	54,0	109,5	7,0	46,0	61,5	11100	0,5	XO.X1806
R217.69-3240.3S-18-3AN	02691791	Seco-Weldon	40,0	3	17,0	10,0	50,0	32,0	–	46,0	60,0	119,5	4,5	62,0	77,5	9900	0,9	XO.X1806
R217.69-3032.0-18-2AN	02691799	Cilindrico	32,0	2	17,0	10,0	–	30,0	–	150,0	150,0	210,0	7,0	46,0	61,5	11100	1,1	XO.X1806
R217.69-3232.0-18-2AN	02691795	Cilindrico	32,0	2	17,0	10,0	–	32,0	–	40,0	150,0	210,0	7,0	46,0	61,5	11100	1,2	XO.X1806
R217.69-3232.0-18-3AN	02691796	Cilindrico	32,0	3	17,0	10,0	–	32,0	–	40,0	150,0	210,0	7,0	46,0	61,5	11100	1,2	XO.X1806
R217.69-3240.0-18-3AN	02691797	Cilindrico	40,0	3	17,0	10,0	–	32,0	–	150,0	150,0	210,0	4,5	62,0	77,5	9900	1,3	XO.X1806
R217.69-3240.0-18-4AN	02691798	Cilindrico	40,0	4	17,0	10,0	–	32,0	–	150,0	150,0	210,0	4,5	62,0	77,5	9900	1,3	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T20PX50	C04510-T20P

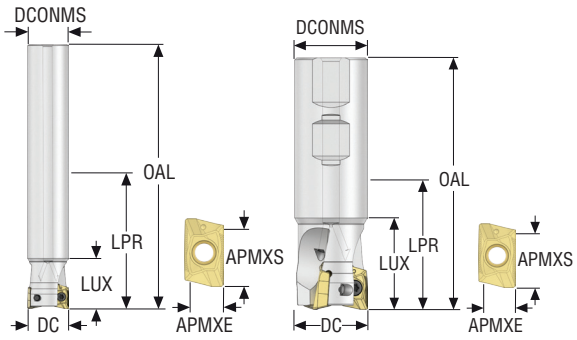
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217.69-18 – Pollici



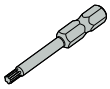


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 80-82
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

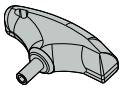
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.69-01.00-3-18-2AN	02699130	Weldon	1.000	2	0.669	0.394	1.000	2.795	1.575	1.732	3.937	6,0	1.280	1.890	13800	0.660	XO.X1806
R217.69-01.25-3-18-3AN	02694949	Weldon	1.250	3	0.669	0.394	1.250	3.189	1.575	1.969	4.331	7,0	1.791	2.402	11100	1.320	XO.X1806
R217.69-01.50-3-18-3AN	02694951	Weldon	1.500	3	0.669	0.394	1.250	3.583	2.362	2.362	4.724	4,5	2.283	2.894	9900	1.540	XO.X1806
R217.69-01.50-3-18-4AN	02694954	Weldon	1.500	4	0.669	0.394	1.250	3.535	2.362	2.362	4.724	4,5	2.283	2.894	9900	1.320	XO.X1806
R217.69-01.00-0-18-2LAN	02699117	Cilindrico	1.000	2	0.669	0.394	1.000	–	1.575	4.488	6.693	5,0	1.280	1.890	13800	1.320	XO.X1806
R217.69-01.25-0-18-2LAN	02694932	Cilindrico	1.250	2	0.669	0.394	1.000	–	5.315	5.315	7.677	2,0	1.791	2.402	11100	1.540	XO.X1806
R217.69-01.25-0-18-3LAN	02694936	Cilindrico	1.250	3	0.669	0.394	1.000	–	5.472	5.472	7.677	7,0	1.791	2.402	11100	1.980	XO.X1806
R217.69-01.50-0-18-3LAN	02694937	Cilindrico	1.500	3	0.669	0.394	1.250	–	5.906	5.906	8.268	4,5	2.283	2.894	9900	2.650	XO.X1806
R217.69-01.50-0-18-4LAN	02694938	Cilindrico	1.500	4	0.669	0.394	1.250	–	5.906	5.906	8.268	4,5	2.283	2.894	9900	2.650	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 0,158"

Parti di ricambio, comprese nella fornitura

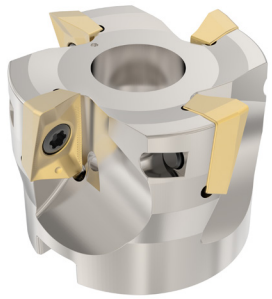
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..	1/4HEX-T20PX50	C04510-T20P

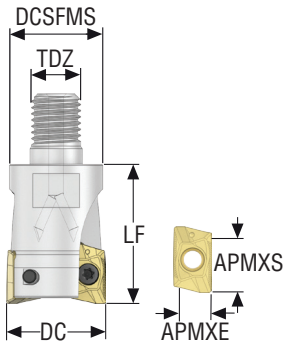
Accessori

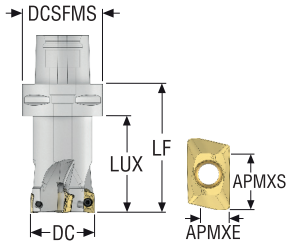
Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.69-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50

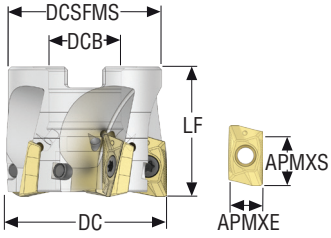
Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217/220.69-18 – In mm







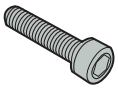
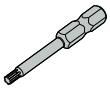


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 80-82
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

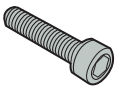
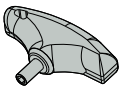
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	LUX	RMPX°	Cmin		RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm	mm		mm	mm		kg	
C6-R217.69-040-18-3AN	02707507	Seco-Capto	40,0	3	17,0	10,0	–	63,0	–	–	80,0	55,0	4,5	62,0	77,5	9900	1,1	XO.X1806
C6-R217.69-066-18-5AN	02707509	Seco-Capto	66,0	5	17,0	10,0	–	63,0	–	–	60,0	60,0	2,0	114,0	129,5	7700	1,4	XO.X1806
C6-R217.69-080-18-6AN	02707511	Seco-Capto	80,0	6	17,0	10,0	–	63,0	–	–	60,0	60,0	1,5	142,0	157,5	7000	1,7	XO.X1806
R220.69-0040-18-4AN	03004031	Manicotto	40,0	4	17,0	10,0	16,0	35,0	–	16,0	40,0	–	4,5	62,0	77,5	9900	0,2	XO.X1806
R220.69-0050-18-4AN	02701130	Manicotto	50,0	4	17,0	10,0	22,0	47,0	–	22,0	40,0	–	3,0	82,0	97,5	8900	0,3	XO.X1806
R220.69-0050-18-5AN	02691824	Manicotto	50,0	5	17,0	10,0	22,0	47,0	–	22,0	40,0	–	3,0	82,0	97,5	8900	0,3	XO.X1806
R220.69-0052-18-4AN	02969087	Manicotto	52,0	4	17,0	10,0	22,0	47,0	–	22,0	40,0	–	3,15	86,0	101,5	8900	0,4	XO.X1806
R220.69-0063-18-4AN	02691810	Manicotto	63,0	4	17,0	10,0	27,0	52,0	–	27,0	40,0	–	2,4	108,0	123,5	7900	0,6	XO.X1806
R220.69-0063-18-5AN	02691825	Manicotto	63,0	5	17,0	10,0	27,0	52,0	–	27,0	40,0	–	2,4	108,0	123,5	7900	0,5	XO.X1806
R220.69-0063-18-6AN	02691826	Manicotto	63,0	6	17,0	10,0	27,0	52,0	–	27,0	40,0	–	2,4	108,0	123,5	7900	0,5	XO.X1806
R220.69-0066-18-5AN	02969088	Manicotto	66,0	5	17,0	10,0	27,0	52,0	–	27,0	40,0	–	2,0	114,0	129,5	7900	0,6	XO.X1806
R220.69-0080-18-5AN	02691811	Manicotto	80,0	5	17,0	10,0	27,0	62,0	–	27,0	50,0	–	1,5	142,0	157,5	7000	0,9	XO.X1806
R220.69-0080-18-6AN	02691827	Manicotto	80,0	6	17,0	10,0	27,0	62,0	–	27,0	50,0	–	1,5	142,0	157,5	7000	0,9	XO.X1806
R220.69-0080-18-8AN	02691828	Manicotto	80,0	8	17,0	10,0	27,0	62,0	–	27,0	50,0	–	1,5	142,0	157,5	7000	0,9	XO.X1806
R220.69-0084-18-6AN	02440816	Manicotto	84,0	6	17,0	10,0	27,0	62,0	–	27,0	50,0	–	1,5	150,0	165,5	7000	0,8	XO.X1806
R220.69-0100-18-6AN	02691817	Manicotto	100,0	6	17,0	10,0	32,0	77,0	–	32,0	50,0	–	1,0	182,0	197,5	6300	1,6	XO.X1806
R220.69-0100-18-7AN	02691820	Manicotto	100,0	7	17,0	10,0	32,0	77,0	–	32,0	50,0	–	1,0	182,0	197,5	6300	1,7	XO.X1806
R220.69-0100-18-9AN	02691822	Manicotto	100,0	9	17,0	10,0	32,0	77,0	–	32,0	50,0	–	1,0	182,0	197,5	6300	1,6	XO.X1806
R220.69-0125-18-7AN	02691818	Manicotto	125,0	7	17,0	10,0	40,0	90,0	–	40,0	63,0	–	1,0	232,0	247,5	5600	2,9	XO.X1806
R220.69-0125-18-8AN	02691823	Manicotto	125,0	8	17,0	10,0	40,0	90,0	–	40,0	63,0	–	1,0	232,0	247,5	5600	3,0	XO.X1806
R220.69-0125-18-11AN	02691815	Manicotto	125,0	11	17,0	10,0	40,0	90,0	–	40,0	63,0	–	1,0	232,0	247,5	5600	3,0	XO.X1806
R220.69-8160-18-7N	02691814	Manicotto	160,0	7	17,0	10,0	40,0	90,0	–	40,0	63,0	–	0,5	302,0	317,5	5000	4,4	XO.X1806
R220.69-8160-18-9N	02691813	Manicotto	160,0	9	17,0	10,0	40,0	90,0	–	40,0	63,0	–	0,5	302,0	317,5	5000	4,5	XO.X1806
R220.69-8160-18-12N	02691809	Manicotto	160,0	12	17,0	10,0	40,0	90,0	–	40,0	63,0	–	0,5	302,0	317,5	5000	4,4	XO.X1806
R217.69-1632.RE-18-2AN	02691807	Combimaster	32,0	2	17,0	10,0	–	30,0	M16	–	45,0	–	7,0	46,0	61,5	11100	0,3	XO.X1806
R217.69-1632.RE-18-3AN	02691805	Combimaster	32,0	3	17,0	10,0	–	30,0	M16	–	45,0	–	7,0	46,0	61,5	11100	0,2	XO.X1806
R217.69-1640.RE-18-3AN	02691808	Combimaster	40,0	3	17,0	10,0	–	30,0	M16	–	45,0	–	4,5	62,0	77,5	9900	0,3	XO.X1806
R217.69-1640.RE-18-4AN	02691806	Combimaster	40,0	4	17,0	10,0	–	30,0	M16	–	45,0	–	4,5	62,0	77,5	9900	0,3	XO.X1806
R217.69-2040.RE-18-4AN	02753402	Combimaster	40,0	4	17,0	10,0	–	36,5	M20	–	45,0	–	4,5	62,0	77,5	9900	0,4	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

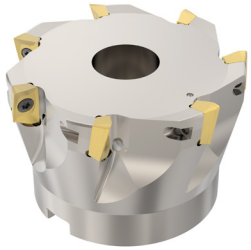
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
Cx-R217.69-..	–	1/4HEX-T20PX50	C04510-T20P
R220.69-0040	TCEI0825	1/4HEX-T20PX50	C04510-T20P
R220.69-0050-0052	220.17-692	1/4HEX-T20PX50	C04510-T20P
R220.69-0063-0066	220.17-693	1/4HEX-T20PX50	C04510-T20P
R220.69-0080-0084	–	1/4HEX-T20PX50	C04510-T20P
R220.69-0100-8160	–	1/4HEX-T20PX90	C04510-T20P

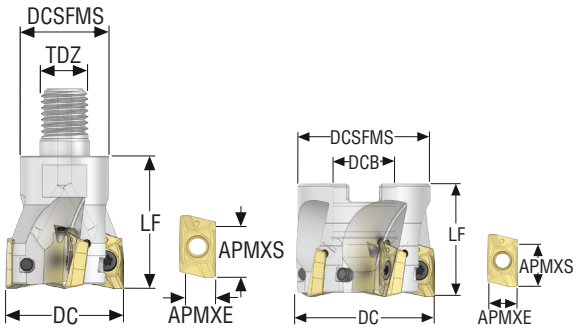
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
Cx-R217/220.69-1632-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.69-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217/220.69-18 – Pollici



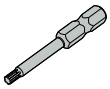


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 80-82
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

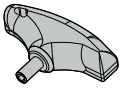
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch		inch	inch		lb	
R220.69-02.00-18-3AN	02694974	Manicotto	2.000	3	0.669	0.394	0.750	1.850	–	0.750	1.575	3,0	3.287	3.898	8900	0.880	XO.X1806
R220.69-02.00-18-4AN	02694975	Manicotto	2.000	4	0.669	0.394	0.750	1.850	–	0.750	1.575	3,0	3.287	3.898	8900	0.880	XO.X1806
R220.69-02.00-18-5AN	02694976	Manicotto	2.000	5	0.669	0.394	0.750	1.850	–	0.750	1.575	3,0	3.287	3.898	8900	0.880	XO.X1806
R220.69-02.50-18-5AN	02694979	Manicotto	2.500	5	0.669	0.394	0.750	1.850	–	0.750	1.575	2,0	4.291	4.902	7900	1.100	XO.X1806
R220.69-02.50-18-6AN	02694981	Manicotto	2.500	6	0.669	0.394	0.750	1.850	–	0.750	1.575	2,0	4.291	4.902	7900	1.100	XO.X1806
R220.69-03.00-18-6AN	02694985	Manicotto	3.000	6	0.669	0.394	1.000	2.441	–	1.000	1.969	1,5	5.276	5.886	7000	2.200	XO.X1806
R220.69-03.00-18-8AN	02694987	Manicotto	3.000	8	0.669	0.394	1.000	2.441	–	1.000	1.969	1,5	5.276	5.886	7000	2.430	XO.X1806
R220.69-04.00-18-5AN	02694990	Manicotto	4.000	5	0.669	0.394	1.500	3.543	–	1.500	1.969	1,0	7.283	7.894	6300	4.850	XO.X1806
R220.69-04.00-18-7AN	02694992	Manicotto	4.000	7	0.669	0.394	1.500	3.543	–	1.500	1.969	1,0	7.283	7.894	6300	4.630	XO.X1806
R220.69-04.00-18-9AN	02694993	Manicotto	4.000	9	0.669	0.394	1.500	3.543	–	1.500	1.969	1,0	7.283	7.894	6300	4.630	XO.X1806
R220.69-05.00-18-8AN	02694995	Manicotto	5.000	8	0.669	0.394	1.500	3.543	–	1.500	2.480	1,0	9.291	9.902	5600	8.160	XO.X1806
R220.69-05.00-18-11AN	02694994	Manicotto	5.000	11	0.669	0.394	1.500	3.543	–	1.500	2.480	1,0	9.291	9.902	5600	8.160	XO.X1806
R220.69-06.00-18-9N	02694997	Manicotto	6.000	9	0.669	0.394	2.000	4.331	–	2.000	2.480	0,5	11.280	11.890	5000	9.040	XO.X1806
R220.69-06.00-18-12N	02694996	Manicotto	6.000	12	0.669	0.394	2.000	4.331	–	2.000	2.480	0,5	11.280	11.890	5000	9.040	XO.X1806
R217.69-01.00-12RE-18-2AN	02699134	Combimaster	1.000	2	0.669	0.394	–	0.906	M12	–	1.575	6,0	1.280	1.890	13800	0.220	XO.X1806
R217.69-01.25-16RE-18-3AN	02699137	Combimaster	1.250	3	0.669	0.394	–	1.181	M16	–	1.772	7,0	1.791	2.402	11100	0.660	XO.X1806
R217.69-01.50-16RE-18-3AN	02699141	Combimaster	1.500	3	0.669	0.394	–	1.181	M16	–	1.772	4,5	2.283	2.894	9900	0.660	XO.X1806
R217.69-01.50-16RE-18-4AN	02699143	Combimaster	1.500	4	0.669	0.394	–	1.181	M16	–	1.772	4,5	2.283	2.894	9900	0.660	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 0,158"
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.69-..	–	1/4HEX-T20PX50	C04510-T20P
R220.69-02.00-02.50	220.17-695	1/4HEX-T20PX50	C04510-T20P
R220.69-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C04510-T20P
R220.69-04.00	UF6S3/4UNFX2	1/4HEX-T20PX90	C04510-T20P
R220.69-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C04510-T20P
R220.69-06.00	–	1/4HEX-T20PX90	C04510-T20P

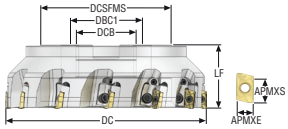
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.69-01.00-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.69-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R220.69-18 – In mm



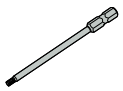


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 80-82
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

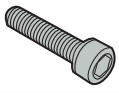
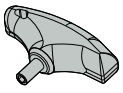
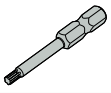
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.69-0125-18-8CN	02706947	Manicotto	125,0	8	17,0	10,0	40,0	90,0	40,0	63,0	1,0	232,0	247,5	5600	3,3	XO.X1806
R220.69-8160-18-10CN	02706948	Manicotto	160,0	10	17,0	10,0	40,0	90,0	40,0	63,0	0,7	302,0	317,5	5000	5,2	XO.X1806
R220.69-8200-18-12CN	02706950	Manicotto	200,0	12	17,0	10,0	60,0	130,0	60,0	63,0	0,5	382,0	397,5	4400	7,4	XO.X1806
R220.69-8250-18-16CN	02706951	Manicotto	250,0	16	17,0	10,0	60,0	130,0	60,0	63,0	0,4	482,0	497,5	3900	14,7	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 4,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto
					
R220.69-0125-8250	AU1114T-T15P	XO18PRN	FS96018	1/4HEX-T20PX90	C04510-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave vite modulo	Chiave di regolazione	Chiave dinamometrica
							
R220.69-0125-8250	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50
R220.69-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50
R220.69-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-18 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XOMX180608TR-ME13 F40M	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
P2	XOMX180608TR-ME13 F40M	8,0 *0.32*	0,19 0.0075	0,20 0.0080	0,32 0.013
P3	XOMX180608TR-M14 MP2501	8,0 *0.32*	0,19 0.0075	0,20 0.0080	0,32 0.013
P4	XOMX180608TR-M14 MP2501	8,0 *0.32*	0,19 0.0075	0,20 0.0080	0,32 0.013
P5	XOMX180608TR-M14 MP2501	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
P6	XOMX180608TR-M14 MP2501	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
P7	XOMX180608TR-M14 MP2501	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
P11	XOMX180608TR-M14 MP3501	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
P12	XOMX180608TR-M14 MP3000	7,0 *0.28*	0,12 0.0048	0,14 0.0055	0,20 0.0080
M1	XOMX180608R-M10 F40M	8,0 *0.32*	0,14 0.0055	0,16 0.0065	0,24 0.0095
M2	XOMX180608R-M10 F40M	8,0 *0.32*	0,13 0.0050	0,14 0.0055	0,22 0.0085
M3	XOMX180608R-M10 F40M	7,0 *0.28*	0,10 0.0040	0,11 0.0044	0,17 0.0065
M4	XOMX180608R-M10 MS2050	5,0 *0.20*	0,090 0.0036	0,10 0.0040	0,15 0.0060
M5	XOMX180608R-M10 MS2050	5,0 *0.20*	0,090 0.0036	0,10 0.0040	0,15 0.0060
K1	XOMX180608TR-M14 MK1501	8,0 *0.32*	0,20 0.0080	0,22 0.0085	0,34 0.013
K2	XOMX180608TR-M14 MK1501	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
K3	XOMX180608TR-M14 MK2050	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
K4	XOMX180608TR-M14 MK2050	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
K5	XOMX180608TR-M14 MK2050	8,0 *0.32*	0,16 0.0065	0,18 0.0070	0,28 0.011
K6	XOMX180608TR-M14 MK2050	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
K7	XOMX180608TR-M14 MK2050	8,0 *0.32*	0,16 0.0065	0,18 0.0070	0,28 0.011
N1	XOEX180608FR-E10 H25	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
N2	XOEX180608FR-E10 H25	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
N3	XOEX180608FR-E10 H25	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
N11	XOEX180608FR-E10 H25	8,0 *0.32*	0,18 0.0070	0,20 0.0080	0,30 0.012
S1	XOMX180608R-M10 F40M	5,0 *0.20*	0,090 0.0036	0,10 0.0040	0,15 0.0060
S2	XOMX180608R-M10 F40M	5,0 *0.20*	0,090 0.0036	0,10 0.0040	0,15 0.0060
S3	XOMX180608R-M10 F40M	5,0 *0.20*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S11	XOMX180608R-M10 MS2050	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,18 0.0070
S12	XOMX180608R-M10 MS2050	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,18 0.0070
S13	XOMX180608R-M10 MS2050	5,0 *0.20*	0,090 0.0036	0,10 0.0040	0,15 0.0060
H5	XOMX180608TR-MD15 MH1051	7,0 *0.28*	0,13 0.0050	0,15 0.0060	0,22 0.0085
H8	XOMX180608TR-MD15 MH1051	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,17 0.0065
H11	XOMX180608TR-MD15 MH1051	7,0 *0.28*	0,13 0.0050	0,15 0.0060	0,22 0.0085
H12	XOMX180608TR-MD15 MH1051	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,17 0.0065
H21	XOMX180608TR-MD15 MH1051	6,0 *0.24*	0,10 0.0040	0,11 0.0044	0,17 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H25		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	255	335	400	250	335	410	270	350	400	260	320	355	335	465	550	290	385	450	—	—	—
	—	—	—	*840*	*1100*	*1300*	*820*	*1100*	*1350*	*890*	*1150*	*1300*	*850*	*1050*	*1175*	*1100*	*1525*	*1800*	*950*	*1275*	*1475*	—	—	—
P2	—	—	—	245	325	385	245	325	385	265	335	390	255	305	350	330	440	530	280	370	440	—	—	—
	—	—	—	*800*	*1075*	*1275*	*800*	*1075*	*1275*	*870*	*1100*	*1275*	*840*	*1000*	*1150*	*1075*	*1450*	*1750*	*920*	*1225*	*1450*	—	—	—
P3	—	—	—	215	290	335	215	295	340	225	295	345	220	270	310	280	390	470	245	325	385	—	—	—
	—	—	—	*710*	*950*	*1100*	*710*	*970*	*1125*	*740*	*970*	*1125*	*720*	*890*	*1025*	*920*	*1275*	*1550*	*800*	*1075*	*1275*	—	—	—
P4	—	—	—	190	255	295	190	260	300	205	260	305	200	250	290	260	345	415	220	285	340	—	—	—
	—	—	—	*620*	*840*	*970*	*620*	*850*	*980*	*670*	*850*	*1000*	*660*	*820*	*950*	*850*	*1125*	*1350*	*720*	*940*	*1125*	—	—	—
P5	310	425	530	185	245	290	185	245	295	195	250	290	190	230	260	250	340	395	210	275	325	—	—	—
	1025	*1400*	*1750*	*610*	*800*	*950*	*610*	*800*	*970*	*640*	*820*	*950*	*620*	*750*	*850*	*820*	*1125*	*1300*	*690*	*900*	*1075*	—	—	—
P6	360	475	590	205	275	325	210	280	330	220	285	325	210	260	290	280	380	445	235	310	365	—	—	—
	1175	*1550*	*1925*	*670*	*900*	*1075*	*690*	*920*	*1075*	*720*	*940*	*1075*	*690*	*850*	*950*	*920*	*1250*	*1450*	*770*	*1025*	*1200*	—	—	—
P7	340	450	560	195	255	305	195	260	315	205	265	305	200	245	275	265	360	420	220	295	345	—	—	—
	1125	*1475*	*1825*	*640*	*840*	*1000*	*640*	*850*	*1025*	*670*	*870*	*1000*	*660*	*800*	*900*	*870*	*1175*	*1375*	*720*	*970*	*1125*	—	—	—
P8	310	425	510	180	245	285	180	245	290	190	245	290	185	225	260	235	330	395	205	270	325	—	—	—
	1025	*1400*	*1675*	*590*	*800*	*940*	*590*	*800*	*950*	*620*	*800*	*950*	*610*	*740*	*850*	*770*	*1075*	*1300*	*670*	*890*	*1075*	—	—	—
P11	330	435	540	190	250	295	190	255	305	200	260	295	195	240	265	240	385	495	215	285	335	—	—	—
	1075	*1425*	*1775*	*620*	*820*	*970*	*620*	*840*	*1000*	*660*	*850*	*970*	*640*	*790*	*870*	*790*	*1275*	*1625*	*710*	*940*	*1100*	—	—	—
P12	240	315	380	125	165	195	135	175	210	135	170	195	130	160	175	165	255	320	140	185	215	—	—	—
	790	*1025*	*1250*	*410*	*540*	*640*	*445*	*570*	*690*	*445*	*560*	*640*	*425*	*520*	*570*	*540*	*840*	*1050*	*460*	*610*	*710*	—	—	—
M1	—	—	—	—	—	—	175	235	275	195	250	300	175	230	275	270	420	560	200	265	315	—	—	—
	—	—	—	—	—	—	*570*	*770*	*900*	*640*	*820*	*980*	*570*	*750*	*900*	*890*	*1375*	*1825*	*660*	*870*	*1025*	—	—	—
M2	—	—	—	—	—	—	150	195	230	160	210	250	145	190	225	225	365	470	165	220	260	—	—	—
	—	—	—	—	—	—	*490*	*640*	*750*	*520*	*690*	*820*	*475*	*620*	*740*	*740*	*1200*	*1550*	*540*	*720*	*850*	—	—	—
M3	—	—	—	—	—	—	120	160	190	130	170	200	120	155	185	195	300	385	135	180	210	—	—	—
	—	—	—	—	—	—	*395*	*520*	*620*	*425*	*560*	*660*	*395*	*510*	*610*	*640*	*980*	*1275*	*445*	*590*	*690*	—	—	—
M4	—	—	—	—	—	—	95	125	145	100	135	155	95	120	140	155	230	295	105	140	165	—	—	—
	—	—	—	—	—	—	*310*	*410*	*475*	*330*	*445*	*510*	*310*	*395*	*460*	*510*	*750*	*970*	*345*	*460*	*540*	—	—	—
M5	—	—	—	—	—	—	80	105	120	85	110	130	75	100	120	130	195	245	90	115	135	—	—	—
	—	—	—	—	—	—	*260*	*345*	*395*	*280*	*360*	*425*	*245*	*330*	*395*	*425*	*640*	*800*	*295*	*375*	*445*	—	—	—
K1	405	560	690	265	350	415	185	250	295	—	—	—	175	225	270	—	—	—	—	—	—	—	—	—
	1325	*1825*	*2275*	*870*	*1150*	*1350*	*610*	*820*	*970*	—	—	—	*570*	*740*	*890*	—	—	—	—	—	—	—	—	—
K2	375	510	640	240	315	375	170	220	265	—	—	—	155	205	240	—	—	—	—	—	—	—	—	—
	1225	*1675*	*2100*	*790*	*1025*	*1225*	*560*	*720*	*870*	—	—	—	*510*	*670*	*790*	—	—	—	—	—	—	—	—	—
K3	320	435	540	200	265	315	140	190	225	—	—	—	130	170	200	—	—	—	—	—	—	—	—	—
	1050	*1425*	*1775*	*660*	*870*	*1025*	*460*	*620*	*740*	—	—	—	*425*	*560*	*660*	—	—	—	—	—	—	—	—	—
K4	305	415	510	190	255	300	135	180	215	—	—	—	125	165	190	—	—	—	—	—	—	—	—	—
	1000	*1350*	*1675*	*620*	*840*	*980*	*445*	*590*	*710*	—	—	—	*410*	*540*	*620*	—	—	—	—	—	—	—	—	—
K5	195	270	315	120	155	185	85	110	130	—	—	—	75	100	115	—	—	—	—	—	—	—	—	—
	640	*890*	*1025*	*395*	*510*	*610*	*280*	*360*	*425*	—	—	—	*245*	*330*	*375*	—	—	—	—	—	—	—	—	—
K6	265	365	455	170	225	265	120	160	190	—	—	—	110	145	170	—	—	—	—	—	—	—	—	—
	870	*1200*	*1500*	*560*	*740*	*870*	*395*	*520*	*620*	—	—	—	*360*	*475*	*560*	—	—	—	—	—	—	—	—	—
K7	245	345	405	150	200	235	105	140	165	—	—	—	95	125	150	—	—	—	—	—	—	—	—	—
	800	*1125*	*1325*	*490*	*660*	*770*	*345*	*460*	*540*	—	—	—	*310*	*410*	*490*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1275	1675	1975	—	—	—	—	—	—	1275	1675	2000
	—	—	—	—	—	—	—	—	—	—	—	—	*4175*	*5500*	*6475*	—	—	—	—	—	—	*4175*	*5500*	*6550*
N2	—	—	—	—	—	—	—	—	—	—	—	—	510	670	800	—	—	—	—	—	—	520	680	810
	—	—	—	—	—	—	—	—	—	—	—	—	*1675*	*2200*	*2625*	—	—	—	—	—	—	*1700*	*2225*	*2650*
N3	—	—	—	—	—	—	—	—	—	—	—	—	340	450	540	—	—	—	—	—	—	345	455	540
	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1475*	*1775*	—	—	—	—	—	—	*1125*	*1500*	*1775*
N11	—	—	—	—	—	—	—	—	—	—	—	—	390	510	610	—	—	—	—	—	—	395	520	620
	—	—	—	—	—	—	—	—	—	—	—	—	*1275*	*1675*	*2000*	—	—	—	—	—	—	*1300*	*1700*	*2025*
S1	—	—	—	—	—	—	44	60	70	48	60	75	43	55	65	50	70	80	50	70	80	—	—	—
	—	—	—	—	—	—	*145*	*195*	*230*	*155*	*195*	*245*	*140*	*180*	*215*	*165*	*230*	*260*	*165*	*230*	*260*	—	—	—
S2	—	—	—	—	—	—	35	47	55	38	50	60	35	45	55	42	55	65	42	55	65	—	—	—
	—	—	—	—	—	—	*115*	*155*	*180*	*125*	*165*	*195*	*115*	*150*	*180*	*140*	*180*	*215*	*140*	*180*	*215*	—	—	—
S3	—	—	—	—	—	—	31	41	48	33	44	50	30	40	47	37	48	55	37	48	55	—	—	—
	—	—	—	—	—	—	*100*	*135*	*155*	*110*	*145*	*165*	*100*	*130*	*155*	*120*	*155*	*180*	*120*	*155*	*180*	—	—	—
S11	—	—	—	—	—	—	—	—	—	65	85	100	60	80	95	75	95	110	75	95	110	—	—	—
	—	—	—	—	—	—	—	—	—	*215*	*280*	*330*	*195*	*260*	*310*	*245*	*310*	*360*	*245*	*310*	*360*	—	—	—
S12	—	—	—	—	—	—	—	—	—	46	60	70	42	55	65	50	65	80	50	65	80	—	—	—
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*140*	*180*	*215*	*165*	*215*	*260*	*165*	*215*	*260*	—	—	—
S13	—	—	—	—	—	—	—	—	—	27	35	41	24	32	37	29	38	45	29	38	45	—	—	—
	—	—	—	—	—	—	—	—	—	*90*	*115*	*135*	*80*	*105*	*120*	*95*	*125*	*150*	*95*	*125*	*150*	—	—	—
H5	125	160	195	43	55	65	38	49	60	—	—	—	36	48	55	—	—	—	—	—	—	—	—	—
	410	*520*	*640*	*140*	*180*	*215*	*125*	*160*	*195*	—	—	—	*120*	*155*	*180*	—	—	—	—	—	—	—	—	—
H8	140	185	215	46	60	70	40	55	60	—	—	—	38	50	60	—	—	—	—	—	—	—	—	—
	460	*610*	*710*	*150*	*195*	*230*	*130*	*180*	*195*	—	—	—	*125*	*165*	*195*	—	—	—	—	—	—	—	—	—
H11	160	205	250	55	70	85	48	60	75	—	—	—	46	60	70	110	165	210	55	70	85	—	—	—
	520	*670*	*820*	*180*	*230*	*280*	*155*	*195*	*245*	—	—	—	*150*	*195*	*230*	*360*	*540*	*690*	*180*	*230*	*280*	—	—	—
H12	165	215	250	80	105	125	75	105	120	—	—	—	70	90	105	105	155	190	90	120	140	—	—	—
	540	*710*	*820*	*260*	*345*	*410*	*245*	*345*	*395*	—	—	—	*230*	*295*	*345*	*345*	*510*	*620*	*295*	*395*	*460*	—	—	—
H21	140	185	215	46	60	70	40	55	60	—	—	—	38	50	60	100	120	130	45	60	70	—	—	—
	460	*610*	*710*	*150*	*195*	*230*	*130*	*180*	*195*	—	—	—	*125*	*165*	*195*	*330*	*395*	*425*	*150*	*195*	*230*	—	—	—

R217/220.69-18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	365	460	530	360	450	520	325	405	460	225	290	340
	—	—	—	*1200*	*1500*	*1750*	*1175*	*1475*	*1700*	*1075*	*1325*	*1500*	*740*	*950*	*1125*
P2	—	—	—	360	445	510	350	435	495	315	395	445	215	285	325
	—	—	—	*1175*	*1450*	*1675*	*1150*	*1425*	*1625*	*1025*	*1300*	*1450*	*710*	*940*	*1075*
P3	—	—	—	315	395	445	305	390	435	275	350	390	190	250	285
	—	—	—	*1025*	*1300*	*1450*	*1000*	*1275*	*1425*	*900*	*1150*	*1275*	*620*	*820*	*940*
P4	—	—	—	275	350	390	270	340	385	245	310	345	185	235	280
	—	—	—	*900*	*1150*	*1275*	*890*	*1125*	*1275*	*800*	*1025*	*1125*	*610*	*770*	*920*
P5	—	—	—	270	335	380	260	325	375	235	295	335	160	210	245
	—	—	—	*890*	*1100*	*1250*	*850*	*1075*	*1225*	*770*	*970*	*1100*	*520*	*690*	*800*
P6	—	—	—	300	375	425	295	365	420	265	330	380	180	240	275
	—	—	—	*980*	*1225*	*1400*	*970*	*1200*	*1375*	*870*	*1075*	*1250*	*590*	*790*	*900*
P7	—	—	—	285	355	405	280	345	395	250	310	355	170	225	260
	—	—	—	*940*	*1175*	*1325*	*920*	*1125*	*1300*	*820*	*1025*	*1175*	*560*	*740*	*850*
P8	—	—	—	265	335	375	255	325	365	230	295	330	160	210	240
	—	—	—	*870*	*1100*	*1225*	*840*	*1075*	*1200*	*750*	*970*	*1075*	*520*	*690*	*790*
P11	—	—	—	275	345	390	270	335	385	245	305	345	165	220	255
	—	—	—	*900*	*1125*	*1275*	*890*	*1100*	*1275*	*800*	*1000*	*1125*	*540*	*720*	*840*
P12	—	—	—	185	225	255	180	220	250	160	200	225	110	140	160
	—	—	—	*610*	*740*	*840*	*590*	*720*	*820*	*520*	*660*	*740*	*360*	*460*	*520*
M1	—	—	—	—	—	—	180	240	280	170	225	265	145	190	225
	—	—	—	—	—	—	*590*	*790*	*920*	*560*	*740*	*870*	*475*	*620*	*740*
M2	—	—	—	—	—	—	150	200	235	140	185	220	120	155	190
	—	—	—	—	—	—	*490*	*660*	*770*	*460*	*610*	*720*	*395*	*510*	*620*
M3	—	—	—	—	—	—	120	160	190	115	155	180	95	130	155
	—	—	—	—	—	—	*395*	*520*	*620*	*375*	*510*	*590*	*310*	*425*	*510*
M4	—	—	—	—	—	—	95	125	145	90	120	140	75	100	120
	—	—	—	—	—	—	*310*	*410*	*475*	*295*	*395*	*460*	*245*	*330*	*395*
M5	—	—	—	—	—	—	80	105	125	75	100	115	65	85	100
	—	—	—	—	—	—	*260*	*345*	*410*	*245*	*330*	*375*	*215*	*280*	*330*
K1	325	570	790	360	450	510	350	440	500	315	395	450	—	—	—
	1075	*1875*	*2600*	*1175*	*1475*	*1675*	*1150*	*1450*	*1650*	*1025*	*1300*	*1475*	—	—	—
K2	290	500	700	325	405	460	315	395	450	285	355	405	—	—	—
	950	*1650*	*2300*	*1075*	*1325*	*1500*	*1025*	*1300*	*1475*	*940*	*1175*	*1325*	—	—	—
K3	220	325	410	275	340	390	270	335	380	240	300	345	—	—	—
	720	*1075*	*1350*	*900*	*1125*	*1275*	*890*	*1100*	*1250*	*790*	*980*	*1125*	—	—	—
K4	210	310	390	260	325	370	255	320	365	230	285	330	—	—	—
	690	*1025*	*1275*	*850*	*1075*	*1225*	*840*	*1050*	*1200*	*750*	*940*	*1075*	—	—	—
K5	130	190	235	160	200	225	160	195	220	140	175	200	—	—	—
	425	*620*	*770*	*520*	*660*	*740*	*520*	*640*	*720*	*460*	*570*	*660*	—	—	—
K6	185	270	345	230	285	330	225	280	320	205	255	290	—	—	—
	610	*890*	*1125*	*750*	*940*	*1075*	*740*	*920*	*1050*	*670*	*840*	*950*	—	—	—
K7	165	240	300	210	255	290	205	250	285	180	225	255	—	—	—
	540	*790*	*980*	*690*	*840*	*950*	*670*	*820*	*940*	*590*	*740*	*840*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	42	55	65	23	31	36
	—	—	—	—	—	—	—	—	—	*140*	*180*	*215*	*75*	*100*	*120*
S2	—	—	—	—	—	—	—	—	—	34	45	50	19	25	29
	—	—	—	—	—	—	—	—	—	*110*	*150*	*165*	*60*	*80*	*95*
S3	—	—	—	—	—	—	—	—	—	30	39	46	17	22	26
	—	—	—	—	—	—	—	—	—	*100*	*130*	*150*	*55*	*70*	*85*
S11	—	—	—	—	—	—	—	—	—	60	80	90	32	43	50
	—	—	—	—	—	—	—	—	—	*195*	*260*	*295*	*105*	*140*	*165*
S12	—	—	—	—	—	—	—	—	—	40	55	65	30	39	47
	—	—	—	—	—	—	—	—	—	*130*	*180*	*215*	*100*	*130*	*155*
S13	—	—	—	—	—	—	—	—	—	24	31	36	18	23	27
	—	—	—	—	—	—	—	—	—	*80*	*100*	*120*	*60*	*75*	*90*
H5	—	—	—	48	60	75	—	—	—	37	49	60	—	—	—
	—	—	—	*155*	*195*	*245*	—	—	—	*120*	*160*	*195*	—	—	—
H8	—	—	—	50	70	80	—	—	—	40	55	60	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	*130*	*180*	*195*	—	—	—
H11	—	—	—	60	80	95	—	—	—	47	60	75	—	—	—
	—	—	—	*195*	*260*	*310*	—	—	—	*155*	*195*	*245*	—	—	—
H12	—	—	—	90	125	140	—	—	—	70	95	110	—	—	—
	—	—	—	*295*	*410*	*460*	—	—	—	*230*	*310*	*360*	—	—	—
H21	—	—	—	50	70	80	—	—	—	40	55	60	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	*130*	*180*	*195*	—	—	—

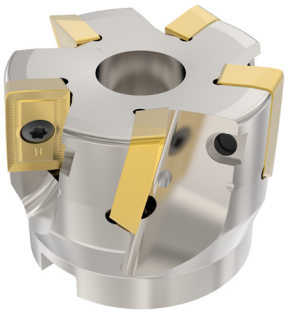


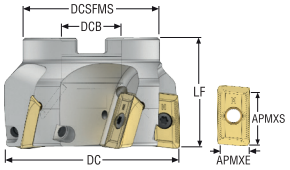
R220.90 ABEX

Queste frese a spallamento retto a 90° multiuso sono ideali per applicazioni di sgrossatura pesante, offrono un'ampia capacità di taglio ed elevate velocità di avanzamento per prestazioni costanti ed eccellenti velocità di asportazione.

- Gamma di frese 63-315 mm (2,5-12")
- Profondità di taglio massima 24 mm (0,94")
- Profondità di taglio per scanalatura consigliata 13 mm (0,51")
- Gamma raggi di punta dell'inserto 1,6 mm (0,063")

R220.90-26 ABEX – In mm

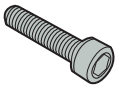
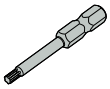




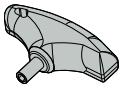
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 86-87
—Per il programma inserti completo, vedere le pagine 860
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.90-0063-26-5AM	02789823	Manicotto	63,0	5	20,0	10,0	27,0	55,0	27,0	50,0	1,5	107,6	123,5	6700	0,6	ABEX2606
R220.90-0063-26-6AM	02789825	Manicotto	63,0	6	20,0	10,0	27,0	55,0	27,0	50,0	1,5	107,6	123,5	6700	0,8	ABEX2606
R220.90-0080-26-5AM	02789826	Manicotto	80,0	5	20,0	10,0	27,0	62,0	27,0	50,0	1,0	141,6	157,5	5900	1,1	ABEX2606
R220.90-0125-26-7AM	02789831	Manicotto	125,0	7	20,0	10,0	40,0	90,0	40,0	63,0	0,5	231,6	247,5	4700	3,1	ABEX2606

Parti di ricambio, comprese nella fornitura

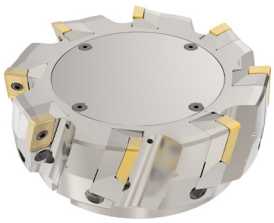
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.90-0063-0080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P
R220.90-0100-0125	–	1/4HEX-T20PX90	C05013-T20P

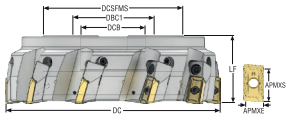
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.90-0063-0125	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.90 ABEX – In mm

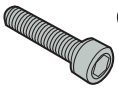
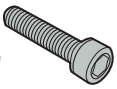
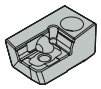
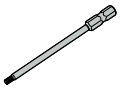
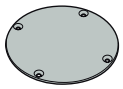




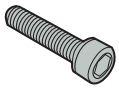
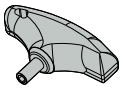
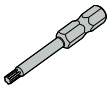
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 86-87
—Per il programma inserti completo, vedere le pagine 860
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DBC1	DCB	DCSFMS		LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.90-8160-26-8CAN	02830886	Manicotto	160,0	8	20,0	10,0	66,7	40,0	90,0	40,0	63,0	0,4	296,5	316,8	4200	5,3	ABEX2606
R220.90-8200-26-10CAN	02830887	Manicotto	200,0	10	20,0	10,0	101,6	60,0	130,0	60,0	63,0	0,35	376,5	396,8	3800	8,1	ABEX2606
R220.90-8250-26-12CAN	02830888	Manicotto	250,0	12	20,0	10,0	101,6	60,0	130,0	60,0	63,0	0,3	476,5	496,8	3400	13,4	ABEX2606
R220.90-8315-26-14CAN	02830889	Manicotto	315,0	14	20,0	10,0	101,6	60,0	225,0	60,0	80,0	0,3	606,5	626,8	3000	28,1	ABEX2606

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Vite attacco 2	Modulo	Vite modulo	Vite modulo 2	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
										
R220.90-8160	AU1114T-T15P	–	–	AB26PRN	FS96018	C05018-T20P	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10
R220.90-8200	AU1114T-T15P	–	–	AB26PRN	FS96018	C05018-T20P	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10
R220.90-8250	AU1114T-T15P	–	–	AB26PRN	FS96018	C05018-T20P	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10
R220.90-8315	AU1114T-T15P	MC6S16X50	MC6S20X50	AB26PRN	FS96018	C05018-T20P	1/4HEX-T20PX90	C05013-T20P	SC-315-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave vite modulo	Chiave di regolazione	Chiave dinamometrica
							
R220.90-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50
R220.90-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50
R220.90-8315	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H5.0X50	1/4HEX-T15PX50	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.90-26 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	ABEX2606ZFFR-M15 F40M	10,0 *0.40*	0,22 0.0085	0,24 0.0095	0,36 0.014
P2	ABEX2606ZFFR-M15 F40M	10,0 *0.40*	0,22 0.0085	0,24 0.0095	0,36 0.014
P3	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
P4	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
P5	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
P6	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,32 0.013
P7	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,32 0.013
P8	ABEX2606ZFFR-M15 MP2501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
P11	ABEX2606ZZFR-M15 MP3501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,32 0.013
P12	ABEX2606ZZFR-M15 MP3501	8,0 *0.32*	0,14 0.0055	0,15 0.0060	0,22 0.0085
M1	ABEX2606ZFFR-M15 F40M	10,0 *0.40*	0,22 0.0085	0,24 0.0095	0,36 0.014
M2	ABEX2606ZFFR-M15 F40M	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
M3	ABEX2606ZFFR-M15 F40M	8,0 *0.32*	0,16 0.0065	0,17 0.0065	0,26 0.010
M4	ABEX2606ZFFR-M15 F40M	6,0 *0.24*	0,14 0.0055	0,15 0.0060	0,24 0.0095
M5	ABEX2606ZFFR-M15 F40M	6,0 *0.24*	0,14 0.0055	0,15 0.0060	0,24 0.0095
K1	ABEX2606ZFFR-M15 MK1501	10,0 *0.40*	0,22 0.0085	0,24 0.0095	0,36 0.014
K2	ABEX2606ZFFR-M15 MK1501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
K3	ABEX2606ZFFR-M15 MK1501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
K4	ABEX2606ZFFR-M15 MK1501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
K5	ABEX2606ZZFR-M15 MP3501	10,0 *0.40*	0,18 0.0070	0,19 0.0075	0,30 0.012
K6	ABEX2606ZZFR-M15 MP3501	10,0 *0.40*	0,20 0.0080	0,22 0.0085	0,34 0.013
K7	ABEX2606ZZFR-M15 MP3501	10,0 *0.40*	0,18 0.0070	0,19 0.0075	0,30 0.012

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.90-26 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	205 *670*	260 *850*	295 *970*	— —	— —	— —	355 *1175*	440 *1450*	510 *1675*	345 *1125*	430 *1400*	495 *1625*	305 *1000*	385 *1275*	440 *1450*
P2	200 *660*	250 *820*	285 *940*	— —	— —	— —	345 *1125*	430 *1400*	490 *1600*	335 *1100*	420 *1375*	480 *1575*	295 *970*	375 *1225*	430 *1400*
P3	180 *590*	225 *740*	255 *840*	— —	— —	— —	305 *1000*	380 *1250*	430 *1400*	300 *980*	375 *1225*	420 *1375*	265 *870*	330 *1075*	375 *1225*
P4	165 *540*	210 *690*	240 *790*	— —	— —	— —	270 *890*	335 *1100*	380 *1250*	265 *870*	330 *1075*	370 *1225*	235 *770*	295 *970*	330 *1075*
P5	150 *490*	190 *620*	220 *720*	— —	— —	— —	255 *840*	320 *1050*	370 *1225*	250 *820*	315 *1025*	360 *1175*	225 *740*	280 *920*	325 *1075*
P6	170 *560*	210 *690*	245 *800*	— —	— —	— —	290 *950*	360 *1175*	415 *1350*	280 *920*	350 *1150*	405 *1325*	250 *820*	315 *1025*	365 *1200*
P7	160 *520*	200 *660*	230 *750*	— —	— —	— —	275 *900*	340 *1125*	390 *1275*	265 *870*	330 *1075*	385 *1275*	235 *770*	295 *970*	340 *1125*
P8	150 *490*	190 *620*	215 *710*	— —	— —	— —	255 *840*	320 *1050*	360 *1175*	250 *820*	315 *1025*	355 *1175*	225 *740*	280 *920*	315 *1025*
P11	155 *510*	195 *640*	225 *740*	— —	— —	— —	265 *870*	330 *1075*	380 *1250*	260 *850*	325 *1075*	370 *1225*	230 *750*	290 *950*	335 *1100*
P12	110 *360*	135 *445*	150 *490*	— —	— —	— —	175 *570*	220 *720*	245 *800*	175 *570*	215 *710*	240 *790*	155 *510*	190 *620*	220 *720*
M1	145 *475*	195 *640*	230 *750*	— —	— —	— —	— —	— —	— —	175 *570*	230 *750*	275 *900*	160 *520*	215 *710*	255 *840*
M2	120 *395*	160 *520*	195 *640*	— —	— —	— —	— —	— —	— —	145 *475*	190 *620*	230 *750*	135 *445*	180 *590*	215 *710*
M3	100 *330*	135 *445*	155 *510*	— —	— —	— —	— —	— —	— —	120 *395*	160 *520*	185 *610*	110 *360*	145 *475*	175 *570*
M4	80 *260*	105 *345*	125 *410*	— —	— —	— —	— —	— —	— —	95 *310*	125 *410*	145 *475*	90 *295*	115 *375*	135 *445*
M5	65 *215*	90 *295*	105 *345*	— —	— —	— —	— —	— —	— —	80 *260*	105 *345*	120 *395*	75 *245*	95 *310*	115 *375*
K1	145 *475*	190 *620*	225 *740*	315 *1025*	560 *1825*	770 *2525*	345 *1125*	435 *1425*	495 *1625*	335 *1100*	425 *1400*	485 *1600*	300 *980*	375 *1225*	435 *1425*
K2	130 *425*	170 *560*	205 *670*	280 *920*	490 *1600*	680 *2225*	310 *1025*	390 *1275*	445 *1450*	305 *1000*	380 *1250*	435 *1425*	270 *890*	340 *1125*	390 *1275*
K3	110 *360*	145 *475*	175 *570*	210 *690*	310 *1025*	395 *1300*	265 *870*	330 *1075*	380 *1250*	255 *840*	320 *1050*	370 *1225*	230 *750*	285 *940*	330 *1075*
K4	105 *345*	140 *460*	165 *540*	205 *670*	300 *980*	375 *1225*	250 *820*	315 *1025*	360 *1175*	245 *800*	305 *1000*	355 *1175*	220 *720*	275 *900*	315 *1025*
K5	65 *215*	85 *280*	100 *330*	125 *410*	185 *610*	230 *750*	155 *510*	195 *640*	220 *720*	150 *490*	190 *620*	215 *710*	135 *445*	170 *560*	190 *620*
K6	90 *295*	120 *395*	145 *475*	180 *590*	260 *850*	330 *1075*	220 *720*	275 *900*	315 *1025*	215 *710*	270 *890*	310 *1025*	190 *620*	240 *790*	280 *920*
K7	80 *260*	110 *360*	130 *425*	160 *520*	235 *770*	290 *950*	200 *660*	250 *820*	280 *920*	195 *640*	245 *800*	275 *900*	175 *570*	220 *720*	245 *800*



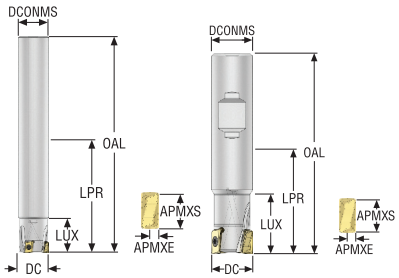
SQUARE T4

Realizzata per operazioni di sgrossatura e semi-finitura, la Square T4 è dotata di quattro taglienti e di un innovativo
disegno tangenziale della fresa che aumenta l'area di contatto tra l'inserto e il corpo fresa, per una buona finitura superficiale durante le applicazioni di scanalatura, contornatura e penetrazione assiale.

- Gli inserti multi-tagliente ottimizzano la stabilità di taglio
- Disponibili in due dimensioni dell'inserto, 08 e 12
- Consentono pareti pulite a 90 gradi

Square T4 – R217.94-08 – In mm

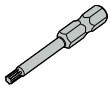




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 93-95
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm			kg	
R217.94-1616.3-08-2A	02827530	Weldon	16,0	2	8,0	2,0	16,0	54,0	23,4	30,0	78,0	0,0	20600	0,2	LOEX0804
R217.94-2018.3-08-2A	02829812	Weldon	18,0	2	8,0	2,0	20,0	65,0	26,7	40,0	90,0	0,0	19400	0,2	LOEX0804
R217.94-2020.3-08-2A	02827531	Weldon	20,0	2	8,0	2,0	20,0	65,0	28,8	40,0	90,0	0,0	18400	0,3	LOEX0804
R217.94-2020.3-08-3A	02827533	Weldon	20,0	3	8,0	2,0	20,0	65,0	28,9	40,0	90,0	0,0	18400	0,2	LOEX0804
R217.94-2522.3-08-3A	02829813	Weldon	22,0	3	8,0	2,0	25,0	69,0	26,5	45,0	101,0	0,0	17600	0,4	LOEX0804
R217.94-2525.3-08-3A	02827534	Weldon	25,0	3	8,0	2,0	25,0	69,0	28,9	45,0	101,0	0,0	16500	0,4	LOEX0804
R217.94-2525.3-08-4A	02827535	Weldon	25,0	4	8,0	2,0	25,0	69,0	28,9	45,0	101,0	0,0	16500	0,3	LOEX0804
R217.94-3232.3-08-5A	02827537	Weldon	32,0	5	8,0	2,0	32,0	69,0	28,2	45,0	105,0	0,0	14600	0,6	LOEX0804
R217.94-1616.0-08-2A	02827519	Cilindrico	16,0	2	8,0	2,0	16,0	–	29,0	42,0	90,0	0,0	20600	0,2	LOEX0804
R217.94-1820.0-08-2A	02827520	Cilindrico	20,0	2	8,0	2,0	18,0	–	110,0	110,0	160,0	0,0	18400	0,4	LOEX0804
R217.94-2020.0-08-2A	02827522	Cilindrico	20,0	2	8,0	2,0	20,0	–	29,0	110,0	160,0	0,0	18400	0,4	LOEX0804
R217.94-2020.0-08-3A	02827523	Cilindrico	20,0	3	8,0	2,0	20,0	–	29,0	60,0	110,0	0,0	18400	0,3	LOEX0804
R217.94-2225.0-08-3A	02827524	Cilindrico	25,0	3	8,0	2,0	22,0	–	124,0	124,0	180,0	0,0	17600	0,5	LOEX0804
R217.94-2525.0-08-3A	02827525	Cilindrico	25,0	3	8,0	2,0	25,0	–	29,0	124,0	180,0	0,0	16500	0,6	LOEX0804
R217.94-2525.0-08-4A	02827526	Cilindrico	25,0	4	8,0	2,0	25,0	–	29,0	64,0	120,0	0,0	16500	0,4	LOEX0804
R217.94-3232.0-08-3A	02827528	Cilindrico	32,0	3	8,0	2,0	32,0	–	29,0	140,0	200,0	0,0	14600	1,1	LOEX0804
R217.94-3232.0-08-5A	02827529	Cilindrico	32,0	5	8,0	2,0	32,0	–	29,0	70,0	130,0	0,0	14600	0,7	LOEX0804

Parti di ricambio, comprese nella fornitura

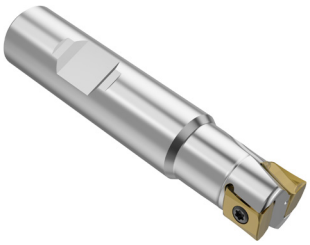
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.94-.. Ø16-18	1/4HEX-T08PX50	C02707B-T08P
R217.94-.. Ø20-32	1/4HEX-T08PX50	C02708B-T08P

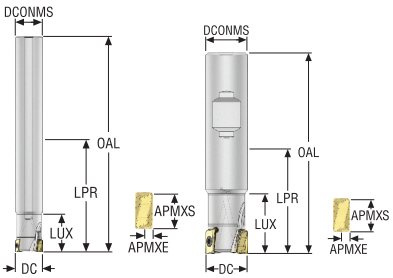
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217.94-08 – Pollici

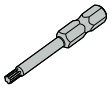




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 93-95
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch			lb	
R217.94-00.75-3-08-3A	02887522	Weldon	0.750	3	0.315	0.079	0.750	2.559	1.138	1.531	3.500	0,0	18400	0.440	LOEX0804
R217.94-01.00-3-08-3A	02887524	Weldon	1.000	3	0.315	0.079	1.000	2.858	1.138	2.031	4.000	0,0	16500	0.880	LOEX0804
R217.94-01.00-3-08-4A	02887525	Weldon	1.000	4	0.315	0.079	1.000	2.858	1.138	2.031	4.000	0,0	16500	0.880	LOEX0804
R217.94-01.25-3-08-4A	02887527	Weldon	1.250	4	0.315	0.079	1.250	2.717	1.110	2.138	4.500	0,0	14600	1.540	LOEX0804
R217.94-00.62-0-08-2A	02887518	Cilindrico	0.625	2	0.315	0.079	0.625	–	1.122	3.630	5.520	0,0	20600	0.440	LOEX0804
R217.94-01.00-0-08-3A	02887523	Cilindrico	1.000	3	0.315	0.079	1.000	–	1.138	5.665	7.870	0,0	16500	1.540	LOEX0804

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.94-00.62-00.75	1/4HEX-T08PX50	C02707B-T08P
R217.94-01.00-01.25	1/4HEX-T08PX50	C02708B-T08P

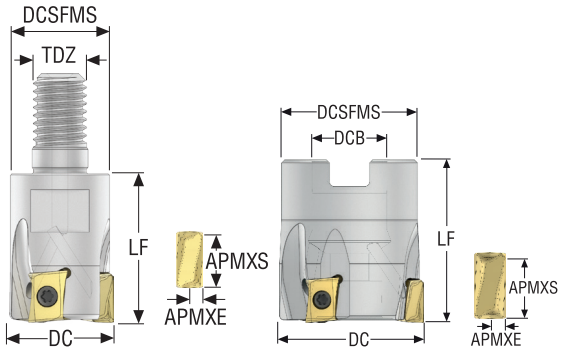
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217/220.94-08 – In mm



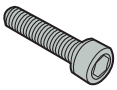
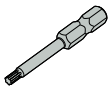


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 93-95
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm			kg	
R220.94-0032-08-5A	02845461	Manicotto	32,0	5	8,0	2,0	16,0	29,3	–	16,0	35,0	0,0	13000	0,2	LOEX0804
R220.94-0040-08-4A	02827545	Manicotto	40,0	4	8,0	2,0	16,0	35,0	–	16,0	40,0	0,0	13000	0,3	LOEX0804
R220.94-0040-08-6A	02827546	Manicotto	40,0	6	8,0	2,0	16,0	35,0	–	16,0	40,0	0,0	13000	0,3	LOEX0804
R220.94-0050-08-5A	02827547	Manicotto	50,0	5	8,0	2,0	22,0	45,0	–	22,0	40,0	0,0	11700	0,5	LOEX0804
R220.94-0050-08-7A	02827548	Manicotto	50,0	7	8,0	2,0	22,0	45,0	–	22,0	40,0	0,0	11700	0,5	LOEX0804
R220.94-0063-08-6A	02827549	Manicotto	63,0	6	8,0	2,0	27,0	56,0	–	27,0	40,0	0,0	10400	0,7	LOEX0804
R220.94-0063-08-9A	02827550	Manicotto	63,0	9	8,0	2,0	27,0	56,0	–	27,0	40,0	0,0	10400	0,7	LOEX0804
R217.94-0816.RE-08-2A	02827538	Combimaster	16,0	2	8,0	2,0	–	13,5	M8	–	23,0	0,0	20600	0,1	LOEX0804
R217.94-1020.RE-08-3A	02827540	Combimaster	20,0	3	8,0	2,0	–	18,5	M10	–	28,0	0,0	18400	0,1	LOEX0804
R217.94-1225.RE-08-3A	02827541	Combimaster	25,0	3	8,0	2,0	–	23,0	M12	–	30,0	0,0	16500	0,2	LOEX0804
R217.94-1225.RE-08-4A	02827542	Combimaster	25,0	4	8,0	2,0	–	23,0	M12	–	30,0	0,0	16500	0,1	LOEX0804
R217.94-1632.RE-08-3A	02827543	Combimaster	32,0	3	8,0	2,0	–	30,0	M16	–	35,0	0,0	14600	0,2	LOEX0804
R217.94-1632.RE-08-5A	02827544	Combimaster	32,0	5	8,0	2,0	–	30,0	M16	–	35,0	0,0	14600	0,2	LOEX0804
R217.94-2040.RE-08-6A	02972755	Combimaster	40,0	6	8,0	2,0	–	36,5	M20	–	40,0	0,0	13000	0,4	LOEX0804

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.94-.. Ø16	–	1/4HEX-T08PX50	C02707B-T08P
R217.94-.. Ø20-40	–	1/4HEX-T08PX50	C02708B-T08P
R220.94-0032	TCEI0825	1/4HEX-T08PX50	C02707B-T08P
R220.94-0040	TCEI0825	1/4HEX-T08PX50	C02708B-T08P
R220.94-0050	220.17-692	1/4HEX-T08PX50	C02708B-T08P
R220.94-0063	MLC6S12X30	1/4HEX-T08PX50	C02708B-T08P

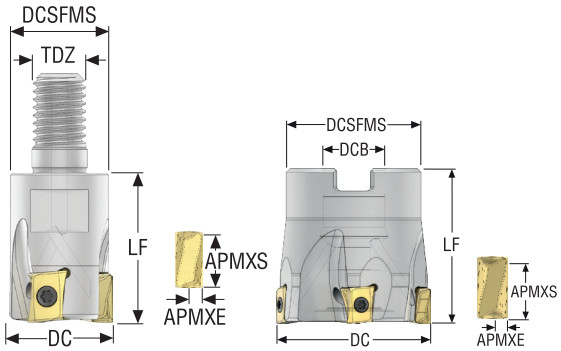
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217/220.94-08 – Pollici



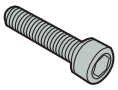
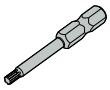


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 93-95
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch			lb	
R220.94-01.50-08-4A	02887529	Manicotto	1.500	4	0.315	0.079	0.750	1.378	–	0.750	1.575	0,0	13000	0.660	LOEX0804
R220.94-02.00-08-5A	02887530	Manicotto	2.000	5	0.315	0.079	0.750	1.772	–	0.750	1.575	0,0	11700	1.100	LOEX0804
R217.94-00.75-10RE-08-3A	10225143	Combimaster	0.750	3	0.315	0.079	–	0.728	M10	–	1.102	0,0	18400	0.220	LOEX0804
R217.94-01.00-12RE-08-3A	02890010	Combimaster	1.000	3	0.315	0.079	–	0.906	M12	–	1.181	0,0	16500	0.220	LOEX0804
R217.94-01.25-16RE-08-4A	10225144	Combimaster	1.250	4	0.315	0.079	–	1.181	M16	–	1.378	0,0	14600	0.440	LOEX0804

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.94-00.75	–	1/4HEX-T08PX50	C02707B-T08P
R217.94-01.00-01.25	–	1/4HEX-T08PX50	C02708B-T08P
R220.94-..	UC6S3/8UNFX1	1/4HEX-T08PX50	C02708B-T08P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.94-08 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	LOEX080408TR-M08 F40M	4,0 *0.16*	0,11 0.0044	0,13 0.0050	0,19 0.0075
P2	LOEX080408TR-M08 F40M	4,0 *0.16*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P3	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,19 0.0075
P4	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
P5	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
P6	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P7	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P8	LOEX080408TR-M08 MP2501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,19 0.0075
P11	LOEX080408TR-M08 MP3501	4,0 *0.16*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P12	LOEX080408TR-M08 MP3000	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,12 0.0048
M1	LOEX080408TR-M08 F40M	4,0 *0.16*	0,12 0.0048	0,13 0.0050	0,20 0.0080
M2	LOEX080408TR-M08 F40M	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M3	LOEX080408TR-M08 F40M	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
M4	LOEX080408TR-M08 MS2050	2,5 *0.10*	0,075 0.0030	0,085 0.0034	0,13 0.0050
M5	LOEX080408TR-M08 MS2050	2,5 *0.10*	0,075 0.0030	0,085 0.0034	0,13 0.0050
K1	LOEX080408TR-MD08 MK1501	4,0 *0.16*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K2	LOEX080408TR-MD08 MK1501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K3	LOEX080408TR-MD08 MK1501	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K4	LOEX080408TR-M08 MK2050	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K5	LOEX080408TR-M08 MK2050	4,0 *0.16*	0,095 0.0038	0,10 0.0040	0,16 0.0065
K6	LOEX080408TR-M08 MK2050	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K7	LOEX080408TR-M08 MK2050	4,0 *0.16*	0,095 0.0038	0,10 0.0040	0,16 0.0065
N1	LOEX080408TR-M08 F40M	4,0 *0.16*	0,15 0.0060	0,16 0.0065	0,25 0.010
N2	LOEX080408TR-M08 F40M	4,0 *0.16*	0,15 0.0060	0,16 0.0065	0,25 0.010
N3	LOEX080408TR-M08 F40M	4,0 *0.16*	0,15 0.0060	0,16 0.0065	0,25 0.010
N11	LOEX080408TR-M08 F40M	4,0 *0.16*	0,15 0.0060	0,16 0.0065	0,25 0.010
S1	LOEX080408TR-M08 F40M	2,5 *0.10*	0,075 0.0030	0,085 0.0034	0,13 0.0050
S2	LOEX080408TR-M08 F40M	2,5 *0.10*	0,075 0.0030	0,085 0.0034	0,13 0.0050
S3	LOEX080408TR-M08 F40M	2,5 *0.10*	0,070 0.0028	0,080 0.0032	0,12 0.0048
S11	LOEX080408TR-M08 MS2050	2,5 *0.10*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S12	LOEX080408TR-M08 MS2050	2,5 *0.10*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S13	LOEX080408TR-M08 MS2050	2,5 *0.10*	0,075 0.0030	0,085 0.0034	0,13 0.0050
H5	LOEX080408TR-M08 MP3000	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,12 0.0048
H8	LOEX080408TR-M08 MP3000	2,5 *0.10*	0,055 0.0022	0,060 0.0024	0,095 0.0038
H11	LOEX080408TR-MD08 MP1501	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,12 0.0048
H12	LOEX080408TR-MD08 MP1501	2,5 *0.10*	0,055 0.0022	0,060 0.0024	0,095 0.0038
H21	LOEX080408TR-MD08 MP1501	2,5 *0.10*	0,055 0.0022	0,060 0.0024	0,095 0.0038

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.94-08 – Parametri di taglio v_c = (m/min)/(sf/min)

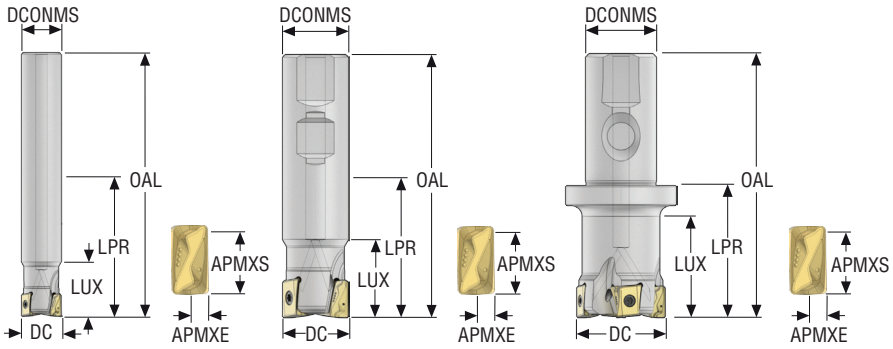
SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	310 *1025*	410 *1350*	475 *1550*	340 *1125*	440 *1450*	500 *1650*	290 *950*	370 *1225*	425 *1400*	285 *940*	345 *1125*	380 *1250*	345 *1125*	455 *1500*	540 *1775*	295 *970*	390 *1275*	460 *1500*
P2	295 *970*	390 *1275*	465 *1525*	320 *1050*	415 *1350*	490 *1600*	275 *900*	355 *1175*	415 *1350*	270 *890*	330 *1075*	370 *1225*	320 *1050*	445 *1450*	530 *1750*	290 *950*	380 *1250*	445 *1450*
P3	260 *850*	345 *1125*	405 *1325*	285 *940*	365 *1200*	430 *1400*	245 *800*	310 *1025*	360 *1175*	240 *790*	290 *950*	325 *1075*	285 *940*	395 *1300*	455 *1500*	255 *840*	330 *1075*	395 *1300*
P4	230 *750*	300 *980*	355 *1175*	250 *820*	325 *1075*	375 *1225*	215 *710*	275 *900*	315 *1025*	210 *690*	265 *870*	300 *980*	255 *840*	345 *1125*	410 *1350*	225 *740*	295 *970*	345 *1125*
P5	220 *720*	290 *950*	340 *1125*	240 *790*	310 *1025*	360 *1175*	205 *670*	260 *850*	305 *1000*	200 *660*	245 *800*	275 *900*	250 *820*	340 *1125*	395 *1300*	215 *710*	280 *920*	330 *1075*
P6	250 *820*	330 *1075*	390 *1275*	275 *900*	355 *1175*	410 *1350*	240 *790*	300 *980*	345 *1125*	230 *750*	280 *920*	310 *1025*	285 *940*	380 *1250*	440 *1450*	240 *790*	315 *1025*	370 *1225*
P7	235 *770*	310 *1025*	365 *1200*	260 *850*	335 *1100*	385 *1275*	225 *740*	285 *940*	325 *1075*	220 *720*	265 *870*	295 *970*	265 *870*	360 *1175*	415 *1350*	225 *740*	300 *980*	350 *1150*
P8	220 *720*	290 *950*	340 *1125*	240 *790*	310 *1025*	360 *1175*	205 *670*	260 *850*	305 *1000*	200 *660*	245 *800*	275 *900*	240 *790*	330 *1075*	385 *1275*	215 *710*	275 *900*	330 *1075*
P11	230 *750*	305 *1000*	355 *1175*	255 *840*	325 *1075*	375 *1225*	220 *720*	275 *900*	315 *1025*	210 *690*	255 *840*	285 *940*	245 *800*	385 *1275*	495 *1625*	220 *720*	290 *950*	340 *1125*
P12	145 *475*	195 *640*	230 *750*	160 *520*	205 *670*	235 *770*	140 *460*	175 *570*	200 *660*	135 *445*	165 *540*	180 *590*	165 *540*	250 *820*	315 *1025*	145 *475*	190 *620*	225 *740*
M1	— —	— —	— —	210 *690*	280 *920*	335 *1100*	200 *660*	265 *870*	315 *1025*	185 *610*	240 *790*	290 *950*	260 *850*	425 *1400*	560 *1825*	205 *670*	275 *900*	320 *1050*
M2	— —	— —	— —	175 *570*	230 *750*	275 *900*	165 *540*	220 *720*	260 *850*	150 *490*	200 *660*	235 *770*	230 *750*	365 *1200*	465 *1525*	170 *560*	225 *740*	265 *870*
M3	— —	— —	— —	145 *475*	185 *610*	220 *720*	135 *445*	180 *590*	210 *690*	125 *410*	160 *520*	190 *620*	195 *640*	295 *970*	380 *1250*	140 *460*	185 *610*	215 *710*
M4	— —	— —	— —	110 *360*	145 *475*	170 *560*	105 *345*	140 *460*	165 *540*	95 *310*	125 *410*	150 *490*	155 *510*	230 *750*	290 *950*	110 *360*	140 *460*	165 *540*
M5	— —	— —	— —	95 *310*	125 *410*	145 *475*	90 *295*	115 *375*	135 *445*	80 *260*	105 *345*	125 *410*	125 *410*	190 *620*	240 *790*	90 *295*	115 *375*	140 *460*
K1	320 *1050*	420 *1375*	500 *1650*	225 *740*	295 *970*	355 *1175*	— —	— —	— —	180 *590*	240 *790*	285 *940*	— —	— —	— —	— —	— —	— —
K2	280 *920*	370 *1225*	440 *1450*	200 *660*	265 *870*	310 *1025*	— —	— —	— —	160 *520*	210 *690*	250 *820*	— —	— —	— —	— —	— —	— —
K3	240 *790*	315 *1025*	375 *1225*	170 *560*	225 *740*	265 *870*	— —	— —	— —	135 *445*	180 *590*	210 *690*	— —	— —	— —	— —	— —	— —
K4	230 *750*	300 *980*	355 *1175*	160 *520*	210 *690*	250 *820*	— —	— —	— —	130 *425*	170 *560*	200 *660*	— —	— —	— —	— —	— —	— —
K5	140 *460*	185 *610*	220 *720*	100 *330*	130 *425*	155 *510*	— —	— —	— —	80 *260*	105 *345*	125 *410*	— —	— —	— —	— —	— —	— —
K6	200 *660*	265 *870*	315 *1025*	140 *460*	185 *610*	220 *720*	— —	— —	— —	115 *375*	150 *490*	175 *570*	— —	— —	— —	— —	— —	— —
K7	180 *590*	240 *790*	280 *920*	125 *410*	170 *560*	195 *640*	— —	— —	— —	100 *330*	135 *445*	160 *520*	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	1325 *4350*	1775 *5825*	2075 *6800*	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	540 *1775*	720 *2350*	840 *2750*	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	360 *1175*	480 *1575*	560 *1825*	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	410 *1350*	550 *1800*	640 *2100*	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	50 *165*	70 *230*	80 *260*	50 *165*	65 *215*	75 *245*	45 *150*	60 *195*	70 *230*	50 *165*	70 *230*	80 *260*	55 *180*	70 *230*	80 *260*
S2	— —	— —	— —	42 *140*	55 *180*	65 *215*	40 *130*	55 *180*	60 *195*	36 *120*	48 *155*	55 *180*	41 *135*	55 *180*	65 *215*	43 *140*	55 *180*	65 *215*
S3	— —	— —	— —	37 *120*	48 *155*	55 *180*	35 *115*	46 *150*	55 *180*	32 *105*	42 *140*	49 *160*	36 *120*	48 *155*	55 *180*	37 *120*	49 *160*	55 *180*
S11	— —	— —	— —	— —	— —	— —	70 *230*	90 *295*	105 *345*	65 *215*	80 *260*	95 *310*	70 *230*	95 *310*	110 *360*	75 *245*	100 *330*	115 *375*
S12	— —	— —	— —	— —	— —	— —	48 *155*	60 *195*	75 *245*	44 *145*	55 *180*	65 *215*	49 *160*	65 *215*	75 *245*	50 *165*	70 *230*	80 *260*
S13	— —	— —	— —	— —	— —	— —	28 *90*	37 *120*	43 *140*	25 *80*	33 *110*	39 *130*	29 *95*	38 *125*	45 *150*	30 *100*	39 *130*	45 *150*
H5	50 *165*	65 *215*	80 *260*	44 *145*	60 *195*	70 *230*	— —	— —	— —	38 *125*	49 *160*	60 *195*	— —	— —	— —	— —	— —	— —
H8	55 *180*	70 *230*	85 *280*	47 *155*	60 *195*	70 *230*	— —	— —	— —	40 *130*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —
H11	65 *215*	85 *280*	100 *330*	55 *180*	75 *245*	85 *280*	— —	— —	— —	48 *155*	65 *215*	75 *245*	110 *360*	165 *540*	205 *670*	55 *180*	70 *230*	85 *280*
H12	95 *310*	125 *410*	145 *475*	90 *295*	120 *395*	140 *460*	— —	— —	— —	75 *245*	95 *310*	110 *360*	105 *345*	150 *490*	185 *610*	90 *295*	120 *395*	140 *460*

R217/220.94-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	450	550	610	445	540	600	400	490	540
	—	—	—	*1475*	*1800*	*2000*	*1450*	*1775*	*1975*	*1300*	*1600*	*1775*
P2	—	—	—	430	530	600	425	520	590	380	470	530
	—	—	—	*1400*	*1750*	*1975*	*1400*	*1700*	*1925*	*1250*	*1550*	*1750*
P3	—	—	—	380	460	520	375	455	510	335	410	460
	—	—	—	*1250*	*1500*	*1700*	*1225*	*1500*	*1675*	*1100*	*1350*	*1500*
P4	—	—	—	330	405	455	330	400	450	295	360	405
	—	—	—	*1075*	*1325*	*1500*	*1075*	*1300*	*1475*	*970*	*1175*	*1325*
P5	—	—	—	315	385	435	315	380	430	280	345	385
	—	—	—	*1025*	*1275*	*1425*	*1025*	*1250*	*1400*	*920*	*1125*	*1275*
P6	—	—	—	365	440	490	360	435	485	325	395	440
	—	—	—	*1200*	*1450*	*1600*	*1175*	*1425*	*1600*	*1075*	*1300*	*1450*
P7	—	—	—	345	415	465	340	410	460	305	370	415
	—	—	—	*1125*	*1350*	*1525*	*1125*	*1350*	*1500*	*1000*	*1225*	*1350*
P8	—	—	—	315	385	435	315	380	430	280	345	385
	—	—	—	*1025*	*1275*	*1425*	*1025*	*1250*	*1400*	*920*	*1125*	*1275*
P11	—	—	—	335	405	450	330	400	445	295	360	400
	—	—	—	*1100*	*1325*	*1475*	*1075*	*1300*	*1450*	*970*	*1175*	*1300*
P12	—	—	—	205	250	275	205	245	275	185	220	245
	—	—	—	*670*	*820*	*900*	*670*	*800*	*900*	*610*	*720*	*800*
M1	—	—	—	—	—	—	215	285	340	200	265	315
	—	—	—	—	—	—	*710*	*940*	*1125*	*660*	*870*	*1025*
M2	—	—	—	—	—	—	180	235	280	165	220	260
	—	—	—	—	—	—	*590*	*770*	*920*	*540*	*720*	*850*
M3	—	—	—	—	—	—	145	190	225	135	180	210
	—	—	—	—	—	—	*475*	*620*	*740*	*445*	*590*	*690*
M4	—	—	—	—	—	—	115	150	175	105	140	165
	—	—	—	—	—	—	*375*	*490*	*570*	*345*	*460*	*540*
M5	—	—	—	—	—	—	95	125	145	90	115	135
	—	—	—	—	—	—	*310*	*410*	*475*	*295*	*375*	*445*
K1	355	610	850	435	530	600	430	520	590	385	470	530
	1175	*2000*	*2800*	*1425*	*1750*	*1975*	*1400*	*1700*	*1925*	*1275*	*1550*	*1750*
K2	315	540	740	385	470	530	380	460	520	340	415	470
	1025	*1775*	*2425*	*1275*	*1550*	*1750*	*1250*	*1500*	*1700*	*1125*	*1350*	*1550*
K3	255	365	455	325	395	445	320	390	440	290	350	395
	840	*1200*	*1500*	*1075*	*1300*	*1450*	*1050*	*1275*	*1450*	*950*	*1150*	*1300*
K4	240	350	435	310	380	425	305	375	420	275	335	380
	790	*1150*	*1425*	*1025*	*1250*	*1400*	*1000*	*1225*	*1375*	*900*	*1100*	*1250*
K5	150	220	265	190	230	255	190	230	255	170	205	230
	490	*720*	*870*	*620*	*750*	*840*	*620*	*750*	*840*	*560*	*670*	*750*
K6	215	310	385	275	335	375	270	330	370	240	295	335
	710	*1025*	*1275*	*900*	*1100*	*1225*	*890*	*1075*	*1225*	*790*	*970*	*1100*
K7	190	280	340	245	295	330	240	295	325	215	265	295
	620	*920*	*1125*	*800*	*970*	*1075*	*790*	*970*	*1075*	*710*	*870*	*970*
N1	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	50	65	75
	—	—	—	—	—	—	—	—	—	*165*	*215*	*245*
S2	—	—	—	—	—	—	—	—	—	40	55	60
	—	—	—	—	—	—	—	—	—	*130*	*180*	*195*
S3	—	—	—	—	—	—	—	—	—	35	46	55
	—	—	—	—	—	—	—	—	—	*115*	*150*	*180*
S11	—	—	—	—	—	—	—	—	—	70	90	105
	—	—	—	—	—	—	—	—	—	*230*	*295*	*345*
S12	—	—	—	—	—	—	—	—	—	48	60	75
	—	—	—	—	—	—	—	—	—	*155*	*195*	*245*
S13	—	—	—	—	—	—	—	—	—	28	37	43
	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*
H5	—	—	—	55	75	85	—	—	—	43	55	65
	—	—	—	*180*	*245*	*280*	—	—	—	*140*	*180*	*215*
H8	—	—	—	60	80	90	—	—	—	47	60	70
	—	—	—	*195*	*260*	*295*	—	—	—	*155*	*195*	*230*
H11	—	—	—	70	95	110	—	—	—	55	70	85
	—	—	—	*230*	*310*	*360*	—	—	—	*180*	*230*	*280*
H12	—	—	—	110	140	165	—	—	—	85	110	125
	—	—	—	*360*	*460*	*540*	—	—	—	*280*	*360*	*410*
H21	—	—	—	60	80	90	—	—	—	47	60	70
	—	—	—	*195*	*260*	*295*	—	—	—	*155*	*195*	*230*

Square T4 – R217.94-12 – In mm

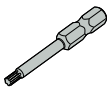




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 101-103
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.94-2525.3-LO12-2A	10207962	Weldon	25,0	2	12,0	3,5	–	25,0	69,5	30,0	45,0	101,0	0,0	14000	0,4	LOEX1207
R217.94-3232.3-LO12-3A	10207963	Weldon	32,0	3	12,0	3,5	–	32,0	74,5	30,0	50,0	110,0	0,0	12400	0,6	LOEX1207
R217.94-2532.3S-LO12-3A	10207964	Seco-Weldon	32,0	3	12,0	3,5	40,0	25,0	–	40,0	54,0	110,0	0,0	12400	0,5	LOEX1207
R217.94-3240.3S-LO12-4A	10207965	Seco/Weldon	40,0	4	12,0	3,5	50,0	32,0	–	46,0	60,0	120,0	0,0	11100	0,8	LOEX1207
R217.94-2525.0-LO12-2A	10207966	Cilindrico	25,0	2	12,0	3,5	–	25,0	–	35,0	114,0	170,0	0,0	14000	0,6	LOEX1207
R217.94-3232.0-LO12-3A	10207967	Cilindrico	32,0	3	12,0	3,5	–	32,0	–	30,0	135,0	195,0	0,0	12400	1,1	LOEX1207
R217.94-3240.0-LO12-4A	10207968	Cilindrico	40,0	4	12,0	3,5	–	32,0	–	150,0	150,0	210,0	0,0	11100	1,4	LOEX1207

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.94-2525	1/4HEX-T15PX50	C040105B-T15P
R217.94-3232-3240	1/4HEX-T15PX50	C04012B-T15P

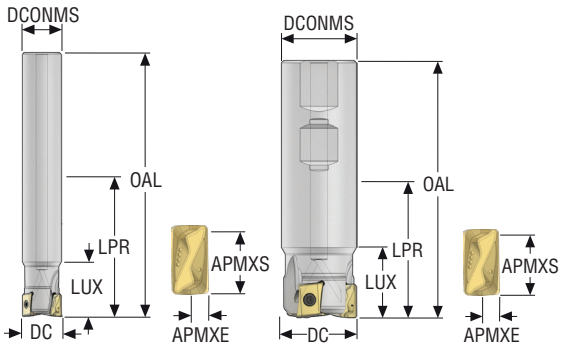
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217.94-12 – Pollici

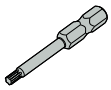




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 101-103
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch			lb	
R217.94-01.00-3-LO12-2A	10207985	Weldon	1.000	2	0.472	0.138	1.000	2.878	1.181	1.795	4.000	0,0	14000	0.880	LOEX1207
R217.94-01.25-3-LO12-3A	10207986	Weldon	1.250	3	0.472	0.138	1.250	3.555	1.181	1.890	4.252	0,0	12400	1.320	LOEX1207
R217.94-01.50-3-LO12-4A	10207987	Weldon	1.500	4	0.472	0.138	1.500	3.555	1.181	1.969	4.724	0,0	11300	2.200	LOEX1207
R217.94-01.00-0-LO12-2A	10207988	Cilindrico	1.000	2	0.472	0.138	1.000	–	1.181	3.740	6.693	0,0	13900	1.320	LOEX1207
R217.94-01.50-0-LO12-4A	10207989	Cilindrico	1.500	4	0.472	0.138	1.500	–	1.181	5.906	8.268	0,0	11300	4.190	LOEX1207

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.94-01.00	1/4HEX-T15PX50	C040105B-T15P
R217.94-01.25-01.50	1/4HEX-T15PX50	C04012B-T15P

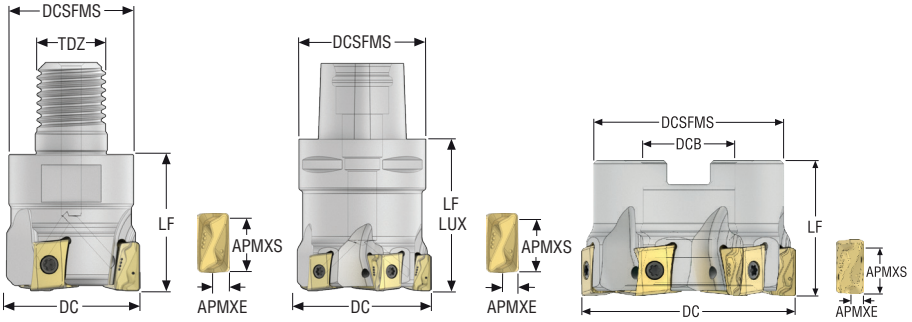
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217/220.94-12 – In mm



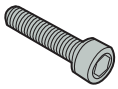
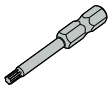


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 101–103
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	LF	LUX	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm			kg	
C4-R217.94-044-LO12-4A	10207972	Seco-Capto	44,0	4	12,0	3,5	–	40,0	–	60,0	60,0	0,0	10600	0,6	LOEX1207
C5-R217.94-054-LO12-5A	10207973	Seco-Capto	54,0	5	12,0	3,5	–	50,0	–	60,0	60,0	0,0	9500	0,9	LOEX1207
C6-R217.94-066-LO12-6A	10207974	Seco-Capto	66,0	6	12,0	3,5	–	63,0	–	60,0	60,0	0,0	8600	1,5	LOEX1207
R220.94-0040-LO12-4A	10207999	Manicotto	40,0	4	12,0	3,5	16,0	35,0	–	40,0	–	0,0	11100	0,3	LOEX1207
R220.94-0040-LO12-5A	10207975	Manicotto	40,0	5	12,0	3,5	16,0	35,0	–	40,0	–	0,0	11100	0,3	LOEX1207
R220.94-0050-LO12-5A	10207976	Manicotto	50,0	5	12,0	3,5	22,0	45,0	–	40,0	–	0,0	9900	0,4	LOEX1207
R220.94-0050-LO12-6A	10207977	Manicotto	50,0	6	12,0	3,5	22,0	45,0	–	40,0	–	0,0	9900	0,4	LOEX1207
R220.94-0063-LO12-6A	10207978	Manicotto	63,0	6	12,0	3,5	27,0	56,0	–	40,0	–	0,0	8800	0,6	LOEX1207
R220.94-0063-LO12-8A	10207979	Manicotto	63,0	8	12,0	3,5	27,0	56,0	–	40,0	–	0,0	8800	0,6	LOEX1207
R220.94-0080-LO12-7A	10207980	Manicotto	80,0	7	12,0	3,5	27,0	62,0	–	50,0	–	0,0	7800	1,2	LOEX1207
R220.94-0080-LO12-10A	10207981	Manicotto	80,0	10	12,0	3,5	27,0	62,0	–	50,0	–	0,0	7800	1,2	LOEX1207
R220.94-0100-LO12-9A	10207982	Manicotto	100,0	9	12,0	3,5	32,0	77,0	–	50,0	–	0,0	7000	1,9	LOEX1207
R220.94-0100-LO12-12A	10207983	Manicotto	100,0	12	12,0	3,5	32,0	77,0	–	50,0	–	0,0	7000	1,9	LOEX1207
R220.94-0125-LO12-12A	10207984	Manicotto	125,0	12	12,0	3,5	40,0	90,0	–	63,0	–	0,0	6300	3,5	LOEX1207
R217.94-1632.RE-LO12-3A	10207969	Combimaster	32,0	3	12,0	3,5	–	30,0	M16	40,0	–	0,0	12400	0,2	LOEX1207
R217.94-2040.RE-LO12-3A	10207970	Combimaster	40,0	3	12,0	3,5	–	36,5	M20	40,0	–	0,0	11100	0,4	LOEX1207
R217.94-2040.RE-LO12-5A	10207971	Combimaster	40,0	5	12,0	3,5	–	36,5	M20	40,0	–	0,0	11100	0,4	LOEX1207

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
Cx-R217.94-..	–	1/4HEX-T15PX50	C04012B-T15P
R220.94-0040	220.17-689	1/4HEX-T15PX50	C04012B-T15P
R220.94-0050	220.17-692	1/4HEX-T15PX50	C04012B-T15P
R220.94-0063	MLC6S12X30	1/4HEX-T15PX50	C04012B-T15P
R220.94-0080	MC6S12X35	1/4HEX-T15PX50	C04012B-T15P
R220.94-0100	MC6S16X35	1/4HEX-T15PX50	C04012B-T15P
R220.94-0125	MC6S20X40	1/4HEX-T15PX50	C04012B-T15P

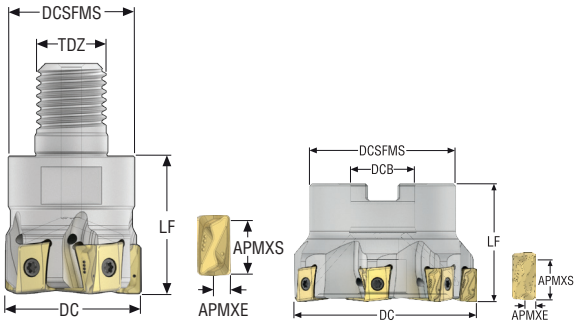
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
Cx-R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square T4 – R217/220.94-12 – Pollici



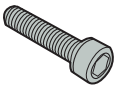
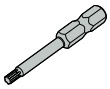
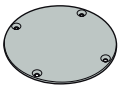


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 101–103
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch			lb	
R220.94-01.50-LO12-4A	10207991	Manicotto	1.500	4	0.472	0.138	0.500	1.378	–	–	1.575	0,0	11300	0.660	LOEX1207
R220.94-02.00-LO12-5A	10207992	Manicotto	2.000	5	0.472	0.138	0.750	1.850	–	0.750	1.575	0,0	9800	0.880	LOEX1207
R220.94-02.00-LO12-6A	10207993	Manicotto	2.000	6	0.472	0.138	0.750	1.850	–	–	1.575	0,0	9800	1.100	LOEX1207
R220.94-02.50-LO12-6A	10207994	Manicotto	2.500	6	0.472	0.138	0.750	1.850	–	–	1.575	0,0	8800	1.320	LOEX1207
R220.94-02.50-LO12-8A	10207995	Manicotto	2.500	8	0.472	0.138	0.750	1.850	–	–	1.575	0,0	8800	1.320	LOEX1207
R220.94-03.00-LO12-8A	10207996	Manicotto	3.000	8	0.472	0.138	1.000	2.441	–	–	1.969	0,0	8000	2.870	LOEX1207
R220.94-04.00-LO12-10A	10207997	Manicotto	4.000	10	0.472	0.138	1.500	3.543	–	–	1.969	0,0	7000	4.630	LOEX1207
R220.94-05.00-LO12-12A	10207998	Manicotto	5.000	12	0.472	0.138	1.500	3.543	–	–	2.480	0,0	6200	7.720	LOEX1207
R220.94-06.00-LO12-14A	10208000	Manicotto	6.000	14	0.472	0.138	2.000	4.331	–	–	2.480	0,0	6200	9.920	LOEX1207
R217.94-01.25-16RE-LO12-3A	10207990	Combimaster	1.250	3	0.472	0.138	–	1.181	M16	–	1.575	0,0	12400	0.660	LOEX1207

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.94-..	–	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-01.50	UC6S1/4UNFX1	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-04.00	ULC6S3/4UNFX11/2	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	C04012B-T15P	–	–
R220.94-06.00	–	1/4HEX-T15PX50	C04012B-T15P	SC-160-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.94-LO12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	LOEX120708TR-T4-M12 F40M	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
P2	LOEX120708TR-T4-M12 F40M	6,0 *0.24*	0,19 0.0075	0,20 0.0080	0,32 0.013
P3	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,18 0.0070	0,28 0.011
P4	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,18 0.0070	0,26 0.010
P5	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,17 0.0065	0,26 0.010
P6	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,17 0.0065	0,26 0.010
P7	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,17 0.0065	0,26 0.010
P8	LOEX120708TR-T4-M12 MP2501	6,0 *0.24*	0,16 0.0065	0,18 0.0070	0,28 0.011
P11	LOEX120708TR-T4-M12 MP3501	6,0 *0.24*	0,17 0.0065	0,18 0.0070	0,28 0.011
P12	LOEX120708TR-T4-M12 MS2500	4,5 *0.18*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M1	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,14 0.0055	0,16 0.0065	0,24 0.0095
M2	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,13 0.0050	0,14 0.0055	0,22 0.0085
M3	LOEX120708R-T4-M09 F40M	4,5 *0.18*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M4	LOEX120708R-T4-M09 MS2050	3,5 *0.14*	0,095 0.0038	0,10 0.0040	0,16 0.0065
M5	LOEX120708R-T4-M09 MS2050	3,5 *0.14*	0,095 0.0038	0,10 0.0040	0,16 0.0065
K1	LOEX120708TR-T4-MD13 MK1501	6,0 *0.24*	0,20 0.0080	0,22 0.0085	0,34 0.013
K2	LOEX120708TR-T4-MD13 MK1501	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
K3	LOEX120708TR-T4-M12 MK2050	6,0 *0.24*	0,17 0.0065	0,19 0.0075	0,28 0.011
K4	LOEX120708TR-T4-M12 MK2050	6,0 *0.24*	0,17 0.0065	0,19 0.0075	0,28 0.011
K5	LOEX120708TR-T4-M12 MK2050	6,0 *0.24*	0,15 0.0060	0,17 0.0065	0,26 0.010
K6	LOEX120708TR-T4-M12 MK2050	6,0 *0.24*	0,17 0.0065	0,19 0.0075	0,28 0.011
K7	LOEX120708TR-T4-M12 MK2050	6,0 *0.24*	0,15 0.0060	0,17 0.0065	0,26 0.010
N1	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
N2	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
N3	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
N11	LOEX120708R-T4-M09 F40M	6,0 *0.24*	0,18 0.0070	0,20 0.0080	0,30 0.012
S1	LOEX120708R-T4-M09 F40M	3,5 *0.14*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S2	LOEX120708R-T4-M09 F40M	3,5 *0.14*	0,095 0.0038	0,10 0.0040	0,16 0.0065
S3	LOEX120708R-T4-M09 F40M	3,5 *0.14*	0,085 0.0034	0,095 0.0038	0,14 0.0055
S11	LOEX120708R-T4-M09 MS2050	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
S12	LOEX120708R-T4-M09 MS2050	4,0 *0.16*	0,11 0.0044	0,12 0.0048	0,18 0.0070
S13	LOEX120708R-T4-M09 MS2050	3,5 *0.14*	0,095 0.0038	0,10 0.0040	0,16 0.0065
H5	LOEX120708TR-T4-M12 MP3000	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
H8	LOEX120708TR-T4-M12 MP3000	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060
H11	LOEX120708TR-T4-MD13 MP1501	4,5 *0.18*	0,12 0.0048	0,13 0.0050	0,20 0.0080
H12	LOEX120708TR-T4-MD13 MP1501	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060
H21	LOEX120708TR-T4-MD13 MP1501	4,0 *0.16*	0,090 0.0036	0,10 0.0040	0,15 0.0060

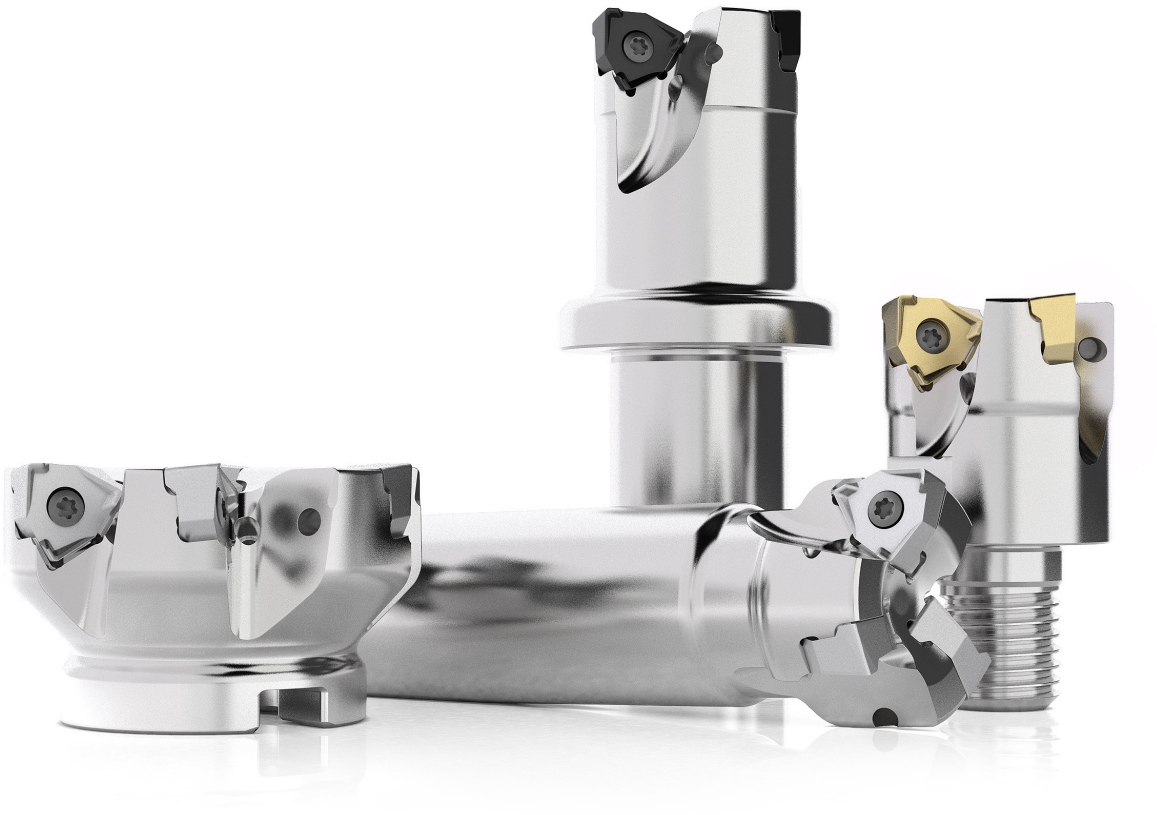
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.94-LO12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	265 *870*	355 *1175*	420 *1375*	270 *890*	360 *1175*	430 *1400*	245 *800*	315 *1025*	370 *1225*	235 *770*	285 *940*	330 *1075*	340 *1125*	465 *1525*	550 *1800*	290 *950*	385 *1275*	450 *1475*
P2	255 *840*	345 *1125*	400 *1300*	255 *840*	350 *1150*	410 *1350*	230 *750*	305 *1000*	355 *1175*	220 *720*	280 *920*	310 *1025*	330 *1075*	440 *1450*	530 *1750*	280 *920*	370 *1225*	440 *1450*
P3	225 *740*	300 *980*	350 *1150*	225 *740*	310 *1025*	360 *1175*	205 *670*	270 *890*	310 *1025*	195 *640*	245 *800*	275 *900*	285 *940*	390 *1275*	470 *1550*	240 *790*	320 *1050*	385 *1275*
P4	200 *660*	265 *870*	310 *1025*	205 *670*	270 *890*	320 *1050*	185 *610*	235 *770*	275 *900*	180 *590*	230 *750*	260 *850*	260 *850*	345 *1125*	415 *1350*	220 *720*	285 *940*	340 *1125*
P5	190 *620*	250 *820*	300 *980*	195 *640*	260 *850*	315 *1025*	175 *570*	225 *740*	265 *870*	170 *560*	205 *670*	235 *770*	250 *820*	340 *1125*	395 *1300*	210 *690*	275 *900*	325 *1075*
P6	215 *710*	290 *950*	340 *1125*	220 *720*	300 *980*	350 *1150*	195 *640*	260 *850*	300 *980*	190 *620*	235 *770*	265 *870*	280 *920*	380 *1250*	445 *1450*	235 *770*	310 *1025*	365 *1200*
P7	205 *670*	270 *890*	320 *1050*	210 *690*	280 *920*	330 *1075*	185 *610*	245 *800*	285 *940*	180 *590*	225 *740*	250 *820*	265 *870*	360 *1175*	420 *1375*	220 *720*	295 *970*	345 *1125*
P8	190 *620*	250 *820*	295 *970*	190 *620*	260 *850*	305 *1000*	170 *560*	225 *740*	260 *850*	165 *540*	205 *670*	230 *750*	240 *790*	330 *1075*	395 *1300*	205 *670*	270 *890*	325 *1075*
P11	195 *640*	265 *870*	310 *1025*	200 *660*	275 *900*	320 *1050*	180 *590*	235 *770*	275 *900*	175 *570*	215 *710*	245 *800*	240 *790*	385 *1275*	495 *1625*	215 *710*	285 *940*	335 *1100*
P12	130 *425*	170 *560*	205 *670*	140 *460*	185 *610*	215 *710*	120 *395*	155 *510*	180 *590*	120 *395*	145 *475*	165 *540*	165 *540*	255 *840*	320 *1050*	140 *460*	185 *610*	215 *710*
M1	— —	— —	— —	185 *610*	245 *800*	290 *950*	175 *570*	235 *770*	275 *900*	160 *520*	215 *710*	250 *820*	270 *890*	420 *1375*	560 *1825*	200 *660*	265 *870*	315 *1025*
M2	— —	— —	— —	155 *510*	205 *670*	245 *800*	145 *475*	190 *620*	230 *750*	135 *445*	175 *570*	210 *690*	230 *750*	365 *1200*	470 *1550*	165 *540*	220 *720*	260 *850*
M3	— —	— —	— —	125 *410*	165 *540*	200 *660*	120 *395*	155 *510*	190 *620*	110 *360*	145 *475*	170 *560*	190 *620*	300 *980*	385 *1275*	135 *445*	180 *590*	210 *690*
M4	— —	— —	— —	100 *330*	130 *425*	150 *490*	95 *310*	125 *410*	145 *475*	85 *280*	110 *360*	130 *425*	150 *490*	230 *750*	295 *970*	105 *345*	140 *460*	165 *540*
M5	— —	— —	— —	80 *260*	110 *360*	125 *410*	80 *260*	105 *345*	120 *395*	70 *230*	95 *310*	110 *360*	125 *410*	195 *640*	245 *800*	85 *280*	115 *375*	135 *445*
K1	275 *900*	370 *1225*	435 *1425*	195 *640*	260 *850*	305 *1000*	— —	— —	— —	155 *510*	210 *690*	245 *800*	— —	— —	— —	— —	— —	— —
K2	250 *820*	325 *1075*	390 *1275*	175 *570*	230 *750*	275 *900*	— —	— —	— —	140 *460*	185 *610*	220 *720*	— —	— —	— —	— —	— —	— —
K3	210 *690*	275 *900*	330 *1075*	150 *490*	195 *640*	235 *770*	— —	— —	— —	120 *395*	155 *510*	185 *610*	— —	— —	— —	— —	— —	— —
K4	200 *660*	265 *870*	315 *1025*	140 *460*	185 *610*	225 *740*	— —	— —	— —	115 *375*	150 *490*	180 *590*	— —	— —	— —	— —	— —	— —
K5	125 *410*	160 *520*	190 *620*	85 *280*	115 *375*	135 *445*	— —	— —	— —	70 *230*	90 *295*	110 *360*	— —	— —	— —	— —	— —	— —
K6	175 *570*	230 *750*	280 *920*	125 *410*	165 *540*	195 *640*	— —	— —	— —	100 *330*	130 *425*	155 *510*	— —	— —	— —	— —	— —	— —
K7	160 *520*	205 *670*	245 *800*	110 *360*	145 *475*	175 *570*	— —	— —	— —	90 *295*	115 *375*	140 *460*	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	1150 *3775*	1525 *5000*	1800 *5900*	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	460 *1500*	620 *2025*	730 *2400*	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	310 *1025*	410 *1350*	485 *1600*	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	350 *1150*	470 *1550*	560 *1825*	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	46 *150*	60 *195*	70 *230*	44 *145*	60 *195*	65 *215*	40 *130*	50 *165*	60 *195*	50 *165*	70 *230*	80 *260*	50 *165*	70 *230*	80 *260*
S2	— —	— —	— —	37 *120*	49 *160*	55 *180*	35 *115*	46 *150*	55 *180*	32 *105*	42 *140*	49 *160*	41 *135*	55 *180*	65 *215*	41 *135*	55 *180*	65 *215*
S3	— —	— —	— —	33 *110*	43 *140*	50 *165*	31 *100*	41 *135*	48 *155*	28 *90*	37 *120*	44 *145*	37 *120*	48 *155*	55 *180*	37 *120*	48 *155*	55 *180*
S11	— —	— —	— —	— —	— —	— —	60 *195*	80 *260*	95 *310*	55 *180*	70 *230*	85 *280*	70 *230*	95 *310*	110 *360*	70 *230*	95 *310*	110 *360*
S12	— —	— —	— —	— —	— —	— —	42 *140*	55 *180*	65 *215*	38 *125*	50 *165*	60 *195*	49 *160*	65 *215*	75 *245*	49 *160*	65 *215*	75 *245*
S13	— —	— —	— —	— —	— —	— —	25 *80*	32 *105*	38 *125*	22 *70*	29 *95*	34 *110*	29 *95*	38 *125*	45 *150*	29 *95*	38 *125*	45 *150*
H5	44 *145*	60 *195*	70 *230*	39 *130*	50 *165*	60 *195*	— —	— —	— —	33 *110*	44 *145*	50 *165*	— —	— —	— —	— —	— —	— —
H8	48 *155*	65 *215*	75 *245*	42 *140*	55 *180*	65 *215*	— —	— —	— —	36 *120*	47 *155*	55 *180*	— —	— —	— —	— —	— —	— —
H11	55 *180*	75 *245*	90 *295*	49 *160*	65 *215*	80 *260*	— —	— —	— —	42 *140*	55 *180*	65 *215*	110 *360*	165 *540*	210 *690*	55 *180*	70 *230*	85 *280*
H12	85 *280*	110 *360*	130 *425*	80 *260*	105 *345*	125 *410*	— —	— —	— —	65 *215*	85 *280*	100 *330*	105 *345*	150 *490*	190 *620*	90 *295*	115 *375*	140 *460*
H21	48 *155*	65 *215*	75 *245*	42 *140*	55 *180*	65 *215*	— —	— —	— —	36 *120*	47 *155*	55 *180*	100 *330*	120 *395*	130 *425*	45 *150*	60 *195*	70 *230*

R217/220.94-LO12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	375	465	530	390	480	550	370	465	540	340	425	485	215	280	330
	—	—	—	*1225*	*1525*	*1750*	*1275*	*1575*	*1800*	*1225*	*1525*	*1775*	*1125*	*1400*	*1600*	*710*	*920*	*1075*
P2	—	—	—	360	455	510	380	470	540	360	450	520	325	410	465	205	270	315
	—	—	—	*1175*	*1500*	*1675*	*1250*	*1550*	*1775*	*1175*	*1475*	*1700*	*1075*	*1350*	*1525*	*670*	*890*	*1025*
P3	—	—	—	315	395	450	335	410	465	320	395	450	285	360	405	180	240	275
	—	—	—	*1025*	*1300*	*1475*	*1100*	*1350*	*1525*	*1050*	*1300*	*1475*	*940*	*1175*	*1325*	*590*	*790*	*900*
P4	—	—	—	285	350	395	295	365	415	280	355	405	255	315	360	175	225	260
	—	—	—	*940*	*1150*	*1300*	*970*	*1200*	*1350*	*920*	*1175*	*1325*	*840*	*1025*	*1175*	*570*	*740*	*850*
P5	—	—	—	270	335	385	280	350	400	265	340	385	245	305	350	155	200	235
	—	—	—	*890*	*1100*	*1275*	*920*	*1150*	*1300*	*870*	*1125*	*1275*	*800*	*1000*	*1150*	*510*	*660*	*770*
P6	—	—	—	305	380	430	315	395	445	300	380	435	275	345	390	175	230	265
	—	—	—	*1000*	*1250*	*1400*	*1025*	*1300*	*1450*	*980*	*1250*	*1425*	*900*	*1125*	*1275*	*570*	*750*	*870*
P7	—	—	—	285	360	405	295	370	420	285	360	410	260	325	370	165	215	250
	—	—	—	*940*	*1175*	*1325*	*970*	*1225*	*1375*	*940*	*1175*	*1350*	*850*	*1075*	*1225*	*540*	*710*	*820*
P8	—	—	—	265	335	375	280	345	390	265	330	380	240	305	340	150	200	230
	—	—	—	*870*	*1100*	*1225*	*920*	*1125*	*1275*	*870*	*1075*	*1250*	*790*	*1000*	*1125*	*490*	*660*	*750*
P11	—	—	—	280	350	395	290	360	410	275	350	395	250	315	360	160	210	245
	—	—	—	*920*	*1150*	*1300*	*950*	*1175*	*1350*	*900*	*1150*	*1300*	*820*	*1025*	*1175*	*520*	*690*	*800*
P12	—	—	—	185	225	255	190	230	260	180	225	255	165	205	235	105	135	155
	—	—	—	*610*	*740*	*840*	*620*	*750*	*850*	*590*	*740*	*840*	*540*	*670*	*770*	*345*	*445*	*510*
M1	—	—	—	—	—	—	195	255	305	210	275	330	175	235	275	135	185	215
	—	—	—	—	—	—	*640*	*840*	*1000*	*690*	*900*	*1075*	*570*	*770*	*900*	*445*	*610*	*710*
M2	—	—	—	—	—	—	160	215	250	175	230	275	145	190	230	115	150	180
	—	—	—	—	—	—	*520*	*710*	*820*	*570*	*750*	*900*	*475*	*620*	*750*	*375*	*490*	*590*
M3	—	—	—	—	—	—	130	170	205	140	185	225	120	155	190	95	125	145
	—	—	—	—	—	—	*425*	*560*	*670*	*460*	*610*	*740*	*395*	*510*	*620*	*310*	*410*	*475*
M4	—	—	—	—	—	—	105	135	160	110	145	175	95	125	145	75	95	115
	—	—	—	—	—	—	*345*	*445*	*520*	*360*	*475*	*570*	*310*	*410*	*475*	*245*	*310*	*375*
M5	—	—	—	—	—	—	85	115	135	95	120	145	80	105	120	60	80	95
	—	—	—	—	—	—	*280*	*375*	*445*	*310*	*395*	*475*	*260*	*345*	*395*	*195*	*260*	*310*
K1	320	560	780	365	460	520	380	475	540	230	305	365	325	415	470	—	—	—
	1050	*1825*	*2550*	*1200*	*1500*	*1700*	*1250*	*1550*	*1775*	*750*	*1000*	*1200*	*1075*	*1350*	*1550*	—	—	—
K2	285	495	690	325	405	465	340	425	480	205	275	325	295	365	425	—	—	—
	940	*1625*	*2275*	*1075*	*1325*	*1525*	*1125*	*1400*	*1575*	*670*	*900*	*1075*	*970*	*1200*	*1400*	—	—	—
K3	220	320	405	275	340	390	285	360	405	175	230	275	250	310	360	—	—	—
	720	*1050*	*1325*	*900*	*1125*	*1275*	*940*	*1175*	*1325*	*570*	*750*	*900*	*820*	*1025*	*1175*	—	—	—
K4	210	305	385	265	325	375	275	340	390	165	220	260	240	295	340	—	—	—
	690	*1000*	*1275*	*870*	*1075*	*1225*	*900*	*1125*	*1275*	*540*	*720*	*850*	*790*	*970*	*1125*	—	—	—
K5	125	185	235	165	200	225	170	210	235	105	135	160	150	180	205	—	—	—
	410	*610*	*770*	*540*	*660*	*740*	*560*	*690*	*770*	*345*	*445*	*520*	*490*	*590*	*670*	—	—	—
K6	185	270	340	235	285	330	240	300	340	145	195	230	210	260	300	—	—	—
	610	*890*	*1125*	*770*	*940*	*1075*	*790*	*980*	*1125*	*475*	*640*	*750*	*690*	*850*	*980*	—	—	—
K7	160	240	300	210	255	290	215	270	300	130	175	205	190	235	265	—	—	—
	520	*790*	*980*	*690*	*840*	*950*	*710*	*890*	*980*	*425*	*570*	*670*	*620*	*770*	*870*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	55	70	85	44	60	65	22	30	35
	—	—	—	—	—	—	—	—	—	*180*	*230*	*280*	*145*	*195*	*215*	*70*	*100*	*115*
S2	—	—	—	—	—	—	—	—	—	44	60	70	35	46	55	18	24	28
	—	—	—	—	—	—	—	—	—	*145*	*195*	*230*	*115*	*150*	*180*	*60*	*80*	*90*
S3	—	—	—	—	—	—	—	—	—	39	50	60	31	41	48	16	21	25
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*	*100*	*135*	*155*	*50*	*70*	*80*
S11	—	—	—	—	—	—	—	—	—	75	100	120	60	80	95	31	41	49
	—	—	—	—	—	—	—	—	—	*245*	*330*	*395*	*195*	*260*	*310*	*100*	*135*	*160*
S12	—	—	—	—	—	—	—	—	—	50	70	80	42	55	65	29	38	45
	—	—	—	—	—	—	—	—	—	*165*	*230*	*260*	*140*	*180*	*215*	*95*	*125*	*150*
S13	—	—	—	—	—	—	—	—	—	31	40	47	25	32	38	17	22	26
	—	—	—	—	—	—	—	—	—	*100*	*130*	*155*	*80*	*105*	*125*	*55*	*70*	*85*
H5	—	—	—	48	65	75	—	—	—	44	60	70	38	50	60	—	—	—
	—	—	—	*155*	*215*	*245*	—	—	—	*145*	*195*	*230*	*125*	*165*	*195*	—	—	—
H8	—	—	—	50	70	80	—	—	—	47	60	75	41	55	65	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	*155*	*195*	*245*	*135*	*180*	*215*	—	—	—
H11	—	—	—	60	80	95	—	—	—	55	75	85	48	65	75	—	—	—
	—	—	—	*195*	*260*	*310*	—	—	—	*180*	*245*	*280*	*155*	*215*	*245*	—	—	—
H12	—	—	—	90	120	145	—	—	—	95	125	145	75	100	115	—	—	—
	—	—	—	*295*	*395*	*475*	—	—	—	*310*	*410*	*475*	*245*	*330*	*375*	—	—	—
H21	—	—	—	50	70	80	—	—	—	47	60	75	41	55	65	—	—	—
	—	—	—	*165*	*230*	*260*	—	—	—	*155*	*195*	*245*	*135*	*180*	*215*	—	—	—

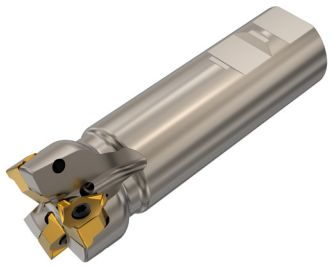


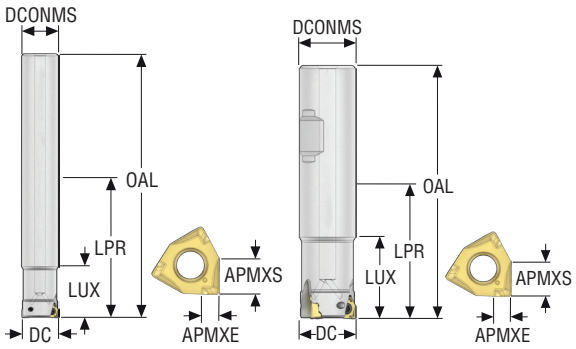
SQUARE 6

La linea Seco di frese a spallamento Square 6 risponde alla necessità di una maggiore economicità nella fresatura a spallamento retto. Questa esclusiva fresa a spallamento retto utilizza inserti trigoni con tre taglienti su ciascun lato –
sei taglienti in totale – per ridurre il costo per tagliente.

– Con due diverse dimensioni della famiglia di frese - dimensioni dell'inserto 04 e 08
– Tratti raschianti per ottimizzare la finitura superficiale
– Diverse qualità e geometrie disponibili

Square 6™ – R217.96-04 – In mm

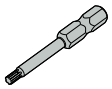




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 109–111
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm			kg	
R217.96-2020.3-04-3A	02768349	Weldon	20,0	3	4,0	2,0	20,0	65,0	29,0	40,0	90,0	0,0	29400	0,2	XNEX0403
R217.96-2525.3-04-4A	02768362	Weldon	25,0	4	4,0	2,0	25,0	69,0	34,0	45,0	101,0	0,0	26300	0,3	XNEX0403
R217.96-2525.3-04-5A	02768364	Weldon	25,0	5	4,0	2,0	25,0	69,0	34,0	45,0	101,0	0,0	26300	0,4	XNEX0403
R217.96-3232.3-04-5A	02768372	Weldon	32,0	5	4,0	2,0	32,0	69,0	37,0	45,0	105,0	0,0	23200	0,6	XNEX0403
R217.96-1820.0-04-3A	02833459	Cilindrico	20,0	3	4,0	2,0	18,0	–	100,0	100,0	150,0	0,0	29400	0,3	XNEX0403
R217.96-2020.0-04-3A	02768343	Cilindrico	20,0	3	4,0	2,0	20,0	–	29,0	100,0	150,0	0,0	29400	0,3	XNEX0403
R217.96-2525.0-04-4A	02768359	Cilindrico	25,0	4	4,0	2,0	25,0	–	29,0	114,0	170,0	0,0	26300	0,6	XNEX0403
R217.96-2525.0-04-5A	02768361	Cilindrico	25,0	5	4,0	2,0	25,0	–	29,0	114,0	170,0	0,0	26300	0,6	XNEX0403
R217.96-3232.0-04-5A	02768370	Cilindrico	32,0	5	4,0	2,0	32,0	–	31,0	135,0	195,0	0,0	23200	1,2	XNEX0403
R217.96-3232.0-04-6A	02768371	Cilindrico	32,0	6	4,0	2,0	32,0	–	31,0	135,0	195,0	0,0	23200	1,2	XNEX0403

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.96-..	1/4HEX-T08PX50	C02506-T08P

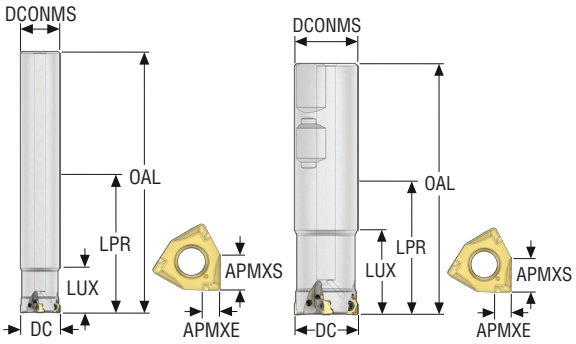
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217.96-04 – Pollici

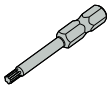




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 109-111
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch			lb	
R217.96-00.75-3-04-3A	02770536	Weldon	0.750	3	0.157	0.079	0.750	2.374	1.193	1.422	3.390	0,0	29400	0.440	XNEX0403
R217.96-01.00-3-04-5A	02770596	Weldon	1.000	5	0.157	0.079	1.000	2.638	1.178	1.575	3.780	0,0	26300	0.880	XNEX0403
R217.96-01.25-3-04-5A	02770602	Weldon	1.250	5	0.157	0.079	1.250	2.858	1.240	1.638	4.000	0,0	23200	1.320	XNEX0403
R217.96-00.75-0-04-3A	02770505	Cilindrico	0.750	3	0.157	0.079	0.750	–	1.394	3.941	5.910	0,0	29400	0.660	XNEX0403

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.96..	1/4HEX-T08PX50	C02506-T08P

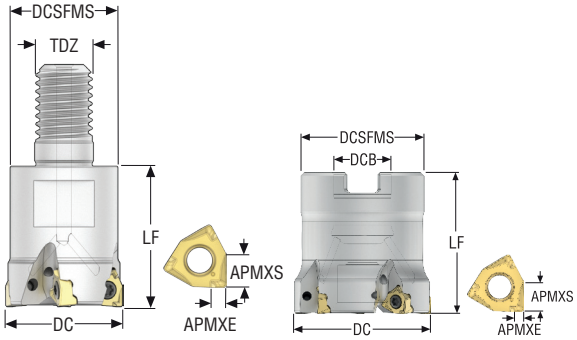
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217/220.96-04 – In mm



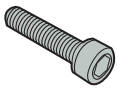
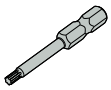


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 109–111
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm			kg	
R220.96-0032-04-4A	02841298	Manicotto	32,0	4	4,0	2,0	16,0	35,0	–	16,0	40,0	0,0	23200	0,2	XNEX0403
R220.96-0032-04-6A	02841306	Manicotto	32,0	6	4,0	2,0	16,0	35,0	–	16,0	40,0	0,0	23200	0,2	XNEX0403
R220.96-0040-04-5A	02841154	Manicotto	40,0	5	4,0	2,0	16,0	35,0	–	16,0	40,0	0,0	20700	0,3	XNEX0403
R220.96-0040-04-7A	02768377	Manicotto	40,0	7	4,0	2,0	16,0	35,0	–	16,0	40,0	0,0	20700	0,3	XNEX0403
R220.96-0050-04-6A	02841155	Manicotto	50,0	6	4,0	2,0	22,0	47,0	–	22,0	40,0	0,0	18600	0,5	XNEX0403
R220.96-0050-04-8A	02768413	Manicotto	50,0	8	4,0	2,0	22,0	47,0	–	22,0	40,0	0,0	18600	0,5	XNEX0403
R220.96-0050-04-9A	02768412	Manicotto	50,0	9	4,0	2,0	22,0	47,0	–	22,0	40,0	0,0	18600	0,5	XNEX0403
R220.96-0063-04-7A	02841156	Manicotto	63,0	7	4,0	2,0	27,0	62,0	–	27,0	40,0	0,0	16500	0,7	XNEX0403
R220.96-0063-04-9A	02768433	Manicotto	63,0	9	4,0	2,0	27,0	62,0	–	27,0	40,0	0,0	16500	0,7	XNEX0403
R217.96-1020.RE-04-3A	02768351	Combimaster	20,0	3	4,0	2,0	–	18,3	M10	–	28,0	0,0	29400	0,1	XNEX0403
R217.96-1225.RE-04-4A	02768365	Combimaster	25,0	4	4,0	2,0	–	23,0	M12	–	30,0	0,0	26300	0,2	XNEX0403
R217.96-1225.RE-04-5A	02768367	Combimaster	25,0	5	4,0	2,0	–	23,0	M12	–	30,0	0,0	26300	0,1	XNEX0403
R217.96-1632.RE-04-5A	02768375	Combimaster	32,0	5	4,0	2,0	–	30,0	M16	–	40,0	0,0	23200	0,3	XNEX0403
R217.96-1632.RE-04-6A	02768376	Combimaster	32,0	6	4,0	2,0	–	30,0	M16	–	40,0	0,0	23200	0,3	XNEX0403

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.96-..	–	1/4HEX-T08PX50	C02506-T08P
R220.96-0032-0040	TCEI0825	1/4HEX-T08PX50	C02506-T08P
R220.96-0050	220.17-692	1/4HEX-T08PX50	C02506-T08P
R220.96-0063	–	1/4HEX-T08PX50	C02506-T08P

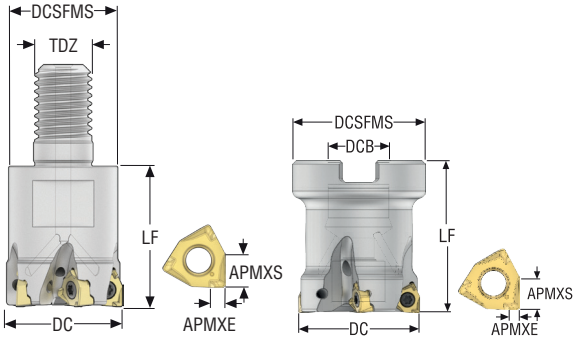
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217/220.96-04 – Pollici



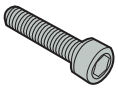
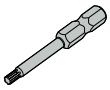


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 109-111
–Per il programma inserti completo, vedere le pagine 899
–Per la spiegazione degli attributi ISO, vedere pag. 16
–KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch			lb	
R220.96-01.50-04-6A	02770608	Manicotto	1.500	6	0.157	0.079	0.750	1.378	–	0.750	1.570	0,0	20700	0.440	XNEX0403
R220.96-02.00-04-9A	02770613	Manicotto	2.000	9	0.157	0.079	0.750	1.850	–	0.750	1.567	0,0	18600	0.880	XNEX0403
R217.96-00.75-10RE-04-3A	02770501	Combimaster	0.750	3	0.157	0.079	–	0.689	M10	–	1.070	0,0	29400	0.220	XNEX0403
R217.96-01.00-12RE-04-5A	02770543	Combimaster	1.000	5	0.157	0.079	–	0.906	M12	–	1.570	0,0	26300	0.220	XNEX0403
R217.96-01.25-16RE-04-5A	02770599	Combimaster	1.250	5	0.157	0.079	–	1.181	M16	–	1.570	0,0	23200	0.660	XNEX0403

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.96-..	–	1/4HEX-T08PX50	C02506-T08P
R220.96-..	UC6S3/8UNFX1	1/4HEX-T08PX50	C02506-T08P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.96-04 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XNEX040304TR-M08 F40M	2,0 *0.080*	0,11 0.0044	0,13 0.0050	0,19 0.0075
P2	XNEX040304TR-M08 F40M	2,0 *0.080*	0,12 0.0048	0,13 0.0050	0,20 0.0080
P3	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
P4	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
P5	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
P6	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P7	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P8	XNEX040304TR-M08 MP2501	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
P11	XNEX040304TR-M08 MP3000	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,18 0.0070
P12	XNEX040304TR-M08 MP3000	1,6 *0.065*	0,075 0.0030	0,080 0.0032	0,12 0.0048
M1	XNEX040304R-M06 F40M	2,0 *0.080*	0,090 0.0036	0,095 0.0038	0,15 0.0060
M2	XNEX040304R-M06 F40M	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
M3	XNEX040304R-M06 F40M	1,6 *0.065*	0,065 0.0026	0,070 0.0028	0,11 0.0044
M4	XNEX040304R-M06 MS2050	1,2 *0.048*	0,060 0.0024	0,065 0.0026	0,095 0.0038
M5	XNEX040304R-M06 MS2050	1,2 *0.048*	0,060 0.0024	0,065 0.0026	0,095 0.0038
K1	XNEX040304TR-M08 MK1501	2,0 *0.080*	0,12 0.0048	0,13 0.0050	0,20 0.0080
K2	XNEX040304TR-M08 MK1501	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K3	XNEX040304TR-M08 MK2050	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K4	XNEX040304TR-M08 MK2050	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K5	XNEX040304TR-M08 MK2050	2,0 *0.080*	0,095 0.0038	0,10 0.0040	0,16 0.0065
K6	XNEX040304TR-M08 MK2050	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,18 0.0070
K7	XNEX040304TR-M08 MK2050	2,0 *0.080*	0,095 0.0038	0,10 0.0040	0,16 0.0065
N1	XNEX040304R-M06 F40M	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
N2	XNEX040304R-M06 F40M	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
N3	XNEX040304R-M06 F40M	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
N11	XNEX040304R-M06 F40M	2,0 *0.080*	0,11 0.0044	0,12 0.0048	0,19 0.0075
S1	XNEX040304R-M06 F40M	1,2 *0.048*	0,060 0.0024	0,065 0.0026	0,095 0.0038
S2	XNEX040304R-M06 F40M	1,2 *0.048*	0,060 0.0024	0,065 0.0026	0,095 0.0038
S3	XNEX040304R-M06 F40M	1,2 *0.048*	0,055 0.0022	0,060 0.0024	0,090 0.0036
S11	XNEX040304R-M06 MS2050	1,4 *0.055*	0,065 0.0026	0,070 0.0028	0,11 0.0044
S12	XNEX040304R-M06 MS2050	1,4 *0.055*	0,065 0.0026	0,070 0.0028	0,11 0.0044
S13	XNEX040304R-M06 MS2050	1,2 *0.048*	0,060 0.0024	0,065 0.0026	0,095 0.0038
H5	XNEX040304TR-M08 MP3000	1,6 *0.065*	0,075 0.0030	0,080 0.0032	0,12 0.0048
H8	XNEX040304TR-M08 MP3000	1,4 *0.055*	0,055 0.0022	0,060 0.0024	0,095 0.0038
H11	XNEX040308TR-M08 MP1501	1,6 *0.065*	0,080 0.0032	0,085 0.0034	0,13 0.0050
H12	XNEX040304TR-M08 MP1501	1,4 *0.055*	0,055 0.0022	0,060 0.0024	0,095 0.0038
H21	XNEX040304TR-M08 MP1501	1,4 *0.055*	0,055 0.0022	0,060 0.0024	0,095 0.0038

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.96-04 – Parametri di taglio v_c = (m/min)/(sf/min)

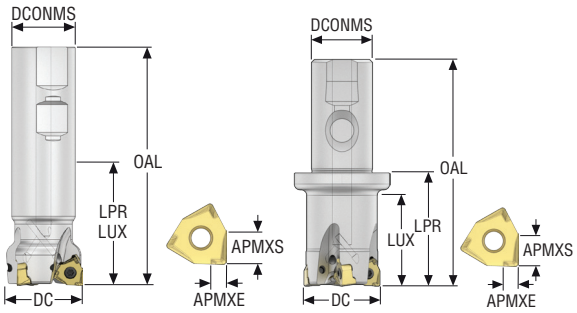
SMG	MK2050			MP3000			MS2050			F40M		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	305 *1000*	395 *1300*	470 *1550*	370 *1225*	475 *1550*	550 *1800*	320 *1050*	400 *1300*	460 *1500*	280 *920*	330 *1075*	375 *1225*
P2	290 *950*	385 *1275*	455 *1500*	365 *1200*	460 *1500*	530 *1750*	310 *1025*	390 *1275*	445 *1450*	265 *870*	325 *1075*	365 *1200*
P3	255 *840*	340 *1125*	400 *1300*	310 *1025*	400 *1300*	460 *1500*	270 *890*	340 *1125*	385 *1275*	235 *770*	285 *940*	320 *1050*
P4	225 *740*	295 *970*	350 *1150*	280 *920*	355 *1175*	410 *1350*	240 *790*	300 *980*	345 *1125*	210 *690*	260 *850*	295 *970*
P5	215 *710*	285 *940*	335 *1100*	265 *870*	340 *1125*	390 *1275*	230 *750*	290 *950*	330 *1075*	195 *640*	240 *790*	270 *890*
P6	245 *800*	325 *1075*	380 *1250*	300 *980*	380 *1250*	440 *1450*	255 *840*	325 *1075*	370 *1225*	225 *740*	275 *900*	305 *1000*
P7	235 *770*	310 *1025*	360 *1175*	280 *920*	360 *1175*	415 *1350*	245 *800*	305 *1000*	350 *1150*	215 *710*	260 *850*	290 *950*
P8	215 *710*	285 *940*	335 *1100*	260 *850*	335 *1100*	385 *1275*	225 *740*	285 *940*	325 *1075*	195 *640*	240 *790*	270 *890*
P11	225 *740*	300 *980*	350 *1150*	275 *900*	350 *1150*	400 *1300*	235 *770*	300 *980*	340 *1125*	210 *690*	250 *820*	280 *920*
P12	145 *475*	190 *620*	225 *740*	170 *560*	215 *710*	240 *790*	150 *490*	185 *610*	210 *690*	135 *445*	160 *520*	180 *590*
M1	— —	— —	— —	235 *770*	310 *1025*	360 *1175*	225 *740*	295 *970*	340 *1125*	180 *590*	240 *790*	285 *940*
M2	— —	— —	— —	195 *640*	260 *850*	300 *980*	185 *610*	245 *800*	285 *940*	150 *490*	195 *640*	230 *750*
M3	— —	— —	— —	155 *510*	205 *670*	240 *790*	145 *475*	195 *640*	225 *740*	120 *395*	160 *520*	190 *620*
M4	— —	— —	— —	120 *395*	160 *520*	185 *610*	115 *375*	150 *490*	175 *570*	95 *310*	125 *410*	145 *475*
M5	— —	— —	— —	100 *330*	135 *445*	155 *510*	95 *310*	125 *410*	145 *475*	80 *260*	105 *345*	120 *395*
K1	315 *1025*	415 *1350*	495 *1625*	250 *820*	330 *1075*	385 *1275*	— —	— —	— —	175 *570*	235 *770*	280 *920*
K2	275 *900*	365 *1200*	435 *1425*	220 *720*	295 *970*	345 *1125*	— —	— —	— —	155 *510*	205 *670*	245 *800*
K3	235 *770*	310 *1025*	365 *1200*	185 *610*	250 *820*	290 *950*	— —	— —	— —	135 *445*	175 *570*	205 *670*
K4	225 *740*	295 *970*	350 *1150*	180 *590*	235 *770*	275 *900*	— —	— —	— —	125 *410*	170 *560*	200 *660*
K5	140 *460*	185 *610*	215 *710*	110 *360*	145 *475*	170 *560*	— —	— —	— —	80 *260*	105 *345*	120 *395*
K6	195 *640*	260 *850*	310 *1025*	155 *510*	210 *690*	245 *800*	— —	— —	— —	110 *360*	150 *490*	175 *570*
K7	175 *570*	235 *770*	275 *900*	140 *460*	185 *610*	215 *710*	— —	— —	— —	100 *330*	135 *445*	155 *510*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	1325 *4350*	1750 *5750*	2050 *6725*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	530 *1750*	710 *2325*	830 *2725*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	355 *1175*	470 *1550*	550 *1800*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	405 *1325*	540 *1775*	630 *2075*
S1	— —	— —	— —	— —	— —	— —	55 *180*	70 *230*	80 *260*	44 *145*	60 *195*	70 *230*
S2	— —	— —	— —	— —	— —	— —	43 *140*	55 *180*	65 *215*	36 *120*	47 *155*	55 *180*
S3	— —	— —	— —	— —	— —	— —	37 *120*	50 *165*	60 *195*	31 *100*	41 *135*	48 *155*
S11	— —	— —	— —	— —	— —	— —	75 *245*	100 *330*	115 *375*	60 *195*	80 *260*	95 *310*
S12	— —	— —	— —	— —	— —	— —	50 *165*	70 *230*	80 *260*	43 *140*	55 *180*	65 *215*
S13	— —	— —	— —	— —	— —	— —	30 *100*	39 *130*	46 *150*	25 *80*	33 *110*	38 *125*
H5	49 *160*	65 *215*	75 *245*	48 *155*	65 *215*	75 *245*	— —	— —	— —	37 *120*	49 *160*	55 *180*
H8	55 *180*	70 *230*	80 *260*	50 *165*	65 *215*	75 *245*	— —	— —	— —	40 *130*	50 *165*	60 *195*
H11	65 *215*	85 *280*	95 *310*	60 *195*	80 *260*	95 *310*	— —	— —	— —	47 *155*	60 *195*	75 *245*
H12	90 *295*	120 *395*	140 *460*	95 *310*	125 *410*	150 *490*	— —	— —	— —	70 *230*	95 *310*	110 *360*
H21	55 *180*	70 *230*	80 *260*	— —	— —	— —	— —	— —	— —	40 *130*	50 *165*	60 *195*

R217/220.96-04 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	445	540	600	480	580	640	270	335	375
	—	—	—	*1450*	*1775*	*1975*	*1575*	*1900*	*2100*	*890*	*1100*	*1225*
P2	—	—	—	430	530	590	470	560	630	260	325	365
	—	—	—	*1400*	*1750*	*1925*	*1550*	*1825*	*2075*	*850*	*1075*	*1200*
P3	—	—	—	370	455	510	405	490	540	225	280	315
	—	—	—	*1225*	*1500*	*1675*	*1325*	*1600*	*1775*	*740*	*920*	*1025*
P4	—	—	—	335	405	450	360	430	475	215	265	300
	—	—	—	*1100*	*1325*	*1475*	*1175*	*1400*	*1550*	*710*	*870*	*980*
P5	—	—	—	320	385	430	340	410	455	190	235	265
	—	—	—	*1050*	*1275*	*1400*	*1125*	*1350*	*1500*	*620*	*770*	*870*
P6	—	—	—	355	435	485	385	465	510	215	265	295
	—	—	—	*1175*	*1425*	*1600*	*1275*	*1525*	*1675*	*710*	*870*	*970*
P7	—	—	—	335	410	455	365	435	485	200	250	280
	—	—	—	*1100*	*1350*	*1500*	*1200*	*1425*	*1600*	*660*	*820*	*920*
P8	—	—	—	310	380	425	340	410	455	190	235	265
	—	—	—	*1025*	*1250*	*1400*	*1125*	*1350*	*1500*	*620*	*770*	*870*
P11	—	—	—	325	400	445	350	425	470	195	240	270
	—	—	—	*1075*	*1300*	*1450*	*1150*	*1400*	*1550*	*640*	*790*	*890*
P12	—	—	—	205	245	270	215	255	280	115	140	155
	—	—	—	*670*	*800*	*890*	*710*	*840*	*920*	*375*	*460*	*510*
M1	—	—	—	—	—	—	245	320	375	180	235	275
	—	—	—	—	—	—	*800*	*1050*	*1225*	*590*	*770*	*900*
M2	—	—	—	—	—	—	200	265	305	145	195	225
	—	—	—	—	—	—	*660*	*870*	*1000*	*475*	*640*	*740*
M3	—	—	—	—	—	—	160	210	245	115	155	180
	—	—	—	—	—	—	*520*	*690*	*800*	*375*	*510*	*590*
M4	—	—	—	—	—	—	125	165	190	90	120	140
	—	—	—	—	—	—	*410*	*540*	*620*	*295*	*395*	*460*
M5	—	—	—	—	—	—	105	135	160	75	100	115
	—	—	—	—	—	—	*345*	*445*	*520*	*245*	*330*	*375*
K1	370	630	860	435	530	590	475	570	630	—	—	—
	1225	*2075*	*2825*	*1425*	*1750*	*1925*	*1550*	*1875*	*2075*	—	—	—
K2	325	550	750	385	465	520	415	500	550	—	—	—
	1075	*1800*	*2450*	*1275*	*1525*	*1700*	*1350*	*1650*	*1800*	—	—	—
K3	265	385	470	325	395	440	350	420	465	—	—	—
	870	*1275*	*1550*	*1075*	*1300*	*1450*	*1150*	*1375*	*1525*	—	—	—
K4	255	365	450	310	375	420	335	405	445	—	—	—
	840	*1200*	*1475*	*1025*	*1225*	*1375*	*1100*	*1325*	*1450*	—	—	—
K5	155	220	275	190	225	255	200	240	265	—	—	—
	510	*720*	*900*	*620*	*740*	*840*	*660*	*790*	*870*	—	—	—
K6	225	320	395	275	330	370	295	355	390	—	—	—
	740	*1050*	*1300*	*900*	*1075*	*1225*	*970*	*1175*	*1275*	—	—	—
K7	195	285	350	240	290	325	260	310	340	—	—	—
	640	*940*	*1150*	*790*	*950*	*1075*	*850*	*1025*	*1125*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	28	37	43
	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*
S2	—	—	—	—	—	—	—	—	—	22	29	34
	—	—	—	—	—	—	—	—	—	*70*	*95*	*110*
S3	—	—	—	—	—	—	—	—	—	20	26	30
	—	—	—	—	—	—	—	—	—	*65*	*85*	*100*
S11	—	—	—	—	—	—	—	—	—	39	50	60
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*
S12	—	—	—	—	—	—	—	—	—	36	47	55
	—	—	—	—	—	—	—	—	—	*120*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	21	27	32
	—	—	—	—	—	—	—	—	—	*70*	*90*	*105*
H5	—	—	—	55	75	85	—	—	—	—	—	—
	—	—	—	*180*	*245*	*280*	—	—	—	—	—	—
H8	—	—	—	60	75	90	—	—	—	—	—	—
	—	—	—	*195*	*245*	*295*	—	—	—	—	—	—
H11	—	—	—	70	95	110	—	—	—	—	—	—
	—	—	—	*230*	*310*	*360*	—	—	—	—	—	—
H12	—	—	—	105	140	160	—	—	—	—	—	—
	—	—	—	*345*	*460*	*520*	—	—	—	—	—	—
H21	—	—	—	60	75	90	—	—	—	—	—	—
	—	—	—	*195*	*245*	*295*	—	—	—	—	—	—

Square 6™ – R217.96-08 – In mm

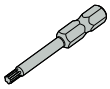




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 118–120
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.96-3240.3-08-3A	02622987	Weldon	40,0	3	7,5	3,0	–	32,0	84,0	60,0	60,0	120,0	0,0	11800	0,7	XNEX0806
R217.96-3240.3-08-4A	02622989	Weldon	40,0	4	7,5	3,0	–	32,0	84,0	60,0	60,0	120,0	0,0	11800	0,7	XNEX0806
R217.96-3240.3S-08-3A	02622914	Seco-Weldon	40,0	3	7,5	3,0	50,0	32,0	–	50,0	60,0	120,0	0,0	11800	0,8	XNEX0806
R217.96-3240.3S-08-4A	02622915	Seco-Weldon	40,0	4	7,5	3,0	50,0	32,0	–	50,0	60,0	120,0	0,0	11800	0,8	XNEX0806

Parti di ricambio, comprese nella fornitura

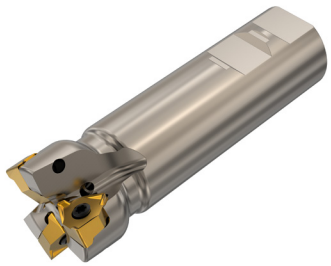
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.96-..	1/4HEX-T15PX50	C04011-T15P

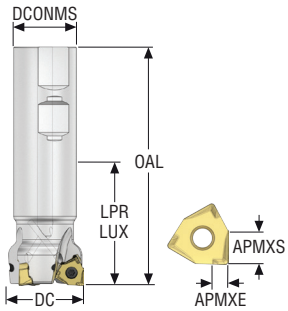
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217.96-08 – Pollici

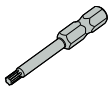




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 118-120
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch			lb	
R217.96-01.50-3-08-3A	02642818	Weldon	1.500	3	0.295	0.118	1.250	3.358	2.138	2.138	4.500	0,0	20700	1.540	XNEX0806

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.96-..	1/4HEX-T15PX50	C04011-T15P

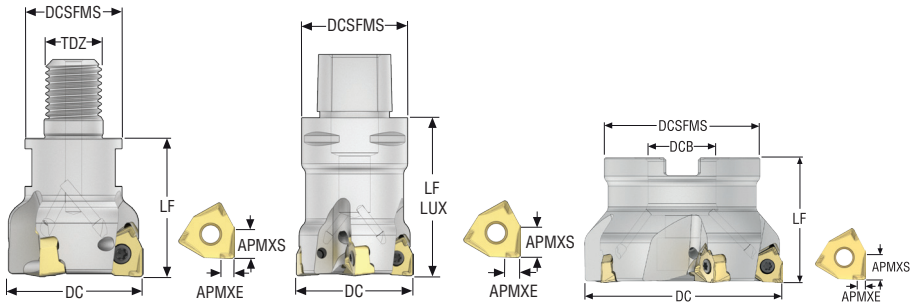
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.96-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217/220.96-08 – In mm



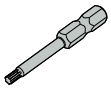


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 118–120
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

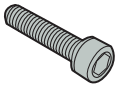
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	LUX	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		mm	mm	mm			kg	
C4-R217.96-044-08-3A	02690109	Seco-Capto	44,0	3	7,5	3,0	–	40,0	–	–	60,0	60,0	0,0	11300	0,6	XNEX0806
C4-R217.96-044-08-4A	02690177	Seco-Capto	44,0	4	7,5	3,0	–	40,0	–	–	60,0	60,0	0,0	11300	0,5	XNEX0806
C5-R217.96-054-08-4A	02690178	Seco-Capto	54,0	4	7,5	3,0	–	50,0	–	–	60,0	60,0	0,0	10200	0,9	XNEX0806
C5-R217.96-054-08-5A	02690179	Seco-Capto	54,0	5	7,5	3,0	–	50,0	–	–	60,0	60,0	0,0	10200	0,9	XNEX0806
C5-R217.96-063-08-6A	02690180	Seco-Capto	63,0	6	7,5	3,0	–	50,0	–	–	60,0	60,0	0,0	9400	1,0	XNEX0806
C6-R217.96-066-08-7A	02780514	Seco-Capto	66,0	7	7,5	3,0	–	63,0	–	–	60,0	60,0	0,0	9400	1,4	XNEX0806
C6-R217.96-080-08-7A	02690182	Seco-Capto	80,0	7	7,5	3,0	–	63,0	–	–	60,0	60,0	0,0	8400	1,7	XNEX0806
C6-R217.96-080-08-9A	02690183	Seco-Capto	80,0	9	7,5	3,0	–	63,0	–	–	60,0	60,0	0,0	8400	1,2	XNEX0806
R220.96-0050-08-4A	02623180	Manicotto	50,0	4	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	10600	0,3	XNEX0806
R220.96-0050-08-5A	02623182	Manicotto	50,0	5	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	10600	0,3	XNEX0806
R220.96-0052-08-5A	02969090	Manicotto	52,0	5	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	10600	0,4	XNEX0806
R220.96-0063-08-4A	02623183	Manicotto	63,0	4	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	9400	0,6	XNEX0806
R220.96-0063-08-5A-27	02768079	Manicotto	63,0	5	7,5	3,0	27,0	62,0	–	27,0	40,0	–	0,0	9400	0,7	XNEX0806
R220.96-0063-08-6A	02623194	Manicotto	63,0	6	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	9400	0,5	XNEX0806
R220.96-0063-08-6A-27	02679623	Manicotto	63,0	6	7,5	3,0	27,0	62,0	–	27,0	40,0	–	0,0	9400	0,6	XNEX0806
R220.96-0063-08-7A	02623196	Manicotto	63,0	7	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	9400	0,5	XNEX0806
R220.96-0063-08-7A-27	02679624	Manicotto	63,0	7	7,5	3,0	27,0	62,0	–	27,0	40,0	–	0,0	9400	0,6	XNEX0806
R220.96-0066-08-6A	02711515	Manicotto	66,0	6	7,5	3,0	22,0	47,0	–	22,0	40,0	–	0,0	9400	0,5	XNEX0806
R220.96-0080-08-5A	02623197	Manicotto	80,0	5	7,5	3,0	27,0	62,0	–	27,0	50,0	–	0,0	8400	1,1	XNEX0806
R220.96-0080-08-7A	02623198	Manicotto	80,0	7	7,5	3,0	27,0	62,0	–	27,0	50,0	–	0,0	8400	1,0	XNEX0806
R220.96-0080-08-9A	02623200	Manicotto	80,0	9	7,5	3,0	27,0	62,0	–	27,0	50,0	–	0,0	8400	1,0	XNEX0806
R220.96-0084-08-7A	02969094	Manicotto	84,0	7	7,5	3,0	27,0	62,0	–	27,0	50,0	–	0,0	8400	1,2	XNEX0806
R220.96-0100-08-6A	02623201	Manicotto	100,0	6	7,5	3,0	32,0	77,0	–	32,0	50,0	–	0,0	7500	1,6	XNEX0806
R220.96-0100-08-8A	02623203	Manicotto	100,0	8	7,5	3,0	32,0	77,0	–	32,0	50,0	–	0,0	7500	1,6	XNEX0806
R220.96-0100-08-11A	02623204	Manicotto	100,0	11	7,5	3,0	32,0	77,0	–	32,0	50,0	–	0,0	7500	1,5	XNEX0806
R220.96-0125-08-7A	02640708	Manicotto	125,0	7	7,5	3,0	40,0	90,0	–	40,0	63,0	–	0,0	6700	2,9	XNEX0806
R220.96-0125-08-11A	02640709	Manicotto	125,0	11	7,5	3,0	40,0	90,0	–	40,0	63,0	–	0,0	6700	2,8	XNEX0806
R220.96-0125-08-14A	02640710	Manicotto	125,0	14	7,5	3,0	40,0	90,0	–	40,0	63,0	–	0,0	6700	2,8	XNEX0806
R220.96-8160-08-12	02640711	Manicotto	160,0	12	7,5	3,0	40,0	90,0	–	40,0	63,0	–	0,0	5900	4,6	XNEX0806
R220.96-8160-08-16	02640712	Manicotto	160,0	16	7,5	3,0	40,0	90,0	–	40,0	63,0	–	0,0	5900	4,8	XNEX0806
R217.96-1640.RE-08-3A	02678953	Combimaster	40,0	3	7,5	3,0	–	28,0	M16	–	40,0	–	0,0	11800	0,3	XNEX0806
R217.96-1640.RE-08-4A	02678957	Combimaster	40,0	4	7,5	3,0	–	28,0	M16	–	40,0	–	0,0	11800	0,3	XNEX0806
R217.96-2040.RE-08-4A	02972745	Combimaster	40,0	4	7,5	3,0	–	36,5	M20	–	40,0	–	0,0	11800	0,3	XNEX0806

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

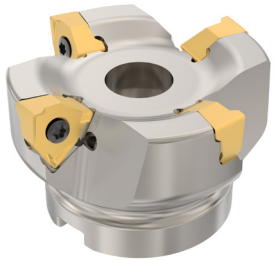
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
Cx/R217.96-..	–	1/4HEX-T15PX50	C04011-T15P
R220.96-0050-0052	220.17-696	1/4HEX-T15PX50	C04011-T15P
R220.96-0063-0066	220.17-692	1/4HEX-T15PX50	C04011-T15P
R220.96-0063-27	220.17-693	1/4HEX-T15PX50	C04011-T15P
R220.96-0080-0084	MC6S12X35	1/4HEX-T15PX50	C04011-T15P
R220.96-0100-0125	–	1/4HEX-T15PX50	C04011-T15P
R220.96-8160	–	1/4HEX-T15PX90	C04011-T15P

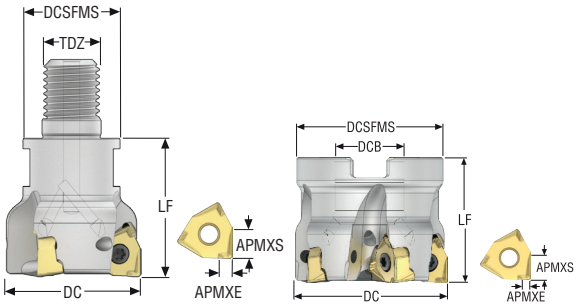
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
Cx-R217/220.96-1640-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.96-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R217/220.96-08 – Pollici



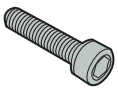
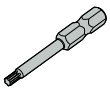


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 118–120
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		inch	inch			lb	
R220.96-02.00-08-4A	02642870	Manicotto	2.000	4	0.295	0.118	0.750	1.850	–	0.750	1.575	0,0	10600	0.660	XNEX0806
R220.96-02.00-08-5A	02642872	Manicotto	2.000	5	0.295	0.118	0.750	1.850	–	0.750	1.575	0,0	10600	0.660	XNEX0806
R220.96-02.50-08-4A	02642873	Manicotto	2.500	4	0.295	0.118	0.750	1.850	–	0.750	1.575	0,0	9400	1.540	XNEX0806
R220.96-02.50-08-6A	02642874	Manicotto	2.500	6	0.295	0.118	0.750	1.850	–	0.750	1.575	0,0	9400	1.100	XNEX0806
R220.96-02.50-08-7A	02642878	Manicotto	2.500	7	0.295	0.118	0.750	1.850	–	0.750	1.575	0,0	9400	1.320	XNEX0806
R220.96-03.00-08-5A	02642879	Manicotto	3.000	5	0.295	0.118	1.000	2.441	–	1.000	1.969	0,0	8400	2.430	XNEX0806
R220.96-03.00-08-7A	02642881	Manicotto	3.000	7	0.295	0.118	1.000	2.441	–	1.000	1.969	0,0	8400	2.200	XNEX0806
R220.96-03.00-08-9A	02642882	Manicotto	3.000	9	0.295	0.118	1.000	2.441	–	1.000	1.969	0,0	8400	2.200	XNEX0806
R220.96-04.00-08-6A	02642884	Manicotto	4.000	6	0.295	0.118	1.500	3.031	–	1.500	1.969	0,0	7500	3.970	XNEX0806
R220.96-04.00-08-8A	02642886	Manicotto	4.000	8	0.295	0.118	1.500	3.031	–	1.500	1.969	0,0	7500	3.750	XNEX0806
R220.96-04.00-08-11A	02642887	Manicotto	4.000	11	0.295	0.118	1.500	3.031	–	1.500	1.969	0,0	7500	3.750	XNEX0806
R220.96-05.00-08-7A	02642888	Manicotto	5.000	7	0.295	0.118	1.500	3.543	–	1.500	2.480	0,0	6700	7.720	XNEX0806
R220.96-05.00-08-11A	02642889	Manicotto	5.000	11	0.295	0.118	1.500	3.543	–	1.500	2.480	0,0	6700	7.280	XNEX0806
R220.96-06.00-08-12	02642891	Manicotto	6.000	12	0.295	0.118	2.000	4.331	–	2.000	2.480	0,0	5900	9.480	XNEX0806
R217.96-01.50-20RE-08-3A	03212088	Combimaster	1.500	3	0.295	0.118	–	1.398	M20	–	1.575	0,0	20700	0.880	XNEX0806

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.96-..	–	1/4HEX-T15PX50	C04011-T15P
R220.96-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04011-T15P
R220.96-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P
R220.96-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T15PX50	C04011-T15P
R220.96-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P
R220.96-06.00	–	1/4HEX-T15PX90	C04011-T15P

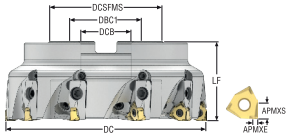
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.96-01.50-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.96-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Square 6™ – R220.96-08 – In mm

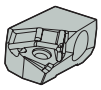
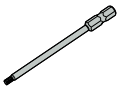
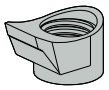




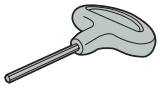
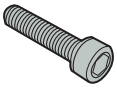
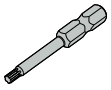
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 118-120
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm			kg	
R220.96-8160-08-7C	02827066	Manicotto	160,0	7	7,5	3,0	40,0	90,0	–	63,0	0,0	5900	5,4	XNEX0806
R220.96-8160-08-10C	02827062	Manicotto	160,0	10	7,5	3,0	40,0	90,0	–	63,0	0,0	5900	5,2	XNEX0806
R220.96-8200-08-8C	02827067	Manicotto	200,0	8	7,5	3,0	60,0	130,0	–	63,0	0,0	5300	7,9	XNEX0806
R220.96-8200-08-12C	02827063	Manicotto	200,0	12	7,5	3,0	60,0	130,0	60,0	63,0	0,0	5300	7,7	XNEX0806
R220.96-8250-08-10C	02827068	Manicotto	250,0	10	7,5	3,0	60,0	130,0	60,0	63,0	0,0	4200	15,2	XNEX0806

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Calibro di regolazione radiale	Vite cuneo
							
R220.96-8160-8250	AU1114T-T15P	XN08PRN	FS96018	1/4HEX-T15PX90	C04011-T15P	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Chiave esagonale	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica	Chiave per vite cuneo
							
R220.96-8160	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35	1/4HEX-T25PX50
R220.96-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	H05-4	MC6S16X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35	1/4HEX-T25PX50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.96-08 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	30%	10%
P1	XNEX080608TR-ME09 F40M	3,5 *0.14*	0,13 0.0050	0,14 0.0055	0,22 0.0085
P2	XNEX080608TR-ME09 F40M	3,5 *0.14*	0,13 0.0050	0,14 0.0055	0,22 0.0085
P3	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,18 0.0070	0,20 0.0080	0,30 0.012
P4	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,18 0.0070	0,19 0.0075	0,30 0.012
P5	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,30 0.012
P6	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,28 0.011
P7	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,28 0.011
P8	XNEX080608TR-M13 MP2501	3,5 *0.14*	0,18 0.0070	0,20 0.0080	0,30 0.012
P11	XNEX080608TR-M13 MP3501	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,28 0.011
P12	XNEX080608R-M08 MS2500	3,0 *0.12*	0,075 0.0030	0,080 0.0032	0,12 0.0048
M1	XNEX080608R-M08 F40M	3,5 *0.14*	0,12 0.0048	0,13 0.0050	0,20 0.0080
M2	XNEX080608R-M08 F40M	3,5 *0.14*	0,11 0.0044	0,12 0.0048	0,18 0.0070
M3	XNEX080608R-M08 F40M	3,0 *0.12*	0,085 0.0034	0,095 0.0038	0,14 0.0055
M4	XNEX080608R-M08 MS2050	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
M5	XNEX080608R-M08 MS2050	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
K1	XNEX080608TR-M13 MK1501	3,5 *0.14*	0,19 0.0075	0,20 0.0080	0,32 0.013
K2	XNEX080608TR-M13 MK1501	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,30 0.012
K3	XNEX080608TR-M13 MK2050	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,30 0.012
K4	XNEX080608TR-M13 MK2050	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,30 0.012
K5	XNEX080608TR-M13 MK2050	3,5 *0.14*	0,16 0.0065	0,17 0.0065	0,26 0.010
K6	XNEX080608TR-M13 MK2050	3,5 *0.14*	0,17 0.0065	0,19 0.0075	0,30 0.012
K7	XNEX080608TR-M13 MK2050	3,5 *0.14*	0,16 0.0065	0,17 0.0065	0,26 0.010
N1	XNEX080608R-M08 H25	3,5 *0.14*	0,15 0.0060	0,16 0.0065	0,25 0.010
N2	XNEX080608R-M08 H25	3,5 *0.14*	0,15 0.0060	0,16 0.0065	0,25 0.010
N3	XNEX080608R-M08 H25	3,5 *0.14*	0,15 0.0060	0,16 0.0065	0,25 0.010
N11	XNEX080608R-M08 H25	3,5 *0.14*	0,15 0.0060	0,16 0.0065	0,25 0.010
S1	XNEX080608R-M08 F40M	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
S2	XNEX080608R-M08 F40M	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
S3	XNEX080608R-M08 F40M	2,0 *0.080*	0,075 0.0030	0,080 0.0032	0,12 0.0048
S11	XNEX080608R-M08 MS2050	2,5 *0.10*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S12	XNEX080608R-M08 MS2050	2,5 *0.10*	0,085 0.0034	0,095 0.0038	0,15 0.0060
S13	XNEX080608R-M08 MS2050	2,0 *0.080*	0,080 0.0032	0,085 0.0034	0,13 0.0050
H5	XNEX080608TR-MD15 MH1051	3,0 *0.12*	0,14 0.0055	0,15 0.0060	0,22 0.0085
H8	XNEX080608TR-MD15 MH1051	2,5 *0.10*	0,11 0.0044	0,12 0.0048	0,18 0.0070
H11	XNEX080608TR-MD15 MH1051	3,0 *0.12*	0,14 0.0055	0,15 0.0060	0,22 0.0085
H12	XNEX080608TR-MD15 MH1051	2,5 *0.10*	0,11 0.0044	0,12 0.0048	0,18 0.0070
H21	XNEX080608TR-MD15 MH1051	2,5 *0.10*	0,11 0.0044	0,12 0.0048	0,18 0.0070

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.96-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H25		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	260	350	415	265	355	425	285	360	420	225	280	320	375	490	570	300	395	475	—	—	—
	—	—	—	*850*	*1150*	*1350*	*870*	*1175*	*1400*	*940*	*1175*	*1375*	*740*	*920*	*1050*	*1225*	*1600*	*1875*	*980*	*1300*	*1550*	—	—	—
P2	—	—	—	255	340	395	255	350	405	275	350	410	215	270	305	365	480	560	290	385	460	—	—	—
	—	—	—	*840*	*1125*	*1300*	*840*	*1150*	*1325*	*900*	*1150*	*1350*	*710*	*890*	*1000*	*1200*	*1575*	*1825*	*950*	*1275*	*1500*	—	—	—
P3	—	—	—	220	290	345	225	300	355	245	310	360	190	240	270	325	420	485	255	340	400	—	—	—
	—	—	—	*720*	*950*	*1125*	*740*	*980*	*1175*	*800*	*1025*	*1175*	*620*	*790*	*890*	*1075*	*1375*	*1600*	*840*	*1125*	*1300*	—	—	—
P4	—	—	—	195	260	305	200	270	315	215	275	315	175	220	260	285	370	425	225	300	355	—	—	—
	—	—	—	*640*	*850*	*1000*	*660*	*890*	*1025*	*710*	*900*	*1025*	*570*	*720*	*850*	*940*	*1225*	*1400*	*740*	*980*	*1175*	—	—	—
P5	310	420	500	190	250	295	195	255	310	205	260	300	165	200	230	275	355	405	215	285	340	—	—	—
	1025	*1375*	*1650*	*620*	*820*	*970*	*640*	*840*	*1025*	*670*	*850*	*980*	*540*	*660*	*750*	*900*	*1175*	*1325*	*710*	*940*	*1125*	—	—	—
P6	350	475	580	210	280	335	220	290	345	230	300	340	185	230	260	310	405	460	245	325	385	—	—	—
	1150	*1550*	*1900*	*690*	*920*	*1100*	*720*	*950*	*1125*	*750*	*980*	*1125*	*610*	*750*	*850*	*1025*	*1325*	*1500*	*800*	*1075*	*1275*	—	—	—
P7	330	445	550	200	265	315	205	275	325	215	280	325	175	215	245	290	385	435	230	310	365	—	—	—
	1075	*1450*	*1800*	*660*	*870*	*1025*	*670*	*900*	*1075*	*710*	*920*	*1075*	*570*	*710*	*800*	*950*	*1275*	*1425*	*750*	*1025*	*1200*	—	—	—
P8	310	420	500	185	245	290	190	250	300	205	260	300	160	200	225	275	355	405	215	285	340	—	—	—
	1025	*1375*	*1650*	*610*	*800*	*950*	*620*	*820*	*980*	*670*	*850*	*980*	*520*	*660*	*740*	*900*	*1175*	*1325*	*710*	*940*	*1125*	—	—	—
P11	320	435	530	195	255	305	200	265	315	210	275	315	170	210	235	260	410	520	220	300	355	—	—	—
	1050	*1425*	*1750*	*640*	*840*	*1000*	*660*	*870*	*1025*	*690*	*900*	*1025*	*560*	*690*	*770*	*850*	*1350*	*1700*	*720*	*980*	*1175*	—	—	—
P12	230	310	375	125	170	200	140	180	210	140	175	200	115	140	160	170	250	310	145	190	225	—	—	—
	750	*1025*	*1225*	*410*	*560*	*660*	*460*	*590*	*690*	*460*	*570*	*660*	*375*	*460*	*520*	*560*	*820*	*1025*	*475*	*620*	*740*	—	—	—
M1	—	—	—	—	—	—	180	245	285	200	265	315	155	205	240	295	460	600	210	275	330	—	—	—
	—	—	—	—	—	—	*590*	*800*	*940*	*660*	*870*	*1025*	*510*	*670*	*790*	*970*	*1500*	*1975*	*690*	*900*	*1075*	—	—	—
M2	—	—	—	—	—	—	150	200	240	165	220	260	130	170	205	250	380	490	175	230	270	—	—	—
	—	—	—	—	—	—	*490*	*660*	*790*	*540*	*720*	*850*	*425*	*560*	*670*	*820*	*1250*	*1600*	*570*	*750*	*890*	—	—	—
M3	—	—	—	—	—	—	125	165	195	135	175	210	105	140	165	205	305	385	140	185	220	—	—	—
	—	—	—	—	—	—	*410*	*540*	*640*	*445*	*570*	*690*	*345*	*460*	*540*	*670*	*1000*	*1275*	*460*	*610*	*720*	—	—	—
M4	—	—	—	—	—	—	95	130	150	105	140	160	85	110	130	155	230	285	110	145	170	—	—	—
	—	—	—	—	—	—	*310*	*425*	*490*	*345*	*460*	*520*	*280*	*360*	*425*	*510*	*750*	*940*	*360*	*475*	*560*	—	—	—
M5	—	—	—	—	—	—	80	105	125	85	115	135	70	90	105	130	190	240	90	120	140	—	—	—
	—	—	—	—	—	—	*260*	*345*	*410*	*280*	*375*	*445*	*230*	*295*	*345*	*425*	*620*	*790*	*295*	*395*	*460*	—	—	—
K1	410	560	680	275	365	425	190	260	300	—	—	—	150	205	240	—	—	—	—	—	—	170	225	265
	1350	*1825*	*2225*	*900*	*1200*	*1400*	*620*	*850*	*980*	—	—	—	*490*	*670*	*790*	—	—	—	—	—	—	*560*	*740*	*870*
K2	375	510	610	245	320	385	175	225	270	—	—	—	135	180	215	—	—	—	—	—	—	150	200	235
	1225	*1675*	*2000*	*800*	*1050*	*1275*	*570*	*740*	*890*	—	—	—	*445*	*590*	*710*	—	—	—	—	—	—	*490*	*660*	*770*
K3	320	430	510	205	270	325	145	190	230	—	—	—	115	150	180	—	—	—	—	—	—	—	—	—
	1050	*1400*	*1675*	*670*	*890*	*1075*	*475*	*620*	*750*	—	—	—	*375*	*490*	*590*	—	—	—	—	—	—	—	—	—
K4	305	410	490	195	260	310	140	185	220	—	—	—	110	145	175	—	—	—	—	—	—	—	—	—
	1000	*1350*	*1600*	*640*	*850*	*1025*	*460*	*610*	*720*	—	—	—	*360*	*475*	*570*	—	—	—	—	—	—	—	—	—
K5	190	260	310	120	160	190	85	115	135	—	—	—	70	90	105	—	—	—	—	—	—	—	—	—
	620	*850*	*1025*	*395*	*520*	*620*	*280*	*375*	*445*	—	—	—	*230*	*295*	*345*	—	—	—	—	—	—	—	—	—
K6	270	365	435	175	230	275	125	160	195	—	—	—	95	130	155	—	—	—	—	—	—	—	—	—
	890	*1200*	*1425*	*570*	*750*	*900*	*410*	*520*	*640*	—	—	—	*310*	*425*	*510*	—	—	—	—	—	—	—	—	—
K7	245	330	400	155	205	240	110	145	170	—	—	—	85	115	135	—	—	—	—	—	—	—	—	—
	800	*1075*	*1300*	*510*	*670*	*790*	*360*	*475*	*560*	—	—	—	*280*	*375*	*445*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1125	1475	1750	—	—	—	—	—	—	1250	1675	1975
	—	—	—	—	—	—	—	—	—	—	—	—	*3700*	*4850*	*5750*	—	—	—	—	—	—	*4100*	*5500*	*6475*
N2	—	—	—	—	—	—	—	—	—	—	—	—	450	600	710	—	—	—	—	—	—	510	680	790
	—	—	—	—	—	—	—	—	—	—	—	—	*1475*	*1975*	*2325*	—	—	—	—	—	—	*1675*	*2225*	*2600*
N3	—	—	—	—	—	—	—	—	—	—	—	—	300	400	475	—	—	—	—	—	—	340	450	530
	—	—	—	—	—	—	—	—	—	—	—	—	*980*	*1300*	*1550*	—	—	—	—	—	—	*1125*	*1475*	*1750*
N11	—	—	—	—	—	—	—	—	—	—	—	—	340	455	540	—	—	—	—	—	—	390	520	610
	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1500*	*1775*	—	—	—	—	—	—	*1275*	*1700*	*2000*
S1	—	—	—	—	—	—	45	60	70	49	65	75	39	50	60	55	70	85	55	70	85	—	—	—
	—	—	—	—	—	—	*150*	*195*	*230*	*160*	*215*	*245*	*130*	*165*	*195*	*180*	*230*	*280*	*180*	*230*	*280*	—	—	—
S2	—	—	—	—	—	—	36	48	55	39	50	60	31	41	48	43	55	65	43	55	65	—	—	—
	—	—	—	—	—	—	*120*	*155*	*180*	*130*	*165*	*195*	*100*	*135*	*155*	*140*	*180*	*215*	*140*	*180*	*215*	—	—	—
S3	—	—	—	—	—	—	32	42	49	34	45	55	27	36	42	38	50	60	38	50	60	—	—	—
	—	—	—	—	—	—	*105*	*140*	*160*	*110*	*150*	*180*	*90*	*120*	*140*	*125*	*165*	*195*	*125*	*165*	*195*	—	—	—
S11	—	—	—	—	—	—	—	—	—	70	90	105	55	70	85	75	100	115	75	100	115	38	49	60
	—	—	—	—	—	—	—	—	—	*230*	*295*	*345*	*180*	*230*	*280*	*245*	*330*	*375*	*245*	*330*	*375*	*125*	*160*	*195*
S12	—	—	—	—	—	—	—	—	—	47	60	75	37	49	60	50	70	80	50	70	80	—	—	—
	—	—	—	—	—	—	—	—	—	*155*	*195*	*245*	*120*	*160*	*195*	*165*	*230*	*260*	*165*	*230*	*260*	—	—	—
S13	—	—	—	—	—	—	—	—	—	27	36	43	22	29	33	30	40	47	30	40	47	—	—	—
	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*	*70*	*95*	*110*	*100*	*130*	*155*	*100*	*130*	*155*	—	—	—
H5	120	160	190	44	60	70	38	50	60	—	—	—	32	42	50	—	—	—	—	—	—	—	—	—
	395	*520*	*620*	*145*	*195*	*230*	*125*	*165*	*195*	—	—	—	*105*	*140*	*165*	—	—	—	—	—	—	—	—	—
H8	135	180	210	47	60	75	41	55	65	—	—	—	35	46	55	—	—	—	—	—	—	—	—	—
	445	*590*	*690*	*155*	*195*	*245*	*135*	*180*	*215*	—	—	—	*115*	*150*	*180*	—	—	—	—	—	—	—	—	—
H11	150	205	245	55	75	85	48	65	75	—	—	—	41	55	65	110	165	205	55	75	85	—	—	—
	490	*670*	*800*	*180*	*245*	*280*	*155*	*215*	*245*	—	—	—	*135*	*180*	*215*	*360*	*540*	*670*	*180*	*245*	*280*	—	—	—
H12	155	210	245	80	105	125	80	105	120	—	—	—	60	85	95	100	140	175	95	120	140	—	—	—
	510	*690*	*800*	*260*	*345*	*410*	*260*	*345*	*395*	—	—	—	*195*	*280*	*310*	*330*	*460*	*570*	*310*	*395*	*460*	—	—	—
H21	135	180	210	47	60	75	41	55	65	—	—	—	35	46	55	100	110	120	47	60	70	—	—	—
	445	*590*	*690*	*155*	*195*	*245*	*135*	*180*	*215*	—	—	—	*115*	*150*	*180*	*330*	*360*	*395*	*155*	*195*	*230*	—	—	—

R217/220.96-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	380	475	540	370	465	530	415	510	580	390	475	540	245	310	360
	—	—	—	*1250*	*1550*	*1775*	*1225*	*1525*	*1750*	*1350*	*1675*	*1900*	*1275*	*1550*	*1775*	*800*	*1025*	*1175*
P2	—	—	—	370	465	520	360	455	510	400	495	570	380	465	530	240	305	350
	—	—	—	*1225*	*1525*	*1700*	*1175*	*1500*	*1675*	*1300*	*1625*	*1875*	*1250*	*1525*	*1750*	*790*	*1000*	*1150*
P3	—	—	—	325	400	455	315	390	445	355	435	490	335	405	455	210	265	305
	—	—	—	*1075*	*1300*	*1500*	*1025*	*1275*	*1450*	*1175*	*1425*	*1600*	*1100*	*1325*	*1500*	*690*	*870*	*1000*
P4	—	—	—	285	355	400	280	350	395	310	385	435	295	355	400	200	250	290
	—	—	—	*940*	*1175*	*1300*	*920*	*1150*	*1300*	*1025*	*1275*	*1425*	*970*	*1175*	*1300*	*660*	*820*	*950*
P5	—	—	—	275	340	390	270	335	385	295	365	415	280	340	385	175	225	255
	—	—	—	*900*	*1125*	*1275*	*890*	*1100*	*1275*	*970*	*1200*	*1350*	*920*	*1125*	*1275*	*570*	*740*	*840*
P6	—	—	—	310	380	435	305	375	430	335	415	470	315	390	435	200	250	285
	—	—	—	*1025*	*1250*	*1425*	*1000*	*1225*	*1400*	*1100*	*1350*	*1550*	*1025*	*1275*	*1425*	*660*	*820*	*940*
P7	—	—	—	295	360	415	285	355	405	315	395	440	295	365	410	185	240	270
	—	—	—	*970*	*1175*	*1350*	*940*	*1175*	*1325*	*1025*	*1300*	*1450*	*970*	*1200*	*1350*	*610*	*790*	*890*
P8	—	—	—	270	335	385	265	330	375	295	365	415	280	340	385	175	225	255
	—	—	—	*890*	*1100*	*1275*	*870*	*1075*	*1225*	*970*	*1200*	*1350*	*920*	*1125*	*1275*	*570*	*740*	*840*
P11	—	—	—	285	350	400	280	345	395	305	380	430	290	355	400	180	230	265
	—	—	—	*940*	*1150*	*1300*	*920*	*1125*	*1300*	*1000*	*1250*	*1400*	*950*	*1175*	*1300*	*590*	*750*	*870*
P12	—	—	—	185	225	255	185	225	255	195	235	260	185	220	245	110	140	155
	—	—	—	*610*	*740*	*840*	*610*	*740*	*840*	*640*	*770*	*850*	*610*	*720*	*800*	*360*	*460*	*510*
M1	—	—	—	—	—	—	185	250	290	230	305	365	200	265	315	155	205	245
	—	—	—	—	—	—	*610*	*820*	*950*	*750*	*1000*	*1200*	*660*	*870*	*1025*	*510*	*670*	*800*
M2	—	—	—	—	—	—	155	205	240	190	255	300	165	220	260	130	170	200
	—	—	—	—	—	—	*510*	*670*	*790*	*620*	*840*	*980*	*540*	*720*	*850*	*425*	*560*	*660*
M3	—	—	—	—	—	—	125	165	195	155	205	245	135	175	210	105	140	165
	—	—	—	—	—	—	*410*	*540*	*640*	*510*	*670*	*800*	*445*	*570*	*690*	*345*	*460*	*540*
M4	—	—	—	—	—	—	100	130	150	120	160	190	105	140	160	80	110	125
	—	—	—	—	—	—	*330*	*425*	*490*	*395*	*520*	*620*	*345*	*460*	*520*	*260*	*360*	*410*
M5	—	—	—	—	—	—	80	110	125	100	135	155	85	115	135	70	90	105
	—	—	—	—	—	—	*260*	*360*	*410*	*330*	*445*	*510*	*280*	*375*	*445*	*230*	*295*	*345*
K1	330	580	800	375	470	520	365	460	510	255	340	405	380	470	530	—	—	—
	1075	*1900*	*2625*	*1225*	*1550*	*1700*	*1200*	*1500*	*1675*	*840*	*1125*	*1325*	*1250*	*1550*	*1750*	—	—	—
K2	290	510	710	335	410	470	330	405	465	230	300	355	340	415	465	—	—	—
	950	*1675*	*2325*	*1100*	*1350*	*1550*	*1075*	*1325*	*1525*	*750*	*980*	*1175*	*1125*	*1350*	*1525*	—	—	—
K3	225	330	415	285	350	400	275	340	390	195	255	300	285	350	395	—	—	—
	740	*1075*	*1350*	*940*	*1150*	*1300*	*900*	*1125*	*1275*	*640*	*840*	*980*	*940*	*1150*	*1300*	—	—	—
K4	215	315	400	270	335	380	265	325	375	185	245	290	275	335	375	—	—	—
	710	*1025*	*1300*	*890*	*1100*	*1250*	*870*	*1075*	*1225*	*610*	*800*	*950*	*900*	*1100*	*1225*	—	—	—
K5	130	195	240	165	205	230	160	200	225	115	150	175	170	205	225	—	—	—
	425	*640*	*790*	*540*	*670*	*750*	*520*	*660*	*740*	*375*	*490*	*570*	*560*	*670*	*740*	—	—	—
K6	190	275	350	240	295	335	235	285	330	160	215	255	240	295	330	—	—	—
	620	*900*	*1150*	*790*	*970*	*1100*	*770*	*940*	*1075*	*520*	*710*	*840*	*790*	*970*	*1075*	—	—	—
K7	170	245	310	210	260	295	205	255	290	145	195	225	215	260	290	—	—	—
	560	*800*	*1025*	*690*	*850*	*970*	*670*	*840*	*950*	*475*	*640*	*740*	*710*	*850*	*950*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	60	80	90	49	65	75	25	33	39
	—	—	—	—	—	—	—	—	—	*195*	*260*	*295*	*160*	*215*	*245*	*80*	*110*	*130*
S2	—	—	—	—	—	—	—	—	—	48	65	75	39	50	60	20	27	31
	—	—	—	—	—	—	—	—	—	*155*	*215*	*245*	*130*	*165*	*195*	*65*	*90*	*100*
S3	—	—	—	—	—	—	—	—	—	42	55	65	34	45	55	18	23	27
	—	—	—	—	—	—	—	—	—	*140*	*180*	*215*	*110*	*150*	*180*	*60*	*75*	*90*
S11	—	—	—	—	—	—	—	—	—	85	110	130	70	90	105	35	46	55
	—	—	—	—	—	—	—	—	—	*280*	*360*	*425*	*230*	*295*	*345*	*115*	*150*	*180*
S12	—	—	—	—	—	—	—	—	—	60	75	90	47	60	75	33	42	50
	—	—	—	—	—	—	—	—	—	*195*	*245*	*295*	*155*	*195*	*245*	*110*	*140*	*165*
S13	—	—	—	—	—	—	—	—	—	33	44	50	27	36	43	19	25	29
	—	—	—	—	—	—	—	—	—	*110*	*145*	*165*	*90*	*120*	*140*	*60*	*80*	*95*
H5	—	—	—	49	65	75	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*160*	*215*	*245*	—	—	—	—	—	—	—	—	—	—	—	—
H8	—	—	—	55	70	80	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*180*	*230*	*260*	—	—	—	—	—	—	—	—	—	—	—	—
H11	—	—	—	60	80	95	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*195*	*260*	*310*	—	—	—	—	—	—	—	—	—	—	—	—
H12	—	—	—	95	125	145	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*310*	*410*	*475*	—	—	—	—	—	—	—	—	—	—	—	—
H21	—	—	—	55	70	80	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*180*	*230*	*260*	—	—	—	—	—	—	—	—	—	—	—	—

Chiavi di codifica in mm e in pollici

R	217	.	69	-	25	32	.	3S	-	042	-	10	.	4	A
1	2		3		4	5		6		7		8		9	10

R	217	.	69	-	01.50	-	3	-	01.34	-	10	-	4	A
1	2		3		5		6		7		8		9	10

1.

Rotazione destra
Cx = Seco-Capto

2.

215/217=Attacco a stelo
220 = Attacco a manicotto
235 = Finitura

3.

69 = Rettangolare positivo 2 taglienti
94 = Tangenziale 4 taglienti
59 = Positivo quadrato 4 taglienti
15 = Finitura

4. (Non applicabile per la designazione in pollici)

Diametro stelo
(ad eccezione del tipo a manicotto)

5.

Diametro fresa

6.

Tipo di stelo (ad eccezione del tipo a manicotto)
0 = Cilindrico
3 = Weldon
3S = Seco Weldon
RE = Combimaster

7.

Massima profondità
assiale di taglio

8.

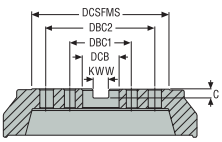
Dimensione dell'inserto
xxS = tagliente corto
xxM = tagliente medio
xxL = tagliente lungo
xxH = per impieghi pesanti

9.

Num. di taglienti effettivo (ZEFP)

10.

A = Adduzione refrigerante interna
N = Rivestito
S = Regolato
H = Impieghi pesanti
K = Elica completa (solo per .59)
R6 = Compatibile con raggio di punta di 6,3 mm (solo per .59)



Dimensioni in mm

DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

Fresa	Inserto	Capacità di lavorare materiali					Raggio di punta (mm)					
		P	M	K	N	S						
Turbo	XO..06	■	■	■	■	■	0,2/0,4/0,8/1,6	■	□	■	■	◩
	XO..10	■	■	■	■	■	0,2/0,4/0,8/1,2/1,6/2,0/2,4/3,1	■	◩	■	■	◩
	XO..12	■	■	■	■	■	0,2/0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	◩	■	■	■	◩
	XO..16	■	■	■	■	■	0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	◩	■	■	■	◩
	XO..18	■	■	■	■	■	0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	□	■	■	■	◩
T4 elicoidale	LO..08	■	□	■	–	◩	0,4/0,8/1,2/1,6	◩	◩	◩	–	□
	LO..12	■	◩	■	◩	◩	0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	◩	◩	◩	–	□
R215/220.59 / R215/220.59K	AC15 SC12	◩	◩	◩	□	□	1,2/3,0/3,1/6,0	_	■	□	_	□
220.69-15	AC15	◩	◩	◩	□	□	1,2/3,0/3,1/6,0	_	■	□	_	□

Soluzione elicoidale per contornatura di finitura (piccolo impegno radiale)

235.15	— -	■	■	■	-	■	Smusso	■	■	◩	-	-

1a scelta ■

Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

Non consigliata –

Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

Selezione – In mm

Fresa	Numero di taglienti	Applicazione	Diametro fresa (mm)/profondità di taglio disponibile e numero di denti															Vedere pagina
			12	14	16	20	25	32	40	44	50	54	63	66	80	100	125	
Turbo 06	2		10 (2)	15 (2)	20 (2)	20 (3) / 25 (3)												130
					15 (3)													
Turbo 10	2					25 (1)	25 (2)	25 (3)	34 (4)		42 (5)							135
						17 (2)	17 (3) / 25 (3) / 34 (3) / 42 (2)	34 (4) / 42 (4) / 50 (3)	34 (5) / 58 (4)	58 (5)	42 (6)							
Turbo 12	2						22 (2) / 33 (2)	33 (2)	33 (3) / 55 (3)	33 (3)	33 (4) / 44 (4) / 55 (4) / 66 (4)	44 (4)	33 (5) / 55 (5)	44 (5)				141
								22 (3) / 33 (3) / 44 (3) / 55 (3)	44 (4) / 65.5 (3)		44 (5) / 86 (5) / 106 (5)		77 (4) / 107 (5)		64 (6)			
Turbo 16	2							29 (2)	29 (3) 43 (3)		57 (3)		43 (4)		71 (5)	71 (6)		149
									71 (3)		43 (4) 57 (4) 85 (4) 98 (4)		57 (5) 85 (5)		71 (6)			
Turbo 18	2								47 (2)		47 (3) / 62 (3)	47 (3)	47 (4) / 62 (3)	47 (4)	47 (5) / 62 (5)	62 (6)		156
													62 (4) / 77 (4)		77 (4) / 93 (5)	77 (5)		
T4 08	4						29 (2) / 36 (2)	36 (3)	36 (3)		43 (4)							185
							43 (2)	43 (3) / 50 (3)	43 (4) / 50 (4)	57 (4)	57 (5)	64 (5)						
T4 12	4								35 (2)	35 (3)	35 (3) / 46 (3)		46 (4)					190
										58 (3)	46 (4) / 58 (4) / 81 (4)	69 (4)	58 (5) / 81 (4) / 92 (4)	81 (5)	69 (5) / 104 (5)	81 (6)		
215/220.59	2 e 4 denti effettivi dimezzati										50 (2) / 59 (2)		59 (2)		68 (2/3)	77 (3/4)		197
											77 (2) / 120 (2)		86 (2) / 120 (2) / 160 (2)		95 (2/3)			197
215/220.59K	2 e 4 piena efficacia										63 (3) / 72 (3)		72 (4) / 110 (3)		72 (5)			197
220.69-15	2												38 (4)		38 (5) / 50 (5)	50 (6)	50 (7)	204
235.15	1							40 (2)			50 (3)				90 (3)			208

x(y) **Operazioni di scanalatura e contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

x(y) **Solo per le operazioni di contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

Scanalatura e contornatura

Solo contornatura

Selezione – Pollici

Fresa	Inserto	Capacità di lavorare materiali					Raggio di punta (pollici)					
		P	M	K	N	S						
Turbo	XO..06	■	■	■	■	■	.007/.016 .031/.063	■	□	■	■	◩
	XO..10	■	■	■	■	■	.007/.016/.031 .047/.063 .079/.094 .122	■	◩	■	■	◩
	XO..12	■	■	■	■	■	.007/.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	◩	■	■	■	◩
	XO..16	■	■	■	■	■	.007/.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	◩	■	■	■	◩
	XO..18	■	■	■	■	■	.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	□	■	■	■	◩
T4 elicoidale	LO..08	■	□	■	–	◩	.016/.031 .047/.063	◩	◩	◩	–	□
	LO..12	■	◩	■	◩	◩	.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	◩	◩	◩	–	□
220.69-15	AC15	◩	◩	◩	□	□	.047/.122 .118/.236	–	■	□	–	□

Soluzione elicoidale per contornatura di finitura (piccolo impegno radiale)

235.15		■	■	■	-	■	Smusso	■	■	◩	-	-

1a scelta ■

Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

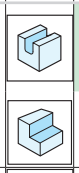
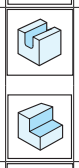
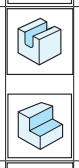
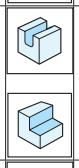
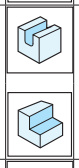
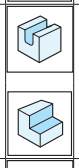
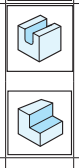
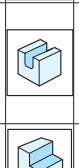
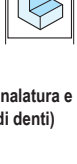
Non consigliata –

Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

Selezione – Pollici

Fresa	Numero di taglienti	Applicazione	Diametro fresa (pollici)/profondità di taglio disponibile e numero di denti								Vedere pagina
			0.750	1.00	1.25	1.50	2.00	2.50	3.00	4.00	
Turbo 06	2		1.024 (3)								130
Turbo 10	2			1.024 (2)		1.378 (4)					135
				1.378 (3) / 1.693 (2)		1.339 (5)					
Turbo 12	2			0.870 (2) / 0.902 (2)	1.299 (2)	1.732 (3)	1.740 (4) / 2.591 (4)	2.953 (4)			141
					1.732 (3)	1.732 (4) / 2.165 (4) / 2.559 (3)	2.146 (5)				
Turbo 16	2					1.69 (3)	1.69 (3)	1.69 (4)	2.79 (5)		141
							1.69 (4) 2.24 (4) 3.89 (4)	2.24 (5) / 3.34 (5)			
Turbo 18	2					1.862 (2)	1.850 (3)	1.866 (4) / 2.409 (4) / 2.441 (4)	2.480 (5) / 3.024 (4)	3.024 (5)	156
							2.441 (3)	3.024 (4)			
Helical T4 08	4			1.417 (2)	1.417 (2)		1.693 (4)				185
				1.693 (2)		1.969 (4)					
Helical T4 12	4						1.406 (3) / 1.850 (3)				190
							2.283 (4) / 2.310 (4)	3.189 (4) / 3.211 (4)	3.189 (5) / 3.211 (5)		
220.69-15	2						1.567 (3)				204
235.15	1						1.969 (3)		3.500 (3)		208

x(y) **Operazioni di scanalatura e contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

x(y) **Solo per le operazioni di contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

 **Scanalatura e contornatura**

 **Solo contornatura**

Selezione – In mm

Fresa	Inserto	Capacità di lavorare materiali					Raggio di punta (mm)					
		P	M	K	N	S						
Elica destrorsa R217/220.82-SNXO16	XO.X16	■	■	■	□	■	0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	–	■	–	■	◩
	SN.U13											
Elica destrorsa R217/220.82-SNAC15-H Elica sinistrorsa R217/220.81-SNAC15 R217/220.81-SNAC15-K	AC.T15	■	◩	■	□	□	1,2/3,0/3,1/6,0	–	■	◩	–	–
	SN.U13											
R217/220.42-LNXO	LN.U11	■	■	■	□	■	0,2/0,4/0,8/1,2/1,6/2,0/2,4/3,1/4,0/5,0/6,3	–	■	–	■	◩
	XO.X12											

■ 1a scelta

◩ Scelta alternativa

□ Scelta possibile

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

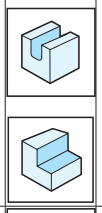
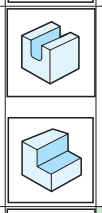
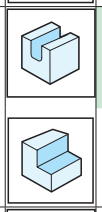
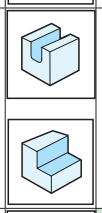
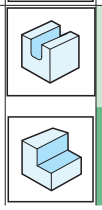
– Non consigliata

Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

Selezione – In mm

Fresa	Numero di taglienti	Applicazione	Diametro fresa (mm)/profondità di taglio disponibile e numero di denti									Vedere pagina
			32	40	50	63	80	100	125	160	200	
Elica destrorsa R2177220.82-SNXO16	2/8				47 (3)	47 (4)	68 (5)					165
						69 (5) / 79 (4)	79 (6)					
Elica destrorsa R217/220.82-SNAC15-H	2/8					46 (4)	57 (5)	57 (6)				173
Elica sinistrorsa R217/220.81-SNAC15	2/8		68 (2)	68 (2)	68 (2)	68 (2)	68 (3)	68 (4)				171
Elica sinistrorsa R217/220.81-SNAC15-K	2/8					68 (4)	79 (5)					172
R217/220.42-LNXO	2/8		41 (3)	70 (3)	70 (5)	50 (6)						178
			21 (3)	41 (4)	40 (4)							

x(y) **Operazioni di scanalatura e contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

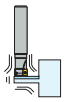
x(y) **Solo per le operazioni di contornatura: x indica la profondità di taglio massima (y indica il numero di denti)**

 **Scanalatura e contornatura**

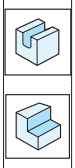
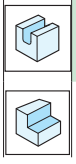
 **Solo contornatura**

Selezione – Pollici

Fresa	Inserto	Capacità di lavorare materiali					Raggio di punta (pollici)					
		P	M	K	N	S						
Elica destrorsa R2177220.82-SNXO16	XO.X16  SN.U13 	■	■	■	□	■	.007/.016/.031 .047/.063 .079/.094 .122/.157 .197/.248	–	■	–	■	◩
R217/220.42-LNXO	LN.U11  XO.X12 	■	■	■	□	■	.008/.016/.031/.047 /.063/.079/.094/.122 /.157/.197/.248/	–	■	–	■	◩

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia		Capacità di lavorare in condizioni instabili	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida		Capacità di effettuare lavorazioni di entrata in rampa	
Scelta possibile	□	Non consigliata	–	Capacità di effettuare lavorazioni di penetrazione assiale	

Selezione – Pollici

Fresa	Numero di taglienti	Applicazione	Diametro fresa (pollici)/profondità di taglio disponibile e numero di denti						Vedere pagina
			1.25	1.50	2.00	2.50	3.00	4.00	
Elica destrorsa R2177220.82-SNXO16	2/8				1.85 (3)	1.85 (4)	2.68 (5)		165
						2.75 (5) / 3.11 (4)	3.11 (6)		
R217/220.42-LNXO	2/8		1.61 (3)	2.79 (3)	3.90 (5)				178
				1.61 (3)	1.96 (5)				

x(y)	Operazioni di scanalatura e contornatura: x indica la profondità di taglio massima (y indica il numero di denti)		Scanalatura e contornatura
x(y)	Solo per le operazioni di contornatura: x indica la profondità di taglio massima (y indica il numero di denti)		Solo contornatura



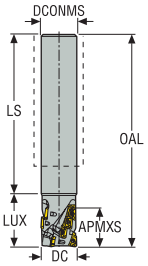
TURBO HELICAL

La gamma di frese elicoidali Turbo ad alte prestazioni di Seco offre elevate velocità di avanzamento, ampie profondità di taglio ed elevate velocità di asportazione nelle applicazioni di contornatura e profilatura. Queste frese rappresentano la prima scelta per la produzione mista in tutti i materiale da lavorare.

- Dimensione dell'inserto 06, gamma frese 12-20 mm (0,75")
- Dimensione dell'inserto 10, gamma frese 20-50 mm (1")
- Dimensione dell'inserto 12, gamma frese 25-66 mm (1-2,5")
- Dimensione dell'inserto 16, gamma frese 32-100 mm (1,5-3")
- Dimensione dell'inserto 18, gamma frese 40-100 mm (1,5-4")

Turbo 06 – R217.69-06 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 133-134
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm		kg	
R217.69-1612.0-10-06.2N	02709311	Cilindrico	12,0	2	4	10,0	16,0	23,0	53,0	98,0	54400	0,2	XO.X0602
R217.69-1616.0-15-06.3N	02709314	Cilindrico	16,0	3	9	15,0	16,0	30,0	62,0	110,0	48000	0,2	XO.X0602
R217.69-1616.0-20-06.2N	02709316	Cilindrico	16,0	2	8	20,0	16,0	30,0	62,0	110,0	48000	0,2	XO.X0602
R217.69-2020.0-25-06.3N	02709317	Cilindrico	20,0	3	15	25,0	20,0	35,0	70,0	120,0	44000	0,4	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,8 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H4B-T06P	C01804-T06P	DOUBLE-T

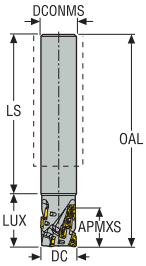
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 06 – R217.69-06 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 133-134
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch		lb	
R217.69-00.75-0-06M3N	02710568	Cilindrico	0.750	3	15	1.024	0.750	1.378	3.031	5.000	44000	0.660	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,031”

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H4B-T06P	C01804-T06P	DOUBLE-T

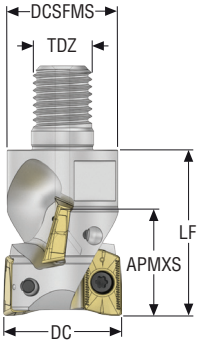
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 06 – R217.69-06– In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 133-134
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	TDZ	LF	OAL	RPMX	Peso	Inserto
			mm			mm	mm		mm	mm		kg	
R217.69-0814.RE-15-06.2N	02709297	Combimaster	14,0	2	6	15,0	13,2	M8	25,0	42,75	51200	0,1	XO.X0602
R217.69-1020.RE-20-06.3AN	02709306	Combimaster	20,0	3	12	20,0	18,5	M10	35,0	53,75	44800	0,2	XO.X0602

Modifica dei corpi fresa necessaria per raggi di punta > 0,8 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H4B-T06P	C01804-T06P	DOUBLE-T

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-06 – Selezione dell'inserto – In mm/ In pollici

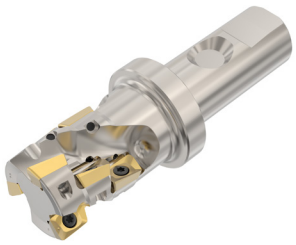
SMG		f_z		
		100%	30%	10%
P1	XOMX060208R-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,095 0.0038
P2	XOMX060208R-M05 F40M	0,060 *0.0024*	0,065 0.0026	0,095 0.0038
P3	XOMX060208R-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,090 0.0036
P4	XOMX060208R-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,090 0.0036
P5	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
P6	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
P7	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
P8	XOMX060208R-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,090 0.0036
P11	XOMX060208R-M05 MP3000	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
P12	XOMX060208R-M05 MP3000	0,036 *0.0014*	0,040 0.0016	0,060 0.0024
M1	XOMX060208R-M05 MS2050	0,060 *0.0024*	0,065 0.0026	0,095 0.0038
M2	XOMX060208R-M05 MS2050	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
M3	XOMX060208R-M05 MS2050	0,042 *0.0017*	0,046 0.0018	0,070 0.0028
M4	XOMX060208R-M05 MS2050	0,038 *0.0015*	0,040 0.0016	0,060 0.0024
M5	XOMX060208R-M05 MS2050	0,038 *0.0015*	0,040 0.0016	0,060 0.0024
K1	XOMX060208R-M05 F40M	0,060 *0.0024*	0,065 0.0026	0,095 0.0038
K2	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
K3	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
K4	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
K5	XOMX060208R-M05 F40M	0,048 *0.0019*	0,050 0.0020	0,080 0.0032
K6	XOMX060208R-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,090 0.0036
K7	XOMX060208R-M05 F40M	0,048 *0.0019*	0,050 0.0020	0,080 0.0032
N1	XOEX060204FR-E03 H15	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
N2	XOEX060204FR-E03 H15	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
N3	XOEX060204FR-E03 H15	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
N11	XOEX060204FR-E03 H15	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
S1	XOMX060208R-M05 F40M	0,038 *0.0015*	0,040 0.0016	0,060 0.0024
S2	XOMX060208R-M05 F40M	0,038 *0.0015*	0,040 0.0016	0,060 0.0024
S3	XOMX060208R-M05 F40M	0,034 *0.0013*	0,038 0.0015	0,060 0.0024
S11	XOMX060208R-M05 MS2050	0,042 *0.0017*	0,046 0.0018	0,070 0.0028
S12	XOMX060208R-M05 MS2050	0,042 *0.0017*	0,046 0.0018	0,070 0.0028
S13	XOMX060208R-M05 MS2050	0,038 *0.0015*	0,040 0.0016	0,060 0.0024
H5	XOMX060208R-M05 MP3000	0,036 *0.0014*	0,040 0.0016	0,060 0.0024
H8	XOMX060208R-M05 MP3000	0,028 *0.0011*	0,030 0.0012	0,046 0.0018
H11	XOMX060208R-M05 MP3000	0,036 *0.0014*	0,040 0.0016	0,060 0.0024
H12	XOMX060208R-M05 MP3000	0,028 *0.0011*	0,030 0.0012	0,046 0.0018

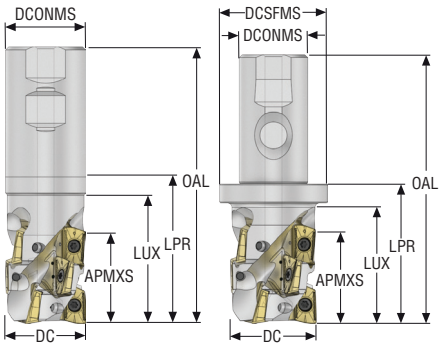
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			F30M			MP3000			MS2050			F40M			H15			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	165	180	190	175	195	205	165	185	195	160	180	190	—	—	—	145	165	175
	—	—	—	*540*	*590*	*620*	*570*	*640*	*670*	*540*	*610*	*640*	*520*	*590*	*620*	—	—	—	*475*	*540*	*570*
P2	—	—	—	160	180	190	175	190	200	165	180	195	160	175	185	—	—	—	145	160	175
	—	—	—	*520*	*590*	*620*	*570*	*620*	*660*	*540*	*590*	*640*	*520*	*570*	*610*	—	—	—	*475*	*520*	*570*
P3	—	—	—	150	170	180	165	180	195	155	175	185	150	165	180	—	—	—	135	155	165
	—	—	—	*490*	*560*	*590*	*540*	*590*	*640*	*510*	*570*	*610*	*490*	*540*	*590*	—	—	—	*445*	*510*	*540*
P4	—	—	—	145	160	170	155	175	185	—	—	—	140	160	170	—	—	—	125	145	155
	—	—	—	*475*	*520*	*560*	*510*	*570*	*610*	—	—	—	*460*	*520*	*560*	—	—	—	*410*	*475*	*510*
P5	—	—	—	140	160	170	155	170	180	—	—	—	140	155	165	—	—	—	125	140	155
	—	—	—	*460*	*520*	*560*	*510*	*560*	*590*	—	—	—	*460*	*510*	*540*	—	—	—	*410*	*460*	*510*
P6	—	—	—	150	165	180	160	180	190	—	—	—	145	165	175	—	—	—	130	150	160
	—	—	—	*490*	*540*	*590*	*520*	*590*	*620*	—	—	—	*475*	*540*	*570*	—	—	—	*425*	*490*	*520*
P7	—	—	—	145	165	175	155	175	185	—	—	—	145	160	170	—	—	—	130	145	155
	—	—	—	*475*	*540*	*570*	*510*	*570*	*610*	—	—	—	*475*	*520*	*560*	—	—	—	*425*	*475*	*510*
P8	—	—	—	140	160	170	150	170	180	—	—	—	135	155	165	—	—	—	125	140	150
	—	—	—	*460*	*520*	*560*	*490*	*560*	*590*	—	—	—	*445*	*510*	*540*	—	—	—	*410*	*460*	*490*
P11	—	—	—	145	160	170	155	175	185	—	—	—	140	160	170	—	—	—	125	145	155
	—	—	—	*475*	*520*	*560*	*510*	*570*	*610*	—	—	—	*460*	*520*	*560*	—	—	—	*410*	*475*	*510*
P12	—	—	—	115	130	140	125	145	155	—	—	—	110	130	140	—	—	—	95	115	125
	—	—	—	*375*	*425*	*460*	*410*	*475*	*510*	—	—	—	*360*	*425*	*460*	—	—	—	*310*	*375*	*410*
M1	—	—	—	145	165	175	155	170	185	150	170	180	145	160	175	—	—	—	135	150	165
	—	—	—	*475*	*540*	*570*	*510*	*560*	*610*	*490*	*560*	*590*	*475*	*520*	*570*	—	—	—	*445*	*490*	*540*
M2	—	—	—	135	155	165	140	160	170	140	155	165	130	150	160	—	—	—	120	140	150
	—	—	—	*445*	*510*	*540*	*460*	*520*	*560*	*460*	*510*	*540*	*425*	*490*	*520*	—	—	—	*395*	*460*	*490*
M3	—	—	—	120	135	145	125	145	155	125	140	150	115	135	145	—	—	—	105	125	135
	—	—	—	*395*	*445*	*475*	*410*	*475*	*510*	*410*	*460*	*490*	*375*	*445*	*475*	—	—	—	*345*	*410*	*445*
M4	—	—	—	100	120	130	110	125	135	105	125	135	100	115	125	—	—	—	90	105	115
	—	—	—	*330*	*395*	*425*	*360*	*410*	*445*	*345*	*410*	*445*	*330*	*375*	*410*	—	—	—	*295*	*345*	*375*
M5	—	—	—	90	110	120	95	115	125	95	110	120	85	105	115	—	—	—	75	95	105
	—	—	—	*295*	*360*	*395*	*310*	*375*	*410*	*310*	*360*	*395*	*280*	*345*	*375*	—	—	—	*245*	*310*	*345*
K1	155	170	185	145	165	175	155	175	185	—	—	—	140	160	170	—	—	—	—	—	—
	510	*560*	*610*	*475*	*540*	*570*	*510*	*570*	*610*	—	—	—	*460*	*520*	*560*	—	—	—	—	—	—
K2	145	165	175	140	155	165	150	170	180	—	—	—	135	155	165	—	—	—	—	—	—
	475	*540*	*570*	*460*	*510*	*540*	*490*	*560*	*590*	—	—	—	*445*	*510*	*540*	—	—	—	—	—	—
K3	135	155	165	125	145	155	140	155	165	—	—	—	125	140	150	—	—	—	—	—	—
	445	*510*	*540*	*410*	*475*	*510*	*460*	*510*	*540*	—	—	—	*410*	*460*	*490*	—	—	—	—	—	—
K4	135	150	160	125	140	150	135	155	165	—	—	—	120	140	150	—	—	—	—	—	—
	445	*490*	*520*	*410*	*460*	*490*	*445*	*510*	*540*	—	—	—	*395*	*460*	*490*	—	—	—	—	—	—
K5	100	120	130	90	110	120	100	120	130	—	—	—	85	105	115	—	—	—	—	—	—
	330	*395*	*425*	*295*	*360*	*395*	*330*	*395*	*425*	—	—	—	*280*	*345*	*375*	—	—	—	—	—	—
K6	125	140	155	115	135	145	125	145	155	—	—	—	115	130	140	—	—	—	—	—	—
	410	*460*	*510*	*375*	*445*	*475*	*410*	*475*	*510*	—	—	—	*375*	*425*	*460*	—	—	—	—	—	—
K7	115	135	145	105	125	135	120	135	145	—	—	—	105	120	130	—	—	—	—	—	—
	375	*445*	*475*	*345*	*410*	*445*	*395*	*445*	*475*	—	—	—	*345*	*395*	*425*	—	—	—	—	—	—
N1	290	305	320	280	300	310	—	—	—	—	—	—	275	295	305	280	300	310	—	—	—
	950	*1000*	*1050*	*920*	*980*	*1025*	—	—	—	—	—	—	*900*	*970*	*1000*	*920*	*980*	*1025*	—	—	—
N2	230	245	260	220	240	250	—	—	—	—	—	—	215	235	245	220	240	250	—	—	—
	750	*800*	*850*	*720*	*790*	*820*	—	—	—	—	—	—	*710*	*770*	*800*	*720*	*790*	*820*	—	—	—
N3	200	220	230	190	210	220	—	—	—	—	—	—	190	210	220	190	210	220	—	—	—
	660	*720*	*750*	*620*	*690*	*720*	—	—	—	—	—	—	*620*	*690*	*720*	*620*	*690*	*720*	—	—	—
N11	210	230	240	200	220	230	—	—	—	—	—	—	200	215	225	200	220	230	—	—	—
	690	*750*	*790*	*660*	*720*	*750*	—	—	—	—	—	—	*660*	*710*	*740*	*660*	*720*	*750*	—	—	—
S1	—	—	—	—	—	—	—	—	—	55	70	80	50	65	75	—	—	—	28	37	43
	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*	*165*	*215*	*245*	—	—	—	*90*	*120*	*140*
S2	—	—	—	—	—	—	—	—	—	45	60	70	41	55	60	—	—	—	23	30	35
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*135*	*180*	*195*	—	—	—	*75*	*100*	*115*
S3	—	—	—	—	—	—	—	—	—	39	50	60	36	46	55	—	—	—	20	26	30
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*	*120*	*150*	*180*	—	—	—	*65*	*85*	*100*
S11	—	—	—	—	—	—	—	—	—	75	95	105	70	90	100	—	—	—	40	50	60
	—	—	—	—	—	—	—	—	—	*245*	*310*	*345*	*230*	*295*	*330*	—	—	—	*130*	*165*	*195*
S12	—	—	—	—	—	—	—	—	—	55	70	80	49	65	75	—	—	—	37	48	55
	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*	*160*	*215*	*245*	—	—	—	*120*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	31	41	47	28	37	43	—	—	—	21	28	32
	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*	*90*	*120*	*140*	—	—	—	*70*	*90*	*105*
H5	—	—	—	45	60	70	50	65	75	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*150*	*195*	*230*	*165*	*215*	*245*	—	—	—	—	—	—	—	—	—	—	—	—
H8	—	—	—	46	60	70	50	65	75	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*150*	*195*	*230*	*165*	*215*	*245*	—	—	—	—	—	—	—	—	—	—	—	—
H11	—	—	—	55	75	85	65	80	90	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*180*	*245*	*280*	*215*	*260*	*295*	—	—	—	—	—	—	—	—	—	—	—	—
H12	—	—	—	80	100	110	95	110	120	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	*260*	*330*	*360*	*310*	*360*	*395*	—	—	—	—	—	—	—	—	—	—	—	—

Turbo 10 – R217.69-10 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 138-140
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm	mm		kg	
R217.69-2020.3-017-10.2A	02827022	Weldon	20,0	2	4	17,0	–	20,0	59,0	35,0	35,0	85,0	26300	0,3	XO.X10T3
R217.69-2020.3-025-10.1A	02827023	Weldon	20,0	1	3	25,0	–	20,0	64,0	45,0	40,0	95,0	26300	0,3	XO.X10T3
R217.69-2525.3-025-10.2A	02827024	Weldon	25,0	2	6	25,0	–	25,0	63,0	44,0	44,0	100,0	23500	0,4	XO.X10T3
R217.69-2025.3S-025-10.3A	02827025	Seco-Weldon	25,0	3	9	25,0	35,0	20,0	–	43,0	50,0	100,0	23500	0,3	XO.X10T3
R217.69-2025.3S-034-10.3A	02827026	Seco-Weldon	25,0	3	12	34,0	35,0	20,0	–	43,0	50,0	100,0	23500	0,3	XO.X10T3
R217.69-2525.3S-034-10.3A	02827027	Seco-Weldon	25,0	3	12	34,0	40,0	25,0	–	43,0	54,0	110,0	23500	0,5	XO.X10T3
R217.69-2525.3S-042-10.2A	02827028	Seco-Weldon	25,0	2	10	42,0	40,0	25,0	–	53,0	64,0	120,0	23500	0,5	XO.X10T3
R217.69-2532.3S-034-10.4A	02827029	Seco-Weldon	32,0	4	16	34,0	40,0	25,0	–	43,0	54,0	110,0	20800	0,5	XO.X10T3
R217.69-2532.3S-042-10.4A	02827030	Seco-Weldon	32,0	4	20	42,0	40,0	25,0	–	53,0	64,0	120,0	20800	0,6	XO.X10T3
R217.69-2532.3S-050-10.3A	02827031	Seco-Weldon	32,0	3	18	50,0	40,0	25,0	–	63,0	74,0	130,0	20800	0,6	XO.X10T3
R217.69-3240.3S-058-10.4A	02827032	Seco-Weldon	40,0	4	28	58,0	50,0	32,0	–	72,0	84,0	144,0	18600	1,0	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 2,0 mm
* Nessun supporto assiale per la prima fila per raggi di punta > 1,6 mm

Parti di ricambio, comprese nella fornitura

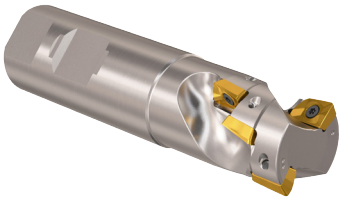
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H4B-T07P	C02506-T07P	DOUBLE-T

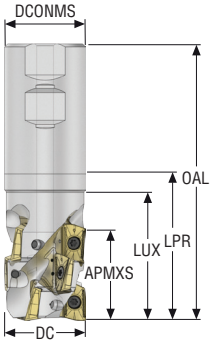
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 10 – R217.69-10 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 138-140
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.69-01.00-3-01.00-10-2A	02829883	Weldon	1.000	2	6	1.024	1.000	2.858	1.874	1.874	4.000	23500	0.880	XO.X10T3
R217.69-01.00-3-01.34-10-3A	02865301	Weldon	1.000	3	12	1.378	1.000	3.110	1.969	2.124	4.250	23500	0.880	XO.X10T3
R217.69-01.00-3-01.65-10-2A	02865304	Weldon	1.000	2	10	1.693	1.000	3.358	2.078	2.374	4.500	23500	0.880	XO.X10T3

Modifica dei corpi fresa necessaria per raggi di punta > 0,079"
* Nessun supporto assiale per la prima fila per raggi di punta > 0,063"

Parti di ricambio, comprese nella fornitura

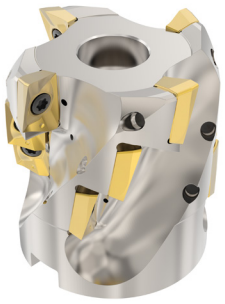
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H4B-T07P	C02506-T07P	DOUBLE-T

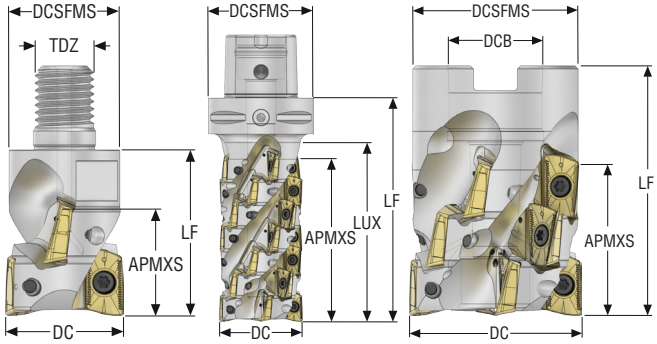
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 10 – R217/220.69-10 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 138-140
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm	mm		kg	
C4-R217.69-044-058-10.5A	02827033	Seco-Capto	44,0	5	35	58,0	–	40,0	–	90,0	90,0	114,0	16600	0,8	XO.X10T3
R220.69-00040-034-10.4A	02865893	Manicotto	40,0	4	16	34,0	16,0	35,0	–	55,0	–	–	18600	0,4	XO.X10T3
R220.69-00040-034-10.5A	02827038	Manicotto	40,0	5	20	34,0	16,0	38,0	–	55,0	–	–	18600	0,4	XO.X10T3
R220.69-00050-042-10.5A	02865895	Manicotto	50,0	5	25	42,0	27,0	48,0	–	65,0	–	–	16600	0,5	XO.X10T3
R220.69-00050-042-10.6A	02827039	Manicotto	50,0	6	30	42,0	27,0	48,0	–	65,0	–	–	16600	0,5	XO.X10T3
R217.69-1020.RE-017-10.2A	02827017	Combimaster	20,0	2	4	17,0	–	18,5	M10	28,0	–	46,75	26300	0,1	XO.X10T3
R217.69-1225.RE-017-10.3A	02827018	Combimaster	25,0	3	6	17,0	–	23,0	M12	35,0	–	56,75	23500	0,2	XO.X10T3
R217.69-1225.RE-025-10.2A	02827019	Combimaster	25,0	2	6	25,0	–	23,0	M12	40,0	–	61,75	23500	0,2	XO.X10T3
R217.69-1632.RE-025-10.3A	02827020	Combimaster	32,0	3	9	25,0	–	30,0	M16	45,0	–	67,75	20800	0,3	XO.X10T3
R217.69-1632.RE-034-10.4A	02827021	Combimaster	32,0	4	16	34,0	–	30,0	M16	50,0	–	72,75	20800	0,3	XO.X10T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Modifica dei corpi fresa necessaria per raggi di punta > 2,0 mm
* Nessun supporto assiale per la prima fila per raggi di punta > 1,6 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R217.69-../Cx-R217.69-..	–	H4B-T07P	C02506-T07P	DOUBLE-T
R220.69-00040	950D0850	H4B-T07P	C02506-T07P	DOUBLE-T
R220.69-00050	MC6S12X60	H4B-T07P	C02506-T07P	DOUBLE-T

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217/220.69-..	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-10 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	XOMX10T308TR-ME07 MP2501	0,080 *0.0032*	0,085 0.0034	0,13 0.0050
P2	XOMX10T308TR-ME07 MP2501	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
P3	XOMX10T308TR-ME07 MP2501	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
P4	XOMX10T308TR-M09 MP2501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P5	XOMX10T308TR-M09 MP2501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P6	XOMX10T308TR-M09 MP2501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P7	XOMX10T308TR-M09 MP2501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P8	XOMX10T308TR-M09 MP2501	0,10 *0.0040*	0,11 0.0044	0,16 0.0065
P11	XOMX10T308TR-M09 MP3501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P12	XOMX10T308TR-M09 MS2500	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
M1	XOEX10T308R-M06 MS2050	0,070 *0.0028*	0,075 0.0030	0,12 0.0048
M2	XOEX10T308R-M06 MS2050	0,065 *0.0026*	0,070 0.0028	0,10 0.0040
M3	XOEX10T308R-M06 MS2050	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
M4	XOMX10T308TR-ME07 MS2050	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
M5	XOMX10T304TR-ME07 MS2050	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
K1	XOMX10T308TR-M09 MK2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
K2	XOMX10T308TR-M09 MK2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
K3	XOMX10T308TR-M09 MK2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
K4	XOMX10T308TR-M09 MK2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
K5	XOMX10T308TR-M09 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
K6	XOMX10T308TR-M09 MK2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
K7	XOMX10T308TR-M09 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
N1	XOEX10T308FR-E05 H15	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
N2	XOEX10T308FR-E05 H15	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
N3	XOEX10T308FR-E05 H15	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
N11	XOEX10T308FR-E05 H15	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
S1	XOMX10T308TR-ME07 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
S2	XOMX10T308TR-ME07 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
S3	XOMX10T308TR-ME07 F40M	0,048 *0.0019*	0,050 0.0020	0,080 0.0032
S11	XOEX10T308R-M06 MS2050	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
S12	XOEX10T308R-M06 MS2050	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
S13	XOEX10T308R-M06 MS2050	0,044 *0.0017*	0,048 0.0019	0,075 0.0030
H5	XOMX10T308TR-M09 MP3000	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
H8	XOMX10T308TR-M09 MP3000	0,048 *0.0019*	0,055 0.0022	0,080 0.0032
H11	XOMX10T308TR-M09 MP3000	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
H12	XOMX10T308TR-M09 MS2500	0,048 *0.0019*	0,055 0.0022	0,080 0.0032

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

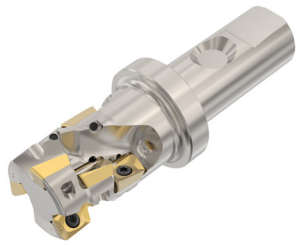
R217/220.69-10 – Parametri di taglio v_c = (m/min)/(sf/min)

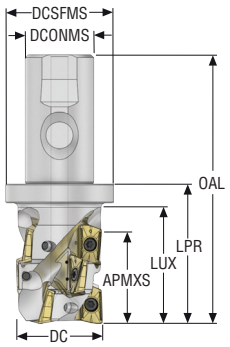
SMG	MK2050			MP3000			MS2050			F40M			H15		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	145 *475*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	140 *460*	155 *510*	165 *540*	— —	— —	— —
P2	145 *475*	160 *520*	170 *560*	140 *460*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	135 *445*	150 *490*	165 *540*	— —	— —	— —
P3	135 *445*	150 *490*	160 *520*	135 *445*	150 *490*	160 *520*	135 *445*	150 *490*	160 *520*	130 *425*	145 *475*	155 *510*	— —	— —	— —
P4	130 *425*	145 *475*	155 *510*	125 *410*	145 *475*	150 *490*	130 *425*	145 *475*	155 *510*	120 *395*	135 *445*	145 *475*	— —	— —	— —
P5	125 *410*	145 *475*	150 *490*	125 *410*	140 *460*	150 *490*	125 *410*	140 *460*	150 *490*	115 *375*	135 *445*	145 *475*	— —	— —	— —
P6	130 *425*	150 *490*	160 *520*	130 *425*	145 *475*	155 *510*	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	— —	— —	— —
P7	130 *425*	145 *475*	155 *510*	125 *410*	145 *475*	155 *510*	130 *425*	145 *475*	155 *510*	120 *395*	140 *460*	150 *490*	— —	— —	— —
P8	125 *410*	140 *460*	150 *490*	120 *395*	140 *460*	150 *490*	125 *410*	140 *460*	150 *490*	115 *375*	135 *445*	145 *475*	— —	— —	— —
P11	125 *410*	145 *475*	155 *510*	125 *410*	140 *460*	150 *490*	125 *410*	145 *475*	155 *510*	120 *395*	135 *445*	145 *475*	— —	— —	— —
P12	100 *330*	120 *395*	125 *410*	100 *330*	115 *375*	125 *410*	100 *330*	115 *375*	125 *410*	95 *310*	110 *360*	120 *395*	— —	— —	— —
M1	— —	— —	— —	125 *410*	140 *460*	150 *490*	130 *425*	145 *475*	155 *510*	125 *410*	140 *460*	150 *490*	— —	— —	— —
M2	— —	— —	— —	110 *360*	130 *425*	140 *460*	120 *395*	135 *445*	145 *475*	110 *360*	130 *425*	140 *460*	— —	— —	— —
M3	— —	— —	— —	100 *330*	115 *375*	125 *410*	105 *345*	120 *395*	130 *425*	100 *330*	115 *375*	125 *410*	— —	— —	— —
M4	— —	— —	— —	85 *280*	100 *330*	110 *360*	90 *295*	105 *345*	115 *375*	85 *280*	100 *330*	110 *360*	— —	— —	— —
M5	— —	— —	— —	75 *245*	90 *295*	100 *330*	80 *260*	95 *310*	105 *345*	70 *230*	90 *295*	100 *330*	— —	— —	— —
K1	150 *490*	165 *540*	175 *570*	130 *425*	145 *475*	155 *510*	— —	— —	— —	120 *395*	140 *460*	150 *490*	— —	— —	— —
K2	140 *460*	160 *520*	165 *540*	120 *395*	135 *445*	145 *475*	— —	— —	— —	115 *375*	130 *425*	140 *460*	— —	— —	— —
K3	130 *425*	150 *490*	155 *510*	110 *360*	125 *410*	135 *445*	— —	— —	— —	105 *345*	120 *395*	130 *425*	— —	— —	— —
K4	130 *425*	145 *475*	155 *510*	105 *345*	125 *410*	135 *445*	— —	— —	— —	100 *330*	120 *395*	130 *425*	— —	— —	— —
K5	100 *330*	115 *375*	125 *410*	80 *260*	95 *310*	105 *345*	— —	— —	— —	70 *230*	90 *295*	100 *330*	— —	— —	— —
K6	120 *395*	140 *460*	145 *475*	100 *330*	115 *375*	125 *410*	— —	— —	— —	95 *310*	110 *360*	120 *395*	— —	— —	— —
K7	115 *375*	130 *425*	140 *460*	95 *310*	110 *360*	120 *395*	— —	— —	— —	85 *280*	105 *345*	115 *375*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	245 *800*	260 *850*	270 *890*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	190 *620*	210 *690*	220 *720*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	165 *540*	185 *610*	195 *640*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	190 *620*	200 *660*
S1	— —	— —	— —	42 *140*	55 *180*	65 *215*	47 *155*	60 *195*	70 *230*	41 *135*	55 *180*	65 *215*	— —	— —	— —
S2	— —	— —	— —	34 *110*	45 *150*	50 *165*	38 *125*	49 *160*	55 *180*	33 *110*	43 *140*	50 *165*	— —	— —	— —
S3	— —	— —	— —	30 *100*	39 *130*	46 *150*	33 *110*	43 *140*	49 *160*	29 *95*	38 *125*	44 *145*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	65 *215*	80 *260*	90 *295*	55 *180*	75 *245*	85 *280*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	46 *150*	60 *195*	70 *230*	40 *130*	50 *165*	60 *195*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	26 *85*	34 *110*	40 *130*	23 *75*	30 *100*	35 *115*	— —	— —	— —
H5	— —	— —	— —	36 *120*	47 *155*	55 *180*	— —	— —	— —	35 *115*	45 *150*	55 *180*	— —	— —	— —
H8	— —	— —	— —	38 *125*	49 *160*	60 *195*	— —	— —	— —	36 *120*	48 *155*	55 *180*	— —	— —	— —
H11	— —	— —	— —	45 *150*	60 *195*	70 *230*	— —	— —	— —	44 *145*	60 *195*	65 *215*	— —	— —	— —
H12	— —	— —	— —	70 *230*	85 *280*	100 *330*	— —	— —	— —	65 *215*	80 *260*	90 *295*	— —	— —	— —

R217/220.69-10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1500			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	170	180	185	165	180	185	160	175	185	160	175	180	125	140	150
	—	—	—	*560*	*590*	*610*	*540*	*590*	*610*	*520*	*570*	*610*	*520*	*570*	*590*	*410*	*460*	*490*
P2	—	—	—	165	180	185	165	175	185	160	175	185	160	170	180	125	140	150
	—	—	—	*540*	*590*	*610*	*540*	*570*	*610*	*520*	*570*	*610*	*520*	*560*	*590*	*410*	*460*	*490*
P3	—	—	—	160	170	175	155	170	175	150	165	175	150	160	170	115	130	140
	—	—	—	*520*	*560*	*570*	*510*	*560*	*570*	*490*	*540*	*570*	*490*	*520*	*560*	*375*	*425*	*460*
P4	—	—	—	150	165	170	150	160	170	140	160	170	145	155	160	110	125	135
	—	—	—	*490*	*540*	*560*	*490*	*520*	*560*	*460*	*520*	*560*	*475*	*510*	*520*	*360*	*410*	*445*
P5	—	—	—	150	160	165	145	160	165	140	155	165	140	155	160	105	120	130
	—	—	—	*490*	*520*	*540*	*475*	*520*	*540*	*460*	*510*	*540*	*460*	*510*	*520*	*345*	*395*	*425*
P6	—	—	—	155	165	175	155	165	170	145	165	175	145	160	165	115	130	140
	—	—	—	*510*	*540*	*570*	*510*	*540*	*560*	*475*	*540*	*570*	*475*	*520*	*540*	*375*	*425*	*460*
P7	—	—	—	150	165	170	150	160	170	145	160	170	145	155	165	110	125	135
	—	—	—	*490*	*540*	*560*	*490*	*520*	*560*	*475*	*520*	*560*	*475*	*510*	*540*	*360*	*410*	*445*
P8	—	—	—	145	160	165	145	160	165	140	155	165	140	150	160	105	120	130
	—	—	—	*475*	*520*	*540*	*475*	*520*	*540*	*460*	*510*	*540*	*460*	*490*	*520*	*345*	*395*	*425*
P11	—	—	—	150	160	170	150	160	165	140	160	170	140	155	160	110	125	135
	—	—	—	*490*	*520*	*560*	*490*	*520*	*540*	*460*	*520*	*560*	*460*	*510*	*520*	*360*	*410*	*445*
P12	—	—	—	120	130	140	120	130	140	115	130	140	115	125	130	80	95	105
	—	—	—	*395*	*425*	*460*	*395*	*425*	*460*	*375*	*425*	*460*	*375*	*410*	*425*	*260*	*310*	*345*
M1	—	—	—	—	—	—	125	140	150	140	155	165	120	135	145	115	130	140
	—	—	—	—	—	—	*410*	*460*	*490*	*460*	*510*	*540*	*395*	*445*	*475*	*375*	*425*	*460*
M2	—	—	—	—	—	—	115	130	140	125	145	155	110	125	135	100	120	130
	—	—	—	—	—	—	*375*	*425*	*460*	*410*	*475*	*510*	*360*	*410*	*445*	*330*	*395*	*425*
M3	—	—	—	—	—	—	100	115	125	115	130	140	95	115	120	90	105	115
	—	—	—	—	—	—	*330*	*375*	*410*	*375*	*425*	*460*	*310*	*375*	*395*	*295*	*345*	*375*
M4	—	—	—	—	—	—	85	100	110	100	115	125	80	100	105	75	90	100
	—	—	—	—	—	—	*280*	*330*	*360*	*330*	*375*	*410*	*260*	*330*	*345*	*245*	*295*	*330*
M5	—	—	—	—	—	—	75	90	100	85	105	115	70	85	95	65	80	90
	—	—	—	—	—	—	*245*	*295*	*330*	*280*	*345*	*375*	*230*	*280*	*310*	*215*	*260*	*295*
K1	150	170	180	165	180	185	165	180	185	145	160	170	160	170	180	—	—	—
	490	*560*	*590*	*540*	*590*	*610*	*540*	*590*	*610*	*475*	*520*	*560*	*520*	*560*	*590*	—	—	—
K2	145	160	170	160	170	180	160	170	175	135	155	165	150	165	170	—	—	—
	475	*520*	*560*	*520*	*560*	*590*	*520*	*560*	*570*	*445*	*510*	*540*	*490*	*540*	*560*	—	—	—
K3	135	150	160	150	160	170	150	160	165	125	145	155	140	155	160	—	—	—
	445	*490*	*520*	*490*	*520*	*560*	*490*	*520*	*540*	*410*	*475*	*510*	*460*	*510*	*520*	—	—	—
K4	130	150	160	145	160	165	145	160	165	125	140	150	140	150	160	—	—	—
	425	*490*	*520*	*475*	*520*	*540*	*475*	*520*	*540*	*410*	*460*	*490*	*460*	*490*	*520*	—	—	—
K5	100	120	130	115	130	135	115	125	135	95	110	120	110	120	130	—	—	—
	330	*395*	*425*	*375*	*425*	*445*	*375*	*410*	*445*	*310*	*360*	*395*	*360*	*395*	*425*	—	—	—
K6	125	140	150	140	150	155	140	150	155	115	135	145	130	145	150	—	—	—
	410	*460*	*490*	*460*	*490*	*510*	*460*	*490*	*510*	*375*	*445*	*475*	*425*	*475*	*490*	—	—	—
K7	115	135	145	130	145	150	130	140	150	110	125	135	125	135	145	—	—	—
	375	*445*	*475*	*425*	*475*	*490*	*425*	*460*	*490*	*360*	*410*	*445*	*410*	*445*	*475*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	55	70	80	40	50	60	23	30	36
	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*	*130*	*165*	*195*	*75*	*100*	*120*
S2	—	—	—	—	—	—	—	—	—	45	60	70	32	42	49	19	25	29
	—	—	—	—	—	—	—	—	—	*150*	*195*	*230*	*105*	*140*	*160*	*60*	*80*	*95*
S3	—	—	—	—	—	—	—	—	—	39	50	60	28	37	43	16	22	25
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*	*90*	*120*	*140*	*50*	*70*	*80*
S11	—	—	—	—	—	—	—	—	—	75	90	100	55	70	80	32	42	50
	—	—	—	—	—	—	—	—	—	*245*	*295*	*330*	*180*	*230*	*260*	*105*	*140*	*165*
S12	—	—	—	—	—	—	—	—	—	55	70	80	38	50	60	30	39	46
	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*	*125*	*165*	*195*	*100*	*130*	*150*
S13	—	—	—	—	—	—	—	—	—	31	41	48	22	29	34	17	23	27
	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*	*70*	*95*	*110*	*55*	*75*	*90*
H5	—	—	—	45	60	70	—	—	—	45	60	70	35	46	55	—	—	—
	—	—	—	*150*	*195*	*230*	—	—	—	*150*	*195*	*230*	*115*	*150*	*180*	—	—	—
H8	—	—	—	48	65	75	—	—	—	47	60	70	37	48	55	—	—	—
	—	—	—	*155*	*215*	*245*	—	—	—	*155*	*195*	*230*	*120*	*155*	*180*	—	—	—
H11	—	—	—	60	75	85	—	—	—	55	75	85	44	60	70	—	—	—
	—	—	—	*195*	*245*	*280*	—	—	—	*180*	*245*	*280*	*145*	*195*	*230*	—	—	—
H12	—	—	—	80	100	110	—	—	—	85	105	110	65	80	90	—	—	—
	—	—	—	*260*	*330*	*360*	—	—	—	*280*	*345*	*360*	*215*	*260*	*295*	—	—	—

Turbo 12 – R217.69-12 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 146-148
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.69-2025.3S-022-12.2AN	02709523	Seco-Weldon	25,0	2	4	22,0	35,0	20,0	38,0	50,0	99,5	20800	0,4	XO.X1204
R217.69-2525.3S-033-12.2AN	02709526	Seco-Weldon	25,0	2	6	33,0	40,0	25,0	49,0	60,0	115,5	20800	0,5	XO.X1204
R217.69-2532.3S-033-12.2AN	02709528	Seco-Weldon	32,0	2	6	33,0	40,0	25,0	47,0	60,0	115,5	18400	0,6	XO.X1204
R217.69-2532.3S-033-12.3AN	02709530	Seco-Weldon	32,0	3	9	33,0	40,0	25,0	48,0	60,0	115,5	18400	0,5	XO.X1204
R217.69-2532.3S-044-12.3AN	02629796	Seco-Weldon	32,0	3	12	44,0	40,0	25,0	58,0	70,0	125,5	18400	0,6	XO.X1204
R217.69-3240.3S-033-12.3AN	02709540	Seco-Weldon	40,0	3	9	33,0	50,0	32,0	49,0	60,0	119,5	16400	0,8	XO.X1204
R217.69-3240.3S-044-12.4AN	02709541	Seco-Weldon	40,0	4	16	44,0	50,0	32,0	57,0	70,0	129,5	16400	0,8	XO.X1204
R217.69-3240.3S-055-12.3AN	02709543	Seco-Weldon	40,0	3	15	55,0	50,0	32,0	69,0	80,0	139,5	16400	1,0	XO.X1204
R217.69-3250.3S-055-12.4AN	02709546	Seco-Weldon	50,0	4	20	55,0	50,0	32,0	67,0	80,0	139,5	14800	1,2	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm
* Nessun supporto assiale per la prima fila per raggi di punta > 1,6 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..Ø25/R217.69-HSK	H4B-T10P	C03507-T10P	DOUBLE-T
R217.69-..Ø32	H4B-T10P	C03508-T10P	DOUBLE-T
R217.69-..Ø40-50	H4B-T10P	C03509-T10P	DOUBLE-T

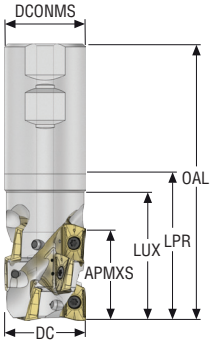
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217.69-12 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 146-148
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.69-01.25-3-12M3AN	02710789	Weldon	1.250	3	12	1.732	1.250	3.860	2.695	2.638	5.000	18400	1.540	XO.X1204
R217.69-01.50-3-12M4AN	02710799	Weldon	1.500	4	20	2.165	1.500	4.563	3.010	3.061	5.750	16400	2.430	XO.X1204
R217.69-01.50-3-12L3AN	02710795	Weldon	1.500	3	18	2.559	1.500	4.811	3.262	3.636	5.998	16400	2.430	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 0,122"
* Nessun supporto assiale per la prima fila per raggi di punta > 0,063"

Parti di ricambio, comprese nella fornitura

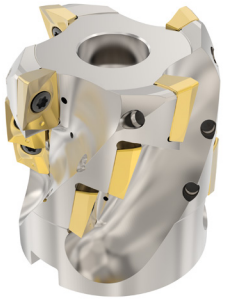
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-01.00-01.25	H4B-T10P	C03507-T10P	DOUBLE-T
R217.69-01.50-02.00	H4B-T10P	C03509-T10P	DOUBLE-T

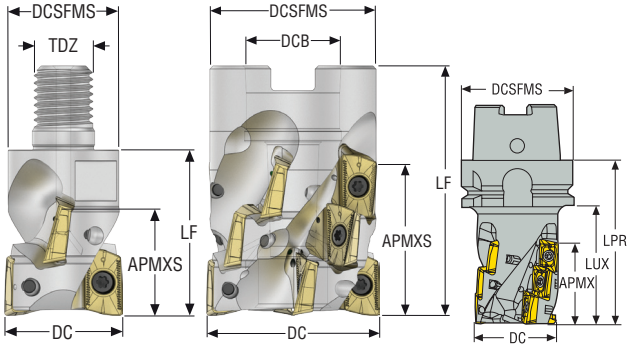
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – In mm





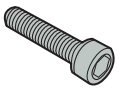
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 146–148
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm	mm		kg	
R220.69-00050-033-12.4AN	02709941	Manicotto	50,0	4	12	33,0	27,0	48,0	–	55,0	–	–	14800	0,5	XO.X1204
R220.69-00050-044-12.4AN	02709947	Manicotto	50,0	4	16	44,0	27,0	48,0	–	65,0	–	–	14800	0,6	XO.X1204
R220.69-00050-044-12.5AN	02709951	Manicotto	50,0	5	20	44,0	27,0	48,0	–	65,0	–	–	14800	0,6	XO.X1204
R220.69-00063-033-12.5AN	02709956	Manicotto	63,0	5	15	33,0	27,0	62,0	–	63,0	–	–	13200	1,1	XO.X1204
R220.69-00063-055-12.5AN	02709965	Manicotto	63,0	5	25	55,0	27,0	60,0	–	75,0	–	–	13200	1,1	XO.X1204
R220.69-00063-077-12.4SAN	02717797	Manicotto	63,0	4	28	77,0	27,0	60,0	–	100,0	–	–	13200	1,5	XO.X1204
R217.69-HSK63A.32-044-12.3AN	02717942	HSK	32,0	3	12	44,0	–	63,0	–	90,0	52,0	122,0	18400	0,1	XO.X1204
R217.69-1225.RE-022-12.2AN	02709506	Combimaster	25,0	2	4	22,8	–	23,0	M12	35,0	–	56,75	20800	0,2	XO.X1204
R217.69-1632.RE-022-12.3AN	02709508	Combimaster	32,0	3	6	22,5	–	30,0	M16	40,0	–	62,75	18400	0,3	XO.X1204
R217.69-2040.RE-033-12.3AN	02972763	Combimaster	40,0	3	9	33,0	–	36,5	M20	50,0	–	77,0	16400	0,4	XO.X1204
R217.69-2040.RE-044-12.4AN	02972764	Combimaster	40,0	4	16	44,0	–	36,5	M20	61,0	–	88,0	16400	0,5	XO.X1204

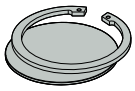
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm
* Nessun supporto assiale per la prima fila per raggi di punta > 1,6 mm

Parti di ricambio, comprese nella fornitura

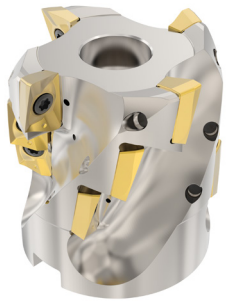
Per fresa	Vite attacco	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
						
R217.69-../C5-R217.69-Ø32	–	–	H4B-T10P	C03508-T10P	DOUBLE-T	–
R217.69-../Cx-R217.69-Ø40	–	–	H4B-T10P	C03509-T10P	DOUBLE-T	–
R217.69-..Ø25	–	–	H4B-T10P	C03507-T10P	DOUBLE-T	–
R217.69-..Ø25/R217.69-HSK	–	–	H4B-T10P	C03507-T10P	DOUBLE-T	–
R220.69-00063	MP6S12X80	R220.69-00063044-12.4BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-RE063033-12.4AN
R220.69-Ø50/Ø63-033-044	MC6S12X50	–	H4B-T10P	C03509-T10P	DOUBLE-T	–
R220.69-Ø50/Ø63-044-055	MC6S12X60	–	H4B-T10P	C03509-T10P	DOUBLE-T	–
R220.69-Ø50-033	MC6S12X40	–	H4B-T10P	C03509-T10P	DOUBLE-T	–

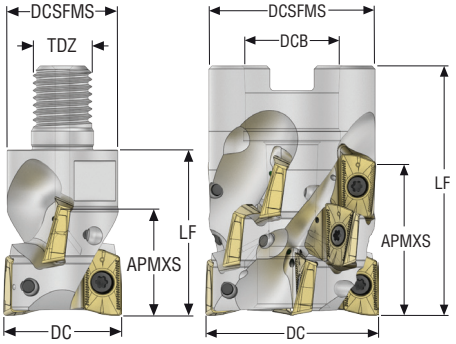
Accessori

Per fresa	Kit refrigerante	Coppia di serraggio inserto	Chiave dinamometrica
			
R217/220.69-..	–	3.0NM	T00-10P30
R220.69-..SAN	LUBRICATION_SET_29	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 146-148
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch		inch	inch		lb	
R220.69-02.00-12S4AN	02710915	Manicotto	2.000	4	16	1.740	1.000	1.929	–	2.750	–	14800	1.540	XO.X1204
R220.69-02.00-12M5AN	02710895	Manicotto	2.000	5	25	2.146	1.000	2.047	–	3.250	–	14800	1.760	XO.X1204
R220.69-02.50-12L4SAN	02722266	Manicotto	2.500	4	28	2.953	1.000	2.441	–	4.020	–	13200	4.630	XO.X1204
R217.69-01.50-20RE-01.73-12-4A	03003976	Combimaster	1.500	4	16	1.732	–	1.437	M20	2.402	3.465	16400	0.880	XO.X1204

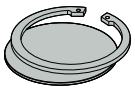
Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Modifica dei corpi fresa necessaria per raggi di punta > 0,122"
* Nessun supporto assiale per la prima fila per raggi di punta > 0,063"

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
						
R217.69-01.50	–	–	H4B-T10P	C03509-T10P	DOUBLE-T	–
R220.69-..L4	UP6S1/2UNFX3-1/4	R220.69-02.50-12L4BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-02.50-RE-12.4AN
R220.69-..M5	UC6S1/2UNFX2-1/2	–	H4B-T10P	C03509-T10P	DOUBLE-T	–
R220.69-..S4	UC6S1/2UNFX3	–	H4B-T10P	C03509-T10P	DOUBLE-T	–

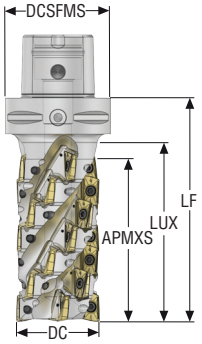
Accessori

Per fresa	Kit refrigerante	Coppia di serraggio inserto	Chiave dinamometrica
			
R220.69-..	–	3.0NM	T00-10P30
R220.69-..L4	LUBRICATION_SET_29	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 12 – R217/220.69-12 – In mm



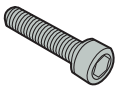


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 146-148
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

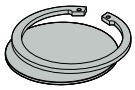
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm		kg	
C5-R217.69-032-044-12.3AN	02717844	Seco-Capto	32,0	3	12	44,0	50,0	79,0	56,0	109,0	18400	0,7	XO.X1204
C5-R217.69-032-055-12.3AN	02829929	Seco-Capto	32,0	3	15	55,0	50,0	90,0	67,0	120,0	18400	0,8	XO.X1204
C6-R217.69-040-055-12.3AN	02717917	Seco-Capto	40,0	3	15	55,0	63,0	92,0	67,0	130,0	16400	1,1	XO.X1204
C6-R217.69-040-066-12.3AN	02829930	Seco-Capto	40,0	3	18	65,5	63,0	103,0	79,9	141,0	16400	1,2	XO.X1204
C4-R217.69-044-033-12.3AN	02717838	Seco-Capto	44,0	3	9	33,0	40,0	68,0	48,0	92,0	15500	0,7	XO.X1204
C6-R217.69-050-055-12.4AN	02717918	Seco-Capto	50,0	4	20	55,0	63,0	92,0	67,0	130,0	14800	1,4	XO.X1204
C6-R217.69-050-066-12.4SAN	02717991	Seco-Capto	50,0	4	24	66,0	63,0	101,0	76,0	139,0	14800	1,4	XO.X1204
C6-R217.69-050-086-12.5SAN	02829935	Seco-Capto	50,0	5	40	86,0	63,0	119,0	97,0	157,0	14800	1,7	XO.X1204
C6-R217.69-050-106-12.5SAN	02829936	Seco-Capto	50,0	5	50	106,0	63,0	140,0	118,0	178,0	12000	1,7	XO.X1204
C5-R217.69-054-044-12.4AN	02717852	Seco-Capto	54,0	4	16	44,0	50,0	79,0	59,0	109,0	13900	1,2	XO.X1204
C6-R217.69-063-107-12.5SAN	02829940	Seco-Capto	63,0	5	50	107,0	63,0	140,0	118,0	178,0	12000	2,4	XO.X1204
C6-R217.69-066-044-12.5AN	02717924	Seco-Capto	66,0	5	20	44,0	63,0	81,0	59,0	119,0	12000	1,9	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm
* Nessun supporto assiale per la prima fila per raggi di punta > 1,6 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
						
C6-R217.69-050-066-4SAN	MC6S10X40	C6-R217.69-050-044-12.4BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-RE050022-12.4AN
C6-R217.69-050-086-5SAN	MC6S10X40	C6-R217.69-050-064-12.5BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-RE050022-12.5AN
C6-R217.69-050-106-5SAN	MC6S10X40	C6-R217.69-050-084-12.5BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-RE050022-12.5AN
C6-R217.69-063-5SAN	MC6S10X40	C6-R217.69-063-074-12.5BAN	H4B-T10P	C03509-T10P	DOUBLE-T	R220.69-RE063033-12.5AN
Cx-R217.69-Ø32	–	–	H4B-T10P	C03508-T10P	DOUBLE-T	–
Cx-R217.69-Ø40-66	–	–	H4B-T10P	C03509-T10P	DOUBLE-T	–

Accessori

Per fresa	Kit refrigerante	Coppia di serraggio inserto	Chiave dinamometrica
			
C6-R217.69-050-SAN	LUBRICATION_SET_19	3.0NM	T00-10P30
C6-R217.69-063-SAN	–	3.0NM	T00-10P30
Cx-R217.69-032-066	–	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	XOMX120408TR-ME08 MP2501	0,095 *0.0038*	0,11 0.0044	0,16 0.0065
P2	XOMX120408TR-ME08 MP2501	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
P3	XOMX120408TR-ME08 MP2501	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P4	XOMX120408TR-M12 MP2501	0,14 *0.0055*	0,15 0.0060	0,22 0.0095
P5	XOMX120408TR-M12 MP2501	0,13 *0.0050*	0,15 0.0060	0,22 0.0085
P6	XOMX120408TR-M12 MP2501	0,13 *0.0050*	0,15 0.0060	0,22 0.0085
P7	XOMX120408TR-M12 MP2501	0,13 *0.0050*	0,15 0.0060	0,22 0.0085
P8	XOMX120408TR-M12 MP2501	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
P11	XOMX120408TR-M12 MP3501	0,13 *0.0050*	0,15 0.0060	0,22 0.0085
P12	XOMX120408TR-M12 MP3501	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
M1	XOEX120408R-M07 MS2050	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
M2	XOEX120408R-M07 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M3	XOEX120408R-M07 MS2050	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
M4	XOMX120408TR-ME08 MS2050	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
M5	XOMX120408TR-ME08 MS2050	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
K1	XOMX120408TR-MD13 MK2050	0,16 *0.0065*	0,18 0.0070	0,26 0.010
K2	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K3	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K4	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K5	XOMX120408TR-MD13 MK2050	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
K6	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K7	XOMX120408TR-MD13 MK2050	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
N1	XOEX120408FR-E06 H15	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N2	XOEX120408FR-E06 H15	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N3	XOEX120408FR-E06 H15	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N11	XOEX120408FR-E06 H15	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
S1	XOEX120408R-M07 F40M	0,070 *0.0028*	0,075 0.0030	0,12 0.0048
S2	XOEX120408R-M07 F40M	0,070 *0.0028*	0,075 0.0030	0,12 0.0048
S3	XOEX120408R-M07 F40M	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
S11	XOEX120408R-M07 MS2050	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
S12	XOEX120408R-M07 MS2050	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
S13	XOEX120408R-M07 MS2050	0,070 *0.0028*	0,075 0.0030	0,12 0.0048
H5	XOMX120408TR-MD13 MP3000	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
H8	XOMX120408TR-MD13 MP3000	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
H11	XOMX120412TR-MD13 MP3000	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
H12	XOMX120408TR-MD13 MP3000	0,075 *0.0030*	0,085 0.0034	0,13 0.0050

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

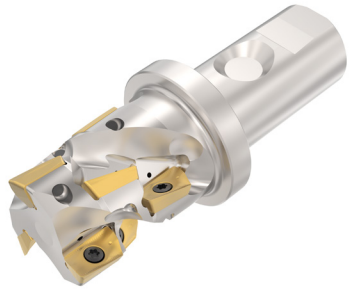
R217/220.69-12 – Parametri di taglio v_c = (m/min)/(sf/min)

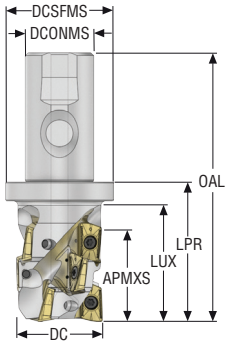
SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H15		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	150 *490*	170 *560*	180 *590*	145 *475*	160 *520*	170 *560*	150 *490*	165 *540*	170 *560*	135 *445*	145 *475*	155 *510*	170 *560*	180 *590*	190 *620*	150 *490*	165 *540*	175 *570*	— —	— —	— —
P2	150 *490*	165 *540*	175 *570*	140 *460*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	130 *425*	145 *475*	155 *510*	170 *560*	180 *590*	185 *610*	150 *490*	165 *540*	175 *570*	— —	— —	— —
P3	140 *460*	160 *520*	170 *560*	135 *445*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	125 *410*	135 *445*	145 *475*	160 *520*	170 *560*	180 *590*	140 *460*	155 *510*	165 *540*	— —	— —	— —
P4	135 *445*	150 *490*	160 *520*	125 *410*	145 *475*	155 *510*	130 *425*	145 *475*	155 *510*	120 *395*	130 *425*	140 *460*	150 *490*	165 *540*	170 *560*	130 *425*	150 *490*	160 *520*	— —	— —	— —
P5	130 *425*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	130 *425*	145 *475*	150 *490*	115 *375*	125 *410*	135 *445*	150 *490*	160 *520*	165 *540*	130 *425*	145 *475*	155 *510*	— —	— —	— —
P6	140 *460*	155 *510*	165 *540*	135 *445*	150 *490*	160 *520*	135 *445*	150 *490*	155 *510*	125 *410*	135 *445*	140 *460*	155 *510*	170 *560*	175 *570*	135 *445*	155 *510*	165 *540*	— —	— —	— —
P7	135 *445*	150 *490*	160 *520*	130 *425*	145 *475*	155 *510*	135 *445*	145 *475*	155 *510*	120 *395*	130 *425*	140 *460*	155 *510*	165 *540*	170 *560*	135 *445*	150 *490*	160 *520*	— —	— —	— —
P8	130 *425*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	130 *425*	140 *460*	150 *490*	115 *375*	125 *410*	135 *445*	150 *490*	160 *520*	165 *540*	130 *425*	145 *475*	155 *510*	— —	— —	— —
P11	135 *445*	150 *490*	160 *520*	125 *410*	145 *475*	155 *510*	130 *425*	145 *475*	150 *490*	115 *375*	130 *425*	135 *445*	145 *475*	170 *560*	185 *610*	130 *425*	150 *490*	160 *520*	— —	— —	— —
P12	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	105 *345*	120 *395*	125 *410*	95 *310*	105 *345*	110 *360*	115 *375*	135 *445*	145 *475*	105 *345*	120 *395*	130 *425*	— —	— —	— —
M1	— —	— —	— —	120 *395*	135 *445*	145 *475*	125 *410*	145 *475*	155 *510*	110 *360*	125 *410*	140 *460*	155 *510*	180 *590*	190 *620*	130 *425*	145 *475*	155 *510*	— —	— —	— —
M2	— —	— —	— —	110 *360*	125 *410*	135 *445*	115 *375*	130 *425*	140 *460*	100 *330*	115 *375*	125 *410*	140 *460*	165 *540*	180 *590*	115 *375*	135 *445*	145 *475*	— —	— —	— —
M3	— —	— —	— —	95 *310*	110 *360*	125 *410*	105 *345*	120 *395*	130 *425*	85 *280*	105 *345*	115 *375*	125 *410*	150 *490*	160 *520*	105 *345*	120 *395*	130 *425*	— —	— —	— —
M4	— —	— —	— —	80 *260*	100 *330*	105 *345*	90 *295*	105 *345*	115 *375*	70 *230*	90 *295*	95 *310*	110 *360*	130 *425*	140 *460*	90 *295*	105 *345*	115 *375*	— —	— —	— —
M5	— —	— —	— —	70 *230*	85 *280*	95 *310*	80 *260*	95 *310*	100 *330*	60 *195*	75 *245*	85 *280*	100 *330*	120 *395*	130 *425*	75 *245*	95 *310*	105 *345*	— —	— —	— —
K1	155 *510*	170 *560*	180 *590*	125 *410*	140 *460*	150 *490*	— —	— —	— —	110 *360*	125 *410*	135 *445*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K2	145 *475*	165 *540*	175 *570*	115 *375*	135 *445*	145 *475*	— —	— —	— —	105 *345*	120 *395*	130 *425*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K3	135 *445*	155 *510*	165 *540*	105 *345*	125 *410*	135 *445*	— —	— —	— —	95 *310*	110 *360*	120 *395*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K4	135 *445*	150 *490*	160 *520*	100 *330*	120 *395*	130 *425*	— —	— —	— —	90 *295*	105 *345*	115 *375*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K5	105 *345*	120 *395*	130 *425*	75 *245*	90 *295*	100 *330*	— —	— —	— —	60 *195*	75 *245*	85 *280*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K6	125 *410*	145 *475*	155 *510*	95 *310*	110 *360*	125 *410*	— —	— —	— —	80 *260*	100 *330*	110 *360*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K7	120 *395*	135 *445*	145 *475*	90 *295*	105 *345*	115 *375*	— —	— —	— —	75 *245*	90 *295*	100 *330*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	245 *800*	260 *850*	270 *890*	— —	— —	— —	230 *750*	245 *800*	255 *840*	— —	— —	— —	— —	— —	— —	240 *790*	260 *850*	270 *890*
N2	— —	— —	— —	190 *620*	205 *670*	215 *710*	— —	— —	— —	175 *570*	190 *620*	200 *660*	— —	— —	— —	— —	— —	— —	190 *620*	205 *670*	215 *710*
N3	— —	— —	— —	165 *540*	180 *590*	190 *620*	— —	— —	— —	150 *490*	165 *540*	175 *570*	— —	— —	— —	— —	— —	— —	165 *540*	180 *590*	190 *620*
N11	— —	— —	— —	170 *560*	190 *620*	200 *660*	— —	— —	— —	160 *520*	175 *570*	185 *610*	— —	— —	— —	— —	— —	— —	170 *560*	190 *620*	200 *660*
S1	— —	— —	— —	40 *130*	55 *180*	60 *195*	45 *150*	60 *195*	65 *215*	34 *110*	45 *150*	50 *165*	50 *165*	65 *215*	75 *245*	47 *155*	60 *195*	70 *230*	— —	— —	— —
S2	— —	— —	— —	32 *105*	42 *140*	49 *160*	36 *120*	47 *155*	55 *180*	27 *90*	36 *120*	42 *140*	40 *130*	50 *165*	60 *195*	38 *125*	50 *165*	60 *195*	— —	— —	— —
S3	— —	— —	— —	28 *90*	37 *120*	43 *140*	32 *105*	41 *135*	48 *155*	24 *80*	31 *100*	37 *120*	35 *115*	46 *150*	55 *180*	33 *110*	44 *145*	50 *165*	— —	— —	— —
S11	— —	— —	— —	55 *180*	70 *230*	80 *260*	60 *195*	80 *260*	85 *280*	47 *155*	60 *195*	70 *230*	70 *230*	85 *280*	95 *310*	65 *215*	80 *260*	90 *295*	— —	— —	— —
S12	— —	— —	— —	38 *125*	50 *165*	60 *195*	43 *140*	55 *180*	65 *215*	33 *110*	43 *140*	50 *165*	48 *155*	65 *215*	75 *245*	45 *150*	60 *195*	70 *230*	— —	— —	— —
S13	— —	— —	— —	22 *70*	30 *100*	34 *110*	25 *80*	33 *110*	38 *125*	19 *60*	25 *80*	29 *95*	28 *90*	37 *120*	43 *140*	26 *85*	35 *115*	41 *135*	— —	— —	— —
H5	45 *150*	60 *195*	70 *230*	34 *110*	45 *150*	55 *180*	— —	— —	— —	29 *95*	37 *120*	44 *145*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	48 *155*	60 *195*	70 *230*	36 *120*	48 *155*	55 *180*	— —	— —	— —	31 *100*	40 *130*	47 *155*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	60 *195*	75 *245*	85 *280*	43 *140*	55 *180*	65 *215*	— —	— —	— —	36 *120*	48 *155*	55 *180*	90 *295*	110 *360*	120 *395*	49 *160*	65 *215*	75 *245*	— —	— —	— —
H12	80 *260*	95 *310*	105 *345*	70 *230*	85 *280*	95 *310*	— —	— —	— —	55 *180*	70 *230*	80 *260*	80 *260*	100 *330*	110 *360*	80 *260*	95 *310*	105 *345*	— —	— —	— —

R217/220.69-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	175	190	195	175	185	195	180	195	200	165	180	190
	—	—	—	*570*	*620*	*640*	*570*	*610*	*640*	*590*	*640*	*660*	*540*	*590*	*620*
P2	—	—	—	170	185	195	170	185	195	180	190	200	165	180	185
	—	—	—	*560*	*610*	*640*	*560*	*610*	*640*	*590*	*620*	*660*	*540*	*590*	*610*
P3	—	—	—	165	180	185	160	175	185	170	180	190	155	170	175
	—	—	—	*540*	*590*	*610*	*520*	*570*	*610*	*560*	*590*	*620*	*510*	*560*	*570*
P4	—	—	—	155	170	175	155	170	175	160	175	180	145	160	170
	—	—	—	*510*	*560*	*570*	*510*	*560*	*570*	*520*	*570*	*590*	*475*	*520*	*560*
P5	—	—	—	155	165	175	150	165	175	160	170	180	145	160	165
	—	—	—	*510*	*540*	*570*	*490*	*540*	*570*	*520*	*560*	*590*	*475*	*520*	*540*
P6	—	—	—	160	175	185	160	175	180	165	180	185	155	165	175
	—	—	—	*520*	*570*	*610*	*520*	*570*	*590*	*540*	*590*	*610*	*510*	*540*	*570*
P7	—	—	—	155	170	180	155	170	180	160	175	185	150	165	170
	—	—	—	*510*	*560*	*590*	*510*	*560*	*590*	*520*	*570*	*610*	*490*	*540*	*560*
P8	—	—	—	150	165	175	150	165	175	160	170	180	145	160	165
	—	—	—	*490*	*540*	*570*	*490*	*540*	*570*	*520*	*560*	*590*	*475*	*520*	*540*
P11	—	—	—	155	170	175	155	170	175	160	175	180	145	160	170
	—	—	—	*510*	*560*	*570*	*510*	*560*	*570*	*520*	*570*	*590*	*475*	*520*	*560*
P12	—	—	—	125	140	145	125	135	145	130	140	150	120	130	140
	—	—	—	*410*	*460*	*475*	*410*	*445*	*475*	*425*	*460*	*490*	*395*	*425*	*460*
M1	—	—	—	—	—	—	125	145	155	140	160	170	120	140	150
	—	—	—	—	—	—	*410*	*475*	*510*	*460*	*520*	*560*	*395*	*460*	*490*
M2	—	—	—	—	—	—	115	130	145	130	150	160	110	125	140
	—	—	—	—	—	—	*375*	*425*	*475*	*425*	*490*	*520*	*360*	*410*	*460*
M3	—	—	—	—	—	—	100	120	130	115	135	145	95	115	125
	—	—	—	—	—	—	*330*	*395*	*425*	*375*	*445*	*475*	*310*	*375*	*410*
M4	—	—	—	—	—	—	85	100	110	100	115	125	80	95	105
	—	—	—	—	—	—	*280*	*330*	*360*	*330*	*375*	*410*	*260*	*310*	*345*
M5	—	—	—	—	—	—	70	90	100	85	105	115	65	85	95
	—	—	—	—	—	—	*230*	*295*	*330*	*280*	*345*	*375*	*215*	*280*	*310*
K1	165	200	225	175	185	195	170	185	195	150	165	180	165	180	185
	540	*660*	*740*	*570*	*610*	*640*	*560*	*610*	*640*	*490*	*540*	*590*	*540*	*590*	*610*
K2	155	195	215	165	180	190	165	180	185	140	160	170	160	170	180
	510	*640*	*710*	*540*	*590*	*620*	*540*	*590*	*610*	*460*	*520*	*560*	*520*	*560*	*590*
K3	140	165	180	155	170	175	155	165	175	130	150	160	145	160	170
	460	*540*	*590*	*510*	*560*	*570*	*510*	*540*	*570*	*425*	*490*	*520*	*475*	*520*	*560*
K4	135	160	175	150	165	175	150	165	175	125	145	155	145	155	165
	445	*520*	*570*	*490*	*540*	*570*	*490*	*540*	*570*	*410*	*475*	*510*	*475*	*510*	*540*
K5	105	130	145	120	130	140	120	130	140	95	110	125	110	125	130
	345	*425*	*475*	*395*	*425*	*460*	*395*	*425*	*460*	*310*	*360*	*410*	*360*	*410*	*425*
K6	130	155	170	145	155	165	140	155	165	120	135	145	135	150	155
	425	*510*	*560*	*475*	*510*	*540*	*460*	*510*	*540*	*395*	*445*	*475*	*445*	*490*	*510*
K7	120	145	160	135	150	155	135	150	155	110	130	140	125	140	150
	395	*475*	*520*	*445*	*490*	*510*	*445*	*490*	*510*	*360*	*425*	*460*	*410*	*460*	*490*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	50	70	80	37	49	55
	—	—	—	—	—	—	—	—	—	*165*	*230*	*260*	*120*	*160*	*180*
S2	—	—	—	—	—	—	—	—	—	42	55	65	30	40	46
	—	—	—	—	—	—	—	—	—	*140*	*180*	*215*	*100*	*130*	*150*
S3	—	—	—	—	—	—	—	—	—	37	49	55	27	35	40
	—	—	—	—	—	—	—	—	—	*120*	*160*	*180*	*90*	*115*	*130*
S11	—	—	—	—	—	—	—	—	—	75	90	100	50	70	80
	—	—	—	—	—	—	—	—	—	*245*	*295*	*330*	*165*	*230*	*260*
S12	—	—	—	—	—	—	—	—	—	50	65	75	36	47	55
	—	—	—	—	—	—	—	—	—	*165*	*215*	*245*	*120*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	29	39	45	21	28	32
	—	—	—	—	—	—	—	—	—	*95*	*130*	*150*	*70*	*90*	*105*
H5	—	—	—	43	55	65	—	—	—	—	—	—	33	43	50
	—	—	—	*140*	*180*	*215*	—	—	—	—	—	—	*110*	*140*	*165*
H8	—	—	—	46	60	70	—	—	—	—	—	—	35	46	55
	—	—	—	*150*	*195*	*230*	—	—	—	—	—	—	*115*	*150*	*180*
H11	—	—	—	55	70	80	—	—	—	—	—	—	42	55	65
	—	—	—	*180*	*230*	*260*	—	—	—	—	—	—	*140*	*180*	*215*
H12	—	—	—	80	100	110	—	—	—	—	—	—	65	80	90
	—	—	—	*260*	*330*	*360*	—	—	—	—	—	—	*215*	*260*	*295*

Turbo 16 – R217.69-16 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 153-155
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.69-3240.3S-043-XO16.3A	10067004	Seco-Weldon	40,0	3	9	43,0	50,0	32,0	54,9	65,0	125,0	13200	0,8	XO.X1605
R217.69-3240.3S-071-XO16.3A	10067005	Seco/Weldon	40,0	3	15	71,0	50,0	32,0	85,4	95,0	155,0	13200	1,0	XO.X1605
R217.69-3250.3S-057-XO16.3A	10067006	Seco/Weldon	50,0	3	12	57,0	50,0	32,0	70,8	80,0	140,0	11800	1,1	XO.X1605
R217.69-3250.3S-057-XO16.4A	10067007	Seco/Weldon	50,0	4	16	57,0	50,0	32,0	70,8	80,0	140,0	11800	1,1	XO.X1605
R217.69-3250.3S-085-XO16.4A	10067008	Seco/Weldon	50,0	4	24	85,0	50,0	32,0	95,8	105,0	165,0	11800	1,3	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm

Parti di ricambio, comprese nella fornitura

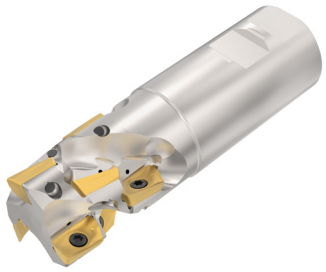
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-3240	H4B-T15P	C04009-T15P	DOUBLE-T
R217.69-3250	H4B-T15P	C04011-T15P	DOUBLE-T

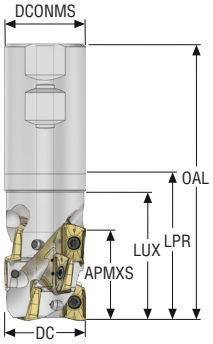
Accessori

Per fresa	Coppia di serraggio inserto	Chiave	Vite	Chiave dinamometrica
				
R217.69-..	3.5NM	T05P-2	SX2035-T05P	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R217.69-16 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 153-155
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.69-01.50-3-1.69-XO16-3A	10067015	Weldon	1.500	3	9	1.693	1.500	4.000	2.417	2.441	5.169	13200	2.200	XO.X1605
R217.69-02.00-3-1.69-XO16-3A	10067016	Weldon	2.000	3	9	1.693	2.000	4.000	2.512	2.535	5.823	13200	4.190	XO.X1605
R217.69-02.00-3-2.24-XO16-4A	10067017	Weldon	2.000	4	16	2.244	2.000	4.500	3.130	3.035	6.323	11800	4.410	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 0,122"

Parti di ricambio, comprese nella fornitura

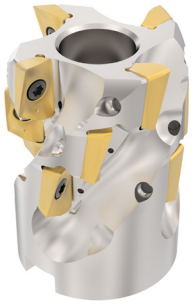
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-01.50	H4B-T15P	C04009-T15P	DOUBLE-T
R217.69-02.00.3A	H4B-T15P	C04009-T15P	DOUBLE-T
R217.69-02.00.4A	H4B-T15P	C04011-T15P	DOUBLE-T

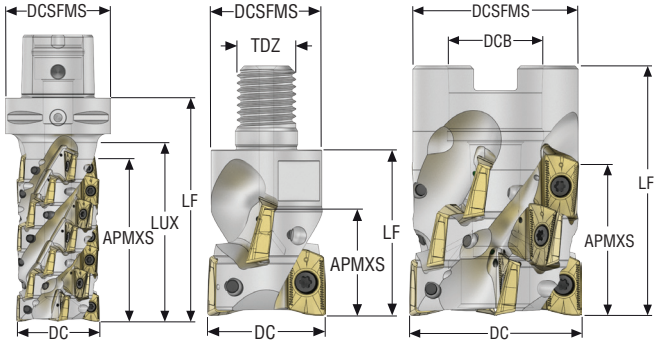
Accessori

Per fresa	Coppia di serraggio inserto	Chiave	Vite	Chiave dinamometrica
				
R217.69-..	3.5NM	T05P-2	SX2035-T05P	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – R217/220.69-16 – In mm



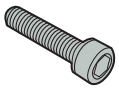
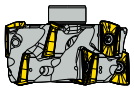


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 153-155
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm	mm		kg	
C6-R217.69-050-098-XO16.4A	10067022	Seco-Capto	50,0	4	28	98,0	–	63,0	–	135,0	110,4	173,0	11800	1,6	XO.X1605
R220.69-0050-043-XO16.4A	10067009	Manicotto	50,0	4	12	43,0	27,0	46,0	–	72,0	–	–	11800	0,6	XO.X1605
R220.69-0063-043-XO16.4A	10067010	Manicotto	63,0	4	12	43,0	27,0	58,0	–	70,0	–	–	10500	1,0	XO.X1605
R220.69-0063-057-XO16.5A	10067011	Manicotto	63,0	5	20	57,0	27,0	58,0	–	80,0	–	–	10500	1,2	XO.X1605
R220.69-0063-085-XO16.5SA	10067024	Manicotto	63,0	5	30	85,0	27,0	58,0	–	108,9	–	–	10500	1,6	XO.X1605
R220.69-0080-071-XO16.5A	10067012	Manicotto	80,0	5	25	71,0	32,0	75,0	–	95,0	–	–	9300	2,5	XO.X1605
R220.69-0080-071-XO16.6A	10067013	Manicotto	80,0	6	30	71,0	32,0	75,0	–	95,0	–	–	9300	2,3	XO.X1605
R220.69-0100-071-XO16.6A	10067014	Manicotto	100,0	6	30	71,0	40,0	88,0	–	95,0	–	–	8300	3,7	XO.X1605
R217.69-1632.RE-029-XO16.2A	10067002	Combimaster	32,0	2	4	29,0	–	30,0	M16	45,0	–	67,75	14800	0,2	XO.X1605
R217.69-2040.RE-029-XO16.3A	10067003	Combimaster	40,0	3	6	29,0	–	36,5	M20	55,0	–	82,0	13200	0,4	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm

Parti di ricambio, comprese nella fornitura

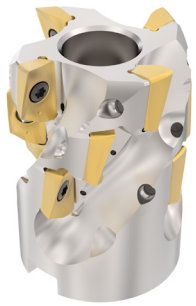
Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
							
Cx-R217.69-..	–	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R217.69-1632-2040	–	–	–	H4B-T15P	C04009-T15P	DOUBLE-T	–
R220.69-0050	MC6S12X60	–	–	H4B-T15P	C04009-T15P	DOUBLE-T	–
R220.69-0063.4A	MC6S12X60	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R220.69-0063.5A	MC6S12X70	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R220.69-0063SA	MC6S12X40	MC6S5X35	R220.69-0063-057-XO16.5BA	H4B-T15P	C04011-T15P	DOUBLE-T	R220.69-RE063-029-XO16.5A
R220.69-0080	MP6S16X80	–	–	H4B-T15PL	C04011-T15P	DOUBLE-T	–
R220.69-0100	MP6S20X80	–	–	H4B-T15PL	C04011-T15P	DOUBLE-T	–

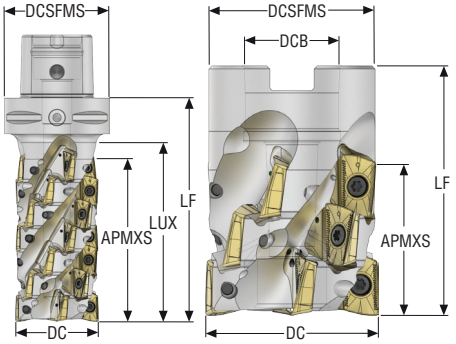
Accessori

Per fresa	Coppia di serraggio inserto	Chiave	Vite	Chiave dinamometrica
				
R217/220.69-..	3.5NM	T05P-2	SX2035-T05P	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 16 – 220.69-16 – Pollici



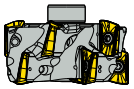


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 153-155
—Per il programma inserti completo, vedere le pagine 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
C6-R217.69-02.00-3.89-XO16-4A	10067023	Seco-Capto	2.000	4	28	3.858	–	2.480	5.350	4.382	6.846	11800	3.530	XO.X1605
R220.69-02.00-1.69-XO16-4A	10067018	Manicotto	2.000	4	12	1.693	1.000	1.850	2.750	–	–	11800	1.320	XO.X1605
R220.69-02.50-1.69-XO16-4A	10067019	Manicotto	2.500	4	12	1.693	1.000	2.283	2.750	–	–	10500	1.100	XO.X1605
R220.69-02.50-2.24-XO16-5A	10067020	Manicotto	2.500	5	20	2.244	1.000	2.283	3.250	–	–	10500	2.650	XO.X1605
R220.69-02.50-3.34-XO16-5SA	10155391	Manicotto	2.500	5	30	3.346	1.000	2.283	4.280	–	–	10500	3.090	XO.X1605
R220.69-03.00-2.79-XO16-5A	10067021	Manicotto	3.000	5	25	2.795	1.250	2.795	3.750	–	–	9300	2.200	XO.X1605

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
							
C6-R217.69-..	–	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R220.69-02.00	UC6S1/2UNFX2-1/2	–	–	H4B-T15P	C04009-T15P	DOUBLE-T	–
R220.69-02.50.4A	UC6S1/2UNFX2-1/2	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R220.69-02.50.5A	UC6S1/2UNFX3	–	–	H4B-T15P	C04011-T15P	DOUBLE-T	–
R220.69-02.50-3.34	UC6S1/2UNFX1-1/2M	UC6S10UNFX1-1/2	R220.69-02.50-2.24-XO16-5BA	1/4HEX-T15PX50	C04011-T15P	–	R220.69-RE02.50-1.14-XO16-5A
R220.69-03.00	UP6S5/8UNFX3-1/4	–	–	H4B-T15PL	C04011-T15P	DOUBLE-T	–

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave	Vite	Chiave dinamometrica
						
C6-R217-02.00	–	–	3.5NM	T05P-2	SX2035-T05P	T00-15P35
R220.69-02.00-03.00	–	–	3.5NM	T05P-2	SX2035-T05P	T00-15P35
R220.69-02.50-SA	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T05P-2	SX2035-T05P	–

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-16 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	XOMX160508TR-ME11 MP2501	0,13 *0.0050*	0,15 0.0060	0,22 0.0085
P2	XOMX160508TR-ME11 MP2501	0,14 *0.0055*	0,15 0.0060	0,22 0.0085
P3	XOMX160508TR-M13 MP2501	0,15 *0.0060*	0,17 0.0065	0,25 0.010
P4	XOMX160508TR-M13 MP2501	0,15 *0.0060*	0,16 0.0065	0,25 0.010
P5	XOMX160508TR-MD14 MP1501	0,16 *0.0065*	0,17 0.0065	0,26 0.010
P6	XOMX160508TR-MD14 MP1501	0,16 *0.0065*	0,17 0.0065	0,26 0.010
P7	XOMX160508TR-MD14 MP1501	0,16 *0.0065*	0,17 0.0065	0,26 0.010
P8	XOMX160508TR-MD14 MP1501	0,16 *0.0065*	0,18 0.0070	0,28 0.011
P11	XOMX160508TR-ME11 MP2050	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P12	XOMX160508TR-ME11 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
M1	XOMX160508R-M09 MS2050	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
M2	XOMX160508R-M09 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M3	XOMX160508R-M09 MS2050	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
M4	XOMX160508TR-ME11 MP2050	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
M5	XOMX160508TR-ME11 MP2050	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
K1	XOMX160508TR-M13 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K2	XOMX160508TR-M13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K3	XOMX160508TR-MD14 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K4	XOMX160508TR-MD14 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K5	XOMX160508TR-MD14 MK2050	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
K6	XOMX160508TR-MD14 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K7	XOMX160508TR-MD14 MK2050	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
N1	XOEX160508FR-E07 H25	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N2	XOEX160508FR-E07 H25	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N3	XOEX160508FR-E07 H25	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
N11	XOEX160508FR-E07 H25	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
S1	XOMX160508TR-ME11 MP2050	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
S2	XOMX160508TR-ME11 MP2050	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
S3	XOMX160508TR-ME11 MP2050	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
S11	XOMX160508TR-ME11 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
S12	XOMX160508TR-ME11 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
S13	XOMX160508TR-ME11 MS2050	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
H5	XOMX160508TR-MD14 MP3000	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
H11	XOMX160508TR-MD14 MP3000	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
H12	XOMX160508TR-ME11 MP2050	0,065 *0.0026*	0,070 0.0028	0,11 0.0044

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-16 – Parametri di taglio v_c = (m/min)/(sf/min)

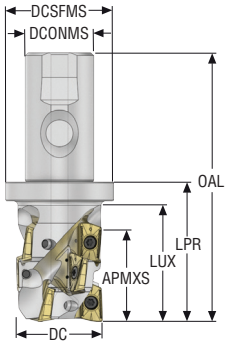
SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H25		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	155 *510*	180 *590*	190 *620*	160 *520*	185 *610*	200 *660*	165 *540*	185 *610*	195 *640*	150 *490*	165 *540*	175 *570*	185 *610*	205 *670*	220 *720*	170 *560*	190 *620*	205 *670*	— —	— —	— —
P2	155 *510*	175 *570*	190 *620*	160 *520*	185 *610*	195 *640*	160 *520*	180 *590*	195 *640*	150 *490*	165 *540*	175 *570*	180 *590*	205 *670*	215 *710*	165 *540*	190 *620*	200 *660*	— —	— —	— —
P3	145 *475*	165 *540*	180 *590*	150 *490*	170 *560*	185 *610*	150 *490*	170 *560*	180 *590*	140 *460*	155 *510*	165 *540*	170 *560*	195 *640*	205 *670*	160 *520*	180 *590*	190 *620*	— —	— —	— —
P4	135 *445*	155 *510*	170 *560*	140 *460*	165 *540*	175 *570*	145 *475*	160 *520*	175 *570*	130 *425*	150 *490*	160 *520*	160 *520*	185 *610*	195 *640*	150 *490*	170 *560*	180 *590*	— —	— —	— —
P5	130 *425*	155 *510*	165 *540*	140 *460*	160 *520*	175 *570*	140 *460*	160 *520*	170 *560*	125 *410*	145 *475*	155 *510*	160 *520*	185 *610*	195 *640*	145 *475*	165 *540*	180 *590*	— —	— —	— —
P6	140 *460*	160 *520*	175 *570*	150 *490*	170 *560*	180 *590*	150 *490*	170 *560*	180 *590*	135 *445*	150 *490*	160 *520*	170 *560*	190 *620*	205 *670*	155 *510*	175 *570*	190 *620*	— —	— —	— —
P7	135 *445*	160 *520*	170 *560*	145 *475*	165 *540*	180 *590*	145 *475*	165 *540*	175 *570*	135 *445*	145 *475*	155 *510*	165 *540*	185 *610*	200 *660*	150 *490*	170 *560*	185 *610*	— —	— —	— —
P8	130 *425*	150 *490*	165 *540*	140 *460*	160 *520*	170 *560*	140 *460*	160 *520*	170 *560*	125 *410*	140 *460*	150 *490*	155 *510*	180 *590*	190 *620*	145 *475*	165 *540*	180 *590*	— —	— —	— —
P11	135 *445*	155 *510*	170 *560*	145 *475*	165 *540*	175 *570*	145 *475*	160 *520*	175 *570*	130 *425*	145 *475*	155 *510*	160 *520*	190 *620*	210 *690*	150 *490*	170 *560*	180 *590*	— —	— —	— —
P12	105 *345*	125 *410*	135 *445*	115 *375*	135 *445*	145 *475*	110 *360*	130 *425*	140 *460*	100 *330*	115 *375*	125 *410*	130 *425*	160 *520*	180 *590*	115 *375*	135 *445*	150 *490*	— —	— —	— —
M1	— —	— —	— —	135 *445*	155 *510*	170 *560*	140 *460*	160 *520*	175 *570*	125 *410*	145 *475*	155 *510*	165 *540*	200 *660*	220 *720*	140 *460*	165 *540*	175 *570*	— —	— —	— —
M2	— —	— —	— —	120 *395*	140 *460*	155 *510*	125 *410*	145 *475*	160 *520*	110 *360*	130 *425*	145 *475*	155 *510*	190 *620*	210 *690*	130 *425*	150 *490*	165 *540*	— —	— —	— —
M3	— —	— —	— —	105 *345*	125 *410*	140 *460*	110 *360*	130 *425*	145 *475*	95 *310*	115 *375*	125 *410*	140 *460*	170 *560*	190 *620*	115 *375*	135 *445*	145 *475*	— —	— —	— —
M4	— —	— —	— —	85 *280*	105 *345*	120 *395*	90 *295*	110 *360*	125 *410*	75 *245*	95 *310*	110 *360*	125 *410*	155 *510*	170 *560*	95 *310*	115 *375*	130 *425*	— —	— —	— —
M5	— —	— —	— —	75 *245*	95 *310*	105 *345*	80 *260*	100 *330*	110 *360*	65 *215*	80 *260*	95 *310*	110 *360*	140 *460*	160 *520*	80 *260*	100 *330*	115 *375*	— —	— —	— —
K1	160 *520*	180 *590*	195 *640*	140 *460*	160 *520*	170 *560*	— —	— —	— —	120 *395*	145 *475*	155 *510*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K2	150 *490*	175 *570*	185 *610*	130 *425*	150 *490*	165 *540*	— —	— —	— —	110 *360*	135 *445*	145 *475*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K3	140 *460*	160 *520*	175 *570*	115 *375*	140 *460*	150 *490*	— —	— —	— —	100 *330*	120 *395*	135 *445*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K4	135 *445*	155 *510*	170 *560*	115 *375*	135 *445*	145 *475*	— —	— —	— —	95 *310*	120 *395*	130 *425*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K5	100 *330*	120 *395*	130 *425*	75 *245*	100 *330*	110 *360*	— —	— —	— —	60 *195*	80 *260*	95 *310*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K6	125 *410*	145 *475*	160 *520*	105 *345*	125 *410*	140 *460*	— —	— —	— —	85 *280*	110 *360*	120 *395*	— —	— —	— —	— —	— —	— —	— —	— —	— —
K7	120 *395*	140 *460*	150 *490*	95 *310*	115 *375*	130 *425*	— —	— —	— —	80 *260*	100 *330*	110 *360*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	270 *890*	290 *950*	305 *1000*	— —	— —	— —	— —	— —	— —	290 *950*	310 *1025*	320 *1050*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	205 *670*	225 *740*	235 *770*	— —	— —	— —	— —	— —	— —	220 *720*	240 *790*	255 *840*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	195 *640*	205 *670*	— —	— —	— —	— —	— —	— —	190 *620*	210 *690*	225 *740*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	185 *610*	205 *670*	215 *710*	— —	— —	— —	— —	— —	— —	200 *660*	220 *720*	235 *770*
S1	— —	— —	— —	41 *135*	55 *180*	65 *215*	44 *145*	55 *180*	70 *230*	35 *115*	46 *150*	55 *180*	48 *155*	60 *195*	75 *245*	48 *155*	60 *195*	75 *245*	— —	— —	— —
S2	— —	— —	— —	33 *110*	43 *140*	50 *165*	35 *115*	46 *150*	55 *180*	28 *90*	37 *120*	44 *145*	39 *130*	50 *165*	60 *195*	39 *130*	50 *165*	60 *195*	— —	— —	— —
S3	— —	— —	— —	29 *95*	38 *125*	44 *145*	31 *100*	41 *135*	48 *155*	25 *80*	33 *110*	38 *125*	34 *110*	45 *150*	50 *165*	34 *110*	45 *150*	50 *165*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	60 *195*	80 *260*	90 *295*	48 *155*	65 *215*	75 *245*	65 *215*	85 *280*	100 *330*	65 *215*	85 *280*	100 *330*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	42 *140*	55 *180*	65 *215*	33 *110*	44 *145*	55 *180*	46 *150*	60 *195*	70 *230*	46 *150*	60 *195*	70 *230*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	25 *80*	32 *105*	38 *125*	20 *65*	26 *85*	30 *100*	27 *90*	35 *115*	42 *140*	27 *90*	35 *115*	42 *140*	— —	— —	— —
H5	— —	— —	— —	34 *110*	45 *150*	55 *180*	— —	— —	— —	29 *95*	39 *130*	45 *150*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	44 *145*	60 *195*	70 *230*	— —	— —	— —	37 *120*	49 *160*	60 *195*	95 *310*	130 *425*	145 *475*	49 *160*	65 *215*	75 *245*	— —	— —	— —
H12	70 *230*	90 *295*	100 *330*	70 *230*	90 *295*	105 *345*	— —	— —	— —	55 *180*	75 *245*	85 *280*	95 *310*	120 *395*	140 *460*	80 *260*	105 *345*	115 *375*	— —	— —	— —

R217/220.69-16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	190	205	215	185	205	215	180	195	205
	—	—	—	*620*	*670*	*710*	*610*	*670*	*710*	*590*	*640*	*670*
P2	—	—	—	185	205	215	185	200	210	175	195	205
	—	—	—	*610*	*670*	*710*	*610*	*660*	*690*	*570*	*640*	*670*
P3	—	—	—	175	190	205	175	190	200	165	185	195
	—	—	—	*570*	*620*	*670*	*570*	*620*	*660*	*540*	*610*	*640*
P4	—	—	—	170	185	195	165	185	190	160	175	185
	—	—	—	*560*	*610*	*640*	*540*	*610*	*620*	*520*	*570*	*610*
P5	—	—	—	165	180	190	165	180	190	155	170	180
	—	—	—	*540*	*590*	*620*	*540*	*590*	*620*	*510*	*560*	*590*
P6	—	—	—	175	190	200	175	190	200	165	180	190
	—	—	—	*570*	*620*	*660*	*570*	*620*	*660*	*540*	*590*	*620*
P7	—	—	—	170	185	195	170	185	195	160	175	185
	—	—	—	*560*	*610*	*640*	*560*	*610*	*640*	*520*	*570*	*610*
P8	—	—	—	165	180	190	165	180	190	155	170	180
	—	—	—	*540*	*590*	*620*	*540*	*590*	*620*	*510*	*560*	*590*
P11	—	—	—	170	185	190	165	180	190	160	175	185
	—	—	—	*560*	*610*	*620*	*540*	*590*	*620*	*520*	*570*	*610*
P12	—	—	—	135	150	160	135	150	155	125	140	150
	—	—	—	*445*	*490*	*520*	*445*	*490*	*510*	*410*	*460*	*490*
M1	—	—	—	—	—	—	135	155	170	130	150	165
	—	—	—	—	—	—	*445*	*510*	*560*	*425*	*490*	*540*
M2	—	—	—	—	—	—	120	140	155	115	135	150
	—	—	—	—	—	—	*395*	*460*	*510*	*375*	*445*	*490*
M3	—	—	—	—	—	—	105	125	140	100	120	135
	—	—	—	—	—	—	*345*	*410*	*460*	*330*	*395*	*445*
M4	—	—	—	—	—	—	90	110	120	80	105	115
	—	—	—	—	—	—	*295*	*360*	*395*	*260*	*345*	*375*
M5	—	—	—	—	—	—	75	95	105	70	90	100
	—	—	—	—	—	—	*245*	*310*	*345*	*230*	*295*	*330*
K1	180	220	245	190	205	215	185	205	215	175	195	205
	590	*720*	*800*	*620*	*670*	*710*	*610*	*670*	*710*	*570*	*640*	*670*
K2	170	210	235	180	195	205	175	195	205	170	185	195
	560	*690*	*770*	*590*	*640*	*670*	*570*	*640*	*670*	*560*	*610*	*640*
K3	150	180	195	165	180	190	165	180	190	155	175	185
	490	*590*	*640*	*540*	*590*	*620*	*540*	*590*	*620*	*510*	*570*	*610*
K4	145	175	190	160	180	190	160	180	185	150	170	180
	475	*570*	*620*	*520*	*590*	*620*	*520*	*590*	*610*	*490*	*560*	*590*
K5	110	140	155	125	140	150	125	140	150	115	135	140
	360	*460*	*510*	*410*	*460*	*490*	*410*	*460*	*490*	*375*	*445*	*460*
K6	135	165	180	155	170	180	150	170	180	145	160	170
	445	*540*	*590*	*510*	*560*	*590*	*490*	*560*	*590*	*475*	*520*	*560*
K7	130	155	175	145	160	170	145	160	170	135	150	160
	425	*510*	*570*	*475*	*520*	*560*	*475*	*520*	*560*	*445*	*490*	*520*
N1	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	39	50	60
	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*
S2	—	—	—	—	—	—	—	—	—	31	41	48
	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*
S3	—	—	—	—	—	—	—	—	—	27	36	42
	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*
S11	—	—	—	—	—	—	—	—	—	55	70	85
	—	—	—	—	—	—	—	—	—	*180*	*230*	*280*
S12	—	—	—	—	—	—	—	—	—	37	48	60
	—	—	—	—	—	—	—	—	—	*120*	*155*	*195*
S13	—	—	—	—	—	—	—	—	—	22	29	33
	—	—	—	—	—	—	—	—	—	*70*	*95*	*110*
H5	—	—	—	44	60	70	—	—	—	34	44	50
	—	—	—	*145*	*195*	*230*	—	—	—	*110*	*145*	*165*
H11	—	—	—	55	75	85	—	—	—	43	55	65
	—	—	—	*180*	*245*	*280*	—	—	—	*140*	*180*	*215*
H12	—	—	—	85	105	115	—	—	—	65	85	95
	—	—	—	*280*	*345*	*375*	—	—	—	*215*	*280*	*310*

Turbo 18 – R217.69-18 – In mm



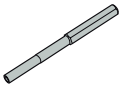


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 161-163
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.69-3240.3S-047-18.2AN	02710003	Seco-Weldon	40,0	2	6	47,0	50,0	32,0	57,0	70,0	130,0	9900	0,8	XO.X1806
R217.69-3250.3S-047-18.3AN	02710010	Seco-Weldon	50,0	3	9	47,0	50,0	32,0	65,0	75,0	134,5	8900	1,2	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H6B-T20P	C04510-T20P	DOUBLE-T

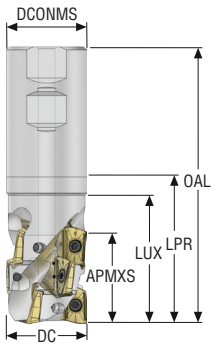
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217.69-18 – Pollici



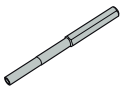


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 161-163
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.69-01.50-3-18S2AN	02710923	Weldon	1.500	2	6	1.862	1.500	4.252	2.618	2.750	5.439	9900	2.200	XO.X1806
R217.69-02.00-3-18S3AN	02710934	Weldon	2.000	3	9	1.850	1.500	4.303	2.802	2.802	5.491	8900	2.870	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 0,122”

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.69-..	H6B-T20P	C04510-T20P	DOUBLE-T

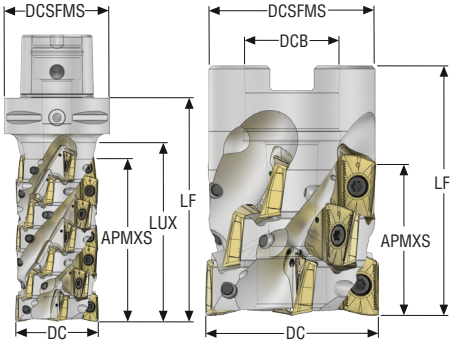
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.69-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217/220.69-18 – In mm



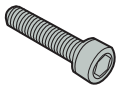
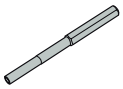


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 161–163
—Per il programma inserti completo, vedere le pagine 911, 912
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

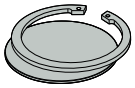
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
C5-R217.69-040-047-18.2AN	02717849	Seco-Capto	40,0	2	6	47,0	–	50,0	82,0	58,0	112,0	9900	0,8	XO.X1806
C6-R217.69-050-062-18.3AN	02717919	Seco-Capto	50,0	3	12	62,0	–	63,0	99,0	73,0	137,0	8900	1,5	XO.X1806
C5-R217.69-054-047-18.3AN	02717916	Seco-Capto	54,0	3	9	47,0	–	50,0	82,0	62,0	112,0	8600	1,1	XO.X1806
C6-R217.69-066-047-18.4AN	02717933	Seco-Capto	66,0	4	12	47,0	–	63,0	84,0	62,0	122,0	7700	1,7	XO.X1806
C8-R217.69-080-093-18.5SAN	02829948	Seco-Capto	80,0	5	30	93,0	–	80,0	140,0	110,0	188,0	7000	4,2	XO.X1806
R220.69-00063-047-18.4AN	02710017	Manicotto	63,0	4	12	47,0	27,0	60,0	70,0	–	–	7900	0,9	XO.X1806
R220.69-00063-047-18.5AN	10178497	Manicotto	63,0	5	15	47,0	27,0	59,0	70,0	–	–	7900	1,0	XO.X1806
R220.69-00063-062-18.3AN	02710032	Manicotto	63,0	3	12	62,0	27,0	60,0	85,0	–	–	7900	1,2	XO.X1806
R220.69-00063-062-18.4AN	02710034	Manicotto	63,0	4	16	62,0	27,0	60,0	85,0	–	–	7900	1,1	XO.X1806
R220.69-00063-077-18.4SAN	02717825	Manicotto	63,0	4	20	77,0	27,0	60,0	100,0	–	–	7900	1,3	XO.X1806
R220.69-00080-047-18.5AN	02710037	Manicotto	80,0	5	15	47,0	32,0	77,0	70,0	–	–	7000	1,7	XO.X1806
R220.69-00080-062-18.5AN	02710039	Manicotto	80,0	5	20	62,0	32,0	77,0	85,0	–	–	7000	2,1	XO.X1806
R220.69-00080-077-18.4SAN	02717831	Manicotto	80,0	4	20	77,0	32,0	77,0	100,0	–	–	7000	2,4	XO.X1806
R220.69-00100-062-18.6AN	02710042	Manicotto	100,0	6	24	62,0	40,0	90,0	85,0	–	–	6300	3,4	XO.X1806
R220.69-00100-077-18.5SAN	02717833	Manicotto	100,0	5	25	77,0	40,0	90,0	100,0	–	–	6300	4,0	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 3,1 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
							
C8-R217.69-080	–	MC6S16X40	C8-R217.69-080-062-18.5BAN	H6B-T20PL	C04510-T20P	DOUBLE-T	R220.69-RE080031-18.5AN
Cx-R217.69-..	–	–	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-00063	MC6S12X60	–	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-00063	MC6S12X60	–	–	1/4HEX-T20PX50	C04510-T20P	–	–
R220.69-00063-SAN	MP6S12X80	–	R220.69-00063046-18.4BAN	H6B-T20P	C04510-T20P	DOUBLE-T	R220.69-RE063031-18.4AN
R220.69-00080	MC6S16X70	–	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-00080-SAN	MP6S16X80	–	R220.69-00080046-18.4BAN	H6B-T20PL	C04510-T20P	DOUBLE-T	R220.69-RE080031-18.4AN
R220.69-00100	MC6S20X70	–	–	H6B-T20PL	C04510-T20P	DOUBLE-T	–
R220.69-00100-SAN	MP6S20X80	–	R220.69-00100046-18.5BAN	H6B-T20PL	C04510-T20P	DOUBLE-T	R220.69-RE100031-18.5AN

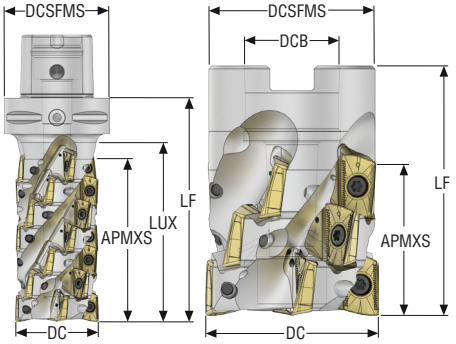
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Kit refrigerante	Coppia di serraggio inserto	Chiave dinamometrica
					
Cx-R217/220.69-..	–	–	–	5.0NM	T00-20P50
Cx-R217/220.69-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	–	5.0NM	T00-20P50
R220.69-00063-SAN	–	–	LUBRICATION_SET_29	5.0NM	T00-20P50
R220.69-00080-SAN	–	–	LUBRICATION_SET_36	5.0NM	T00-20P50
R220.69-00100-SAN	–	–	LUBRICATION_SET_44	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Turbo 18 – R217/220.69-18 – Pollici



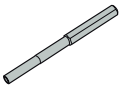


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 161–163
–Per il programma inserti completo, vedere le pagine 911, 912
–Per la spiegazione degli attributi ISO, vedere pag. 16
–KAPRS 90°

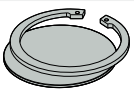
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
C6-R217.69-02.00-18M3AN	02721715	Seco-Capto	2.000	3	12	2.441	–	2.480	3.898	3.031	5.394	8900	2.430	XO.X1806
C6-R217.69-02.50-18M4AN	02721716	Seco-Capto	2.500	4	16	2.409	–	2.480	3.898	3.898	5.394	7900	4.190	XO.X1806
R220.69-02.50-18S4AN	02710940	Manicotto	2.500	4	12	1.866	1.000	2.441	2.750	–	–	7900	2.200	XO.X1806
R220.69-02.50-18M4AN	02710937	Manicotto	2.500	4	16	2.441	1.000	2.441	3.346	–	–	7900	2.200	XO.X1806
R220.69-02.50-18L4SAN	02722279	Manicotto	2.500	4	20	3.024	1.000	2.441	3.937	–	–	7900	3.090	XO.X1806
R220.69-03.00-18M5AN	02710942	Manicotto	3.000	5	20	2.480	1.250	2.890	3.500	–	–	7000	4.410	XO.X1806
R220.69-03.00-18L4SAN	02722281	Manicotto	3.000	4	20	3.024	1.250	2.890	3.937	–	–	7000	4.630	XO.X1806
R220.69-04.00-18L5SAN	02722282	Manicotto	4.000	5	25	3.024	1.500	3.543	3.937	–	–	6300	8.820	XO.X1806

Modifica dei corpi fresa necessaria per raggi di punta > 0,122"

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile
						
Cx-R217.69-..	–	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-02.50L	UP6S1/2UNFX3-1/4	R220.69-02.50-18L4BAN	H6B-T20P	C04510-T20P	DOUBLE-T	R220.69-02.50-RE-18.4AN
R220.69-02.50M	UC6S1/2UNFX3	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-02.50S	UC6S1/2UNFX2-1/2	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-03.00M	UC6S5/8UNFX3	–	H6B-T20P	C04510-T20P	DOUBLE-T	–
R220.69-03.00S	UP6S5/8UNFX3-1/4	R220.69-03.00-18L4BAN	H6B-T20PL	C04510-T20P	DOUBLE-T	R220.69-03.00-RE-18.4AN
R220.69-04.00S	UP6S3/4UNFX3-1/4	R220.69-04.00-18L5BAN	H6B-T20PL	C04510-T20P	DOUBLE-T	R220.69-04.00-RE-18.5AN

Accessori

Per fresa	Kit refrigerante	Coppia di serraggio inserto	Chiave dinamometrica
			
Cx-R217/220.69-..	–	5.0NM	T00-20P50
R220.69-02.50-SAN	LUBRICATION_SET_29	5.0NM	T00-20P50
R220.69-03.00-SAN	LUBRICATION_SET_36	5.0NM	T00-20P50
R220.69-04.00-SAN	LUBRICATION_SET_44	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.69-18 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	XOMX180608TR-ME13 MP2501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
P2	XOMX180608TR-ME13 MP2501	0,15 *0.0060*	0,16 0.0065	0,25 0.010
P3	XOMX180608TR-ME13 MP2501	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
P4	XOMX180608TR-M14 MP2501	0,15 *0.0060*	0,16 0.0065	0,25 0.010
P5	XOMX180608TR-M14 MP2501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
P6	XOMX180608TR-M14 MP2501	0,14 *0.0055*	0,16 0.0065	0,24 0.0095
P7	XOMX180608TR-M14 MP2501	0,14 *0.0055*	0,16 0.0065	0,24 0.0095
P8	XOMX180608TR-M14 MP2501	0,15 *0.0060*	0,17 0.0065	0,25 0.010
P11	XOMX180608TR-M14 MP3501	0,14 *0.0055*	0,16 0.0065	0,24 0.0095
P12	XOMX180608TR-M14 MP3000	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M1	XOMX180608R-M10 MS2050	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
M2	XOMX180608R-M10 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M3	XOMX180608R-M10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
M4	XOMX180608TR-M14 MP3501	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M5	XOMX180608TR-M14 MP3501	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
K1	XOMX180608TR-MD15 MK2050	0,17 *0.0065*	0,19 0.0075	0,28 0.011
K2	XOMX180608TR-MD15 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K3	XOMX180608TR-MD15 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K4	XOMX180608TR-MD15 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K5	XOMX180608TR-MD15 MK2050	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
K6	XOMX180608TR-MD15 MK2050	0,16 *0.0065*	0,17 0.0065	0,26 0.010
K7	XOMX180608TR-MD15 MK2050	0,14 *0.0055*	0,15 0.0060	0,24 0.0095
N1	XOEX180608FR-E10 H25	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N2	XOEX180608FR-E10 H25	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N3	XOEX180608FR-E10 H25	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N11	XOEX180608FR-E10 H25	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
S1	XOMX180608R-M10 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
S2	XOMX180608R-M10 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
S3	XOMX180608R-M10 F40M	0,070 *0.0028*	0,075 0.0030	0,11 0.0044
S11	XOMX180608R-M10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S12	XOMX180608R-M10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S13	XOMX180608R-M10 MS2050	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
H5	XOMX180608TR-MD15 MP3000	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
H8	XOMX180608TR-MD15 MP3000	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
H11	XOMX180608TR-MD15 MP3000	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
H12	XOMX180608TR-M14 MP3000	0,075 *0.0030*	0,085 0.0034	0,13 0.0050

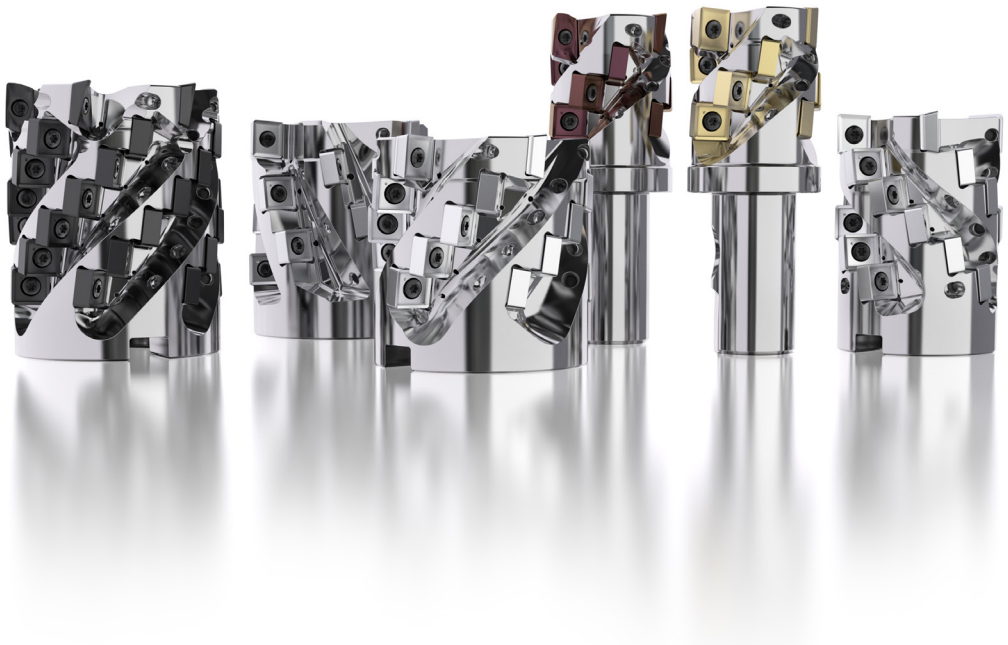
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.69-18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F30M			MP3000			MS2050			F40M			H25		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	140 *460*	155 *510*	165 *540*	130 *425*	145 *475*	155 *510*	140 *460*	155 *510*	165 *540*	140 *460*	155 *510*	165 *540*	125 *410*	140 *460*	155 *510*	— —	— —	— —
P2	140 *460*	155 *510*	165 *540*	125 *410*	145 *475*	155 *510*	135 *445*	155 *510*	165 *540*	140 *460*	155 *510*	165 *540*	125 *410*	140 *460*	150 *490*	— —	— —	— —
P3	130 *425*	145 *475*	155 *510*	120 *395*	135 *445*	145 *475*	130 *425*	145 *475*	155 *510*	130 *425*	145 *475*	155 *510*	115 *375*	130 *425*	145 *475*	— —	— —	— —
P4	120 *395*	140 *460*	150 *490*	110 *360*	130 *425*	140 *460*	120 *395*	140 *460*	150 *490*	120 *395*	140 *460*	150 *490*	110 *360*	125 *410*	135 *445*	— —	— —	— —
P5	120 *395*	135 *445*	145 *475*	110 *360*	125 *410*	135 *445*	120 *395*	135 *445*	145 *475*	120 *395*	135 *445*	145 *475*	105 *345*	120 *395*	135 *445*	— —	— —	— —
P6	130 *425*	145 *475*	155 *510*	115 *375*	130 *425*	145 *475*	125 *410*	145 *475*	155 *510*	125 *410*	145 *475*	155 *510*	115 *375*	130 *425*	140 *460*	— —	— —	— —
P7	125 *410*	140 *460*	150 *490*	115 *375*	130 *425*	140 *460*	125 *410*	140 *460*	150 *490*	125 *410*	140 *460*	150 *490*	110 *360*	125 *410*	135 *445*	— —	— —	— —
P8	120 *395*	135 *445*	145 *475*	110 *360*	125 *410*	135 *445*	120 *395*	135 *445*	145 *475*	120 *395*	135 *445*	145 *475*	105 *345*	120 *395*	130 *425*	— —	— —	— —
P11	120 *395*	140 *460*	150 *490*	110 *360*	125 *410*	140 *460*	120 *395*	140 *460*	150 *490*	120 *395*	140 *460*	150 *490*	110 *360*	125 *410*	135 *445*	— —	— —	— —
P12	95 *310*	115 *375*	125 *410*	85 *280*	100 *330*	110 *360*	95 *310*	110 *360*	120 *395*	95 *310*	110 *360*	120 *395*	80 *260*	100 *330*	110 *360*	— —	— —	— —
M1	— —	— —	— —	115 *375*	130 *425*	140 *460*	120 *395*	135 *445*	145 *475*	125 *410*	140 *460*	150 *490*	110 *360*	130 *425*	140 *460*	— —	— —	— —
M2	— —	— —	— —	100 *330*	120 *395*	130 *425*	110 *360*	125 *410*	135 *445*	115 *375*	130 *425*	140 *460*	100 *330*	115 *375*	125 *410*	— —	— —	— —
M3	— —	— —	— —	90 *295*	105 *345*	115 *375*	95 *310*	110 *360*	125 *410*	100 *330*	115 *375*	125 *410*	85 *280*	105 *345*	115 *375*	— —	— —	— —
M4	— —	— —	— —	75 *245*	90 *295*	100 *330*	80 *260*	100 *330*	110 *360*	85 *280*	100 *330*	110 *360*	70 *230*	90 *295*	100 *330*	— —	— —	— —
M5	— —	— —	— —	65 *215*	80 *260*	90 *295*	70 *230*	85 *280*	95 *310*	75 *245*	90 *295*	100 *330*	60 *195*	80 *260*	90 *295*	— —	— —	— —
K1	140 *460*	160 *520*	170 *560*	110 *360*	130 *425*	140 *460*	125 *410*	140 *460*	150 *490*	— —	— —	— —	110 *360*	125 *410*	135 *445*	— —	— —	— —
K2	135 *445*	150 *490*	165 *540*	105 *345*	120 *395*	135 *445*	115 *375*	135 *445*	145 *475*	— —	— —	— —	100 *330*	120 *395*	130 *425*	— —	— —	— —
K3	125 *410*	140 *460*	155 *510*	95 *310*	110 *360*	125 *410*	105 *345*	125 *410*	135 *445*	— —	— —	— —	90 *295*	110 *360*	120 *395*	— —	— —	— —
K4	120 *395*	140 *460*	150 *490*	90 *295*	110 *360*	120 *395*	100 *330*	120 *395*	130 *425*	— —	— —	— —	90 *295*	105 *345*	115 *375*	— —	— —	— —
K5	95 *310*	110 *360*	120 *395*	65 *215*	80 *260*	90 *295*	75 *245*	90 *295*	100 *330*	— —	— —	— —	60 *195*	80 *260*	85 *280*	— —	— —	— —
K6	115 *375*	130 *425*	140 *460*	85 *280*	100 *330*	110 *360*	95 *310*	110 *360*	125 *410*	— —	— —	— —	80 *260*	100 *330*	110 *360*	— —	— —	— —
K7	110 *360*	125 *410*	135 *445*	80 *260*	95 *310*	105 *345*	90 *295*	105 *345*	115 *375*	— —	— —	— —	75 *245*	90 *295*	100 *330*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	230 *750*	245 *800*	255 *840*	235 *770*	255 *840*	265 *870*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	190 *620*	200 *660*	185 *610*	200 *660*	210 *690*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	150 *490*	170 *560*	180 *590*	160 *520*	175 *570*	185 *610*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	160 *520*	175 *570*	185 *610*	165 *540*	185 *610*	195 *640*
S1	— —	— —	— —	36 *120*	47 *155*	55 *180*	40 *130*	50 *165*	60 *195*	42 *140*	55 *180*	65 *215*	34 *110*	45 *150*	55 *180*	— —	— —	— —
S2	— —	— —	— —	29 *95*	38 *125*	45 *150*	32 *105*	42 *140*	50 *165*	34 *110*	45 *150*	55 *180*	28 *90*	36 *120*	43 *140*	— —	— —	— —
S3	— —	— —	— —	25 *80*	34 *110*	39 *130*	28 *90*	37 *120*	44 *145*	30 *100*	39 *130*	46 *150*	24 *80*	32 *105*	38 *125*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	75 *245*	85 *280*	47 *155*	60 *195*	75 *245*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	— —	— —	— —	41 *135*	55 *180*	65 *215*	33 *110*	43 *140*	50 *165*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	— —	— —	— —	24 *80*	31 *100*	37 *120*	19 *60*	25 *80*	30 *100*	— —	— —	— —
H5	— —	— —	— —	30 *100*	40 *130*	47 *155*	34 *110*	44 *145*	50 *165*	— —	— —	— —	29 *95*	38 *125*	45 *150*	— —	— —	— —
H8	— —	— —	— —	33 *110*	42 *140*	50 *165*	36 *120*	47 *155*	55 *180*	— —	— —	— —	31 *100*	40 *130*	48 *155*	— —	— —	— —
H11	— —	— —	— —	38 *125*	50 *165*	60 *195*	43 *140*	55 *180*	65 *215*	— —	— —	— —	37 *120*	48 *155*	55 *180*	— —	— —	— —
H12	— —	— —	— —	60 *195*	75 *245*	85 *280*	70 *230*	85 *280*	95 *310*	— —	— —	— —	55 *180*	70 *230*	80 *260*	— —	— —	— —

R217/220.69-18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1500			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	165	175	185	160	175	185	155	170	175
	—	—	—	*540*	*570*	*610*	*520*	*570*	*610*	*510*	*560*	*570*
P2	—	—	—	160	175	185	160	175	180	155	170	175
	—	—	—	*520*	*570*	*610*	*520*	*570*	*590*	*510*	*560*	*570*
P3	—	—	—	155	165	175	155	165	175	145	160	165
	—	—	—	*510*	*540*	*570*	*510*	*540*	*570*	*475*	*520*	*540*
P4	—	—	—	145	160	165	145	160	165	140	150	160
	—	—	—	*475*	*520*	*540*	*475*	*520*	*540*	*460*	*490*	*520*
P5	—	—	—	145	155	165	140	155	165	135	150	155
	—	—	—	*475*	*510*	*540*	*460*	*510*	*540*	*445*	*490*	*510*
P6	—	—	—	150	165	170	150	165	170	145	155	165
	—	—	—	*490*	*540*	*560*	*490*	*540*	*560*	*475*	*510*	*540*
P7	—	—	—	150	160	170	145	160	165	140	155	160
	—	—	—	*490*	*520*	*560*	*475*	*520*	*540*	*460*	*510*	*520*
P8	—	—	—	145	155	165	140	155	165	135	150	155
	—	—	—	*475*	*510*	*540*	*460*	*510*	*540*	*445*	*490*	*510*
P11	—	—	—	145	160	165	145	160	165	140	150	160
	—	—	—	*475*	*520*	*540*	*475*	*520*	*540*	*460*	*490*	*520*
P12	—	—	—	120	130	140	120	130	140	115	125	130
	—	—	—	*395*	*425*	*460*	*395*	*425*	*460*	*375*	*410*	*425*
M1	—	—	—	—	—	—	120	140	150	115	135	145
	—	—	—	—	—	—	*395*	*460*	*490*	*375*	*445*	*475*
M2	—	—	—	—	—	—	110	125	135	105	120	130
	—	—	—	—	—	—	*360*	*410*	*445*	*345*	*395*	*425*
M3	—	—	—	—	—	—	95	115	125	90	110	120
	—	—	—	—	—	—	*310*	*375*	*410*	*295*	*360*	*395*
M4	—	—	—	—	—	—	80	100	110	80	95	105
	—	—	—	—	—	—	*260*	*330*	*360*	*260*	*310*	*345*
M5	—	—	—	—	—	—	70	90	100	65	85	95
	—	—	—	—	—	—	*230*	*295*	*330*	*215*	*280*	*310*
K1	145	160	175	160	175	185	160	175	185	155	170	175
	475	*520*	*570*	*520*	*570*	*610*	*520*	*570*	*610*	*510*	*560*	*570*
K2	140	155	165	155	170	175	155	165	175	145	160	170
	460	*510*	*540*	*510*	*560*	*570*	*510*	*540*	*570*	*475*	*520*	*560*
K3	130	145	155	145	160	165	145	155	165	135	150	160
	425	*475*	*510*	*475*	*520*	*540*	*475*	*510*	*540*	*445*	*490*	*520*
K4	125	145	155	140	155	165	140	155	165	135	150	155
	410	*475*	*510*	*460*	*510*	*540*	*460*	*510*	*540*	*445*	*490*	*510*
K5	95	115	125	115	125	135	115	125	135	105	120	125
	310	*375*	*410*	*375*	*410*	*445*	*375*	*410*	*445*	*345*	*395*	*410*
K6	120	135	145	135	150	155	135	145	155	125	140	150
	395	*445*	*475*	*445*	*490*	*510*	*445*	*475*	*510*	*410*	*460*	*490*
K7	110	130	140	130	140	150	125	140	145	120	135	140
	360	*425*	*460*	*425*	*460*	*490*	*410*	*460*	*475*	*395*	*445*	*460*
N1	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	38	50	60
	—	—	—	—	—	—	—	—	—	*125*	*165*	*195*
S2	—	—	—	—	—	—	—	—	—	30	40	47
	—	—	—	—	—	—	—	—	—	*100*	*130*	*155*
S3	—	—	—	—	—	—	—	—	—	27	35	41
	—	—	—	—	—	—	—	—	—	*90*	*115*	*135*
S11	—	—	—	—	—	—	—	—	—	50	70	80
	—	—	—	—	—	—	—	—	—	*165*	*230*	*260*
S12	—	—	—	—	—	—	—	—	—	36	48	55
	—	—	—	—	—	—	—	—	—	*120*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	21	28	33
	—	—	—	—	—	—	—	—	—	*70*	*90*	*110*
H5	—	—	—	43	55	65	—	—	—	33	44	50
	—	—	—	*140*	*180*	*215*	—	—	—	*110*	*145*	*165*
H8	—	—	—	46	60	70	—	—	—	36	47	55
	—	—	—	*150*	*195*	*230*	—	—	—	*120*	*155*	*180*
H11	—	—	—	55	70	80	—	—	—	42	55	65
	—	—	—	*180*	*230*	*260*	—	—	—	*140*	*180*	*215*
H12	—	—	—	80	95	105	—	—	—	65	80	90
	—	—	—	*260*	*310*	*345*	—	—	—	*215*	*260*	*295*

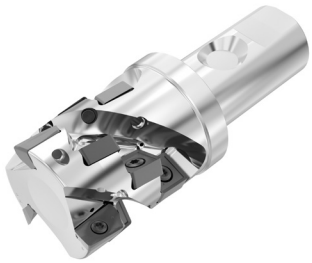


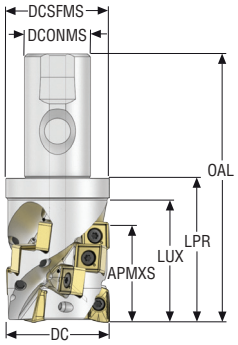
SN8-13 ELICOIDALE

Restiamo al passo con i clienti, che ci chiedono di ridurre il costo pezzo. Seco Helical SN8-13 ha inserti elicoidali bilaterali con otto taglienti che riducono significativamente il costo per tagliente per migliorare l'efficienza di scanalatura, fresatura a spallamento e fresatura di sgrossatura. Realizzati per applicazioni difficili che coinvolgono materiali ISO P, M, K e S, gli utensili da taglio offrono versioni di sottofamiglie specifiche per applicazioni con eliche destrorse o sinistrorse, diverse opzioni di taglienti effettivi, due inserti frontali e molte scelte di raggi per una lunga durata utensile e la massima asportazione del truciolo. Affidabile e di facile utilizzo, su Helical SN8-13 non è possibile l'errato montaggio invertendo gli inserti frontali ed elicoidali con riduzione degli errori da parte dell'operatore.

- La gamma è costruita con 4 sottofamiglie realizzate con inserto elicoidale SN13:
- L'inserto SN.U13 offre 8 taglienti in 3 geometrie e diverse qualità
- R217/220.82: Inserto di imbocco XO16 = prima scelta
- R217/220.82-H: Inserto di imbocco AC15 = impieghi pesanti, sostituzione R220.69-15H
- R217/220.81: Inserto di imbocco AC15 = bassa potenza, sostituzione R215/220.59
- R217/220.81-K: Inserto di imbocco AC15 = sporgenza lunga, sostituzione R215/220.59

R217.82-SNXO16 – In mm

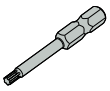




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 169–170
—Per il programma inserti completo, vedere le pagine 885, 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.82-3250.3S-047-SNXO16.3A	10127480	Seco/Weldon	50,0	3	12	47,0	50,0	32,0	60,0	70,0	130,0	11800	1,0	XO.X1605 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Vite di bloccaggio inserto 2
			
R217.82-..	1/4HEX-T15PX50	C55011-T15P	C04011-T15P

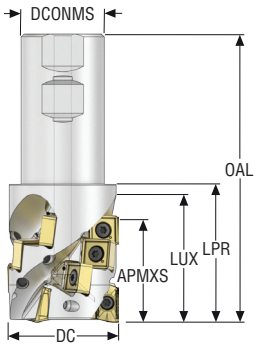
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coppia di serraggio inserto 2	Chiave dinamometrica	Chiave dinamometrica 2
						
R217.82-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	3.5NM	T00-15P50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217.82-SNXO16 – Pollici

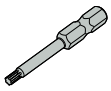




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 169-170
—Per il programma inserti completo, vedere le pagine 885, 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.82-02.00-3-1.85-SNXO16.3A	10127485	Weldon	2.000	3	12	1.850	1.500	4.000	2.362	2.441	5.169	11800	2.650	XO.X1605 / SN.U1306

Parti di ricambio, comprese nella fornitura

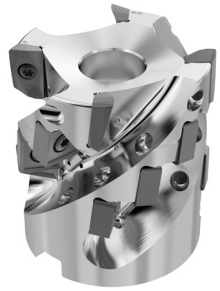
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Vite di bloccaggio inserto 2
			
R217.82-..	1/4HEX-T15PX50	C55011-T15P	C04011-T15P

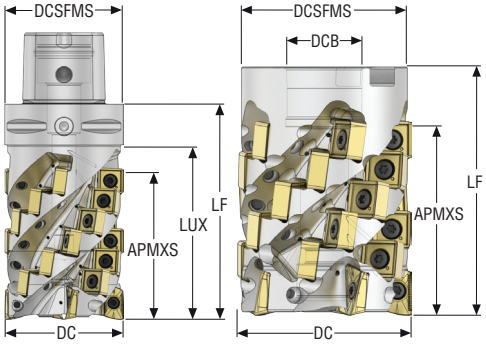
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coppia di serraggio inserto 2	Chiave dinamometrica	Chiave dinamometrica 2
						
R217.82-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	3.5NM	T00-15P50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.82-SNXO16 – In mm

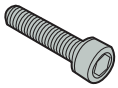
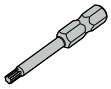
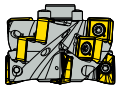




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 169–170
—Per il programma inserti completo, vedere le pagine 885, 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
C6-R217.82-063-079-SNXO16.4SA	10127467	Seco-Capto	63,0	4	28	79,0	–	63,0	115,0	92,2	153,0	7400	2,0	XO.X1605 / SN.U1306
R220.82-0063-047-SNXO16.4A	10127481	Manicotto	63,0	4	16	47,0	27,0	59,0	70,0	–	–	10500	0,9	XO.X1605 / SN.U1306
R220.82-0063-069-SNXO16.5A	10127482	Manicotto	63,0	5	30	69,0	27,0	59,0	90,0	–	–	10500	1,2	XO.X1605 / SN.U1306
R220.82-0080-068-SNXO16.5A	10127483	Manicotto	80,0	5	30	68,0	32,0	75,0	90,0	–	–	6500	1,9	XO.X1605 / SN.U1306
R220.82-0080-079-SNXO16.6A	10127484	Manicotto	80,0	6	42	79,0	32,0	75,0	100,0	–	–	6500	2,1	XO.X1605 / SN.U1306
R220.82-0080-090-SNXO16.5SA	10127468	Manicotto	80,0	5	30	90,0	32,0	75,0	115,0	–	–	6500	2,7	XO.X1605 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Vite di bloccaggio inserto 2	Terminale sostituibile
							
Cx-R217.82	–	MC6S5X35	C6-R217.82-063-043-SN.4BA	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	R220.82-RE063-036-SNXO16.4A
R220.82-0063-047	MC6S12X60	–	–	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	–
R220.82-0063-069	MC6S12X80	–	–	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	–
R220.82-0080	MP6S16X80	–	–	1/4HEX-T15PX90	C55011-T15P	C04011-T15P	–
R220.82-0080-090	MC6S16X100	–	R220.82-0080-054-SN.5BA	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	R220.82-RE080-036-SNXO16.5A

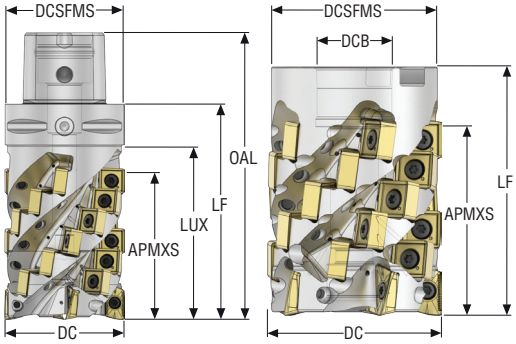
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coppia di serraggio inserto 2	Chiave dinamometrica	Chiave dinamometrica 2
						
	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	–	–	T00-15P50	T00-15P35
Cx-R217/220.82	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	3.5NM	T00-15P50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.82-SNXO16 – Pollici

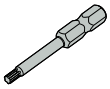
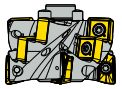




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 169-170
—Per il programma inserti completo, vedere le pagine 885, 909, 910
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
C6-R217.82-2.5-3.11-SNXO16.4SA	10128065	Seco-Capto	2.500	4	28	3.110	–	2.480	4.528	3.630	6.024	7400	3.970	XO.X1605 / SN.U1306
R220.82-02.50-1.85-SNXO16.4A	10127486	Manicotto	2.500	4	16	1.850	1.000	2.323	2.750	–	–	10500	1.980	XO.X1605 / SN.U1306
R220.82-02.50-2.75-SNXO16.5A	10127487	Manicotto	2.500	5	30	2.717	1.000	2.323	3.500	–	–	10500	2.650	XO.X1605 / SN.U1306
R220.82-03.00-2.68-SNXO16.5A	10127488	Manicotto	3.000	5	30	2.677	1.250	2.795	3.500	–	–	6500	3.750	XO.X1605 / SN.U1306
R220.82-03.00-3.11-SNXO16.6A	10127489	Manicotto	3.000	6	42	3.110	1.250	2.795	3.938	–	–	6500	4.190	XO.X1605 / SN.U1306
R220.82-03.00-3.11-SNXO16.5SA	10164790	Manicotto	3.000	5	30	3.110	1.250	2.795	4.000	–	–	6500	4.410	XO.X1605 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Vite di bloccaggio inserto 2	Terminale sostituibile
							
Cx-R217.82	–	UC6S10UNFX1-1/2	C6-R217.82-2.5-1.69-SN.4BA	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	R220.82-RE02.50-1.42-SNXO16.4A
R220.82-02.50.4A	UC6S1/2UNFX2-1/4	–	–	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	–
R220.82-02.50.5A	UC6S1/2UNFX3	–	–	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	–
R220.82-03.00	UP6S5/8UNFX3-1/4	–	–	1/4HEX-T15PX90	C55011-T15P	C04011-T15P	–
R220.82-03.00-SA	MC6S16X100	–	R220.82-03.00-1.69-SN.5BA	1/4HEX-T15PX50	C55011-T15P	C04011-T15P	R220.82-RE03.00-1.42-SNXO16.5A

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coppia di serraggio inserto 2	Chiave dinamometrica	Chiave dinamometrica 2
						
	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	–	–	T00-15P50	T00-15P35
Cx-R217/220.82-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	3.5NM	T00-15P50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.82-SNXO16 – Selezione dell'inserto – mm/Inch

SMG			f_z		
			100%	30%	10%
P1	XOMX160508TR-M13 MP2501	SNXU130612TN-M12 MP2501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
P2	XOMX160508TR-M13 MP2501	SNXU130612TN-M12 MP2501	0,15 *0.0060*	0,16 *0.0065*	0,25 *0.010*
P3	XOMX160508TR-M13 MP2501	SNXU130612TN-M12 MP2501	0,14 *0.0055*	0,15 *0.0060*	0,24 *0.0095*
P4	XOMX160508TR-M13 MP2501	SNXU130612TN-M12 MP2501	0,14 *0.0055*	0,15 *0.0060*	0,24 *0.0095*
P5	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
P6	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,14 *0.0055*	0,16 *0.0065*	0,24 *0.0095*
P7	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,14 *0.0055*	0,16 *0.0065*	0,24 *0.0095*
P8	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,15 *0.0060*	0,17 *0.0065*	0,25 *0.010*
P11	XOMX160508TR-ME11 MP3501	SNXU130612TN-M12 MP3501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P12	XOMX160508TR-ME11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
M1	XOMX160508R-M09 MS2050	SNGU130612EN-ME10 MS2050	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
M2	XOMX160508R-M09 MS2050	SNGU130612EN-ME10 MS2050	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
M3	XOMX160508R-M09 MS2050	SNGU130612EN-ME10 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,13 *0.0050*
M4	XOMX160508TR-ME11 MS2050	SNGU130612EN-ME10 MS2050	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
M5	XOMX160508TR-ME11 MS2050	SNGU130612EN-ME10 MS2050	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
K1	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,15 *0.0060*	0,16 *0.0065*	0,25 *0.010*
K2	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,14 *0.0055*	0,15 *0.0060*	0,22 *0.0085*
K3	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,14 *0.0055*	0,15 *0.0060*	0,22 *0.0085*
K4	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,14 *0.0055*	0,15 *0.0060*	0,22 *0.0085*
K5	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
K6	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,14 *0.0055*	0,15 *0.0060*	0,22 *0.0085*
K7	XOMX160508TR-M13 MK2050	SNGU130612TN-M14 MK2050	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
S1	XOMX160508TR-ME11 F40M	SNGU130612EN-ME10 MS2050	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S2	XOMX160508TR-ME11 F40M	SNGU130612EN-ME10 MS2050	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S3	XOMX160508TR-ME11 F40M	SNGU130612EN-ME10 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,12 *0.0048*
S11	XOMX160508TR-ME11 MS2050	SNGU130612EN-ME10 MS2050	0,090 *0.0036*	0,10 *0.0040*	0,15 *0.0060*
S12	XOMX160508TR-ME11 MS2050	SNGU130612EN-ME10 MS2050	0,090 *0.0036*	0,10 *0.0040*	0,15 *0.0060*
S13	XOMX160508TR-ME11 MS2050	SNGU130612EN-ME10 MS2050	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
H5	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
H11	XOMX160508TR-MD14 MP1501	SNGU130612TN-M14 MP1501	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
H12	XOMX160508TR-ME11 MP2050	SNGU130612EN-ME10 MP2050	0,060 *0.0024*	0,065 *0.0026*	0,10 *0.0040*

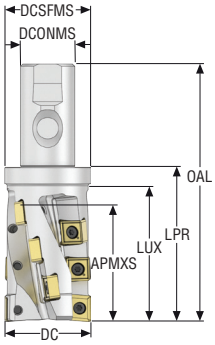
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.82-SNXO16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MS2050			F40M			MS2500			MP1501			MP2501			MS2500			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	120 *395*	135 *445*	145 *475*	140 *460*	155 *510*	165 *540*	155 *510*	165 *540*	175 *570*	155 *510*	165 *540*	170 *560*	140 *460*	155 *510*	165 *540*	150 *490*	160 *520*	170 *560*
P2	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	120 *395*	135 *445*	145 *475*	140 *460*	155 *510*	165 *540*	150 *490*	165 *540*	170 *560*	150 *490*	165 *540*	170 *560*	140 *460*	155 *510*	165 *540*	145 *475*	160 *520*	165 *540*
P3	125 *410*	140 *460*	150 *490*	115 *375*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*	130 *425*	145 *475*	155 *510*	145 *475*	155 *510*	165 *540*	145 *475*	155 *510*	165 *540*	130 *425*	145 *475*	155 *510*	140 *460*	150 *490*	160 *520*
P4	120 *395*	135 *445*	145 *475*	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	125 *410*	140 *460*	150 *490*	140 *460*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	125 *410*	140 *460*	150 *490*	135 *445*	145 *475*	150 *490*
P5	120 *395*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	125 *410*	140 *460*	150 *490*	135 *445*	150 *490*	155 *510*	135 *445*	145 *475*	155 *510*	125 *410*	140 *460*	150 *490*	130 *425*	140 *460*	150 *490*
P6	125 *410*	140 *460*	150 *490*	115 *375*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*	130 *425*	145 *475*	155 *510*	145 *475*	155 *510*	160 *520*	140 *460*	155 *510*	160 *520*	130 *425*	145 *475*	155 *510*	140 *460*	150 *490*	155 *510*
P7	120 *395*	135 *445*	145 *475*	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	125 *410*	140 *460*	150 *490*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	155 *510*	125 *410*	140 *460*	150 *490*	135 *445*	145 *475*	155 *510*
P8	115 *375*	130 *425*	140 *460*	105 *345*	125 *410*	130 *425*	100 *330*	120 *395*	125 *410*	120 *395*	140 *460*	145 *475*	135 *445*	145 *475*	155 *510*	135 *445*	145 *475*	155 *510*	120 *395*	140 *460*	145 *475*	130 *425*	140 *460*	150 *490*
P11	120 *395*	135 *445*	145 *475*	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	125 *410*	140 *460*	150 *490*	140 *460*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	125 *410*	140 *460*	150 *490*	135 *445*	145 *475*	150 *490*
P12	95 *310*	110 *360*	120 *395*	85 *280*	100 *330*	110 *360*	80 *260*	95 *310*	105 *345*	100 *330*	115 *375*	125 *410*	115 *375*	125 *410*	130 *425*	115 *375*	125 *410*	130 *425*	100 *330*	115 *375*	125 *410*	110 *360*	120 *395*	125 *410*
M1	— —	— —	— —	110 *360*	130 *425*	140 *460*	105 *345*	120 *395*	130 *425*	120 *395*	135 *445*	145 *475*	— —	— —	— —	115 *375*	130 *425*	140 *460*	120 *395*	135 *445*	145 *475*	110 *360*	130 *425*	140 *460*
M2	— —	— —	— —	105 *345*	115 *375*	125 *410*	100 *330*	110 *360*	120 *395*	110 *360*	125 *410*	135 *445*	— —	— —	— —	105 *345*	120 *395*	130 *425*	110 *360*	125 *410*	135 *445*	105 *345*	115 *375*	125 *410*
M3	— —	— —	— —	90 *295*	105 *345*	115 *375*	85 *280*	100 *330*	110 *360*	100 *330*	115 *375*	125 *410*	— —	— —	— —	95 *310*	110 *360*	115 *375*	100 *330*	115 *375*	125 *410*	90 *295*	105 *345*	115 *375*
M4	— —	— —	— —	75 *245*	90 *295*	100 *330*	70 *230*	85 *280*	95 *310*	85 *280*	100 *330*	110 *360*	— —	— —	— —	80 *260*	95 *310*	105 *345*	85 *280*	100 *330*	110 *360*	75 *245*	90 *295*	100 *330*
M5	— —	— —	— —	65 *215*	80 *260*	90 *295*	60 *195*	75 *245*	85 *280*	75 *245*	90 *295*	100 *330*	— —	— —	— —	70 *230*	85 *280*	95 *310*	75 *245*	90 *295*	100 *330*	65 *215*	80 *260*	90 *295*
K1	135 *445*	155 *510*	165 *540*	— —	— —	— —	105 *345*	120 *395*	130 *425*	125 *410*	140 *460*	150 *490*	155 *510*	165 *540*	170 *560*	150 *490*	165 *540*	170 *560*	125 *410*	140 *460*	150 *490*	145 *475*	160 *520*	165 *540*
K2	130 *425*	145 *475*	155 *510*	— —	— —	— —	100 *330*	115 *375*	125 *410*	120 *395*	135 *445*	145 *475*	145 *475*	160 *520*	165 *540*	145 *475*	155 *510*	165 *540*	120 *395*	135 *445*	145 *475*	140 *460*	155 *510*	160 *520*
K3	125 *410*	135 *445*	145 *475*	— —	— —	— —	90 *295*	105 *345*	115 *375*	110 *360*	125 *410*	135 *445*	135 *445*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	110 *360*	125 *410*	135 *445*	135 *445*	145 *475*	150 *490*
K4	120 *395*	135 *445*	145 *475*	— —	— —	— —	90 *295*	105 *345*	115 *375*	110 *360*	125 *410*	135 *445*	135 *445*	145 *475*	155 *510*	135 *445*	145 *475*	155 *510*	110 *360*	125 *410*	135 *445*	130 *425*	140 *460*	150 *490*
K5	95 *310*	110 *360*	115 *375*	— —	— —	— —	60 *195*	75 *245*	85 *280*	80 *260*	95 *310*	105 *345*	110 *360*	120 *395*	125 *410*	105 *345*	120 *395*	125 *410*	80 *260*	95 *310*	105 *345*	105 *345*	115 *375*	120 *395*
K6	115 *375*	125 *410*	140 *460*	— —	— —	— —	80 *260*	95 *310*	105 *345*	100 *330*	115 *375*	125 *410*	130 *425*	140 *460*	145 *475*	125 *410*	140 *460*	145 *475*	100 *330*	115 *375*	125 *410*	125 *410*	135 *445*	140 *460*
K7	105 *345*	120 *395*	130 *425*	— —	— —	— —	75 *245*	90 *295*	100 *330*	95 *310*	110 *360*	120 *395*	120 *395*	135 *445*	140 *460*	120 *395*	135 *445*	140 *460*	95 *310*	110 *360*	120 *395*	115 *375*	130 *425*	135 *445*
S1	— —	— —	— —	38 *125*	50 *165*	60 *195*	35 *115*	46 *150*	55 *180*	47 *155*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	47 *155*	60 *195*	70 *230*	38 *125*	50 *165*	60 *195*
S2	— —	— —	— —	31 *100*	41 *135*	48 *155*	28 *90*	37 *120*	43 *140*	37 *120*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	37 *120*	50 *165*	60 *195*	31 *100*	41 *135*	48 *155*
S3	— —	— —	— —	27 *90*	36 *120*	42 *140*	25 *80*	32 *105*	38 *125*	33 *110*	43 *140*	50 *165*	— —	— —	— —	— —	— —	— —	33 *110*	43 *140*	50 *165*	27 *90*	36 *120*	42 *140*
S11	— —	— —	— —	55 *180*	70 *230*	75 *245*	49 *160*	65 *215*	70 *230*	65 *215*	80 *260*	90 *295*	— —	— —	— —	— —	— —	— —	65 *215*	80 *260*	90 *295*	55 *180*	70 *230*	75 *245*
S12	— —	— —	— —	37 *120*	49 *160*	55 *180*	34 *110*	44 *145*	50 *165*	45 *150*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	45 *150*	60 *195*	70 *230*	37 *120*	49 *160*	55 *180*
S13	— —	— —	— —	21 *70*	28 *90*	33 *110*	20 *65*	26 *85*	30 *100*	26 *85*	35 *115*	40 *130*	— —	— —	— —	— —	— —	— —	26 *85*	35 *115*	40 *130*	21 *70*	28 *90*	33 *110*
H5	— —	— —	— —	— —	— —	— —	29 *95*	39 *130*	46 *150*	38 *125*	50 *165*	60 *195*	43 *140*	55 *180*	65 *215*	— —	— —	— —	38 *125*	50 *165*	60 *195*	34 *110*	44 *145*	55 *180*
H8	— —	— —	— —	— —	— —	— —	31 *100*	41 *135*	48 *155*	41 *135*	55 *180*	60 *195*	46 *150*	60 *195*	70 *230*	— —	— —	— —	41 *135*	55 *180*	60 *195*	36 *120*	48 *155*	55 *180*
H11	— —	— —	— —	— —	— —	— —	37 *120*	49 *160*	60 *195*	49 *160*	65 *215*	75 *245*	55 *180*	70 *230*	80 *260*	— —	— —	— —	49 *160*	65 *215*	75 *245*	43 *140*	55 *180*	65 *215*
H12	— —	— —	— —	— —	— —	— —	55 *180*	70 *230*	80 *260*	75 *245*	90 *295*	100 *330*	75 *245*	90 *295*	100 *330*	— —	— —	— —	75 *245*	90 *295*	100 *330*	65 *215*	80 *260*	90 *295*

R217.81-SNAC15 Elica sinistrorsa per risoluzione dei problemi – In mm

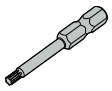




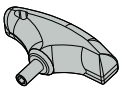
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 175-176
—Per il programma inserti completo, vedere le pagine 861, 885
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.81-3250.3S-068-SNAC15.2	10127496	Seco/Weldon	50,0	2	12	68,0	50,0	32,0	79,0	90,0	150,0	8300	1,1	AC.T1506 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.81-..	1/4HEX-T15PX50	C55011-T15P

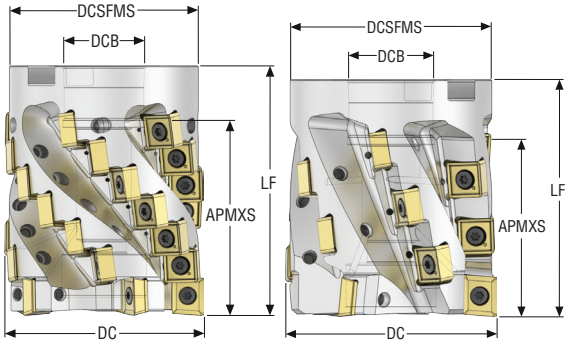
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.81-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-15P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.81-SNAC15 – Elica sinistrorsa per risoluzione dei problemi - In mm

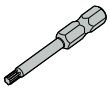




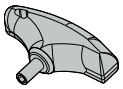
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 175–176
—Per il programma inserti completo, vedere le pagine 861, 885
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm		kg	
R220.81-0063-068-SNAC15.2A	10127497	Manicotto	63,0	2	12	68,0	27,0	59,0	90,0	7400	1,2	AC.T1506 / SN.U1306
R220.81-0063-068-SNAC15.4KA	10127494	Manicotto	63,0	4	24	68,0	27,0	59,0	90,0	7400	1,2	AC.T1506 / SN.U1306
R220.81-0080-068-SNAC15.3A	10127498	Manicotto	80,0	3	18	68,0	32,0	75,5	90,0	6500	2,1	AC.T1506 / SN.U1306
R220.81-0080-079-SNAC15.5KA	10127495	Manicotto	80,0	5	35	79,0	32,0	75,0	100,0	6500	2,1	AC.T1506 / SN.U1306
R220.81-0100-068-SNAC15.4A	10127499	Manicotto	100,0	4	24	68,0	40,0	91,0	90,0	5800	3,5	AC.T1506 / SN.U1306

Parti di ricambio, comprese nella fornitura

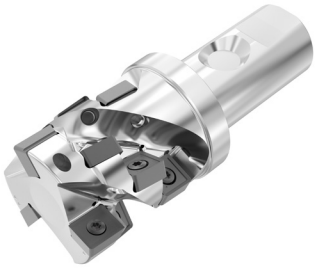
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.81-0063	MP6S12X80	1/4HEX-T15PX50	C55011-T15P
R220.81-0080	MP6S16X80	1/4HEX-T15PX90	C55011-T15P
R220.81-0100	MP6S20X80	1/4HEX-T15PX90	C55011-T15P

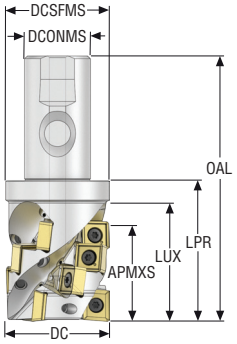
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.81-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-15P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217.82-SNAC15 – Elica destrorsa per impieghi gravosi – In mm

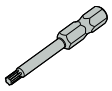




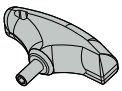
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 161-163
—Per il programma inserti completo, vedere le pagine 861, 885
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.82-3250.3S-046-SNAC15.3HA	10127490	Seco-Weldon	50,0	3	12	47,0	50,0	32,0	57,0	68,0	128,0	8300	1,0	AC.T1506 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.82-..	1/4HEX-T15PX50	C55011-T15P

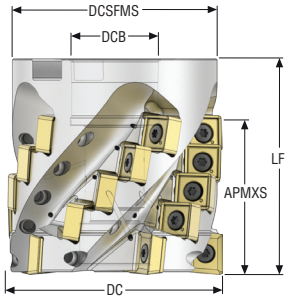
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.82-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-15P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220-82-SNAC15 Elica destrorsa per impieghi gravosi – In mm

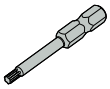




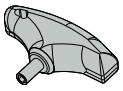
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 175–176
—Per il programma inserti completo, vedere le pagine 861, 885
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm		kg	
R220.82-0063-046-SNAC15.4HA	10127491	Manicotto	63,0	4	16	46,0	27,0	59,0	70,0	7400	0,9	AC.T1506 / SN.U1306
R220.82-0080-057-SNAC15.5HA	10127492	Manicotto	80,0	5	25	57,0	32,0	75,0	80,0	6500	1,7	AC.T1506 / SN.U1306
R220.82-0100-057-SNAC15.6HA	10127493	Manicotto	100,0	6	30	57,0	40,0	90,0	75,0	5800	2,6	AC.T1506 / SN.U1306

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.82-0063	MC6S12X60	1/4HEX-T15PX50	C55011-T15P
R220.82-0080	MC6S16X70	1/4HEX-T15PX90	C55011-T15P
R220.82-0100	MC6S20X50	1/4HEX-T15PX90	C55011-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.82-0063-0080	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-15P50
R220.82-0100	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-15P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.82-SNAC15 – Selezione dell'inserto – mm/Inch

SMG			f_z		
			100%	30%	10%
P1	ACET150612TR-M11 MP2501	SNXU130612TN-M12 MP2501	0,12 *0.0048*	0,14 *0.0055*	0,20 *0.0080*
P2	ACET150612TR-M11 MP2501	SNXU130612TN-M12 MP2501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
P3	ACET150612TR-M11 MP2501	SNXU130612TN-M12 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P4	ACET150612TR-M11 MP2501	SNXU130612TN-M12 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P5	ACET150612TR-M11 MP2501	SNGU130612TN-M14 MP2501	0,11 *0.0044*	0,13 *0.0050*	0,19 *0.0075*
P6	ACET150612TR-M11 MP2501	SNGU130612TN-M14 MP2501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P7	ACET150612TR-M11 MP2501	SNGU130612TN-M14 MP2501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P8	ACET150612TR-M11 MP2501	SNGU130612TN-M14 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P11	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P12	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
M1	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,11 *0.0044*	0,13 *0.0050*	0,19 *0.0075*
M2	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
M3	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
M4	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
M5	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
K1	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,16 *0.0065*	0,18 *0.0070*	0,26 *0.010*
K2	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K3	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K4	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K5	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
K6	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K7	ACET150612TR-M14 MK1501	SNGU130612TN-M14 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
S1	ACET150612TR-M11 F40M	SNXU130612TN-M12 F40M	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S2	ACET150612TR-M11 F40M	SNXU130612TN-M12 F40M	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S3	ACET150612TR-M11 F40M	SNXU130612TN-M12 F40M	0,075 *0.0030*	0,080 *0.0032*	0,12 *0.0048*
S11	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
S12	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
S13	ACET150612TR-ME10 MS2050	SNGU130612EN-ME10 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,12 *0.0048*
H5	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
H8	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,060 *0.0024*	0,065 *0.0026*	0,10 *0.0040*
H11	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
H12	ACET150612TR-M11 MP3501	SNXU130612TN-M12 MP3501	0,060 *0.0024*	0,065 *0.0026*	0,10 *0.0040*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.82-SNAC15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MS2050			F40M			MS2500			MP1501			MP2501			MS2500			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	140 *460*	150 *490*	160 *520*	135 *445*	145 *475*	155 *510*	130 *425*	140 *460*	150 *490*	155 *510*	165 *540*	175 *570*	155 *510*	170 *560*	175 *570*	155 *510*	165 *540*	175 *570*	155 *510*	165 *540*	175 *570*	150 *490*	165 *540*	170 *560*
P2	135 *445*	150 *490*	160 *520*	130 *425*	145 *475*	155 *510*	130 *425*	140 *460*	150 *490*	150 *490*	165 *540*	175 *570*	155 *510*	165 *540*	175 *570*	155 *510*	165 *540*	175 *570*	150 *490*	165 *540*	175 *570*	150 *490*	160 *520*	170 *560*
P3	130 *425*	145 *475*	155 *510*	125 *410*	140 *460*	145 *475*	120 *395*	135 *445*	140 *460*	145 *475*	160 *520*	165 *540*	145 *475*	160 *520*	165 *540*	145 *475*	160 *520*	165 *540*	145 *475*	160 *520*	165 *540*	140 *460*	155 *510*	160 *520*
P4	120 *395*	135 *445*	145 *475*	115 *375*	130 *425*	140 *460*	115 *375*	130 *425*	135 *445*	140 *460*	150 *490*	160 *520*	140 *460*	155 *510*	160 *520*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	135 *445*	145 *475*	155 *510*
P5	120 *395*	135 *445*	145 *475*	115 *375*	130 *425*	140 *460*	115 *375*	125 *410*	130 *425*	135 *445*	150 *490*	155 *510*	140 *460*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	135 *445*	145 *475*	150 *490*
P6	125 *410*	140 *460*	150 *490*	120 *395*	135 *445*	145 *475*	120 *395*	130 *425*	140 *460*	145 *475*	155 *510*	165 *540*	145 *475*	155 *510*	165 *540*	145 *475*	155 *510*	165 *540*	145 *475*	155 *510*	165 *540*	140 *460*	150 *490*	160 *520*
P7	125 *410*	140 *460*	150 *490*	120 *395*	135 *445*	140 *460*	115 *375*	130 *425*	135 *445*	140 *460*	150 *490*	160 *520*	140 *460*	155 *510*	160 *520*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	135 *445*	150 *490*	155 *510*
P8	120 *395*	135 *445*	145 *475*	115 *375*	130 *425*	135 *445*	115 *375*	125 *410*	130 *425*	135 *445*	150 *490*	155 *510*	140 *460*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	130 *425*	145 *475*	150 *490*
P11	120 *395*	135 *445*	145 *475*	120 *395*	130 *425*	140 *460*	115 *375*	125 *410*	135 *445*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	135 *445*	145 *475*	155 *510*
P12	100 *330*	110 *360*	120 *395*	95 *310*	105 *345*	115 *375*	95 *310*	105 *345*	110 *360*	115 *375*	125 *410*	130 *425*	115 *375*	125 *410*	135 *445*	115 *375*	125 *410*	135 *445*	115 *375*	125 *410*	130 *425*	110 *360*	120 *395*	130 *425*
M1	— —	— —	— —	115 *375*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*	120 *395*	140 *460*	150 *490*	— —	— —	— —	115 *375*	135 *445*	140 *460*	120 *395*	140 *460*	150 *490*	115 *375*	130 *425*	140 *460*
M2	— —	— —	— —	105 *345*	120 *395*	130 *425*	100 *330*	115 *375*	125 *410*	115 *375*	130 *425*	140 *460*	— —	— —	— —	105 *345*	120 *395*	130 *425*	115 *375*	130 *425*	140 *460*	105 *345*	120 *395*	130 *425*
M3	— —	— —	— —	95 *310*	110 *360*	115 *375*	90 *295*	105 *345*	110 *360*	100 *330*	115 *375*	125 *410*	— —	— —	— —	95 *310*	110 *360*	120 *395*	100 *330*	115 *375*	125 *410*	95 *310*	110 *360*	115 *375*
M4	— —	— —	— —	80 *260*	95 *310*	105 *345*	75 *245*	90 *295*	100 *330*	85 *280*	105 *345*	110 *360*	— —	— —	— —	80 *260*	95 *310*	105 *345*	85 *280*	105 *345*	110 *360*	80 *260*	95 *310*	105 *345*
M5	— —	— —	— —	70 *230*	85 *280*	95 *310*	65 *215*	80 *260*	90 *295*	75 *245*	95 *310*	100 *330*	— —	— —	— —	70 *230*	85 *280*	95 *310*	75 *245*	95 *310*	100 *330*	70 *230*	85 *280*	95 *310*
K1	140 *460*	155 *510*	165 *540*	— —	— —	— —	110 *360*	125 *410*	135 *445*	130 *425*	145 *475*	155 *510*	155 *510*	165 *540*	175 *570*	155 *510*	165 *540*	175 *570*	130 *425*	145 *475*	155 *510*	150 *490*	160 *520*	170 *560*
K2	135 *445*	150 *490*	160 *520*	— —	— —	— —	105 *345*	115 *375*	125 *410*	125 *410*	135 *445*	145 *475*	150 *490*	160 *520*	170 *560*	145 *475*	160 *520*	165 *540*	125 *410*	135 *445*	145 *475*	145 *475*	155 *510*	160 *520*
K3	125 *410*	140 *460*	150 *490*	— —	— —	— —	95 *310*	110 *360*	120 *395*	115 *375*	130 *425*	140 *460*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	115 *375*	130 *425*	140 *460*	135 *445*	145 *475*	155 *510*
K4	120 *395*	135 *445*	145 *475*	— —	— —	— —	90 *295*	105 *345*	115 *375*	110 *360*	125 *410*	135 *445*	135 *445*	150 *490*	155 *510*	135 *445*	150 *490*	155 *510*	110 *360*	125 *410*	135 *445*	135 *445*	145 *475*	150 *490*
K5	95 *310*	110 *360*	120 *395*	— —	— —	— —	65 *215*	80 *260*	90 *295*	85 *280*	100 *330*	110 *360*	110 *360*	120 *395*	130 *425*	110 *360*	120 *395*	130 *425*	85 *280*	100 *330*	110 *360*	105 *345*	115 *375*	125 *410*
K6	115 *375*	130 *425*	140 *460*	— —	— —	— —	85 *280*	100 *330*	110 *360*	105 *345*	120 *395*	130 *425*	130 *425*	140 *460*	150 *490*	130 *425*	140 *460*	150 *490*	105 *345*	120 *395*	130 *425*	125 *410*	135 *445*	145 *475*
K7	110 *360*	125 *410*	135 *445*	— —	— —	— —	75 *245*	95 *310*	100 *330*	95 *310*	115 *375*	120 *395*	125 *410*	135 *445*	140 *460*	125 *410*	135 *445*	140 *460*	95 *310*	115 *375*	120 *395*	120 *395*	130 *425*	135 *445*
S1	— —	— —	— —	39 *130*	55 *180*	60 *195*	36 *120*	48 *155*	55 *180*	48 *155*	65 *215*	70 *230*	— —	— —	— —	— —	— —	— —	48 *155*	65 *215*	70 *230*	39 *130*	55 *180*	60 *195*
S2	— —	— —	— —	32 *105*	42 *140*	50 *165*	29 *95*	38 *125*	45 *150*	39 *130*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	39 *130*	50 *165*	60 *195*	32 *105*	42 *140*	50 *165*
S3	— —	— —	— —	28 *90*	37 *120*	43 *140*	26 *85*	34 *110*	39 *130*	34 *110*	45 *150*	55 *180*	— —	— —	— —	— —	— —	— —	34 *110*	45 *150*	55 *180*	28 *90*	37 *120*	43 *140*
S11	— —	— —	— —	55 *180*	70 *230*	80 *260*	50 *165*	65 *215*	75 *245*	65 *215*	80 *260*	90 *295*	— —	— —	— —	— —	— —	— —	65 *215*	80 *260*	90 *295*	55 *180*	70 *230*	80 *260*
S12	— —	— —	— —	38 *125*	50 *165*	60 *195*	35 *115*	46 *150*	55 *180*	47 *155*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	47 *155*	60 *195*	70 *230*	38 *125*	50 *165*	60 *195*
S13	— —	— —	— —	22 *70*	30 *100*	35 *115*	20 *65*	27 *90*	31 *100*	27 *90*	36 *120*	42 *140*	— —	— —	— —	— —	— —	— —	27 *90*	36 *120*	42 *140*	22 *70*	30 *100*	35 *115*
H5	41 *135*	55 *180*	65 *215*	— —	— —	— —	31 *100*	40 *130*	48 *155*	40 *130*	50 *165*	60 *195*	44 *145*	60 *195*	65 *215*	— —	— —	— —	40 *130*	50 *165*	60 *195*	35 *115*	46 *150*	55 *180*
H8	44 *145*	60 *195*	65 *215*	— —	— —	— —	33 *110*	43 *140*	50 *165*	42 *140*	55 *180*	65 *215*	48 *155*	60 *195*	70 *230*	— —	— —	— —	42 *140*	55 *180*	65 *215*	38 *125*	49 *160*	60 *195*
H11	50 *165*	65 *215*	75 *245*	— —	— —	— —	39 *130*	50 *165*	60 *195*	50 *165*	65 *215*	75 *245*	55 *180*	70 *230*	80 *260*	— —	— —	— —	50 *165*	65 *215*	75 *245*	45 *150*	60 *195*	70 *230*
H12	75 *245*	90 *295*	95 *310*	— —	— —	— —	60 *195*	75 *245*	80 *260*	80 *260*	95 *310*	100 *330*	80 *260*	95 *310*	105 *345*	— —	— —	— —	80 *260*	95 *310*	100 *330*	65 *215*	80 *260*	90 *295*



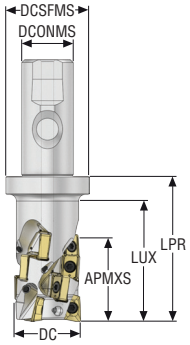
LN4-11 elicoidale

La gamma di frese elicoidali LN4-11 Seco con inserti bilaterali a quattro taglienti offre un basso costo per tagliente combinato con prestazioni elevate in un'ampia varietà di applicazioni, ad esempio contornatura sia di sgrossatura che di semi-finitura. Geometria e grado sono stati sviluppati per lavorazioni di materiali ISO P, M, K e S.
Gli inserti frontali comprendono molte varietà di scelta raggi di punta

– R217/220.42, gamma di frese 32-63mm (1,25-2,00 pollici)

R217.42-LNXO

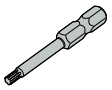




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 182-183
—Per il programma inserti completo, vedere le pagine 867, 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.42-2532.3S-031-LNXO.3A	10255162	Seco/Weldon	32,0	3	9	31,0	40,0	25,0	49,7	60,0	116,0	17000	0,5	XO.X12/LN.U11
R217.42-2532.3S-041-LNXO.3A	10255161	Seco/Weldon	32,0	3	12	41,0	40,0	25,0	59,7	70,0	126,0	17000	0,5	XO.X12/LN.U11
R217.42-3240.3S-041-LNXO.3A	10255164	Seco/Weldon	40,0	3	12	41,0	50,0	32,0	50,5	70,0	130,0	15200	0,9	XO.X12/LN.U11
R217.42-3240.3S-051-LNXO.4A	10255165	Seco/Weldon	40,0	4	20	51,0	50,0	32,0	69,5	80,0	140,0	15200	0,9	XO.X12/LN.U11
R217.42-3240.3S-070-LNXO.3A	10255166	Seco/Weldon	40,0	3	21	70,0	50,0	32,0	80,5	90,0	150,0	15200	0,9	XO.X12/LN.U11

Parti di ricambio, comprese nella fornitura

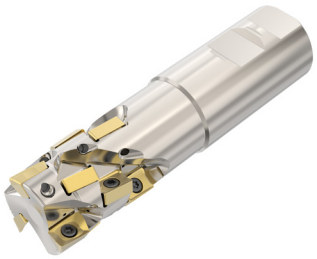
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.42-2532	1/4HEX-T10PX50	C03508-T10P
R217.42-3240	1/4HEX-T10PX50	C03509-T10P

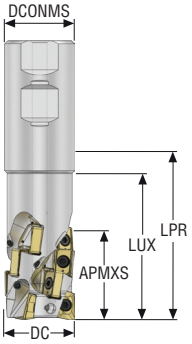
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
R217.42-2532	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30
R217.42-3240	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.42-LNXO

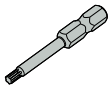




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 182-183
—Per il programma inserti completo, vedere le pagine 867, 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.42-1.25-3-1.61-LNXO.3A	10256018	Weldon	1.250	3	12	1.614	1.250	3.860	2.642	2.663	4.982	17100	1.540	XO.X12/LN.U11
R217.42-1.50-3-2.79-LNXO.3A	10256020	Weldon	1.500	3	21	2.756	1.500	5.016	3.437	3.457	6.185	15600	2.430	XO.X12/LN.U11

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.42-1.25	1/4HEX-T10PX50	C03508-T10P
R217.42-1.50	1/4HEX-T10PX50	C03509-T10P

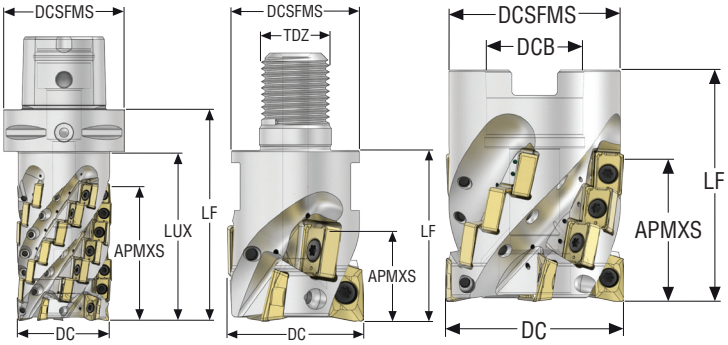
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
R217.42-1.25	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30
R217.42-1.50	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.42-LNXO

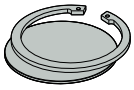
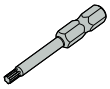




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 182-183
—Per il programma inserti completo, vedere le pagine 867, 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm	mm		kg	
C6-R217.42-0050-070-LNXO.5SA	10255172	Seco-Capto	50,0	5	35	70,0	–	63,0	–	110,0	87,5	148,0	13600	1,5	XO.X12/LN.U11
R220.42-0050-040-LNXO.4A	10255167	Manicotto	50,0	4	16	40,0	27,0	47,09	–	65,0	–	–	13600	0,6	XO.X12/LN.U11
R220.42-0050-050-LNXO.5A	10255168	Manicotto	50,0	5	25	50,0	27,0	46,88	–	75,0	–	–	13600	0,8	XO.X12/LN.U11
R220.42-0063-050-LNXO.6A	10255169	Manicotto	63,0	6	30	50,0	27,0	59,82	–	75,0	–	–	12100	1,2	XO.X12/LN.U11
R217.42-1632.RE-021-LNXO.3A	10255160	Combimaster	32,0	3	6	21,0	–	30,0	M16	40,0	–	62,75	17000	0,2	XO.X12/LN.U11
R217.42-2040.RE-041-LNXO.4A	10255163	Combimaster	40,0	4	16	41,0	–	36,5	M20	61,0	–	88,0	15200	0,5	XO.X12/LN.U11

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto
				
C6-R217.42-..	–	LUBRICATION_SET_19	1/4HEX-T10PX50	C03509-T10P
R217.42-..	–	–	1/4HEX-T10PX50	C03509-T10P
R220.42-0050-0063	MC6S12X70	–	1/4HEX-T10PX50	C03509-T10P
R220.42-0050-040	MC6S12X60	–	1/4HEX-T10PX50	C03509-T10P

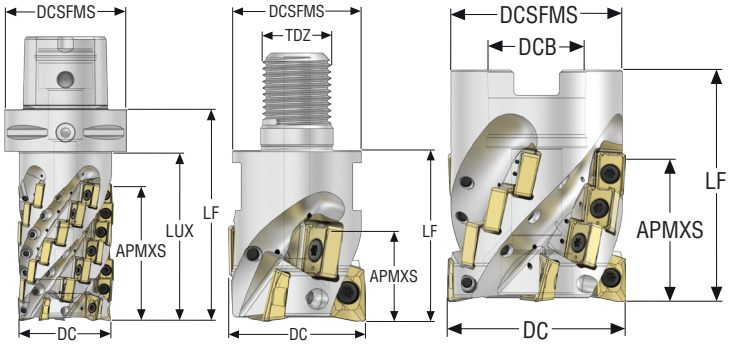
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
R217/220.42-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.42-LNXO

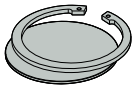
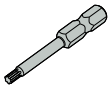




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 182-183
—Per il programma inserti completo, vedere le pagine 867, 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16
—KAPRS 90°

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch		inch	inch	inch		lb	
C6-R217.42-2.00-3.90-LNXO.5SA	10256021	Seco-Capto	2.000	5	50	3.898	–	2.480	–	5.500	4.614	6.996	13500	3.970	XO.X12/LN.U11
R220.42-2.00-1.57-LNXO.4A	10255170	Manicotto	2.000	4	16	1.602	1.000	1.885	–	2.750	–	–	13500	1.760	XO.X12/LN.U11
R220.42-2.00-1.96-LNXO.5A	10255171	Manicotto	2.000	5	25	2.000	1.000	1.876	–	3.250	–	–	13500	1.980	XO.X12/LN.U11
R217.42-1.50-20RE-1.61-LNXO.3A	10256019	Combimaster	1.500	3	12	1.614	–	1.437	M20	2.402	–	3.465	15600	0.880	XO.X12/LN.U11

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto
				
C6-R217.42-..	–	LUBRICATION_SET_19	1/4HEX-T10PX50	C03509-T10P
R217.42-..	–	–	1/4HEX-T10PX50	C03509-T10P
R220.42-2.00-1.57	UC6S1/2UNFX2-1/2	–	1/4HEX-T10PX50	C03509-T10P
R220.42-2.00-1.96	UC6S1/2UNFX3	–	1/4HEX-T10PX50	C03509-T10P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
R217/220.42-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

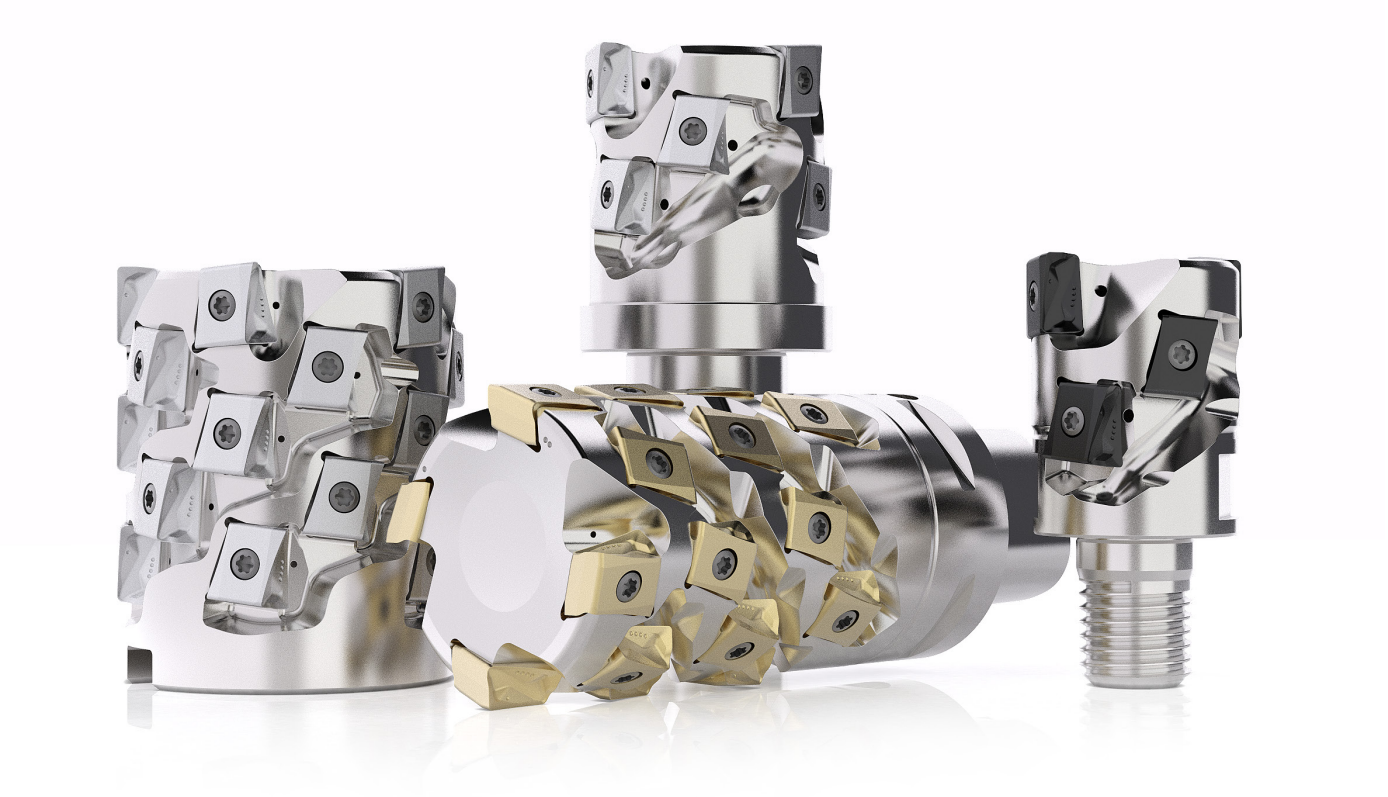
R217/220.42 – Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			100%	30%	10%
P1	XOMX120408TR-M12 MP2501	LNMU110408SR-M12 MP2501	0,14 *0.0055*	0,15 *0.0060*	0,22 *0.0085*
P2	XOMX120408TR-M12 MP2501	LNMU110408SR-M12 MP2501	0,14 *0.0055*	0,15 *0.0060*	0,24 *0.0095*
P3	XOMX120408TR-M12 MP2501	LNMU110408SR-M12 MP2501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
P4	XOMX120408TR-M12 MP2501	LNMU110408SR-M12 MP2501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
P5	XOEX120404R-M07 MP2501	LNEU110408SR-M12 MP2501	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
P6	XOEX120408R-M07 MP2501	LNEU110408SR-M12 MP2501	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
P7	XOEX120408R-M07 MP2501	LNEU110408SR-M12 MP2501	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
P8	XOEX120408R-M07 MP2501	LNEU110408SR-M12 MP2501	0,10 *0.0040*	0,11 *0.0044*	0,16 *0.0065*
P11	XOEX120408R-M07 MP3501	LNEU110408SR-M12 MP3501	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
P12	XOEX120408R-M07 MP2501	LNEU110408SR-M12 MP3501	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*
M1	XOEX120408R-M07 MS2050	LNEU110408SR-ME07 MS2050	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
M2	XOEX120404R-M07 MS2050	LNEU110408SR-ME07 MS2050	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*
M3	XOEX120404R-M07 MS2050	LNEU110408SR-ME07 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,13 *0.0050*
M4	XOEX120408R-M07 MP3501	LNEU110408SR-M12 MP3501	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*
M5	XOEX120408R-M07 MP3501	LNEU110408SR-M12 MP3501	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*
K1	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,14 *0.0055*	0,15 *0.0060*	0,24 *0.0095*
K2	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,20 *0.0080*
K3	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,20 *0.0080*
K4	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,20 *0.0080*
K5	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
K6	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,13 *0.0050*	0,14 *0.0055*	0,20 *0.0080*
K7	XOMX120408TR-M12 MK2050	LNMU110408SR-M12 MK2050	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
S1	XOMX120404TR-ME08 F40M	LNMU110408SR-ME08 F40M	0,060 *0.0024*	0,065 *0.0026*	0,095 *0.0038*
S2	XOMX120404TR-ME08 F40M	LNMU110408SR-ME08 F40M	0,060 *0.0024*	0,065 *0.0026*	0,095 *0.0038*
S3	XOMX120404TR-ME08 F40M	LNMU110408SR-ME08 F40M	0,055 *0.0022*	0,060 *0.0024*	0,090 *0.0036*
S11	XOEX120404R-M07 MS2050	LNEU110408ER-M07 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,13 *0.0050*
S12	XOEX120404R-M07 MS2050	LNEU110408ER-M07 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,13 *0.0050*
S13	XOEX120404R-M07 MS2050	LNMU110408ER-M07 MS2050	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*
H5	XOMX120408TR-M12 MP3501	LNEU110408SR-M12 MP3501	0,085 *0.0034*	0,095 *0.0038*	0,14 *0.0055*
H8	XOMX120408TR-M12 MP3501	LNEU110408SR-M12 MP3501	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*
H11	XOMX120408TR-M12 MP3501	XOMX120408TR-M12 MP3501	0,085 *0.0034*	0,095 *0.0038*	0,14 *0.0055*
H12	XOMX120408TR-M12 MP3501	LNEU110408SR-M12 MP3501	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.42 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MS2050			MP2050			F40M			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	150 *490*	170 *560*	185 *610*	155 *510*	175 *570*	185 *610*	165 *540*	185 *610*	195 *640*	135 *445*	155 *510*	165 *540*	180 *590*	190 *620*	200 *660*	175 *570*	190 *620*	200 *660*	170 *560*	185 *610*	195 *640*
P2	150 *490*	170 *560*	180 *590*	155 *510*	170 *560*	180 *590*	165 *540*	180 *590*	195 *640*	135 *445*	150 *490*	165 *540*	175 *570*	190 *620*	200 *660*	175 *570*	190 *620*	195 *640*	165 *540*	180 *590*	190 *620*
P3	140 *460*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	155 *510*	170 *560*	185 *610*	125 *410*	145 *475*	155 *510*	170 *560*	180 *590*	190 *620*	165 *540*	180 *590*	190 *620*	160 *520*	175 *570*	180 *590*
P4	135 *445*	155 *510*	165 *540*	135 *445*	155 *510*	165 *540*	145 *475*	165 *540*	175 *570*	115 *375*	135 *445*	145 *475*	160 *520*	175 *570*	180 *590*	160 *520*	170 *560*	180 *590*	150 *490*	165 *540*	175 *570*
P5	130 *425*	150 *490*	160 *520*	130 *425*	150 *490*	160 *520*	145 *475*	160 *520*	175 *570*	115 *375*	130 *425*	145 *475*	155 *510*	170 *560*	180 *590*	155 *510*	170 *560*	180 *590*	145 *475*	160 *520*	170 *560*
P6	140 *460*	155 *510*	170 *560*	140 *460*	160 *520*	170 *560*	150 *490*	170 *560*	180 *590*	120 *395*	140 *460*	150 *490*	165 *540*	180 *590*	185 *610*	165 *540*	175 *570*	185 *610*	155 *510*	170 *560*	180 *590*
P7	135 *445*	155 *510*	165 *540*	135 *445*	155 *510*	165 *540*	150 *490*	165 *540*	175 *570*	120 *395*	135 *445*	150 *490*	160 *520*	175 *570*	185 *610*	160 *520*	175 *570*	180 *590*	155 *510*	165 *540*	175 *570*
P8	130 *425*	150 *490*	160 *520*	130 *425*	150 *490*	160 *520*	145 *475*	160 *520*	170 *560*	115 *375*	130 *425*	145 *475*	155 *510*	170 *560*	180 *590*	155 *510*	170 *560*	175 *570*	145 *475*	160 *520*	170 *560*
P11	135 *445*	150 *490*	165 *540*	135 *445*	155 *510*	165 *540*	145 *475*	165 *540*	175 *570*	115 *375*	135 *445*	145 *475*	160 *520*	170 *560*	180 *590*	160 *520*	170 *560*	180 *590*	150 *490*	165 *540*	175 *570*
P12	105 *345*	125 *410*	135 *445*	105 *345*	125 *410*	135 *445*	115 *375*	135 *445*	145 *475*	90 *295*	105 *345*	115 *375*	130 *425*	140 *460*	150 *490*	130 *425*	140 *460*	150 *490*	120 *395*	135 *445*	140 *460*
M1	— —	— —	— —	140 *460*	155 *510*	170 *560*	140 *460*	160 *520*	170 *560*	120 *395*	140 *460*	150 *490*	— —	— —	— —	130 *425*	150 *490*	160 *520*	125 *410*	145 *475*	155 *510*
M2	— —	— —	— —	125 *410*	145 *475*	155 *510*	130 *425*	145 *475*	160 *520*	105 *345*	125 *410*	135 *445*	— —	— —	— —	115 *375*	135 *445*	150 *490*	110 *360*	130 *425*	145 *475*
M3	— —	— —	— —	110 *360*	130 *425*	140 *460*	115 *375*	130 *425*	145 *475*	95 *310*	110 *360*	120 *395*	— —	— —	— —	105 *345*	120 *395*	135 *445*	100 *330*	120 *395*	130 *425*
M4	— —	— —	— —	95 *310*	110 *360*	120 *395*	95 *310*	115 *375*	125 *410*	75 *245*	95 *310*	105 *345*	— —	— —	— —	85 *280*	105 *345*	115 *375*	85 *280*	100 *330*	110 *360*
M5	— —	— —	— —	80 *260*	100 *330*	110 *360*	85 *280*	105 *345*	115 *375*	65 *215*	85 *280*	95 *310*	— —	— —	— —	75 *245*	95 *310*	105 *345*	70 *230*	90 *295*	100 *330*
K1	155 *510*	175 *570*	185 *610*	— —	— —	— —	— —	— —	— —	120 *395*	135 *445*	145 *475*	175 *570*	190 *620*	200 *660*	175 *570*	190 *620*	195 *640*	170 *560*	185 *610*	190 *620*
K2	150 *490*	165 *540*	180 *590*	— —	— —	— —	— —	— —	— —	110 *360*	130 *425*	140 *460*	170 *560*	185 *610*	190 *620*	165 *540*	180 *590*	190 *620*	160 *520*	175 *570*	185 *610*
K3	135 *445*	155 *510*	170 *560*	— —	— —	— —	— —	— —	— —	100 *330*	115 *375*	130 *425*	155 *510*	170 *560*	180 *590*	155 *510*	170 *560*	180 *590*	150 *490*	165 *540*	170 *560*
K4	135 *445*	150 *490*	165 *540*	— —	— —	— —	— —	— —	— —	95 *310*	115 *375*	125 *410*	155 *510*	170 *560*	175 *570*	155 *510*	165 *540*	175 *570*	145 *475*	160 *520*	170 *560*
K5	100 *330*	120 *395*	130 *425*	— —	— —	— —	— —	— —	— —	65 *215*	85 *280*	95 *310*	125 *410*	135 *445*	145 *475*	120 *395*	135 *445*	145 *475*	115 *375*	130 *425*	135 *445*
K6	125 *410*	145 *475*	155 *510*	— —	— —	— —	— —	— —	— —	85 *280*	105 *345*	120 *395*	145 *475*	160 *520*	170 *560*	145 *475*	160 *520*	170 *560*	135 *445*	150 *490*	160 *520*
K7	120 *395*	135 *445*	145 *475*	— —	— —	— —	— —	— —	— —	80 *260*	100 *330*	110 *360*	140 *460*	150 *490*	160 *520*	140 *460*	150 *490*	160 *520*	130 *425*	145 *475*	150 *490*
S1	— —	— —	— —	47 *155*	60 *195*	70 *230*	50 *165*	65 *215*	80 *260*	36 *120*	47 *155*	55 *180*	— —	— —	— —	— —	— —	— —	39 *130*	50 *165*	60 *195*
S2	— —	— —	— —	38 *125*	49 *160*	60 *195*	42 *140*	55 *180*	65 *215*	29 *95*	38 *125*	44 *145*	— —	— —	— —	— —	— —	— —	32 *105*	42 *140*	49 *160*
S3	— —	— —	— —	33 *110*	43 *140*	50 *165*	36 *120*	48 *155*	55 *180*	26 *85*	33 *110*	39 *130*	— —	— —	— —	— —	— —	— —	28 *90*	37 *120*	43 *140*
S11	— —	— —	— —	65 *215*	85 *280*	95 *310*	70 *230*	90 *295*	100 *330*	50 *165*	65 *215*	75 *245*	— —	— —	— —	— —	— —	— —	55 *180*	70 *230*	85 *280*
S12	— —	— —	— —	45 *150*	60 *195*	70 *230*	50 *165*	65 *215*	75 *245*	35 *115*	46 *150*	55 *180*	— —	— —	— —	— —	— —	— —	38 *125*	50 *165*	60 *195*
S13	— —	— —	— —	27 *90*	35 *115*	40 *130*	29 *95*	38 *125*	44 *145*	20 *65*	27 *90*	31 *100*	— —	— —	— —	— —	— —	— —	22 *70*	29 *95*	34 *110*
H5	41 *135*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	30 *100*	40 *130*	47 *155*	45 *150*	60 *195*	70 *230*	— —	— —	— —	35 *115*	46 *150*	55 *180*
H8	44 *145*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	32 *105*	43 *140*	50 *165*	48 *155*	65 *215*	75 *245*	— —	— —	— —	37 *120*	49 *160*	55 *180*
H11	50 *165*	70 *230*	80 *260*	— —	— —	— —	55 *180*	70 *230*	80 *260*	39 *130*	50 *165*	60 *195*	60 *195*	75 *245*	85 *280*	— —	— —	— —	45 *150*	60 *195*	70 *230*
H12	75 *245*	95 *310*	105 *345*	— —	— —	— —	85 *280*	105 *345*	115 *375*	60 *195*	75 *245*	85 *280*	85 *280*	105 *345*	115 *375*	— —	— —	— —	65 *215*	85 *280*	95 *310*

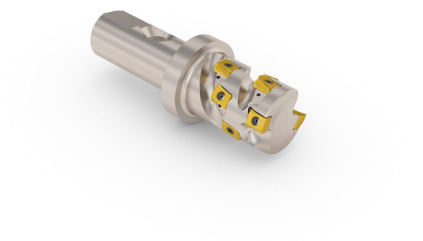


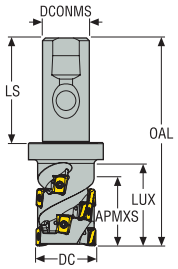
SQUARE T4 HELICAL

La gamma di frese Square T4 Helical porta la nostra gamma diversificata di frese a un livello superiore, con inserti tangenziali, ciascuno con 4 taglienti.

– T4 Helical dimensione dell'inserto 08, gamma gamma frese 25-54 mm (1")
– T4 Helical dimensione dell'inserto 12, gamma frese 40-100 mm (2-3")

T4 – R217.94-08 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 188-189
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R217.94-2025.3S-029-08.2A	02926806	Seco-Weldon	25,0	2	8	29,0	35,0	20,0	44,0	50,0	100,0	20800	0,3	LOEX0804
R217.94-2025.3S-036-08.2A	02926807	Seco-Weldon	25,0	2	10	36,0	35,0	20,0	44,0	50,0	100,0	20800	0,3	LOEX0804
R217.94-2532.3S-043-08.3A	02926813	Seco-Weldon	32,0	3	18	43,0	40,0	25,0	55,0	65,0	121,0	18400	0,6	LOEX0804
R217.94-2532.3S-050-08.3A	02926814	Seco-Weldon	32,0	3	21	50,0	40,0	25,0	59,0	69,0	125,0	18400	0,5	LOEX0804
R217.94-3240.3S-050-08.4A	02926816	Seco-Weldon	40,0	4	28	50,0	50,0	32,0	60,0	70,0	130,0	16400	0,9	LOEX0804

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R217.94-..	H4B-T08P	C02708B-T08P	DOUBLE-T

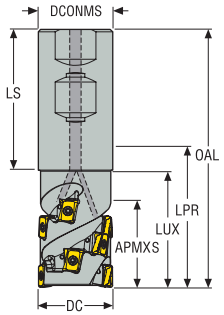
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217.94-..	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

T4 – R217.94-08 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 188-189
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch		lb	
R217.94-01.00-3-01.40-08-2A	02941522	Weldon	0.996	2	10	1.417	1.000	3.110	1.870	1.772	4.252	20800	0.880	LOEX0804
R217.94-01.00-3-01.70-08-2A	02941527	Weldon	0.996	2	12	1.693	1.000	3.346	2.106	1.772	4.488	20800	0.880	LOEX0804

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R127.94-..	H4B-T08P	C02708B-T08P	DOUBLE-T

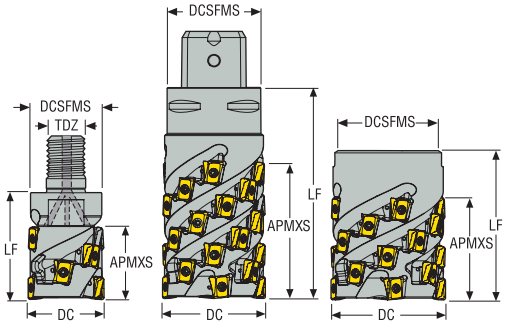
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R127.94-..	1.2NM	T00-08P12
R217.94-..	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

T4 – R217/220.94-08 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 188-189
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm	mm		kg	
C4-R217.94-044-057-08.4A	02926819	Seco-Capto	44,0	4	32	57,0	–	40,0	–	90,0	70,0	114,0	15500	0,9	LOEX0804
R220.94-00050-043-08.4A	02926817	Manicotto	50,0	4	24	43,0	27,0	48,0	–	65,0	–	–	14800	0,7	LOEX0804
R220.94-00050-057-08.5A	02926818	Manicotto	50,0	5	40	57,0	27,0	48,0	–	70,0	–	–	14800	0,7	LOEX0804
R217.94-1632.RE-036-08.3A	02926805	Combimaster	32,0	3	15	36,0	–	30,0	M16	55,0	–	77,75	18400	0,3	LOEX0804
R217.94-2040.RE-043-08.4A	02972768	Combimaster	40,0	4	24	43,0	–	36,5	M20	60,0	–	87,0	16400	0,5	LOEX0804

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R217.94-../Cx-217.94-..	–	H4B-T08P	C02708B-T08P	DOUBLE-T
R220.94-..	MC6S12X60	H4B-T08P	C02708B-T08P	DOUBLE-T

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
Cx-R217/220.69-..	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.94-08 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	LOEX080408TR-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
P2	LOEX080408TR-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
P3	LOEX080408TR-M08 F40M	0,085 *0.0034*	0,095 0.0038	0,15 0.0055
P4	LOEX080408TR-M08 F40M	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
P5	LOEX080408TR-M08 F40M	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
P6	LOEX080408TR-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
P7	LOEX080408TR-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,14 0.0055
P8	LOEX080408TR-M08 F40M	0,085 *0.0034*	0,095 0.0038	0,15 0.0055
P11	LOEX080408TR-M08 MP2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
P12	LOEX080408TR-M08 MP2050	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
M1	LOEX080408TR-M08 MS2050	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
M2	LOEX080408TR-M08 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
M3	LOEX080408TR-M08 MS2050	0,065 *0.0026*	0,075 0.0030	0,11 0.0044
M4	LOEX080408TR-M08 MS2050	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
M5	LOEX080408TR-M08 MS2050	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
K1	LOEX080408TR-MD08 MK2050	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
K2	LOEX080408TR-MD08 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
K3	LOEX080408TR-MD08 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
K4	LOEX080408TR-MD08 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
K5	LOEX080408TR-MD08 MK2050	0,075 *0.0030*	0,080 0.0032	0,13 0.0050
K6	LOEX080408TR-MD08 MK2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
K7	LOEX080408TR-MD08 MK2050	0,075 *0.0030*	0,080 0.0032	0,13 0.0050
N1	LOEX080408TR-M08 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
N2	LOEX080408TR-M08 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
N3	LOEX080408TR-M08 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
N11	LOEX080408TR-M08 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
S1	LOEX080408TR-M08 F40M	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
S2	LOEX080408TR-M08 F40M	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
S3	LOEX080408TR-M08 F40M	0,055 *0.0022*	0,060 0.0024	0,090 0.0036
S11	LOEX080408TR-M08 MS2050	0,065 *0.0026*	0,075 0.0030	0,11 0.0044
S12	LOEX080408TR-M08 MS2050	0,065 *0.0026*	0,075 0.0030	0,11 0.0044
S13	LOEX080408TR-M08 MS2050	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
H5	LOEX080408TR-M08 MP3000	0,055 *0.0022*	0,060 0.0024	0,095 0.0038
H8	LOEX080408TR-M08 MP3000	0,044 *0.0017*	0,048 0.0019	0,075 0.0028
H11	LOEX080408TR-M08 MP3000	0,055 *0.0022*	0,060 0.0024	0,095 0.0038
H12	LOEX080408TR-M08 MP2050	0,048 *0.0019*	0,055 0.0022	0,080 0.0032

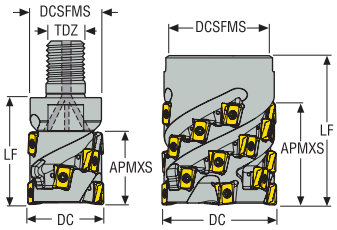
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.94-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	140 *460*	155 *510*	165 *540*	145 *475*	160 *520*	170 *560*	140 *460*	150 *490*	160 *520*	135 *445*	150 *490*	155 *510*	150 *490*	165 *540*	175 *570*	140 *460*	155 *510*	165 *540*
P2	140 *460*	155 *510*	165 *540*	145 *475*	160 *520*	170 *560*	135 *445*	150 *490*	160 *520*	135 *445*	145 *475*	155 *510*	150 *490*	165 *540*	170 *560*	140 *460*	155 *510*	165 *540*
P3	130 *425*	145 *475*	155 *510*	140 *460*	150 *490*	160 *520*	130 *425*	145 *475*	150 *490*	130 *425*	140 *460*	145 *475*	140 *460*	155 *510*	165 *540*	130 *425*	145 *475*	155 *510*
P4	125 *410*	140 *460*	150 *490*	130 *425*	145 *475*	155 *510*	125 *410*	135 *445*	145 *475*	120 *395*	135 *445*	140 *460*	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*
P5	120 *395*	135 *445*	145 *475*	130 *425*	145 *475*	150 *490*	120 *395*	135 *445*	140 *460*	120 *395*	130 *425*	135 *445*	135 *445*	150 *490*	155 *510*	120 *395*	135 *445*	145 *475*
P6	130 *425*	145 *475*	150 *490*	135 *445*	150 *490*	155 *510*	130 *425*	140 *460*	145 *475*	125 *410*	135 *445*	140 *460*	140 *460*	155 *510*	160 *520*	130 *425*	145 *475*	150 *490*
P7	125 *410*	140 *460*	150 *490*	135 *445*	145 *475*	155 *510*	125 *410*	135 *445*	145 *475*	125 *410*	135 *445*	140 *460*	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*
P8	120 *395*	135 *445*	145 *475*	130 *425*	140 *460*	150 *490*	120 *395*	135 *445*	140 *460*	120 *395*	130 *425*	135 *445*	130 *425*	145 *475*	155 *510*	120 *395*	135 *445*	145 *475*
P11	125 *410*	140 *460*	150 *490*	130 *425*	145 *475*	150 *490*	125 *410*	135 *445*	145 *475*	120 *395*	130 *425*	135 *445*	130 *425*	155 *510*	170 *560*	125 *410*	140 *460*	150 *490*
P12	100 *330*	115 *375*	125 *410*	105 *345*	120 *395*	125 *410*	100 *330*	110 *360*	115 *375*	100 *330*	105 *345*	110 *360*	110 *360*	130 *425*	140 *460*	100 *330*	115 *375*	125 *410*
M1	— —	— —	— —	120 *395*	135 *445*	145 *475*	120 *395*	135 *445*	145 *475*	115 *375*	130 *425*	140 *460*	140 *460*	160 *520*	175 *570*	120 *395*	135 *445*	145 *475*
M2	— —	— —	— —	110 *360*	125 *410*	135 *445*	110 *360*	125 *410*	135 *445*	105 *345*	120 *395*	130 *425*	130 *425*	150 *490*	165 *540*	110 *360*	125 *410*	135 *445*
M3	— —	— —	— —	100 *330*	115 *375*	125 *410*	95 *310*	110 *360*	120 *395*	90 *295*	105 *345*	115 *375*	115 *375*	140 *460*	150 *490*	100 *330*	115 *375*	120 *395*
M4	— —	— —	— —	85 *280*	100 *330*	110 *360*	85 *280*	100 *330*	105 *345*	80 *260*	90 *295*	100 *330*	105 *345*	125 *410*	135 *445*	85 *280*	100 *330*	110 *360*
M5	— —	— —	— —	75 *245*	90 *295*	100 *330*	75 *245*	90 *295*	95 *310*	70 *230*	80 *260*	90 *295*	95 *310*	115 *375*	125 *410*	75 *245*	90 *295*	100 *330*
K1	145 *475*	160 *520*	165 *540*	125 *410*	140 *460*	150 *490*	— —	— —	— —	115 *375*	130 *425*	140 *460*	— —	— —	— —	— —	— —	— —
K2	135 *445*	150 *490*	160 *520*	120 *395*	135 *445*	145 *475*	— —	— —	— —	105 *345*	120 *395*	130 *425*	— —	— —	— —	— —	— —	— —
K3	125 *410*	140 *460*	150 *490*	110 *360*	125 *410*	135 *445*	— —	— —	— —	95 *310*	115 *375*	120 *395*	— —	— —	— —	— —	— —	— —
K4	125 *410*	140 *460*	150 *490*	105 *345*	120 *395*	130 *425*	— —	— —	— —	95 *310*	110 *360*	120 *395*	— —	— —	— —	— —	— —	— —
K5	95 *310*	115 *375*	120 *395*	80 *260*	95 *310*	105 *345*	— —	— —	— —	70 *230*	85 *280*	90 *295*	— —	— —	— —	— —	— —	— —
K6	115 *375*	135 *445*	140 *460*	100 *330*	115 *375*	125 *410*	— —	— —	— —	90 *295*	105 *345*	110 *360*	— —	— —	— —	— —	— —	— —
K7	110 *360*	125 *410*	135 *445*	95 *310*	110 *360*	115 *375*	— —	— —	— —	80 *260*	95 *310*	105 *345*	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	220 *720*	240 *790*	245 *800*	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	190 *620*	195 *640*	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	150 *490*	165 *540*	175 *570*	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	160 *520*	175 *570*	180 *590*	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	45 *150*	60 *195*	70 *230*	43 *140*	55 *180*	65 *215*	39 *130*	50 *165*	60 *195*	44 *145*	60 *195*	65 *215*	46 *150*	60 *195*	70 *230*
S2	— —	— —	— —	36 *120*	47 *155*	55 *180*	34 *110*	45 *150*	55 *180*	31 *100*	41 *135*	48 *155*	36 *120*	47 *155*	55 *180*	37 *120*	49 *160*	55 *180*
S3	— —	— —	— —	32 *105*	42 *140*	49 *160*	30 *100*	39 *130*	46 *150*	27 *90*	36 *120*	42 *140*	31 *100*	41 *135*	49 *160*	32 *105*	43 *140*	50 *165*
S11	— —	— —	— —	— —	— —	— —	60 *195*	75 *245*	85 *280*	55 *180*	70 *230*	80 *260*	60 *195*	75 *245*	85 *280*	65 *215*	80 *260*	85 *280*
S12	— —	— —	— —	— —	— —	— —	42 *140*	55 *180*	65 *215*	38 *125*	49 *160*	60 *195*	43 *140*	55 *180*	65 *215*	44 *145*	60 *195*	65 *215*
S13	— —	— —	— —	— —	— —	— —	24 *80*	31 *100*	37 *120*	22 *70*	29 *95*	34 *110*	25 *80*	33 *110*	39 *130*	26 *85*	34 *110*	40 *130*
H5	— —	— —	— —	39 *130*	50 *165*	60 *195*	— —	— —	— —	33 *110*	43 *140*	50 *165*	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	41 *135*	55 *180*	60 *195*	— —	— —	— —	35 *115*	45 *150*	55 *180*	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	49 *160*	65 *215*	70 *230*	— —	— —	— —	42 *140*	55 *180*	65 *215*	85 *280*	105 *345*	120 *395*	47 *155*	60 *195*	70 *230*
H12	75 *245*	90 *295*	100 *330*	75 *245*	90 *295*	100 *330*	— —	— —	— —	60 *195*	75 *245*	85 *280*	80 *260*	100 *330*	110 *360*	75 *245*	90 *295*	100 *330*

T4 – R217/220.94-LO12 – In mm



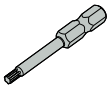


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 193-195
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	TDZ	LF	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm		mm	mm		kg	
R220.94-0050-046-LO12.3A	10215181	Manicotto	50,0	3	12	46,0	27,0	46,4	–	70,0	–	9900	0,7	LOEX1207
R220.94-0050-046-LO12.4A	10215182	Manicotto	50,0	4	16	46,0	27,0	46,4	–	65,0	–	9900	0,6	LOEX1207
R220.94-0050-058-LO12.4A	10215183	Manicotto	50,0	4	20	58,0	27,0	46,4	–	80,0	–	9900	0,7	LOEX1207
R220.94-0063-046-LO12.4A	10215184	Manicotto	63,0	4	16	46,0	27,0	59,6	–	65,0	–	8800	1,0	LOEX1207
R220.94-0063-058-LO12.5A	10215185	Manicotto	63,0	5	25	58,0	27,0	59,6	–	75,0	–	8800	1,2	LOEX1207
R220.94-0063-081-LO12.4A	10215186	Manicotto	63,0	4	28	81,0	27,0	59,6	–	93,0	–	8800	1,4	LOEX1207
R220.94-0080-069-LO12.5A	10215187	Manicotto	80,0	5	30	69,0	32,0	76,6	–	90,0	–	7800	2,4	LOEX1207
R217.94-2040.RE-035-LO12.2A	10215197	Combimaster	40,0	2	6	35,0	–	36,5	M20	50,0	77,0	11000	0,4	LOEX1207

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

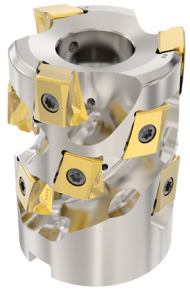
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.94-2040	–	1/4HEX-T15PX50	C04012B-T15P
R220.94-0050/0063-046	MC6S12X60	1/4HEX-T15PX50	C04012B-T15P
R220.94-0050/0063-058	MC6S12X70	1/4HEX-T15PX50	C04012B-T15P
R220.94-0063-081	MP6S12X80	1/4HEX-T15PX50	C04012B-T15P
R220.94-0080-069	MP6S16X80	1/4HEX-T15PX50	C04012B-T15P

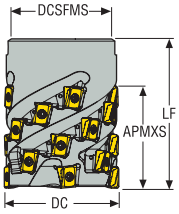
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

T4 – R217/220.94-LO12 – Pollici

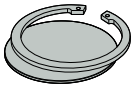
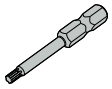




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 193-195
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch		lb	
R220.94-02.00-1.81-LO12-3A	10215190	Manicotto	2.000	3	12	1.850	1.000	1.862	2.756	9900	1.540	LOEX1207
R220.94-02.00-2.28-LO12-4A	10215191	Manicotto	2.000	4	20	2.283	1.000	1.862	3.150	9900	1.540	LOEX1207
R220.94-02.50-3.18-LO12-4A	10215192	Manicotto	2.500	4	28	3.189	1.000	2.366	3.661	8800	3.090	LOEX1207
R220.94-02.50-3.18-LO12-4SA	10226053	Manicotto	2.500	4	28	3.189	1.000	2.366	3.937	8800	3.090	LOEX1207
R220.94-03.00-3.18-LO12-5A	10215193	Manicotto	3.000	5	35	3.189	1.250	2.870	3.740	8000	5.070	LOEX1207

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Corpo base	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto	Terminale sostituibile
						
R220.94-02.00-3A	UC6S1/2UNFX2-1/4	–	–	1/4HEX-T15PX50	C04012B-T15P	–
R220.94-02.00-4A	UC6S1/2UNFX2-1/2	–	–	1/4HEX-T15PX50	C04012B-T15P	–
R220.94-02.50-4A	UP6S1/2UNFX3-1/4	–	–	1/4HEX-T15PX50	C04012B-T15P	–
R220.94-02.50-4SA	UP6S1/2UNFX3-1/4	R220.94-02.50-1.76-LO12.4BA	LUBRICATION_SET_19	1/4HEX-T15PX50	C04012B-T15P	R220.94-RE2.50-1.42-LO12.4A
R220.94-03.00	UP6S5/8UNFX3-1/4	–	–	1/4HEX-T15PX50	C04012B-T15P	–

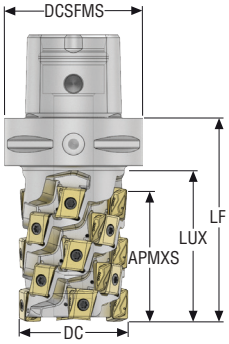
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

T4 – R217/220.94-LO12 – In mm

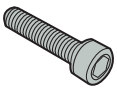
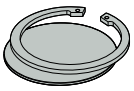
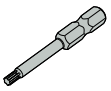




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 193-195
—Per il programma inserti completo, vedere le pagine 863
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm		kg	
C5-R217.94-044-058-LO12.3A	10215194	Seco-Capto	44,0	3	15	58,0	50,0	95,0	73,0	125,0	10600	0,9	LOEX1207
C6-R217.94-050-081-LO12.4SA	10226054	Seco-Capto	50,0	4	28	81,0	63,0	115,0	91,0	153,0	10000	1,5	LOEX1207
C5-R217.94-054-069-LO12.4A	10215195	Seco-Capto	54,0	4	24	69,0	50,0	69,0	84,1	105,0	9700	1,3	LOEX1207
C6-R217.94-063-092-LO12.4SA	10226052	Seco-Capto	63,0	4	32	92,0	63,0	125,0	101,5	163,0	9000	2,4	LOEX1207
C6-R217.94-066-081-LO12.5A	10215196	Seco-Capto	66,0	5	35	81,0	63,0	115,0	101,5	153,0	8700	2,3	LOEX1207

Parti di ricambio, comprese nella fornitura

Per fresa	Vite di assemblaggio	Corpo base	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto	Terminale sostituibile
						
C5-R217.94-044/055	–	–	–	1/4HEX-T15PX50	C04012B-T15P	–
C6-R217.94-050	220.17-692M	C6-R217.94-050-058-LO12.4BA	LUBRICATION_SET_19	1/4HEX-T15PX50	C04012B-T15P	R220.94-RE050023-LO12.4A
C6-R217.94-063	MC6S12X35	C6-R217.94-063-056-LO12.4BA	LUBRICATION_SET_29	1/4HEX-T15PX50	C04012B-T15P	R220.94-RE063036-LO12.4A
C6-R217.94-066	–	–	–	1/4HEX-T15PX50	C04012B-T15P	–

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
Cx-R217.94-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.94-12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	LOEX120708R-T4-M09 MP2501	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P2	LOEX120708R-T4-M09 MP2501	0,11 *0.0044*	0,13 0.0050	0,19 0.0075
P3	LOEX120708R-T4-M09 MP2501	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
P4	LOEX120708TR-T4-M12 MP2501	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
P5	LOEX120708TR-T4-M12 MP2501	0,12 *0.0048*	0,14 0.0055	0,20 0.0080
P6	LOEX120708TR-T4-M12 MP2501	0,12 *0.0048*	0,14 0.0055	0,20 0.0080
P7	LOEX120708TR-T4-M12 MP2501	0,12 *0.0048*	0,14 0.0055	0,20 0.0080
P8	LOEX120708TR-T4-M12 MP2501	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
P11	LOEX120708TR-T4-M12 MP2501	0,12 *0.0048*	0,14 0.0055	0,20 0.0080
P12	LOEX120708TR-T4-M12 MP2501	0,085 *0.0034*	0,095 0.0038	0,14 0.0055
M1	LOEX120708R-T4-M09 MS2050	0,11 *0.0044*	0,13 0.0050	0,19 0.0075
M2	LOEX120708R-T4-M09 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M3	LOEX120708R-T4-M09 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
M4	LOEX120708TR-T4-M12 MS2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
M5	LOEX120708TR-T4-M12 MS2050	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
K1	LOEX120708TR-T4-MD13 MK2050	0,16 *0.0065*	0,18 0.0070	0,26 0.010
K2	LOEX120708TR-T4-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K3	LOEX120708TR-T4-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K4	LOEX120708TR-T4-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K5	LOEX120708TR-T4-MD13 MK2050	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
K6	LOEX120708TR-T4-MD13 MK2050	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K7	LOEX120708TR-T4-MD13 MK2050	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
N1	LOEX120708R-T4-M09 F40M	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N2	LOEX120708R-T4-M09 F40M	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N3	LOEX120708R-T4-M09 F40M	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
N11	LOEX120708R-T4-M09 F40M	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
S1	LOEX120708TR-T4-M12 F40M	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
S2	LOEX120708TR-T4-M12 F40M	0,095 *0.0038*	0,10 0.0040	0,16 0.0065
S3	LOEX120708TR-T4-M12 F40M	0,090 *0.0036*	0,095 0.0038	0,15 0.0060
S11	LOEX120708R-T4-M09 F40M	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S12	LOEX120708R-T4-M09 F40M	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S13	LOEX120708R-T4-M09 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
H5	LOEX120708TR-T4-MD13 MP1501	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
H8	LOEX120708TR-T4-MD13 MP1501	0,070 *0.0028*	0,075 0.0030	0,12 0.0048
H11	LOEX120708TR-T4-MD13 MP1501	0,090 *0.0036*	0,10 0.0040	0,15 0.0060
H12	LOEX120708TR-T4-M12 MS2500	0,065 *0.0026*	0,070 0.0028	0,11 0.0044

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.94-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	155 *510*	170 *560*	185 *610*	160 *520*	180 *590*	190 *620*	160 *520*	175 *570*	185 *610*	150 *490*	165 *540*	170 *560*	165 *540*	185 *610*	200 *660*	155 *510*	175 *570*	185 *610*
P2	150 *490*	170 *560*	180 *590*	155 *510*	175 *570*	190 *620*	155 *510*	175 *570*	180 *590*	145 *475*	160 *520*	170 *560*	160 *520*	185 *610*	195 *640*	155 *510*	175 *570*	185 *610*
P3	140 *460*	160 *520*	170 *560*	150 *490*	170 *560*	180 *590*	145 *475*	165 *540*	175 *570*	140 *460*	155 *510*	160 *520*	155 *510*	175 *570*	190 *620*	145 *475*	165 *540*	175 *570*
P4	135 *445*	155 *510*	165 *540*	140 *460*	160 *520*	170 *560*	140 *460*	155 *510*	165 *540*	130 *425*	145 *475*	155 *510*	145 *475*	170 *560*	180 *590*	135 *445*	155 *510*	165 *540*
P5	130 *425*	150 *490*	160 *520*	140 *460*	155 *510*	170 *560*	135 *445*	155 *510*	165 *540*	125 *410*	140 *460*	150 *490*	145 *475*	165 *540*	180 *590*	135 *445*	155 *510*	165 *540*
P6	140 *460*	160 *520*	170 *560*	150 *490*	165 *540*	175 *570*	145 *475*	160 *520*	170 *560*	135 *445*	150 *490*	160 *520*	155 *510*	175 *570*	185 *610*	145 *475*	160 *520*	175 *570*
P7	135 *445*	155 *510*	165 *540*	145 *475*	160 *520*	175 *570*	140 *460*	155 *510*	165 *540*	135 *445*	145 *475*	155 *510*	150 *490*	170 *560*	180 *590*	140 *460*	155 *510*	170 *560*
P8	130 *425*	150 *490*	160 *520*	140 *460*	155 *510*	165 *540*	135 *445*	150 *490*	160 *520*	125 *410*	140 *460*	150 *490*	145 *475*	165 *540*	175 *570*	135 *445*	155 *510*	165 *540*
P11	135 *445*	150 *490*	165 *540*	140 *460*	160 *520*	170 *560*	140 *460*	155 *510*	165 *540*	130 *425*	145 *475*	150 *490*	145 *475*	175 *570*	195 *640*	140 *460*	155 *510*	165 *540*
P12	105 *345*	125 *410*	135 *445*	115 *375*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*	105 *345*	115 *375*	125 *410*	120 *395*	150 *490*	165 *540*	110 *360*	125 *410*	140 *460*
M1	— —	— —	— —	135 *445*	150 *490*	165 *540*	135 *445*	155 *510*	165 *540*	125 *410*	140 *460*	155 *510*	150 *490*	180 *590*	200 *660*	130 *425*	150 *490*	160 *520*
M2	— —	— —	— —	120 *395*	140 *460*	150 *490*	125 *410*	140 *460*	150 *490*	110 *360*	130 *425*	140 *460*	140 *460*	170 *560*	190 *620*	120 *395*	140 *460*	150 *490*
M3	— —	— —	— —	105 *345*	125 *410*	135 *445*	110 *360*	125 *410*	135 *445*	95 *310*	115 *375*	125 *410*	130 *425*	160 *520*	175 *570*	105 *345*	125 *410*	135 *445*
M4	— —	— —	— —	90 *295*	110 *360*	120 *395*	90 *295*	110 *360*	120 *395*	80 *260*	100 *330*	110 *360*	115 *375*	145 *475*	160 *520*	90 *295*	110 *360*	120 *395*
M5	— —	— —	— —	80 *260*	95 *310*	105 *345*	80 *260*	95 *310*	110 *360*	70 *230*	85 *280*	95 *310*	100 *330*	130 *425*	145 *475*	80 *260*	95 *310*	105 *345*
K1	155 *510*	175 *570*	185 *610*	135 *445*	155 *510*	165 *540*	— —	— —	— —	120 *395*	140 *460*	150 *490*	— —	— —	— —	— —	— —	— —
K2	150 *490*	165 *540*	180 *590*	130 *425*	145 *475*	160 *520*	— —	— —	— —	115 *375*	135 *445*	145 *475*	— —	— —	— —	— —	— —	— —
K3	135 *445*	155 *510*	170 *560*	115 *375*	135 *445*	150 *490*	— —	— —	— —	100 *330*	120 *395*	135 *445*	— —	— —	— —	— —	— —	— —
K4	135 *445*	155 *510*	165 *540*	115 *375*	135 *445*	145 *475*	— —	— —	— —	100 *330*	120 *395*	130 *425*	— —	— —	— —	— —	— —	— —
K5	100 *330*	120 *395*	130 *425*	85 *280*	100 *330*	110 *360*	— —	— —	— —	70 *230*	85 *280*	100 *330*	— —	— —	— —	— —	— —	— —
K6	125 *410*	145 *475*	155 *510*	105 *345*	125 *410*	135 *445*	— —	— —	— —	90 *295*	110 *360*	120 *395*	— —	— —	— —	— —	— —	— —
K7	120 *395*	135 *445*	150 *490*	100 *330*	120 *395*	130 *425*	— —	— —	— —	85 *280*	105 *345*	115 *375*	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	255 *840*	275 *900*	285 *940*	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	195 *640*	215 *710*	225 *740*	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	165 *540*	185 *610*	195 *640*	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	195 *640*	205 *670*	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	44 *145*	60 *195*	70 *230*	45 *150*	60 *195*	70 *230*	38 *125*	50 *165*	60 *195*	46 *150*	60 *195*	70 *230*	46 *150*	60 *195*	70 *230*
S2	— —	— —	— —	36 *120*	47 *155*	55 *180*	36 *120*	48 *155*	55 *180*	31 *100*	41 *135*	48 *155*	37 *120*	49 *160*	55 *180*	37 *120*	49 *160*	55 *180*
S3	— —	— —	— —	31 *100*	41 *135*	48 *155*	32 *105*	42 *140*	50 *165*	27 *90*	36 *120*	42 *140*	32 *105*	43 *140*	50 *165*	32 *105*	43 *140*	50 *165*
S11	— —	— —	— —	— —	— —	— —	65 *215*	80 *260*	90 *295*	55 *180*	70 *230*	80 *260*	65 *215*	80 *260*	95 *310*	65 *215*	80 *260*	95 *310*
S12	— —	— —	— —	— —	— —	— —	43 *140*	60 *195*	70 *230*	37 *120*	48 *155*	55 *180*	44 *145*	60 *195*	70 *230*	44 *145*	60 *195*	70 *230*
S13	— —	— —	— —	— —	— —	— —	25 *80*	33 *110*	39 *130*	21 *70*	29 *95*	33 *110*	26 *85*	34 *110*	40 *130*	26 *85*	34 *110*	40 *130*
H5	— —	— —	— —	38 *125*	50 *165*	60 *195*	— —	— —	— —	32 *105*	43 *140*	50 *165*	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	40 *130*	55 *180*	60 *195*	— —	— —	— —	34 *110*	46 *150*	55 *180*	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	48 *155*	65 *215*	75 *245*	— —	— —	— —	41 *135*	55 *180*	65 *215*	90 *295*	120 *395*	135 *445*	48 *155*	65 *215*	75 *245*
H12	75 *245*	95 *310*	105 *345*	75 *245*	95 *310*	105 *345*	— —	— —	— —	60 *195*	80 *260*	90 *295*	90 *295*	115 *375*	130 *425*	80 *260*	100 *330*	110 *360*

R217/220.94-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1500			MP1501			MP2501			MP3000			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	—	—	—	180	195	200	185	195	205	155	175	185	175	190	195
	—	—	—	*590*	*640*	*660*	*610*	*640*	*670*	*510*	*570*	*610*	*570*	*620*	*640*
P2	—	—	—	180	190	200	180	195	200	150	170	180	170	185	195
	—	—	—	*590*	*620*	*660*	*590*	*640*	*660*	*490*	*560*	*590*	*560*	*610*	*640*
P3	—	—	—	170	185	190	170	185	195	145	165	175	165	175	185
	—	—	—	*560*	*610*	*620*	*560*	*610*	*640*	*475*	*540*	*570*	*540*	*570*	*610*
P4	—	—	—	160	175	185	165	175	185	135	155	165	155	170	175
	—	—	—	*520*	*570*	*610*	*540*	*570*	*610*	*445*	*510*	*540*	*510*	*560*	*570*
P5	—	—	—	155	170	180	160	175	185	130	150	165	150	165	175
	—	—	—	*510*	*560*	*590*	*520*	*570*	*610*	*425*	*490*	*540*	*490*	*540*	*570*
P6	—	—	—	165	180	190	170	185	190	140	160	170	160	175	185
	—	—	—	*540*	*590*	*620*	*560*	*610*	*620*	*460*	*520*	*560*	*520*	*570*	*610*
P7	—	—	—	165	175	185	165	180	185	135	155	165	155	170	180
	—	—	—	*540*	*570*	*610*	*540*	*590*	*610*	*445*	*510*	*540*	*510*	*560*	*590*
P8	—	—	—	155	170	180	160	175	180	130	150	160	150	165	175
	—	—	—	*510*	*560*	*590*	*520*	*570*	*590*	*425*	*490*	*520*	*490*	*540*	*570*
P11	—	—	—	160	175	185	165	175	185	135	155	165	155	170	175
	—	—	—	*520*	*570*	*610*	*540*	*570*	*610*	*445*	*510*	*540*	*510*	*560*	*570*
P12	—	—	—	130	145	150	135	145	155	105	125	135	125	140	145
	—	—	—	*425*	*475*	*490*	*445*	*475*	*510*	*345*	*410*	*445*	*410*	*460*	*475*
M1	—	—	—	—	—	—	135	155	165	135	150	165	130	150	160
	—	—	—	—	—	—	*445*	*510*	*540*	*445*	*490*	*540*	*425*	*490*	*520*
M2	—	—	—	—	—	—	125	140	155	120	140	150	115	135	145
	—	—	—	—	—	—	*410*	*460*	*510*	*395*	*460*	*490*	*375*	*445*	*475*
M3	—	—	—	—	—	—	110	130	140	105	125	135	105	120	135
	—	—	—	—	—	—	*360*	*425*	*460*	*345*	*410*	*445*	*345*	*395*	*445*
M4	—	—	—	—	—	—	90	110	120	90	110	120	85	105	115
	—	—	—	—	—	—	*295*	*360*	*395*	*295*	*360*	*395*	*280*	*345*	*375*
M5	—	—	—	—	—	—	80	100	110	80	95	105	75	95	105
	—	—	—	—	—	—	*260*	*330*	*360*	*260*	*310*	*345*	*245*	*310*	*345*
K1	160	180	190	180	195	200	180	195	205	135	155	165	170	185	195
	520	*590*	*620*	*590*	*640*	*660*	*590*	*640*	*670*	*445*	*510*	*540*	*560*	*610*	*640*
K2	150	170	180	170	185	195	175	185	195	130	145	160	165	180	190
	490	*560*	*590*	*560*	*610*	*640*	*570*	*610*	*640*	*425*	*475*	*520*	*540*	*590*	*620*
K3	140	160	170	160	175	180	165	175	185	115	135	150	155	165	175
	460	*520*	*560*	*520*	*570*	*590*	*540*	*570*	*610*	*375*	*445*	*490*	*510*	*540*	*570*
K4	135	155	170	155	170	180	160	175	180	115	135	145	150	165	175
	445	*510*	*560*	*510*	*560*	*590*	*520*	*570*	*590*	*375*	*445*	*475*	*490*	*540*	*570*
K5	105	125	135	125	140	145	125	140	150	85	100	110	120	130	140
	345	*410*	*445*	*410*	*460*	*475*	*410*	*460*	*490*	*280*	*330*	*360*	*395*	*425*	*460*
K6	130	150	160	145	160	170	150	165	175	105	125	135	140	155	165
	425	*490*	*520*	*475*	*520*	*560*	*490*	*540*	*570*	*345*	*410*	*445*	*460*	*510*	*540*
K7	120	140	150	140	155	160	145	155	165	100	120	130	135	150	155
	395	*460*	*490*	*460*	*510*	*520*	*475*	*510*	*540*	*330*	*395*	*425*	*445*	*490*	*510*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	44	60	70	42	55	65
	—	—	—	—	—	—	—	—	—	*145*	*195*	*230*	*140*	*180*	*215*
S2	—	—	—	—	—	—	—	—	—	36	47	55	34	45	50
	—	—	—	—	—	—	—	—	—	*120*	*155*	*180*	*110*	*150*	*165*
S3	—	—	—	—	—	—	—	—	—	31	41	48	30	39	46
	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*	*100*	*130*	*150*
S11	—	—	—	—	—	—	—	—	—	—	—	—	60	75	90
	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*245*	*295*
S12	—	—	—	—	—	—	—	—	—	—	—	—	40	55	65
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*180*	*215*
S13	—	—	—	—	—	—	—	—	—	—	—	—	24	31	37
	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*100*	*120*
H5	—	—	—	47	60	70	—	—	—	38	50	60	37	49	60
	—	—	—	*155*	*195*	*230*	—	—	—	*125*	*165*	*195*	*120*	*160*	*195*
H8	—	—	—	50	65	75	—	—	—	40	55	60	40	50	60
	—	—	—	*165*	*215*	*245*	—	—	—	*130*	*180*	*195*	*130*	*165*	*195*
H11	—	—	—	60	75	90	—	—	—	48	65	75	47	60	75
	—	—	—	*195*	*245*	*295*	—	—	—	*155*	*215*	*245*	*155*	*195*	*245*
H12	—	—	—	85	105	115	—	—	—	75	95	105	70	90	100
	—	—	—	*280*	*345*	*375*	—	—	—	*245*	*310*	*345*	*230*	*295*	*330*

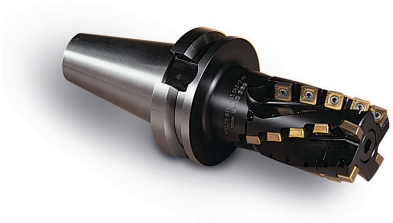


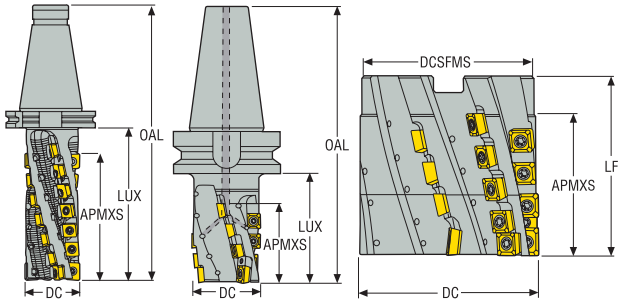
R215/220.59 HELICAL

La nostra gamma completa di frese elicoidali ad alte prestazioni incorpora le geometrie e le qualità più recenti per ottenere elevate velocità di avanzamento, ampie profondità di taglio e asportazione aggressiva del metallo nelle operazioni di contornatura e profilatura. L'angolo dell'elica consente alla fresa di assorbire la maggior parte del carico finale in modo che entri ed esca agevolmente dal pezzo in lavorazione.

– Gamma frese 50-100 mm (2")
– Numerose opzioni per diversi tipi di attacco

R215.59-12.4 – Denti effettivi dimezzati – In mm



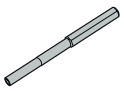
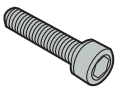


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 201-202
—Per il programma inserti completo, vedere le pagine 861,880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R220.59-00080.068-12.6	75000109	Manicotto	80,0	3	24	68,0	32,0	77,0	85,0	–	–	6500	1,9	AC.T1506 / SC.T1206
R220.59-00100077-12.6S	75000112	Manicotto	100,0	3	27	77,0	40,0	90,0	100,0	–	–	5800	3,7	AC.T1506 / SC.T1206
R220.59-00100077-12.6SR6	75000247	Manicotto	100,0	3	24	77,0	40,0	90,0	100,0	–	–	5800	4,4	AC.T1506 / SC.T1206
R220.59-00100077-12.8S	75000113	Manicotto	100,0	4	36	77,0	40,0	90,0	100,0	–	–	5800	3,9	AC.T1506 / SC.T1206
R220.59-00100077-12.8SR6	75000248	Manicotto	100,0	4	32	77,0	40,0	90,0	100,0	–	–	5800	4,5	AC.T1506 / SC.T1206
R215.59-50063120-12.4S	00026979	DIN2080	63,0	2	28	122,8	–	97,45	200,0	165,0	327,0	7400	5,6	AC.T1506 / SC.T1206
R215.59-BT50.050.077-12.4A	75066231	BT50	50,0	2	18	77,0	–	100,0	148,0	110,0	250,0	8300	4,5	AC.T1506 / SC.T1206
R215.59-BT50.063.086-12.4S	75034445	BT50	63,0	2	18	86,0	–	100,0	162,9	125,0	265,0	7400	6,8	AC.T1506 / SC.T1206
R215.59-BT50.080.095-12.4S	75034446	BT50	80,0	2	22	96,0	–	100,0	173,0	135,0	275,0	6500	6,6	AC.T1506 / SC.T1206

Modifica dei corpi fresa necessaria per raggi di punta > 3,0 mm
*Compatibile solo con raggi di punta di 6,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile	Tenone	Tenon screw
									
R215.59-050	–	–	–	H6B-T20P	C45011-T20P	DOUBLE-T	–	–	–
R215.59-060	–	215.59-691	R215.59-BT50.063.062-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4	–	–
R215.59-50-4S	–	215.59-691	R215.59-CV50/50063096-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4	–	–
R220.59-00080	MC6S16X70	–	–	H6B-T20P	C45011-T20P	DOUBLE-T	–	–	–
R220.59-00100..6S	215.59-693S	–	R220.59-00100043-12.6B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE100034-12.6	DK1210	TCEI0412
R220.59-00100..6SR	215.59-693S	–	R220.59-00100043-12.6B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE100034-12.6R6	DK1210	TCEI0412
R220.59-00100..8S	215.59-693S	–	R220.59-00100043-12.8B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE100034-12.8	DK1210	TCEI0412
R220.59-00100..8SR	215.59-693S	–	R220.59-00100043-12.8B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE100034-12.8R6	DK1210	TCEI0412
R220.59-080	–	215.59-692S	R215.59-BT50.080.061-12.4B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE080034-12.4	DK1010	TCEI0412

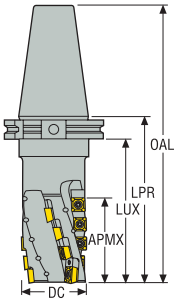
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R215.59-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R215.59-12.4 – Denti effettivi dimezzati – In mm



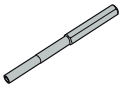
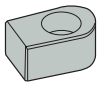
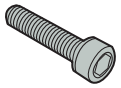


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 201-202
—Per il programma inserti completo, vedere le pagine 861,880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm		kg	
R215.59-CV50050120-12.4	00026978	CV50	50,0	2	28	122,9	97,45	180,0	145,0	282,0	8300	4,5	AC.T1506 / SC.T1206
R215.59-CV50063086-12.4S	75003346	CV50	63,0	2	20	86,0	97,45	160,0	120,0	261,0	7400	5,0	AC.T1506 / SC.T1206
R215.59-CV50063086-12.4SR6	75000244	CV50	63,0	2	20	86,0	97,45	160,0	120,0	261,0	7400	5,1	AC.T1506 / SC.T1206
R215.59-CV50063120-12.4S	00026980	CV50	63,0	2	28	122,8	97,45	200,0	165,0	302,0	7400	5,6	AC.T1506 / SC.T1206
R215.59-CV50063120-12.4SR6	00027074	CV50	63,0	2	28	122,8	97,45	199,9	165,0	302,0	7400	5,8	AC.T1506 / SC.T1206
R215.59-CV50063160-12.4S	00095805	CV50	63,0	2	36	158,7	97,45	234,9	200,0	336,5	7400	6,2	AC.T1506 / SC.T1206
R215.59-CV50063160-12.4SR6	00095807	CV50	63,0	2	36	158,7	97,45	234,9	200,0	336,5	7400	6,2	AC.T1506 / SC.T1206
R215.59-CV50080095-12.4S	75007713	CV50	80,0	2	22	96,0	97,45	150,0	131,0	252,0	6500	5,5	AC.T1506 / SC.T1206
R215.59-CV50080095-12.6S	75003347	CV50	80,0	3	33	96,0	97,45	150,0	131,0	252,0	6500	5,9	AC.T1506 / SC.T1206

Modifica dei corpi fresa necessaria per raggi di punta > 3,0 mm
*Compatibile solo con raggi di punta di 6,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Adaptor	Vite di assemblaggio	Corpo base	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Terminale sostituibile	Tenone	Tenon screw
									
R215.59-63-120-12.4S	AD-CV50	215.59-691	R215.59-CV50/50063096-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4	–	–
R215.59-63-120-12.4SR	AD-CV50	215.59-691	R215.59-CV50/50063096-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4R6	–	–
R215.59-63-160-12.4S	AD-CV50	215.59-691	R215.59-CV50/50063134-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4	–	–
R215.59-63-160-12.4SR	AD-CV50	215.59-691	R215.59-CV50/50063134-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4R6	–	–
R215.59-CV5006-12.4S	–	215.59-691	R215.59-CV50063062-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4	–	–
R215.59-CV5008-12.4S	–	215.59-692S	R215.59-CV50080061-12.4B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE080034-12.4	DK1010	TCEI0412
R215.59-CV50-12.4	–	–	–	H6B-T20P	C45011-T20P	DOUBLE-T	–	–	–
R215.59-CV50-12.4SR	–	215.59-691	R215.59-CV50063062-12.4B	H6B-T20P	C45011-T20P	DOUBLE-T	R220.59-RE063024-12.4R6	–	–
R220.59-080-12.6S	–	215.59-692S	R215.59-CV50080061-12.6B	H6B-T20PL	C45011-T20P	DOUBLE-T	R220.59-RE080034-12.6	DK1010	TCEI0412

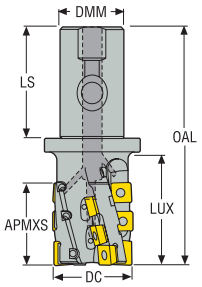
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R215.59-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R215.59-12.4..K – Piena efficacia – In mm



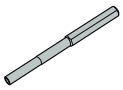


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 201-202
—Per il programma inserti completo, vedere le pagine 861,880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCSFMS	DMM	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R215.59-4050.3S-063-12.3K	00092248	Seco-Weldon	50,0	3	18	63,0	60,0	40,0	78,0	90,0	160,0	8300	1,5	AC.T1506 / SC.T1206

Modifica dei corpi fresa necessaria per raggi di punta > 3,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R215.59-..	H6B-T20P	C45011-T20P	DOUBLE-T

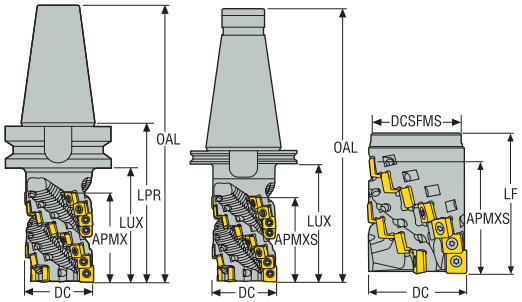
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R215.59-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R215/220.59-12.4 – Piena efficacia – In mm



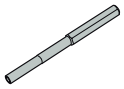


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 201-202
—Per il programma inserti completo, vedere le pagine 861,880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	LUX	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm		kg	
R220.59-00080.072-12.5K	00008462	Manicotto	80,0	5	35	72,0	32,0	74,7	100,0	–	–	6500	2,3	AC.T1506 / SC.T1206
R215.59-BT50050072-12.3K	00008459	BT50	50,0	3	21	73,0	–	100,0	145,0	103,0	247,0	8300	4,9	AC.T1506 / SC.T1206
R215.59-BT50063110-12.3K	00008466	BT50	63,0	3	33	111,8	–	100,0	180,0	137,0	282,0	7400	5,7	AC.T1506 / SC.T1206

Modifica dei corpi fresa necessaria per raggi di punta > 3,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R215.59-..	–	H6B-T20P	C45011-T20P	DOUBLE-T
R220.59-00080	MC6S16X80	H6B-T20P	C45011-T20P	DOUBLE-T

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R215.59-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R215/220.59-12 – Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			100%	30%	10%
P1	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,12 *0.0048*	0,14 *0.0055*	0,20 *0.0080*
P2	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
P3	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P4	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P5	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,11 *0.0044*	0,13 *0.0050*	0,19 *0.0075*
P6	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P7	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P8	ACET150612TR-M11 MP2501	SCET120612T-M11 MP2501	0,12 *0.0048*	0,13 *0.0050*	0,20 *0.0080*
P11	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,11 *0.0044*	0,12 *0.0048*	0,19 *0.0075*
P12	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
M1	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,11 *0.0044*	0,13 *0.0050*	0,19 *0.0075*
M2	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*
M3	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
M4	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
M5	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
K1	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,16 *0.0065*	0,18 *0.0070*	0,26 *0.010*
K2	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K3	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K4	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K5	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
K6	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,15 *0.0060*	0,16 *0.0065*	0,24 *0.0095*
K7	ACET150612TR-M14 MK1501	SCET120612T-M14 MK1501	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*
S1	ACET150612TR-M11 F40M	SCET120612T-M11 F40M	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S2	ACET150612TR-M11 F40M	SCET120612T-M11 F40M	0,080 *0.0032*	0,090 *0.0036*	0,13 *0.0050*
S3	ACET150612TR-M11 F40M	SCET120612T-M11 F40M	0,075 *0.0030*	0,080 *0.0032*	0,12 *0.0048*
S11	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
S12	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,085 *0.0034*	0,090 *0.0036*	0,14 *0.0055*
S13	ACET150612TR-ME10 MS2050	SCET120612R-M10 MS2050	0,075 *0.0030*	0,080 *0.0032*	0,12 *0.0048*
H5	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
H8	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,060 *0.0024*	0,065 *0.0026*	0,10 *0.0040*
H11	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,080 *0.0032*	0,085 *0.0034*	0,13 *0.0050*
H12	ACET150612TR-M11 MP3501	SCET120612T-M11 MP3501	0,060 *0.0024*	0,065 *0.0026*	0,10 *0.0040*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R215/220.59-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP3000			MS2050			F40M			MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	120	135	140	125	135	140	120	130	135	—	—	—	140	150	155	140	150	155	135	145	150
	395	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*	—	—	—	*460*	*490*	*510*	*460*	*490*	*510*	*445*	*475*	*490*
P2	120	130	140	125	135	140	115	125	130	—	—	—	140	150	155	140	150	155	135	145	150
	395	*425*	*460*	*410*	*445*	*460*	*375*	*410*	*425*	—	—	—	*460*	*490*	*510*	*460*	*490*	*510*	*445*	*475*	*490*
P3	115	125	135	115	130	135	110	120	125	—	—	—	135	145	150	135	145	150	130	140	145
	375	*410*	*445*	*375*	*425*	*445*	*360*	*395*	*410*	—	—	—	*445*	*475*	*490*	*445*	*475*	*490*	*425*	*460*	*475*
P4	110	120	130	110	120	130	105	115	125	—	—	—	130	135	145	125	135	140	120	130	135
	360	*395*	*425*	*360*	*395*	*425*	*345*	*375*	*410*	—	—	—	*425*	*445*	*475*	*410*	*445*	*460*	*395*	*425*	*445*
P5	105	120	125	110	120	125	105	115	120	—	—	—	125	135	140	125	135	140	120	130	135
	345	*395*	*410*	*360*	*395*	*410*	*345*	*375*	*395*	—	—	—	*410*	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*
P6	110	125	135	115	125	130	110	120	125	—	—	—	130	140	145	130	140	145	125	135	140
	360	*410*	*445*	*375*	*410*	*425*	*360*	*395*	*410*	—	—	—	*425*	*460*	*475*	*425*	*460*	*475*	*410*	*445*	*460*
P7	110	120	130	110	125	130	105	115	120	—	—	—	130	140	145	130	140	145	125	135	140
	360	*395*	*425*	*360*	*410*	*425*	*345*	*375*	*395*	—	—	—	*425*	*460*	*475*	*425*	*460*	*475*	*410*	*445*	*460*
P8	105	120	125	110	120	125	105	115	120	—	—	—	125	135	140	125	135	140	120	130	135
	345	*395*	*410*	*360*	*395*	*410*	*345*	*375*	*395*	—	—	—	*410*	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*
P11	110	120	130	110	120	130	105	115	120	—	—	—	130	135	140	125	135	140	120	130	135
	360	*395*	*425*	*360*	*395*	*425*	*345*	*375*	*395*	—	—	—	*425*	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*
P12	90	100	110	90	100	105	85	95	100	—	—	—	105	115	120	105	115	120	100	110	115
	295	*330*	*360*	*295*	*330*	*345*	*280*	*310*	*330*	—	—	—	*345*	*375*	*395*	*345*	*375*	*395*	*330*	*360*	*375*
M1	105	115	125	110	120	130	100	115	120	—	—	—	—	—	—	105	120	130	105	115	125
	345	*375*	*410*	*360*	*395*	*425*	*330*	*375*	*395*	—	—	—	—	—	—	*345*	*395*	*425*	*345*	*375*	*410*
M2	95	110	115	100	110	120	90	105	110	—	—	—	—	—	—	100	115	120	95	110	115
	310	*360*	*375*	*330*	*360*	*395*	*295*	*345*	*360*	—	—	—	—	—	—	*330*	*375*	*395*	*310*	*360*	*375*
M3	85	100	105	90	100	110	80	95	100	—	—	—	—	—	—	90	100	110	85	100	105
	280	*330*	*345*	*295*	*330*	*360*	*260*	*310*	*330*	—	—	—	—	—	—	*295*	*330*	*360*	*280*	*330*	*345*
M4	75	85	95	75	90	100	70	80	90	—	—	—	—	—	—	80	90	100	75	85	95
	245	*280*	*310*	*245*	*295*	*330*	*230*	*260*	*295*	—	—	—	—	—	—	*260*	*295*	*330*	*245*	*280*	*310*
M5	65	80	85	70	80	90	60	75	80	—	—	—	—	—	—	70	80	90	65	80	85
	215	*260*	*280*	*230*	*260*	*295*	*195*	*245*	*260*	—	—	—	—	—	—	*230*	*260*	*295*	*215*	*260*	*280*
K1	105	120	125	—	—	—	100	110	120	130	155	175	140	150	155	140	150	155	135	145	150
	345	*395*	*410*	—	—	—	*330*	*360*	*395*	*425*	*510*	*570*	*460*	*490*	*510*	*460*	*490*	*510*	*445*	*475*	*490*
K2	100	115	120	—	—	—	95	105	115	125	150	165	135	145	150	135	145	150	130	140	145
	330	*375*	*395*	—	—	—	*310*	*345*	*375*	*410*	*490*	*540*	*445*	*475*	*490*	*445*	*475*	*490*	*425*	*460*	*475*
K3	90	105	115	—	—	—	85	100	105	115	130	140	130	135	140	125	135	140	120	130	135
	295	*345*	*375*	—	—	—	*280*	*330*	*345*	*375*	*425*	*460*	*425*	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*
K4	90	105	110	—	—	—	85	95	105	110	130	140	125	135	140	125	135	140	120	130	135
	295	*345*	*360*	—	—	—	*280*	*310*	*345*	*360*	*425*	*460*	*410*	*445*	*460*	*410*	*445*	*460*	*395*	*425*	*445*
K5	70	80	90	—	—	—	60	75	80	90	105	115	100	110	115	100	110	115	95	105	110
	230	*260*	*295*	—	—	—	*195*	*245*	*260*	*295*	*345*	*375*	*330*	*360*	*375*	*330*	*360*	*375*	*310*	*345*	*360*
K6	85	100	105	—	—	—	80	90	100	105	125	135	120	130	135	120	130	135	115	125	130
	280	*330*	*345*	—	—	—	*260*	*295*	*330*	*345*	*410*	*445*	*395*	*425*	*445*	*395*	*425*	*445*	*375*	*410*	*425*
K7	80	95	100	—	—	—	75	85	95	100	120	130	115	125	130	115	120	130	110	120	125
	260	*310*	*330*	—	—	—	*245*	*280*	*310*	*330*	*395*	*425*	*375*	*410*	*425*	*375*	*395*	*425*	*360*	*395*	*410*
S1	39	50	60	42	55	60	36	47	55	—	—	—	—	—	—	—	—	—	40	50	60
	130	*165*	*195*	*140*	*180*	*195*	*120*	*155*	*180*	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*
S2	31	41	49	34	45	50	29	38	45	—	—	—	—	—	—	—	—	—	32	42	50
	100	*135*	*160*	*110*	*150*	*165*	*95*	*125*	*150*	—	—	—	—	—	—	—	—	—	*105*	*140*	*165*
S3	28	36	43	30	39	46	25	34	40	—	—	—	—	—	—	—	—	—	28	37	44
	90	*120*	*140*	*100*	*130*	*150*	*80*	*110*	*130*	—	—	—	—	—	—	—	—	—	*90*	*120*	*145*
S11	55	65	75	55	70	80	50	65	70	—	—	—	—	—	—	—	—	—	55	65	75
	180	*215*	*245*	*180*	*230*	*260*	*165*	*215*	*230*	—	—	—	—	—	—	—	—	—	*180*	*215*	*245*
S12	37	49	60	41	55	60	35	46	55	—	—	—	—	—	—	—	—	—	38	50	60
	120	*160*	*195*	*135*	*180*	*195*	*115*	*150*	*180*	—	—	—	—	—	—	—	—	—	*125*	*165*	*195*
S13	22	29	34	24	31	37	20	26	32	—	—	—	—	—	—	—	—	—	22	29	35
	70	*95*	*110*	*80*	*100*	*120*	*65*	*85*	*105*	—	—	—	—	—	—	—	—	—	*70*	*95*	*115*
H5	33	43	50	—	—	—	30	40	47	—	—	—	45	60	65	—	—	—	35	46	55
	110	*140*	*165*	—	—	—	*100*	*130*	*155*	—	—	—	*150*	*195*	*215*	—	—	—	*115*	*150*	*180*
H8	36	46	55	—	—	—	32	42	50	—	—	—	48	60	70	—	—	—	37	49	55
	120	*150*	*180*	—	—	—	*105*	*140*	*165*	—	—	—	*155*	*195*	*230*	—	—	—	*120*	*160*	*180*
H11	42	55	60	—	—	—	38	50	60	—	—	—	55	70	75	—	—	—	44	55	65
	140	*180*	*195*	—	—	—	*125*	*165*	*195*	—	—	—	*180*	*230*	*245*	—	—	—	*145*	*180*	*215*
H12	65	75	85	—	—	—	55	70	75	—	—	—	75	90	95	—	—	—	65	75	85
	215	*245*	*280*	—	—	—	*180*	*230*	*245*	—	—	—	*245*	*295*	*310*	—	—	—	*215*	*245*	*280*



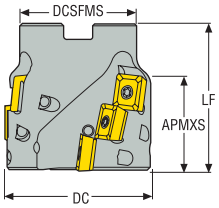
R215/220.69-15XH HELICAL

Frese elicoidali per impieghi pesanti, inserti con 4 taglienti, inserti monolaterali.

- Gamma frese 50-100 mm (2-4")
- Profondità di taglio <= 160 mm (6,3"), max 30% ae
- Profondità scanalatura max 50% DC
- Gamma raggi di punta dell'inserto 1,2-6,3 mm (0,047-0,248")

R220.69-15H – Elevati avanzamenti – In mm



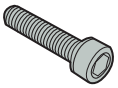
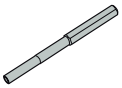


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 205-206
—Per il programma inserti completo, vedere le pagine 861
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm		kg	
R220.69-0100050-15.6H	75068040	Manicotto	100,0	6	24	50,0	40,0	90,0	75,0	5800	2,8	AC.T1506
R220.69-00125050-15.7H	00094725	Manicotto	125,0	7	28	50,0	40,0	90,0	75,0	5200	3,5	AC.T1506

Modifica dei corpi fresa necessaria per raggi di punta > 3,0 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Supporto assiale	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Chiave di regolazione
						
R220.69-00125	–	CH9411-T09P	H6B-T20P	C45011-T20P	DOUBLE-T	H4B-T09P
R220.69-0100	MC6S20X50	CH9411-T09P	H6B-T20PL	C45011-T20P	DOUBLE-T	H4B-T09P

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R220.69-..	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.69-15 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	ACET150612TR-M11 MP2501	0,12 *0.0048*	0,14 0.0055	0,20 0.0080
P2	ACET150612TR-M11 MP2501	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
P3	ACET150612TR-M11 MP2501	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P4	ACET150612TR-M11 MP2501	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P5	ACET150612TR-M11 MP2501	0,11 *0.0044*	0,13 0.0050	0,19 0.0075
P6	ACET150612TR-M11 MP2501	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P7	ACET150612TR-M11 MP2501	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P8	ACET150612TR-M11 MP2501	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P11	ACET150612TR-M11 MP3501	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P12	ACET150612TR-M11 MP3501	0,080 *0.0032*	0,085 0.0034	0,13 0.0050
M1	ACET150612TR-ME10 MS2050	0,11 *0.0044*	0,13 0.0050	0,19 0.0075
M2	ACET150612TR-ME10 MS2050	0,10 *0.0040*	0,11 0.0044	0,17 0.0065
M3	ACET150612TR-ME10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
M4	ACET150612TR-M11 MP3501	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
M5	ACET150612TR-M11 MP3501	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
K1	ACET150612TR-M14 MK1501	0,16 *0.0065*	0,18 0.0070	0,26 0.010
K2	ACET150612TR-M14 MK1501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K3	ACET150612TR-M14 MK1501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K4	ACET150612TR-M14 MK1501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K5	ACET150612TR-M14 MK1501	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
K6	ACET150612TR-M14 MK1501	0,15 *0.0060*	0,16 0.0065	0,24 0.0095
K7	ACET150612TR-M14 MK1501	0,13 *0.0050*	0,14 0.0055	0,22 0.0085
S1	ACET150612TR-M11 F40M	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
S2	ACET150612TR-M11 F40M	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
S3	ACET150612TR-M11 F40M	0,075 *0.0030*	0,080 0.0032	0,13 0.0048
S11	ACET150612TR-ME10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S12	ACET150612TR-ME10 MS2050	0,085 *0.0034*	0,090 0.0036	0,14 0.0055
S13	ACET150612TR-ME10 MS2050	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
H5	ACET150612TR-M11 MP3501	0,080 *0.0032*	0,085 0.0034	0,13 0.0050
H8	ACET150612TR-M11 MP3501	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
H11	ACET150612TR-M11 MP3501	0,080 *0.0032*	0,085 0.0034	0,13 0.0050
H12	ACET150612TR-M14 MP3501	0,075 *0.0030*	0,085 0.0034	0,13 0.0050

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.69-15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MP3000			MS2050			MK1501			MP1501			MP2501			MP3501		
	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%	100%	30%	10%
P1	145	160	165	145	165	180	155	170	180	—	—	—	180	190	200	175	190	200	170	180	190
	475	*520*	*540*	*475*	*540*	*590*	*510*	*560*	*590*	—	—	—	*590*	*620*	*660*	*570*	*620*	*660*	*560*	*590*	*620*
P2	140	155	165	145	165	175	150	165	175	—	—	—	175	190	195	175	185	195	165	180	190
	460	*510*	*540*	*475*	*540*	*570*	*490*	*540*	*570*	—	—	—	*570*	*620*	*640*	*570*	*610*	*640*	*540*	*590*	*620*
P3	135	145	155	135	155	165	140	160	170	—	—	—	165	180	185	165	180	185	160	170	180
	445	*475*	*510*	*445*	*510*	*540*	*460*	*520*	*560*	—	—	—	*540*	*590*	*610*	*540*	*590*	*610*	*520*	*560*	*590*
P4	125	140	150	130	150	160	135	150	160	—	—	—	155	170	180	155	170	180	150	165	170
	410	*460*	*490*	*425*	*490*	*520*	*445*	*490*	*520*	—	—	—	*510*	*560*	*590*	*510*	*560*	*590*	*490*	*540*	*560*
P5	125	135	145	125	145	155	130	150	155	—	—	—	155	170	175	155	165	175	150	160	170
	410	*445*	*475*	*410*	*475*	*510*	*425*	*490*	*510*	—	—	—	*510*	*560*	*570*	*510*	*540*	*570*	*490*	*520*	*560*
P6	130	145	150	135	155	165	140	155	165	—	—	—	165	175	185	165	175	185	155	170	175
	425	*475*	*490*	*445*	*510*	*540*	*460*	*510*	*540*	—	—	—	*540*	*570*	*610*	*540*	*570*	*610*	*510*	*560*	*570*
P7	130	140	150	130	150	160	135	150	160	—	—	—	160	175	180	160	170	180	150	165	170
	425	*460*	*490*	*425*	*490*	*520*	*445*	*490*	*520*	—	—	—	*520*	*570*	*590*	*520*	*560*	*590*	*490*	*540*	*560*
P8	120	135	145	125	145	155	130	145	155	—	—	—	155	170	175	155	165	175	145	160	170
	395	*445*	*475*	*410*	*475*	*510*	*425*	*475*	*510*	—	—	—	*510*	*560*	*570*	*510*	*540*	*570*	*475*	*520*	*560*
P11	125	140	145	130	150	160	135	150	160	—	—	—	160	170	180	155	170	180	150	165	170
	410	*460*	*475*	*425*	*490*	*520*	*445*	*490*	*520*	—	—	—	*520*	*560*	*590*	*510*	*560*	*590*	*490*	*540*	*560*
P12	100	110	120	105	120	130	105	120	130	—	—	—	125	140	145	125	140	145	120	130	140
	330	*360*	*395*	*345*	*395*	*425*	*345*	*395*	*425*	—	—	—	*410*	*460*	*475*	*410*	*460*	*475*	*395*	*425*	*460*
M1	115	135	145	120	140	155	130	150	160	—	—	—	—	—	—	130	145	160	125	140	155
	375	*445*	*475*	*395*	*460*	*510*	*425*	*490*	*520*	—	—	—	—	—	—	*425*	*475*	*520*	*410*	*460*	*510*
M2	105	125	135	110	130	140	120	135	145	—	—	—	—	—	—	115	135	145	115	130	140
	345	*410*	*445*	*360*	*425*	*460*	*395*	*445*	*475*	—	—	—	—	—	—	*375*	*445*	*475*	*375*	*425*	*460*
M3	90	110	120	95	115	125	105	120	130	—	—	—	—	—	—	105	120	130	100	115	125
	295	*360*	*395*	*310*	*375*	*410*	*345*	*395*	*425*	—	—	—	—	—	—	*345*	*395*	*425*	*330*	*375*	*410*
M4	75	95	105	80	100	110	85	105	115	—	—	—	—	—	—	85	105	115	80	100	110
	245	*310*	*345*	*260*	*330*	*360*	*280*	*345*	*375*	—	—	—	—	—	—	*280*	*345*	*375*	*260*	*330*	*360*
M5	65	80	90	70	85	95	75	90	105	—	—	—	—	—	—	75	90	105	70	85	100
	215	*260*	*295*	*230*	*280*	*310*	*245*	*295*	*345*	—	—	—	—	—	—	*245*	*295*	*345*	*230*	*280*	*330*
K1	115	135	145	125	145	155	—	—	—	165	200	220	175	190	195	175	190	195	165	180	190
	375	*445*	*475*	*410*	*475*	*510*	—	—	—	*540*	*660*	*720*	*570*	*620*	*640*	*570*	*620*	*640*	*540*	*590*	*620*
K2	110	125	140	120	135	150	—	—	—	155	190	215	170	180	190	170	180	190	160	175	180
	360	*410*	*460*	*395*	*445*	*490*	—	—	—	*510*	*620*	*710*	*560*	*590*	*620*	*560*	*590*	*620*	*520*	*570*	*590*
K3	100	115	130	105	125	135	—	—	—	135	165	180	155	170	180	155	170	175	150	160	170
	330	*375*	*425*	*345*	*410*	*445*	—	—	—	*445*	*540*	*590*	*510*	*560*	*590*	*510*	*560*	*570*	*490*	*520*	*560*
K4	95	115	125	105	125	135	—	—	—	135	160	175	155	165	175	155	165	175	145	160	165
	310	*375*	*410*	*345*	*410*	*445*	—	—	—	*445*	*520*	*570*	*510*	*540*	*570*	*510*	*540*	*570*	*475*	*520*	*540*
K5	65	80	90	70	90	100	—	—	—	100	130	140	120	135	140	120	135	140	115	125	135
	215	*260*	*295*	*230*	*295*	*330*	—	—	—	*330*	*425*	*460*	*395*	*445*	*460*	*395*	*445*	*460*	*375*	*410*	*445*
K6	85	105	115	95	115	125	—	—	—	125	150	165	145	160	165	145	155	165	140	150	160
	280	*345*	*375*	*310*	*375*	*410*	—	—	—	*410*	*490*	*540*	*475*	*520*	*540*	*475*	*510*	*540*	*460*	*490*	*520*
K7	80	95	110	90	105	115	—	—	—	120	145	160	140	150	160	135	150	155	130	145	150
	260	*310*	*360*	*295*	*345*	*375*	—	—	—	*395*	*475*	*520*	*460*	*490*	*520*	*445*	*490*	*510*	*425*	*475*	*490*
S1	35	46	55	38	50	60	42	55	65	—	—	—	—	—	—	—	—	—	39	50	60
	115	*150*	*180*	*125*	*165*	*195*	*140*	*180*	*215*	—	—	—	—	—	—	—	—	—	*130*	*165*	*195*
S2	28	37	44	31	40	47	34	44	50	—	—	—	—	—	—	—	—	—	31	41	48
	90	*120*	*145*	*100*	*130*	*155*	*110*	*145*	*165*	—	—	—	—	—	—	—	—	—	*100*	*135*	*155*
S3	25	33	39	27	35	42	29	39	46	—	—	—	—	—	—	—	—	—	27	36	42
	80	*110*	*130*	*90*	*115*	*140*	*95*	*130*	*150*	—	—	—	—	—	—	—	—	—	*90*	*120*	*140*
S11	49	65	75	50	70	80	60	75	85	—	—	—	—	—	—	—	—	—	55	70	80
	160	*215*	*245*	*165*	*230*	*260*	*195*	*245*	*280*	—	—	—	—	—	—	—	—	—	*180*	*230*	*260*
S12	34	45	55	36	48	55	40	55	60	—	—	—	—	—	—	—	—	—	38	49	60
	110	*150*	*180*	*120*	*155*	*180*	*130*	*180*	*195*	—	—	—	—	—	—	—	—	—	*125*	*160*	*195*
S13	20	26	31	21	28	33	23	31	36	—	—	—	—	—	—	—	—	—	22	28	34
	65	*85*	*100*	*70*	*90*	*110*	*75*	*100*	*120*	—	—	—	—	—	—	—	—	—	*70*	*90*	*110*
H5	29	39	46	32	42	50	—	—	—	—	—	—	44	60	70	—	—	—	34	45	55
	95	*130*	*150*	*105*	*140*	*165*	—	—	—	—	—	—	*145*	*195*	*230*	—	—	—	*110*	*150*	*180*
H8	32	41	49	35	45	55	—	—	—	—	—	—	47	60	70	—	—	—	36	48	55
	105	*135*	*160*	*115*	*150*	*180*	—	—	—	—	—	—	*155*	*195*	*230*	—	—	—	*120*	*155*	*180*
H11	38	50	60	41	55	65	—	—	—	—	—	—	55	75	85	—	—	—	43	55	65
	125	*165*	*195*	*135*	*180*	*215*	—	—	—	—	—	—	*180*	*245*	*280*	—	—	—	*140*	*180*	*215*
H12	55	75	85	65	85	95	—	—	—	—	—	—	80	100	110	—	—	—	65	85	95
	180	*245*	*280*	*215*	*280*	*310*	—	—	—	—	—	—	*260*	*330*	*360*	—	—	—	*215*	*280*	*310*

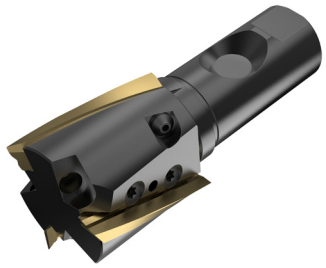


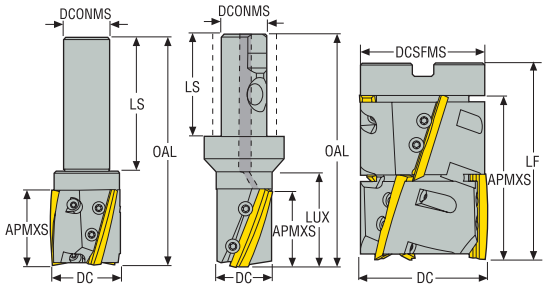
R235.15 HELICAL

Frese elicoidali per un'elevata finitura superficiale in operazioni a spallamento retto e di contornatura. Per operazioni di finitura.

- Gamma di frese 32-80 mm, (1,25-3")
- Profondità di taglio <= 90 mm (3,5")
- Max a_e = 1 mm

R235.15 – Operazioni di finitura – In mm

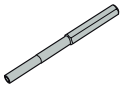




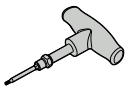
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 210–211
—Per il programma inserti completo, vedere le pagine 918
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm			mm	mm	mm	mm	mm	mm	mm	mm		kg	
R235.15-2532.3S-40A	75036948	Seco-Weldon	32,0	2	2	40,0	–	40,0	25,0	–	50,0	69,0	125,0	8000	0,7	R235.15-032
R235.15A-3250.3S-50A	75036946	Seco-Weldon	50,0	3	3	50,0	–	50,0	32,0	–	61,4	60,0	120,0	5500	1,0	R235.15-050
R235.15A-0080-90	75037122	Manicotto	80,0	3	6	90,0	32,0	75,0	–	120,0	–	–	–	4400	3,5	R235.15-080
R235.15-2532.0-40	75036949	Cilindrico	32,0	2	2	40,0	–	–	25,0	–	40,0	84,0	140,0	8000	0,7	R235.15-032
R235.15A-3250.0-50	75036947	Cilindrico	50,0	3	3	50,0	–	–	32,0	–	50,0	95,0	155,0	5500	1,3	R235.15-050

Parti di ricambio, comprese nella fornitura

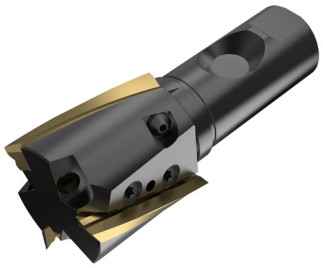
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Calibro di regolazione	Chiave di regolazione
						
R235.15-2532	–	H6B-T25P	CL85012-T25P	DOUBLE-T	–	–
R235.15-3250	–	H6B-T25P	CL85012-T25P	DOUBLE-T	AU8019-T15P	H4B-T15P
R235.15A-0080	MC6S16X100	H6B-T25P	CL85012-T25P	DOUBLE-T	AU8019-T15P	H4B-T15P

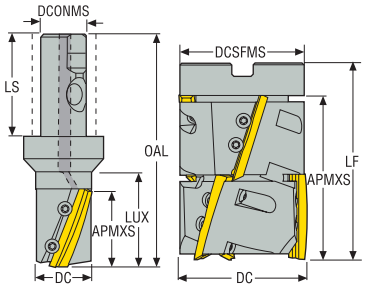
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R235.15-..	6.0NM	T00T-25P60

Chiavi dinamometriche e fisse, vedere pagina 931

R235.15 – Operazioni di finitura – Pollici

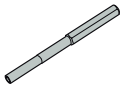




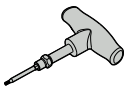
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 210-211
—Per il programma inserti completo, vedere le pagine 918
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	ZNP	APMXS	DCB	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch			inch	inch	inch	inch	inch	inch	inch	inch		lb	
R235.15A-02.00-3S-50A	75056423	Seco/Weldon	2.000	3	3	1.969	–	1.772	1.250	–	1.969	2.283	4.724	5500	2.200	R235.15-050
R235.15A-03.00-90	75056424	Manicotto	3.000	3	6	3.500	1.000	2.866	–	4.724	–	–	–	4400	7.050	R235.15-080

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Calibro di regolazione	Chiave di regolazione
						
R235.15A-02.00	–	H6B-T25P	CL85012-T25P	DOUBLE-T	AU8019-T15P	H4B-T15P
R235.15A-03.00	UC6S1/2UNFX4	H6B-T25P	CL85012-T25P	DOUBLE-T	AU8019-T15P	H4B-T15P

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R235.15-..	6.0NM	T00T-25P60

Chiavi dinamometriche e fisse, vedere pagina 931

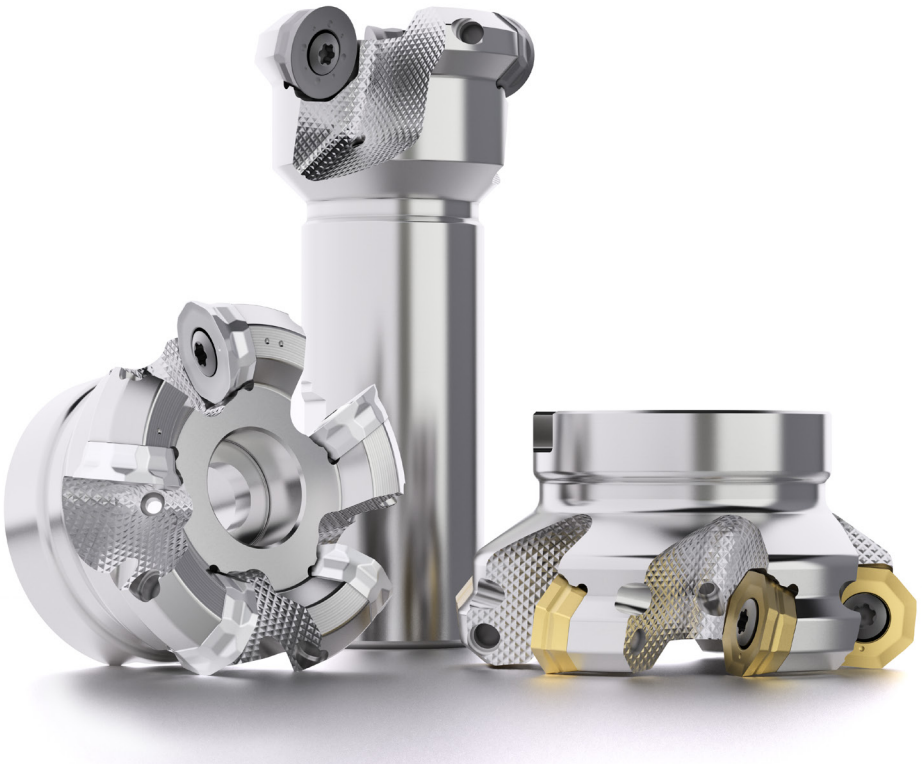
R235.15 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z
		3%
P1	R235.15-xxx-E05 F30M	0,20 *0.0080*
P2	R235.15-xxx-E05 F30M	0,22 *0.0085*
P3	R235.15-xxx-E05 F30M	0,20 *0.0080*
P4	R235.15-xxx-E05 F30M	0,20 *0.0080*
P5	R235.15-xxx-E05 F30M	0,19 *0.0075*
P6	R235.15-xxx-E05 F30M	0,19 *0.0075*
P7	R235.15-xxx-E05 F30M	0,19 *0.0075*
P8	R235.15-xxx-E05 F30M	0,20 *0.0080*
P11	R235.15-xxx-E05 F30M	0,19 *0.0075*
P12	R235.15-xxx-E05 F30M	0,13 *0.0050*
M1	R235.15-xxx-E05 F30M	0,22 *0.0085*
M2	R235.15-xxx-E05 F30M	0,19 *0.0075*
M3	R235.15-xxx-E05 F30M	0,15 *0.0060*
M4	R235.15-xxx-E05 F30M	0,13 *0.0050*
M5	R235.15-xxx-E05 F30M	0,13 *0.0050*
K1	R235.15-xxx-E05 F30M	0,22 *0.0085*
K2	R235.15-xxx-E05 F30M	0,19 *0.0075*
K3	R235.15-xxx-E05 F30M	0,19 *0.0075*
K4	R235.15-xxx-E05 F30M	0,19 *0.0075*
K5	R235.15-xxx-E05 F30M	0,17 *0.0065*
K6	R235.15-xxx-E05 F30M	0,19 *0.0075*
K7	R235.15-xxx-E05 F30M	0,17 *0.0065*
N1	R235.15-xxx-E05 F30M	0,28 *0.011*
N2	R235.15-xxx-E05 F30M	0,28 *0.011*
N3	R235.15-xxx-E05 F30M	0,28 *0.011*
N11	R235.15-xxx-E05 F30M	0,28 *0.011*
S1	R235.15-xxx-E05 F30M	0,13 *0.0050*
S2	R235.15-xxx-E05 F30M	0,13 *0.0050*
S3	R235.15-xxx-E05 F30M	0,13 *0.0050*
S11	R235.15-xxx-E05 F30M	0,15 *0.0060*
S12	R235.15-xxx-E05 F30M	0,15 *0.0060*
S13	R235.15-xxx-E05 F30M	0,13 *0.0050*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R235.15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F30M
	3%
P1	310 *1025*
P2	295 *970*
P3	260 *850*
P4	230 *750*
P5	220 *720*
P6	245 *800*
P7	235 *770*
P8	215 *710*
P11	225 *740*
P12	145 *475*
M1	200 *660*
M2	165 *540*
M3	130 *425*
M4	100 *330*
M5	85 *280*
K1	235 *770*
K2	210 *690*
K3	175 *570*
K4	170 *560*
K5	105 *345*
K6	150 *490*
K7	130 *425*
N1	1450 *4750*
N2	590 *1925*
N3	390 *1275*
N11	445 *1450*
S1	70 *230*
S2	55 *180*
S3	49 *160*
S11	100 *330*
S12	70 *230*
S13	40 *130*



Chiavi di codifica in mm e in pollici

R	220	.	53	-	0100	-	12	-	7	A
1	2		3		4		5		6	7

R	220	.	53	-	04.00	-	12	-	7	A
1	2		3		4		5		6	7

1.

R = rotazione destra
L = rotazione sinistra
Cx = Seco-Capto

2.

217 = Attacco a stelo
220 = Attacco a manicotto

3.

Tipo di fresa

4.

Tipo di attacco e diametro
0xxx = attacco a manicotto
8xxx = attacco con flangia
9xxx = attacco CAP

5.

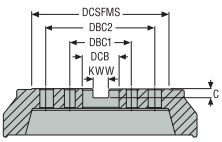
Dimensione dell'inserto

6.

Numero di denti effettivo (ZEFP)

7.

A = Con adduzione refrigerante interna
W = Inserto con cuneo di bloccaggio
G = Versione a passo largo per impiego su macchine di limitata potenza
T = Versione a passo stretto per impiego con elevati avanzamenti su macchine di grande potenza
C = Moduli
S = Inserto con bloccaggio a vite
M = Modificato o inserto con cuneo di bloccaggio



Dimensioni in mm

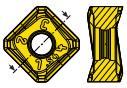
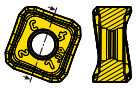
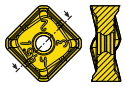
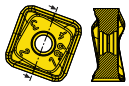
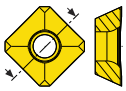
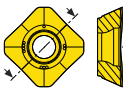
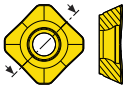
DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
Double Quattromill .54-14	SN.X14..AN 	6,0	5,0	■	■	■	◩	■	■	■	◩	48°
Double Quattromill .56-14	SN.X14..ZN 	8,0	6,0	■	◩	■	–	□	◩	■	◩	71°
Double Quattromill .54-22	SNMX22..AN 	9,0	7,0	■	■	■	□	◩	□	■	–	48°
Double Quattromill .56-22	SNMX22..ZN 	13	10,0	■	◩	■	–	□	–	■	–	71°
Quattromill .53-09/.53-12/.53-15	SE.X09T3 	4,5	3,0	■	■	◩	■	■	■	◩	■	45°
	SE.X1204 	6,0	4,5	■	■	■	■	■	■	■	■	45°
	SE.X1505 	7,5	6,0	■	■	■	■	■	◩	■	■	45°

1a scelta ■

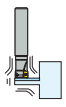
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti													Vedere pagina
			20	24*/25	32	40	50	63	80	100	125	160	200	250	315	
SNMX14..AN	8						4	5	6	7	8	10	12			239
							5	7	8	10	12	15	17			
												9	11	14	16	
SNMX14..ZN	8						4	5	6	7	8	10	12			239
							5	7	8	10	12	15	17			
												9	11	14	16	
SNMX22..AN	8								5	5	6	8				252
									6	7	8	11				
													9	11	14	
SNMX22..ZN	8									5	6	8				252
									5	7	8	10				
													9	11	14	
SE.X09T3	4		2	3	4	4	5	6	6	7						281
						5	6	7	8	10						
											8	10				
SE.X1204	4									5	6	7				289
							4	5	6	7	8	10				
						4	5	6	8	10	12					
								9								
														10	12	
											8	10	12	16		
SE.X1505	4							5	6	7	8	10	12			296
									7	9	10					
														10	12	
											8	10	12	16		

x — A sedi fisse (x indica il numero di denti)

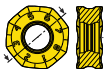
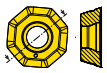
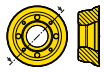
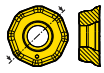
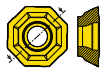
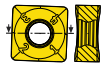
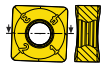
x — A moduli (x indica il numero di denti)

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Produttività

Selezione – In mm

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
Double Octomill .48-05/.48-09	ON..05 	3,0	2,0	■	■	◩	□	◩	■	◩	◩	40°
	ON..09 	6,0	4,0	■	■	■	□	◩	◩	■	□	40°
Octomill 06 .43-06	OO.T06 	4,0	3,0	■	■	◩	■	■	■	■	■	40°
	ROMT16 	7,5	4,5	■	■	◩	–	◩	◩	■	–	–
	MHF 	1,5	1,5	■	■	–	–	■	■	■	–	20°
Octomill .43-05/.43-07	OF..05 	3,5	2,5	■	■	◩	◩	◩	■	◩	■	43°
	OF..07 	5,0	4,0	■	■	◩	◩	◩	■	■	◩	43°
.88-12/.88.16	SNMU12.. 	9,0	5,0	■	◩	■	-	-	■	■	■	88°
	SNMU16.. 	13,0	8,0	■	◩	■	-	-	□	■	■	88°

1a scelta ■

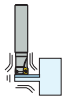
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti														Vedere pagina
			20	24*/25	32	40	50	63	80	100	125	160	200	250	315	400	500	
ON..05	16						4	5	6	7	8							265
				3	4		5	6										
						5	6	8	10	12	14							
ON..09	16							5	6	7	8	10	12	16	20			271
								6	7	8	10	12						
									9	12	15	20	24	30	40	50	60	
													28					
											8	10	12	16	20			
OO.T06/ROMT								4	5	6	7	8	10	12				227
							4	5	7	8	10	12	12	14				
							5	6	8	10	12							
OF..05					3	3	4	5	6	7	8	10						314
						4	5	6	8									
										6	8	10	12	16				
											10	14						
OF..07	8						4	4	5	6	8	10						320
								6	9	12								
												10	12	16				
												14						
SNMU12..	8						4	6	7	8	10	12						303
						4	5	7	9	11	13	16						
SNMU16..	8								6	8	10	12						308
								5	7	9	11	13						

x — **A sedi fisse (x indica il numero di denti)**

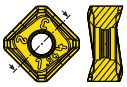
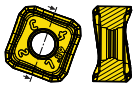
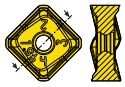
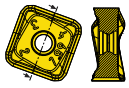
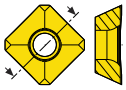
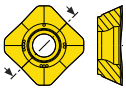
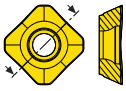
x — **A moduli (x indica il numero di denti)**

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Produttività

Selezione – Pollici

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
Double Quattromill .54-14	SN.X14..AN 	0.236	0.197	■	■	■	◩	■	◩	■	◩	48°
Double Quattromill .56-14	SN.X14..ZN 	0.315	0.236	■	◩	■	–	□	◩	■	◩	71°
Double Quattromill .54-22	SNMX22..AN 	0.354	0.275	■	■	■	□	◩	□	■	–	48°
Double Quattromill .56-22	SNMX22..ZN 	0.512	0.393	■	◩	■	–	□	–	■	–	71°
Quattromill .53-09/.53-12/.53-15	SE.X09T3 	0.177	0.118	■	■	◩	■	■	■	◩	■	45°
	SE.X1204 	0.236	0.177	■	■	■	■	■	■	■	■	45°
	SE.X1505 	0.295	0.236	■	■	■	■	■	◩	■	■	45°

1a scelta ■

Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

Non consigliata -

Capacità di lavorare in condizioni instabili

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – Pollici

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici) con numero effettivo di denti													Vedere pagina
			0.75	1	1.25	1.5	2	2.5	3	4	5	6	8	10	12.5	
SNMX14..AN	8						4	5	6	7	8	10	12			239
							5	7	8	10	12	15	17			
												9	11	14	16	
SNMX14..ZN	8						4	5	6	7	8	10	12			239
							5	7	8	10	12	15	17			
												9	11	14	16	
SNMX22..AN	8								5	5	6	8				252
									6	7	8	11				
													9	11	14	
SNMX22..ZN	8								5	5	6	8				252
										7	8	10				
													9	11	14	
SE.X09T3	4			3	4	4	5	6	6							281
SE.X1204	4					4	4	5	6	7	8	7				289
							5	6	8	10		10	12			
SE.X1505	4								6	7		10				296

x — A sedi fisse (x indica il numero di denti)

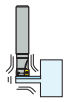
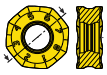
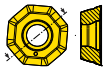
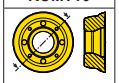
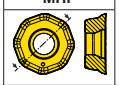
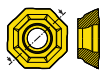
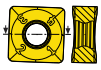
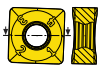
x — A moduli (x indica il numero di denti)

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Produttività

Selezione – Pollici

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
Double Octomill .48-05/.48-09	ON..05 	0.118	0.079	■	■	◩	□	◩	■	◩	◩	40°
	ON..09 	0.236	0.157	■	■	■	□	◩	◩	■	□	40°
Octomill 06 .43-06	OO.T06 	0.157	0.118	■	■	◩	■	■	■	■	■	40°
	ROMT16 	0.295	0.177	■	■	◩	–	◩	◩	■	–	–
	MHF 	0.059	0.059	■	■	–	–	■	■	■	–	20°
Octomill .43-05/.43-07	OF..05 	0.138	0.098	■	■	◩	◩	◩	■	◩	◩	43°
	OF..07 	0.197	0.157	■	■	◩	◩	◩	■	■	◩	43°
.88-12/.88-16	SNMU12.. 	0.354	0.197	■	◩	■	-	-	■	■	■	88°
	SNMU16.. 	0.512	0.354	■	◩	■	-	-	□	■	◩	88°

1a scelta ■

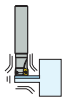
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – Pollici

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici) con numero effettivo di denti													Vedere pagina
			0.75	1	1.25	1.5	2	2.5	3	4	5	6	8	10	12.5	
ON..05	16				4	4		5	6	7						265
							5		10							
ON..09	16							5	6	7	8	10	12	16	20	271
									9	12	15					
												10	12	16		
OO.T06/ROMT									5	6	7					227
								5	7	8	10	12	12			
							5	6								
OF..05	8						4	5	6	7						314
OF..07	8								5	6						320
SNMU12..	8					4	4	6	7	8	10	12				303
							5	7	9	11	13	16				
SNMU16..	8								6	8	10	12				308
									7	9	11	13				

x — A sedi fisse (x indica il numero di denti)

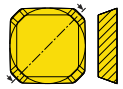
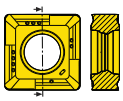
x — A moduli (x indica il numero di denti)

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Produttività

Selezione – In mm

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
.30	SEEX1203 	1,0	0,20 - 0,50	■	◩	■	–	–	◩	■	◩	88 45
R230.19	SNHQ 	3,1	0,10 - 0,50	■	■	◩	–	■	■	◩	■	90
.38	SNFX1204 	3,0 - 1,0	0,10 - 0,50	■	◩	■	–	◩	◩	■	◩	88 27

1a scelta ■

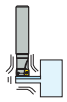
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti															Vedere pagina
			20	24*/25	32	40	50	63	80	100	125	160	200	250	315	400	500	
SEEX1203	4								6	8	10			22				265
									9				25	32				
SNHQ1103	4					3	5	6	8	10								271
SNFX1204	8							4	6	8	10	12	16	22				227
									8	10	12	15	20	25				
									10	12	14	18						
										14	18	22						

x — A sedi fisse (x indica il numero di denti)

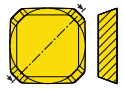
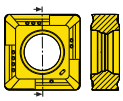
x — Con unità di regolazione

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Produttività

Selezione – inch

Famiglia frese	Inserto	a_p max	a_p racc.	Capacità di lavorare materiali								KAPRS°
				P	M	K	N	S				
.30	SEEX1203 	0.04	0.008 - 0.0196	■	◩	■	–	–	◩	■	◩	88 45
.19	SNHQ 	0.122	0.004 - 0.0196	■	■	◩	–	■	■	◩	■	90
.38	SNFX1204 	0.118-0.04	0.004 - 0.0196	■	◩	■	–	◩	◩	■	◩	88 27

■ 1a scelta

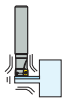
◩ Scelta alternativa

□ Scelta possibile

Macchina ad alta velocità con bassa potenza/coppia 

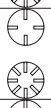
Macchina robusta e stabile con connessione rigida 

\- Non consigliata

Capacità di lavorare in condizioni instabili 

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – inch

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti													Vedere pagina
			0.75	1	1.25	1.5	2	2.5	3	4	5	6	8	10	12.5	
SEEX1203	4															265
SNHQ1103	4															271
SNFX1204	8								6	8 10	10 12 14	12 15 18				227

x — **A sedi fisse (x indica il numero di denti)**

x — **Con unità di regolazione**

 **Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili**

 **Scelta base**

 **Produttività**



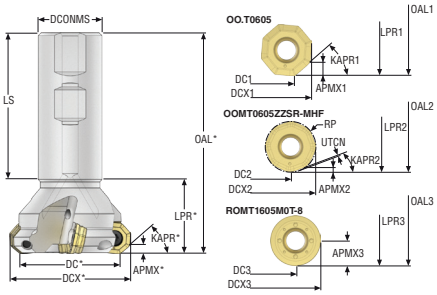
Octomill™ 06

Octomill™ taglia 06 è una nuova generazione ed evoluzione di Seco Octomill™ taglia 05 e 07, basata su un design OF.
La nuova generazione di Octomill™ 06 affronta la sfida principale degli inserti monolaterali con facile e sicura manipolazione dell'inserto. Esplorate le caratteristiche favorevoli dei monolaterali come il comportamento al taglio insieme a una manipolazione paragonabile a quella di una soluzione bilaterale.
Octomill™ 06 combina la forza e supera la debolezza delle comuni soluzioni OF e OD. Combina il comportamento di taglio leggero di un OF e la forza/robustezza del tagliente di una soluzione di tipo OD.
La misura 07 di Octomill™ offre ancora un punto di forza fondamentale basato sull'opzione di serraggio a cuneo e sugli inserti più sottili rispetto alla misura 06 di nuova generazione. Ciò consente di ottenere passi di fresa ravvicinati e super ravvicinati, nonché una rapida indicizzazione dell'inserto. Ciò è vantaggioso per i diametri di fresa più grandi e in genere è interessante per le applicazioni di lavorazione di blocchi e lamiere.

– Dimensione dell'inserto 06, gamma frese 40-250 mm (2,00" - 8.00")
– 8 taglienti, inserti monolaterali

R217.43-06 – In mm



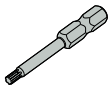


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

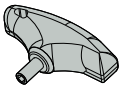
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	DC3	ZEFP	APMX1	APMX2	APMX3	KAPR1°	KAPR2	LPR1	LPR2	LPR3
			mm	mm	mm		mm	mm	mm			mm	mm	mm
R217.43-3240.3-06-03SA	10260220	Weldon	40,0	36,0	34,5	3	4,0	1,5	7,5	40,0	20,0	50,0	50,15	50,0
R217.43-3250.3-06-04SA	10260221	Weldon	50,0	46,0	44,5	4	4,0	1,5	7,5	40,0	20,0	50,0	50,15	50,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCX3	DCONMS	OAL1	OAL2	OAL3	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm	mm	mm	mm	mm	mm	mm	mm		kg	
R217.43-3240.3-06-03SA	10260220	Weldon	50,4	50,7	50,35	32,0	110,0	110,15	110,0	71,4	96,8	13200	0,7	OO.T0605 / ROMT1605
R217.43-3250.3-06-04SA	10260221	Weldon	60,4	60,7	60,35	32,0	110,0	110,15	110,0	91,4	116,8	11500	0,9	OO.T0605 / ROMT1605

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.43-..	1/4HEX-T20PX50	C05013-T20P

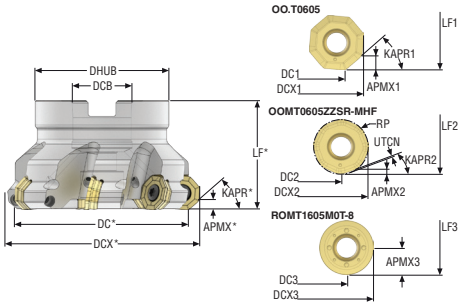
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.43-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.43-06 – In mm



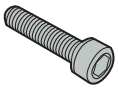
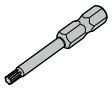
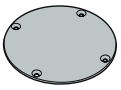


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

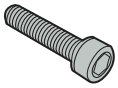
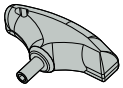
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	DC3	ZEFP	APMX1	APMX2	APMX3	KAPR1°	KAPR2	DCB	DHUB	LF1	LF2	LF3
			mm	mm	mm		mm	mm	mm			mm	mm	mm	mm	mm
R220.43-0050-06-05SA	10260222	Manicotto	50,0	46,0	44,5	5	4,0	1,5	7,5	40,0	20,0	22,0	47,0	40,0	40,15	40,0
R220.43-0063-06-04SA	10260223	Manicotto	63,0	59,0	57,5	4	4,0	1,5	7,5	40,0	20,0	22,0	47,0	40,0	40,15	40,0
R220.43-0063-06-05SA	10260224	Manicotto	63,0	59,0	57,5	5	4,0	1,5	7,5	40,0	20,0	22,0	47,0	40,0	40,15	40,0
R220.43-0063-06-06SA	10260225	Manicotto	63,0	59,0	57,5	6	4,0	1,5	7,5	40,0	20,0	22,0	47,0	40,0	40,15	40,0
R220.43-0080-06-05SA	10260226	Manicotto	80,0	76,0	74,5	5	4,0	1,5	7,5	40,0	20,0	27,0	62,0	50,0	50,15	50,0
R220.43-0080-06-07SA	10260227	Manicotto	80,0	76,0	74,5	7	4,0	1,5	7,5	40,0	20,0	27,0	62,0	50,0	50,15	50,0
R220.43-0080-06-08SA	10260228	Manicotto	80,0	76,0	74,5	8	4,0	1,5	7,5	40,0	20,0	27,0	62,0	50,0	50,15	50,0
R220.43-0100-06-06SA	10260229	Manicotto	100,0	96,0	94,5	6	4,0	1,5	7,5	40,0	20,0	32,0	77,0	50,0	50,15	50,0
R220.43-0100-06-08SA	10260230	Manicotto	100,0	96,0	94,5	8	4,0	1,5	7,5	40,0	20,0	32,0	77,0	50,0	50,15	50,0
R220.43-0100-06-10SA	10260231	Manicotto	100,0	96,0	94,5	10	4,0	1,5	7,5	40,0	20,0	32,0	77,0	50,0	50,15	50,0
R220.43-0125-06-07SA	10260232	Manicotto	125,0	121,0	119,5	7	4,0	1,5	7,5	40,0	20,0	40,0	90,0	63,0	63,15	63,0
R220.43-0125-06-10SA	10260233	Manicotto	125,0	121,0	119,5	10	4,0	1,5	7,5	40,0	20,0	40,0	90,0	63,0	63,15	63,0
R220.43-0125-06-12SA	10260234	Manicotto	125,0	121,0	119,5	12	4,0	1,5	7,5	40,0	20,0	40,0	90,0	63,0	63,15	63,0
R220.43-8160-06-08SA	10260235	Manicotto	160,0	156,0	154,5	8	4,0	1,5	7,5	40,0	20,0	40,0	130,0	63,0	63,15	63,0
R220.43-8160-06-12SA	10260236	Manicotto	160,0	156,0	154,5	12	4,0	1,5	7,5	40,0	20,0	40,0	130,0	63,0	63,15	63,0
R220.43-8200-06-12SA	10260237	Manicotto	200,0	196,0	194,5	12	4,0	1,5	7,5	40,0	20,0	60,0	170,0	63,0	63,15	63,0
R220.43-8250-06-14SA	10260238	Manicotto	250,0	246,0	244,5	14	4,0	1,5	7,5	40,0	20,0	60,0	200,0	63,0	63,15	63,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCX3	DBC1	DCONMS	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm	mm	mm	mm	mm	mm		kg	
R220.43-0050-06-05SA	10260222	Manicotto	60,4	60,7	60,35	–	22,0	91,4	116,8	11300	0,4	OO.T0605 / ROMT1605
R220.43-0063-06-04SA	10260223	Manicotto	73,4	73,7	73,35	–	22,0	117,4	142,8	10100	0,6	OO.T0605 / ROMT1605
R220.43-0063-06-05SA	10260224	Manicotto	73,4	73,7	73,35	–	22,0	117,4	142,8	10100	0,6	OO.T0605 / ROMT1605
R220.43-0063-06-06SA	10260225	Manicotto	73,4	73,7	73,35	–	22,0	117,4	142,8	10100	0,5	OO.T0605 / ROMT1605
R220.43-0080-06-05SA	10260226	Manicotto	90,4	90,7	90,35	–	27,0	151,4	176,8	8900	1,3	OO.T0605 / ROMT1605
R220.43-0080-06-07SA	10260227	Manicotto	90,4	90,7	90,35	–	27,0	151,4	176,8	8900	1,3	OO.T0605 / ROMT1605
R220.43-0080-06-08SA	10260228	Manicotto	90,4	90,7	90,35	–	27,0	151,4	176,8	8900	1,3	OO.T0605 / ROMT1605
R220.43-0100-06-06SA	10260229	Manicotto	110,4	110,7	110,35	–	32,0	191,4	216,8	8000	1,9	OO.T0605 / ROMT1605
R220.43-0100-06-08SA	10260230	Manicotto	110,4	110,7	110,35	–	32,0	191,4	216,8	8000	1,8	OO.T0605 / ROMT1605
R220.43-0100-06-10SA	10260231	Manicotto	110,4	110,7	110,35	–	32,0	191,4	216,8	8000	2,0	OO.T0605 / ROMT1605
R220.43-0125-06-07SA	10260232	Manicotto	135,4	135,7	135,35	–	40,0	241,4	266,8	7100	3,6	OO.T0605 / ROMT1605
R220.43-0125-06-10SA	10260233	Manicotto	135,4	135,7	135,35	–	40,0	241,4	266,8	7100	3,8	OO.T0605 / ROMT1605
R220.43-0125-06-12SA	10260234	Manicotto	135,4	135,7	135,35	–	40,0	241,4	266,8	7100	3,8	OO.T0605 / ROMT1605
R220.43-8160-06-08SA	10260235	Manicotto	170,4	170,7	170,35	66,7	40,0	311,4	336,8	6300	5,3	OO.T0605 / ROMT1605
R220.43-8160-06-12SA	10260236	Manicotto	170,4	170,7	170,35	66,7	40,0	311,4	336,8	6300	5,6	OO.T0605 / ROMT1605
R220.43-8200-06-12SA	10260237	Manicotto	210,4	210,7	210,35	101,6	60,0	391,4	416,8	5600	7,6	OO.T0605 / ROMT1605
R220.43-8250-06-14SA	10260238	Manicotto	260,4	260,7	260,35	101,6	60,0	491,4	516,8	5000	16,4	OO.T0605 / ROMT1605

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.43-0050-0063	220.17-692	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-0080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-0100	MLC6S16X35	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-0100-SA	MLC6S16X35	1/4HEX-T20PX90	C05013-T20P	–	–
R220.43-0125	MC6S20X40	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-0125-SA	MC6S20X40	1/4HEX-T20PX90	C05013-T20P	–	–
R220.43-8160	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10
R220.43-8200	–	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10
R220.43-8250	–	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10

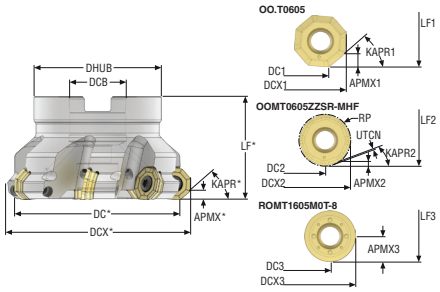
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.43-0050-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.43-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.43-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.43-06 – inch



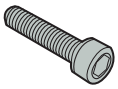
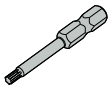
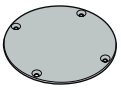


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

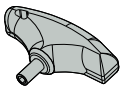
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC1	DC2	DC3	ZEFP	APMX1	APMX2	APMX3	KAPR1°	KAPR2	DCB	DBC2	DHUB	LF1	LF2	LF3
			inch	inch	inch		inch	inch	inch			inch	inch	inch	inch	inch	inch
R220.43-02.00-06-05SA	10260239	Manicotto	2.000	1.843	1.783	5	0.157	0.059	0.295	40,0	20,0	0.750	–	1.850	1.575	1.581	1.575
R220.43-02.50-06-05SA	10260240	Manicotto	2.500	2.343	2.283	5	0.157	0.059	0.295	40,0	20,0	0.750	–	1.850	1.575	1.581	1.575
R220.43-02.50-06-06SA	10260241	Manicotto	2.500	2.343	2.283	6	0.157	0.059	0.295	40,0	20,0	0.750	–	1.850	1.575	1.581	1.575
R220.43-03.00-06-05SA	10260242	Manicotto	3.000	2.843	2.783	5	0.157	0.059	0.295	40,0	20,0	1.000	–	2.441	1.969	1.974	1.969
R220.43-03.00-06-07SA	10260243	Manicotto	3.000	2.843	2.783	7	0.157	0.059	0.295	40,0	20,0	1.000	–	2.441	1.969	1.974	1.969
R220.43-04.00-06-06SA	10260244	Manicotto	4.000	3.843	3.783	6	0.157	0.059	0.295	40,0	20,0	1.500	–	3.031	1.969	1.974	1.969
R220.43-04.00-06-08SA	10260245	Manicotto	4.000	3.846	3.783	8	0.157	0.059	0.295	40,0	20,0	1.500	–	3.031	1.969	1.974	1.969
R220.43-05.00-06-07SA	10260246	Manicotto	5.000	4.843	4.783	7	0.157	0.059	0.295	40,0	20,0	1.500	–	3.543	2.480	2.486	2.480
R220.43-05.00-06-10SA	10260247	Manicotto	5.000	4.843	4.783	10	0.157	0.059	0.295	40,0	20,0	1.500	–	3.543	2.480	2.486	2.480
R220.43-06.00-06-12SA	10260248	Manicotto	6.000	5.843	5.783	12	0.157	0.059	0.295	40,0	20,0	2.000	–	4.724	2.480	2.486	2.480
R220.43-808.00-06-12SA	10260249	Manicotto	8.000	7.843	7.783	12	0.157	0.059	0.295	40,0	20,0	2.500	4.000	6.693	2.480	2.486	2.480

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCX3	DBC1	DBC2	DCONMS	C min	C max	RPMX	Peso	Inserto
			inch	inch	inch	inch	inch	inch	inch	inch		lb	
R220.43-02.00-06-05SA	10260239	Manicotto	2.409	2.421	2.407	–	–	0.750	3.661	4.661	11300	1.100	OO.T0605 / ROMT1605
R220.43-02.50-06-05SA	10260240	Manicotto	2.909	2.921	2.907	–	–	0.750	4.661	5.661	10100	1.540	OO.T0605 / ROMT1605
R220.43-02.50-06-06SA	10260241	Manicotto	2.909	2.921	2.907	–	–	0.750	4.661	5.661	10100	1.540	OO.T0605 / ROMT1605
R220.43-03.00-06-05SA	10260242	Manicotto	3.409	3.421	3.407	–	–	1.000	5.661	6.661	8900	2.650	OO.T0605 / ROMT1605
R220.43-03.00-06-07SA	10260243	Manicotto	3.409	3.421	3.407	–	–	1.000	5.661	6.661	8900	2.430	OO.T0605 / ROMT1605
R220.43-04.00-06-06SA	10260244	Manicotto	4.409	4.421	4.407	–	–	1.500	7.661	8.661	8000	4.190	OO.T0605 / ROMT1605
R220.43-04.00-06-08SA	10260245	Manicotto	4.409	4.421	4.407	–	–	1.500	7.661	8.661	8000	4.190	OO.T0605 / ROMT1605
R220.43-05.00-06-07SA	10260246	Manicotto	5.409	5.421	5.407	–	–	1.500	9.661	10.661	7100	11.020	OO.T0605 / ROMT1605
R220.43-05.00-06-10SA	10260247	Manicotto	5.409	5.421	5.407	–	–	1.500	9.661	10.661	7100	8.600	OO.T0605 / ROMT1605
R220.43-06.00-06-12SA	10260248	Manicotto	6.409	6.421	6.407	–	–	2.000	11.661	12.661	6500	10.140	OO.T0605 / ROMT1605
R220.43-808.00-06-12SA	10260249	Manicotto	8.409	8.421	8.407	4.000	4.000	2.500	15.661	16.661	5900	22.050	OO.T0605 / ROMT1605

Parti di ricambio, comprese nella fornitura

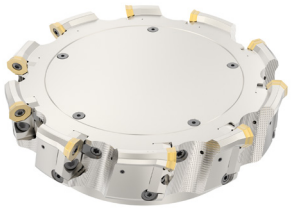
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.43-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-04.00	ULC6S3/4UNFX11/2	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX50	C05013-T20P	–	–
R220.43-05.00-10SA	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.43-06.00	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10
R220.43-808.00	–	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10

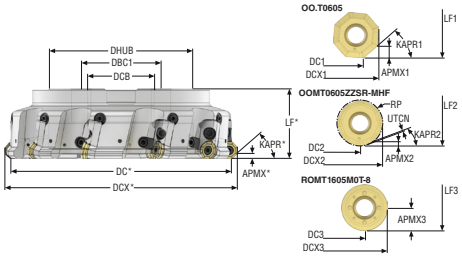
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.43-02.00-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.43-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.43-808.00	1/4HEX-T-HANDLE-5.0-14.0NM	950DNC062225	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.43-06 – In mm



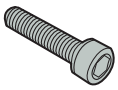
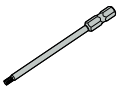
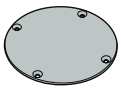
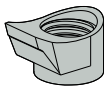


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

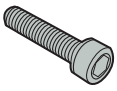
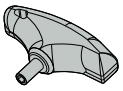
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	DC3	ZEFP	APMX1	APMX2	APMX3	KAPR1°	KAPR2	DCB	DHUB	LF1	LF2	LF3
			mm	mm	mm		mm	mm	mm			mm	mm	mm	mm	mm
R220.43-8200-06-10CSA	10260250	Manicotto	200,0	196,0	194,5	10	4,0	1,5	7,5	40,0	20,0	60,0	160,0	63,0	63,15	63,0
R220.43-8250-06-12CSA	10260251	Manicotto	250,0	246,0	244,5	12	4,0	1,5	7,5	40,0	20,0	60,0	200,0	63,0	63,15	63,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCX3	DBC1	DCONMS	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm	mm	mm	mm	mm	mm		kg	
R220.43-8200-06-10CSA	10260250	Manicotto	210,4	210,7	210,35	101,6	60,0	391,4	416,8	1800	12,0	OO.T0605 / ROMT1605
R220.43-8250-06-12CSA	10260251	Manicotto	260,4	260,7	260,35	101,6	60,0	491,4	516,8	1560	12,7	OO.T0605 / ROMT1605

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Vite di fermo	Cuneo	Vite cuneo
										
R220.43-10CSA	AU1114T-T15P	OO06ZR	MC6S6X20	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	P6SS4X4G	CW0810	LD8020-T25P
R220.43-12CSA	AU1114T-T15P	OO06ZR	MC6S6X20	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10	P6SS4X4G	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.43-..	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.43-06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	OOET0605ZZSR-ME12 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P2	OOET0605ZZSR-ME12 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
P3	OOET0605ZZSR-ME12 MP3501	3,0 *0.12*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
P4	OOMT0605ZZSR-M15 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,42 0.017
P5	OOMT0605ZZSR-M15 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P6	OOMT0605ZZSR-M15 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P7	OOMT0605ZZSR-M15 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P8	OOMT0605ZZSR-M15 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,42 0.017
P11	OOET0605ZZSR-ME12 MP2051	3,0 *0.12*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
P12	OOET0605ZZSR-ME12 MP2051	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
M1	OOET0605ZZER-M10 F40M	3,0 *0.12*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
M2	OOET0605ZZER-M10 MS2050	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
M3	OOET0605ZZER-M10 MS2050	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
M4	OOET0605ZZER-M10 MP2051	1,9 *0.075*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
M5	OOET0605ZZER-M10 MP2051	1,9 *0.075*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
K1	OOMT0605ZZSR-M15 MK1501	3,0 *0.12*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K2	OOMT0605ZZSR-M15 MK1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K3	OOMT0605ZZSR-M15 MP1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K4	OOMT0605ZZSR-M15 MP1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K5	OOMT0605ZZSR-M15 MP1501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
K6	OOMT0605ZZSR-M15 MK2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K7	OOMT0605ZZSR-M15 MK2050	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
N1	OOET0605ZZFR-E08 H25	3,0 *0.12*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
N2	OOET0605ZZFR-E08 H25	3,0 *0.12*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
N3	OOET0605ZZFR-E08 H25	3,0 *0.12*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
N11	OOET0605ZZFR-E08 H25	3,0 *0.12*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
S1	OOET0605ZZER-M10 MS2050	1,9 *0.075*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S2	OOET0605ZZER-M10 MS2050	1,9 *0.075*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S3	OOET0605ZZER-M10 MS2050	1,9 *0.075*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
S11	OOET0605ZZER-M10 MS2050	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
S12	OOET0605ZZER-M10 MS2050	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
S13	OOET0605ZZER-M10 MS2050	1,9 *0.075*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
H5	OOEW0605ZZSR-D20 MH1051	2,5 *0.10*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
H8	OOEW0605ZZSR-D20 MH1051	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H11	OOEW0605ZZSR-D20 MH1051	2,5 *0.10*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
H12	OOEW0605ZZSR-D20 MH1051	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H21	OOEW0605ZZSR-D20 MH1051	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.43-06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,75 0.030	0,75 0.030	0,80 0.032	1,0 0.040
P2	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,75 0.030	0,75 0.030	0,80 0.032	1,0 0.040
P3	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,75 0.030	0,75 0.030	0,75 0.030	0,95 0.038
P4	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,75 0.030	0,90 0.036
P5	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
P6	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
P7	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
P8	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,75 0.030	0,75 0.030	0,75 0.030	0,95 0.038
P11	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
P12	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,48 0.019	0,48 0.019	0,50 0.020	0,60 0.024
M1	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,75 0.030	0,75 0.030	0,80 0.032	1,0 0.040
M2	OOMT0605ZZSR-MHF-M16 MS2050	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
M3	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,55 0.022	0,55 0.022	0,60 0.024	0,70 0.028
M4	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
M5	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
K1	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,75 0.030	0,75 0.030	0,80 0.032	1,0 0.040
K2	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
K3	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
K4	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
K5	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,65 0.026	0,65 0.026	0,65 0.026	0,80 0.032
K6	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,70 0.028	0,90 0.036
K7	OOMT0605ZZSR-MHF-M16 MP2501	1,5 *0.060*	0,65 0.026	0,65 0.026	0,65 0.026	0,80 0.032
S1	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
S2	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
S3	OOMT0605ZZSR-MHF-M16 MS2050	1,2 *0.046*	0,46 0.018	0,46 0.018	0,46 0.018	0,60 0.024

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.43-06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,50 0.020	0,50 0.020	0,55 0.022	0,70 0.028
P2	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,55 0.022	0,70 0.028
P3	ROMT1605M0T-8-M14 MP2501	3,0 *0.12*	0,50 0.020	0,50 0.020	0,50 0.020	0,65 0.026
P4	ROMT1605M0T-8-M14 MP2501	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
P5	ROMT1605M0T-8-M14 MP2501	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
P6	ROMT1605M0T-8-M14 MP2501	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
P7	ROMT1605M0T-8-M14 MP2501	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
P8	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,50 0.020	0,50 0.020	0,50 0.020	0,65 0.026
P11	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
P12	ROMT1605M0T-8-M14 MS2050	2,5 *0.10*	0,36 0.014	0,36 0.014	0,38 0.015	0,48 0.019
M1	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,55 0.022	0,70 0.028
M2	ROMT1605M0T-8-M14 MS2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
M3	ROMT1605M0T-8-M14 MS2050	2,5 *0.10*	0,42 0.017	0,42 0.017	0,44 0.017	0,55 0.022
M4	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
M5	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
K1	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,55 0.022	0,70 0.028
K2	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
K3	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
K4	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
K5	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
K6	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,50 0.020	0,65 0.026
K7	ROMT1605M0T-8-M14 MK2050	3,0 *0.12*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
S1	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
S2	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
S3	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,40 0.016	0,40 0.016	0,42 0.017	0,55 0.022
S11	ROMT1605M0T-8-M14 MS2050	2,0 *0.080*	0,48 0.019	0,48 0.019	0,50 0.020	0,60 0.024
S12	ROMT1605M0T-8-M14 MS2050	2,0 *0.080*	0,48 0.019	0,48 0.019	0,50 0.020	0,60 0.024
S13	ROMT1605M0T-8-M14 MS2050	1,8 *0.070*	0,44 0.017	0,44 0.017	0,46 0.018	0,55 0.022
H5	ROMT1605M0T-8-M14 MK2050	2,5 *0.10*	0,36 0.014	0,36 0.014	0,38 0.015	0,48 0.019
H8	ROMT1605M0T-8-M14 MK2050	2,0 *0.080*	0,30 0.012	0,30 0.012	0,32 0.013	0,40 0.016
H11	ROMT1605M0T-8-M14 MK2050	2,5 *0.10*	0,36 0.014	0,36 0.014	0,38 0.015	0,48 0.019
H12	ROMT1605M0T-8-M14 MK2050	2,0 *0.080*	0,30 0.012	0,30 0.012	0,32 0.013	0,40 0.016
H21	ROMT1605M0T-8-M14 MK2050	2,0 *0.080*	0,30 0.012	0,30 0.012	0,32 0.013	0,40 0.016

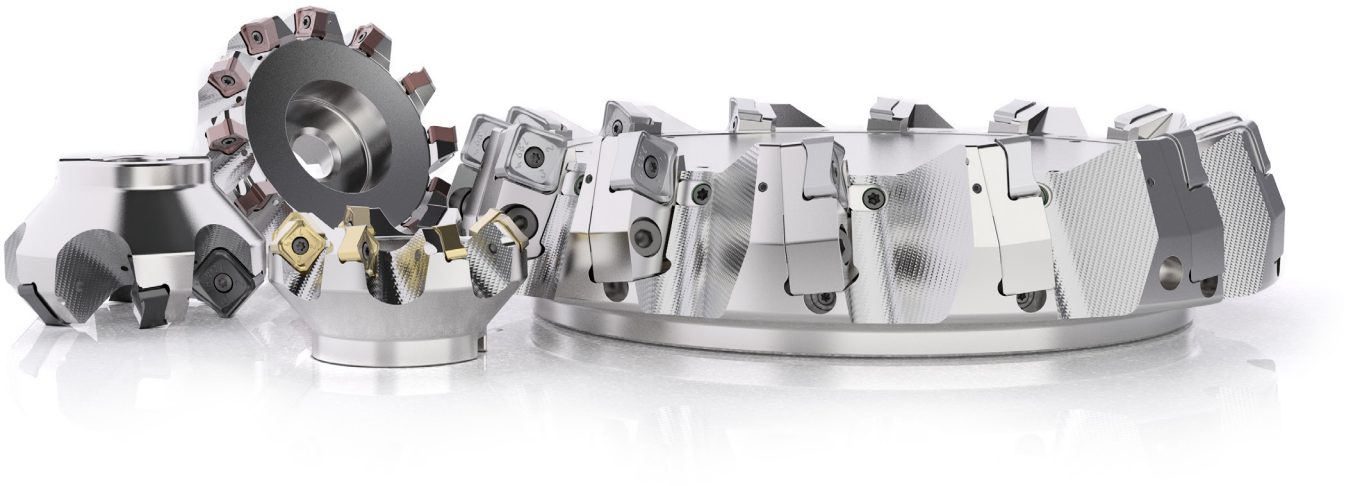
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.43-06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051				MK2050				MP3000				MS2050				F40M				MP2051				MP1020				H15			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	275	295	325	370	295	325	375	430	270	290	325	370	250	270	300	335	300	340	410	485	195	225	260	310	—	—	—	—
	—	—	—	—	*900*	*970*	*1075*	*1225*	*970*	*1075*	*1225*	*1400*	*890*	*950*	*1075*	*1225*	*820*	*890*	*980*	*1100*	*980*	*1125*	*1350*	*1600*	*640*	*740*	*850*	*1025*	—	—	—	—
P2	—	—	—	—	270	290	320	360	290	315	365	410	260	285	320	355	245	265	290	320	290	330	400	460	190	220	255	300	—	—	—	—
	—	—	—	—	*890*	*950*	*1050*	*1175*	*950*	*1025*	*1200*	*1350*	*850*	*940*	*1050*	*1175*	*800*	*870*	*950*	*1050*	*950*	*1075*	*1300*	*1500*	*620*	*720*	*840*	*980*	—	—	—	—
P3	—	—	—	—	235	255	280	315	260	285	325	360	235	250	280	310	220	235	260	280	265	300	360	405	180	205	235	270	—	—	—	—
	—	—	—	—	*770*	*840*	*920*	*1025*	*850*	*940*	*1075*	*1175*	*770*	*820*	*920*	*1025*	*720*	*770*	*850*	*920*	*870*	*980*	*1175*	*1325*	*590*	*670*	*770*	*890*	—	—	—	—
P4	—	—	—	—	205	225	245	280	230	250	285	325	205	220	250	280	200	215	240	265	235	265	315	370	155	180	205	240	—	—	—	—
	—	—	—	—	*670*	*740*	*800*	*920*	*750*	*820*	*940*	*1075*	*670*	*720*	*820*	*920*	*660*	*710*	*790*	*870*	*770*	*870*	*1025*	*1225*	*510*	*590*	*670*	*790*	—	—	—	—
P5	265	295	335	405	200	215	240	270	220	245	270	310	200	215	235	265	185	200	220	240	230	260	300	355	150	170	210	240	—	—	—	—
	870	*970*	*1100*	*1325*	*660*	*710*	*790*	*890*	*720*	*800*	*890*	*1025*	*660*	*710*	*770*	*870*	*610*	*660*	*720*	*790*	*750*	*850*	*980*	*1175*	*490*	*560*	*690*	*790*	—	—	—	—
P6	295	330	390	455	220	240	270	305	250	270	305	350	225	240	265	300	210	225	245	270	260	295	340	395	170	190	235	270	—	—	—	—
	970	*1075*	*1275*	*1500*	*720*	*790*	*890*	*1000*	*820*	*890*	*1000*	*1150*	*740*	*790*	*870*	*980*	*690*	*740*	*800*	*890*	*850*	*970*	*1125*	*1300*	*560*	*620*	*770*	*890*	—	—	—	—
P7	280	310	370	430	210	225	255	285	235	255	290	330	210	225	250	280	195	210	230	255	245	275	320	375	160	180	225	255	—	—	—	—
	920	*1025*	*1225*	*1400*	*690*	*740*	*840*	*940*	*770*	*840*	*950*	*1075*	*690*	*740*	*820*	*920*	*640*	*690*	*750*	*840*	*800*	*900*	*1050*	*1225*	*520*	*590*	*740*	*840*	—	—	—	—
P8	255	285	335	380	200	215	235	265	220	240	270	305	195	210	235	260	185	195	220	235	225	255	300	340	150	170	195	230	—	—	—	—
	840	*940*	*1100*	*1250*	*660*	*710*	*770*	*870*	*720*	*790*	*890*	*1000*	*640*	*690*	*770*	*850*	*610*	*640*	*720*	*770*	*740*	*840*	*980*	*1125*	*490*	*560*	*640*	*750*	—	—	—	—
P11	270	300	360	415	205	220	245	280	230	250	280	320	205	220	245	275	190	205	225	250	235	275	330	410	155	175	215	245	—	—	—	—
	890	*980*	*1175*	*1350*	*670*	*720*	*800*	*920*	*750*	*820*	*920*	*1050*	*670*	*720*	*800*	*900*	*620*	*670*	*740*	*820*	*770*	*900*	*1075*	*1350*	*510*	*570*	*710*	*800*	—	—	—	—
P12	205	225	260	305	135	145	160	180	160	175	190	215	140	150	160	180	130	140	150	165	180	205	235	285	140	155	175	190	—	—	—	—
	670	*740*	*850*	*1000*	*445*	*475*	*520*	*590*	*520*	*570*	*620*	*710*	*460*	*490*	*520*	*590*	*425*	*460*	*490*	*540*	*590*	*670*	*770*	*940*	*460*	*510*	*570*	*620*	—	—	—	—
M1	—	—	—	—	—	—	—	—	210	230	255	285	200	215	245	270	185	195	220	245	250	295	365	445	165	190	220	265	—	—	—	—
	—	—	—	—	—	—	—	—	*690*	*750*	*840*	*940*	*660*	*710*	*800*	*890*	*610*	*640*	*720*	*800*	*820*	*970*	*1200*	*1450*	*540*	*620*	*720*	*870*	—	—	—	—
M2	—	—	—	—	—	—	—	—	180	190	210	240	170	180	200	225	155	165	180	205	225	260	310	390	145	165	205	235	—	—	—	—
	—	—	—	—	—	—	—	—	*590*	*620*	*690*	*790*	*560*	*590*	*660*	*740*	*510*	*540*	*590*	*670*	*740*	*850*	*1025*	*1275*	*475*	*540*	*670*	*770*	—	—	—	—
M3	—	—	—	—	—	—	—	—	145	155	175	195	135	145	165	185	125	135	150	165	200	230	275	330	150	170	190	215	—	—	—	—
	—	—	—	—	—	—	—	—	*475*	*510*	*570*	*640*	*445*	*475*	*540*	*610*	*410*	*445*	*490*	*540*	*660*	*750*	*900*	*1075*	*490*	*560*	*620*	*710*	—	—	—	—
M4	—	—	—	—	—	—	—	—	110	120	135	150	105	115	125	145	95	105	115	130	160	180	215	260	130	140	160	175	—	—	—	—
	—	—	—	—	—	—	—	—	*360*	*395*	*445*	*490*	*345*	*375*	*410*	*475*	*310*	*345*	*375*	*425*	*520*	*590*	*710*	*850*	*425*	*460*	*520*	*570*	—	—	—	—
M5	—	—	—	—	—	—	—	—	95	100	110	125	90	95	105	120	80	85	95	110	135	150	180	215	110	120	135	145	—	—	—	—
	—	—	—	—	—	—	—	—	*310*	*330*	*360*	*410*	*295*	*310*	*345*	*395*	*260*	*280*	*310*	*360*	*445*	*490*	*590*	*710*	*360*	*395*	*445*	*475*	—	—	—	—
K1	340	385	440	530	290	310	345	390	225	245	270	305	—	—	—	—	180	195	215	245	—	—	—	—	195	210	235	265	—	—	—	—
	1125	*1275*	*1450*	*1750*	*950*	*1025*	*1125*	*1275*	*740*	*800*	*890*	*1000*	—	—	—	—	*590*	*640*	*710*	*800*	—	—	—	—	*640*	*690*	*770*	*870*	—	—	—	—
K2	320	355	405	490	255	275	310	350	200	220	240	270	—	—	—	—	160	175	190	220	—	—	—	—	175	185	210	235	—	—	—	—
	1050	*1175*	*1325*	*1600*	*840*	*900*	*1025*	*1150*	*660*	*720*	*790*	*890*	—	—	—	—	*520*	*570*	*620*	*720*	—	—	—	—	*570*	*610*	*690*	*770*	—	—	—	—
K3	270	300	345	415	215	235	260	295	170	185	205	230	—	—	—	—	135	145	160	185	—	—	—	—	145	160	175	200	—	—	—	—
	890	*980*	*1125*	*1350*	*710*	*770*	*850*	*970*	*560*	*610*	*670*	*750*	—	—	—	—	*445*	*475*	*520*	*610*	—	—	—	—	*475*	*520*	*570*	*660*	—	—	—	—
K4	255	285	330	395	205	225	250	280	165	175	195	220	—	—	—	—	130	140	155	175	—	—	—	—	140	150	170	190	—	—	—	—
	840	*940*	*1075*	*1300*	*670*	*740*	*820*	*920*	*540*	*570*	*640*	*720*	—	—	—	—	*425*	*460*	*510*	*570*	—	—	—	—	*460*	*490*	*560*	*620*	—	—	—	—
K5	165	185	215	250	130	140	150	175	100	110	120	135	—	—	—	—	80	85	95	110	—	—	—	—	85	95	105	115	—	—	—	—
	540	*610*	*710*	*820*	*425*	*460*	*490*	*570*	*330*	*360*	*395*	*445*	—	—	—	—	*260*	*280*	*310*	*360*	—	—	—	—	*280*	*310*	*345*	*375*	—	—	—	—
K6	225	255	290	350	180	195	220	250	145	155	170	195	—	—	—	—	115	125	135	155	—	—	—	—	125	135	150	170	—	—	—	—
	740	*840*	*950*	*1150*	*590*	*640*	*720*	*820*	*475*	*510*	*560*	*640*	—	—	—	—	*375*	*410*	*445*	*510*	—	—	—	—	*410*	*445*	*490*	*560*	—	—	—	—
K7	210	235	275	315	165	175	195	220	130	140	150	175	—	—	—	—	105	110	120	140	—	—	—	—	110	120	130	150	—	—	—	—
	690	*770*	*900*	*1025*	*540*	*570*	*640*	*720*	*425*	*460*	*490*	*570*	—	—	—	—	*345*	*360*	*395*	*460*	—	—	—	—	*360*	*395*	*425*	*490*	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1425	1550	1675	1925
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*4675*	*5075*	*5500*	*6325*
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	580	620	680	770
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1900*	*2025*	*2225*	*2525*
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	385	415	455	520
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1275*	*1350*	*1500*	*1700*
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	440	475	520	590
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1450*	*1550*	*1700*	*1925*
S1	—	—	—	—	—	—	—	—	50	55	60	70	49	55	60	65	45	48	55	60	55	60	65	75	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*230*	*160*	*180*	*195*	*215*	*150*	*155*	*180*	*195*	*180*	*195*	*215*	*245*	—	—	—	—	—	—	—	—
S2	—	—	—	—	—	—	—	—	42	45	50	55	40	43	48	55	36	39	43	49	44	47	50	60	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*	*130*	*140*	*155*	*180*	*120*	*130*	*140*	*160*	*145*	*155*	*165*	*195*	—	—	—	—	—	—	—	—
S3	—	—	—	—	—	—	—	—	37	39	44	50	35	37	42	48	32	34	38	43	38	41	46	50	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*120*	*130*	*145*	*165*	*115*	*120*	*140*	*155*	*105*	*110*	*125*	*140*	*125*	*135*	*150*	*165*	—	—	—	—	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	70	75	85	95	65	70	75	85	75	80	90	100	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*280*	*310*	*215*	*230*	*245*	*280*	*245*	*260*	*295*	*330*	—	—	—	—	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	48	50	55	65	44	47	50	60	50	55	65	70	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*165*	*180*	*215*	*145*	*155*	*165*	*195*	*165*	*180*	*215*	*230*	—	—	—	—	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	28	30	33	38	25	27	30	34	30	33	36	41	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*110*	*125*	*80*	*90*	*100*	*110*	*100*	*110*	*120*	*135*	—	—	—	—	—	—	—	—
H5	105	115	135	155	46	50	55	60	45	48	55	60	—	—	—	—	38	41	45	50	—	—	—	—	—	—	—	—	—	—	—	—
	345	*375*	*445*	*510*	*150*	*165*	*180*	*195*	*150*	*155*	*180*	*195*	—	—	—	—	*125*	*135*	*150*	*165*	—	—	—	—	—	—	—	—	—	—	—	—
H8	125	140	150	180	50	55	60	70	48	50	55	65	—	—	—	—	41	44	48	55	—	—	—	—	—	—	—	—	—	—	—	—
	410	*460*	*490*	*590*	*165*	*180*	*195*	*230*	*155*	*165*	*180*	*215*	—	—	—	—	*135*	*145*	*155*	*180*	—	—	—	—	—	—	—	—	—	—	—	—
H11	135	145	170	200	60	65	70	80	55	60	65	75	—	—	—	—	49	55	60	65	120	135	155	185	—	—	—	—	—	—	—	—
	445	*475*	*560*	*660*	*195*	*215*	*230*	*260*	*180*	*195*	*215*	*245*	—	—	—	—	*160*	*180*	*195*	*215*	*395*	*445*	*510*	*610*	—	—	—	—	—	—	—	—
H12	145	160	175	205	90	95	105	120	90	100	110	120	—	—	—	—	75	80	85	100	120	135	150	180	—	—	—	—	—	—	—	—
	475	*520*	*570*	*670*	*295*	*310*	*345*	*395*	*295*	*330*	*360*	*395*	—	—	—	—	*245*	*260*	*280*	*330*	*395*	*445*	*490*	*590*	—	—	—	—	—	—	—	—
H21	125	140	150	180	50	55	60	70	48	50	55	65	—	—	—	—	41	44	48	55	105	110	120	130	—	—	—	—	—	—	—	—
	410	*460*	*490*	*590*	*165*	*180*	*195*	*230*	*155*	*165*	*180*	*215*	—	—	—	—	*135*	*145*	*155*	*180*	*345*	*360*	*395*	*425*	—	—	—	—	—	—	—	—

R217/220.53-09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MS2500				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	375	385	415	450	365	375	400	440	390	400	430	475	325	330	355	390
	—	—	—	—	*1225*	*1275*	*1350*	*1475*	*1200*	*1225*	*1300*	*1450*	*1275*	*1300*	*1400*	*1550*	*1075*	*1075*	*1175*	*1275*
P2	—	—	—	—	365	375	405	440	355	365	390	425	375	390	420	465	315	320	345	380
	—	—	—	—	*1200*	*1225*	*1325*	*1450*	*1175*	*1200*	*1275*	*1400*	*1225*	*1275*	*1375*	*1525*	*1025*	*1050*	*1125*	*1250*
P3	—	—	—	—	320	330	355	385	310	320	345	375	335	345	370	410	280	285	305	335
	—	—	—	—	*1050*	*1075*	*1175*	*1275*	*1025*	*1050*	*1125*	*1225*	*1100*	*1125*	*1225*	*1350*	*920*	*940*	*1000*	*1100*
P4	—	—	—	—	285	290	310	340	275	285	305	330	295	305	325	360	245	250	270	295
	—	—	—	—	*940*	*950*	*1025*	*1125*	*900*	*940*	*1000*	*1075*	*970*	*1000*	*1075*	*1175*	*800*	*820*	*890*	*970*
P5	—	—	—	—	270	280	300	330	265	270	290	320	285	295	315	345	235	240	255	285
	—	—	—	—	*890*	*920*	*980*	*1075*	*870*	*890*	*950*	*1050*	*940*	*970*	*1025*	*1125*	*770*	*790*	*840*	*940*
P6	—	—	—	—	305	310	335	370	295	305	325	360	320	330	355	385	260	270	290	320
	—	—	—	—	*1000*	*1025*	*1100*	*1225*	*970*	*1000*	*1075*	*1175*	*1050*	*1075*	*1175*	*1275*	*850*	*890*	*950*	*1050*
P7	—	—	—	—	285	295	315	350	280	285	305	340	300	310	335	365	245	255	275	305
	—	—	—	—	*940*	*970*	*1025*	*1150*	*920*	*940*	*1000*	*1125*	*980*	*1025*	*1100*	*1200*	*800*	*840*	*900*	*1000*
P8	—	—	—	—	270	280	300	325	265	270	290	315	280	290	310	345	235	240	255	280
	—	—	—	—	*890*	*920*	*980*	*1075*	*870*	*890*	*950*	*1025*	*920*	*950*	*1025*	*1125*	*770*	*790*	*840*	*920*
P11	—	—	—	—	280	285	305	340	270	280	300	330	290	305	325	355	240	245	265	295
	—	—	—	—	*920*	*940*	*1000*	*1125*	*890*	*920*	*980*	*1075*	*950*	*1000*	*1075*	*1175*	*790*	*800*	*870*	*970*
P12	—	—	—	—	185	190	205	225	180	190	200	220	195	200	215	230	165	170	180	195
	—	—	—	—	*610*	*620*	*670*	*740*	*590*	*620*	*660*	*720*	*640*	*660*	*710*	*750*	*540*	*560*	*590*	*640*
M1	—	—	—	—	—	—	—	—	185	195	210	235	220	235	255	280	170	185	195	215
	—	—	—	—	—	—	—	—	*610*	*640*	*690*	*770*	*720*	*770*	*840*	*920*	*560*	*610*	*640*	*710*
M2	—	—	—	—	—	—	—	—	150	160	175	195	185	195	210	235	140	150	165	180
	—	—	—	—	—	—	—	—	*490*	*520*	*570*	*640*	*610*	*640*	*690*	*770*	*460*	*490*	*540*	*590*
M3	—	—	—	—	—	—	—	—	125	135	145	160	150	160	170	190	115	125	135	150
	—	—	—	—	—	—	—	—	*410*	*445*	*475*	*520*	*490*	*520*	*560*	*620*	*375*	*410*	*445*	*490*
M4	—	—	—	—	—	—	—	—	95	105	110	125	115	125	130	145	90	95	105	115
	—	—	—	—	—	—	—	—	*310*	*345*	*360*	*410*	*375*	*410*	*425*	*475*	*295*	*310*	*345*	*375*
M5	—	—	—	—	—	—	—	—	80	85	95	105	95	100	110	125	75	80	85	95
	—	—	—	—	—	—	—	—	*260*	*280*	*310*	*345*	*310*	*330*	*360*	*410*	*245*	*260*	*280*	*310*
K1	335	410	465	550	370	380	405	440	360	365	395	430	245	260	280	310	315	325	350	380
	1100	*1350*	*1525*	*1800*	*1225*	*1250*	*1325*	*1450*	*1175*	*1200*	*1300*	*1400*	*800*	*850*	*920*	*1025*	*1025*	*1075*	*1150*	*1250*
K2	295	360	410	485	325	335	360	400	320	325	350	390	220	230	250	275	280	290	310	345
	970	*1175*	*1350*	*1600*	*1075*	*1100*	*1175*	*1300*	*1050*	*1075*	*1150*	*1275*	*720*	*750*	*820*	*900*	*920*	*950*	*1025*	*1125*
K3	225	250	275	315	275	285	305	335	270	275	295	330	185	195	210	235	240	245	265	295
	740	*820*	*900*	*1025*	*900*	*940*	*1000*	*1100*	*890*	*900*	*970*	*1075*	*610*	*640*	*690*	*770*	*790*	*800*	*870*	*970*
K4	215	235	260	300	265	270	290	320	255	265	285	315	175	190	205	225	230	235	250	280
	710	*770*	*850*	*980*	*870*	*890*	*950*	*1050*	*840*	*870*	*940*	*1025*	*570*	*620*	*670*	*740*	*750*	*770*	*820*	*920*
K5	130	145	160	180	165	170	180	195	160	165	175	190	110	115	125	135	145	145	160	170
	425	*475*	*520*	*590*	*540*	*560*	*590*	*640*	*520*	*540*	*570*	*620*	*360*	*375*	*410*	*445*	*475*	*475*	*520*	*560*
K6	190	210	230	265	230	240	255	285	225	230	250	275	155	165	180	195	200	205	220	245
	620	*690*	*750*	*870*	*750*	*790*	*840*	*940*	*740*	*750*	*820*	*900*	*510*	*540*	*590*	*640*	*660*	*670*	*720*	*800*
K7	170	190	210	235	210	220	235	250	205	210	225	245	140	150	160	175	185	190	200	220
	560	*620*	*690*	*770*	*690*	*720*	*770*	*820*	*670*	*690*	*740*	*800*	*460*	*490*	*520*	*570*	*610*	*620*	*660*	*720*
S1	—	—	—	—	—	—	—	—	—	—	—	—	55	60	65	70	42	45	48	55
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*215*	*230*	*140*	*150*	*155*	*180*
S2	—	—	—	—	—	—	—	—	—	—	—	—	45	48	50	60	34	36	39	44
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*165*	*195*	*110*	*120*	*130*	*145*
S3	—	—	—	—	—	—	—	—	—	—	—	—	40	42	46	50	30	32	35	38
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*140*	*150*	*165*	*100*	*105*	*115*	*125*
S11	—	—	—	—	—	—	—	—	—	—	—	—	80	85	90	100	60	65	70	75
	—	—	—	—	—	—	—	—	—	—	—	—	*260*	*280*	*295*	*330*	*195*	*215*	*230*	*245*
S12	—	—	—	—	—	—	—	—	—	—	—	—	55	60	65	70	40	43	47	50
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*215*	*230*	*130*	*140*	*155*	*165*
S13	—	—	—	—	—	—	—	—	—	—	—	—	32	34	36	40	24	25	27	30
	—	—	—	—	—	—	—	—	—	—	—	—	*105*	*110*	*120*	*130*	*80*	*80*	*90*	*100*
H5	—	—	—	—	48	50	55	60	—	—	—	—	47	50	55	60	37	40	43	48
	—	—	—	—	*155*	*165*	*180*	*195*	—	—	—	—	*155*	*165*	*180*	*195*	*120*	*130*	*140*	*155*
H8	—	—	—	—	50	55	60	65	—	—	—	—	50	55	55	60	40	43	47	50
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*165*	*180*	*180*	*195*	*130*	*140*	*155*	*165*
H11	—	—	—	—	60	65	70	80	—	—	—	—	60	65	70	75	47	50	55	60
	—	—	—	—	*195*	*215*	*230*	*260*	—	—	—	—	*195*	*215*	*230*	*245*	*155*	*165*	*180*	*195*
H12	—	—	—	—	95	100	110	120	—	—	—	—	100	105	115	125	70	80	85	90
	—	—	—	—	*310*	*330*	*360*	*395*	—	—	—	—	*330*	*345*	*375*	*410*	*230*	*260*	*280*	*295*
H21	—	—	—	—	50	55	60	65	—	—	—	—	50	55	55	60	40	43	47	50
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*165*	*180*	*180*	*195*	*130*	*140*	*155*	*165*

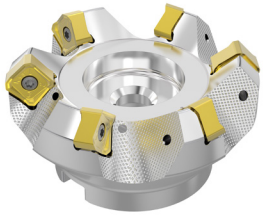


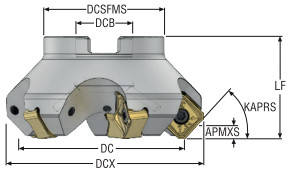
DOUBLE QUATTROMILL 14/22

Sfruttate al massimo la capacità di fresatura della macchina utensile per aumentare la produttività con la fresa per spianatura Double Quattromill™ di Seco per operazioni di sgrossatura e semi-finitura. La fresa per spianatura Double Quattromill 48 gradi offre una combinazione di forze di taglio ridotte, minor consumo di potenza, avanzamenti più elevati e un eccezionale controllo del truciolo. La versione a 71 gradi è invece più indicata per fresare vicino a una parete o ad una attrezzatura. Il tagliente rappresenta il perfetto equilibrio tra la versione a 48 gradi e una tipica fresa a spallamento retto in termini di forze e profondità di taglio.

– Dimensione dell'inserto 14, gamma frese 50-315 mm (2-12,50")
– Dimensione dell'inserto 22, gamma frese 80-315 mm (3-12,50")
– 8 taglienti, inserti bilaterali

R220.54-14 In mm

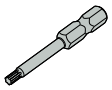
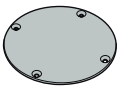




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.54-0050-14-4A	03213622	Manicotto	50,0	4	6,0	48,0 °	65,0	22,0	–	47,0	40,0	8500	0,5	SN.X1407A
R220.54-0050-14-5A	03213629	Manicotto	50,0	5	6,0	48,0 °	65,0	22,0	–	47,0	40,0	8500	0,5	SN.X1407A
R220.54-0063-14-5A	03213623	Manicotto	63,0	5	6,0	48,0 °	78,0	22,0	–	47,0	40,0	7600	0,6	SN.X1407A
R220.54-0063-14-7A	03213630	Manicotto	63,0	7	6,0	48,0 °	78,0	22,0	–	47,0	40,0	7600	0,6	SN.X1407A
R220.54-0080-14-6A	03213624	Manicotto	80,0	6	6,0	48,0 °	95,0	27,0	–	62,0	50,0	6700	1,2	SN.X1407A
R220.54-0080-14-8A	03213631	Manicotto	80,0	8	6,0	48,0 °	95,0	27,0	–	62,0	50,0	6700	1,2	SN.X1407A
R220.54-0100-14-7A	03213625	Manicotto	100,0	7	6,0	48,0 °	115,0	32,0	–	77,0	50,0	6000	1,8	SN.X1407A
R220.54-0100-14-10A	03213632	Manicotto	100,0	10	6,0	48,0 °	115,0	32,0	–	77,0	50,0	6000	1,8	SN.X1407A
R220.54-0125-14-8A	03213626	Manicotto	125,0	8	6,0	48,0 °	140,0	40,0	–	90,0	63,0	5400	3,6	SN.X1407A
R220.54-0125-14-12A	03213633	Manicotto	125,0	12	6,0	48,0 °	140,0	40,0	–	90,0	63,0	5400	3,4	SN.X1407A
R220.54-8160-14-10A	03213627	Manicotto	160,0	10	6,0	48,0 °	175,0	40,0	66,7	90,0	63,0	4700	6,2	SN.X1407A
R220.54-8160-14-15A	03213634	Manicotto	160,0	15	6,0	48,0 °	175,0	40,0	66,7	90,0	63,0	4700	5,8	SN.X1407A
R220.54-8200-14-12A	03213628	Manicotto	200,0	12	6,0	48,0 °	215,0	60,0	101,6	130,0	63,0	4200	8,2	SN.X1407A
R220.54-8200-14-17A	03213635	Manicotto	200,0	17	6,0	48,0 °	215,0	60,0	101,6	130,0	63,0	4200	8,2	SN.X1407A

Parti di ricambio, comprese nella fornitura

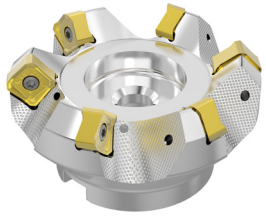
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.54-0050-0063	220.17-691	1/4HEX-T15PX50	C04011-T15P	–	–
R220-54-0080	–	1/4HEX-T15PX50	C04011-T15P	–	–
R220-54-0100-0125	–	1/4HEX-T15PX90	C04011-T15P	–	–
R220-54-8160	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10
R220-54-8200	–	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10

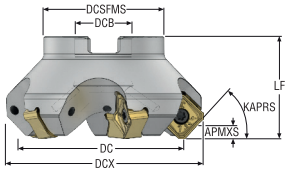
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54-0050-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220-54-8200	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54-14 – Pollici

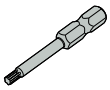
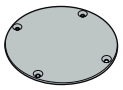




–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
–Per il programma inserti completo, vedere le pagine 894
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.54-02.00-14-4A	03213636	Manicotto	1.969	4	0.236	48,0 °	2.559	0.750	–	–	1.850	1.575	8500	1.100	SN.X1407A
R220.54-02.00-14-5A	03213643	Manicotto	1.969	5	0.236	48,0 °	2.559	0.750	–	–	1.850	1.575	8500	1.100	SN.X1407A
R220.54-02.50-14-5A	03213637	Manicotto	2.480	5	0.236	48,0 °	3.071	0.750	–	–	1.850	1.575	7600	1.320	SN.X1407A
R220.54-02.50-14-7A	03213644	Manicotto	2.480	7	0.236	48,0 °	3.071	0.750	–	–	1.850	1.575	7600	1.320	SN.X1407A
R220.54-03.00-14-6A	03213638	Manicotto	3.150	6	0.236	48,0 °	3.740	1.000	–	–	2.441	1.969	6700	3.090	SN.X1407A
R220.54-03.00-14-8A	03213645	Manicotto	3.150	8	0.236	48,0 °	3.740	1.000	–	–	2.441	1.969	6700	2.870	SN.X1407A
R220.54-04.00-14-7A	03213639	Manicotto	3.937	7	0.236	48,0 °	4.528	1.500	–	–	3.031	1.969	6000	3.970	SN.X1407A
R220.54-04.00-14-10A	03213646	Manicotto	3.937	10	0.236	48,0 °	4.528	1.500	–	–	3.031	1.969	6000	3.970	SN.X1407A
R220.54-05.00-14-8A	03213640	Manicotto	4.921	8	0.236	48,0 °	5.512	1.500	–	–	3.543	2.480	5400	8.380	SN.X1407A
R220.54-05.00-14-12A	03213647	Manicotto	4.921	12	0.236	48,0 °	5.512	1.500	–	–	3.543	2.480	5400	8.600	SN.X1407A
R220.54-06.00-14-10A	03213641	Manicotto	6.299	10	0.236	48,0 °	6.890	2.000	–	–	4.331	2.480	4700	14.330	SN.X1407A
R220.54-06.00-14-15A	03213648	Manicotto	6.299	15	0.236	48,0 °	6.890	2.000	–	–	4.331	2.480	4700	14.110	SN.X1407A
R220.54-808.00-14-12A	03213642	Manicotto	7.874	12	0.236	48,0 °	8.465	2.500	4.000	4.000	5.118	2.480	4200	18.080	SN.X1407A
R220.54-808.00-14-17A	03213649	Manicotto	7.874	17	0.236	48,0 °	8.465	2.500	4.000	4.000	5.118	2.480	4200	17.860	SN.X1407A

Parti di ricambio, comprese nella fornitura

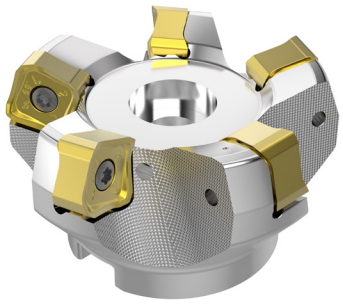
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.54-02.00-02.50	220.17-698	1/4HEX-T15PX50	C04011-T15P	–	–
R220.54-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P	–	–
R220.54-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.54-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.54-06.00	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10
R220.54-808.00	–	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10

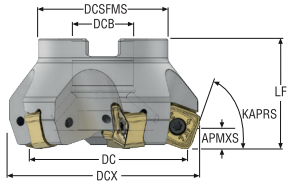
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54-02.00-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54-808.00	1/4HEX-S-HANDLE-0.8-5.0NM	950DNC062225	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.56-14 – In mm

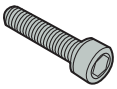
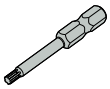
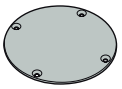




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.56-0050-14-4A	03241895	Manicotto	50,0	4	8,0	71,0 °	57,0	22,0	–	47,0	40,0	8500	0,5	SN.X1407Z
R220.56-0050-14-5A	03241902	Manicotto	50,0	5	8,0	71,0 °	57,0	22,0	–	47,0	40,0	8500	0,4	SN.X1407Z
R220.56-0063-14-5A	03241896	Manicotto	63,0	5	8,0	71,0 °	70,0	22,0	–	47,0	40,0	7600	0,6	SN.X1407Z
R220.56-0063-14-6A	03241903	Manicotto	63,0	6	8,0	71,0 °	70,0	22,0	–	47,0	40,0	7600	0,6	SN.X1407Z
R220.56-0080-14-6A	03241897	Manicotto	80,0	6	8,0	71,0 °	87,0	27,0	–	62,0	50,0	6700	1,1	SN.X1407Z
R220.56-0080-14-8A	03241904	Manicotto	80,0	8	8,0	71,0 °	87,0	27,0	–	62,0	50,0	6700	1,1	SN.X1407Z
R220.56-0100-14-7A	03241898	Manicotto	100,0	7	8,0	71,0 °	107,0	32,0	–	77,0	50,0	6000	1,7	SN.X1407Z
R220.56-0100-14-10A	03241905	Manicotto	100,0	10	8,0	71,0 °	107,0	32,0	–	77,0	50,0	6000	1,7	SN.X1407Z
R220.56-0125-14-8A	03241899	Manicotto	125,0	8	8,0	71,0 °	132,0	40,0	–	90,0	63,0	5400	3,2	SN.X1407Z
R220.56-0125-14-12A	03241906	Manicotto	125,0	12	8,0	71,0 °	132,0	40,0	–	90,0	63,0	5400	3,4	SN.X1407Z
R220.56-8160-14-10A	03241900	Manicotto	160,0	10	8,0	71,0 °	167,0	40,0	66,7	90,0	63,0	4700	5,5	SN.X1407Z
R220.56-8160-14-15A	03241907	Manicotto	160,0	15	8,0	71,0 °	167,0	40,0	66,7	90,0	63,0	4700	5,4	SN.X1407Z
R220.56-8200-14-12A	03241901	Manicotto	200,0	12	8,0	71,0 °	207,0	60,0	101,6	130,0	63,0	4200	6,6	SN.X1407Z
R220.56-8200-14-17A	03241908	Manicotto	200,0	17	8,0	71,0 °	207,0	60,0	101,6	130,0	63,0	4200	6,9	SN.X1407Z

Parti di ricambio, comprese nella fornitura

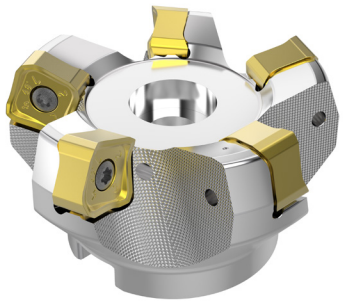
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.56-0050-0063	220.17-692	1/4HEX-T15PX50	C04011-T15P	–	–
R220.56-0080	–	1/4HEX-T15PX50	C04011-T15P	–	–
R220.56-0100-0125	–	1/4HEX-T15PX90	C04011-T15P	–	–
R220.56-8160	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10
R220.56-8200	–	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10

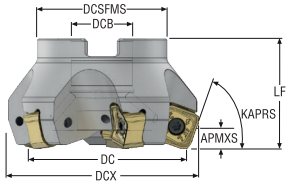
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.56-0050-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-0080-6A	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-0080-8A	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-8200	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.56-14 – Pollici

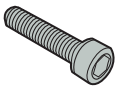
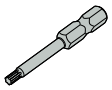
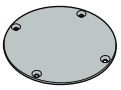




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.56-02.00-14-4A	03241909	Manicotto	1.969	4	0.315	71,0 °	2.244	0.750	–	–	1.850	1.575	8500	0.880	SN.X1407Z
R220.56-02.00-14-5A	03241916	Manicotto	1.969	5	0.315	71,0 °	2.244	0.750	–	–	1.850	1.575	8500	1.100	SN.X1407Z
R220.56-02.50-14-5A	03241910	Manicotto	2.480	5	0.315	71,0 °	2.756	0.750	–	–	1.850	1.575	7600	1.100	SN.X1407Z
R220.56-02.50-14-6A	03241917	Manicotto	2.480	6	0.315	71,0 °	2.756	0.750	–	–	1.850	1.575	7600	1.320	SN.X1407Z
R220.56-03.00-14-6A	03241911	Manicotto	3.150	6	0.315	71,0 °	3.425	1.000	–	–	2.441	1.969	6700	2.650	SN.X1407Z
R220.56-03.00-14-8A	03241918	Manicotto	3.150	8	0.315	71,0 °	3.425	1.000	–	–	2.441	1.969	6700	2.870	SN.X1407Z
R220.56-04.00-14-7A	03241912	Manicotto	3.937	7	0.315	71,0 °	4.213	1.500	–	–	3.031	1.969	6000	3.310	SN.X1407Z
R220.56-04.00-14-10A	03241919	Manicotto	3.937	10	0.315	71,0 °	4.213	1.500	–	–	3.031	1.969	6000	3.530	SN.X1407Z
R220.56-05.00-14-8A	03241913	Manicotto	4.921	8	0.315	71,0 °	5.197	1.500	–	–	3.543	2.480	5400	8.160	SN.X1407Z
R220.56-05.00-14-12A	03241920	Manicotto	4.921	12	0.315	71,0 °	5.197	1.500	–	–	3.543	2.480	5400	7.940	SN.X1407Z
R220.56-06.00-14-10A	03241914	Manicotto	6.299	10	0.315	71,0 °	6.575	2.000	–	–	4.331	2.480	4700	13.450	SN.X1407Z
R220.56-06.00-14-15A	03241921	Manicotto	6.299	15	0.315	71,0 °	6.575	2.000	–	–	4.331	2.480	4700	13.230	SN.X1407Z
R220.56-808.00-14-12A	03241915	Manicotto	7.874	12	0.315	71,0 °	8.150	2.500	4.000	4.000	5.118	2.480	4200	16.310	SN.X1407Z
R220.56-808.00-14-17A	03241922	Manicotto	7.874	17	0.315	71,0 °	8.150	2.500	4.000	4.000	5.118	2.480	4200	14.990	SN.X1407Z

Parti di ricambio, comprese nella fornitura

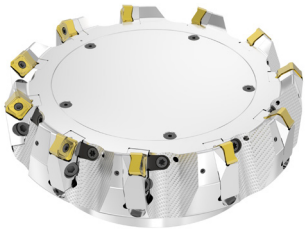
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.56-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04011-T15P	–	–
R220.56-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P	–	–
R220.56-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.56-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.56-06.00	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10
R220.56-808.00	–	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10

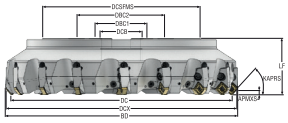
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.56-02.00-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.56-808.00	1/4HEX-S-HANDLE-0.8-5.0NM	950DNC062225	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54/56-14CA – In mm

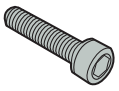
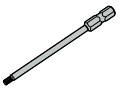
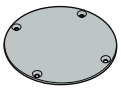
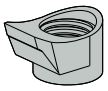




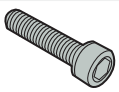
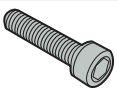
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.54-8200-14-11CA	03213788	Manicotto	200,0	11	6,0	48,0 °	215,0	60,0	101,6	–	130,0	80,0	4200	9,8	SN.X1407A
R220.56-8200-14-11CA	03245959	Manicotto	200,0	11	8,0	71,0 °	207,0	60,0	101,6	–	130,0	80,0	4200	18,6	SN.X1407Z
R220.54-8250-14-14CA	03213789	Manicotto	250,0	14	6,0	48,0 °	265,0	60,0	101,6	–	130,0	80,0	3800	23,2	SN.X1407A
R220.56-8250-14-14CA	03245960	Manicotto	250,0	14	8,0	71,0 °	257,0	60,0	101,6	–	130,0	80,0	3800	18,5	SN.X1407Z
R220.54-8315-14-16CA	03213790	Manicotto	315,0	16	6,0	48,0 °	330,0	60,0	101,6	177,8	225,0	80,0	3400	32,0	SN.X1407A
R220.56-8315-14-16CA	03245961	Manicotto	315,0	16	8,0	71,0 °	322,0	60,0	101,6	177,8	225,0	80,0	3400	29,8	SN.X1407Z

Parti di ricambio, comprese nella fornitura

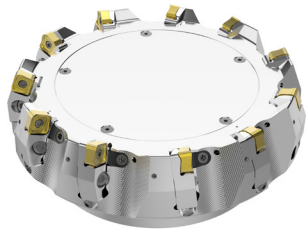
Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
									
R220.54-8200	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-8250	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-8315	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-8200	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X8	CW0810	LD8020-T25P
R220.56-8250	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-8315	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P

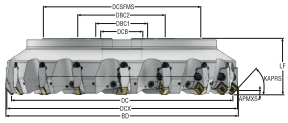
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R220.54/56-8200	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54/56-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.54/56-8315	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	MC6S20X50	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54/56-14CA – Pollici

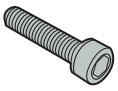
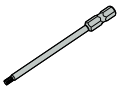
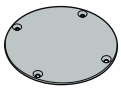
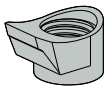




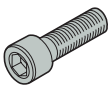
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 246-251
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.54-808.00-14-11CA	03213792	Manicotto	7.874	11	0.236	48,0 °	8.465	2.500	4.000	4.000	5.118	3.150	4200	32.850	SN.X1407A
R220.56-808.00-14-11CA	03245963	Manicotto	7.874	11	0.315	71,0 °	8.150	2.500	4.000	4.000	5.118	3.150	4200	22.490	SN.X1407Z
R220.54-810.00-14-14CA	03213793	Manicotto	9.843	14	0.236	48,0 °	10.433	2.500	4.000	4.000	5.118	3.150	3800	51.590	SN.X1407A
R220.56-810.00-14-14CA	03245964	Manicotto	9.843	14	0.315	71,0 °	10.118	2.500	4.000	4.000	5.118	3.150	3800	43.650	SN.X1407Z
R220.54-812.50-14-16CA	03213794	Manicotto	12.402	16	0.236	48,0 °	12.992	2.500	4.000	4.000	8.858	3.150	3400	82.230	SN.X1407A
R220.56-812.50-14-16CA	03245965	Manicotto	12.402	16	0.315	71,0 °	12.677	2.500	4.000	4.000	8.858	3.150	3400	65.920	SN.X1407Z

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
									
R220.54-808.00	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-810.00	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-812.50	AU1114T-T15P	SN14AR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-808.00	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-200-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-810.00	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-812.50	AU1114T-T15P	SN14ZR	MC6S6X20	1/4HEX-T15PX90	C04011-T15P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54/56-808.-812.50	1/4HEX-S-HANDLE-0.8-5.0NM	950DNC062225	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.54-14 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMX1407ANTR-M10 MP3501	5,0 *0.20*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
P2	SNMX1407ANTR-M10 MP3501	5,0 *0.20*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,32 0.013
P3	SNMX1407ANTR-M16 MP2501	5,0 *0.20*	0,36 0.014	0,36 0.014	0,38 0.015	0,46 0.018
P4	SNMX1407ANTR-M16 MP2501	5,0 *0.20*	0,36 0.014	0,36 0.014	0,36 0.014	0,46 0.018
P5	SNMX1407ANTR-M16 MP2501	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
P6	SNMX1407ANTR-M16 MP2501	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
P7	SNMX1407ANTR-M10 MP3501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
P8	SNMX1407ANTR-M10 MP3501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,30 0.012
P11	SNMX1407ANTR-M10 MP2051	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
P12	SNMX1407ANTR-M10 MP2051	4,0 *0.16*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,19 0.0075
M1	SNHX1407ANR-ME10 F40M	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
M2	SNHX1407ANR-ME10 MS2050	5,0 *0.20*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
M3	SNHX1407ANR-ME10 MS2050	4,0 *0.16*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
M4	SNMX1407ANTR-M10 MP2051	3,0 *0.12*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
M5	SNMX1407ANTR-M10 MP2051	3,0 *0.12*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
K1	SNMX1407ANTR-M16 MK1501	5,0 *0.20*	0,38 0.015	0,38 0.015	0,40 0.016	0,50 0.020
K2	SNMX1407ANTR-M16 MK1501	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K3	SNMX1407ANTR-M16 MP1501	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K4	SNMX1407ANTR-M16 MP1501	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K5	SNMX1407ANTR-M16 MP1501	5,0 *0.20*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K6	SNMX1407ANTR-M16 MK2050	5,0 *0.20*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K7	SNMX1407ANTR-M16 MK2050	5,0 *0.20*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
N1	SNHX1407ANR-ME10 H25	5,0 *0.20*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
N2	SNHX1407ANR-ME10 H25	5,0 *0.20*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
N3	SNHX1407ANR-ME10 H25	5,0 *0.20*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
N11	SNHX1407ANR-ME10 H25	5,0 *0.20*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
S1	SNMX1407ANTR-M10 MS2500	3,0 *0.12*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S2	SNMX1407ANTR-M10 MS2500	3,0 *0.12*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S3	SNMX1407ANTR-M10 MS2500	3,0 *0.12*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S11	SNHX1407ANR-ME10 MS2050	3,5 *0.14*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S12	SNHX1407ANR-ME10 MS2050	3,5 *0.14*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S13	SNHX1407ANR-ME10 MS2050	3,0 *0.12*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,17 0.0065
H5	SNMX1407ANTR-M16 MP3000	4,0 *0.16*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
H8	SNMX1407ANTR-M16 MP3000	3,5 *0.14*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
H11	SNMX1407ANTR-M16 MP1501	4,0 *0.16*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
H12	SNMX1407ANTR-M16 MP1501	3,5 *0.14*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
H21	SNMX1407ANTR-M16 MP1501	3,5 *0.14*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.54-14 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MP3000				MS2050				F40M				MP2051				H25			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	230 *750*	250 *820*	270 *890*	300 *980*	210 *690*	215 *710*	240 *790*	280 *920*	245 *800*	260 *850*	280 *920*	310 *1025*	235 *770*	240 *790*	260 *850*	280 *920*		290 *950*	330 *1075*		— —			
P2			260 *850*	290 *950*	200 *660*	210 *690*	230 *750*		240 *790*	250 *820*						275 *900*		280 *920*	320 *1050*	375 *1225*	— —	— —	— —	— —
P3	200 *660*	210 *690*			180 *590*			235 *770*	215 *710*	225 *740*	240 *790*	260 *850*	205 *670*	210 *690*	225 *740*	240 *790*	250 *820*	260 *850*			— —	— —	— —	— —
P4	175 *570*	185 *610*	200 *660*		160 *520*	165 *540*	180 *590*		185 *610*	195 *640*	215 *710*	230 *750*	185 *610*	190 *620*	205 *670*	225 *740*	220 *720*	230 *750*	260 *850*	290 *950*	— —	— —	— —	— —
P5	170 *560*	180 *590*	195 *640*	215 *710*	155 *510*	165 *540*	180 *590*	205 *670*	180 *590*	190 *620*	205 *670*	225 *740*	170 *560*	175 *570*	190 *620*	210 *690*	210 *690*	220 *720*	245 *800*	295 *970*	— —	— —	— —	— —
P6	190 *620*	205 *670*	220 *720*	240 *790*	175 *570*	185 *610*	205 *670*	230 *750*	200 *660*	210 *690*	230 *750*	255 *840*	190 *620*	195 *640*	210 *690*	235 *770*	240 *790*	245 *800*	280 *920*	330 *1075*	— —	— —	— —	— —
P7	180 *590*	190 *620*	210 *690*	230 *750*	165 *540*	170 *560*	190 *620*	215 *710*	190 *620*	200 *660*	215 *710*	240 *790*	180 *590*	185 *610*	200 *660*	220 *720*	225 *740*	230 *750*	260 *850*	310 *1025*	— —	— —	— —	— —
P8	165 *540*	180 *590*	190 *620*	210 *690*	150 *490*	155 *510*	175 *570*	195 *640*	180 *590*	190 *620*	205 *670*	220 *720*	170 *560*	175 *570*	190 *620*	200 *660*	210 *690*	220 *720*	245 *800*	280 *920*	— —	— —	— —	— —
P11	175 *570*	185 *610*	200 *660*	220 *720*	160 *520*	165 *540*	185 *610*	210 *690*	185 *610*	195 *640*	210 *690*	235 *770*	175 *570*	180 *590*	195 *640*	215 *710*	205 *670*	225 *740*	260 *850*	320 *1050*	— —	— —	— —	— —
P12	115 *375*	125 *410*	135 *445*	145 *475*	115 *375*	120 *395*	135 *445*	150 *490*	125 *410*	130 *425*	140 *460*	150 *490*	120 *395*	125 *410*	130 *425*	140 *460*	155 *510*	170 *560*	195 *640*	220 *720*	— —	— —	— —	— —
M1	— —	— —	— —	— —	160 *520*	175 *570*	190 *620*	205 *670*	180 *590*	190 *620*	205 *670*	230 *750*	165 *540*	175 *570*	190 *620*	210 *690*	225 *740*	245 *800*	285 *940*	345 *1125*	— —	— —	— —	— —
M2	— —	— —	— —	— —	135 *445*	145 *475*	160 *520*	175 *570*	150 *490*	160 *520*	170 *560*	190 *620*	135 *445*	145 *475*	155 *510*	175 *570*	195 *640*	210 *690*	245 *800*	305 *1000*	— —	— —	— —	— —
M3	— —	— —	— —	— —	110 *360*	120 *395*	125 *410*	140 *460*	120 *395*	130 *425*	140 *460*	155 *510*	110 *360*	115 *375*	125 *410*	140 *460*	170 *560*	185 *610*	215 *710*	260 *850*	— —	— —	— —	— —
M4	— —	— —	— —	— —	85 *280*	90 *295*	100 *330*	110 *360*	95 *310*	100 *330*	105 *345*	120 *395*	85 *280*	90 *295*	95 *310*	110 *360*	135 *445*	150 *490*	170 *560*	200 *660*	— —	— —	— —	— —
M5	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	75 *245*	80 *260*	90 *295*	100 *330*	70 *230*	75 *245*	80 *260*	90 *295*	115 *375*	125 *410*	140 *460*	170 *560*	— —	— —	— —	— —
K1	245 *800*	260 *850*	280 *920*	310 *1025*	170 *560*	185 *610*	200 *660*	220 *720*	— —	— —	— —	— —	160 *520*	170 *560*	185 *610*	205 *670*	— —	— —	— —	— —	165 *540*	175 *570*	190 *620*	210 *690*
K2	220 *720*	235 *770*	255 *840*	280 *920*	155 *510*	165 *540*	180 *590*	195 *640*	— —	— —	— —	— —	140 *460*	155 *510*	165 *540*	185 *610*	— —	— —	— —	— —	145 *475*	160 *520*	170 *560*	185 *610*
K3	185 *610*	200 *660*	215 *710*	235 *770*	130 *425*	140 *460*	150 *490*	165 *540*	— —	— —	— —	— —	120 *395*	130 *425*	140 *460*	155 *510*	— —	— —	— —	— —	— —	— —	— —	— —
K4	175 *570*	190 *620*	205 *670*	225 *740*	125 *410*	135 *445*	145 *475*	160 *520*	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	150 *490*	— —	— —	— —	— —	— —	— —	— —	— —
K5	105 *345*	115 *375*	125 *410*	140 *460*	75 *245*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	— —	— —	— —	— —	— —	— —	— —	— —
K6	155 *510*	165 *540*	180 *590*	200 *660*	110 *360*	120 *395*	125 *410*	140 *460*	— —	— —	— —	— —	100 *330*	110 *360*	115 *375*	130 *425*	— —	— —	— —	— —	— —	— —	— —	— —
K7	135 *445*	145 *475*	160 *520*	180 *590*	95 *310*	105 *345*	115 *375*	125 *410*	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1175 *3850*	1250 *4100*	1375 *4500*	1500 *4925*	— —	— —	— —	— —	1200 *3925*	1275 *4175*	1400 *4600*	1550 *5075*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	475 *1550*	510 *1675*	550 *1800*	600 *1975*	— —	— —	— —	— —	485 *1600*	520 *1700*	560 *1825*	630 *2075*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	315 *1025*	340 *1125*	365 *1200*	405 *1325*	— —	— —	— —	— —	320 *1050*	345 *1125*	375 *1225*	420 *1375*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	360 *1175*	390 *1275*	420 *1375*	460 *1500*	— —	— —	— —	— —	370 *1225*	395 *1300*	425 *1400*	475 *1550*
S1	— —	— —	— —	— —	40 *130*	43 *140*	46 *150*	50 *165*	43 *140*	46 *150*	50 *165*	55 *180*	39 *130*	42 *140*	45 *150*	50 *165*	47 *155*	50 *165*	55 *180*	60 *195*	— —	— —	— —	— —
S2	— —	— —	— —	— —	32 *105*	34 *110*	37 *120*	41 *135*	35 *115*	37 *120*	40 *130*	45 *150*	32 *105*	34 *110*	36 *120*	41 *135*	38 *125*	41 *135*	44 *145*	49 *160*	— —	— —	— —	— —
S3	— —	— —	— —	— —	28 *90*	30 *100*	32 *105*	36 *120*	31 *100*	33 *110*	35 *115*	39 *130*	28 *90*	30 *100*	32 *105*	36 *120*	33 *110*	36 *120*	39 *130*	43 *140*	— —	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	80 *260*	55 *180*	60 *195*	65 *215*	70 *230*	65 *215*	70 *230*	75 *245*	85 *280*	36 *120*	38 *125*	41 *135*	46 *150*
S12	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	48 *155*	55 *180*	38 *125*	41 *135*	44 *145*	49 *160*	46 *150*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	— —	— —	24 *80*	26 *85*	28 *90*	31 *100*	22 *70*	24 *80*	25 *80*	28 *90*	27 *90*	28 *90*	31 *100*	34 *110*	— —	— —	— —	— —
H5	39 *130*	42 *140*	45 *150*	50 *165*	34 *110*	37 *120*	40 *130*	44 *145*	— —	— —	— —	— —	34 *110*	36 *120*	39 *130*	42 *140*	— —	— —	— —	— —	— —	— —	— —	— —
H8	43 *140*	46 *150*	49 *160*	55 *180*	37 *120*	40 *130*	43 *140*	47 *155*	— —	— —	— —	— —	36 *120*	38 *125*	41 *135*	46 *150*	— —	— —	— —	— —	— —	— —	— —	— —
H11	50 *165*	55 *180*	60 *195*	65 *215*	44 *145*	47 *155*	50 *165*	55 *180*	— —	— —	— —	— —	43 *140*	46 *150*	49 *160*	55 *180*	100 *330*	110 *360*	125 *410*	145 *475*	— —	— —	— —	— —
H12	75 *245*	80 *260*	85 *280*	95 *310*	70 *230*	75 *245*	85 *280*	90 *295*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	80 *260*	100 *330*	110 *360*	125 *410*	140 *460*	— —	— —	— —	— —
H21	43 *140*	46 *150*	49 *160*	55 *180*	37 *120*	40 *130*	43 *140*	47 *155*	— —	— —	— —	— —	36 *120*	38 *125*	41 *135*	46 *150*	95 *310*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —

R220.54-14 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501				MS2500			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	395	410	440	475	385	400	425	465	340	355	380	415	365	385	410	450
	—	—	—	—	*1300*	*1350*	*1450*	*1550*	*1275*	*1300*	*1400*	*1525*	*1125*	*1175*	*1250*	*1350*	*1200*	*1275*	*1350*	*1475*
P2	—	—	—	—	385	400	425	465	375	390	415	455	335	345	370	405	355	375	400	435
	—	—	—	—	*1275*	*1300*	*1400*	*1525*	*1225*	*1275*	*1350*	*1500*	*1100*	*1125*	*1225*	*1325*	*1175*	*1225*	*1300*	*1425*
P3	—	—	—	—	340	355	375	405	330	345	370	395	295	310	330	355	315	330	355	380
	—	—	—	—	*1125*	*1175*	*1225*	*1325*	*1075*	*1125*	*1225*	*1300*	*970*	*1025*	*1075*	*1175*	*1025*	*1075*	*1175*	*1250*
P4	—	—	—	—	300	310	330	355	290	305	325	350	260	270	290	310	280	290	310	335
	—	—	—	—	*980*	*1025*	*1075*	*1175*	*950*	*1000*	*1075*	*1150*	*850*	*890*	*950*	*1025*	*920*	*950*	*1025*	*1100*
P5	—	—	—	—	285	295	315	350	280	290	310	340	250	260	275	305	265	280	300	330
	—	—	—	—	*940*	*970*	*1025*	*1150*	*920*	*950*	*1025*	*1125*	*820*	*850*	*900*	*1000*	*870*	*920*	*980*	*1075*
P6	—	—	—	—	320	335	355	390	315	325	350	385	280	290	310	345	300	315	335	370
	—	—	—	—	*1050*	*1100*	*1175*	*1275*	*1025*	*1075*	*1150*	*1275*	*920*	*950*	*1025*	*1125*	*980*	*1025*	*1100*	*1225*
P7	—	—	—	—	300	315	335	370	295	305	330	360	265	275	295	325	280	295	315	350
	—	—	—	—	*980*	*1025*	*1100*	*1225*	*970*	*1000*	*1075*	*1175*	*870*	*900*	*970*	*1075*	*920*	*970*	*1025*	*1150*
P8	—	—	—	—	285	295	315	340	280	290	310	330	250	260	275	295	265	280	300	320
	—	—	—	—	*940*	*970*	*1025*	*1125*	*920*	*950*	*1025*	*1075*	*820*	*850*	*900*	*970*	*870*	*920*	*980*	*1050*
P11	—	—	—	—	295	305	325	360	285	300	320	350	255	265	285	315	275	285	305	340
	—	—	—	—	*970*	*1000*	*1075*	*1175*	*940*	*980*	*1050*	*1150*	*840*	*870*	*940*	*1025*	*900*	*940*	*1000*	*1125*
P12	—	—	—	—	190	200	210	225	190	200	210	225	170	175	190	200	180	190	200	215
	—	—	—	—	*620*	*660*	*690*	*740*	*620*	*660*	*690*	*740*	*560*	*570*	*620*	*660*	*590*	*620*	*660*	*710*
M1	—	—	—	—	—	—	—	—	190	205	225	245	180	190	205	230	210	225	240	265
	—	—	—	—	—	—	—	—	*620*	*670*	*740*	*800*	*590*	*620*	*670*	*750*	*690*	*740*	*790*	*870*
M2	—	—	—	—	—	—	—	—	160	170	185	205	150	160	170	190	175	185	200	225
	—	—	—	—	—	—	—	—	*520*	*560*	*610*	*670*	*490*	*520*	*560*	*620*	*570*	*610*	*660*	*740*
M3	—	—	—	—	—	—	—	—	130	135	150	165	120	130	140	155	140	150	160	180
	—	—	—	—	—	—	—	—	*425*	*445*	*490*	*540*	*395*	*425*	*460*	*510*	*460*	*490*	*520*	*590*
M4	—	—	—	—	—	—	—	—	100	105	115	125	95	100	105	120	110	115	125	140
	—	—	—	—	—	—	—	—	*330*	*345*	*375*	*410*	*310*	*330*	*345*	*395*	*360*	*375*	*410*	*460*
M5	—	—	—	—	—	—	—	—	85	90	95	105	75	80	90	100	90	95	105	115
	—	—	—	—	—	—	—	—	*280*	*295*	*310*	*345*	*245*	*260*	*295*	*330*	*295*	*310*	*345*	*375*
K1	310	385	440	510	385	400	430	470	380	390	420	460	335	350	375	410	230	245	265	295
	1025	*1275*	*1450*	*1675*	*1275*	*1300*	*1400*	*1550*	*1250*	*1275*	*1375*	*1500*	*1100*	*1150*	*1225*	*1350*	*750*	*800*	*870*	*970*
K2	275	340	390	455	345	360	385	420	335	350	375	415	300	315	335	370	205	220	240	265
	900	*1125*	*1275*	*1500*	*1125*	*1175*	*1275*	*1375*	*1100*	*1150*	*1225*	*1350*	*980*	*1025*	*1100*	*1225*	*670*	*720*	*790*	*870*
K3	205	230	255	285	290	305	325	355	285	295	315	350	255	265	285	315	175	185	200	225
	670	*750*	*840*	*940*	*950*	*1000*	*1075*	*1175*	*940*	*970*	*1025*	*1150*	*840*	*870*	*940*	*1025*	*570*	*610*	*660*	*740*
K4	195	220	245	275	280	290	310	340	275	285	305	335	245	255	270	300	165	180	190	215
	640	*720*	*800*	*900*	*920*	*950*	*1025*	*1125*	*900*	*940*	*1000*	*1100*	*800*	*840*	*890*	*980*	*540*	*590*	*620*	*710*
K5	120	135	145	170	170	180	190	205	165	175	185	205	150	155	165	185	100	110	120	130
	395	*445*	*475*	*560*	*560*	*590*	*620*	*670*	*540*	*570*	*610*	*670*	*490*	*510*	*540*	*610*	*330*	*360*	*395*	*425*
K6	170	195	215	240	245	255	275	300	240	250	265	295	215	220	240	265	145	155	170	190
	560	*640*	*710*	*790*	*800*	*840*	*900*	*980*	*790*	*820*	*870*	*970*	*710*	*720*	*790*	*870*	*475*	*510*	*560*	*620*
K7	150	170	190	215	220	230	245	265	215	225	240	260	190	200	215	235	130	140	150	170
	490	*560*	*620*	*710*	*720*	*750*	*800*	*870*	*710*	*740*	*790*	*850*	*620*	*660*	*710*	*770*	*425*	*460*	*490*	*560*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	43	46	50	55	55	55	60	65
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*	*180*	*180*	*195*	*215*
S2	—	—	—	—	—	—	—	—	—	—	—	—	35	37	40	45	42	45	49	55
	—	—	—	—	—	—	—	—	—	—	—	—	*115*	*120*	*130*	*150*	*140*	*150*	*160*	*180*
S3	—	—	—	—	—	—	—	—	—	—	—	—	31	33	35	39	37	40	43	48
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*110*	*115*	*130*	*120*	*130*	*140*	*155*
S11	—	—	—	—	—	—	—	—	—	—	—	—	60	65	70	80	75	80	85	95
	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*215*	*230*	*260*	*245*	*260*	*280*	*310*
S12	—	—	—	—	—	—	—	—	—	—	—	—	42	45	48	55	50	55	60	65
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*155*	*180*	*165*	*180*	*195*	*215*
S13	—	—	—	—	—	—	—	—	—	—	—	—	24	26	28	31	30	32	34	38
	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*85*	*90*	*100*	*100*	*105*	*110*	*125*
H5	—	—	—	—	50	55	60	65	—	—	—	—	39	42	45	49	44	47	50	55
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*130*	*140*	*150*	*160*	*145*	*155*	*165*	*180*
H8	—	—	—	—	55	55	60	70	—	—	—	—	41	44	47	50	46	50	55	60
	—	—	—	—	*180*	*180*	*195*	*230*	—	—	—	—	*135*	*145*	*155*	*165*	*150*	*165*	*180*	*195*
H11	—	—	—	—	65	70	75	80	—	—	—	—	49	55	55	60	55	60	65	70
	—	—	—	—	*215*	*230*	*245*	*260*	—	—	—	—	*160*	*180*	*180*	*195*	*180*	*195*	*215*	*230*
H12	—	—	—	—	95	100	110	120	—	—	—	—	75	80	85	95	90	100	105	120
	—	—	—	—	*310*	*330*	*360*	*395*	—	—	—	—	*245*	*260*	*280*	*310*	*295*	*330*	*345*	*395*
H21	—	—	—	—	55	55	60	70	—	—	—	—	41	44	47	50	46	50	55	60
	—	—	—	—	*180*	*180*	*195*	*230*	—	—	—	—	*135*	*145*	*155*	*165*	*150*	*165*	*180*	*195*

R220.56-14 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMX1407ZNTR-M10 MP2501	6,0 *0.24*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
P2	SNMX1407ZNTR-M10 MP2501	6,0 *0.24*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
P3	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.012	0,36 0.014
P4	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
P5	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P6	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
P7	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
P8	SNMX1407ZNTR-M16 MP2501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.012	0,36 0.014
P11	SNMX1407ZNTR-M10 MP2051	6,0 *0.24*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P12	SNMX1407ZNTR-M10 MP2051	5,0 *0.20*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
M1	SNHX1407ZNR-ME10 MS2050	6,0 *0.24*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
M2	SNHX1407ZNR-ME10 MS2050	6,0 *0.24*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
M3	SNHX1407ZNR-ME10 MS2050	5,0 *0.20*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
M4	SNMX1407ZNTR-M10 MP2051	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
M5	SNMX1407ZNTR-M10 MP2051	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
K1	SNMX1407ZNTR-M16 MK1501	6,0 *0.24*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
K2	SNMX1407ZNTR-M16 MK1501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K3	SNMX1407ZNTR-M16 MP1501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K4	SNMX1407ZNTR-M16 MP1501	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K5	SNMX1407ZNTR-M16 MP1501	6,0 *0.24*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
K6	SNMX1407ZNTR-M16 MK2050	6,0 *0.24*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K7	SNMX1407ZNTR-M16 MK2050	6,0 *0.24*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
S1	SNMX1407ZNTR-M10 MS2500	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
S2	SNMX1407ZNTR-M10 MS2500	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
S3	SNMX1407ZNTR-M10 MS2500	4,0 *0.16*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
S11	SNHX1407ZNR-ME10 MS2050	4,5 *0.18*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
S12	SNHX1407ZNR-ME10 MS2050	4,5 *0.18*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
S13	SNHX1407ZNR-ME10 MS2050	4,0 *0.16*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,13 0.0050
H5	SNMX1407ZNTR-M16 MP1501	5,0 *0.20*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H8	SNMX1407ZNTR-M16 MP1501	4,5 *0.18*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
H11	SNMX1407ZNTR-M16 MP1501	5,0 *0.20*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H12	SNMX1407ZNTR-M16 MP1501	4,5 *0.18*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
H21	SNMX1407ZNTR-M16 MP1501	4,5 *0.18*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

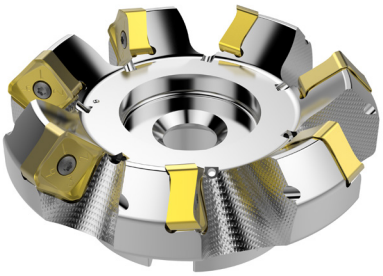
R220.56-14 – Parametri di taglio v_c = (m/min)/(sf/min)

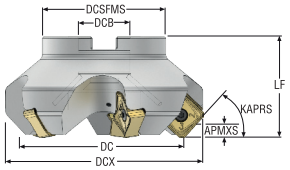
SMG	MK2050				MP3000				MS2050				F40M				MP2051			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	225 *740*	235 *770*	255 *840*	290 *950*	275 *900*	285 *940*	310 *1025*	355 *1175*	245 *800*	255 *840*	275 *900*	310 *1025*	235 *770*	240 *790*	255 *840*	285 *940*	285 *940*	290 *950*	325 *1075*	390 *1275*
P2	220 *720*	230 *750*	250 *820*	280 *920*	270 *890*	275 *900*		345 *1125*	240 *790*	250 *820*	270 *890*	300 *980*	230 *750*	235 *770*						
P3			220 *720*										205 *670*		220 *720*	245 *800*	250 *820*	255 *840*		340 *1125*
P4	170 *560*	180 *590*	195 *640*	220 *720*	210 *690*	215 *710*	235 *770*	270 *890*	185 *610*	195 *640*	210 *690*	235 *770*	185 *610*	190 *620*	205 *670*	225 *740*	220 *720*	220 *720*	250 *820*	300 *980*
P5	160 *520*	170 *560*	185 *610*	210 *690*	205 *670*	210 *690*	230 *750*	255 *840*	180 *590*	190 *620*	205 *670*	225 *740*	175 *570*	175 *570*	190 *620*	205 *670*	220 *720*	220 *720*	250 *820*	285 *940*
P6	185 *610*	195 *640*	215 *710*	235 *770*	230 *750*	240 *790*	260 *850*	290 *950*	205 *670*	210 *690*	230 *750*	250 *820*	195 *640*	200 *660*	215 *710*	230 *750*	245 *800*	250 *820*	280 *920*	320 *1050*
P7	175 *570*	185 *610*	200 *660*	220 *720*	215 *710*	225 *740*	245 *800*	270 *890*	195 *640*	200 *660*	215 *710*	235 *770*	185 *610*	190 *620*	200 *660*	220 *720*	230 *750*	235 *770*	265 *870*	300 *980*
P8	160 *520*	170 *560*	185 *610*	205 *670*	200 *660*	205 *670*	225 *740*	255 *840*	180 *590*	185 *610*	200 *660*	225 *740*	170 *560*	175 *570*	185 *610*	205 *670*	210 *690*	210 *690*	240 *790*	285 *940*
P11	170 *560*	180 *590*	195 *640*	215 *710*	210 *690*	220 *720*	240 *790*	265 *870*	185 *610*	195 *640*	210 *690*	230 *750*	180 *590*	180 *590*	195 *640*	210 *690*	210 *690*	225 *740*	260 *850*	310 *1025*
P12	110 *360*	120 *395*	130 *425*	145 *475*	145 *475*	150 *490*	160 *520*	180 *590*	125 *410*	130 *425*	140 *460*	155 *510*	120 *395*	125 *410*	130 *425*	145 *475*	155 *510*	170 *560*	190 *620*	225 *740*
M1	— —	— —	— —	— —	190 *620*	200 *660*	215 *710*	245 *800*	180 *590*	190 *620*	205 *670*	230 *750*	165 *540*	175 *570*	185 *610*	210 *690*	230 *750*	240 *790*	280 *920*	350 *1150*
M2	— —	— —	— —	— —	160 *520*	170 *560*	180 *590*	200 *660*	150 *490*	160 *520*	170 *560*	190 *620*	135 *445*	145 *475*	155 *510*	170 *560*	200 *660*	215 *710*	250 *820*	295 *970*
M3	— —	— —	— —	— —	130 *425*	135 *445*	145 *475*	165 *540*	120 *395*	130 *425*	140 *460*	155 *510*	110 *360*	115 *375*	125 *410*	140 *460*	175 *570*	190 *620*	215 *710*	260 *850*
M4	— —	— —	— —	— —	100 *330*	105 *345*	115 *375*	125 *410*	95 *310*	100 *330*	110 *360*	120 *395*	85 *280*	90 *295*	100 *330*	110 *360*	140 *460*	155 *510*	175 *570*	205 *670*
M5	— —	— —	— —	— —	85 *280*	90 *295*	95 *310*	105 *345*	80 *260*	85 *280*	90 *295*	100 *330*	70 *230*	75 *245*	80 *260*	90 *295*	120 *395*	130 *425*	145 *475*	170 *560*
K1	235 *770*	250 *820*	270 *890*	305 *1000*	200 *660*	215 *710*	230 *750*	255 *840*	— —	— —	— —	— —	160 *520*	170 *560*	185 *610*	205 *670*	— —	— —	— —	— —
K2	210 *690*	220 *720*	240 *790*	270 *890*	180 *590*	190 *620*	205 *670*	225 *740*	— —	— —	— —	— —	145 *475*	155 *510*	165 *540*	180 *590*	— —	— —	— —	— —
K3	175 *570*	185 *610*	205 *670*	230 *750*	150 *490*	160 *520*	175 *570*	190 *620*	— —	— —	— —	— —	120 *395*	130 *425*	140 *460*	155 *510*	— —	— —	— —	— —
K4	170 *560*	180 *590*	195 *640*	215 *710*	145 *475*	155 *510*	165 *540*	185 *610*	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	145 *475*	— —	— —	— —	— —
K5	105 *345*	110 *360*	120 *395*	135 *445*	90 *295*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	— —	— —	— —	— —
K6	150 *490*	160 *520*	170 *560*	190 *620*	130 *425*	135 *445*	145 *475*	160 *520*	— —	— —	— —	— —	105 *345*	110 *360*	115 *375*	130 *425*	— —	— —	— —	— —
K7	135 *445*	145 *475*	155 *510*	170 *560*	115 *375*	120 *395*	130 *425*	145 *475*	— —	— —	— —	— —	90 *295*	100 *330*	105 *345*	115 *375*	— —	— —	— —	— —
S1	— —	— —	— —	— —	47 *155*	50 *165*	55 *180*	60 *195*	44 *145*	47 *155*	50 *165*	55 *180*	40 *130*	43 *140*	46 *150*	50 *165*	49 *160*	50 *165*	55 *180*	60 *195*
S2	— —	— —	— —	— —	38 *125*	40 *130*	43 *140*	48 *155*	36 *120*	38 *125*	41 *135*	45 *150*	33 *110*	35 *115*	37 *120*	41 *135*	39 *130*	42 *140*	45 *150*	50 *165*
S3	— —	— —	— —	— —	33 *110*	35 *115*	38 *125*	41 *135*	32 *105*	34 *110*	36 *120*	39 *130*	29 *95*	31 *100*	33 *110*	36 *120*	35 *115*	37 *120*	40 *130*	43 *140*
S11	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	80 *260*	55 *180*	60 *195*	65 *215*	70 *230*	65 *215*	70 *230*	75 *245*	85 *280*
S12	— —	— —	— —	— —	— —	— —	— —	— —	43 *140*	45 *150*	49 *160*	55 *180*	39 *130*	41 *135*	44 *145*	49 *160*	47 *155*	49 *160*	55 *180*	60 *195*
S13	— —	— —	— —	— —	— —	— —	— —	— —	25 *80*	27 *90*	29 *95*	32 *105*	23 *75*	24 *80*	26 *85*	29 *95*	27 *90*	29 *95*	31 *100*	35 *115*
H5	38 *125*	41 *135*	44 *145*	49 *160*	40 *130*	42 *140*	45 *150*	50 *165*	— —	— —	— —	— —	34 *110*	36 *120*	39 *130*	43 *140*	— —	— —	— —	— —
H8	42 *140*	45 *150*	48 *155*	50 *165*	43 *140*	46 *150*	49 *160*	55 *180*	— —	— —	— —	— —	36 *120*	39 *130*	42 *140*	46 *150*	— —	— —	— —	— —
H11	49 *160*	50 *165*	55 *180*	60 *195*	50 *165*	55 *180*	60 *195*	65 *215*	— —	— —	— —	— —	43 *140*	46 *150*	49 *160*	55 *180*	100 *330*	110 *360*	125 *410*	145 *475*
H12	75 *245*	80 *260*	85 *280*	90 *295*	80 *260*	85 *280*	95 *310*	100 *330*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	80 *260*	100 *330*	115 *375*	125 *410*	140 *460*
H21	42 *140*	45 *150*	48 *155*	50 *165*	43 *140*	46 *150*	49 *160*	55 *180*	— —	— —	— —	— —	36 *120*	39 *130*	42 *140*	46 *150*	95 *310*	100 *330*	105 *345*	115 *375*

R220.56-14 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MS2500			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	320	325	350	395	310	315	340	380	370	380	410	450
	—	—	—	—	*1050*	*1075*	*1150*	*1300*	*1025*	*1025*	*1125*	*1250*	*1225*	*1250*	*1350*	*1475*
P2	—	—	—	—	310	320	345	385	300	305	330	370	360	370	400	440
	—	—	—	—	*1025*	*1050*	*1125*	*1275*	*980*	*1000*	*1075*	*1225*	*1175*	*1225*	*1300*	*1450*
P3	—	—	—	—	275	280	305	330	265	270	295	320	315	325	350	385
	—	—	—	—	*900*	*920*	*1000*	*1075*	*870*	*890*	*970*	*1050*	*1025*	*1075*	*1150*	*1275*
P4	—	—	—	—	245	250	265	300	235	240	260	290	280	285	305	340
	—	—	—	—	*800*	*820*	*870*	*980*	*770*	*790*	*850*	*950*	*920*	*940*	*1000*	*1125*
P5	—	—	—	—	230	235	255	285	225	230	245	275	270	280	300	325
	—	—	—	—	*750*	*770*	*840*	*940*	*740*	*750*	*800*	*900*	*890*	*920*	*980*	*1075*
P6	—	—	—	—	270	275	295	320	260	265	285	310	305	315	335	365
	—	—	—	—	*890*	*900*	*970*	*1050*	*850*	*870*	*940*	*1025*	*1000*	*1025*	*1100*	*1200*
P7	—	—	—	—	255	260	280	300	245	250	270	295	285	295	315	345
	—	—	—	—	*840*	*850*	*920*	*980*	*800*	*820*	*890*	*970*	*940*	*970*	*1025*	*1125*
P8	—	—	—	—	230	235	255	275	225	230	245	270	265	275	295	325
	—	—	—	—	*750*	*770*	*840*	*900*	*740*	*750*	*800*	*890*	*870*	*900*	*970*	*1075*
P11	—	—	—	—	245	250	270	295	240	245	260	285	280	290	310	335
	—	—	—	—	*800*	*820*	*890*	*970*	*790*	*800*	*850*	*940*	*920*	*950*	*1025*	*1100*
P12	—	—	—	—	165	170	180	200	160	165	175	195	180	190	200	220
	—	—	—	—	*540*	*560*	*590*	*660*	*520*	*540*	*570*	*640*	*590*	*620*	*660*	*720*
M1	—	—	—	—	—	—	—	—	160	170	185	205	210	220	240	270
	—	—	—	—	—	—	—	—	*520*	*560*	*610*	*670*	*690*	*720*	*790*	*890*
M2	—	—	—	—	—	—	—	—	135	140	150	170	175	185	200	220
	—	—	—	—	—	—	—	—	*445*	*460*	*490*	*560*	*570*	*610*	*660*	*720*
M3	—	—	—	—	—	—	—	—	110	115	125	140	140	150	160	180
	—	—	—	—	—	—	—	—	*360*	*375*	*410*	*460*	*460*	*490*	*520*	*590*
M4	—	—	—	—	—	—	—	—	85	90	95	110	110	120	125	140
	—	—	—	—	—	—	—	—	*280*	*295*	*310*	*360*	*360*	*395*	*410*	*460*
M5	—	—	—	—	—	—	—	—	70	75	80	90	90	100	105	115
	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*295*	*295*	*330*	*345*	*375*
K1	300	360	415	495	315	320	345	385	305	310	335	375	230	245	265	295
	980	*1175*	*1350*	*1625*	*1025*	*1050*	*1125*	*1275*	*1000*	*1025*	*1100*	*1225*	*750*	*800*	*870*	*970*
K2	265	320	365	435	280	285	310	345	270	275	300	335	210	220	240	260
	870	*1050*	*1200*	*1425*	*920*	*940*	*1025*	*1125*	*890*	*900*	*980*	*1100*	*690*	*720*	*790*	*850*
K3	195	215	240	275	235	245	260	290	230	235	250	285	175	185	200	220
	640	*710*	*790*	*900*	*770*	*800*	*850*	*950*	*750*	*770*	*820*	*940*	*570*	*610*	*660*	*720*
K4	185	205	230	265	225	230	250	280	220	225	240	270	170	180	190	210
	610	*670*	*750*	*870*	*740*	*750*	*820*	*920*	*720*	*740*	*790*	*890*	*560*	*590*	*620*	*690*
K5	115	130	145	160	145	145	160	175	140	145	155	170	105	110	120	130
	375	*425*	*475*	*520*	*475*	*475*	*520*	*570*	*460*	*475*	*510*	*560*	*345*	*360*	*395*	*425*
K6	165	180	200	230	200	205	220	245	195	195	210	240	150	155	170	185
	540	*590*	*660*	*750*	*660*	*670*	*720*	*800*	*640*	*640*	*690*	*790*	*490*	*510*	*560*	*610*
K7	150	165	185	205	185	190	200	220	180	185	195	215	135	140	150	165
	490	*540*	*610*	*670*	*610*	*620*	*660*	*720*	*590*	*610*	*640*	*710*	*445*	*460*	*490*	*540*
S1	—	—	—	—	—	—	—	—	—	—	—	—	55	60	60	70
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*195*	*230*
S2	—	—	—	—	—	—	—	—	—	—	—	—	44	46	50	55
	—	—	—	—	—	—	—	—	—	—	—	—	*145*	*150*	*165*	*180*
S3	—	—	—	—	—	—	—	—	—	—	—	—	38	41	44	48
	—	—	—	—	—	—	—	—	—	—	—	—	*125*	*135*	*145*	*155*
S11	—	—	—	—	—	—	—	—	—	—	—	—	75	80	85	95
	—	—	—	—	—	—	—	—	—	—	—	—	*245*	*260*	*280*	*310*
S12	—	—	—	—	—	—	—	—	—	—	—	—	50	55	60	65
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*215*
S13	—	—	—	—	—	—	—	—	—	—	—	—	30	32	35	39
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*105*	*115*	*130*
H5	—	—	—	—	43	45	49	55	—	—	—	—	44	47	50	55
	—	—	—	—	*140*	*150*	*160*	*180*	—	—	—	—	*145*	*155*	*165*	*180*
H8	—	—	—	—	47	50	55	60	—	—	—	—	47	50	55	60
	—	—	—	—	*155*	*165*	*180*	*195*	—	—	—	—	*155*	*165*	*180*	*195*
H11	—	—	—	—	55	55	60	70	—	—	—	—	55	60	65	70
	—	—	—	—	*180*	*180*	*195*	*230*	—	—	—	—	*180*	*195*	*215*	*230*
H12	—	—	—	—	85	90	95	105	—	—	—	—	95	100	110	120
	—	—	—	—	*280*	*295*	*310*	*345*	—	—	—	—	*310*	*330*	*360*	*395*
H21	—	—	—	—	47	50	55	60	—	—	—	—	47	50	55	60
	—	—	—	—	*155*	*165*	*180*	*195*	—	—	—	—	*155*	*165*	*180*	*195*

Double Quattro R220.54-22 – In mm

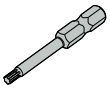
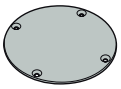




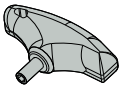
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.54-0080-22-5A	03156810	Manicotto	80,0	5	9,0	48,0 °	104,0	27,0	–	62,0	63,0	4600	1,6	SN.X2209A
R220.54-0080-22-6A	03157469	Manicotto	80,0	6	9,0	48,0 °	104,0	27,0	–	62,0	63,0	4600	1,5	SN.X2209A
R220.54-0100-22-5A	03156811	Manicotto	100,0	5	9,0	48,0 °	124,0	32,0	–	77,0	63,0	4000	2,4	SN.X2209A
R220.54-0100-22-7A	03157470	Manicotto	100,0	7	9,0	48,0 °	124,0	32,0	–	77,0	63,0	4000	2,2	SN.X2209A
R220.54-0125-22-6A	03156812	Manicotto	125,0	6	9,0	48,0 °	149,0	40,0	–	90,0	63,0	3700	3,3	SN.X2209A
R220.54-0125-22-8A	03157471	Manicotto	125,0	8	9,0	48,0 °	149,0	40,0	–	90,0	63,0	3700	3,3	SN.X2209A
R220.54-8160-22-8A	03156813	Manicotto	160,0	8	9,0	48,0 °	184,0	40,0	66,7	90,0	63,0	3300	5,7	SN.X2209A
R220.54-8160-22-11A	03157472	Manicotto	160,0	11	9,0	48,0 °	184,0	40,0	66,7	90,0	63,0	3300	5,7	SN.X2209A

Parti di ricambio, comprese nella fornitura

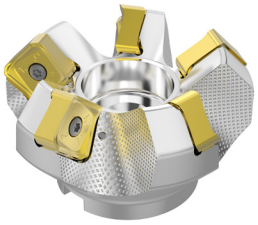
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
				
R220.54-0080	1/4HEX-T20PX50	C05013-T20P	–	–
R220.54-0100-0125	1/4HEX-T20PX90	C05013-T20P	–	–
R220.54-8160	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

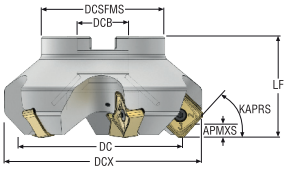
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54-0080	1/4HEX-T-HANDLE-5.0-14.0NM	5802712	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54-0100	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54-22 – Pollici

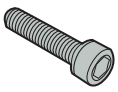
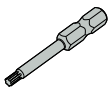
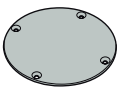




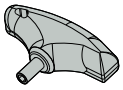
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.54-03.00-22-5A	03157473	Manicotto	3.150	5	0.354	48,0 °	4.094	1.000	2.441	2.480	4600	3.970	SN.X2209A
R220.54-03.00-22-6A	03157477	Manicotto	3.150	6	0.354	48,0 °	4.094	1.000	2.441	2.480	4600	3.750	SN.X2209A
R220.54-04.00-22-5A	03157474	Manicotto	3.937	5	0.354	48,0 °	4.882	1.500	3.543	2.480	4000	5.730	SN.X2209A
R220.54-04.00-22-7A	03157479	Manicotto	3.937	7	0.354	48,0 °	4.882	1.500	3.543	2.480	4000	5.510	SN.X2209A
R220.54-05.00-22-6A	03157475	Manicotto	4.921	6	0.354	48,0 °	5.866	1.500	3.543	2.480	3700	7.940	SN.X2209A
R220.54-05.00-22-8A	03157480	Manicotto	4.921	8	0.354	48,0 °	5.866	1.500	3.543	2.480	3700	7.500	SN.X2209A
R220.54-06.00-22-8A	03157476	Manicotto	6.299	8	0.354	48,0 °	7.244	2.000	4.331	2.480	3300	13.010	SN.X2209A
R220.54-06.00-22-11A	03157481	Manicotto	6.299	11	0.354	48,0 °	7.244	2.000	4.331	2.480	3300	13.010	SN.X2209A

Parti di ricambio, comprese nella fornitura

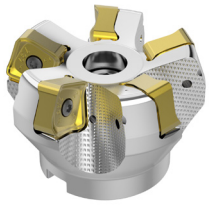
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.54-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C05013-T20P	–	–
R220.54-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.54-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.54-06.00	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

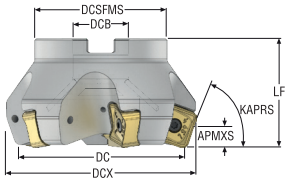
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54-03.00-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.56-22 – In mm

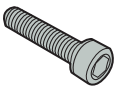
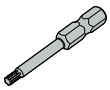
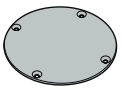




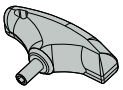
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
–Per il programma inserti completo, vedere le pagine 894
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.56-0080-22-5A	03157447	Manicotto	80,0	5	13,0	71,0 °	91,5	27,0	–	62,0	63,0	4600	1,4	SN.X2209ZN.R
R220.56-0100-22-5A	03156816	Manicotto	100,0	5	13,0	71,0 °	111,5	32,0	–	77,0	63,0	4000	2,1	SN.X2209ZN.R
R220.56-0100-22-7A	03157448	Manicotto	100,0	7	13,0	71,0 °	111,5	32,0	–	77,0	63,0	4000	1,9	SN.X2209ZN.R
R220.56-0125-22-6A	03156817	Manicotto	125,0	6	13,0	71,0 °	136,5	40,0	–	90,0	63,0	3700	2,9	SN.X2209ZN.R
R220.56-0125-22-8A	03157449	Manicotto	125,0	8	13,0	71,0 °	136,5	40,0	–	90,0	63,0	3700	2,9	SN.X2209ZN.R
R220.56-8160-22-8A	03156818	Manicotto	160,0	8	13,0	71,0 °	171,5	40,0	66,7	90,0	63,0	3300	5,0	SN.X2209ZN.R
R220.56-8160-22-10A	03157450	Manicotto	160,0	10	13,0	71,0 °	171,5	40,0	66,7	90,0	63,0	3300	4,9	SN.X2209ZN.R

Parti di ricambio, comprese nella fornitura

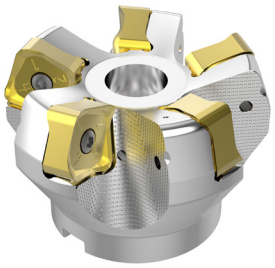
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.56-0080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P	–	–
R220.56-0100-0125	–	1/4HEX-T20PX90	C05013-T20P	–	–
R220.56-8160	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

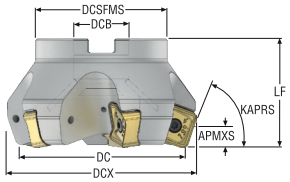
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.56-0080	1/4HEX-T-HANDLE-5.0-14.0NM	5802712	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.56-0100	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.56-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.56-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.56-22 – Pollici

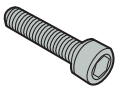
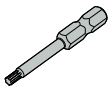
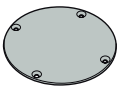




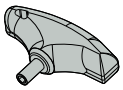
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.56-03.00-22-5A	03157454	Manicotto	3.150	5	0.512	71,0 °	3.602	1.000	2.441	2.480	4600	3.090	SN.X2209ZN.R
R220.56-04.00-22-5A	03157451	Manicotto	3.937	5	0.512	71,0 °	4.390	1.500	3.031	2.480	4000	4.630	SN.X2209ZN.R
R220.56-04.00-22-7A	03157455	Manicotto	3.937	7	0.512	71,0 °	4.390	1.500	3.031	2.480	4000	4.410	SN.X2209ZN.R
R220.56-05.00-22-6A	03157452	Manicotto	4.921	6	0.512	71,0 °	5.374	1.500	3.543	2.480	3700	7.940	SN.X2209ZN.R
R220.56-05.00-22-8A	03157456	Manicotto	4.921	8	0.512	71,0 °	5.374	1.500	3.543	2.480	3700	7.500	SN.X2209ZN.R
R220.56-06.00-22-8A	03157453	Manicotto	6.299	8	0.512	71,0 °	6.752	2.000	3.937	2.480	3300	10.800	SN.X2209ZN.R
R220.56-06.00-22-10A	03157457	Manicotto	6.299	10	0.512	71,0 °	6.752	2.000	4.331	2.480	3300	10.580	SN.X2209ZN.R

Parti di ricambio, comprese nella fornitura

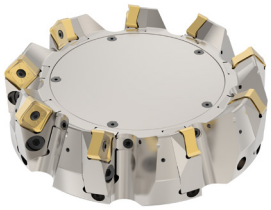
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.56-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C05013-T20P	–	–
R220.56-04.00-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.56-06.00	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

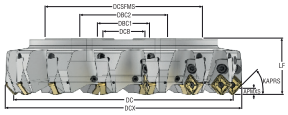
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.56-03.00-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.56-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54/56-22CS – In mm

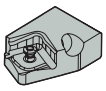
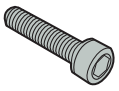
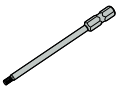
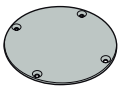
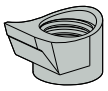




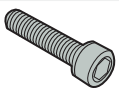
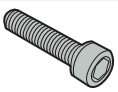
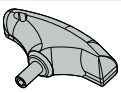
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.54-8200-22-9CS	03167768	Manicotto	200,0	9	9,0	48,0 °	224,0	60,0	101,6	–	130,0	80,0	2700	9,9	SN.X2209A
R220.56-8200-22-9CS	03167771	Manicotto	200,0	9	13,0	71,0 °	211,5	60,0	101,6	–	130,0	80,0	2700	9,9	SN.X2209ZN.R
R220.54-8250-22-11CS	03167769	Manicotto	250,0	11	9,0	48,0 °	274,0	60,0	101,6	–	130,0	80,0	2500	17,9	SN.X2209A
R220.56-8250-22-11CS	03167772	Manicotto	250,0	11	13,0	71,0 °	261,5	60,0	101,6	–	130,0	80,0	2500	18,0	SN.X2209ZN.R
R220.54-8315-22-14CS	03167770	Manicotto	315,0	14	9,0	48,0 °	339,0	60,0	101,6	177,8	225,0	80,0	2200	34,0	SN.X1407A
R220.56-8315-22-14CS	03167773	Manicotto	315,0	14	13,0	71,0 °	326,5	60,0	101,6	177,8	225,0	80,0	2200	29,2	SN.X2209ZN.R

Parti di ricambio, comprese nella fornitura

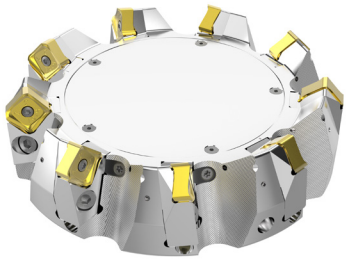
Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
									
R220.54-8200	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8018-T25P
R220.54-8250	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-8315	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-8200	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8018-T25P
R220.56-8250	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-8315	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P

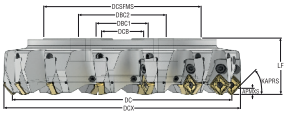
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R220.54/56-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54/56-8315	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	MC6S20X50	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Quattro R220.54/56-22C – Pollici

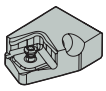
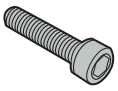
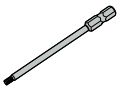
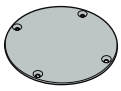
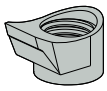




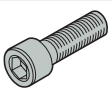
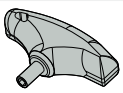
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 258-263
—Per il programma inserti completo, vedere le pagine 894
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.54-808.00-22-9C	03167774	Manicotto	7.874	9	0.354	48,0 °	8.819	2.500	4.000	4.000	5.118	3.150	2700	24.030	SN.X2209A
R220.56-808.00-22-9C	03167777	Manicotto	7.874	9	0.512	71,0 °	8.335	2.500	4.000	4.000	5.118	3.150	2700	20.060	SN.X2209ZN.R
R220.54-810.00-22-11C	03167775	Manicotto	9.843	11	0.354	48,0 °	10.787	2.500	4.000	4.000	5.118	3.150	2500	50.040	SN.X2209A
R220.56-810.00-22-11C	03167778	Manicotto	9.843	11	0.512	71,0 °	10.307	2.500	4.000	4.000	5.118	3.150	2500	49.600	SN.X2209ZN.R
R220.54-812.50-22-14C	03167776	Manicotto	12.402	14	0.354	48,0 °	13.346	2.500	4.000	4.000	8.858	3.150	2200	81.570	SN.X2209A
R220.56-812.50-22-14C	03167779	Manicotto	12.402	14	0.512	71,0 °	12.866	2.500	4.000	4.000	8.858	3.150	2200	75.620	SN.X2209ZN.R

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
									
R220.54-808.00	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8018-T25P
R220.54-810.00	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.54-812.50	AU1114T-T15P	SN22AR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-808.00	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8018-T25P
R220.56-810.00	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-250-90	MF6S4X10	CW0810	LD8020-T25P
R220.56-812.50	AU1114T-T15P	SN22ZR	MC6S8X30	1/4HEX-T20PX90	C05013-T20P	SC-315-90	MF6S4X10	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.54/56-808.-810.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.54/56-812.50	1/4HEX-T-HANDLE-5.0-14.0NM	950DNC062225	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.54-22 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMX2209ANTR-M12 MP2501	7,0 *0.28*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P2	SNMX2209ANTR-M12 MP2501	7,0 *0.28*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.015
P3	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.022
P4	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.020
P5	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
P6	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,40 0.016	0,50 0.020
P7	SNMX2209ANTR-M18 MP3501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,40 0.016	0,50 0.020
P8	SNMX2209ANTR-M18 MP3501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.022
P11	SNMX2209ANTR-M12 MP2051	7,0 *0.28*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
P12	SNMX2209ANTR-M12 MP2051	6,0 *0.24*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
M1	SNMX2209ANR-ME12 F40M	7,0 *0.28*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
M2	SNMX2209ANR-ME12 F40M	7,0 *0.28*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,32 0.013
M3	SNMX2209ANTR-M12 MS2050	6,0 *0.24*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M4	SNMX2209ANTR-M12 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
M5	SNMX2209ANTR-M12 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
K1	SNMX2209ANTR-M18 MK1501	7,0 *0.28*	0,44 0.017	0,44 0.017	0,44 0.017	0,55 0.022
K2	SNMX2209ANTR-M18 MK1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K3	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K4	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K5	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,36 0.014	0,36 0.014	0,36 0.014	0,46 0.018
K6	SNMX2209ANTR-M18 MK2050	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K7	SNMX2209ANTR-M18 MK2050	7,0 *0.28*	0,36 0.014	0,36 0.014	0,36 0.014	0,46 0.018
S1	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
S2	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
S3	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
S11	SNMX2209ANTR-M12 MS2050	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S12	SNMX2209ANTR-M12 MS2050	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S13	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H5	SNMX2209ANTR-M18 MP1501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
H8	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H11	SNMX2209ANTR-M18 MP1501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
H12	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H21	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.54-22 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MS2050				F40M				MP2050			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	215 *710*	230 *750*	245 *800*	275 *900*	200 *660*	215 *710*	230 *750*	260 *850*	185 *610*	200 *660*	215 *710*	240 *790*	235 *770*	250 *820*	270 *890*	305 *1000*
P2	210 *690*	220 *720*	240 *790*	265 *870*	195 *640*	210 *690*	225 *740*	250 *820*	180 *590*	195 *640*	210 *690*	235 *770*	230 *750*	245 *800*	265 *870*	295 *970*
P3	185 *610*	195 *640*	210 *690*	235 *770*	175 *570*	185 *610*	200 *660*	215 *710*	160 *520*	170 *560*	185 *610*	200 *660*	205 *670*	215 *710*	235 *770*	255 *840*
P4	160 *520*	170 *560*	185 *610*	210 *690*	150 *490*	160 *520*	175 *570*	195 *640*	140 *460*	150 *490*	160 *520*	180 *590*	180 *590*	190 *620*	205 *670*	230 *750*
P5	155 *510*	165 *540*	180 *590*	200 *660*	145 *475*	155 *510*	165 *540*	185 *610*	135 *445*	145 *475*	155 *510*	175 *570*	170 *560*	180 *590*	195 *640*	220 *720*
P6	175 *570*	185 *610*	200 *660*	225 *740*	165 *540*	175 *570*	190 *620*	210 *690*	155 *510*	165 *540*	175 *570*	195 *640*	195 *640*	210 *690*	225 *740*	245 *800*
P7	165 *540*	175 *570*	190 *620*	210 *690*	155 *510*	165 *540*	180 *590*	195 *640*	145 *475*	155 *510*	165 *540*	185 *610*	185 *610*	195 *640*	215 *710*	230 *750*
P8	155 *510*	165 *540*	175 *570*	195 *640*	145 *475*	155 *510*	165 *540*	180 *590*	135 *445*	145 *475*	155 *510*	170 *560*	170 *560*	180 *590*	195 *640*	215 *710*
P11	160 *520*	170 *560*	185 *610*	205 *670*	155 *510*	160 *520*	175 *570*	190 *620*	140 *460*	150 *490*	160 *520*	180 *590*	180 *590*	190 *620*	205 *670*	225 *740*
P12	110 *360*	115 *375*	125 *410*	135 *445*	100 *330*	105 *345*	115 *375*	125 *410*	95 *310*	100 *330*	105 *345*	115 *375*	115 *375*	125 *410*	135 *445*	150 *490*
M1	— —	— —	— —	— —	160 *520*	170 *560*	180 *590*	205 *670*	145 *475*	155 *510*	170 *560*	190 *620*	165 *540*	175 *570*	190 *620*	215 *710*
M2	— —	— —	— —	— —	130 *425*	140 *460*	150 *490*	170 *560*	125 *410*	130 *425*	140 *460*	155 *510*	135 *445*	145 *475*	155 *510*	175 *570*
M3	— —	— —	— —	— —	105 *345*	115 *375*	125 *410*	135 *445*	100 *330*	105 *345*	115 *375*	125 *410*	110 *360*	120 *395*	130 *425*	145 *475*
M4	— —	— —	— —	— —	85 *280*	90 *295*	95 *310*	105 *345*	75 *245*	80 *260*	90 *295*	100 *330*	85 *280*	90 *295*	100 *330*	110 *360*
M5	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	65 *215*	70 *230*	75 *245*	80 *260*	75 *245*	75 *245*	85 *280*	90 *295*
K1	225 *740*	240 *790*	260 *850*	290 *950*	— —	— —	— —	— —	145 *475*	155 *510*	165 *540*	185 *610*	— —	— —	— —	— —
K2	205 *670*	215 *710*	235 *770*	255 *840*	— —	— —	— —	— —	130 *425*	140 *460*	150 *490*	165 *540*	— —	— —	— —	— —
K3	170 *560*	180 *590*	195 *640*	220 *720*	— —	— —	— —	— —	110 *360*	115 *375*	125 *410*	140 *460*	— —	— —	— —	— —
K4	165 *540*	175 *570*	190 *620*	210 *690*	— —	— —	— —	— —	105 *345*	110 *360*	120 *395*	135 *445*	— —	— —	— —	— —
K5	100 *330*	105 *345*	115 *375*	130 *425*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	80 *260*	— —	— —	— —	— —
K6	145 *475*	155 *510*	165 *540*	185 *610*	— —	— —	— —	— —	90 *295*	100 *330*	105 *345*	115 *375*	— —	— —	— —	— —
K7	130 *425*	135 *445*	150 *490*	165 *540*	— —	— —	— —	— —	85 *280*	90 *295*	95 *310*	105 *345*	— —	— —	— —	— —
S1	— —	— —	— —	— —	39 *130*	41 *135*	44 *145*	49 *160*	36 *120*	38 *125*	42 *140*	46 *150*	43 *140*	45 *150*	49 *160*	55 *180*
S2	— —	— —	— —	— —	31 *100*	33 *110*	36 *120*	40 *130*	29 *95*	31 *100*	33 *110*	37 *120*	34 *110*	36 *120*	39 *130*	44 *145*
S3	— —	— —	— —	— —	27 *90*	29 *95*	32 *105*	35 *115*	26 *85*	27 *90*	29 *95*	32 *105*	30 *100*	32 *105*	35 *115*	38 *125*
S11	— —	— —	— —	— —	55 *180*	60 *195*	60 *195*	70 *230*	49 *160*	50 *165*	55 *180*	65 *215*	60 *195*	65 *215*	70 *230*	75 *245*
S12	— —	— —	— —	— —	38 *125*	40 *130*	43 *140*	48 *155*	34 *110*	36 *120*	39 *130*	44 *145*	41 *135*	44 *145*	47 *155*	55 *180*
S13	— —	— —	— —	— —	22 *70*	23 *75*	25 *80*	28 *90*	20 *65*	21 *70*	23 *75*	26 *85*	24 *80*	25 *80*	27 *90*	30 *100*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	45 *150*	47 *155*	50 *165*	55 *180*
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	85 *280*	95 *310*
H21	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	38 *125*	40 *130*	43 *140*	48 *155*

R220.54-22 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	305	315	340	370	295	300	325	360	260	265	285	315
	—	—	—	—	*1000*	*1025*	*1125*	*1225*	*970*	*980*	*1075*	*1175*	*850*	*870*	*940*	*1025*
P2	—	—	—	—	290	300	320	360	280	285	310	350	245	250	270	310
	—	—	—	—	*950*	*980*	*1050*	*1175*	*920*	*940*	*1025*	*1150*	*800*	*820*	*890*	*1025*
P3	—	—	—	—	260	270	290	320	255	255	280	305	225	225	245	270
	—	—	—	—	*850*	*890*	*950*	*1050*	*840*	*840*	*920*	*1000*	*740*	*740*	*800*	*890*
P4	—	—	—	—	230	235	255	280	225	225	245	270	195	200	215	240
	—	—	—	—	*750*	*770*	*840*	*920*	*740*	*740*	*800*	*890*	*640*	*660*	*710*	*790*
P5	—	—	—	—	220	225	245	275	215	215	235	265	185	190	205	235
	—	—	—	—	*720*	*740*	*800*	*900*	*710*	*710*	*770*	*870*	*610*	*620*	*670*	*770*
P6	—	—	—	—	255	260	280	305	245	250	270	295	215	220	235	260
	—	—	—	—	*840*	*850*	*920*	*1000*	*800*	*820*	*890*	*970*	*710*	*720*	*770*	*850*
P7	—	—	—	—	240	245	265	290	230	235	255	280	205	205	225	245
	—	—	—	—	*790*	*800*	*870*	*950*	*750*	*770*	*840*	*920*	*670*	*670*	*740*	*800*
P8	—	—	—	—	220	225	245	265	215	215	235	260	185	190	205	230
	—	—	—	—	*720*	*740*	*800*	*870*	*710*	*710*	*770*	*850*	*610*	*620*	*670*	*750*
P11	—	—	—	—	230	240	255	280	225	230	245	270	200	200	215	240
	—	—	—	—	*750*	*790*	*840*	*920*	*740*	*750*	*800*	*890*	*660*	*660*	*710*	*790*
P12	—	—	—	—	160	165	175	190	155	160	170	185	140	140	150	165
	—	—	—	—	*520*	*540*	*570*	*620*	*510*	*520*	*560*	*610*	*460*	*460*	*490*	*540*
M1	—	—	—	—	—	—	—	—	150	160	175	195	140	150	165	185
	—	—	—	—	—	—	—	—	*490*	*520*	*570*	*640*	*460*	*490*	*540*	*610*
M2	—	—	—	—	—	—	—	—	125	135	145	165	120	125	135	155
	—	—	—	—	—	—	—	—	*410*	*445*	*475*	*540*	*395*	*410*	*445*	*510*
M3	—	—	—	—	—	—	—	—	105	110	120	135	100	105	110	125
	—	—	—	—	—	—	—	—	*345*	*360*	*395*	*445*	*330*	*345*	*360*	*410*
M4	—	—	—	—	—	—	—	—	85	85	95	105	75	80	90	100
	—	—	—	—	—	—	—	—	*280*	*280*	*310*	*345*	*245*	*260*	*295*	*330*
M5	—	—	—	—	—	—	—	—	70	75	80	90	65	70	75	80
	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*295*	*215*	*230*	*245*	*260*
K1	290	355	405	480	295	300	325	365	285	290	310	355	250	250	275	310
	950	*1175*	*1325*	*1575*	*970*	*980*	*1075*	*1200*	*940*	*950*	*1025*	*1175*	*820*	*820*	*900*	*1025*
K2	255	310	360	425	265	275	295	330	255	260	285	320	225	230	250	280
	840	*1025*	*1175*	*1400*	*870*	*900*	*970*	*1075*	*840*	*850*	*940*	*1050*	*740*	*750*	*820*	*920*
K3	190	210	230	265	225	230	250	280	220	220	240	270	190	195	210	240
	620	*690*	*750*	*870*	*740*	*750*	*820*	*920*	*720*	*720*	*790*	*890*	*620*	*640*	*690*	*790*
K4	180	200	220	255	215	220	240	265	210	210	230	260	185	185	200	230
	590	*660*	*720*	*840*	*710*	*720*	*790*	*870*	*690*	*690*	*750*	*850*	*610*	*610*	*660*	*750*
K5	110	125	135	155	135	140	150	165	130	135	145	160	115	115	125	140
	360	*410*	*445*	*510*	*445*	*460*	*490*	*540*	*425*	*445*	*475*	*520*	*375*	*375*	*410*	*460*
K6	160	175	195	225	190	195	210	235	185	185	200	225	160	165	175	200
	520	*570*	*640*	*740*	*620*	*640*	*690*	*770*	*610*	*610*	*660*	*740*	*520*	*540*	*570*	*660*
K7	140	160	175	200	170	175	190	210	165	170	185	205	145	150	160	180
	460	*520*	*570*	*660*	*560*	*570*	*620*	*690*	*540*	*560*	*610*	*670*	*475*	*490*	*520*	*590*
S1	—	—	—	—	—	—	—	—	—	—	—	—	36	38	41	46
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*125*	*135*	*150*
S2	—	—	—	—	—	—	—	—	—	—	—	—	29	31	33	37
	—	—	—	—	—	—	—	—	—	—	—	—	*95*	*100*	*110*	*120*
S3	—	—	—	—	—	—	—	—	—	—	—	—	26	27	29	33
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*95*	*110*
S11	—	—	—	—	—	—	—	—	—	—	—	—	50	50	55	65
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*165*	*180*	*215*
S12	—	—	—	—	—	—	—	—	—	—	—	—	34	36	39	44
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*120*	*130*	*145*
S13	—	—	—	—	—	—	—	—	—	—	—	—	20	21	23	26
	—	—	—	—	—	—	—	—	—	—	—	—	*65*	*70*	*75*	*85*
H5	—	—	—	—	42	44	48	50	—	—	—	—	32	34	37	40
	—	—	—	—	*140*	*145*	*155*	*165*	—	—	—	—	*105*	*110*	*120*	*130*
H8	—	—	—	—	45	48	50	55	—	—	—	—	35	37	40	43
	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—	*115*	*120*	*130*	*140*
H11	—	—	—	—	55	55	60	65	—	—	—	—	41	43	47	50
	—	—	—	—	*180*	*180*	*195*	*215*	—	—	—	—	*135*	*140*	*155*	*165*
H12	—	—	—	—	80	85	95	100	—	—	—	—	65	65	70	80
	—	—	—	—	*260*	*280*	*310*	*330*	—	—	—	—	*215*	*215*	*230*	*260*
H21	—	—	—	—	45	48	50	55	—	—	—	—	35	37	40	43
	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—	*115*	*120*	*130*	*140*

R220.56-22 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMX2209ZNTR-M12 MP2501	10,0 *0.40*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
P2	SNMX2209ZNTR-M12 MP2501	10,0 *0.40*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
P3	SNMX2209ZNTR-M18 MP2501	10,0 *0.40*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P4	SNMX2209ZNTR-M18 MP2501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,40 0.016
P5	SNMX2209ZNTR-M18 MP2501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
P6	SNMX2209ZNTR-M18 MP2501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P7	SNMX2209ZNTR-M18 MP3501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P8	SNMX2209ZNTR-M18 MP3501	10,0 *0.40*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P11	SNMX2209ZNTR-M18 MP3501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P12	SNMX2209ZNTR-M18 MP3501	8,0 *0.32*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
M1	SNMX2209ZNTR-M12 MS2050	10,0 *0.40*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M2	SNMX2209ZNTR-M12 MS2050	10,0 *0.40*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
M3	SNMX2209ZNTR-M12 MS2050	8,0 *0.32*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
M4	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
M5	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
K1	SNMX2209ZNTR-M18 MK1500	10,0 *0.40*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K2	SNMX2209ZNTR-M18 MK1500	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K3	SNMX2209ZNTR-M18 MP1501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K4	SNMX2209ZNTR-M18 MP1501	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K5	SNMX2209ZNTR-M18 MP1501	10,0 *0.40*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K6	SNMX2209ZNTR-M18 MK2050	10,0 *0.40*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K7	SNMX2209ZNTR-M18 MK2050	10,0 *0.40*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
S1	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S2	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S3	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,17 0.0065
S11	SNMX2209ZNTR-M12 MS2050	7,0 *0.28*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
S12	SNMX2209ZNTR-M12 MS2050	7,0 *0.28*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
S13	SNMX2209ZNTR-M12 MS2050	6,0 *0.24*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
H5	SNMX2209ZNTR-M18 MP1501	8,0 *0.32*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H8	SNMX2209ZNTR-M18 MP1501	7,0 *0.28*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
H11	SNMX2209ZNTR-M18 MP1501	8,0 *0.32*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H12	SNMX2209ZNTR-M18 MP1501	7,0 *0.28*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
H21	SNMX2209ZNTR-M18 MP1501	7,0 *0.28*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.56-22 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MS2050				F40M			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	220 *720*	230 *750*	250 *820*	280 *920*	205 *670*	220 *720*	235 *770*	265 *870*	190 *620*	200 *660*	215 *710*	240 *790*
P2	215 *710*	225 *740*	240 *790*	270 *890*	200 *660*	215 *710*	230 *750*	250 *820*	185 *610*	195 *640*	210 *690*	225 *740*
P3	185 *610*	195 *640*	215 *710*	235 *770*	175 *570*	185 *610*	200 *660*	220 *720*	160 *520*	165 *540*	180 *590*	200 *660*
P4	165 *540*	175 *570*	185 *610*	210 *690*	155 *510*	160 *520*	175 *570*	195 *640*	140 *460*	145 *475*	160 *520*	175 *570*
P5	160 *520*	170 *560*	185 *610*	200 *660*	150 *490*	160 *520*	170 *560*	185 *610*	135 *445*	145 *475*	155 *510*	170 *560*
P6	180 *590*	190 *620*	205 *670*	225 *740*	170 *560*	180 *590*	190 *620*	215 *710*	155 *510*	160 *520*	175 *570*	195 *640*
P7	170 *560*	180 *590*	195 *640*	215 *710*	160 *520*	170 *560*	180 *590*	205 *670*	145 *475*	155 *510*	165 *540*	185 *610*
P8	155 *510*	165 *540*	180 *590*	195 *640*	145 *475*	155 *510*	165 *540*	185 *610*	135 *445*	140 *460*	150 *490*	170 *560*
P11	165 *540*	175 *570*	190 *620*	205 *670*	155 *510*	165 *540*	175 *570*	195 *640*	140 *460*	150 *490*	160 *520*	180 *590*
P12	110 *360*	115 *375*	125 *410*	140 *460*	100 *330*	110 *360*	115 *375*	125 *410*	95 *310*	100 *330*	105 *345*	115 *375*
M1	— —	— —	— —	— —	160 *520*	170 *560*	185 *610*	200 *660*	150 *490*	155 *510*	170 *560*	185 *610*
M2	— —	— —	— —	— —	135 *445*	145 *475*	155 *510*	165 *540*	125 *410*	130 *425*	140 *460*	150 *490*
M3	— —	— —	— —	— —	110 *360*	115 *375*	125 *410*	140 *460*	100 *330*	105 *345*	110 *360*	125 *410*
M4	— —	— —	— —	— —	85 *280*	90 *295*	95 *310*	105 *345*	80 *260*	80 *260*	90 *295*	100 *330*
M5	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	65 *215*	70 *230*	75 *245*	80 *260*
K1	230 *750*	240 *790*	260 *850*	295 *970*	— —	— —	— —	— —	145 *475*	155 *510*	165 *540*	180 *590*
K2	210 *690*	220 *720*	235 *770*	260 *850*	— —	— —	— —	— —	130 *425*	135 *445*	150 *490*	160 *520*
K3	175 *570*	185 *610*	200 *660*	220 *720*	— —	— —	— —	— —	110 *360*	115 *375*	125 *410*	135 *445*
K4	170 *560*	175 *570*	190 *620*	210 *690*	— —	— —	— —	— —	105 *345*	110 *360*	120 *395*	130 *425*
K5	100 *330*	110 *360*	115 *375*	130 *425*	— —	— —	— —	— —	65 *215*	65 *215*	70 *230*	80 *260*
K6	150 *490*	155 *510*	170 *560*	185 *610*	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	115 *375*
K7	130 *425*	140 *460*	150 *490*	165 *540*	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	105 *345*
S1	— —	— —	— —	— —	40 *130*	42 *140*	45 *150*	50 *165*	36 *120*	38 *125*	41 *135*	46 *150*
S2	— —	— —	— —	— —	32 *105*	34 *110*	36 *120*	40 *130*	29 *95*	31 *100*	33 *110*	37 *120*
S3	— —	— —	— —	— —	28 *90*	30 *100*	32 *105*	35 *115*	26 *85*	27 *90*	29 *95*	32 *105*
S11	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	70 *230*	50 *165*	55 *180*	55 *180*	65 *215*
S12	— —	— —	— —	— —	38 *125*	40 *130*	43 *140*	48 *155*	35 *115*	37 *120*	39 *130*	44 *145*
S13	— —	— —	— —	— —	22 *70*	24 *80*	25 *80*	28 *90*	20 *65*	22 *70*	23 *75*	26 *85*
H5	— —	— —	— —	— —	— —	— —	— —	— —	31 *100*	33 *110*	35 *115*	38 *125*
H8	— —	— —	— —	— —	— —	— —	— —	— —	33 *110*	35 *115*	38 *125*	42 *140*
H11	— —	— —	— —	— —	— —	— —	— —	— —	39 *130*	41 *135*	45 *150*	49 *160*
H12	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	65 *215*	75 *245*
H21	— —	— —	— —	— —	— —	— —	— —	— —	33 *110*	35 *115*	38 *125*	42 *140*

R220.56-22 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1500				MP1501				MP2501				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	305	310	335	380	295	300	325	365	260	260	285	320
	—	—	—	—	*1000*	*1025*	*1100*	*1250*	*970*	*980*	*1075*	*1200*	*850*	*850*	*940*	*1050*
P2	—	—	—	—	300	305	325	370	285	290	315	355	255	255	275	315
	—	—	—	—	*980*	*1000*	*1075*	*1225*	*940*	*950*	*1025*	*1175*	*840*	*840*	*900*	*1025*
P3	—	—	—	—	265	270	290	315	255	260	280	305	225	225	245	270
	—	—	—	—	*870*	*890*	*950*	*1025*	*840*	*850*	*920*	*1000*	*740*	*740*	*800*	*890*
P4	—	—	—	—	235	235	255	285	225	225	245	275	195	200	215	245
	—	—	—	—	*770*	*770*	*840*	*940*	*740*	*740*	*800*	*900*	*640*	*660*	*710*	*800*
P5	—	—	—	—	230	235	250	275	220	225	240	265	195	195	215	235
	—	—	—	—	*750*	*770*	*820*	*900*	*720*	*740*	*790*	*870*	*640*	*640*	*710*	*770*
P6	—	—	—	—	255	260	280	305	250	250	270	295	220	220	240	260
	—	—	—	—	*840*	*850*	*920*	*1000*	*820*	*820*	*890*	*970*	*720*	*720*	*790*	*850*
P7	—	—	—	—	240	245	265	290	235	235	255	280	205	210	225	245
	—	—	—	—	*790*	*800*	*870*	*950*	*770*	*770*	*840*	*920*	*670*	*690*	*740*	*800*
P8	—	—	—	—	220	225	245	265	215	215	235	255	190	190	205	225
	—	—	—	—	*720*	*740*	*800*	*870*	*710*	*710*	*770*	*840*	*620*	*620*	*670*	*740*
P11	—	—	—	—	235	240	260	280	225	230	250	270	200	205	220	240
	—	—	—	—	*770*	*790*	*850*	*920*	*740*	*750*	*820*	*890*	*660*	*670*	*720*	*790*
P12	—	—	—	—	160	160	175	190	155	155	170	185	135	140	150	165
	—	—	—	—	*520*	*520*	*570*	*620*	*510*	*510*	*560*	*610*	*445*	*460*	*490*	*540*
M1	—	—	—	—	—	—	—	—	155	165	175	200	145	150	165	185
	—	—	—	—	—	—	—	—	*510*	*540*	*570*	*660*	*475*	*490*	*540*	*610*
M2	—	—	—	—	—	—	—	—	130	140	150	165	120	130	140	155
	—	—	—	—	—	—	—	—	*425*	*460*	*490*	*540*	*395*	*425*	*460*	*510*
M3	—	—	—	—	—	—	—	—	105	115	120	135	100	105	115	125
	—	—	—	—	—	—	—	—	*345*	*375*	*395*	*445*	*330*	*345*	*375*	*410*
M4	—	—	—	—	—	—	—	—	85	90	95	105	80	85	90	100
	—	—	—	—	—	—	—	—	*280*	*295*	*310*	*345*	*260*	*280*	*295*	*330*
M5	—	—	—	—	—	—	—	—	70	75	80	90	65	70	75	85
	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*295*	*215*	*230*	*245*	*280*
K1	240	255	275	310	300	305	330	370	290	295	315	360	255	255	280	315
	790	*840*	*900*	*1025*	*980*	*1000*	*1075*	*1225*	*950*	*970*	*1025*	*1175*	*840*	*840*	*920*	*1025*
K2	220	230	250	275	275	280	305	330	265	270	290	320	235	240	255	280
	720	*750*	*820*	*900*	*900*	*920*	*1000*	*1075*	*870*	*890*	*950*	*1050*	*770*	*790*	*840*	*920*
K3	185	195	210	230	235	240	255	280	225	230	245	270	200	200	220	240
	610	*640*	*690*	*750*	*770*	*790*	*840*	*920*	*740*	*750*	*800*	*890*	*660*	*660*	*720*	*790*
K4	175	185	200	220	225	225	245	265	215	220	235	260	190	190	210	230
	570	*610*	*660*	*720*	*740*	*740*	*800*	*870*	*710*	*720*	*770*	*850*	*620*	*620*	*690*	*750*
K5	110	115	125	140	135	140	150	170	135	135	145	165	115	120	130	145
	360	*375*	*410*	*460*	*445*	*460*	*490*	*560*	*445*	*445*	*475*	*540*	*375*	*395*	*425*	*475*
K6	155	165	180	195	195	200	215	235	190	195	210	225	170	170	185	200
	510	*540*	*590*	*640*	*640*	*660*	*710*	*770*	*620*	*640*	*690*	*740*	*560*	*560*	*610*	*660*
K7	140	145	155	175	175	180	190	215	170	170	185	210	150	150	165	185
	460	*475*	*510*	*570*	*570*	*590*	*620*	*710*	*560*	*560*	*610*	*690*	*490*	*490*	*540*	*610*
S1	—	—	—	—	—	—	—	—	—	—	—	—	37	39	42	46
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*140*	*150*
S2	—	—	—	—	—	—	—	—	—	—	—	—	30	31	33	37
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*100*	*110*	*120*
S3	—	—	—	—	—	—	—	—	—	—	—	—	26	27	30	32
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*100*	*105*
S11	—	—	—	—	—	—	—	—	—	—	—	—	50	55	55	65
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*180*	*215*
S12	—	—	—	—	—	—	—	—	—	—	—	—	35	36	40	44
	—	—	—	—	—	—	—	—	—	—	—	—	*115*	*120*	*130*	*145*
S13	—	—	—	—	—	—	—	—	—	—	—	—	21	22	23	26
	—	—	—	—	—	—	—	—	—	—	—	—	*70*	*70*	*75*	*85*
H5	—	—	—	—	41	44	47	55	—	—	—	—	32	34	36	41
	—	—	—	—	*135*	*145*	*155*	*180*	—	—	—	—	*105*	*110*	*120*	*135*
H8	—	—	—	—	45	48	50	55	—	—	—	—	35	37	40	44
	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—	*115*	*120*	*130*	*145*
H11	—	—	—	—	55	55	60	65	—	—	—	—	41	43	46	50
	—	—	—	—	*180*	*180*	*195*	*215*	—	—	—	—	*135*	*140*	*150*	*165*
H12	—	—	—	—	80	85	95	100	—	—	—	—	60	65	70	80
	—	—	—	—	*260*	*280*	*310*	*330*	—	—	—	—	*195*	*215*	*230*	*260*
H21	—	—	—	—	45	48	50	55	—	—	—	—	35	37	40	44
	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—	*115*	*120*	*130*	*145*

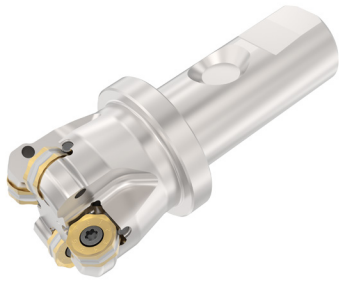


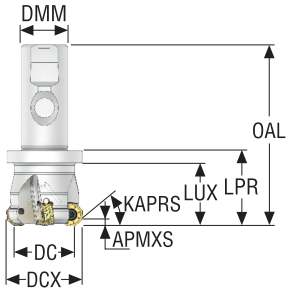
DOUBLE OCTOMILL 05/09

La fresa per spianatura f Double Octomill è estremamente versatile, economica e produttiva e può essere utilizzata sia per la sgrossatura che per la finitura. Grazie agli inserti bilaterali con un totale di 16 taglienti, la fresa rappresenta una combinazione di prestazioni elevate e funzionamento economico. La fresa Double Octomill presenta un corpo rivestito pre-temprato per garantire una lunga durata, proteggendola dall'usura e impedendo l'incollamento dei trucioli.

– Dimensione dell'inserto 05, gamma frese 25-125 mm (1,25-4")
– Dimensione dell'inserto 09, gamma frese 63-500 mm (2,5-12,5")
– Inserti bilaterali con 16 taglienti

Double Octomill™ R217.48-05 – In mm

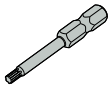




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 871
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R217.48-2025.3S-05-3SA	02810001	Seco-Weldon	25,0	3	3,0	40,0 °	33,0	20,0	33,0	40,0	90,0	20400	0,3	ONMU0504
R217.48-2532.3S-05-4SA	02810002	Seco-Weldon	32,0	4	3,0	40,0 °	40,0	25,0	33,0	40,0	90,0	18000	0,5	ONMU0504

Parti di ricambio, comprese nella fornitura

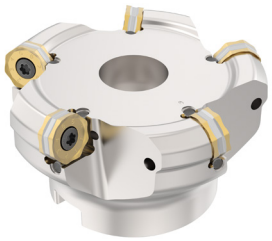
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.48-..	1/4HEX-T15PX50	C04009-T15P

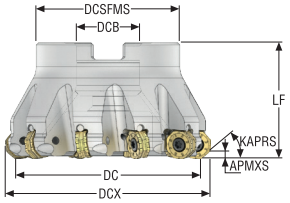
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.48-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R220.48-05 – In mm

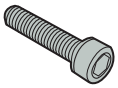
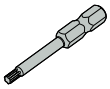




–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
–Per il programma inserti completo, vedere le pagine 871
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		kg	
R220.48-0040-05-05SA	02810083	Manicotto	40,0	5	3,0	40,0 °	48,35	16,0	35,0	40,0	16100	0,3	ON.U00504
R220.48-0050-05-04SA	02810003	Manicotto	50,0	4	3,0	40,0 °	58,35	22,0	47,0	40,0	14400	0,5	ON.U00504
R220.48-0050-05-05SA	02810084	Manicotto	50,0	5	3,0	40,0 °	58,35	22,0	47,0	40,0	14400	0,5	ON.U00504
R220.48-0050-05-06SA	02810085	Manicotto	50,0	6	3,0	40,0 °	58,35	22,0	47,0	40,0	14400	0,5	ON.U00504
R220.48-0063-05-05SA	02810004	Manicotto	63,0	5	3,0	40,0 °	71,35	22,0	47,0	40,0	12800	0,7	ON.U00504
R220.48-0063-05-06SA	02810086	Manicotto	63,0	6	3,0	40,0 °	71,35	22,0	47,0	40,0	12800	0,6	ON.U00504
R220.48-0063-05-08SA	02810087	Manicotto	63,0	8	3,0	40,0 °	71,35	22,0	47,0	40,0	12800	0,6	ON.U00504
R220.48-0080-05-06SA	02810005	Manicotto	80,0	6	3,0	40,0 °	88,35	27,0	62,0	50,0	11400	1,2	ON.U00504
R220.48-0080-05-10SA	02810088	Manicotto	80,0	10	3,0	40,0 °	88,35	27,0	62,0	50,0	11400	1,1	ON.U00504
R220.48-0100-05-07SA	02810089	Manicotto	100,0	7	3,0	40,0 °	108,35	32,0	77,0	50,0	10200	1,9	ON.U00504
R220.48-0100-05-12SA	02810090	Manicotto	100,0	12	3,0	40,0 °	108,35	32,0	77,0	50,0	10200	1,8	ON.U00504
R220.48-0125-05-08SA	02810091	Manicotto	125,0	8	3,0	40,0 °	133,35	40,0	90,0	63,0	9100	3,4	ON.U00504
R220.48-0125-05-14SA	02810092	Manicotto	125,0	14	3,0	40,0 °	133,35	40,0	90,0	63,0	9100	3,4	ON.U00504

Parti di ricambio, comprese nella fornitura

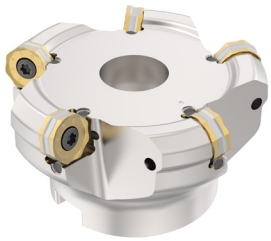
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.48-0040	TCEI0825	1/4HEX-T15PX50	C04009-T15P
R220.48-0050-0063	220.17-692	1/4HEX-T15PX50	C04009-T15P
R220.48-0080-0125	–	1/4HEX-T15PX90	C04009-T15P

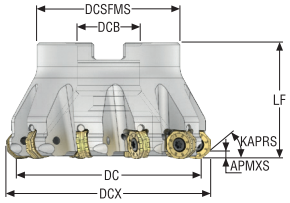
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.48-0040-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.48-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.48-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.48-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R220.48-05 – Pollici

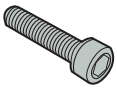
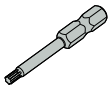




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 268 - 270
—Per il programma inserti completo, vedere le pagine 871
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.48-01.50-05-04SA	02810093	Manicotto	1.575	4	0.118	40,0 °	1.904	0.500	1.378	1.575	16100	0.880	ON.U00504
R220.48-02.00-05-05SA	02810096	Manicotto	1.969	5	0.118	40,0 °	2.297	0.750	1.850	1.575	14400	1.100	ON.U00504
R220.48-02.50-05-05SA	02810098	Manicotto	2.480	5	0.118	40,0 °	2.809	0.750	1.850	1.575	12800	1.540	ON.U00504
R220.48-03.00-05-06SA	02810101	Manicotto	3.150	6	0.118	40,0 °	3.478	1.000	2.441	1.969	11400	3.090	ON.U00504
R220.48-03.00-05-10SA	02810102	Manicotto	3.150	10	0.118	40,0 °	3.478	1.000	2.441	1.969	11400	2.650	ON.U00504
R220.48-04.00-05-07SA	02810103	Manicotto	3.937	7	0.118	40,0 °	4.266	1.500	3.031	1.969	10200	4.190	ON.U00504

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.48-01.50	UC6S1/4UNFX1	1/4HEX-T15PX50	C04009-T15P
R220.48-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04009-T15P
R220.48-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX90	C04009-T15P
R220.48-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T15PX90	C04009-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.48-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.48-05 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMX2209ANTR-M12 MP2501	7,0 *0.28*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P2	SNMX2209ANTR-M12 MP2501	7,0 *0.28*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.015
P3	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.022
P4	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.020
P5	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
P6	SNMX2209ANTR-M18 MP2501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,40 0.016	0,50 0.020
P7	SNMX2209ANTR-M18 MP3501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,40 0.016	0,50 0.020
P8	SNMX2209ANTR-M18 MP3501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,42 0.017	0,50 0.022
P11	SNMX2209ANTR-M12 MP2051	7,0 *0.28*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
P12	SNMX2209ANTR-M12 MP2051	6,0 *0.24*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
M1	SNMX2209ANR-ME12 F40M	7,0 *0.28*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
M2	SNMX2209ANR-ME12 F40M	7,0 *0.28*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,32 0.013
M3	SNMX2209ANTR-M12 MS2050	6,0 *0.24*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M4	SNMX2209ANTR-M12 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
M5	SNMX2209ANTR-M12 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
K1	SNMX2209ANTR-M18 MK1501	7,0 *0.28*	0,44 0.017	0,44 0.017	0,44 0.017	0,55 0.022
K2	SNMX2209ANTR-M18 MK1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K3	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K4	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K5	SNMX2209ANTR-M18 MP1501	7,0 *0.28*	0,36 0.014	0,36 0.014	0,36 0.014	0,46 0.018
K6	SNMX2209ANTR-M18 MK2050	7,0 *0.28*	0,40 0.016	0,40 0.016	0,40 0.016	0,50 0.020
K7	SNMX2209ANTR-M18 MK2050	7,0 *0.28*	0,36 0.014	0,36 0.014	0,36 0.014	0,46 0.018
S1	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
S2	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
S3	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
S11	SNMX2209ANTR-M12 MS2050	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S12	SNMX2209ANTR-M12 MS2050	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S13	SNMX2209ANTR-M12 MS2050	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H5	SNMX2209ANTR-M18 MP1501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
H8	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H11	SNMX2209ANTR-M18 MP1501	6,0 *0.24*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
H12	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H21	SNMX2209ANTR-M18 MP1501	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.48-05 – Parametri di taglio v_c = (m/min)/(sf/min)

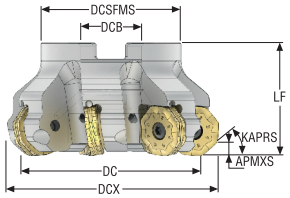
SMG	MK2050				MP3000				MS2050				F40M				MP2050			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	270 *890*	285 *940*	310 *1025*	345 *1125*	260 *850*	275 *900*	295 *970*	330 *1075*	225 *740*	240 *790*	260 *850*	290 *950*	205 *670*	220 *720*	235 *770*	265 *870*	275 *900*	290 *950*	315 *1025*	350 *1150*
P2	260 *850*	275 *900*	300 *980*	335 *1100*	250 *820*	265 *870*	290 *950*	320 *1050*	220 *720*	235 *770*	255 *840*	285 *940*	200 *660*	215 *710*	230 *750*	255 *840*	265 *870*	285 *940*	305 *1000*	335 *1100*
P3	230 *750*	245 *800*	265 *870*	295 *970*	220 *720*	235 *770*	255 *840*	280 *920*	195 *640*	205 *670*	225 *740*	250 *820*	175 *570*	190 *620*	205 *670*	225 *740*	230 *750*	245 *800*	265 *870*	295 *970*
P4	200 *660*	215 *710*	230 *750*	260 *850*	195 *640*	205 *670*	225 *740*	250 *820*	170 *560*	180 *590*	195 *640*	220 *720*	155 *510*	165 *540*	180 *590*	200 *660*	205 *670*	220 *720*	235 *770*	260 *850*
P5	200 *660*	210 *690*	225 *740*	245 *800*	190 *620*	200 *660*	220 *720*	235 *770*	165 *540*	180 *590*	190 *620*	210 *690*	150 *490*	160 *520*	175 *570*	190 *620*	195 *640*	210 *690*	225 *740*	250 *820*
P6	220 *720*	235 *770*	255 *840*	275 *900*	215 *710*	225 *740*	245 *800*	265 *870*	190 *620*	200 *660*	215 *710*	235 *770*	170 *560*	180 *590*	195 *640*	215 *710*	220 *720*	235 *770*	255 *840*	285 *940*
P7	210 *690*	220 *720*	240 *790*	260 *850*	200 *660*	215 *710*	230 *750*	250 *820*	175 *570*	190 *620*	205 *670*	220 *720*	160 *520*	170 *560*	185 *610*	200 *660*	210 *690*	220 *720*	240 *790*	265 *870*
P8	195 *640*	205 *670*	220 *720*	245 *800*	185 *610*	195 *640*	215 *710*	235 *770*	165 *540*	175 *570*	185 *610*	210 *690*	150 *490*	160 *520*	170 *560*	190 *620*	195 *640*	205 *670*	225 *740*	245 *800*
P11	205 *670*	215 *710*	235 *770*	255 *840*	195 *640*	210 *690*	225 *740*	245 *800*	170 *560*	185 *610*	195 *640*	215 *710*	155 *510*	165 *540*	180 *590*	195 *640*	205 *670*	215 *710*	235 *770*	260 *850*
P12	130 *425*	140 *460*	150 *490*	165 *540*	125 *410*	135 *445*	145 *475*	160 *520*	110 *360*	120 *395*	125 *410*	140 *460*	100 *330*	110 *360*	115 *375*	130 *425*	130 *425*	140 *460*	150 *490*	170 *560*
M1	— —	— —	— —	— —	190 *620*	200 *660*	215 *710*	240 *790*	180 *590*	190 *620*	205 *670*	230 *750*	160 *520*	170 *560*	185 *610*	205 *670*	190 *620*	205 *670*	220 *720*	240 *790*
M2	— —	— —	— —	— —	160 *520*	170 *560*	180 *590*	200 *660*	150 *490*	160 *520*	170 *560*	190 *620*	135 *445*	145 *475*	155 *510*	170 *560*	160 *520*	170 *560*	180 *590*	200 *660*
M3	— —	— —	— —	— —	125 *410*	135 *445*	145 *475*	160 *520*	120 *395*	130 *425*	140 *460*	155 *510*	110 *360*	115 *375*	125 *410*	140 *460*	125 *410*	135 *445*	145 *475*	160 *520*
M4	— —	— —	— —	— —	100 *330*	105 *345*	110 *360*	125 *410*	95 *310*	100 *330*	105 *345*	120 *395*	85 *280*	90 *295*	95 *310*	105 *345*	100 *330*	105 *345*	115 *375*	125 *410*
M5	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	105 *345*	80 *260*	85 *280*	90 *295*	100 *330*	70 *230*	75 *245*	80 *260*	90 *295*	80 *260*	85 *280*	95 *310*	105 *345*
K1	280 *920*	300 *980*	325 *1075*	360 *1175*	200 *660*	210 *690*	230 *750*	255 *840*	— —	— —	— —	— —	160 *520*	170 *560*	185 *610*	205 *670*	— —	— —	— —	— —
K2	255 *840*	270 *890*	295 *970*	320 *1050*	180 *590*	190 *620*	205 *670*	225 *740*	— —	— —	— —	— —	145 *475*	155 *510*	165 *540*	180 *590*	— —	— —	— —	— —
K3	215 *710*	230 *750*	250 *820*	270 *890*	155 *510*	160 *520*	175 *570*	190 *620*	— —	— —	— —	— —	120 *395*	130 *425*	140 *460*	155 *510*	— —	— —	— —	— —
K4	205 *670*	220 *720*	235 *770*	260 *850*	145 *475*	155 *510*	165 *540*	180 *590*	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	145 *475*	— —	— —	— —	— —
K5	125 *410*	135 *445*	145 *475*	160 *520*	90 *295*	95 *310*	100 *330*	110 *360*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	— —	— —	— —	— —
K6	180 *590*	195 *640*	210 *690*	225 *740*	130 *425*	135 *445*	145 *475*	160 *520*	— —	— —	— —	— —	105 *345*	110 *360*	120 *395*	130 *425*	— —	— —	— —	— —
K7	160 *520*	170 *560*	185 *610*	205 *670*	115 *375*	120 *395*	130 *425*	145 *475*	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	46 *150*	49 *160*	50 *165*	60 *195*	44 *145*	46 *150*	50 *165*	55 *180*	40 *130*	42 *140*	45 *150*	50 *165*	48 *155*	50 *165*	55 *180*	60 *195*
S2	— —	— —	— —	— —	37 *120*	39 *130*	42 *140*	47 *155*	35 *115*	37 *120*	40 *130*	44 *145*	32 *105*	34 *110*	36 *120*	40 *130*	38 *125*	41 *135*	44 *145*	49 *160*
S3	— —	— —	— —	— —	32 *105*	34 *110*	37 *120*	42 *140*	31 *100*	33 *110*	36 *120*	39 *130*	28 *90*	30 *100*	32 *105*	36 *120*	34 *110*	36 *120*	39 *130*	43 *140*
S11	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	80 *260*	55 *180*	60 *195*	65 *215*	70 *230*	70 *230*	70 *230*	75 *245*	85 *280*
S12	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	48 *155*	55 *180*	38 *125*	41 *135*	44 *145*	49 *160*	47 *155*	50 *165*	55 *180*	60 *195*
S13	— —	— —	— —	— —	— —	— —	— —	— —	25 *80*	26 *85*	28 *90*	31 *100*	22 *70*	24 *80*	25 *80*	28 *90*	27 *90*	28 *90*	31 *100*	34 *110*
H5	— —	— —	— —	— —	39 *130*	42 *140*	45 *150*	50 *165*	— —	— —	— —	— —	34 *110*	36 *120*	38 *125*	43 *140*	— —	— —	— —	— —
H8	— —	— —	— —	— —	42 *140*	45 *150*	49 *160*	55 *180*	— —	— —	— —	— —	36 *120*	38 *125*	42 *140*	45 *150*	— —	— —	— —	— —
H11	— —	— —	— —	— —	50 *165*	55 *180*	55 *180*	65 *215*	— —	— —	— —	— —	43 *140*	45 *150*	49 *160*	55 *180*	50 *165*	55 *180*	60 *195*	65 *215*
H12	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	100 *330*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	80 *260*	85 *280*	90 *295*	95 *310*	105 *345*
H21	— —	— —	— —	— —	42 *140*	45 *150*	49 *160*	55 *180*	— —	— —	— —	— —	36 *120*	38 *125*	42 *140*	45 *150*	42 *140*	45 *150*	49 *160*	55 *180*

R217/220.48-05 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	400	415	440	485	390	405	430	475	350	360	385	425
	—	—	—	—	*1300*	*1350*	*1450*	*1600*	*1275*	*1325*	*1400*	*1550*	*1150*	*1175*	*1275*	*1400*
P2	—	—	—	—	390	405	430	475	380	395	420	465	340	350	375	415
	—	—	—	—	*1275*	*1325*	*1400*	*1550*	*1250*	*1300*	*1375*	*1525*	*1125*	*1150*	*1225*	*1350*
P3	—	—	—	—	345	355	380	410	335	345	370	400	300	310	330	355
	—	—	—	—	*1125*	*1175*	*1250*	*1350*	*1100*	*1125*	*1225*	*1300*	*980*	*1025*	*1075*	*1175*
P4	—	—	—	—	300	315	335	365	295	305	325	360	265	270	290	320
	—	—	—	—	*980*	*1025*	*1100*	*1200*	*970*	*1000*	*1075*	*1175*	*870*	*890*	*950*	*1050*
P5	—	—	—	—	290	305	325	350	285	295	315	345	255	265	280	305
	—	—	—	—	*950*	*1000*	*1075*	*1150*	*940*	*970*	*1025*	*1125*	*840*	*870*	*920*	*1000*
P6	—	—	—	—	330	340	365	395	320	330	355	385	285	295	315	345
	—	—	—	—	*1075*	*1125*	*1200*	*1300*	*1050*	*1075*	*1175*	*1275*	*940*	*970*	*1025*	*1125*
P7	—	—	—	—	310	320	340	370	305	315	335	365	270	280	300	325
	—	—	—	—	*1025*	*1050*	*1125*	*1225*	*1000*	*1025*	*1100*	*1200*	*890*	*920*	*980*	*1075*
P8	—	—	—	—	290	300	320	345	285	290	310	335	250	260	280	300
	—	—	—	—	*950*	*980*	*1050*	*1125*	*940*	*950*	*1025*	*1100*	*820*	*850*	*920*	*980*
P11	—	—	—	—	300	310	335	360	295	305	325	355	265	270	290	315
	—	—	—	—	*980*	*1025*	*1100*	*1175*	*970*	*1000*	*1075*	*1175*	*870*	*890*	*950*	*1025*
P12	—	—	—	—	195	205	215	230	195	200	215	230	175	180	190	205
	—	—	—	—	*640*	*670*	*710*	*750*	*640*	*660*	*710*	*750*	*570*	*590*	*620*	*670*
M1	—	—	—	—	—	—	—	—	195	210	225	250	180	195	210	235
	—	—	—	—	—	—	—	—	*640*	*690*	*740*	*820*	*590*	*640*	*690*	*770*
M2	—	—	—	—	—	—	—	—	165	175	190	205	150	160	175	195
	—	—	—	—	—	—	—	—	*540*	*570*	*620*	*670*	*490*	*520*	*570*	*640*
M3	—	—	—	—	—	—	—	—	135	140	150	165	125	130	140	155
	—	—	—	—	—	—	—	—	*445*	*460*	*490*	*540*	*410*	*425*	*460*	*510*
M4	—	—	—	—	—	—	—	—	105	110	115	130	95	100	110	120
	—	—	—	—	—	—	—	—	*345*	*360*	*375*	*425*	*310*	*330*	*360*	*395*
M5	—	—	—	—	—	—	—	—	85	90	100	105	80	85	90	100
	—	—	—	—	—	—	—	—	*280*	*295*	*330*	*345*	*260*	*280*	*295*	*330*
K1	345	415	475	560	395	405	435	480	385	395	425	470	340	350	380	420
	1125	*1350*	*1550*	*1825*	*1300*	*1325*	*1425*	*1575*	*1275*	*1300*	*1400*	*1550*	*1125*	*1150*	*1250*	*1375*
K2	310	370	420	495	355	365	390	425	345	360	380	415	310	320	340	370
	1025	*1225*	*1375*	*1625*	*1175*	*1200*	*1275*	*1400*	*1125*	*1175*	*1250*	*1350*	*1025*	*1050*	*1125*	*1225*
K3	245	270	295	335	300	310	330	360	295	305	325	350	260	270	290	315
	800	*890*	*970*	*1100*	*980*	*1025*	*1075*	*1175*	*970*	*1000*	*1075*	*1150*	*850*	*890*	*950*	*1025*
K4	230	255	285	320	285	295	315	340	280	290	310	335	250	260	275	300
	750	*840*	*940*	*1050*	*940*	*970*	*1025*	*1125*	*920*	*950*	*1025*	*1100*	*820*	*850*	*900*	*980*
K5	140	155	175	195	175	185	195	210	175	180	190	205	155	160	170	185
	460	*510*	*570*	*640*	*570*	*610*	*640*	*690*	*570*	*590*	*620*	*670*	*510*	*520*	*560*	*610*
K6	205	225	250	285	250	260	280	300	245	255	270	295	220	225	245	265
	670	*740*	*820*	*940*	*820*	*850*	*920*	*980*	*800*	*840*	*890*	*970*	*720*	*740*	*800*	*870*
K7	180	200	220	250	225	235	250	265	220	230	245	260	200	205	220	235
	590	*660*	*720*	*820*	*740*	*770*	*820*	*870*	*720*	*750*	*800*	*850*	*660*	*670*	*720*	*770*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	45	47	50	55
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*165*	*180*
S2	—	—	—	—	—	—	—	—	—	—	—	—	36	38	41	45
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*125*	*135*	*150*
S3	—	—	—	—	—	—	—	—	—	—	—	—	31	33	36	40
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*110*	*120*	*130*
S11	—	—	—	—	—	—	—	—	—	—	—	—	60	65	70	80
	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*215*	*230*	*260*
S12	—	—	—	—	—	—	—	—	—	—	—	—	43	46	50	55
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*
S13	—	—	—	—	—	—	—	—	—	—	—	—	25	27	29	31
	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*90*	*95*	*100*
H5	—	—	—	—	50	55	60	65	—	—	—	—	40	42	46	50
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*130*	*140*	*150*	*165*
H8	—	—	—	—	55	60	65	70	—	—	—	—	43	45	49	55
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*140*	*150*	*160*	*180*
H11	—	—	—	—	65	70	75	80	—	—	—	—	50	55	60	65
	—	—	—	—	*215*	*230*	*245*	*260*	—	—	—	—	*165*	*180*	*195*	*215*
H12	—	—	—	—	100	105	115	125	—	—	—	—	75	80	90	95
	—	—	—	—	*330*	*345*	*375*	*410*	—	—	—	—	*245*	*260*	*295*	*310*
H21	—	—	—	—	55	60	65	70	—	—	—	—	43	45	49	55
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*140*	*150*	*160*	*180*

Double Octomill™ R217/220.48-09 – In mm

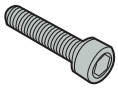
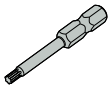




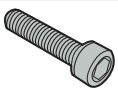
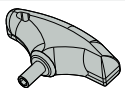
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.48-0063-09-05SA	02670226	Manicotto	63,0	5	6,0	40,0 °	78,0	22,0	–	–	47,0	40,0	4900	0,6	ON.U0905
R220.48-0063-09-06SA	02685780	Manicotto	63,0	6	6,0	40,0 °	78,0	22,0	–	–	47,0	40,0	4900	0,6	ON.U0905
R220.48-0080-09-06SA	02670228	Manicotto	80,0	6	6,0	40,0 °	95,0	27,0	–	–	62,0	50,0	4400	1,0	ON.U0905
R220.48-0080-09-07SA	02685781	Manicotto	80,0	7	6,0	40,0 °	95,0	27,0	–	–	62,0	50,0	4400	1,0	ON.U0905
R220.48-0100-09-07SA	02670229	Manicotto	100,0	7	6,0	40,0 °	115,0	32,0	–	–	77,0	50,0	3900	1,6	ON.U0905
R220.48-0100-09-08SA	02685782	Manicotto	100,0	8	6,0	40,0 °	115,0	32,0	–	–	77,0	50,0	3900	1,6	ON.U0905
R220.48-0125-09-08SA	02670231	Manicotto	125,0	8	6,0	40,0 °	140,0	40,0	–	–	90,0	63,0	3500	2,9	ON.U0905
R220.48-0125-09-10SA	02685847	Manicotto	125,0	10	6,0	40,0 °	140,0	40,0	–	–	90,0	63,0	3500	3,0	ON.U0905
R220.48-8160-09-12S	02685849	Manicotto	160,0	12	6,0	40,0 °	175,0	40,0	66,7	–	90,0	63,0	3100	4,2	ON.U0905
R220.48-8160-09-10S	02685776	Manicotto	160,0	10	6,0	40,0 °	175,0	40,0	66,7	–	90,0	63,0	3100	4,1	ON.U0905
R220.48-8200-09-12S	02685845	Manicotto	200,0	12	6,0	40,0 °	215,0	60,0	101,6	–	130,0	63,0	2700	5,4	ON.U0905
R220.48-8250-09-16S	02685777	Manicotto	250,0	16	6,0	40,0 °	265,0	60,0	101,6	–	130,0	63,0	2500	13,0	ON.U0905
R220.48-8315-09-20S	02685846	Manicotto	315,0	20	6,0	40,0 °	330,0	60,0	101,6	177,8	225,0	80,0	2200	27,0	ON.U0905

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.48-0063	220.17-692	1/4HEX-T20PX50	C05013-T20P
R220.48-0080-8315	–	1/4HEX-T20PX90	C05013-T20P

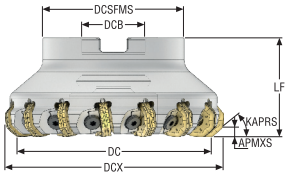
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R217/220.48-063-0100	1/4HEX-T-HANDLE-5.0-14.0NM	–	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-0080SA	1/4HEX-T-HANDLE-5.0-14.0NM	5802712	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-0100SA	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-0125SA	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-8160S	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-8200-8250S	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-8315S	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	MC6S20X50	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R217/220.48-09 – In mm

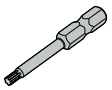
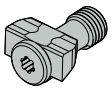




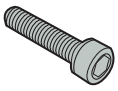
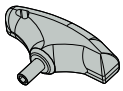
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.48-0080-09-09M	02670210	Manicotto	80,0	9	6,0	40,0 °	95,0	27,0	–	–	62,0	50,0	4400	1,2	ON.U0905
R220.48-0100-09-12M	02670213	Manicotto	100,0	12	6,0	40,0 °	115,0	32,0	–	–	77,0	50,0	3900	1,8	ON.U0905
R220.48-0125-09-15M	02670214	Manicotto	125,0	15	6,0	40,0 °	140,0	40,0	–	–	90,0	63,0	3500	3,4	ON.U0905
R220.48-8160-09-20M	02670215	Manicotto	160,0	20	6,0	40,0 °	175,0	40,0	66,7	–	90,0	63,0	3100	4,6	ON.U0905
R220.48-8200-09-24M	02685773	Manicotto	200,0	24	6,0	40,0 °	215,0	60,0	101,6	–	130,0	63,0	2700	6,0	ON.U0905
R220.48-8250-09-30M	02685774	Manicotto	250,0	30	6,0	40,0 °	265,0	60,0	101,6	–	130,0	63,0	2500	14,1	ON.U0905
R220.48-8315-09-40M	02685775	Manicotto	315,0	40	6,0	40,0 °	330,0	60,0	101,6	177,8	225,0	80,0	2200	28,6	ON.U0905

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Kit cuneo
		
R220.48-0080-0125M	1/4HEX-T20PX50	CW0816-RHA
R220.48-8160-8315M	1/4HEX-T20PX50	CW0816-RHA

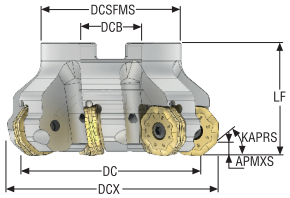
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Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto
					
R220.48-0125M	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	–	1/4HEX-T-HANDLE	6.0NM
R220.48-080M	1/4HEX-T-HANDLE-5.0-14.0NM	5802712	–	1/4HEX-T-HANDLE	6.0NM
R220.48-100M	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	–	1/4HEX-T-HANDLE	6.0NM
R220.48-8160M	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	–	1/4HEX-T-HANDLE	6.0NM
R220.48-8200-8250M	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	–	1/4HEX-T-HANDLE	6.0NM
R220.48-8315M	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	MC6S20X50	1/4HEX-T-HANDLE	6.0NM

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R220.48-09 – Pollici

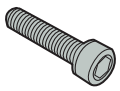
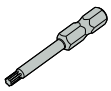
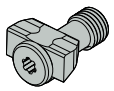




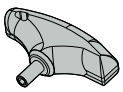
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.48-02.50-09-05SA	02685793	Manicotto	2.480	5	0.236	40,0 °	3.071	0.750	–	–	1.850	1.575	4900	1.320	ON.U0905
R220.48-03.00-09-06SA	02685794	Manicotto	3.150	6	0.236	40,0 °	3.740	1.000	–	–	2.441	1.969	4400	2.650	ON.U0905
R220.48-03.00-09-09M	02685806	Manicotto	3.150	9	0.236	40,0 °	3.740	1.000	–	–	2.441	1.969	4400	3.090	ON.U0905
R220.48-04.00-09-07SA	02685795	Manicotto	3.937	7	0.236	40,0 °	4.528	1.500	–	–	3.543	1.969	3900	3.750	ON.U0905
R220.48-04.00-09-12M	02685807	Manicotto	3.937	12	0.236	40,0 °	4.528	1.500	–	–	3.543	1.969	3900	4.410	ON.U0905
R220.48-05.00-09-08SA	02685797	Manicotto	4.921	8	0.236	40,0 °	5.512	1.500	–	–	3.543	2.480	3500	7.050	ON.U0905
R220.48-05.00-09-15M	02685808	Manicotto	4.921	15	0.236	40,0 °	5.512	1.500	–	–	3.543	2.480	3500	8.380	ON.U0905
R220.48-06.00-09-10S	02685799	Manicotto	6.299	10	0.236	40,0 °	6.890	2.000	–	–	4.331	2.480	3100	8.600	ON.U0905
R220.48-808.00-09-12S	02685801	Manicotto	7.874	12	0.236	40,0 °	8.465	2.500	4.000	4.000	5.118	2.480	2700	13.230	ON.U0905
R220.48-810.00-09-16S	02685802	Manicotto	9.843	16	0.236	40,0 °	10.433	2.500	4.000	4.000	5.118	2.480	2500	28.660	ON.U0905
R220.48-812.50-09-20S	02685803	Manicotto	12.402	20	0.236	40,0 °	12.992	2.500	4.000	4.000	8.858	3.150	2200	59.520	ON.U0905

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Kit cuneo
				
R220.48-02.50	UC6S3/8UNFX1	1/4HEX-T20PX50	C05013-T20P	–
R220.48-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–
R220.48-03.00M	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	–	CW0816-RHA
R220.48-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T20PX90	C05013-T20P	–
R220.48-04.00M	UC6S3/4UNFX1-1/4	1/4HEX-T20PX50	–	CW0816-RHA
R220.48-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–
R220.48-05.00M	UC6S3/4UNFX1-1/4	1/4HEX-T20PX50	–	CW0816-RHA
R220.48-06.00 - 812.00	–	1/4HEX-T20PX90	C05013-T20P	–

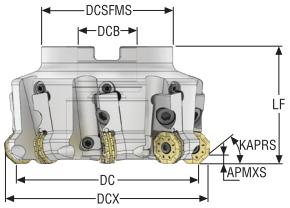
Accessori

Per	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.48-02.50-05.00-SA	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-03.00-05.00-M	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	6.0NM	–
R220.48-06.00-S	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-08.00 - 810.00-S	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.48-812.50-S	1/4HEX-T-HANDLE-5.0-14.0NM	950DNC062225	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R/L220.48-09CS – In mm

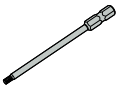
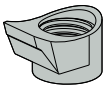




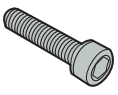
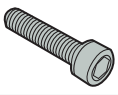
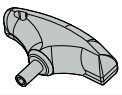
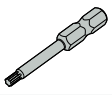
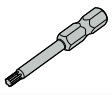
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
L220.48-0125-09-08CS	02883050	Manicotto	125,0	8	6,0	40,0 °	140,0	40,0	–	–	90,0	80,0	3500	4,9	ON.U0905
R220.48-8160-09-10CS	02883046	Manicotto	160,0	10	6,0	40,0 °	175,0	40,0	66,7	–	130,0	80,0	3100	7,4	ON.U0905
L220.48-8160-09-10CS	02883051	Manicotto	160,0	10	6,0	40,0 °	175,0	40,0	66,7	–	130,0	80,0	3100	7,5	ON.U0905
R220.48-8200-09-12CS	02883047	Manicotto	200,0	12	6,0	40,0 °	215,0	60,0	101,6	–	160,0	80,0	2700	10,5	ON.U0905
L220.48-8200-09-12CS	02883052	Manicotto	200,0	12	6,0	40,0 °	215,0	60,0	101,6	–	160,0	80,0	2700	10,1	ON.U0905
R220.48-8250-09-16CS	02883048	Manicotto	250,0	16	6,0	40,0 °	265,0	60,0	101,6	–	200,0	80,0	2500	19,6	ON.U0905
L220.48-8250-09-16CS	02883053	Manicotto	250,0	16	6,0	40,0 °	265,0	60,0	101,6	–	200,0	80,0	2500	19,6	ON.U0905
R220.48-8315-09-20CS	02883049	Manicotto	315,0	20	6,0	40,0 °	330,0	60,0	101,6	177,8	225,0	80,0	2200	35,5	ON.U0905

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo (L)	Modulo (R)	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Cuneo di bloccaggio	Vite cuneo
								
L220.48-0125-8250	AU1114T-T15P	ON09AL	–	FS98030	1/4HEX-T20PX90	C05013-T20P	CW0810	LD8020-T25P
R220.48-0125-8315	AU1114T-T15P	–	ON09AR	FS98030	1/4HEX-T20PX90	C05013-T20P	CW0810	LD8020-T25P

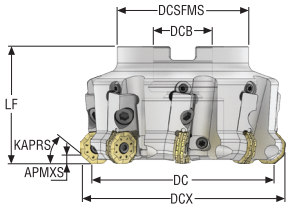
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave di regolazione	Chiave dinamometrica	Chiave per vite cuneo
								
R/L220.48-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50
R/L220.48-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50
R/L220.48-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50
R220.48-8315	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	MC6S20X50	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R/L220.48-09CS – Pollici

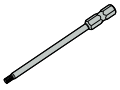
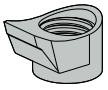




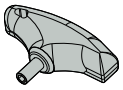
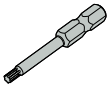
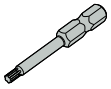
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.48-06.00-09-10CS	02882758	Manicotto	6.299	10	0.236	40,0 °	6.890	2.000	–	–	4.331	3.150	3100	16.090	ON.U0905
R220.48-808.00-09-12CS	02883055	Manicotto	7.874	12	0.236	40,0 °	8.465	2.500	4.000	4.000	5.118	3.150	2700	23.150	ON.U0905
R220.48-810.00-09-16CS	02883056	Manicotto	9.843	16	0.236	40,0 °	10.433	2.500	4.000	4.000	5.118	3.150	2500	43.210	ON.U0905
R220.48-812.50-09-20CS	02883057	Manicotto	12.402	20	0.236	40,0 °	12.992	2.500	4.000	4.000	8.858	3.150	2200	78.260	ON.U0905

Parti di ricambio, comprese nella fornitura

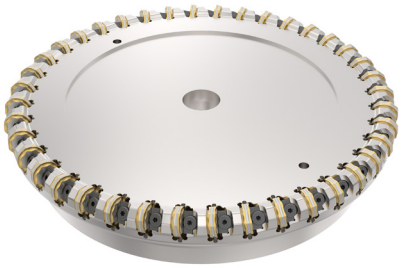
Per fresa	Unità di regolazione	Modulo (R)	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Cuneo di bloccaggio	Vite cuneo
							
R220.48- 06.00-812.50	AU1114T-T15P	ON09AR	FS98030	1/4HEX-T20PX90	C05013-T20P	CW0810	LD8020-T25P

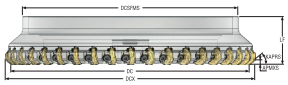
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave di regolazione	Chiave dinamometrica	Chiave per vite cuneo
							
R220.48- 06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50
R220.48- 808.00-810.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50
R220.48-812.50	1/4HEX-T-HANDLE-5.0-14.0NM	950DNC062225	1/4HEX-T-HANDLE	5.0NM	1/4HEX-T15PX50	T00-20P50	1/4HEX-T25PX50

Chiavi dinamometriche e fisse, vedere pagina 931

Double Octomill™ R220.48-09 CAP – In mm

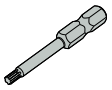
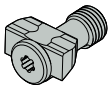




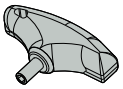
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 277 - 279
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCSFMS	LF	RPMX	Peso
			mm		mm		mm	mm	mm		kg
R220.48-9355-09-50M	02671031	CAP	355,0	50	6,0	40,0 °	370,0	285,0	63,0	2000	15,1
R220.48-9400-09-50M	02720555	CAP	400,0	50	6,0	40,0 °	415,0	370,0	63,0	1900	18,6
R220.48-9500-09-60M	02720556	CAP	500,0	60	6,0	40,0 °	515,0	470,0	63,0	1700	27,0

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Kit cuneo
		
R220.48-9355-9500	1/4HEX-T20PX50	CW0816-RHA

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto
			
R220.48-9355-9500	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	6.0NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.48-09 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			80%	40%	20%
P1	ONMU090520ANTN-ME13 MP3501	3,5 *0.14*	0,24 0.0095	0,25 0.010	0,32 0.013
P2	ONMU090520ANTN-ME13 MP3501	3,5 *0.14*	0,25 0.010	0,25 0.010	0,32 0.013
P3	ONMU090510ANTN-ME16 MP2501	3,5 *0.14*	0,30 0.012	0,32 0.013	0,40 0.016
P4	ONMU090510ANTN-ME16 MP2501	3,5 *0.14*	0,30 0.012	0,32 0.013	0,38 0.015
P5	ONMU090510ANTN-ME16 MP2501	3,5 *0.14*	0,30 0.012	0,30 0.012	0,38 0.015
P6	ONMU090510ANTN-ME16 MP2501	3,5 *0.14*	0,30 0.012	0,30 0.012	0,38 0.015
P7	ONMU090510ANTN-ME16 MP3501	3,5 *0.14*	0,30 0.012	0,30 0.012	0,38 0.015
P8	ONMU090510ANTN-ME16 MP3501	3,5 *0.14*	0,30 0.012	0,32 0.013	0,40 0.016
P11	ONMU090512TN-ME16 MP2051	3,5 *0.14*	0,30 0.012	0,30 0.012	0,38 0.015
P12	ONMU090512TN-ME16 MP2051	3,0 *0.12*	0,20 0.0080	0,22 0.0085	0,26 0.010
M1	ONMU090520ANTN-ME13 F40M	3,5 *0.14*	0,25 0.010	0,25 0.010	0,32 0.013
M2	ONMU090520ANTN-ME13 MS2050	3,5 *0.14*	0,22 0.0085	0,24 0.0095	0,28 0.011
M3	ONMU090520ANTN-ME13 MS2050	3,0 *0.12*	0,18 0.0070	0,19 0.0075	0,24 0.0095
M4	ONMU090520ANTN-ME12 MP2051	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,24 0.0095
M5	ONMU090520ANTN-ME12 MP2051	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,24 0.0095
K1	ONMU090520ANTN-M15 MK1501	3,5 *0.14*	0,34 0.013	0,36 0.014	0,44 0.017
K2	ONMU090520ANTN-M15 MK1501	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
K3	ONMU090520ANTN-M15 MP1501	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
K4	ONMU090520ANTN-M15 MP1501	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
K5	ONMU090520ANTN-M15 MK2050	3,5 *0.14*	0,28 0.011	0,30 0.012	0,36 0.014
K6	ONMU090520ANTN-M15 MK2050	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
K7	ONMU090520ANTN-M15 MK2050	3,5 *0.14*	0,28 0.011	0,30 0.012	0,36 0.014
N1	ONMU090520ANTN-ME12 F40M	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
N2	ONMU090520ANTN-ME12 F40M	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
N3	ONMU090520ANTN-ME12 F40M	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
N11	ONMU090520ANTN-ME12 F40M	3,5 *0.14*	0,32 0.013	0,32 0.013	0,40 0.016
S1	ONMU090520ANTN-M12 MS2500	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,24 0.0095
S2	ONMU090520ANTN-M12 MS2500	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,24 0.0095
S3	ONMU090520ANTN-M12 MS2500	2,0 *0.080*	0,17 0.0065	0,18 0.0070	0,22 0.0085
S11	ONMU090520ANTN-ME13 MS2050	2,5 *0.10*	0,19 0.0075	0,19 0.0075	0,24 0.0095
S12	ONMU090520ANTN-ME13 MS2050	2,5 *0.10*	0,19 0.0075	0,19 0.0075	0,24 0.0095
S13	ONMU090520ANTN-ME13 MS2050	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,22 0.0085
H5	ONMU090520ANTN-M15 MP1501	3,0 *0.12*	0,22 0.0085	0,22 0.0085	0,28 0.011
H8	ONMU090520ANTN-M15 MP1501	2,5 *0.10*	0,17 0.0065	0,18 0.0070	0,22 0.0085
H11	ONMU090520ANTN-MD16 MP1501	3,0 *0.12*	0,25 0.010	0,25 0.010	0,32 0.013
H12	ONMU090520ANTN-MD16 MP1501	2,5 *0.10*	0,19 0.0075	0,20 0.0080	0,25 0.010
H21	ONMU090520ANTN-MD16 MP1501	2,5 *0.10*	0,19 0.0075	0,20 0.0080	0,25 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.48-09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MP3000				MS2050				F40M				MP2050			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	240 *790*	255 *840*	280 *920*	305 *1000*	230 *750*	245 *800*	265 *870*	295 *970*	220 *720*	235 *770*	255 *840*	280 *920*	200 *660*	210 *690*	230 *750*	255 *840*	270 *890*	290 *950*	310 *1025*	340 *1125*
P2	230 *750*	245 *800*	265 *870*	295 *970*	220 *720*	235 *770*	255 *840*	285 *940*	215 *710*	230 *750*	245 *800*	270 *890*	195 *640*	205 *670*	225 *740*	245 *800*	255 *840*	275 *900*	295 *970*	330 *1075*
P3	200 *660*	215 *710*	230 *750*	260 *850*	195 *640*	205 *670*	225 *740*	250 *820*	190 *620*	200 *660*	215 *710*	235 *770*	170 *560*	180 *590*	195 *640*	215 *710*	225 *740*	240 *790*	260 *850*	290 *950*
P4	180 *590*	195 *640*	210 *690*	230 *750*	175 *570*	185 *610*	200 *660*	220 *720*	165 *540*	175 *570*	190 *620*	210 *690*	150 *490*	160 *520*	170 *560*	195 *640*	200 *660*	210 *690*	230 *750*	255 *840*
P5	175 *570*	185 *610*	200 *660*	225 *740*	165 *540*	175 *570*	190 *620*	215 *710*	160 *520*	170 *560*	180 *590*	205 *670*	145 *475*	155 *510*	170 *560*	185 *610*	195 *640*	205 *670*	225 *740*	245 *800*
P6	195 *640*	205 *670*	225 *740*	250 *820*	185 *610*	200 *660*	215 *710*	240 *790*	175 *570*	190 *620*	205 *670*	230 *750*	165 *540*	175 *570*	190 *620*	205 *670*	220 *720*	235 *770*	250 *820*	275 *900*
P7	185 *610*	195 *640*	210 *690*	235 *770*	175 *570*	190 *620*	205 *670*	225 *740*	165 *540*	180 *590*	195 *640*	215 *710*	155 *510*	165 *540*	180 *590*	195 *640*	205 *670*	220 *720*	235 *770*	260 *850*
P8	170 *560*	180 *590*	195 *640*	220 *720*	165 *540*	175 *570*	190 *620*	210 *690*	160 *520*	170 *560*	180 *590*	200 *660*	145 *475*	150 *490*	165 *540*	180 *590*	190 *620*	205 *670*	220 *720*	245 *800*
P11	180 *590*	190 *620*	205 *670*	230 *750*	170 *560*	180 *590*	195 *640*	220 *720*	160 *520*	175 *570*	185 *610*	210 *690*	150 *490*	160 *520*	175 *570*	190 *620*	200 *660*	215 *710*	230 *750*	250 *820*
P12	115 *375*	125 *410*	135 *445*	150 *490*	115 *375*	120 *395*	130 *425*	145 *475*	105 *345*	115 *375*	125 *410*	135 *445*	95 *310*	105 *345*	110 *360*	125 *410*	130 *425*	140 *460*	150 *490*	165 *540*
M1	— —	— —	— —	— —	165 *540*	175 *570*	190 *620*	215 *710*	170 *560*	185 *610*	200 *660*	220 *720*	155 *510*	165 *540*	180 *590*	200 *660*	185 *610*	195 *640*	210 *690*	235 *770*
M2	— —	— —	— —	— —	140 *460*	150 *490*	160 *520*	180 *590*	140 *460*	150 *490*	165 *540*	185 *610*	130 *425*	140 *460*	150 *490*	165 *540*	155 *510*	165 *540*	180 *590*	195 *640*
M3	— —	— —	— —	— —	115 *375*	120 *395*	130 *425*	145 *475*	115 *375*	125 *410*	135 *445*	150 *490*	105 *345*	115 *375*	120 *395*	135 *445*	125 *410*	135 *445*	145 *475*	160 *520*
M4	— —	— —	— —	— —	85 *280*	95 *310*	100 *330*	110 *360*	90 *295*	95 *310*	105 *345*	115 *375*	80 *260*	85 *280*	95 *310*	105 *345*	95 *310*	105 *345*	110 *360*	125 *410*
M5	— —	— —	— —	— —	75 *245*	75 *245*	85 *280*	95 *310*	75 *245*	80 *260*	85 *280*	95 *310*	65 *215*	70 *230*	80 *260*	90 *295*	80 *260*	85 *280*	90 *295*	100 *330*
K1	250 *820*	265 *870*	285 *940*	320 *1050*	175 *570*	185 *610*	200 *660*	225 *740*	— —	— —	— —	— —	155 *510*	165 *540*	175 *570*	195 *640*	— —	— —	— —	— —
K2	225 *740*	240 *790*	255 *840*	290 *950*	160 *520*	170 *560*	180 *590*	205 *670*	— —	— —	— —	— —	140 *460*	150 *490*	160 *520*	175 *570*	— —	— —	— —	— —
K3	190 *620*	200 *660*	220 *720*	245 *800*	135 *445*	140 *460*	155 *510*	170 *560*	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	150 *490*	— —	— —	— —	— —
K4	180 *590*	190 *620*	210 *690*	230 *750*	125 *410*	135 *445*	145 *475*	165 *540*	— —	— —	— —	— —	110 *360*	120 *395*	130 *425*	140 *460*	— —	— —	— —	— —
K5	110 *360*	120 *395*	130 *425*	140 *460*	80 *260*	85 *280*	90 *295*	100 *330*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	— —	— —	— —	— —
K6	160 *520*	170 *560*	185 *610*	205 *670*	110 *360*	120 *395*	130 *425*	145 *475*	— —	— —	— —	— —	100 *330*	105 *345*	115 *375*	125 *410*	— —	— —	— —	— —
K7	145 *475*	155 *510*	165 *540*	180 *590*	100 *330*	110 *360*	115 *375*	125 *410*	— —	— —	— —	— —	85 *280*	95 *310*	100 *330*	110 *360*	— —	— —	— —	— —
S1	— —	— —	— —	— —	41 *135*	43 *140*	47 *155*	50 *165*	42 *140*	44 *145*	49 *160*	55 *180*	38 *125*	40 *130*	44 *145*	49 *160*	47 *155*	50 *165*	55 *180*	60 *195*
S2	— —	— —	— —	— —	33 *110*	35 *115*	38 *125*	42 *140*	34 *110*	36 *120*	39 *130*	43 *140*	30 *100*	32 *105*	36 *120*	40 *130*	38 *125*	41 *135*	44 *145*	48 *155*
S3	— —	— —	— —	— —	29 *95*	30 *100*	33 *110*	37 *120*	30 *100*	31 *100*	34 *110*	38 *125*	27 *90*	28 *90*	31 *100*	34 *110*	33 *110*	36 *120*	39 *130*	43 *140*
S11	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	60 *195*	65 *215*	75 *245*	55 *180*	55 *180*	60 *195*	70 *230*	65 *215*	70 *230*	75 *245*	85 *280*
S12	— —	— —	— —	— —	— —	— —	— —	— —	40 *130*	43 *140*	46 *150*	50 *165*	37 *120*	39 *130*	43 *140*	47 *155*	46 *150*	49 *160*	55 *180*	60 *195*
S13	— —	— —	— —	— —	— —	— —	— —	— —	23 *75*	25 *80*	27 *90*	30 *100*	21 *70*	22 *70*	25 *80*	28 *90*	27 *90*	28 *90*	30 *100*	34 *110*
H5	— —	— —	— —	— —	35 *115*	37 *120*	40 *130*	45 *150*	— —	— —	— —	— —	32 *105*	34 *110*	37 *120*	41 *135*	— —	— —	— —	— —
H8	— —	— —	— —	— —	37 *120*	40 *130*	44 *145*	48 *155*	— —	— —	— —	— —	35 *115*	37 *120*	41 *135*	44 *145*	— —	— —	— —	— —
H11	— —	— —	— —	— —	45 *150*	48 *155*	50 *165*	55 *180*	— —	— —	— —	— —	41 *135*	44 *145*	47 *155*	55 *180*	49 *160*	55 *180*	55 *180*	65 *215*
H12	— —	— —	— —	— —	70 *230*	75 *245*	85 *280*	90 *295*	— —	— —	— —	— —	60 *195*	65 *215*	75 *245*	80 *260*	80 *260*	90 *295*	95 *310*	105 *345*
H21	— —	— —	— —	— —	37 *120*	40 *130*	44 *145*	48 *155*	— —	— —	— —	— —	35 *115*	37 *120*	41 *135*	44 *145*	41 *135*	44 *145*	48 *155*	55 *180*

R217/220.48-09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	405	420	450	480	395	410	440	470	380	395	420	455	355	365	390	420	225	235	255	275
	—	—	—	—	*1325*	*1375*	*1475*	*1575*	*1300*	*1350*	*1450*	*1550*	*1250*	*1300*	*1375*	*1500*	*1175*	*1200*	*1275*	*1375*	*740*	*770*	*840*	*900*
P2	—	—	—	—	385	400	425	470	375	390	415	460	360	375	400	440	335	345	370	410	215	225	240	270
	—	—	—	—	*1275*	*1300*	*1400*	*1550*	*1225*	*1275*	*1350*	*1500*	*1175*	*1225*	*1300*	*1450*	*1100*	*1125*	*1225*	*1350*	*710*	*740*	*790*	*890*
P3	—	—	—	—	340	350	375	410	330	345	365	405	315	330	355	390	295	305	330	360	190	200	215	235
	—	—	—	—	*1125*	*1150*	*1225*	*1350*	*1075*	*1125*	*1200*	*1325*	*1025*	*1075*	*1175*	*1275*	*970*	*1000*	*1075*	*1175*	*620*	*660*	*710*	*770*
P4	—	—	—	—	300	315	335	360	295	305	330	355	285	295	315	340	265	275	295	320	180	190	205	225
	—	—	—	—	*980*	*1025*	*1100*	*1175*	*970*	*1000*	*1075*	*1175*	*940*	*970*	*1025*	*1125*	*870*	*900*	*970*	*1050*	*590*	*620*	*670*	*740*
P5	—	—	—	—	290	300	320	350	285	295	315	345	270	280	300	330	255	260	280	305	160	170	180	200
	—	—	—	—	*950*	*980*	*1050*	*1150*	*940*	*970*	*1025*	*1125*	*890*	*920*	*980*	*1075*	*840*	*850*	*920*	*1000*	*520*	*560*	*590*	*660*
P6	—	—	—	—	330	340	365	390	320	335	355	385	305	320	340	370	290	300	320	345	185	190	205	225
	—	—	—	—	*1075*	*1125*	*1200*	*1275*	*1050*	*1100*	*1175*	*1275*	*1000*	*1050*	*1125*	*1225*	*950*	*980*	*1050*	*1125*	*610*	*620*	*670*	*740*
P7	—	—	—	—	310	320	340	370	305	315	335	365	290	300	325	350	270	280	300	325	175	180	195	215
	—	—	—	—	*1025*	*1050*	*1125*	*1225*	*1000*	*1025*	*1100*	*1200*	*950*	*980*	*1075*	*1150*	*890*	*920*	*980*	*1075*	*570*	*590*	*640*	*710*
P8	—	—	—	—	285	295	315	345	280	290	310	340	265	280	295	325	250	260	275	305	160	165	180	200
	—	—	—	—	*940*	*970*	*1025*	*1125*	*920*	*950*	*1025*	*1125*	*870*	*920*	*970*	*1075*	*820*	*850*	*900*	*1000*	*520*	*540*	*590*	*660*
P11	—	—	—	—	300	315	335	360	295	305	325	355	280	295	315	340	265	275	290	315	170	175	190	210
	—	—	—	—	*980*	*1025*	*1100*	*1175*	*970*	*1000*	*1075*	*1175*	*920*	*970*	*1025*	*1125*	*870*	*900*	*950*	*1025*	*560*	*570*	*620*	*690*
P12	—	—	—	—	195	200	215	230	190	200	210	225	185	190	205	215	170	180	190	205	110	115	125	130
	—	—	—	—	*640*	*660*	*710*	*750*	*620*	*660*	*690*	*740*	*610*	*620*	*670*	*710*	*560*	*590*	*620*	*670*	*360*	*375*	*410*	*425*
M1	—	—	—	—	—	—	—	—	195	205	220	250	210	225	240	270	180	190	205	230	140	150	160	180
	—	—	—	—	—	—	—	—	*640*	*670*	*720*	*820*	*690*	*740*	*790*	*890*	*590*	*620*	*670*	*750*	*460*	*490*	*520*	*590*
M2	—	—	—	—	—	—	—	—	160	170	185	205	175	185	200	225	150	160	175	195	120	125	135	150
	—	—	—	—	—	—	—	—	*520*	*560*	*610*	*670*	*570*	*610*	*660*	*740*	*490*	*520*	*570*	*640*	*395*	*410*	*445*	*490*
M3	—	—	—	—	—	—	—	—	130	140	150	165	140	150	165	180	120	130	140	155	95	100	110	120
	—	—	—	—	—	—	—	—	*425*	*460*	*490*	*540*	*460*	*490*	*540*	*590*	*395*	*425*	*460*	*510*	*310*	*330*	*360*	*395*
M4	—	—	—	—	—	—	—	—	100	105	115	130	110	115	125	140	95	100	110	120	75	80	85	95
	—	—	—	—	—	—	—	—	*330*	*345*	*375*	*425*	*360*	*375*	*410*	*460*	*310*	*330*	*360*	*395*	*245*	*260*	*280*	*310*
M5	—	—	—	—	—	—	—	—	85	90	95	110	90	95	105	115	80	85	90	100	60	65	70	80
	—	—	—	—	—	—	—	—	*280*	*295*	*310*	*360*	*295*	*310*	*345*	*375*	*260*	*280*	*295*	*330*	*195*	*215*	*230*	*260*
K1	340	415	475	560	390	405	430	470	380	395	420	465	230	245	265	295	340	350	375	415	—	—	—	—
	1125	*1350*	*1550*	*1825*	*1275*	*1325*	*1400*	*1550*	*1250*	*1300*	*1375*	*1525*	*750*	*800*	*870*	*970*	*1125*	*1150*	*1225*	*1350*	—	—	—	—
K2	305	370	420	495	350	365	385	420	340	355	380	415	205	220	240	265	305	315	340	370	—	—	—	—
	1000	*1225*	*1375*	*1625*	*1150*	*1200*	*1275*	*1375*	*1125*	*1175*	*1250*	*1350*	*670*	*720*	*790*	*870*	*1000*	*1025*	*1125*	*1225*	—	—	—	—
K3	235	265	290	330	295	305	325	355	290	300	320	350	175	185	200	225	260	270	285	315	—	—	—	—
	770	*870*	*950*	*1075*	*970*	*1000*	*1075*	*1175*	*950*	*980*	*1050*	*1150*	*570*	*610*	*660*	*740*	*850*	*890*	*940*	*1025*	—	—	—	—
K4	225	250	275	315	280	295	310	340	275	285	305	335	165	180	195	215	245	255	275	300	—	—	—	—
	740	*820*	*900*	*1025*	*920*	*970*	*1025*	*1125*	*900*	*940*	*1000*	*1100*	*540*	*590*	*640*	*710*	*800*	*840*	*900*	*980*	—	—	—	—
K5	140	155	170	195	175	180	195	210	170	180	190	205	105	110	120	135	155	160	170	185	—	—	—	—
	460	*510*	*560*	*640*	*570*	*590*	*640*	*690*	*560*	*590*	*620*	*670*	*345*	*360*	*395*	*445*	*510*	*520*	*560*	*610*	—	—	—	—
K6	200	220	245	280	250	260	275	300	245	250	270	295	145	160	170	190	220	225	240	265	—	—	—	—
	660	*720*	*800*	*920*	*820*	*850*	*900*	*980*	*800*	*820*	*890*	*970*	*475*	*520*	*560*	*620*	*720*	*740*	*790*	*870*	—	—	—	—
K7	180	200	220	250	225	230	245	270	220	230	240	265	130	140	155	170	195	205	215	235	—	—	—	—
	590	*660*	*720*	*820*	*740*	*750*	*800*	*890*	*720*	*750*	*790*	*870*	*425*	*460*	*510*	*560*	*640*	*670*	*710*	*770*	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	55	55	60	70	44	47	50	55	22	24	26	29
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*180*	*195*	*230*	*145*	*155*	*165*	*180*	*70*	*80*	*85*	*95*
S2	—	—	—	—	—	—	—	—	—	—	—	—	43	46	50	55	35	38	41	45	18	19	21	23
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*	*115*	*125*	*135*	*150*	*60*	*60*	*70*	*75*
S3	—	—	—	—	—	—	—	—	—	—	—	—	38	41	44	48	31	33	36	40	16	17	18	20
	—	—	—	—	—	—	—	—	—	—	—	—	*125*	*135*	*145*	*155*	*100*	*110*	*120*	*130*	*50*	*55*	*60*	*65*
S11	—	—	—	—	—	—	—	—	—	—	—	—	75	80	85	95	60	65	70	80	32	34	37	41
	—	—	—	—	—	—	—	—	—	—	—	—	*245*	*260*	*280*	*310*	*195*	*215*	*230*	*260*	*105*	*110*	*120*	*135*
S12	—	—	—	—	—	—	—	—	—	—	—	—	50	55	60	65	43	46	49	55	29	31	34	37
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*215*	*140*	*150*	*160*	*180*	*95*	*100*	*110*	*120*
S13	—	—	—	—	—	—	—	—	—	—	—	—	30	32	35	38	25	26	28	32	17	18	20	22
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*105*	*115*	*125*	*80*	*85*	*90*	*105*	*55*	*60*	*65*	*70*
H5	—	—	—	—	50	55	60	65	—	—	—	—	44	47	50	55	39	42	45	49	—	—	—	—
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*145*	*155*	*165*	*180*	*130*	*140*	*150*	*160*	—	—	—	—
H8	—	—	—	—	55	60	65	70	—	—	—	—	47	50	55	60	42	45	48	55	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*155*	*165*	*180*	*195*	*140*	*150*	*155*	*180*	—	—	—	—
H11	—	—	—	—	65	70	75	80	—	—	—	—	55	60	65	70	50	55	55	65	—	—	—	—
	—	—	—	—	*215*	*230*	*245*	*260*	—	—	—	—	*180*	*195*	*215*	*230*	*165*	*180*	*180*	*215*	—	—	—	—
H12	—	—	—	—	100	105	110	125	—	—	—	—	95	100	110	120	75	80	85	95	—	—	—	—
	—	—	—	—	*330*	*345*	*360*	*410*	—	—	—	—	*310*	*330*	*360*	*395*	*245*	*260*	*280*	*310*	—	—	—	—
H21	—	—	—	—	55	60	65	70	—	—	—	—	47	50	55	60	42	45	48	55	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*155*	*165*	*180*	*195*	*140*	*150*	*155*	*180*	—	—	—	—



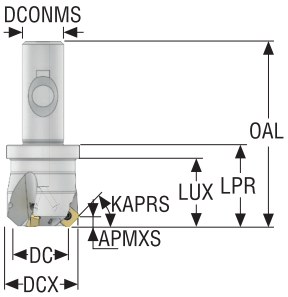
QUATTROMILL 09/12/15

QuattroMill™ è molto più di una fresa per spianare per uso generico. Si tratta di una soluzione semplice con più denti per fresa che aumenta la produttività, la facilità d'uso, l'affidabilità e la precisione per l'intera gamma di applicazioni di spianatura e materiali. QuattroMill è dotata di inserti robusti e quadrati che soddisfano le esigenze delle applicazioni più complesse e di una robusta vite di bloccaggio centrale con posizionamento rapido dell'inserto che ne facilita la sostituzione. Il corpo della fresa è rivestito e pre-indurito. Presenta, inoltre, un ampio vano per i trucioli per la lavorazione di acciaio e acciaio inossidabile. L'angoli di taglio positivo e il radiale negativo massimizzano la capacità di una macchina utensile e consentono di aumentare la produttività tanto in condizioni di stabilità quanto di instabilità.

- Dimensione dell'inserto 09, gamma frese 20-315 mm (0,75-3")
- Dimensione dell'inserto 12, gamma frese 40-315 mm (1,5-8")
- Dimensione dell'inserto 15, gamma frese 63-315 mm (3-6")

Quattromill R217.53-09 – In mm

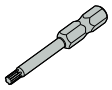




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 286-288
—Per il programma inserti completo, vedere le pagine 881
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R217.53-2020.3S-09-2A	02422248	Seco-Weldon	20,0	2	4,5	45,0 °	30,0	20,0	33,0	40,0	90,0	25100	0,3	SE.X09T
R217.53-2025.3S-09-3A	02422250	Seco-Weldon	25,0	3	4,5	45,0 °	35,0	20,0	33,0	40,0	90,0	22400	0,3	SE.X09T
R217.53-2032.3S-09-4A	02422251	Seco-Weldon	32,0	4	4,5	45,0 °	42,0	20,0	33,0	40,0	90,0	19800	0,4	SE.X09T

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.53..	1/4HEX-T09PX50	C03008-T09P

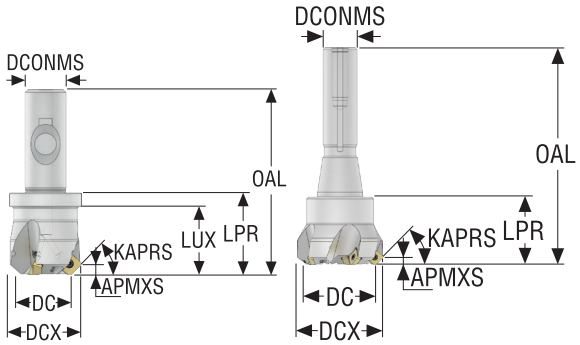
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.53..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R217.53-09 – Pollici

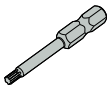




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 286-288
—Per il programma inserti completo, vedere le pagine 881
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch		lb	
R217.53-01.00.3S-09-3A	02422260	Seco/Weldon	0.984	3	0.177	45,0 °	1.378	0.750	1.299	1.575	3.543	22400	0.880	SE.X09T
R217.53-01.25.3S-09-4A	02422261	Seco/Weldon	1.260	4	0.177	45,0 °	1.654	0.750	1.299	1.575	3.543	19800	0.880	SE.X09T
R217.53-02.00.R8-09-5	02422262	Bridgeport R8	1.575	5	0.180	45,0 °	1.969	0.949	–	1.890	6.024	15800	2.430	SE.X09T3

Parti di ricambio, comprese nella fornitura

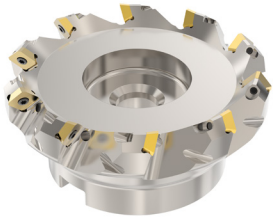
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.53-..	1/4HEX-T09PX50	C03008-T09P

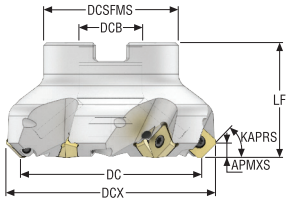
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.53-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-09 – In mm

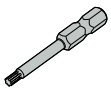




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 286-288
—Per il programma inserti completo, vedere le pagine 881
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		kg	
R220.53-0032-09-4A	02422230	Manicotto	32,0	4	4,5	45,0 °	42,0	16,0	35,0	40,0	19800	0,3	SE.X09T3
R220.53-0040-09-4A	02422231	Manicotto	40,0	4	4,5	45,0 °	50,0	22,0	47,0	40,0	17700	0,4	SE.X09T3
R220.53-0040-09-5A	02422161	Manicotto	40,0	5	4,5	45,0 °	50,0	22,0	47,0	40,0	17700	0,4	SE.X09T3
R220.53-0050-09-5A	02422232	Manicotto	50,0	5	4,5	45,0 °	60,0	22,0	47,0	40,0	15800	0,5	SE.X09T3
R220.53-0050-09-6A	02422162	Manicotto	50,0	6	4,5	45,0 °	60,0	22,0	47,0	40,0	15800	0,5	SE.X09T3
R220.53-0063-09-6A	02422233	Manicotto	63,0	6	4,5	45,0 °	73,0	22,0	47,0	40,0	14100	0,6	SE.X09T3
R220.53-0063-09-7A	02422163	Manicotto	63,0	7	4,5	45,0 °	73,0	22,0	47,0	40,0	14100	0,7	SE.X09T3
R220.53-0080-09-6A	02422234	Manicotto	80,0	6	4,5	45,0 °	90,0	27,0	62,0	50,0	12500	1,2	SE.X09T3
R220.53-0080-09-8A	02422164	Manicotto	80,0	8	4,5	45,0 °	90,0	27,0	62,0	50,0	12500	1,2	SE.X09T3
R220.53-0100-09-7A	02422235	Manicotto	100,0	7	4,5	45,0 °	110,0	32,0	77,0	50,0	11200	1,8	SE.X09T3
R220.53-0100-09-10A	02422165	Manicotto	100,0	10	4,5	45,0 °	110,0	32,0	77,0	50,0	11200	1,8	SE.X09T3

Parti di ricambio, comprese nella fornitura

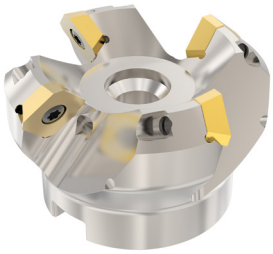
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-0032	220.17-690	1/4HEX-T09PX50	C03008-T09P
R220.53-0040-0063	220.17-696	1/4HEX-T09PX50	C03008-T09P
R220.53-0080	–	1/4HEX-T09PX50	C03008-T09P
R220.53-0100	–	1/4HEX-T09PX90	C03008-T09P

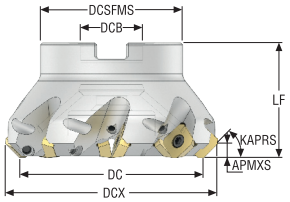
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.53-0032-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R220.53-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R220.53-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-09 – Pollici

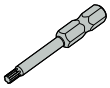




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 286-288
—Per il programma inserti completo, vedere le pagine 881
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.53-01.50-09-4A	02422254	Manicotto	1.575	4	0.180	45,0 °	1.969	0.750	1.850	1.575	17700	1.100	SE.X09T3
R220.53-02.00-09-5A	02422255	Manicotto	1.969	5	0.180	45,0 °	2.362	0.750	1.850	1.575	15800	1.320	SE.X09T3
R220.53-02.50-09-6A	02422256	Manicotto	2.480	6	0.180	45,0 °	2.874	0.750	1.850	1.575	14100	1.540	SE.X09T3
R220.53-03.00-09-6A	02422257	Manicotto	3.150	6	0.180	45,0 °	3.543	1.000	2.441	1.969	12500	2.870	SE.X09T3

Parti di ricambio, comprese nella fornitura

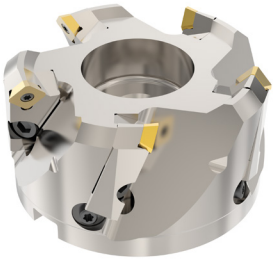
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-01.50-02.50	220.17-698	1/4HEX-T09PX50	C03008-T09P
R220.53-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T09PX50	C03008-T09P

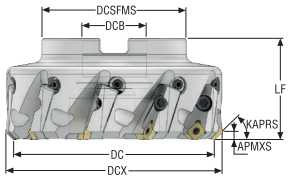
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.53-01.50-03.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-09C – In mm

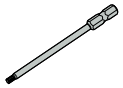




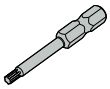
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 286-288
—Per il programma inserti completo, vedere le pagine 881
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.53-0125-09-8C	02510182	Manicotto	125,0	8	4,5	45,0 °	135,0	40,0	–	90,0	63,0	5900	4,2	SE.X09T3
R220.53-8160-09-10C	02510158	Manicotto	160,0	10	4,5	45,0 °	170,0	40,0	66,7	90,0	63,0	5200	7,1	SE.X09T3

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto
					
R220.53-0080-8315	AU1114T-T15P	SE09AR-53	FS96018	1/4HEX-T09PX90	C03008-T09P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave	Chiave di regolazione	Chiave dinamometrica
							
R220.53-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	2.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-09P20
R220.53-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	2.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.53-09 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SEEX09T3AFTN-ME07 F40M	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P2	SEEX09T3AFTN-ME07 F40M	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P3	SEEX09T3AFTN-M08 MP2501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
P4	SEEX09T3AFTN-M08 MP2501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
P5	SEEX09T3AFTN-M08 MP2501	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P6	SEEX09T3AFTN-M08 MP2501	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P7	SEEX09T3AFTN-M08 MP3501	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P8	SEEX09T3AFTN-M08 MP3501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
P11	SEEX09T3AFTN-M08 MP3501	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P12	SEEX09T3AFTN-M08 MP3501	2,0 *0.080*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
M1	SEEX09T3AFN-M05 F40M	2,5 *0.10*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,16 0.0065
M2	SEEX09T3AFN-M05 MS2050	2,5 *0.10*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
M3	SEEX09T3AFN-M05 MS2050	2,0 *0.080*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
M4	SEEX09T3AFN-M05 MS2050	1,6 *0.065*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,10 0.0040
M5	SEEX09T3AFN-M05 MS2050	1,6 *0.065*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,10 0.0040
K1	SEEX09T3AFTN-M08 MP1501	2,5 *0.10*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,24 0.0095
K2	SEEX09T3AFTN-M08 MP1501	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K3	SEEX09T3AFTN-M08 MK2050	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K4	SEEX09T3AFTN-M08 MK2050	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K5	SEEX09T3AFTN-M08 MK2050	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
K6	SEEX09T3AFTN-M08 MK2050	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K7	SEEX09T3AFTN-M08 MK2050	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
N1	SEEX09T3AFN-E04 H15	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
N2	SEEX09T3AFN-E04 H15	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
N3	SEEX09T3AFN-E04 H15	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
N11	SEEX09T3AFN-E04 H15	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
S1	SEEX09T3AFTN-ME07 F40M	1,6 *0.065*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
S2	SEEX09T3AFTN-ME07 F40M	1,6 *0.065*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
S3	SEEX09T3AFTN-ME07 F40M	1,6 *0.065*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,13 0.0050
S11	SEEX09T3AFN-M05 MS2050	1,9 *0.075*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
S12	SEEX09T3AFN-M05 MS2050	1,9 *0.075*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
S13	SEEX09T3AFN-M05 MS2050	1,6 *0.065*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,10 0.0040
H5	SEEX09T3AFTN-D09 MP1501	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
H8	SEEX09T3AFTN-D09 MP1501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
H11	SEEX09T3AFTN-D09 MP1501	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
H12	SEEX09T3AFTN-D09 MP1501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
H21	SEEX09T3AFTN-D09 MP1501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.53-09 – Parametri di taglio v_c = (m/min)/(sf/min)

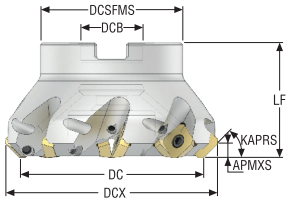
SMG	F15M				MK2050				MP3000				MS2050				F40M				H15			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	290	310	335	375	315	340	365	395	280	300	320	350	225	240	260	285	—	—	—	—
	—	—	—	—	*950*	*1025*	*1100*	*1225*	*1025*	*1125*	*1200*	*1300*	*920*	*980*	*1050*	*1150*	*740*	*790*	*850*	*940*	—	—	—	—
P2	—	—	—	—	285	305	325	360	305	325	350	385	265	285	305	340	220	235	250	275	—	—	—	—
	—	—	—	—	*940*	*1000*	*1075*	*1175*	*1000*	*1075*	*1150*	*1275*	*870*	*940*	*1000*	*1125*	*720*	*770*	*820*	*900*	—	—	—	—
P3	—	—	—	—	250	265	285	315	265	285	305	340	235	250	270	300	190	205	220	245	—	—	—	—
	—	—	—	—	*820*	*870*	*940*	*1025*	*870*	*940*	*1000*	*1125*	*770*	*820*	*890*	*980*	*620*	*670*	*720*	*800*	—	—	—	—
P4	—	—	—	—	220	235	250	280	235	250	270	300	205	220	235	260	170	180	195	215	—	—	—	—
	—	—	—	—	*720*	*770*	*820*	*920*	*770*	*820*	*890*	*980*	*670*	*720*	*770*	*850*	*560*	*590*	*640*	*710*	—	—	—	—
P5	—	—	—	—	210	225	245	265	225	240	255	285	195	210	225	250	165	175	185	205	—	—	—	—
	—	—	—	—	*690*	*740*	*800*	*870*	*740*	*790*	*840*	*940*	*640*	*690*	*740*	*820*	*540*	*570*	*610*	*670*	—	—	—	—
P6	—	—	—	—	240	255	275	300	255	275	295	320	225	240	260	280	185	195	210	230	—	—	—	—
	—	—	—	—	*790*	*840*	*900*	*980*	*840*	*900*	*970*	*1050*	*740*	*790*	*850*	*920*	*610*	*640*	*690*	*750*	—	—	—	—
P7	—	—	—	—	225	240	260	280	240	260	280	300	215	230	245	265	175	185	200	215	—	—	—	—
	—	—	—	—	*740*	*790*	*850*	*920*	*790*	*850*	*920*	*980*	*710*	*750*	*800*	*870*	*570*	*610*	*660*	*710*	—	—	—	—
P8	—	—	—	—	210	220	240	265	225	240	255	285	195	210	225	250	160	170	185	205	—	—	—	—
	—	—	—	—	*690*	*720*	*790*	*870*	*740*	*790*	*840*	*940*	*640*	*690*	*740*	*820*	*520*	*560*	*610*	*670*	—	—	—	—
P11	—	—	—	—	220	235	250	275	235	250	270	295	205	220	240	260	170	180	195	210	—	—	—	—
	—	—	—	—	*720*	*770*	*820*	*900*	*770*	*820*	*890*	*970*	*670*	*720*	*790*	*850*	*560*	*590*	*640*	*690*	—	—	—	—
P12	—	—	—	—	140	150	160	180	150	160	170	190	130	140	150	165	110	115	125	140	—	—	—	—
	—	—	—	—	*460*	*490*	*520*	*590*	*490*	*520*	*560*	*620*	*425*	*460*	*490*	*540*	*360*	*375*	*410*	*460*	—	—	—	—
M1	—	—	—	—	—	—	—	—	225	240	260	290	215	230	245	275	175	190	200	220	—	—	—	—
	—	—	—	—	—	—	—	—	*740*	*790*	*850*	*950*	*710*	*750*	*800*	*900*	*570*	*620*	*660*	*720*	—	—	—	—
M2	—	—	—	—	—	—	—	—	185	200	215	240	175	190	205	225	145	155	170	185	—	—	—	—
	—	—	—	—	—	—	—	—	*610*	*660*	*710*	*790*	*570*	*620*	*670*	*740*	*475*	*510*	*560*	*610*	—	—	—	—
M3	—	—	—	—	—	—	—	—	150	160	175	190	140	150	165	180	120	125	135	150	—	—	—	—
	—	—	—	—	—	—	—	—	*490*	*520*	*570*	*620*	*460*	*490*	*540*	*590*	*395*	*410*	*445*	*490*	—	—	—	—
M4	—	—	—	—	—	—	—	—	115	125	135	145	110	120	125	140	90	100	105	115	—	—	—	—
	—	—	—	—	—	—	—	—	*375*	*410*	*445*	*475*	*360*	*395*	*410*	*460*	*295*	*330*	*345*	*375*	—	—	—	—
M5	—	—	—	—	—	—	—	—	95	105	110	120	90	100	105	115	75	80	90	95	—	—	—	—
	—	—	—	—	—	—	—	—	*310*	*345*	*360*	*395*	*295*	*330*	*345*	*375*	*245*	*260*	*295*	*310*	—	—	—	—
K1	270	290	310	345	305	325	350	385	240	255	275	305	—	—	—	—	175	185	200	220	—	—	—	—
	890	*950*	*1025*	*1125*	*1000*	*1075*	*1150*	*1275*	*790*	*840*	*900*	*1000*	—	—	—	—	*570*	*610*	*660*	*720*	—	—	—	—
K2	240	255	275	305	275	290	315	345	210	225	245	270	—	—	—	—	155	165	180	195	—	—	—	—
	790	*840*	*900*	*1000*	*900*	*950*	*1025*	*1125*	*690*	*740*	*800*	*890*	—	—	—	—	*510*	*540*	*590*	*640*	—	—	—	—
K3	200	215	235	260	230	245	265	290	180	190	205	230	—	—	—	—	130	140	150	165	—	—	—	—
	660	*710*	*770*	*850*	*750*	*800*	*870*	*950*	*590*	*620*	*670*	*750*	—	—	—	—	*425*	*460*	*490*	*540*	—	—	—	—
K4	195	205	220	245	220	235	255	280	170	185	195	220	—	—	—	—	125	135	145	155	—	—	—	—
	640	*670*	*720*	*800*	*720*	*770*	*840*	*920*	*560*	*610*	*640*	*720*	—	—	—	—	*410*	*445*	*475*	*510*	—	—	—	—
K5	120	130	140	150	135	145	155	170	105	115	125	130	—	—	—	—	75	80	85	95	—	—	—	—
	395	*425*	*460*	*490*	*445*	*475*	*510*	*560*	*345*	*375*	*410*	*425*	—	—	—	—	*245*	*260*	*280*	*310*	—	—	—	—
K6	170	180	195	215	195	210	225	245	150	160	175	190	—	—	—	—	110	115	125	140	—	—	—	—
	560	*590*	*640*	*710*	*640*	*690*	*740*	*800*	*490*	*520*	*570*	*620*	—	—	—	—	*360*	*375*	*410*	*460*	—	—	—	—
K7	155	165	175	190	170	185	195	220	135	145	155	170	—	—	—	—	95	105	110	125	—	—	—	—
	510	*540*	*570*	*620*	*560*	*610*	*640*	*720*	*445*	*475*	*510*	*560*	—	—	—	—	*310*	*345*	*360*	*410*	—	—	—	—
N1	2025	2175	2325	2550	—	—	—	—	—	—	—	—	—	—	—	—	1275	1350	1475	1625	1600	1700	1850	2025
	6650	*7125*	*7625*	*8375*	—	—	—	—	—	—	—	—	—	—	—	—	*4175*	*4425*	*4850*	*5325*	*5250*	*5575*	*6075*	*6650*
N2	820	870	940	1025	—	—	—	—	—	—	—	—	—	—	—	—	520	550	590	650	650	690	740	810
	2700	*2850*	*3075*	*3375*	—	—	—	—	—	—	—	—	—	—	—	—	*1700*	*1800*	*1925*	*2125*	*2125*	*2275*	*2425*	*2650*
N3	550	580	630	690	—	—	—	—	—	—	—	—	—	—	—	—	345	365	395	435	430	460	495	540
	1800	*1900*	*2075*	*2275*	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1200*	*1300*	*1425*	*1400*	*1500*	*1625*	*1775*
N11	620	670	720	780	—	—	—	—	—	—	—	—	—	—	—	—	395	420	450	495	495	530	570	620
	2025	*2200*	*2350*	*2550*	—	—	—	—	—	—	—	—	—	—	—	—	*1300*	*1375*	*1475*	*1625*	*1625*	*1750*	*1875*	*2025*
S1	—	—	—	—	—	—	—	—	—	—	—	—	50	55	60	65	43	46	49	55	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*215*	*140*	*150*	*160*	*180*	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	42	45	48	50	35	37	40	43	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*155*	*165*	*115*	*120*	*130*	*140*	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	36	39	42	45	30	32	35	38	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*140*	*150*	*100*	*105*	*115*	*125*	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	70	75	85	90	60	65	70	75	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*280*	*295*	*195*	*215*	*230*	*245*	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	50	55	55	65	41	44	47	55	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*180*	*215*	*135*	*145*	*155*	*180*	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	29	31	33	36	24	26	28	30	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*95*	*100*	*110*	*120*	*80*	*85*	*90*	*100*	—	—	—	—
H5	—	—	—	—	—	—	—	—	46	50	55	60	—	—	—	—	36	38	41	46	—	—	—	—
	—	—	—	—	—	—	—	—	*150*	*165*	*180*	*195*	—	—	—	—	*120*	*125*	*135*	*150*	—	—	—	—
H8	—	—	—	—	—	—	—	—	49	55	55	60	—	—	—	—	39	41	44	49	—	—	—	—
	—	—	—	—	—	—	—	—	*160*	*180*	*180*	*195*	—	—	—	—	*130*	*135*	*145*	*160*	—	—	—	—
H11	—	—	—	—	—	—	—	—	60	65	70	75	—	—	—	—	46	49	55	60	—	—	—	—
	—	—	—	—	—	—	—	—	*195*	*215*	*230*	*245*	—	—	—	—	*150*	*160*	*180*	*195*	—	—	—	—
H12	—	—	—	—	—	—	—	—	95	100	110	120	—	—	—	—	70	75	80	90	—	—	—	—
	—	—	—	—	—	—	—	—	*310*	*330*	*360*	*395*	—	—	—	—	*230*	*245*	*260*	*295*	—	—	—	—
H21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	41	44	49	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*135*	*145*	*160*	—	—	—	—

R217/220.53-09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	410	425	450	480	425	440	470	500	380	395	420	450
	—	—	—	—	*1350*	*1400*	*1475*	*1575*	*1400*	*1450*	*1550*	*1650*	*1250*	*1300*	*1375*	*1475*
P2	—	—	—	—	400	410	440	470	410	420	450	490	365	380	400	440
	—	—	—	—	*1300*	*1350*	*1450*	*1550*	*1350*	*1375*	*1475*	*1600*	*1200*	*1250*	*1300*	*1450*
P3	—	—	—	—	340	355	375	415	355	370	395	430	320	330	350	385
	—	—	—	—	*1125*	*1175*	*1225*	*1350*	*1175*	*1225*	*1300*	*1400*	*1050*	*1075*	*1150*	*1275*
P4	—	—	—	—	300	310	330	365	320	330	350	375	285	295	315	340
	—	—	—	—	*980*	*1025*	*1075*	*1200*	*1050*	*1075*	*1150*	*1225*	*940*	*970*	*1025*	*1125*
P5	—	—	—	—	295	305	325	345	305	315	335	365	275	285	300	330
	—	—	—	—	*970*	*1000*	*1075*	*1125*	*1000*	*1025*	*1100*	*1200*	*900*	*940*	*980*	*1075*
P6	—	—	—	—	330	345	365	390	340	355	375	410	305	320	340	370
	—	—	—	—	*1075*	*1125*	*1200*	*1275*	*1125*	*1175*	*1225*	*1350*	*1000*	*1050*	*1125*	*1225*
P7	—	—	—	—	315	325	345	370	325	335	355	385	290	300	320	345
	—	—	—	—	*1025*	*1075*	*1125*	*1225*	*1075*	*1100*	*1175*	*1275*	*950*	*980*	*1050*	*1125*
P8	—	—	—	—	290	300	315	345	300	310	330	360	270	280	295	325
	—	—	—	—	*950*	*980*	*1025*	*1125*	*980*	*1025*	*1075*	*1175*	*890*	*920*	*970*	*1075*
P11	—	—	—	—	305	315	335	360	315	325	345	375	280	290	310	335
	—	—	—	—	*1000*	*1025*	*1100*	*1175*	*1025*	*1075*	*1125*	*1225*	*920*	*950*	*1025*	*1100*
P12	—	—	—	—	195	205	215	230	200	210	220	235	180	190	200	215
	—	—	—	—	*640*	*670*	*710*	*750*	*660*	*690*	*720*	*770*	*590*	*620*	*660*	*710*
M1	—	—	—	—	—	—	—	—	205	220	240	265	195	205	220	245
	—	—	—	—	—	—	—	—	*670*	*720*	*790*	*870*	*640*	*670*	*720*	*800*
M2	—	—	—	—	—	—	—	—	175	185	200	220	160	170	185	205
	—	—	—	—	—	—	—	—	*570*	*610*	*660*	*720*	*520*	*560*	*610*	*670*
M3	—	—	—	—	—	—	—	—	140	150	160	175	130	140	150	165
	—	—	—	—	—	—	—	—	*460*	*490*	*520*	*570*	*425*	*460*	*490*	*540*
M4	—	—	—	—	—	—	—	—	110	115	125	135	100	105	115	130
	—	—	—	—	—	—	—	—	*360*	*375*	*410*	*445*	*330*	*345*	*375*	*425*
M5	—	—	—	—	—	—	—	—	90	95	105	115	85	90	95	105
	—	—	—	—	—	—	—	—	*295*	*310*	*345*	*375*	*280*	*295*	*310*	*345*
K1	360	435	495	580	400	415	445	475	410	425	455	495	370	380	405	445
	1175	*1425*	*1625*	*1900*	*1300*	*1350*	*1450*	*1550*	*1350*	*1400*	*1500*	*1625*	*1225*	*1250*	*1325*	*1450*
K2	320	385	435	510	360	370	395	420	370	380	405	440	330	340	365	395
	1050	*1275*	*1425*	*1675*	*1175*	*1225*	*1300*	*1375*	*1225*	*1250*	*1325*	*1450*	*1075*	*1125*	*1200*	*1300*
K3	255	280	310	350	305	315	335	355	310	325	345	375	280	290	310	335
	840	*920*	*1025*	*1150*	*1000*	*1025*	*1100*	*1175*	*1025*	*1075*	*1125*	*1225*	*920*	*950*	*1025*	*1100*
K4	240	270	295	335	290	300	320	340	295	310	330	355	265	275	295	320
	790	*890*	*970*	*1100*	*950*	*980*	*1050*	*1125*	*970*	*1025*	*1075*	*1175*	*870*	*900*	*970*	*1050*
K5	150	165	180	205	175	180	195	210	185	190	200	215	165	170	180	195
	490	*540*	*590*	*670*	*570*	*590*	*640*	*690*	*610*	*620*	*660*	*710*	*540*	*560*	*590*	*640*
K6	215	235	260	295	255	265	280	300	260	270	290	315	235	245	260	280
	710	*770*	*850*	*970*	*840*	*870*	*920*	*980*	*850*	*890*	*950*	*1025*	*770*	*800*	*850*	*920*
K7	190	210	235	260	225	230	245	270	235	245	260	275	210	220	230	245
	620	*690*	*770*	*850*	*740*	*750*	*800*	*890*	*770*	*800*	*850*	*900*	*690*	*720*	*750*	*800*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	47	50	55	60
	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*165*	*180*	*195*
S2	—	—	—	—	—	—	—	—	—	—	—	—	38	40	43	48
	—	—	—	—	—	—	—	—	—	—	—	—	*125*	*130*	*140*	*155*
S3	—	—	—	—	—	—	—	—	—	—	—	—	33	36	38	42
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*120*	*125*	*140*
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	70	75	85
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*245*	*280*
S12	—	—	—	—	—	—	—	—	—	—	—	—	45	48	50	60
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*165*	*195*
S13	—	—	—	—	—	—	—	—	—	—	—	—	26	28	30	34
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*100*	*110*
H5	—	—	—	—	50	55	60	65	—	—	—	—	41	44	48	55
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*135*	*145*	*155*	*180*
H8	—	—	—	—	55	60	65	70	—	—	—	—	44	47	50	55
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*145*	*155*	*165*	*180*
H11	—	—	—	—	65	70	75	80	—	—	—	—	55	55	60	65
	—	—	—	—	*215*	*230*	*245*	*260*	—	—	—	—	*180*	*180*	*195*	*215*
H12	—	—	—	—	100	105	115	125	—	—	—	—	80	85	90	100
	—	—	—	—	*330*	*345*	*375*	*410*	—	—	—	—	*260*	*280*	*295*	*330*
H21	—	—	—	—	55	60	65	70	—	—	—	—	44	47	50	55
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*145*	*155*	*165*	*180*

Quattromill R217/220.53-12 – In mm

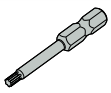




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 293-295
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.53-0040-12-4A	02410704	Manicotto	40,0	4	6,0	45,0 °	52,0	22,0	–	47,0	40,0	16500	0,4	SE.X1204
R220.53-0050-12-4A	00040081	Manicotto	50,0	4	6,0	45,0 °	62,0	22,0	–	47,0	40,0	14800	0,5	SE.X1204
R220.53-0050-12-5A	00040082	Manicotto	50,0	5	6,0	45,0 °	62,0	22,0	–	47,0	40,0	14800	0,4	SE.X1204
R220.53-0063-12-5A	00040083	Manicotto	63,0	5	6,0	45,0 °	75,0	22,0	–	47,0	40,0	13200	0,6	SE.X1204
R220.53-0063-12-6A	00040084	Manicotto	63,0	6	6,0	45,0 °	75,0	22,0	–	47,0	40,0	13200	0,6	SE.X1204
R220.53-0080-12-6A	00040085	Manicotto	80,0	6	6,0	45,0 °	92,0	27,0	–	62,0	50,0	11700	1,1	SE.X1204
R220.53-0080-12-8A	00040086	Manicotto	80,0	8	6,0	45,0 °	92,0	27,0	–	62,0	50,0	11700	1,1	SE.X1204
R220.53-0100-12-5A	02448963	Manicotto	100,0	5	6,0	45,0 °	112,0	32,0	–	77,0	50,0	10500	1,7	SE.X1204
R220.53-0100-12-7A	00040087	Manicotto	100,0	7	6,0	45,0 °	112,0	32,0	–	77,0	50,0	10500	1,7	SE.X1204
R220.53-0100-12-10A	00040088	Manicotto	100,0	10	6,0	45,0 °	112,0	32,0	–	77,0	50,0	10500	1,8	SE.X1204
R220.53-0125-12-6A	02448964	Manicotto	125,0	6	6,0	45,0 °	137,0	40,0	–	90,0	63,0	9400	3,1	SE.X1204
R220.53-0125-12-8A	00040089	Manicotto	125,0	8	6,0	45,0 °	137,0	40,0	–	90,0	63,0	9400	2,9	SE.X1204
R220.53-0125-12-12A	00040090	Manicotto	125,0	12	6,0	45,0 °	137,0	40,0	–	90,0	63,0	9400	2,9	SE.X1204
R220.53-8160-12-7	02448965	Manicotto	160,0	7	6,0	45,0 °	172,0	40,0	66,7	90,0	63,0	8300	4,4	SE.X1204
R220.53-8160-12-10	00040091	Manicotto	160,0	10	6,0	45,0 °	172,0	40,0	66,7	90,0	63,0	8300	4,5	SE.X1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-0040-0063	220.17-696	1/4HEX-T15PX50	C04011-T15P
R220.53-0080	–	1/4HEX-T15PX50	C04011-T15P
R220.53-0100-8160	–	1/4HEX-T15PX90	C04011-T15P

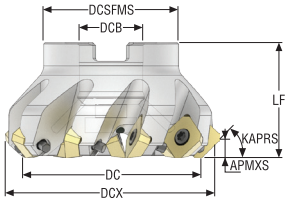
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.53-0040-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R217/220.53-12 – In mm

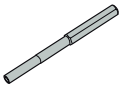




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 293-295
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		kg	
R220.53-0063-12-9A	02997159	Manicotto	63,0	9	6,0	45,0 °	75,0	22,0	47,0	40,0	13200	0,5	SE.X1204
R220.53-0080-12-11A	02997160	Manicotto	80,0	11	6,0	45,0 °	92,0	27,0	62,0	50,0	11700	1,1	SE.X1204

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per serraggio inserto da dietro	Chiave frontale per vite inserto	Vite di bloccaggio inserto
			
R220.53-0063-0080	H6B-H3.0	T15P-E8	C04008-H3

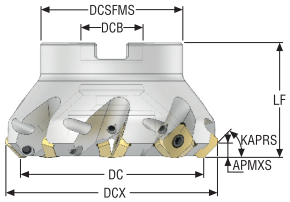
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto
				
R220.53-0063-0080	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM
R220.53-0063-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	–	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R217/220.53-12 – Pollici

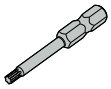




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 293-295
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch	inch	inch		lb	
R220.53-01.50-12-4A	02422139	Manicotto	1.575	4	0.236	45,0 °	2.047	0.750	–	–	1.850	1.575	16500	1.100	SE.X1204
R220.53-02.00-12-4A	02422140	Manicotto	1.969	4	0.236	45,0 °	2.441	0.750	–	–	1.850	1.575	14800	1.100	SE.X1204
R220.53-02.00-12-5A	02422141	Manicotto	1.969	5	0.236	45,0 °	2.441	0.750	–	–	1.850	1.575	14800	1.100	SE.X1204
R220.53-02.50-12-5A	02422142	Manicotto	2.480	5	0.236	45,0 °	2.953	0.750	–	–	1.850	1.575	13200	1.540	SE.X1204
R220.53-02.50-12-6A	02422143	Manicotto	2.480	6	0.236	45,0 °	2.953	0.750	–	–	1.850	1.575	13200	1.320	SE.X1204
R220.53-03.00-12-6A	02422144	Manicotto	3.150	6	0.236	45,0 °	3.622	1.000	–	–	2.441	1.969	11700	2.650	SE.X1204
R220.53-03.00-12-8A	02422145	Manicotto	3.150	8	0.236	45,0 °	3.622	1.000	–	–	2.441	1.969	11700	2.870	SE.X1204
R220.53-04.00-12-7A	02422146	Manicotto	3.937	7	0.236	45,0 °	4.409	1.500	–	–	3.543	1.969	10500	4.630	SE.X1204
R220.53-04.00-12-10A	02422147	Manicotto	3.937	10	0.236	45,0 °	4.409	1.500	–	–	3.543	1.969	10500	4.850	SE.X1204
R220.53-05.00-12-8A	02422148	Manicotto	4.921	8	0.236	45,0 °	5.394	1.500	–	–	3.543	2.480	9400	7.940	SE.X1204
R220.53-06.00-12-10	02422150	Manicotto	6.299	10	0.236	45,0 °	6.772	2.000	–	–	3.543	2.480	8300	9.920	SE.X1204
R220.53-06.00-12-7	02449820	Manicotto	6.299	7	0.236	45,0 °	6.772	2.000	–	–	3.543	2.480	8300	9.920	SE.X1204
R220.53-808.00-12-12	02422151	Manicotto	7.874	12	0.236	45,0 °	8.346	2.500	4.000	4.000	5.118	2.480	7400	16.530	SE.X1204

Parti di ricambio, comprese nella fornitura

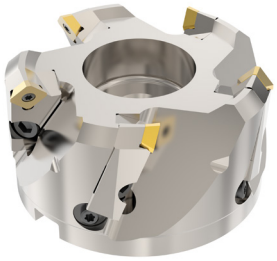
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-01.50-02.50	220.17-698	1/4HEX-T15PX50	C04011-T15P
R220.53-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P
R220.53-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T15PX90	C04011-T15P
R220.53-05.00	UF6S3/4UNFX2	1/4HEX-T15PX90	C04011-T15P
R220.53-06.00-808.00	–	1/4HEX-T15PX90	C04011-T15P

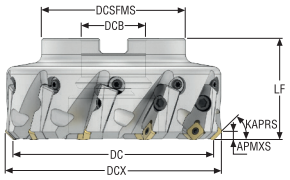
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.53-01.50 - 05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.53-808.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-12C – In mm

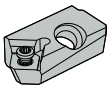
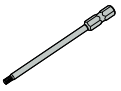




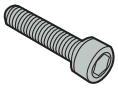
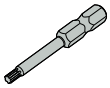
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 293-295
–Per il programma inserti completo, vedere le pagine 882
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.53-0125-12-8C	02448846	Manicotto	125,0	8	6,0	45,0 °	137,0	40,0	–	–	90,0	63,0	5900	4,4	SE.X1204
R220.53-8160-12-10C	02448847	Manicotto	160,0	10	6,0	45,0 °	172,0	40,0	66,7	–	90,0	63,0	5200	6,6	SE.X1204
R220.53-8200-12-12C	02448849	Manicotto	200,0	12	6,0	45,0 °	212,0	60,0	101,6	–	130,0	63,0	4700	9,5	SE.X1204
R220.53-8250-12-10C	02448896	Manicotto	250,0	10	6,0	45,0 °	262,0	60,0	101,6	–	130,0	63,0	4200	21,4	SE.X1204
R220.53-8250-12-16C	02448853	Manicotto	250,0	16	6,0	45,0 °	262,0	60,0	101,6	–	130,0	63,0	4200	21,6	SE.X1204
R220.53-8315-12-12C	02448900	Manicotto	315,0	12	6,0	45,0 °	327,0	60,0	101,6	177,8	225,0	80,0	3700	32,9	SE.X1204

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto
					
R220.53-0100-8315	AU1114T-T15P	SE12AR-53	FS96018	1/4HEX-T15PX90	C04009-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave	Chiave di regolazione	Chiave dinamometrica
								
R220.53-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-15P35
R220.53-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-15P35
R220.53-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-15P35
R220.53-8315	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	MC6S20X50	1/4HEX-S-HANDLE	3.5NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.53-12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SEMX1204AFTN-ME12 MP3501	3,5 *0.14*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
P2	SEMX1204AFTN-ME12 MP3501	3,5 *0.14*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
P3	SEMX1204AFTN-M15 MP2501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P4	SEMX1204AFTN-M15 MP2501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P5	SEMX1204AFTN-M15 MP2501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
P6	SEMX1204AFTN-M15 MP2501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P7	SEMX1204AFTN-M15 MP3501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P8	SEMX1204AFTN-M15 MP3501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P11	SEEX1204AFN-M10 MP2051	3,5 *0.14*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
P12	SEEX1204AFN-M10 MP2051	3,0 *0.12*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,17 0.0065
M1	SEEX1204AFN-M10 F40M	3,5 *0.14*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M2	SEEX1204AFN-M10 MS2050	3,5 *0.14*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
M3	SEEX1204AFN-M10 MS2050	3,0 *0.12*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
M4	SEEX1204AFN-M10 MP2051	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
M5	SEEX1204AFN-M10 MP2051	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
K1	SEMX1204AFTN-M15 MK1501	3,5 *0.14*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K2	SEMX1204AFTN-M15 MK1501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
K3	SEMX1204AFTN-M15 MP1501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
K4	SEMX1204AFTN-M15 MP1501	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
K5	SEMX1204AFTN-M15 MP1501	3,5 *0.14*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K6	SEMX1204AFTN-M15 MK2050	3,5 *0.14*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
K7	SEMX1204AFTN-M15 MK2050	3,5 *0.14*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
N1	SEEX1204AFN-E08 H25	3,5 *0.14*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
N2	SEEX1204AFN-E08 H25	3,5 *0.14*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
N3	SEEX1204AFN-E08 H25	3,5 *0.14*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
N11	SEEX1204AFN-E08 H25	3,5 *0.14*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S1	SEMX1204AFTN-ME12 MS2050	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S2	SEMX1204AFTN-ME12 MS2050	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S3	SEMX1204AFTN-ME12 MS2050	2,0 *0.080*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
S11	SEEX1204AFN-M10 MS2050	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
S12	SEEX1204AFN-M10 MS2050	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
S13	SEEX1204AFN-M10 MS2050	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
H5	SEMX1204AFTN-MD19 MP3000	3,0 *0.12*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
H8	SEMX1204AFTN-MD19 MP3000	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
H11	SEMX1204AFTN-MD19 MP1501	3,0 *0.12*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
H12	SEMX1204AFTN-MD19 MP1501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
H21	SEMX1204AFTN-MD19 MP1501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.53-12 – Parametri di taglio v_c = (m/min)/(sf/min)

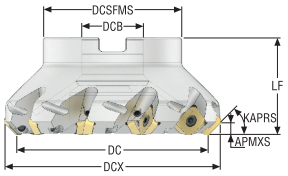
SMG	MK2050				MP3000				MS2050				F40M				MP2051				H25			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	290 *950*	310 *1025*	350 *1150*	390 *1275*	325 *1075*	355 *1175*	400 *1300*	450 *1475*	290 *950*	310 *1025*	345 *1125*	385 *1275*	235 *770*	255 *840*	280 *920*	310 *1025*	345 *1125*	385 *1275*	450 *1475*	520 *1700*	— —	— —	— —	— —
P2	280 *920*	305 *1000*	330 *1075*	380 *1250*	315 *1025*	345 *1125*	390 *1275*	440 *1450*	280 *920*	300 *980*	335 *1100*	375 *1225*	230 *750*	245 *800*	265 *870*									
P3				335 *1100*		310 *1025*				270 *890*						265 *870*	310 *1025*	345 *1125*	380 *1250*	445 *1450*	— —	— —	— —	— —
P4	215 *710*	235 *770*	265 *870*	295 *970*	250 *820*	270 *890*	305 *1000*	340 *1125*	220 *720*	235 *770*	265 *870*	290 *950*	190 *620*	205 *670*	225 *740*	250 *820*	270 *890*	300 *980*	350 *1150*	390 *1275*	— —	— —	— —	— —
P5	210 *690*	225 *740*	250 *820*	280 *920*	240 *790*	260 *850*	295 *970*	330 *1075*	210 *690*	225 *740*	250 *820*	280 *920*	170 *560*	185 *610*	205 *670*	225 *740*	260 *850*	290 *950*	335 *1100*	380 *1250*	— —	— —	— —	— —
P6	235 *770*	250 *820*	280 *920*	320 *1050*	275 *900*	300 *980*	330 *1075*	370 *1225*	240 *790*	260 *850*	280 *920*	315 *1025*	190 *620*	205 *670*	230 *750*	255 *840*	300 *980*	335 *1100*	375 *1225*	425 *1400*	— —	— —	— —	— —
P7	220 *720*	240 *790*	265 *870*	305 *1000*	260 *850*	280 *920*	310 *1025*	350 *1150*	225 *740*	245 *800*	265 *870*	295 *970*	180 *590*	195 *640*	215 *710*	240 *790*	285 *940*	315 *1025*	355 *1175*	400 *1300*	— —	— —	— —	— —
P8	210 *690*	225 *740*	245 *800*	280 *920*	240 *790*	260 *850*	280 *920*	325 *1075*	210 *690*	225 *740*	245 *800*	275 *900*	170 *560*	185 *610*	200 *660*	225 *740*	260 *850*	290 *950*	320 *1050*	375 *1225*	— —	— —	— —	— —
P11	215 *710*	230 *750*	260 *850*	295 *970*	250 *820*	275 *900*	300 *980*	340 *1125*	220 *720*	235 *770*	260 *850*	290 *950*	175 *570*	190 *620*	210 *690*	235 *770*	275 *900*	315 *1025*	370 *1225*	445 *1450*	— —	— —	— —	— —
P12	140 *460*	155 *510*	170 *560*	190 *620*	165 *540*	180 *590*	200 *660*	220 *720*	145 *475*	155 *510*	170 *560*	190 *620*	125 *410*	130 *425*	145 *475*	155 *510*	190 *620*	215 *710*	245 *800*	295 *970*	— —	— —	— —	— —
M1	— —	— —	— —	— —	225 *740*	240 *790*	270 *890*	300 *980*	210 *690*	230 *750*	255 *840*	285 *940*	175 *570*	190 *620*	205 *670*	235 *770*	290 *950*	335 *1100*	410 *1350*	500 *1650*	— —	— —	— —	— —
M2	— —	— —	— —	— —	185 *610*	200 *660*	220 *720*	250 *820*	175 *570*	190 *620*	210 *690*	235 *770*	145 *475*	155 *510*	175 *570*	195 *640*	250 *820*	290 *950*	350 *1150*	425 *1400*	— —	— —	— —	— —
M3	— —	— —	— —	— —	150 *490*	160 *520*	180 *590*	200 *660*	145 *475*	155 *510*	170 *560*	190 *620*	120 *395*	125 *410*	140 *460*	160 *520*	220 *720*	250 *820*	290 *950*	350 *1150*	— —	— —	— —	— —
M4	— —	— —	— —	— —	120 *395*	125 *410*	140 *460*	155 *510*	110 *360*	120 *395*	130 *425*	150 *490*	90 *295*	100 *330*	110 *360*	125 *410*	175 *570*	195 *640*	225 *740*	270 *890*	— —	— —	— —	— —
M5	— —	— —	— —	— —	100 *330*	105 *345*	115 *375*	130 *425*	95 *310*	100 *330*	110 *360*	125 *410*	75 *245*	80 *260*	90 *295*	105 *345*	150 *490*	165 *540*	190 *620*	225 *740*	— —	— —	— —	— —
K1	305 *1000*	325 *1075*	360 *1175*	410 *1350*	235 *770*	255 *840*	285 *940*	320 *1050*	— —	— —	— —	— —	170 *560*	185 *610*	205 *670*	235 *770*	— —	— —	— —	— —	— —	— —	— —	— —
K2	270 *890*	290 *950*	325 *1075*	365 *1200*	210 *690*	225 *740*	255 *840*	285 *940*	— —	— —	— —	— —	150 *490*	165 *540*	185 *610*	205 *670*	— —	— —	— —	— —	— —	— —	— —	— —
K3	225 *740*	245 *800*	275 *900*	305 *1000*	180 *590*	190 *620*	215 *710*	240 *790*	— —	— —	— —	— —	130 *425*	140 *460*	155 *510*	175 *570*	— —	— —	— —	— —	— —	— —	— —	— —
K4	215 *710*	235 *770*	260 *850*	295 *970*	170 *560*	185 *610*	205 *670*	230 *750*	— —	— —	— —	— —	120 *395*	130 *425*	150 *490*	165 *540*	— —	— —	— —	— —	— —	— —	— —	— —
K5	135 *445*	145 *475*	160 *520*	180 *590*	105 *345*	110 *360*	125 *410*	140 *460*	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	— —	— —	— —	— —
K6	190 *620*	205 *670*	230 *750*	260 *850*	150 *490*	160 *520*	180 *590*	205 *670*	— —	— —	— —	— —	110 *360*	115 *375*	130 *425*	145 *475*	— —	— —	— —	— —	— —	— —	— —	— —
K7	170 *560*	185 *610*	205 *670*	230 *750*	135 *445*	145 *475*	160 *520*	180 *590*	— —	— —	— —	— —	95 *310*	105 *345*	115 *375*	130 *425*	— —	— —	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1250 *4100*	1350 *4425*	1500 *4925*	1700 *5575*	— —	— —	— —	— —	1600 *5250*	1725 *5650*	1900 *6225*	2150 *7050*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	500 *1650*	550 *1800*	600 *1975*	680 *2225*	— —	— —	— —	— —	640 *2100*	690 *2275*	770 *2525*	870 *2850*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	335 *1100*	365 *1200*	400 *1300*	455 *1500*	— —	— —	— —	— —	430 *1400*	460 *1500*	510 *1675*	580 *1900*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	385 *1275*	415 *1350*	460 *1500*	520 *1700*	— —	— —	— —	— —	490 *1600*	530 *1750*	590 *1925*	660 *2175*
S1	— —	— —	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	70 *230*	43 *140*	46 *150*	50 *165*	60 *195*	55 *180*	60 *195*	70 *230*	75 *245*	— —	— —	— —	— —
S2	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	50 *165*	55 *180*	35 *115*	37 *120*	41 *135*	46 *150*	46 *150*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —
S3	— —	— —	— —	— —	— —	— —	— —	— —	37 *120*	39 *130*	44 *145*	49 *160*	30 *100*	33 *110*	36 *120*	41 *135*	40 *130*	43 *140*	48 *155*	55 *180*	— —	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	— —	— —	70 *230*	80 *260*	85 *280*	95 *310*	60 *195*	65 *215*	70 *230*	80 *260*	80 *260*	85 *280*	95 *310*	105 *345*	— —	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	65 *215*	41 *135*	45 *150*	50 *165*	55 *180*	55 *180*	60 *195*	65 *215*	75 *245*	— —	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	— —	— —	29 *95*	31 *100*	35 *115*	39 *130*	24 *80*	26 *85*	29 *95*	32 *105*	32 *105*	34 *110*	38 *125*	43 *140*	— —	— —	— —	— —
H5	49 *160*	50 *165*	60 *195*	65 *215*	46 *150*	50 *165*	55 *180*	60 *195*	— —	— —	— —	— —	36 *120*	39 *130*	44 *145*	49 *160*	— —	— —	— —	— —	— —	— —	— —	— —
H8	50 *165*	55 *180*	60 *195*	70 *230*	50 *165*	55 *180*	60 *195*	65 *215*	— —	— —	— —	— —	39 *130*	43 *140*	46 *150*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —
H11	60 *195*	65 *215*	75 *245*	85 *280*	60 *195*	65 *215*	70 *230*	80 *260*	— —	— —	— —	— —	46 *150*	50 *165*	55 *180*	60 *195*	125 *410*	140 *460*	160 *520*	190 *620*	— —	— —	— —	— —
H12	90 *295*	100 *330*	110 *360*	125 *410*	95 *310*	105 *345*	110 *360*	125 *410*	— —	— —	— —	— —	70 *230*	75 *245*	85 *280*	95 *310*	125 *410*	135 *445*	150 *490*	175 *570*	— —	— —	— —	— —
H21	50 *165*	55 *180*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	— —	— —	39 *130*	43 *140*	46 *150*	55 *180*	110 *360*	115 *375*	120 *395*	130 *425*	— —	— —	— —	— —

R217/220.53-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501				MM4500			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	395	405	435	480	385	395	425	470	325	335	360	400	245	255	275	305
	—	—	—	—	*1300*	*1325*	*1425*	*1575*	*1275*	*1300*	*1400*	*1550*	*1075*	*1100*	*1175*	*1300*	*800*	*840*	*900*	*1000*
P2	—	—	—	—	385	395	425	460	375	385	410	445	315	325	350	380	240	250	270	295
	—	—	—	—	*1275*	*1300*	*1400*	*1500*	*1225*	*1275*	*1350*	*1450*	*1025*	*1075*	*1150*	*1250*	*790*	*820*	*890*	*970*
P3	—	—	—	—	340	350	375	405	330	340	365	395	280	285	310	335	210	220	240	255
	—	—	—	—	*1125*	*1150*	*1225*	*1325*	*1075*	*1125*	*1200*	*1300*	*920*	*940*	*1025*	*1100*	*690*	*720*	*790*	*840*
P4	—	—	—	—	300	305	330	365	290	300	320	355	245	255	270	300	200	210	225	250
	—	—	—	—	*980*	*1000*	*1075*	*1200*	*950*	*980*	*1050*	*1175*	*800*	*840*	*890*	*980*	*660*	*690*	*740*	*820*
P5	—	—	—	—	285	295	315	345	275	285	305	340	235	240	260	290	175	185	200	220
	—	—	—	—	*940*	*970*	*1025*	*1125*	*900*	*940*	*1000*	*1125*	*770*	*790*	*850*	*950*	*570*	*610*	*660*	*720*
P6	—	—	—	—	320	330	355	390	310	320	345	380	265	270	290	325	200	215	230	250
	—	—	—	—	*1050*	*1075*	*1175*	*1275*	*1025*	*1050*	*1125*	*1250*	*870*	*890*	*950*	*1075*	*660*	*710*	*750*	*820*
P7	—	—	—	—	300	310	335	365	295	300	325	360	250	255	275	305	190	200	215	235
	—	—	—	—	*980*	*1025*	*1100*	*1200*	*970*	*980*	*1075*	*1175*	*820*	*840*	*900*	*1000*	*620*	*660*	*710*	*770*
P8	—	—	—	—	285	295	315	340	275	285	305	330	235	240	260	280	175	185	200	215
	—	—	—	—	*940*	*970*	*1025*	*1125*	*900*	*940*	*1000*	*1075*	*770*	*790*	*850*	*920*	*570*	*610*	*660*	*710*
P11	—	—	—	—	295	300	325	355	285	295	315	350	240	250	265	295	185	195	210	225
	—	—	—	—	*970*	*980*	*1075*	*1175*	*940*	*970*	*1025*	*1150*	*790*	*820*	*870*	*970*	*610*	*640*	*690*	*740*
P12	—	—	—	—	195	205	215	235	190	200	210	230	165	170	180	195	115	125	130	145
	—	—	—	—	*640*	*670*	*710*	*770*	*620*	*660*	*690*	*750*	*540*	*560*	*590*	*640*	*375*	*410*	*425*	*475*
M1	—	—	—	—	—	—	—	—	195	205	220	245	170	180	195	215	155	165	180	200
	—	—	—	—	—	—	—	—	*640*	*670*	*720*	*800*	*560*	*590*	*640*	*710*	*510*	*540*	*590*	*660*
M2	—	—	—	—	—	—	—	—	160	170	185	205	140	150	165	180	130	140	150	165
	—	—	—	—	—	—	—	—	*520*	*560*	*610*	*670*	*460*	*490*	*540*	*590*	*425*	*460*	*490*	*540*
M3	—	—	—	—	—	—	—	—	130	140	150	170	115	125	135	150	105	110	120	135
	—	—	—	—	—	—	—	—	*425*	*460*	*490*	*560*	*375*	*410*	*445*	*490*	*345*	*360*	*395*	*445*
M4	—	—	—	—	—	—	—	—	100	110	115	130	90	95	105	115	80	85	95	105
	—	—	—	—	—	—	—	—	*330*	*360*	*375*	*425*	*295*	*310*	*345*	*375*	*260*	*280*	*310*	*345*
M5	—	—	—	—	—	—	—	—	85	90	95	110	75	80	85	95	70	75	80	85
	—	—	—	—	—	—	—	—	*280*	*295*	*310*	*360*	*245*	*260*	*280*	*310*	*230*	*245*	*260*	*280*
K1	350	425	485	570	385	400	425	465	375	385	415	450	320	325	350	380	—	—	—	—
	1150	*1400*	*1600*	*1875*	*1275*	*1300*	*1400*	*1525*	*1225*	*1275*	*1350*	*1475*	*1050*	*1075*	*1150*	*1250*	—	—	—	—
K2	305	375	425	500	345	355	380	420	335	345	370	410	285	290	315	350	—	—	—	—
	1000	*1225*	*1400*	*1650*	*1125*	*1175*	*1250*	*1375*	*1100*	*1125*	*1225*	*1350*	*940*	*950*	*1025*	*1150*	—	—	—	—
K3	235	260	290	330	290	300	320	355	285	290	315	345	240	245	265	295	—	—	—	—
	770	*850*	*950*	*1075*	*950*	*980*	*1050*	*1175*	*940*	*950*	*1025*	*1125*	*790*	*800*	*870*	*970*	—	—	—	—
K4	225	250	275	315	280	285	305	340	270	280	300	330	230	235	255	280	—	—	—	—
	740	*820*	*900*	*1025*	*920*	*940*	*1000*	*1125*	*890*	*920*	*980*	*1075*	*750*	*770*	*840*	*920*	—	—	—	—
K5	140	155	170	190	170	180	190	205	170	175	185	200	145	145	160	170	—	—	—	—
	460	*510*	*560*	*620*	*560*	*590*	*620*	*670*	*560*	*570*	*610*	*660*	*475*	*475*	*520*	*560*	—	—	—	—
K6	195	220	240	275	245	255	270	300	240	245	265	290	200	210	225	250	—	—	—	—
	640	*720*	*790*	*900*	*800*	*840*	*890*	*980*	*790*	*800*	*870*	*950*	*660*	*690*	*740*	*820*	—	—	—	—
K7	175	195	215	245	220	230	245	265	215	220	235	260	185	190	200	220	—	—	—	—
	570	*640*	*710*	*800*	*720*	*750*	*800*	*870*	*710*	*720*	*770*	*850*	*610*	*620*	*660*	*720*	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	42	45	48	55	25	27	29	32
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*155*	*180*	*80*	*90*	*95*	*105*
S2	—	—	—	—	—	—	—	—	—	—	—	—	34	36	39	43	20	22	23	26
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*120*	*130*	*140*	*65*	*70*	*75*	*85*
S3	—	—	—	—	—	—	—	—	—	—	—	—	30	32	34	38	18	19	20	22
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*105*	*110*	*125*	*60*	*60*	*65*	*70*
S11	—	—	—	—	—	—	—	—	—	—	—	—	60	65	70	75	35	37	40	44
	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*215*	*230*	*245*	*115*	*120*	*130*	*145*
S12	—	—	—	—	—	—	—	—	—	—	—	—	41	43	47	50	32	34	37	41
	—	—	—	—	—	—	—	—	—	—	—	—	*135*	*140*	*155*	*165*	*105*	*110*	*120*	*135*
S13	—	—	—	—	—	—	—	—	—	—	—	—	24	25	27	30	19	20	21	24
	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*80*	*90*	*100*	*60*	*65*	*70*	*80*
H5	—	—	—	—	50	55	60	65	—	—	—	—	37	40	43	48	—	—	—	—
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*120*	*130*	*140*	*155*	—	—	—	—
H8	—	—	—	—	55	60	65	70	—	—	—	—	40	43	47	50	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*130*	*140*	*155*	*165*	—	—	—	—
H11	—	—	—	—	65	70	75	85	—	—	—	—	48	50	55	60	—	—	—	—
	—	—	—	—	*215*	*230*	*245*	*280*	—	—	—	—	*155*	*165*	*180*	*195*	—	—	—	—
H12	—	—	—	—	100	105	115	125	—	—	—	—	70	75	85	90	—	—	—	—
	—	—	—	—	*330*	*345*	*375*	*410*	—	—	—	—	*230*	*245*	*280*	*295*	—	—	—	—
H21	—	—	—	—	55	60	65	70	—	—	—	—	40	43	47	50	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*130*	*140*	*155*	*165*	—	—	—	—

Quattromill R220.53-15 – In mm

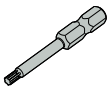




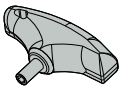
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 299-301
–Per il programma inserti completo, vedere le pagine 882
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.53-0063-15-5A	02486622	Manicotto	63,0	5	7,5	45,0 °	78,0	22,0	–	47,0	40,0	8300	0,7	SE.X1505
R220.53-0080-15-6A	02486624	Manicotto	80,0	6	7,5	45,0 °	96,0	27,0	–	62,0	50,0	7400	1,1	SE.X1505
R220.53-0080-15-7A	02486625	Manicotto	80,0	7	7,5	45,0 °	96,0	27,0	–	62,0	50,0	7400	1,2	SE.X1505
R220.53-0100-15-7A	02486627	Manicotto	100,0	7	7,5	45,0 °	116,0	32,0	–	77,0	50,0	6600	1,8	SE.X1505
R220.53-0100-15-9A	02486628	Manicotto	100,0	9	7,5	45,0 °	116,0	32,0	–	77,0	50,0	6600	1,8	SE.X1505
R220.53-0125-15-8A	02486630	Manicotto	125,0	8	7,5	45,0 °	141,0	40,0	–	90,0	63,0	5900	3,1	SE.X1505
R220.53-0125-15-10A	02486631	Manicotto	125,0	10	7,5	45,0 °	141,0	40,0	–	90,0	63,0	5900	3,2	SE.X1505
R220.53-8160-15-10	02486633	Manicotto	160,0	10	7,5	45,0 °	176,0	40,0	66,7	90,0	63,0	5200	4,7	SE.X1505
R220.53-8200-15-12	02486636	Manicotto	200,0	12	7,5	45,0 °	216,0	60,0	101,6	130,0	63,0	4700	7,8	SE.X1505

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-0063	220.17-696	1/4HEX-T20PX50	C05013-T20P
R220.53-0080	–	1/4HEX-T20PX50	C05013-T20P
R220.53-0100-8200	–	1/4HEX-T20PX90	C05013-T20P

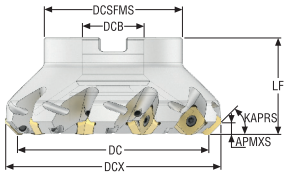
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.53-0063	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-0080	1/4HEX-T-HANDLE-5.0-14.0NM	5802712	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-0100	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-8200	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-15 – Pollici

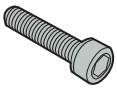
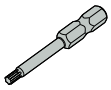




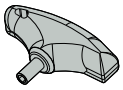
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 299-301
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.53-03.00-15-6A	02486638	Manicotto	3.150	6	0.295	45,0 °	3.740	1.000	2.441	1.969	7400	2.870	SE.X1505
R220.53-04.00-15-7A	02486644	Manicotto	3.937	7	0.295	45,0 °	4.528	1.500	3.543	1.969	6600	4.850	SE.X1505
R220.53-06.00-15-10	02486653	Manicotto	6.299	10	0.295	45,0 °	6.890	2.000	3.543	2.480	5200	9.920	SE.X1505

Parti di ricambio, comprese nella fornitura

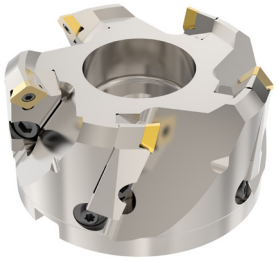
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.53-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C05013-T20P
R220.53-04.00	UF6S3/4UNFX1-3/4	1/4HEX-T20PX90	C05013-T20P
R220.53-06.00	–	1/4HEX-T20PX90	C05013-T20P

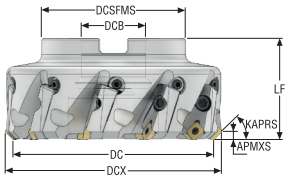
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.53-03.00-04.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.53-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

Quattromill R220.53-15C – In mm

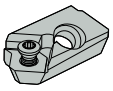
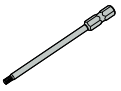




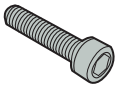
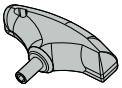
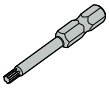
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 299-301
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DBC2	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm	mm		kg	
R220.53-0125-15-8C	02510199	Manicotto	125,0	8	7,5	45,0 °	141,0	40,0	–	–	90,0	63,0	5900	4,2	SE.X1505
R220.53-8160-15-10C	02510202	Manicotto	160,0	10	7,5	45,0 °	176,0	40,0	66,7	–	90,0	63,0	5200	6,6	SE.X1505
R220.53-8200-15-12C	02510204	Manicotto	200,0	12	7,5	45,0 °	216,0	60,0	101,6	–	130,0	63,0	4700	0,0	SE.X1505
R220.53-8250-15-10C	02510234	Manicotto	250,0	10	7,5	45,0 °	266,0	60,0	101,6	–	130,0	63,0	4200	18,0	SE.X1505
R220.53-8250-15-16C	02510231	Manicotto	250,0	16	7,5	45,0 °	260,0	60,0	101,6	–	130,0	63,0	4200	17,1	SE.X1505
R220.53-8315-15-12C	02510235	Manicotto	315,0	12	7,5	45,0 °	331,0	60,0	101,6	177,8	225,0	80,0	3700	37,2	SE.X1505

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto
					
R220.53-0080-8315	AU1114T-T15P	SE15AR-53	FS96018	1/4HEX-T20PX90	C05010-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Coppia di serraggio inserto	Chiave	Chiave di regolazione	Chiave dinamometrica
								
R220.53-0080-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-20P50
R220.53-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-20P50
R220.53-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	–	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-20P50
R220.53-8315	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	MC6S20X50	1/4HEX-T-HANDLE	5.0NM	1/4HEX-H4.0X50	1/4HEX-T15PX50	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.53-15 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SEMX1505AFTN-ME15 MP3501	4,5 *0.18*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
P2	SEMX1505AFTN-ME15 MP3501	4,5 *0.18*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P3	SEMX1505AFTN-M18 MP2501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
P4	SEMX1505AFTN-M18 MP2501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
P5	SEMX1505AFTN-M18 MP2501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
P6	SEMX1505AFTN-M18 MP2501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
P7	SEMX1505AFTN-M18 MP3501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
P8	SEMX1505AFTN-M18 MP3501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
P11	SEEX1505AFN-M12 MP2051	4,5 *0.18*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
P12	SEEX1505AFN-M12 MP2051	3,5 *0.14*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
M1	SEEX1505AFN-M12 F40M	4,5 *0.18*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
M2	SEEX1505AFN-M12 MS2050	4,5 *0.18*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
M3	SEEX1505AFN-M12 MS2050	3,5 *0.14*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,25 0.010
M4	SEEX1505AFN-M12 MP2051	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
M5	SEEX1505AFN-M12 MP2051	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K1	SEMX1505AFTN-M18 MK1501	4,5 *0.18*	0,36 0.014	0,36 0.014	0,38 0.015	0,48 0.019
K2	SEMX1505AFTN-M18 MK1501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K3	SEMX1505AFTN-M18 MP1501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K4	SEMX1505AFTN-M18 MP1501	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K5	SEMX1505AFTN-M18 MP1501	4,5 *0.18*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K6	SEMX1505AFTN-M18 MK2050	4,5 *0.18*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K7	SEMX1505AFTN-M18 MK2050	4,5 *0.18*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
N1	SEEX1505AFN-E10 H25	4,5 *0.18*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
N2	SEEX1505AFN-E10 H25	4,5 *0.18*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
N3	SEEX1505AFN-E10 H25	4,5 *0.18*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
N11	SEEX1505AFN-E10 H25	4,5 *0.18*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
S1	SEEX1505AFN-M12 MP2051	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
S2	SEEX1505AFN-M12 MP2051	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
S3	SEEX1505AFN-M12 MP2051	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
S11	SEEX1505AFN-M12 MS2050	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
S12	SEEX1505AFN-M12 MS2050	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
S13	SEEX1505AFN-M12 MS2050	2,5 *0.10*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
H5	SEMX1505AFTN-MD20 MP3000	3,5 *0.14*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
H8	SEMX1505AFTN-MD20 MP3000	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
H11	SEMX1505AFTN-MD20 MP1501	3,5 *0.14*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
H12	SEMX1505AFTN-MD20 MP1501	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
H21	SEMX1505AFTN-MD20 MP1501	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.53-15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MP3000				MS2050				F40M				MP2051				H25			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	260 *850*	280 *920*	310 *1025*	355 *1175*	210 *690*	235 *770*	265 *870*	315 *1025*	260 *850*	280 *920*	315 *1025*	355 *1175*	205 *670*	220 *720*	245 *800*	275 *900*	290 *950*	325 *1075*	395 *1300*	465 *1525*	— —	— —	— —	— —
P2	255 *840*	275 *900*	300 *980*	345 *1125*	200 *660*	220 *720*	260 *850*	310 *1025*	250 *820*	270 *890*	305 *1000*	335 *1100*	200 *660*	215 *710*	235 *770*	270 *890*	280 *920*	320 *1050*	380 *1250*	435 *1425*	— —	— —	— —	— —
P3	220 *720*	240 *790*	265 *870*	300 *980*	185 *610*	205 *670*	230 *750*	265 *870*	220 *720*	240 *790*	265 *870*	295 *970*	180 *590*	190 *620*	210 *690*	235 *770*	250 *820*	280 *920*	335 *1100*	390 *1275*	— —	— —	— —	— —
P4	195 *640*	210 *690*	235 *770*	265 *870*	160 *520*	180 *590*	200 *660*	240 *790*	195 *640*	215 *710*	235 *770*	265 *870*	165 *540*	180 *590*	195 *640*	220 *720*	230 *750*	255 *840*	295 *970*	355 *1175*	— —	— —	— —	— —
P5	185 *610*	200 *660*	225 *740*	255 *840*	155 *510*	170 *560*	200 *660*	230 *750*	190 *620*	205 *670*	225 *740*	255 *840*	150 *490*	160 *520*	180 *590*	200 *660*	215 *710*	245 *800*	290 *950*	335 *1100*	— —	— —	— —	— —
P6	210 *690*	225 *740*	255 *840*	290 *950*	175 *570*	190 *620*	225 *740*	255 *840*	210 *690*	230 *750*	255 *840*	285 *940*	170 *560*	180 *590*	205 *670*	225 *740*	245 *800*	275 *900*	325 *1075*	380 *1250*	— —	— —	— —	— —
P7	200 *660*	215 *710*	240 *790*	270 *890*	165 *540*	180 *590*	210 *690*	240 *790*	200 *660*	215 *710*	240 *790*	270 *890*	160 *520*	170 *560*	190 *620*	215 *710*	230 *750*	260 *850*	310 *1025*	355 *1175*	— —	— —	— —	— —
P8	185 *610*	200 *660*	220 *720*	255 *840*	155 *510*	170 *560*	195 *640*	225 *740*	185 *610*	200 *660*	225 *740*	250 *820*	150 *490*	160 *520*	175 *570*	195 *640*	210 *690*	235 *770*	285 *940*	325 *1075*	— —	— —	— —	— —
P11	190 *620*	210 *690*	235 *770*	265 *870*	160 *520*	175 *570*	205 *670*	235 *770*	195 *640*	210 *690*	235 *770*	260 *850*	155 *510*	165 *540*	185 *610*	205 *670*	220 *720*	255 *840*	315 *1025*	390 *1275*	— —	— —	— —	— —
P12	130 *425*	140 *460*	155 *510*	175 *570*	120 *395*	130 *425*	150 *490*	170 *560*	135 *445*	140 *460*	155 *510*	175 *570*	110 *360*	115 *375*	125 *410*	140 *460*	175 *570*	195 *640*	225 *740*	275 *900*	— —	— —	— —	— —
M1	— —	— —	— —	— —	165 *540*	180 *590*	205 *670*	235 *770*	190 *620*	210 *690*	230 *750*	260 *850*	155 *510*	170 *560*	185 *610*	215 *710*	240 *790*	280 *920*	350 *1150*	425 *1400*	— —	— —	— —	— —
M2	— —	— —	— —	— —	140 *460*	150 *490*	170 *560*	190 *620*	160 *520*	170 *560*	190 *620*	215 *710*	130 *425*	140 *460*	155 *510*	180 *590*	210 *690*	245 *800*	300 *980*	370 *1225*	— —	— —	— —	— —
M3	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	155 *510*	130 *425*	140 *460*	155 *510*	175 *570*	105 *345*	115 *375*	125 *410*	145 *475*	190 *620*	220 *720*	255 *840*	315 *1025*	— —	— —	— —	— —
M4	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	120 *395*	100 *330*	110 *360*	120 *395*	135 *445*	85 *280*	90 *295*	100 *330*	115 *375*	155 *510*	175 *570*	205 *670*	245 *800*	— —	— —	— —	— —
M5	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	100 *330*	85 *280*	90 *295*	100 *330*	110 *360*	70 *230*	75 *245*	80 *260*	95 *310*	130 *425*	145 *475*	170 *560*	205 *670*	— —	— —	— —	— —
K1	275 *900*	295 *970*	325 *1075*	370 *1225*	175 *570*	190 *620*	215 *710*	245 *800*	— —	— —	— —	— —	155 *510*	165 *540*	185 *610*	210 *690*	— —	— —	— —	— —	— —	— —	— —	— —
K2	240 *790*	260 *850*	295 *970*	330 *1075*	160 *520*	170 *560*	190 *620*	215 *710*	— —	— —	— —	— —	135 *445*	150 *490*	165 *540*	190 *620*	— —	— —	— —	— —	— —	— —	— —	— —
K3	205 *670*	220 *720*	250 *820*	280 *920*	135 *445*	145 *475*	165 *540*	185 *610*	— —	— —	— —	— —	115 *375*	125 *410*	140 *460*	160 *520*	— —	— —	— —	— —	— —	— —	— —	— —
K4	195 *640*	210 *690*	235 *770*	270 *890*	130 *425*	140 *460*	155 *510*	175 *570*	— —	— —	— —	— —	110 *360*	120 *395*	135 *445*	150 *490*	— —	— —	— —	— —	— —	— —	— —	— —
K5	120 *395*	130 *425*	145 *475*	165 *540*	80 *260*	85 *280*	95 *310*	110 *360*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	95 *310*	— —	— —	— —	— —	— —	— —	— —	— —
K6	170 *560*	185 *610*	210 *690*	235 *770*	115 *375*	120 *395*	135 *445*	155 *510*	— —	— —	— —	— —	95 *310*	105 *345*	120 *395*	135 *445*	— —	— —	— —	— —	— —	— —	— —	— —
K7	155 *510*	170 *560*	185 *610*	210 *690*	100 *330*	110 *360*	125 *410*	140 *460*	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	120 *395*	— —	— —	— —	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	1300 *4275*	1425 *4675*	1550 *5075*	1800 *5900*	— —	— —	— —	— —	1125 *3700*	1200 *3925*	1350 *4425*	1525 *5000*	— —	— —	— —	— —	1425 *4675*	1550 *5075*	1725 *5650*	1950 *6400*
N2	— —	— —	— —	— —	530 *1750*	570 *1875*	620 *2025*	720 *2350*	— —	— —	— —	— —	450 *1475*	490 *1600*	540 *1775*	610 *2000*	— —	— —	— —	— —	580 *1900*	630 *2075*	700 *2300*	780 *2550*
N3	— —	— —	— —	— —	355 *1175*	385 *1275*	415 *1350*	480 *1575*	— —	— —	— —	— —	300 *980*	325 *1075*	360 *1175*	410 *1350*	— —	— —	— —	— —	385 *1275*	415 *1350*	465 *1525*	520 *1700*
N11	— —	— —	— —	— —	405 *1325*	435 *1425*	475 *1550*	550 *1800*	— —	— —	— —	— —	345 *1125*	375 *1225*	415 *1350*	470 *1550*	— —	— —	— —	— —	440 *1450*	475 *1550*	530 *1750*	600 *1975*
S1	— —	— —	— —	— —	42 *140*	45 *150*	50 *165*	55 *180*	47 *155*	50 *165*	55 *180*	65 *215*	39 *130*	42 *140*	46 *150*	55 *180*	50 *165*	55 *180*	60 *195*	70 *230*	— —	— —	— —	— —
S2	— —	— —	— —	— —	33 *110*	36 *120*	40 *130*	46 *150*	38 *125*	41 *135*	45 *150*	50 *165*	31 *100*	34 *110*	37 *120*	42 *140*	42 *140*	45 *150*	50 *165*	55 *180*	— —	— —	— —	— —
S3	— —	— —	— —	— —	30 *100*	32 *105*	36 *120*	40 *130*	33 *110*	36 *120*	40 *130*	45 *150*	28 *90*	30 *100*	33 *110*	37 *120*	37 *120*	39 *130*	44 *145*	49 *160*	— —	— —	— —	— —
S11	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	80 *260*	65 *215*	70 *230*	80 *260*	90 *295*	55 *180*	60 *195*	65 *215*	75 *245*	70 *230*	80 *260*	85 *280*	95 *310*	— —	— —	— —	— —
S12	— —	— —	— —	— —	41 *135*	44 *145*	48 *155*	55 *180*	45 *150*	49 *160*	55 *180*	60 *195*	37 *120*	40 *130*	45 *150*	50 *165*	50 *165*	55 *180*	60 *195*	65 *215*	— —	— —	— —	— —
S13	— —	— —	— —	— —	23 *75*	25 *80*	28 *90*	32 *105*	27 *90*	29 *95*	32 *105*	35 *115*	22 *70*	24 *80*	26 *85*	30 *100*	29 *95*	31 *100*	35 *115*	39 *130*	— —	— —	— —	— —
H5	44 *145*	47 *155*	50 *165*	60 *195*	36 *120*	39 *130*	43 *140*	49 *160*	— —	— —	— —	— —	33 *110*	35 *115*	39 *130*	44 *145*	— —	— —	— —	— —	— —	— —	— —	— —
H8	48 *155*	50 *165*	55 *180*	65 *215*	39 *130*	42 *140*	47 *155*	55 *180*	— —	— —	— —	— —	36 *120*	38 *125*	42 *140*	48 *155*	— —	— —	— —	— —	— —	— —	— —	— —
H11	55 *180*	60 *195*	65 *215*	75 *245*	46 *150*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	41 *135*	45 *150*	50 *165*	55 *180*	115 *375*	125 *410*	145 *475*	180 *590*	— —	— —	— —	— —
H12	85 *280*	90 *295*	100 *330*	110 *360*	75 *245*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	85 *280*	115 *375*	125 *410*	145 *475*	170 *560*	— —	— —	— —	— —
H21	48 *155*	50 *165*	55 *180*	65 *215*	39 *130*	42 *140*	47 *155*	55 *180*	— —	— —	— —	— —	36 *120*	38 *125*	42 *140*	48 *155*	100 *330*	105 *345*	115 *375*	125 *410*	— —	— —	— —	— —

R220.53-15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	355	380	415	465	340	370	405	455	300	325	355	405
	—	—	—	—	*1175*	*1250*	*1350*	*1525*	*1125*	*1225*	*1325*	*1500*	*980*	*1075*	*1175*	*1325*
P2	—	—	—	—	345	370	405	455	335	360	390	440	295	315	350	395
	—	—	—	—	*1125*	*1225*	*1325*	*1500*	*1100*	*1175*	*1275*	*1450*	*970*	*1025*	*1150*	*1300*
P3	—	—	—	—	305	325	355	395	295	315	345	385	260	280	305	345
	—	—	—	—	*1000*	*1075*	*1175*	*1300*	*970*	*1025*	*1125*	*1275*	*850*	*920*	*1000*	*1125*
P4	—	—	—	—	270	285	315	350	260	280	305	340	230	245	270	305
	—	—	—	—	*890*	*940*	*1025*	*1150*	*850*	*920*	*1000*	*1125*	*750*	*800*	*890*	*1000*
P5	—	—	—	—	255	275	305	340	245	265	295	330	220	235	265	295
	—	—	—	—	*840*	*900*	*1000*	*1125*	*800*	*870*	*970*	*1075*	*720*	*770*	*870*	*970*
P6	—	—	—	—	285	310	345	380	275	300	335	370	245	265	295	330
	—	—	—	—	*940*	*1025*	*1125*	*1250*	*900*	*980*	*1100*	*1225*	*800*	*870*	*970*	*1075*
P7	—	—	—	—	270	290	325	360	260	280	315	350	230	250	280	310
	—	—	—	—	*890*	*950*	*1075*	*1175*	*850*	*920*	*1025*	*1150*	*750*	*820*	*920*	*1025*
P8	—	—	—	—	255	275	300	335	245	265	290	325	220	235	255	290
	—	—	—	—	*840*	*900*	*980*	*1100*	*800*	*870*	*950*	*1075*	*720*	*770*	*840*	*950*
P11	—	—	—	—	265	280	315	350	255	275	305	340	225	240	270	305
	—	—	—	—	*870*	*920*	*1025*	*1150*	*840*	*900*	*1000*	*1125*	*740*	*790*	*890*	*1000*
P12	—	—	—	—	180	190	205	230	175	185	205	225	155	165	180	200
	—	—	—	—	*590*	*620*	*670*	*750*	*570*	*610*	*670*	*740*	*510*	*540*	*590*	*660*
M1	—	—	—	—	—	—	—	—	180	195	215	245	170	185	200	230
	—	—	—	—	—	—	—	—	*590*	*640*	*710*	*800*	*560*	*610*	*660*	*750*
M2	—	—	—	—	—	—	—	—	150	160	180	205	140	150	170	190
	—	—	—	—	—	—	—	—	*490*	*520*	*590*	*670*	*460*	*490*	*560*	*620*
M3	—	—	—	—	—	—	—	—	120	130	145	165	115	125	135	155
	—	—	—	—	—	—	—	—	*395*	*425*	*475*	*540*	*375*	*410*	*445*	*510*
M4	—	—	—	—	—	—	—	—	95	105	115	130	90	95	105	120
	—	—	—	—	—	—	—	—	*310*	*345*	*375*	*425*	*295*	*310*	*345*	*395*
M5	—	—	—	—	—	—	—	—	80	85	95	110	75	80	90	100
	—	—	—	—	—	—	—	—	*260*	*280*	*310*	*360*	*245*	*260*	*295*	*330*
K1	375	430	500	640	350	375	410	460	335	360	395	445	295	320	350	395
	1225	*1400*	*1650*	*2100*	*1150*	*1225*	*1350*	*1500*	*1100*	*1175*	*1300*	*1450*	*970*	*1050*	*1150*	*1300*
K2	330	375	445	560	310	330	370	410	300	320	360	400	265	285	320	355
	1075	*1225*	*1450*	*1825*	*1025*	*1075*	*1225*	*1350*	*980*	*1050*	*1175*	*1300*	*870*	*940*	*1050*	*1175*
K3	225	250	285	340	260	280	310	345	255	270	305	340	225	240	270	300
	740	*820*	*940*	*1125*	*850*	*920*	*1025*	*1125*	*840*	*890*	*1000*	*1125*	*740*	*790*	*890*	*980*
K4	215	240	275	325	250	270	300	330	240	260	290	325	215	230	255	285
	710	*790*	*900*	*1075*	*820*	*890*	*980*	*1075*	*790*	*850*	*950*	*1075*	*710*	*750*	*840*	*940*
K5	135	150	165	200	155	165	180	205	150	165	175	200	135	145	155	180
	445	*490*	*540*	*660*	*510*	*540*	*590*	*670*	*490*	*540*	*570*	*660*	*445*	*475*	*510*	*590*
K6	190	210	240	285	220	235	265	290	215	230	255	285	190	200	225	255
	620	*690*	*790*	*940*	*720*	*770*	*870*	*950*	*710*	*750*	*840*	*940*	*620*	*660*	*740*	*840*
K7	170	190	210	255	200	215	230	260	195	210	225	255	170	185	200	225
	560	*620*	*690*	*840*	*660*	*710*	*750*	*850*	*640*	*690*	*740*	*840*	*560*	*610*	*660*	*740*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	42	45	50	55
	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*
S2	—	—	—	—	—	—	—	—	—	—	—	—	34	36	40	46
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*120*	*130*	*150*
S3	—	—	—	—	—	—	—	—	—	—	—	—	30	32	36	40
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*105*	*120*	*130*
S11	—	—	—	—	—	—	—	—	—	—	—	—	60	60	70	80
	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*195*	*230*	*260*
S12	—	—	—	—	—	—	—	—	—	—	—	—	40	43	48	55
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*140*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	—	—	—	24	25	28	32
	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*80*	*90*	*105*
H5	—	—	—	—	48	50	55	65	—	—	—	—	37	40	44	50
	—	—	—	—	*155*	*165*	*180*	*215*	—	—	—	—	*120*	*130*	*145*	*165*
H8	—	—	—	—	50	55	60	70	—	—	—	—	40	43	48	55
	—	—	—	—	*165*	*180*	*195*	*230*	—	—	—	—	*130*	*140*	*155*	*180*
H11	—	—	—	—	60	65	75	80	—	—	—	—	47	50	55	65
	—	—	—	—	*195*	*215*	*245*	*260*	—	—	—	—	*155*	*165*	*180*	*215*
H12	—	—	—	—	95	100	110	125	—	—	—	—	70	75	85	95
	—	—	—	—	*310*	*330*	*360*	*410*	—	—	—	—	*230*	*245*	*280*	*310*
H21	—	—	—	—	50	55	60	70	—	—	—	—	40	43	48	55
	—	—	—	—	*165*	*180*	*195*	*230*	—	—	—	—	*130*	*140*	*155*	*180*

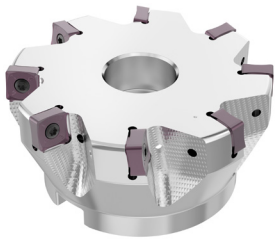


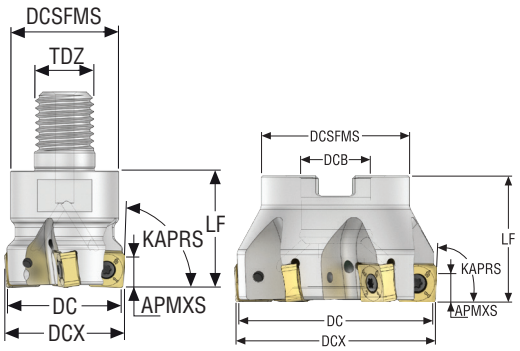
R220.88 (SNMU)

La famiglia di frese .88 comprende una fresa per spianatura con caratteristiche di fresatura a spallamento. L'angolo d'attacco vicino a 90° genera un'elevata capacità di profondità di taglio e consente operazioni di lavorazione in prossimità delle pareti di un pezzo in lavorazione o vicino allo staffaggio grazie al ridotto rischio di interferenze. Requisiti comuni durante la lavorazione di componenti in ghisa, poiché le condizioni variabili del pezzo fuso causano condizioni di profondità di taglio non definite durante la prima passata.

– Dimensione dell'inserto 12, gamma di frese 40-160 mm (1,5-6,0")
– Dimensione dell'inserto 16, gamma di frese 63-160 mm (2,5-6,0")

R220.88-12 – In mm

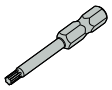
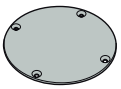




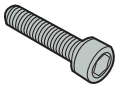
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 305-306
—Per il programma inserti completo, vedere le pagine 893
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		mm		kg	
R220.88-0040-12-4SAP	10130008	Manicotto	40,0	4	9,0	88,0 °	41,4	16,0	–	35,0	–	40,0	12600	0,3	SN.U1204
R220.88-0050-12-4SAP	10134775	Manicotto	50,0	4	9,0	88,0 °	51,2	22,0	–	47,0	–	40,0	12600	0,4	SN.U1204
R220.88-0050-12-5SAP	10134776	Manicotto	50,0	5	9,0	88,0 °	51,2	22,0	–	47,0	–	40,0	12600	0,4	SN.U1204
R220.88-0063-12-6SAP	10134777	Manicotto	63,0	6	9,0	88,0 °	64,5	22,0	–	47,0	–	40,0	11200	0,5	SN.U1204
R220.88-0063-12-7SAP	10134778	Manicotto	63,0	7	9,0	88,0 °	64,5	22,0	–	47,0	–	40,0	11200	0,5	SN.U1204
R220.88-0080-12-7SAP	10134779	Manicotto	80,0	7	9,0	88,0 °	81,16	27,0	–	62,0	–	50,0	9900	1,1	SN.U1204
R220.88-0080-12-9SAP	10134780	Manicotto	80,0	9	9,0	88,0 °	81,16	27,0	–	62,0	–	50,0	9900	1,1	SN.U1204
R220.88-0100-12-8SAP	10134782	Manicotto	100,0	8	9,0	88,0 °	101,15	32,0	–	77,0	–	50,0	8900	1,9	SN.U1204
R220.88-0100-12-11SAP	10134781	Manicotto	100,0	11	9,0	88,0 °	101,15	32,0	–	77,0	–	50,0	8900	1,9	SN.U1204
R220.88-0125-12-10SAP	10134783	Manicotto	125,0	10	9,0	88,0 °	126,15	40,0	–	90,0	–	63,0	7900	3,7	SN.U1204
R220.88-0125-12-13SAP	10134784	Manicotto	125,0	13	9,0	88,0 °	126,15	40,0	–	90,0	–	63,0	7900	3,8	SN.U1204
R220.88-8160-12-12SAP	10134785	Manicotto	160,0	12	9,0	88,0 °	161,14	40,0	66,7	90,0	–	63,0	7000	5,6	SN.U1204
R220.88-8160-12-16SAP	10134786	Manicotto	160,0	16	9,0	88,0 °	161,14	40,0	66,7	90,0	–	63,0	7000	4,3	SN.U1204
R217.88-2040.RE-12-4SAP	10130009	Combimaster	40,0	4	9,0	88,0 °	41,4	–	–	37,0	M20	40,0	12600	0,3	SN.U1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.88-..	–	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-0040	220.17-690	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-0050-0063	220.17-692	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-0080	MC6S12X35	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-0100	MC6S16X35	1/4HEX-T15PX90	C04011-T15P	–	–
R220.88-0125	MC6S20X40	1/4HEX-T15PX90	C04011-T15P	–	–
R220.88-8160	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10

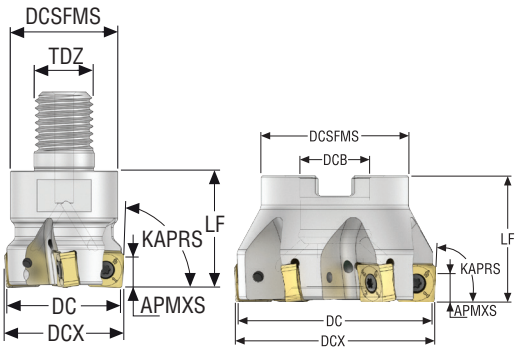
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.88-0040-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.88-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.88-12 – Pollici

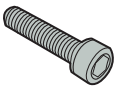
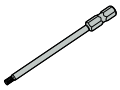
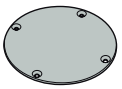




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 305-306
—Per il programma inserti completo, vedere le pagine 893
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch		inch		lb	
R220.88-01.50-12-4SAP	10134787	Manicotto	1.500	4	0.354	88,0 °	1.558	0.500	1.378	–	1.575	12600	0.660	SN.U1204
R220.88-02.00-12-4SAP	10134788	Manicotto	2.000	4	0.354	88,0 °	2.051	0.750	1.850	–	1.575	12600	0.880	SN.U1204
R220.88-02.00-12-5SAP	10134789	Manicotto	2.000	5	0.354	88,0 °	2.051	0.750	1.850	–	1.575	12600	0.880	SN.U1204
R220.88-02.50-12-6SAP	10134790	Manicotto	2.500	6	0.354	88,0 °	2.549	0.750	1.850	–	1.575	11200	1.320	SN.U1204
R220.88-02.50-12-7SAP	10134791	Manicotto	2.500	7	0.354	88,0 °	2.549	0.750	1.850	–	1.575	11200	1.320	SN.U1204
R220.88-03.00-12-7SAP	10134792	Manicotto	3.000	7	0.354	88,0 °	3.046	1.000	2.441	–	1.969	9900	2.650	SN.U1204
R220.88-03.00-12-9SAP	10134793	Manicotto	3.000	9	0.354	88,0 °	3.046	1.000	2.441	–	1.969	9900	2.430	SN.U1204
R220.88-04.00-12-8SAP	10134795	Manicotto	4.000	8	0.354	88,0 °	4.039	1.500	3.031	–	1.969	8900	4.190	SN.U1204
R220.88-04.00-12-11SAP	10134794	Manicotto	4.000	11	0.354	88,0 °	4.039	1.500	3.031	–	1.969	8900	4.190	SN.U1204
R220.88-05.00-12-10SAP	10134796	Manicotto	5.000	10	0.354	88,0 °	5.039	1.500	3.543	–	2.480	7900	8.380	SN.U1204
R220.88-05.00-12-13SAP	10134797	Manicotto	5.000	13	0.354	88,0 °	5.039	1.500	3.543	–	2.480	7900	8.380	SN.U1204
R220.88-06.00-12-12SAP	10134798	Manicotto	6.000	12	0.354	88,0 °	6.039	2.000	4.331	–	2.480	7000	10.800	SN.U1204
R220.88-06.00-12-16SAP	10134799	Manicotto	6.000	16	0.354	88,0 °	6.039	2.000	4.331	–	2.480	7000	10.800	SN.U1204
R217.88-01.50-20RE-12-4SAP	10134800	Combimaster	1.500	4	0.354	88,0 °	1.563	–	1.457	M20	1.575	12600	0.660	SN.U1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.88-..	–	1/4HEX-T15PX90	C04011-T15P	–	–
R220.88-01.50	UC6S1/4UNFX1	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C04011-T15P	–	–
R220.88-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.88-04.00-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX90	C04011-T15P	–	–
R220.88-06.00	–	1/4HEX-T15PX90	C04011-T15P	SC-160-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220-01.50-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R217/220-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.88-12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMU120410TN-M10 MS2050	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,18 0.0070
P2	SNMU120410TN-M10 MS2050	5,0 *0.20*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,18 0.0070
P3	SNMU120410TN-M10 MP2501	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,17 0.0065
P4	SNMU120412TN-M16 MP2501	5,0 *0.20*	0,24 0.0095	0,24 0.0095	0,24 0.0095	0,30 0.012
P5	SNMU120412TN-M16 MP2501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
P6	SNMU120412TN-M16 MP2501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
P7	SNMU120410TN-M10 MP3501	5,0 *0.20*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,17 0.0065
P8	SNMU120410TN-M10 MP3501	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,17 0.0065
P11	SNMU120410TN-M10 MS2500	5,0 *0.20*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,17 0.0065
P12	SNMU120410TN-M10 MS2500	4,5 *0.18*	0,090 0.0036	0,090 0.0036	0,095 0.0038	0,11 0.0044
M1	SNMU120410TN-M10 F40M	5,0 *0.20*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,18 0.0070
M2	SNMU120410TN-M10 MS2050	5,0 *0.20*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,17 0.0065
M3	SNMU120410TN-M10 MS2050	4,5 *0.18*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,13 0.0050
M4	SNMU120410TN-M10 MS2050	3,0 *0.12*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
M5	SNMU120410TN-M10 MS2050	3,0 *0.12*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
K1	SNMU120412TN-M16 MK1501	5,0 *0.20*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K2	SNMU120412TN-M16 MK1501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
K3	SNMU120412TN-M16 MP1501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
K4	SNMU120412TN-M16 MP1501	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
K5	SNMU120412TN-M16 MK2050	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
K6	SNMU120412TN-M16 MK2050	5,0 *0.20*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
K7	SNMU120412TN-M16 MK2050	5,0 *0.20*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,26 0.010
H5	SNMU120410TN-MD13 MP1501	4,5 *0.18*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,19 0.0075
H8	SNMU120410TN-MD13 MP1501	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
H11	SNMU120410TN-MD13 MP1501	4,5 *0.18*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,19 0.0075
H12	SNMU120410TN-MD13 MP1501	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
H21	SNMU120410TN-MD13 MP1501	4,0 *0.16*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

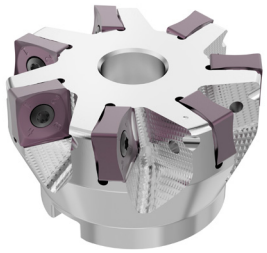
R217/220.88-12 – Parametri di taglio v_c = (m/min)/(sf/min)

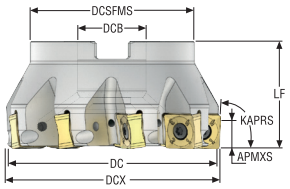
SMG	MK2050				MP3000				MS2050				F40M			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	295 *970*	315 *1025*	345 *1125*	395 *1300*	280 *920*	305 *1000*	330 *1075*	380 *1250*	240 *790*	260 *850*	280 *920*	320 *1050*	225 *740*	245 *800*	265 *870*	305 *1000*
P2	280 *920*	300 *980*	335 *1100*	385 *1275*	270 *890*	290 *950*	325 *1075*	370 *1225*	230 *750*	245 *800*	275 *900*	315 *1025*	215 *710*	230 *750*	260 *850*	295 *970*
P3	245 *800*	265 *870*	295 *970*	335 *1100*	235 *770*	255 *840*	285 *940*	320 *1050*	200 *660*	215 *710*	240 *790*	275 *900*	190 *620*	205 *670*	225 *740*	260 *850*
P4	215 *710*	235 *770*	260 *850*	295 *970*	210 *690*	225 *740*	250 *820*	285 *940*	175 *570*	190 *620*	210 *690*	240 *790*	165 *540*	180 *590*	200 *660*	225 *740*
P5	210 *690*	230 *750*	250 *820*	280 *920*	205 *670*	220 *720*	240 *790*	270 *890*	170 *560*	185 *610*	200 *660*	230 *750*	165 *540*	175 *570*	190 *620*	215 *710*
P6	235 *770*	255 *840*	280 *920*	315 *1025*	230 *750*	245 *800*	270 *890*	305 *1000*	195 *640*	210 *690*	225 *740*	260 *850*	180 *590*	195 *640*	215 *710*	245 *800*
P7	225 *740*	240 *790*	265 *870*	300 *980*	215 *710*	230 *750*	255 *840*	285 *940*	185 *610*	195 *640*	215 *710*	245 *800*	170 *560*	185 *610*	200 *660*	230 *750*
P8	205 *670*	225 *740*	250 *820*	280 *920*	200 *660*	215 *710*	240 *790*	270 *890*	170 *560*	180 *590*	200 *660*	230 *750*	160 *520*	170 *560*	190 *620*	215 *710*
P11	220 *720*	235 *770*	255 *840*	290 *950*	210 *690*	225 *740*	245 *800*	280 *920*	175 *570*	190 *620*	210 *690*	235 *770*	165 *540*	180 *590*	195 *640*	225 *740*
P12	140 *460*	155 *510*	165 *540*	190 *620*	135 *445*	145 *475*	160 *520*	185 *610*	115 *375*	125 *410*	135 *445*	155 *510*	110 *360*	120 *395*	130 *425*	145 *475*
M1	— —	— —	— —	— —	200 *660*	215 *710*	240 *790*	275 *900*	185 *610*	200 *660*	220 *720*	250 *820*	175 *570*	185 *610*	210 *690*	240 *790*
M2	— —	— —	— —	— —	170 *560*	185 *610*	200 *660*	225 *740*	155 *510*	165 *540*	180 *590*	205 *670*	145 *475*	160 *520*	170 *560*	195 *640*
M3	— —	— —	— —	— —	135 *445*	145 *475*	160 *520*	185 *610*	125 *410*	135 *445*	150 *490*	170 *560*	115 *375*	125 *410*	140 *460*	160 *520*
M4	— —	— —	— —	— —	105 *345*	115 *375*	125 *410*	140 *460*	100 *330*	105 *345*	115 *375*	130 *425*	90 *295*	100 *330*	110 *360*	120 *395*
M5	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	120 *395*	80 *260*	85 *280*	95 *310*	110 *360*	75 *245*	80 *260*	90 *295*	100 *330*
K1	300 *980*	325 *1075*	365 *1200*	415 *1350*	215 *710*	230 *750*	255 *840*	290 *950*	— —	— —	— —	— —	170 *560*	185 *610*	205 *670*	235 *770*
K2	275 *900*	295 *970*	320 *1050*	365 *1200*	195 *640*	210 *690*	225 *740*	255 *840*	— —	— —	— —	— —	155 *510*	165 *540*	180 *590*	205 *670*
K3	230 *750*	250 *820*	270 *890*	310 *1025*	165 *540*	175 *570*	190 *620*	215 *710*	— —	— —	— —	— —	130 *425*	140 *460*	155 *510*	175 *570*
K4	220 *720*	240 *790*	260 *850*	295 *970*	155 *510*	170 *560*	185 *610*	210 *690*	— —	— —	— —	— —	125 *410*	135 *445*	145 *475*	165 *540*
K5	135 *445*	145 *475*	160 *520*	180 *590*	95 *310*	100 *330*	115 *375*	130 *425*	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	100 *330*
K6	195 *640*	210 *690*	230 *750*	260 *850*	135 *445*	150 *490*	160 *520*	185 *610*	— —	— —	— —	— —	110 *360*	120 *395*	130 *425*	145 *475*
K7	170 *560*	185 *610*	205 *670*	230 *750*	120 *395*	130 *425*	145 *475*	165 *540*	— —	— —	— —	— —	95 *310*	105 *345*	115 *375*	130 *425*
H5	— —	— —	— —	— —	43 *140*	46 *150*	50 *165*	55 *180*	— —	— —	— —	— —	36 *120*	39 *130*	43 *140*	49 *160*
H8	— —	— —	— —	— —	45 *150*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	39 *130*	42 *140*	46 *150*	50 *165*
H11	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	75 *245*	— —	— —	— —	— —	46 *150*	50 *165*	55 *180*	60 *195*
H12	— —	— —	— —	— —	85 *280*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	95 *310*

R217/220.88-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501				MS2500			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	330	355	395	445	320	345	385	430	355	380	405	450	395	420	450	500
	—	—	—	—	*1075*	*1175*	*1300*	*1450*	*1050*	*1125*	*1275*	*1400*	*1175*	*1250*	*1325*	*1475*	*1300*	*1375*	*1475*	*1650*
P2	—	—	—	—	320	345	380	420	310	335	370	410	340	360	395	440	375	400	440	490
	—	—	—	—	*1050*	*1125*	*1250*	*1375*	*1025*	*1100*	*1225*	*1350*	*1125*	*1175*	*1300*	*1450*	*1225*	*1300*	*1450*	*1600*
P3	—	—	—	—	280	300	335	370	275	295	325	360	300	315	345	380	330	350	385	425
	—	—	—	—	*920*	*980*	*1100*	*1225*	*900*	*970*	*1075*	*1175*	*980*	*1025*	*1125*	*1250*	*1075*	*1150*	*1275*	*1400*
P4	—	—	—	—	250	265	295	325	240	260	285	320	260	280	305	335	290	310	340	375
	—	—	—	—	*820*	*870*	*970*	*1075*	*790*	*850*	*940*	*1050*	*850*	*920*	*1000*	*1100*	*950*	*1025*	*1125*	*1225*
P5	—	—	—	—	245	265	280	320	240	255	275	310	255	270	290	320	285	305	325	360
	—	—	—	—	*800*	*870*	*920*	*1050*	*790*	*840*	*900*	*1025*	*840*	*890*	*950*	*1050*	*940*	*1000*	*1075*	*1175*
P6	—	—	—	—	275	295	315	360	265	285	310	350	290	305	335	360	320	340	370	400
	—	—	—	—	*900*	*970*	*1025*	*1175*	*870*	*940*	*1025*	*1150*	*950*	*1000*	*1100*	*1175*	*1050*	*1125*	*1225*	*1300*
P7	—	—	—	—	260	280	300	340	250	270	290	330	270	290	315	340	300	320	350	380
	—	—	—	—	*850*	*920*	*980*	*1125*	*820*	*890*	*950*	*1075*	*890*	*950*	*1025*	*1125*	*980*	*1050*	*1150*	*1250*
P8	—	—	—	—	235	255	280	310	230	245	275	305	250	265	290	320	280	295	325	360
	—	—	—	—	*770*	*840*	*920*	*1025*	*750*	*800*	*900*	*1000*	*820*	*870*	*950*	*1050*	*920*	*970*	*1075*	*1175*
P11	—	—	—	—	255	270	290	330	245	265	280	320	265	280	305	330	295	310	340	370
	—	—	—	—	*840*	*890*	*950*	*1075*	*800*	*870*	*920*	*1050*	*870*	*920*	*1000*	*1075*	*970*	*1025*	*1125*	*1225*
P12	—	—	—	—	170	180	195	215	165	175	190	210	170	180	195	210	190	200	215	235
	—	—	—	—	*560*	*590*	*640*	*710*	*540*	*570*	*620*	*690*	*560*	*590*	*640*	*690*	*620*	*660*	*710*	*770*
M1	—	—	—	—	—	—	—	—	170	180	200	230	185	200	220	250	220	240	265	305
	—	—	—	—	—	—	—	—	*560*	*590*	*660*	*750*	*610*	*660*	*720*	*820*	*720*	*790*	*870*	*1000*
M2	—	—	—	—	—	—	—	—	140	155	165	195	155	165	180	205	185	200	220	250
	—	—	—	—	—	—	—	—	*460*	*510*	*540*	*640*	*510*	*540*	*590*	*670*	*610*	*660*	*720*	*820*
M3	—	—	—	—	—	—	—	—	115	125	135	160	125	135	150	170	150	160	180	205
	—	—	—	—	—	—	—	—	*375*	*410*	*445*	*520*	*410*	*445*	*490*	*560*	*490*	*520*	*590*	*670*
M4	—	—	—	—	—	—	—	—	90	100	105	120	100	105	115	130	120	125	140	155
	—	—	—	—	—	—	—	—	*295*	*330*	*345*	*395*	*330*	*345*	*375*	*425*	*395*	*410*	*460*	*510*
M5	—	—	—	—	—	—	—	—	75	80	90	100	80	85	95	110	100	105	115	130
	—	—	—	—	—	—	—	—	*245*	*260*	*295*	*330*	*260*	*280*	*310*	*360*	*330*	*345*	*375*	*425*
K1	350	400	470	600	325	350	380	425	315	340	370	415	340	365	400	440	245	265	295	335
	1150	*1300*	*1550*	*1975*	*1075*	*1150*	*1250*	*1400*	*1025*	*1125*	*1225*	*1350*	*1125*	*1200*	*1300*	*1450*	*800*	*870*	*970*	*1100*
K2	310	355	415	530	295	320	340	385	290	310	330	375	310	330	350	390	220	240	260	295
	1025	*1175*	*1350*	*1750*	*970*	*1050*	*1125*	*1275*	*950*	*1025*	*1075*	*1225*	*1025*	*1075*	*1150*	*1275*	*720*	*790*	*850*	*970*
K3	220	240	270	320	250	270	290	325	245	260	280	320	260	280	300	330	190	205	220	250
	720	*790*	*890*	*1050*	*820*	*890*	*950*	*1075*	*800*	*850*	*920*	*1050*	*850*	*920*	*980*	*1075*	*620*	*670*	*720*	*820*
K4	210	230	255	310	240	255	275	310	235	250	270	305	250	265	285	315	180	195	210	240
	690	*750*	*840*	*1025*	*790*	*840*	*900*	*1025*	*770*	*820*	*890*	*1000*	*820*	*870*	*940*	*1025*	*590*	*640*	*690*	*790*
K5	125	140	155	185	150	160	170	190	145	155	165	185	155	160	175	190	110	120	130	145
	410	*460*	*510*	*610*	*490*	*520*	*560*	*620*	*475*	*510*	*540*	*610*	*510*	*520*	*570*	*620*	*360*	*395*	*425*	*475*
K6	185	200	225	270	210	225	245	275	205	220	235	270	220	235	250	275	160	170	185	210
	610	*660*	*740*	*890*	*690*	*740*	*800*	*900*	*670*	*720*	*770*	*890*	*720*	*770*	*820*	*900*	*520*	*560*	*610*	*690*
K7	165	180	200	240	190	200	215	245	185	195	210	240	195	205	225	245	140	150	165	190
	540	*590*	*660*	*790*	*620*	*660*	*710*	*800*	*610*	*640*	*690*	*790*	*640*	*670*	*740*	*800*	*460*	*490*	*540*	*620*
H5	—	—	—	—	45	48	55	60	—	—	—	—	40	43	47	55	47	50	55	65
	—	—	—	—	*150*	*155*	*180*	*195*	—	—	—	—	*130*	*140*	*155*	*180*	*155*	*165*	*180*	*215*
H8	—	—	—	—	49	50	60	65	—	—	—	—	43	46	50	55	50	55	60	65
	—	—	—	—	*160*	*165*	*195*	*215*	—	—	—	—	*140*	*150*	*165*	*180*	*165*	*180*	*195*	*215*
H11	—	—	—	—	55	60	70	80	—	—	—	—	50	55	60	70	60	65	70	80
	—	—	—	—	*180*	*195*	*230*	*260*	—	—	—	—	*165*	*180*	*195*	*230*	*195*	*215*	*230*	*260*
H12	—	—	—	—	85	95	105	115	—	—	—	—	75	85	90	105	100	110	120	135
	—	—	—	—	*280*	*310*	*345*	*375*	—	—	—	—	*245*	*280*	*295*	*345*	*330*	*360*	*395*	*445*

R220.88-16 – In mm

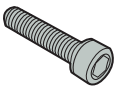
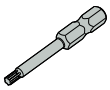
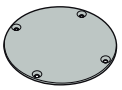




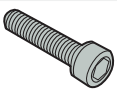
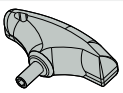
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 310–311
—Per il programma inserti completo, vedere le pagine 893
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.88-0063-16-5SAP	10134810	Manicotto	63,0	5	13,0	88,0 °	64,75	22,0	–	47,0	40,0	7100	0,5	SN.U1606
R220.88-0080-16-6SAP	10134811	Manicotto	80,0	6	13,0	88,0 °	81,62	27,0	–	62,0	50,0	6300	1,1	SN.U1606
R220.88-0080-16-7SAP	10134812	Manicotto	80,0	7	13,0	88,0 °	81,62	27,0	–	62,0	50,0	6300	1,1	SN.U1606
R220.88-0100-16-8SAP	10134813	Manicotto	100,0	8	13,0	88,0 °	101,6	32,0	–	77,0	50,0	5600	1,9	SN.U1606
R220.88-0100-16-9SAP	10134814	Manicotto	100,0	9	13,0	88,0 °	101,6	32,0	–	77,0	50,0	5600	1,9	SN.U1606
R220.88-0125-16-10SAP	10134815	Manicotto	125,0	10	13,0	88,0 °	126,6	40,0	–	90,0	63,0	5000	3,7	SN.U1606
R220.88-0125-16-11SAP	10134816	Manicotto	125,0	11	13,0	88,0 °	126,6	40,0	–	90,0	63,0	5000	3,6	SN.U1606
R220.88-8160-16-12SAP	10134817	Manicotto	160,0	12	13,0	88,0 °	161,58	40,0	66,7	90,0	63,0	4400	5,4	SN.U1204
R220.88-8160-16-13SAP	10134818	Manicotto	160,0	13	13,0	88,0 °	161,58	40,0	66,7	90,0	63,0	4400	5,4	SN.U1204

Parti di ricambio, comprese nella fornitura

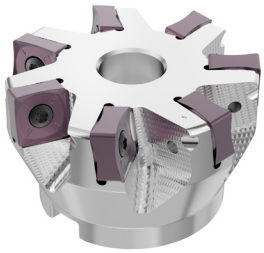
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.88-0063	220.17-692	1/4HEX-T20PX50	C05013-T20P	–	–
R220.88-0080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P	–	–
R220.88-0100	MC6S16X35	1/4HEX-T20PX90	C05013-T20P	–	–
R220.88-0125	MC6S20X40	1/4HEX-T20PX90	C05013-T20P	–	–
R220.88-8160	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

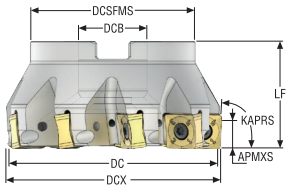
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.88-0063-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.88-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.88-16 – Pollici

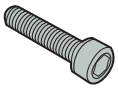
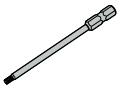
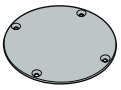




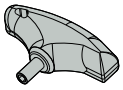
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 310–311
—Per il programma inserti completo, vedere le pagine 893
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.88-03.00-16-6SAP	10134819	Manicotto	3.000	6	0.512	88,0 °	3.064	1.000	2.441	1.969	6300	2.650	SN.U1606
R220.88-03.00-16-7SAP	10134820	Manicotto	3.000	7	0.512	88,0 °	3.064	1.000	2.441	1.969	6300	2.430	SN.U1606
R220.88-04.00-16-8SAP	10134821	Manicotto	4.000	8	0.512	88,0 °	4.063	1.500	3.031	1.969	5600	3.970	SN.U1606
R220.88-04.00-16-9SAP	10134822	Manicotto	4.000	9	0.512	88,0 °	4.063	1.500	3.031	1.969	5600	3.970	SN.U1606
R220.88-05.00-16-10SAP	10134823	Manicotto	5.000	10	0.512	88,0 °	5.063	1.500	3.543	2.480	5000	8.160	SN.U1606
R220.88-05.00-16-11SAP	10134824	Manicotto	5.000	11	0.512	88,0 °	5.063	1.500	3.543	2.480	5000	7.940	SN.U1606
R220.88-06.00-16-12SAP	10134825	Manicotto	6.000	12	0.512	88,0 °	6.062	2.000	4.331	2.480	4400	10.580	SN.U1204
R220.88-06.00-16-13SAP	10134826	Manicotto	6.000	13	0.512	88,0 °	6.062	2.000	4.331	2.480	4400	10.580	SN.U1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.88-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.88-04.00-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	–	–
R220.88-06.00	–	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.88-03.00-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.88-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.88-16 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNMU160612TN-M10 MP3000	8,0 *0.32*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P2	SNMU160612TN-M10 MP3000	8,0 *0.32*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P3	SNMU160612TN-M18 MP2501	8,0 *0.32*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
P4	SNMU160612TN-M18 MP2501	8,0 *0.32*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
P5	SNMU160612TN-M18 MP2501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
P6	SNMU160612TN-M18 MP2501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,25 0.010	0,32 0.013
P7	SNMU160612TN-M18 MP3501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,25 0.010	0,32 0.013
P8	SNMU160612TN-M18 MP3501	8,0 *0.32*	0,26 0.010	0,26 0.010	0,26 0.010	0,32 0.013
P11	SNMU160612TN-M18 MP3501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,25 0.010	0,32 0.013
P12	SNMU160612TN-M18 MP3501	6,0 *0.24*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
K1	SNMU160612TN-M18 MK1500	8,0 *0.32*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K2	SNMU160612TN-M18 MK1500	8,0 *0.32*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K3	SNMU160612TN-M18 MP1501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K4	SNMU160612TN-M18 MP1501	8,0 *0.32*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K5	SNMU160612TN-M18 MK2050	8,0 *0.32*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
K6	SNMU160612TN-M18 MK2050	8,0 *0.32*	0,25 0.010	0,25 0.010	0,26 0.010	0,32 0.013
K7	SNMU160612TN-M18 MK2050	8,0 *0.32*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,28 0.011
H5	SNMU160612TN-MD16 MP1501	6,0 *0.24*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
H8	SNMU160612TN-MD16 MP1501	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
H11	SNMU160612TN-MD16 MP1501	6,0 *0.24*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
H12	SNMU160612TN-MD16 MP1501	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
H21	SNMU160612TN-MD16 MP1501	5,0 *0.20*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.88-16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MP3000				F40M			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	225 *740*	245 *800*	275 *900*	315 *1025*	265 *870*	285 *940*	315 *1025*	355 *1175*	175 *570*	190 *620*	210 *690*	240 *790*
P2	220 *720*	240 *790*	270 *890*	305 *1000*	255 *840*	275 *900*	305 *1000*	345 *1125*	170 *560*	185 *610*	205 *670*	235 *770*
P3	195 *640*	210 *690*	235 *770*	270 *890*	225 *740*	240 *790*	270 *890*	305 *1000*	150 *490*	160 *520*	180 *590*	205 *670*
P4	170 *560*	185 *610*	210 *690*	235 *770*	200 *660*	215 *710*	235 *770*	265 *870*	130 *425*	145 *475*	160 *520*	180 *590*
P5	165 *540*	180 *590*	200 *660*	225 *740*	190 *620*	205 *670*	225 *740*	260 *850*	130 *425*	140 *460*	155 *510*	175 *570*
P6	185 *610*	200 *660*	225 *740*	255 *840*	215 *710*	235 *770*	255 *840*	290 *950*	145 *475*	155 *510*	175 *570*	195 *640*
P7	175 *570*	190 *620*	215 *710*	240 *790*	205 *670*	220 *720*	240 *790*	275 *900*	135 *445*	145 *475*	165 *540*	185 *610*
P8	165 *540*	175 *570*	200 *660*	225 *740*	190 *620*	205 *670*	225 *740*	255 *840*	125 *410*	135 *445*	155 *510*	175 *570*
P11	170 *560*	185 *610*	205 *670*	235 *770*	200 *660*	215 *710*	235 *770*	265 *870*	130 *425*	140 *460*	160 *520*	180 *590*
P12	115 *375*	125 *410*	135 *445*	155 *510*	130 *425*	140 *460*	155 *510*	175 *570*	90 *295*	95 *310*	105 *345*	120 *395*
M1	— —	— —	— —	— —	190 *620*	205 *670*	230 *750*	260 *850*	135 *445*	150 *490*	165 *540*	190 *620*
M2	— —	— —	— —	— —	160 *520*	170 *560*	190 *620*	215 *710*	115 *375*	125 *410*	135 *445*	155 *510*
M3	— —	— —	— —	— —	130 *425*	140 *460*	155 *510*	175 *570*	95 *310*	105 *345*	115 *375*	130 *425*
M4	— —	— —	— —	— —	100 *330*	110 *360*	120 *395*	135 *445*	75 *245*	80 *260*	90 *295*	100 *330*
M5	— —	— —	— —	— —	85 *280*	90 *295*	100 *330*	110 *360*	60 *195*	65 *215*	75 *245*	85 *280*
K1	240 *790*	255 *840*	290 *950*	330 *1075*	200 *660*	220 *720*	245 *800*	275 *900*	135 *445*	145 *475*	165 *540*	185 *610*
K2	215 *710*	230 *750*	255 *840*	290 *950*	180 *590*	195 *640*	215 *710*	245 *800*	120 *395*	130 *425*	145 *475*	165 *540*
K3	180 *590*	195 *640*	215 *710*	245 *800*	150 *490*	165 *540*	180 *590*	210 *690*	105 *345*	110 *360*	125 *410*	140 *460*
K4	175 *570*	185 *610*	205 *670*	235 *770*	145 *475*	155 *510*	175 *570*	200 *660*	100 *330*	105 *345*	115 *375*	135 *445*
K5	110 *360*	115 *375*	125 *410*	145 *475*	90 *295*	95 *310*	110 *360*	120 *395*	60 *195*	65 *215*	70 *230*	85 *280*
K6	155 *510*	165 *540*	185 *610*	210 *690*	125 *410*	135 *445*	155 *510*	175 *570*	85 *280*	95 *310*	105 *345*	115 *375*
K7	140 *460*	150 *490*	160 *520*	190 *620*	115 *375*	125 *410*	140 *460*	155 *510*	80 *260*	85 *280*	90 *295*	105 *345*
H5	— —	— —	— —	— —	40 *130*	43 *140*	48 *155*	55 *180*	29 *95*	32 *105*	35 *115*	39 *130*
H8	— —	— —	— —	— —	43 *140*	47 *155*	50 *165*	55 *180*	32 *105*	34 *110*	38 *125*	43 *140*
H11	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	70 *230*	37 *120*	40 *130*	44 *145*	50 *165*
H12	— —	— —	— —	— —	85 *280*	90 *295*	95 *310*	110 *360*	55 *180*	60 *195*	70 *230*	75 *245*

R217/220.88-16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	310	335	375	420	300	325	365	410	265	285	320	365
	—	—	—	—	*1025*	*1100*	*1225*	*1375*	*980*	*1075*	*1200*	*1350*	*870*	*940*	*1050*	*1200*
P2	—	—	—	—	305	325	365	410	290	315	355	400	255	280	315	355
	—	—	—	—	*1000*	*1075*	*1200*	*1350*	*950*	*1025*	*1175*	*1300*	*840*	*920*	*1025*	*1175*
P3	—	—	—	—	270	290	325	360	260	280	315	350	230	250	280	310
	—	—	—	—	*890*	*950*	*1075*	*1175*	*850*	*920*	*1025*	*1150*	*750*	*820*	*920*	*1025*
P4	—	—	—	—	240	255	285	320	230	245	275	310	200	220	245	275
	—	—	—	—	*790*	*840*	*940*	*1050*	*750*	*800*	*900*	*1025*	*660*	*720*	*800*	*900*
P5	—	—	—	—	230	250	270	305	225	240	265	295	195	210	235	265
	—	—	—	—	*750*	*820*	*890*	*1000*	*740*	*790*	*870*	*970*	*640*	*690*	*770*	*870*
P6	—	—	—	—	260	280	310	340	250	270	300	330	220	240	265	295
	—	—	—	—	*850*	*920*	*1025*	*1125*	*820*	*890*	*980*	*1075*	*720*	*790*	*870*	*970*
P7	—	—	—	—	245	265	295	320	235	255	285	315	210	225	250	280
	—	—	—	—	*800*	*870*	*970*	*1050*	*770*	*840*	*940*	*1025*	*690*	*740*	*820*	*920*
P8	—	—	—	—	225	245	270	305	220	235	265	295	195	210	235	265
	—	—	—	—	*740*	*800*	*890*	*1000*	*720*	*770*	*870*	*970*	*640*	*690*	*770*	*870*
P11	—	—	—	—	240	255	285	315	230	245	275	305	205	220	245	270
	—	—	—	—	*790*	*840*	*940*	*1025*	*750*	*800*	*900*	*1000*	*670*	*720*	*800*	*890*
P12	—	—	—	—	165	175	190	210	160	170	190	205	145	155	170	185
	—	—	—	—	*540*	*570*	*620*	*690*	*520*	*560*	*620*	*670*	*475*	*510*	*560*	*610*
K1	300	345	410	520	305	330	370	415	295	320	355	405	260	280	315	355
	980	*1125*	*1350*	*1700*	*1000*	*1075*	*1225*	*1350*	*970*	*1050*	*1175*	*1325*	*850*	*920*	*1025*	*1175*
K2	270	310	365	455	280	300	330	370	270	290	320	360	240	255	285	320
	890	*1025*	*1200*	*1500*	*920*	*980*	*1075*	*1225*	*890*	*950*	*1050*	*1175*	*790*	*840*	*940*	*1050*
K3	185	205	235	270	235	255	280	310	230	245	270	305	200	215	240	270
	610	*670*	*770*	*890*	*770*	*840*	*920*	*1025*	*750*	*800*	*890*	*1000*	*660*	*710*	*790*	*890*
K4	175	195	225	260	225	245	265	295	220	235	260	290	190	205	230	255
	570	*640*	*740*	*850*	*740*	*800*	*870*	*970*	*720*	*770*	*850*	*950*	*620*	*670*	*750*	*840*
K5	105	120	135	160	140	150	165	185	135	150	160	180	120	130	140	160
	345	*395*	*445*	*520*	*460*	*490*	*540*	*610*	*445*	*490*	*520*	*590*	*395*	*425*	*460*	*520*
K6	155	170	195	230	200	215	235	260	190	205	225	255	170	185	200	225
	510	*560*	*640*	*750*	*660*	*710*	*770*	*850*	*620*	*670*	*740*	*840*	*560*	*610*	*660*	*740*
K7	135	150	175	205	180	195	210	235	175	190	205	230	155	165	180	205
	445	*490*	*570*	*670*	*590*	*640*	*690*	*770*	*570*	*620*	*670*	*750*	*510*	*540*	*590*	*670*
H5	—	—	—	—	44	47	55	60	—	—	—	—	34	37	41	45
	—	—	—	—	*145*	*155*	*180*	*195*	—	—	—	—	*110*	*120*	*135*	*150*
H11	—	—	—	—	55	60	65	75	—	—	—	—	43	47	50	60
	—	—	—	—	*180*	*195*	*215*	*245*	—	—	—	—	*140*	*155*	*165*	*195*
H12	—	—	—	—	85	90	100	115	—	—	—	—	65	70	80	90
	—	—	—	—	*280*	*295*	*330*	*375*	—	—	—	—	*215*	*230*	*260*	*295*



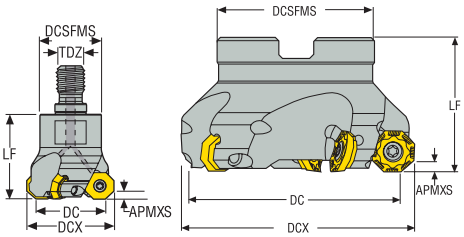
OCTOMILL 05/07

Octomill™ 05 e 07 offrono una delle gamme più complete di fresa per spianatura frontale sul mercato. Progettate per gestire molte applicazioni, Octomill 05 e 07 offrono elevate prestazioni e sicurezza di processo. Queste frese sono eccellenti per operazioni di semi-finitura e sgrossatura di acciaio e acciaio inossidabile. Con otto taglienti, le frese offrono una maggiore economicità rispetto alle frese tradizionali grazie a un costo per tagliente inferiore.

- Dimensione dell'inserto 05, gamma frese 32-315 mm (1,5-4")
- Dimensione dell'inserto 07, gamma frese 50-315 mm (2,5-6")
- Octomill 05 è adatta per macchine di piccole dimensioni e Octomill 07 è adatta per macchine di medie dimensioni

Octomill R217/R220.43-05 – In mm

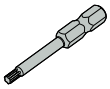




–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 317 - 319
–Per il programma inserti completo, vedere le pagine 870
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		mm		kg	
R220.43-0032-05	75069157	Manicotto	32,0	3	3,5	43,0 °	41,0	16,0	–	35,0	–	40,0	14800	0,3	OF..05
R220.43-0040-05	75069158	Manicotto	40,0	3	3,5	43,0 °	49,0	16,0	–	35,0	–	40,0	13200	0,3	OF..05
R220.43-0040-05-4A	00026516	Manicotto	40,0	4	3,5	43,0 °	49,0	16,0	–	35,0	–	40,0	13200	0,3	OF..05
R220.43-0050-05	75069159	Manicotto	50,0	4	3,5	43,0 °	59,0	22,0	–	47,0	–	40,0	11900	0,5	OF..05
R220.43-0050-05-5A	00026517	Manicotto	50,0	5	3,5	43,0 °	59,0	22,0	–	47,0	–	40,0	11900	0,5	OF..05
R220.43-0063-05	75069160	Manicotto	63,0	5	3,5	43,0 °	72,0	22,0	–	47,0	–	40,0	10600	0,6	OF..05
R220.43-0063-05-6A	00026518	Manicotto	63,0	6	3,5	43,0 °	72,0	22,0	–	47,0	–	40,0	10600	0,6	OF..05
R220.43-0080-05	75069161	Manicotto	80,0	6	3,5	43,0 °	89,0	27,0	–	62,0	–	50,0	9400	1,2	OF..05
R220.43-0080-05-8A	00026519	Manicotto	80,0	8	3,5	43,0 °	89,0	27,0	–	62,0	–	50,0	9400	0,9	OF..05
R220.43-0100-05	75069162	Manicotto	100,0	7	3,5	43,0 °	109,0	32,0	–	77,0	–	50,0	8400	1,9	OF..05
R220.43-0125-05	75079618	Manicotto	125,0	8	3,5	43,0 °	134,0	40,0	–	90,0	–	63,0	7500	3,3	OF..05
R220.43-8160-05	75080766	Manicotto	160,0	10	3,5	43,0 °	169,0	40,0	66,7	90,0	–	63,0	6600	5,5	OF..05
R217.43-1632.RE-05.3A	00005768	Combimaster	32,0	3	3,5	43,0 °	40,0	–	–	30,0	M16	40,0	14800	0,3	OF..05

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.43-..	–	1/4HEX-T15PX50	C04008-T15P
R220.43-0032	220.17-690	1/4HEX-T15PX50	C04008-T15P
R220.43-0040	TCEI0825	1/4HEX-T15PX50	C04008-T15P
R220.43-0050-0063	220.17-692	1/4HEX-T15PX50	C04008-T15P
R220.43-0080	–	1/4HEX-T15PX50	C04008-T15P
R220.43-0100-8160	–	1/4HEX-T15PX90	C04008-T15P

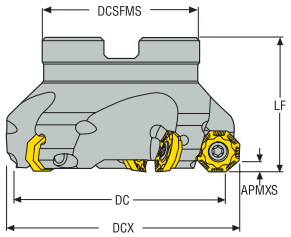
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.43-0032-0080	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.43-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.43-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.43-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Octomill R220.43-05 – Pollici

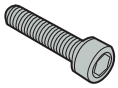
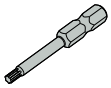




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 317 - 319
—Per il programma inserti completo, vedere le pagine 870
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.43-02.00-05	00086838	Manicotto	1.969	4	0.138	43,0 °	2.441	0.750	1.850	1.575	11900	1.100	OF..05
R220.43-02.50-05	00086839	Manicotto	2.480	5	0.138	43,0 °	2.953	0.750	1.850	1.575	10600	1.320	OF..05
R220.43-03.00-05	00086840	Manicotto	3.150	6	0.138	43,0 °	3.622	1.000	2.441	1.969	9400	2.430	OF..05
R220.43-04.00-05	00086841	Manicotto	3.937	7	0.138	43,0 °	4.291	1.500	3.543	1.969	8400	3.750	OF..05

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.43-02.00	UC6S3/8UNFX1	1/4HEX-T15PX50	C04008-T15P
R220.43-02.50-03.00	–	1/4HEX-T15PX50	C04008-T15P
R220.43-04.00	–	1/4HEX-T15PX90	C04008-T15P

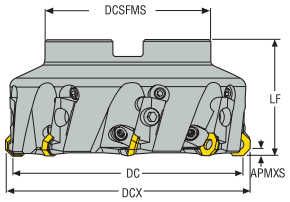
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.43-02.00-04.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Octomill R220.43-05C/CT/CG – In mm

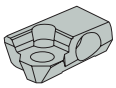
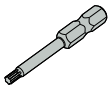
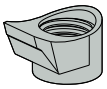




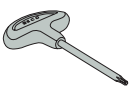
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 317 - 319
—Per il programma inserti completo, vedere le pagine 870
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.43-0125-05C	00090988	Manicotto	125,0	8	3,5	43,0 °	134,0	40,0	–	90,0	63,0	3800	3,7	OF..05
R220.43-0125-05CT	00090989	Manicotto	125,0	10	3,5	43,0 °	134,0	40,0	–	90,0	63,0	3800	4,0	OF..05
R220.43-8160-05C	00090991	Manicotto	160,0	10	3,5	43,0 °	169,0	40,0	66,7	90,0	63,0	3300	5,8	OF..05
R220.43-8160-05CT	00090992	Manicotto	160,0	14	3,5	43,0 °	169,0	40,0	66,7	90,0	63,0	3300	5,8	OF..05
R220.43-8200-05C	00090994	Manicotto	200,0	12	3,5	43,0 °	209,0	60,0	101,6	130,0	63,0	3000	8,5	OF..05
R220.43-8250-05C	00090997	Manicotto	250,0	16	3,5	43,0 °	259,0	60,0	101,6	130,0	63,0	2700	14,3	OF..05

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Cuneo inserto	Vite cuneo
						
R220.43-0125	AU1114T-T15P	OF05AR	FS96018	1/4HEX-T25PX50	334.5-640	LD8020-T25P
R220.43-0125C	AU1114T-T15P	OF05AR	FS96018	1/4HEX-T25PX50	CW0810	LD8020-T25P
R220.43-8160C/CG	AU1114T-T15P	OF05AR	FS96018	1/4HEX-T25PX50	CW0810	LD8020-T25P
R220.43-8160CT	AU1114T-T15P	OF05AR	FS96018	1/4HEX-T25PX50	334.5-640	LD8020-T25P
R220.43-8200-8250C/CG	AU1114T-T15P	OF05AR	FS96018	1/4HEX-T25PX50	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave vite modulo	Chiave di regolazione
					
R220.43-0125C	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	T15P-4
R220.43-0125CT	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	–	T15P-4
R220.43-8160C/CG	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	T15P-4
R220.43-8160CT	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	–	T15P-4
R220.43-8200-8250C/CG	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	T15P-4

Chiavi dinamometriche e fisse, vedere pagina 931

R220.43-05 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	OFEX05T305TN-M08 MP3501	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P2	OFEX05T305TN-M08 MP3501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
P3	OFEX05T305TN-M08 MP3501	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P4	OFEX05T305TN-M08 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
P5	OFEX05T305TN-M08 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P6	OFEX05T305TN-M08 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P7	OFEX05T305TN-M08 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P8	OFEX05T305TN-M08 MP3501	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P11	OFEX05T305TN-M08 MP3501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
P12	OFEX05T305TN-M08 MP3501	1,7 *0.065*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
M1	OFEX05T305TN-ME07 F40M	2,0 *0.080*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,19 0.0075
M2	OFEX05T305TN-ME07 F40M	2,0 *0.080*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
M3	OFEX05T305TN-ME07 F40M	1,7 *0.065*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
M4	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
M5	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
K1	OFEX05T305TN-M08 MK1501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
K2	OFEX05T305TN-M08 MK1501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
K3	OFEX05T305TN-D09 MP1501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
K4	OFEX05T305TN-D09 MP1501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
K5	OFEX05T305TN-D09 MP1501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
K6	OFEX05T305TN-D09 MP1501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
K7	OFEX05T305TN-D09 MP1501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
N1	OFEX05T305N-E04 F15M	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
N2	OFEX05T305N-E04 F15M	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
N3	OFEX05T305N-E04 F15M	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
N11	OFEX05T305N-E04 F15M	2,0 *0.080*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
S1	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
S2	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
S3	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
S11	OFEX05T305TN-ME07 F40M	1,5 *0.060*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
S12	OFEX05T305TN-ME07 F40M	1,5 *0.060*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
S13	OFEX05T305TN-ME07 F40M	1,3 *0.050*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
H5	OFEX05T305TN-D09 MP1501	1,7 *0.065*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
H8	OFEX05T305TN-D09 MP1501	1,5 *0.060*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
H11	OFEX05T305TN-D09 MP1501	1,7 *0.065*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,16 0.0065
H12	OFEX05T305TN-D09 MP1501	1,5 *0.060*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
H21	OFEX05T305TN-D09 MP1501	1,5 *0.060*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

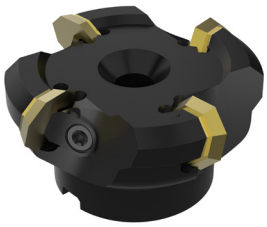
R217/220.43-05 – Parametri di taglio v_c = (m/min)/(sf/min)

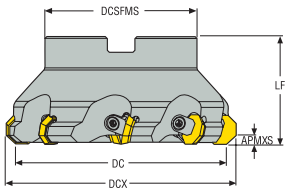
SMG	F15M				F30M				F40M				H15				PCD20			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	285	305	335	375	235	255	285	320	—	—	—	—	—	—	—	—
	—	—	—	—	*940*	*1000*	*1100*	*1225*	*770*	*840*	*940*	*1050*	—	—	—	—	—	—	—	—
P2	—	—	—	—	275	295	320	365	230	250	270	310	—	—	—	—	—	—	—	—
	—	—	—	—	*900*	*970*	*1050*	*1200*	*750*	*820*	*890*	*1025*	—	—	—	—	—	—	—	—
P3	—	—	—	—	240	255	280	315	200	215	235	270	—	—	—	—	—	—	—	—
	—	—	—	—	*790*	*840*	*920*	*1025*	*660*	*710*	*770*	*890*	—	—	—	—	—	—	—	—
P4	—	—	—	—	210	225	250	280	180	190	210	235	—	—	—	—	—	—	—	—
	—	—	—	—	*690*	*740*	*820*	*920*	*590*	*620*	*690*	*770*	—	—	—	—	—	—	—	—
P5	—	—	—	—	205	220	235	270	170	185	205	230	—	—	—	—	—	—	—	—
	—	—	—	—	*670*	*720*	*770*	*890*	*560*	*610*	*670*	*750*	—	—	—	—	—	—	—	—
P6	—	—	—	—	230	245	265	300	195	210	225	260	—	—	—	—	—	—	—	—
	—	—	—	—	*750*	*800*	*870*	*980*	*640*	*690*	*740*	*850*	—	—	—	—	—	—	—	—
P7	—	—	—	—	215	230	250	285	185	195	215	245	—	—	—	—	—	—	—	—
	—	—	—	—	*710*	*750*	*820*	*940*	*610*	*640*	*710*	*800*	—	—	—	—	—	—	—	—
P8	—	—	—	—	200	215	235	265	170	185	200	225	—	—	—	—	—	—	—	—
	—	—	—	—	*660*	*710*	*770*	*870*	*560*	*610*	*660*	*740*	—	—	—	—	—	—	—	—
P11	—	—	—	—	210	225	245	275	175	190	210	240	—	—	—	—	—	—	—	—
	—	—	—	—	*690*	*740*	*800*	*900*	*570*	*620*	*690*	*790*	—	—	—	—	—	—	—	—
P12	—	—	—	—	135	145	160	175	115	125	135	155	—	—	—	—	—	—	—	—
	—	—	—	—	*445*	*475*	*520*	*570*	*375*	*410*	*445*	*510*	—	—	—	—	—	—	—	—
M1	—	—	—	—	220	240	260	295	185	200	220	250	—	—	—	—	—	—	—	—
	—	—	—	—	*720*	*790*	*850*	*970*	*610*	*660*	*720*	*820*	—	—	—	—	—	—	—	—
M2	—	—	—	—	185	195	215	240	155	165	180	210	—	—	—	—	—	—	—	—
	—	—	—	—	*610*	*640*	*710*	*790*	*510*	*540*	*590*	*690*	—	—	—	—	—	—	—	—
M3	—	—	—	—	145	155	170	195	125	135	145	165	—	—	—	—	—	—	—	—
	—	—	—	—	*475*	*510*	*560*	*640*	*410*	*445*	*475*	*540*	—	—	—	—	—	—	—	—
M4	—	—	—	—	115	120	130	150	95	105	115	130	—	—	—	—	—	—	—	—
	—	—	—	—	*375*	*395*	*425*	*490*	*310*	*345*	*375*	*425*	—	—	—	—	—	—	—	—
M5	—	—	—	—	95	100	110	125	80	85	95	105	—	—	—	—	—	—	—	—
	—	—	—	—	*310*	*330*	*360*	*410*	*260*	*280*	*310*	*345*	—	—	—	—	—	—	—	—
K1	300	320	350	395	220	235	255	290	185	195	215	250	—	—	—	—	—	—	—	—
	980	*1050*	*1150*	*1300*	*720*	*770*	*840*	*950*	*610*	*640*	*710*	*820*	—	—	—	—	—	—	—	—
K2	260	280	310	350	195	210	225	255	160	175	190	220	—	—	—	—	—	—	—	—
	850	*920*	*1025*	*1150*	*640*	*690*	*740*	*840*	*520*	*570*	*620*	*720*	—	—	—	—	—	—	—	—
K3	220	240	260	295	165	175	190	215	135	145	165	185	—	—	—	—	—	—	—	—
	720	*790*	*850*	*970*	*540*	*570*	*620*	*710*	*445*	*475*	*540*	*610*	—	—	—	—	—	—	—	—
K4	210	225	250	285	155	170	180	205	130	140	155	180	—	—	—	—	—	—	—	—
	690	*740*	*820*	*940*	*510*	*560*	*590*	*670*	*425*	*460*	*510*	*590*	—	—	—	—	—	—	—	—
K5	130	140	150	170	95	100	110	125	80	85	95	105	—	—	—	—	—	—	—	—
	425	*460*	*490*	*560*	*310*	*330*	*360*	*410*	*260*	*280*	*310*	*345*	—	—	—	—	—	—	—	—
K6	185	200	220	250	140	150	160	180	115	125	135	155	—	—	—	—	—	—	—	—
	610	*660*	*720*	*820*	*460*	*490*	*520*	*590*	*375*	*410*	*445*	*510*	—	—	—	—	—	—	—	—
K7	165	175	195	220	120	130	145	160	105	110	120	135	—	—	—	—	—	—	—	—
	540	*570*	*640*	*720*	*395*	*425*	*475*	*520*	*345*	*360*	*395*	*445*	—	—	—	—	—	—	—	—
N1	2200	2375	2625	2925	1600	1725	1900	2175	1325	1425	1600	1800	1750	1875	2075	2325	2050	2050	2050	2050
	7225	*7800*	*8600*	*9600*	*5250*	*5650*	*6225*	*7125*	*4350*	*4675*	*5250*	*5900*	*5750*	*6150*	*6800*	*7625*	*6725*	*6725*	*6725*	*6725*
N2	890	960	1050	1175	640	690	770	870	540	580	640	730	700	760	840	940	1450	1450	1450	1450
	2925	*3150*	*3450*	*3850*	*2100*	*2275*	*2525*	*2850*	*1775*	*1900*	*2100*	*2400*	*2300*	*2500*	*2750*	*3075*	*4750*	*4750*	*4750*	*4750*
N3	590	640	700	790	430	465	510	580	355	385	430	485	470	500	560	630	—	—	—	—
	1925	*2100*	*2300*	*2600*	*1400*	*1525*	*1675*	*1900*	*1175*	*1275*	*1400*	*1600*	*1550*	*1650*	*1825*	*2075*	—	—	—	—
N11	680	730	800	900	490	530	590	670	410	440	490	550	540	580	640	720	900	900	900	900
	2225	*2400*	*2625*	*2950*	*1600*	*1750*	*1925*	*2200*	*1350*	*1450*	*1600*	*1800*	*1775*	*1900*	*2100*	*2350*	*2950*	*2950*	*2950*	*2950*
S1	—	—	—	—	—	—	—	—	45	48	55	60	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*150*	*155*	*180*	*195*	—	—	—	—	—	—	—	—
S2	—	—	—	—	—	—	—	—	36	39	43	48	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*120*	*130*	*140*	*155*	—	—	—	—	—	—	—	—
S3	—	—	—	—	—	—	—	—	32	34	38	42	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*105*	*110*	*125*	*140*	—	—	—	—	—	—	—	—
S11	—	—	—	—	—	—	—	—	60	65	75	85	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*195*	*215*	*245*	*280*	—	—	—	—	—	—	—	—
S12	—	—	—	—	—	—	—	—	43	46	50	60	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*195*	—	—	—	—	—	—	—	—
S13	—	—	—	—	—	—	—	—	25	27	30	34	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*80*	*90*	*100*	*110*	—	—	—	—	—	—	—	—
H5	—	—	—	—	45	48	55	60	38	41	45	50	—	—	—	—	—	—	—	—
	—	—	—	—	*150*	*155*	*180*	*195*	*125*	*135*	*150*	*165*	—	—	—	—	—	—	—	—
H8	—	—	—	—	47	50	55	60	40	43	48	55	—	—	—	—	—	—	—	—
	—	—	—	—	*155*	*165*	*180*	*195*	*130*	*140*	*155*	*180*	—	—	—	—	—	—	—	—
H11	—	—	—	—	55	60	65	75	49	50	55	65	—	—	—	—	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*245*	*160*	*165*	*180*	*215*	—	—	—	—	—	—	—	—
H12	—	—	—	—	85	90	100	110	70	80	85	95	—	—	—	—	—	—	—	—
	—	—	—	—	*280*	*295*	*330*	*360*	*230*	*260*	*280*	*310*	—	—	—	—	—	—	—	—
H21	—	—	—	—	47	50	55	60	40	43	48	55	—	—	—	—	—	—	—	—
	—	—	—	—	*155*	*165*	*180*	*195*	*130*	*140*	*155*	*180*	—	—	—	—	—	—	—	—

R217/220.43-05 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501				T25M			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	420	435	460	495	425	440	465	500	380	395	415	445	290	310	330	365
	—	—	—	—	*1375*	*1425*	*1500*	*1625*	*1400*	*1450*	*1525*	*1650*	*1250*	*1300*	*1350*	*1450*	*950*	*1025*	*1075*	*1200*
P2	—	—	—	—	400	415	440	480	405	420	445	485	365	375	400	435	285	300	320	350
	—	—	—	—	*1300*	*1350*	*1450*	*1575*	*1325*	*1375*	*1450*	*1600*	*1200*	*1225*	*1300*	*1425*	*940*	*980*	*1050*	*1150*
P3	—	—	—	—	350	365	385	420	355	365	390	420	320	330	350	380	245	260	275	305
	—	—	—	—	*1150*	*1200*	*1275*	*1375*	*1175*	*1200*	*1275*	*1375*	*1050*	*1075*	*1150*	*1250*	*800*	*850*	*900*	*1000*
P4	—	—	—	—	315	325	345	370	320	330	350	370	285	295	315	335	220	230	250	270
	—	—	—	—	*1025*	*1075*	*1125*	*1225*	*1050*	*1075*	*1150*	*1225*	*940*	*970*	*1025*	*1100*	*720*	*750*	*820*	*890*
P5	—	—	—	—	300	310	330	355	305	315	330	360	275	280	300	325	210	220	235	265
	—	—	—	—	*980*	*1025*	*1075*	*1175*	*1000*	*1025*	*1075*	*1175*	*900*	*920*	*980*	*1075*	*690*	*720*	*770*	*870*
P6	—	—	—	—	335	345	370	400	340	355	375	405	305	315	335	365	235	250	265	295
	—	—	—	—	*1100*	*1125*	*1225*	*1300*	*1125*	*1175*	*1225*	*1325*	*1000*	*1025*	*1100*	*1200*	*770*	*820*	*870*	*970*
P7	—	—	—	—	315	330	345	375	320	335	350	380	290	300	315	345	220	235	250	280
	—	—	—	—	*1025*	*1075*	*1125*	*1225*	*1050*	*1100*	*1150*	*1250*	*950*	*980*	*1025*	*1125*	*720*	*770*	*820*	*920*
P8	—	—	—	—	295	305	325	350	300	310	325	355	270	275	295	320	205	215	235	260
	—	—	—	—	*970*	*1000*	*1075*	*1150*	*980*	*1025*	*1075*	*1175*	*890*	*900*	*970*	*1050*	*670*	*710*	*770*	*850*
P11	—	—	—	—	310	320	335	365	310	325	340	370	280	290	305	335	215	225	245	270
	—	—	—	—	*1025*	*1050*	*1100*	*1200*	*1025*	*1075*	*1125*	*1225*	*920*	*950*	*1000*	*1100*	*710*	*740*	*800*	*890*
P12	—	—	—	—	200	205	215	230	200	205	215	230	180	185	195	210	140	150	160	175
	—	—	—	—	*660*	*670*	*710*	*750*	*660*	*670*	*710*	*750*	*590*	*610*	*640*	*690*	*460*	*490*	*520*	*570*
M1	—	—	—	—	—	—	—	—	205	220	235	260	195	205	220	245	230	240	260	285
	—	—	—	—	—	—	—	—	*670*	*720*	*770*	*850*	*640*	*670*	*720*	*800*	*750*	*790*	*850*	*940*
M2	—	—	—	—	—	—	—	—	175	185	195	220	160	170	185	205	185	200	215	235
	—	—	—	—	—	—	—	—	*570*	*610*	*640*	*720*	*520*	*560*	*610*	*670*	*610*	*660*	*710*	*770*
M3	—	—	—	—	—	—	—	—	140	150	160	175	130	140	150	165	150	160	175	185
	—	—	—	—	—	—	—	—	*460*	*490*	*520*	*570*	*425*	*460*	*490*	*540*	*490*	*520*	*570*	*610*
M4	—	—	—	—	—	—	—	—	105	115	125	135	100	105	115	125	115	125	135	145
	—	—	—	—	—	—	—	—	*345*	*375*	*410*	*445*	*330*	*345*	*375*	*410*	*375*	*410*	*445*	*475*
M5	—	—	—	—	—	—	—	—	90	95	105	110	85	90	95	105	95	105	110	120
	—	—	—	—	—	—	—	—	*295*	*310*	*345*	*360*	*280*	*295*	*310*	*345*	*310*	*345*	*360*	*395*
K1	355	425	480	560	405	420	445	485	410	425	450	490	370	380	405	440	225	235	255	280
	1175	*1400*	*1575*	*1825*	*1325*	*1375*	*1450*	*1600*	*1350*	*1400*	*1475*	*1600*	*1225*	*1250*	*1325*	*1450*	*740*	*770*	*840*	*920*
K2	315	375	425	500	360	375	395	430	365	380	400	435	330	340	360	390	200	210	225	250
	1025	*1225*	*1400*	*1650*	*1175*	*1225*	*1300*	*1400*	*1200*	*1250*	*1300*	*1425*	*1075*	*1125*	*1175*	*1275*	*660*	*690*	*740*	*820*
K3	255	280	305	345	305	315	335	365	310	320	340	370	280	290	305	330	165	175	190	210
	840	*920*	*1000*	*1125*	*1000*	*1025*	*1100*	*1200*	*1025*	*1050*	*1125*	*1225*	*920*	*950*	*1000*	*1075*	*540*	*570*	*620*	*690*
K4	240	265	290	330	290	300	320	345	295	305	325	350	265	275	290	315	160	170	180	200
	790	*870*	*950*	*1075*	*950*	*980*	*1050*	*1125*	*970*	*1000*	*1075*	*1150*	*870*	*900*	*950*	*1025*	*520*	*560*	*590*	*660*
K5	150	165	180	200	180	185	195	210	180	190	200	210	165	170	180	190	95	105	110	120
	490	*540*	*590*	*660*	*590*	*610*	*640*	*690*	*590*	*620*	*660*	*690*	*540*	*560*	*590*	*620*	*310*	*345*	*360*	*395*
K6	215	235	255	290	260	265	280	305	260	270	285	310	235	240	255	280	140	150	160	180
	710	*770*	*840*	*950*	*850*	*870*	*920*	*1000*	*850*	*890*	*940*	*1025*	*770*	*790*	*840*	*920*	*460*	*490*	*520*	*590*
K7	190	210	230	255	230	235	250	270	235	240	255	270	210	215	230	245	125	130	140	155
	620	*690*	*750*	*840*	*750*	*770*	*820*	*890*	*770*	*790*	*840*	*890*	*690*	*710*	*750*	*800*	*410*	*425*	*460*	*510*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	47	49	55	60	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*160*	*180*	*195*	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	37	40	44	47	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*145*	*155*	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	33	35	38	41	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*115*	*125*	*135*	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	70	75	85	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*245*	*280*	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	45	48	50	55	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	26	28	30	33	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*100*	*110*	—	—	—	—
H5	—	—	—	—	55	55	60	65	—	—	—	—	42	44	47	50	—	—	—	—
	—	—	—	—	*180*	*180*	*195*	*215*	—	—	—	—	*140*	*145*	*155*	*165*	—	—	—	—
H8	—	—	—	—	55	60	65	70	—	—	—	—	44	47	50	55	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*145*	*155*	*165*	*180*	—	—	—	—
H11	—	—	—	—	65	70	75	85	—	—	—	—	55	55	60	65	—	—	—	—
	—	—	—	—	*215*	*230*	*245*	*280*	—	—	—	—	*180*	*180*	*195*	*215*	—	—	—	—
H12	—	—	—	—	100	105	115	125	—	—	—	—	80	85	90	100	—	—	—	—
	—	—	—	—	*330*	*345*	*375*	*410*	—	—	—	—	*260*	*280*	*295*	*330*	—	—	—	—
H21	—	—	—	—	55	60	65	70	—	—	—	—	44	47	50	55	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	—	—	—	—	*145*	*155*	*165*	*180*	—	—	—	—

Octomill R220.43-07W – In mm

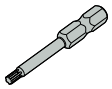
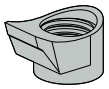




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 324-326
—Per il programma inserti completo, vedere le pagine 869
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.43-0050-07W	00034758	Manicotto	50,0	4	5,0	43,0 °	62,0	22,0	–	47,0	60,0	6300	0,7	OF..0704
R220.43-0063-07W	00005691	Manicotto	63,0	4	5,0	43,0 °	75,0	22,0	–	47,0	40,0	5600	0,6	OF..0704
R220.43-0080-07W	00005692	Manicotto	80,0	5	5,0	43,0 °	92,0	27,0	–	62,0	50,0	5000	1,3	OF..0704
R220.43-0100-07W	00005693	Manicotto	100,0	6	5,0	43,0 °	112,0	32,0	–	77,0	50,0	4400	1,8	OF..0704
R220.43-0125-07W	00005694	Manicotto	125,0	8	5,0	43,0 °	137,0	40,0	–	90,0	63,0	4000	2,8	OF..0704
R220.43-8160-07W	00005695	Manicotto	160,0	10	5,0	43,0 °	172,0	40,0	66,7	90,0	63,0	3500	5,1	OF..0704

Parti di ricambio, comprese nella fornitura

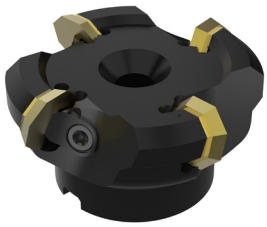
Per fresa	Vite attacco	Chiave per vite inserto	Cuneo inserto	Vite cuneo
				
R220.43-0050	220.17-696	1/4HEX-T25PX50	334.5-640	LD8018-T25P
R220.43-0063	MF6S10X40	1/4HEX-T25PX50	CW0810	LD8018-T25P
R220.43-0080	MC6S12X35	1/4HEX-T25PX50	CW0810	LD8020-T25P
R220.43-0100-8160	–	1/4HEX-T25PX50	CW0810	LD8018-T25P

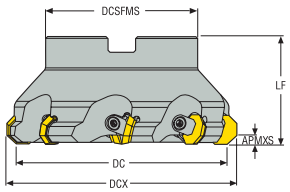
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura
			
R220.43-0050-0080	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE
R220.43-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE
R220.43-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE
R220.43-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

Octomill R220.43-07W – Pollici

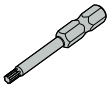
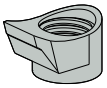




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 324-326
—Per il programma inserti completo, vedere le pagine 869
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch		inch	inch	inch	inch		lb	
R220.43-03.00-07W	00003266	Manicotto	3.150	5	0.197	43,0 °	3.622	1.000	2.441	1.969	5000	2.870	OF..0704
R220.43-04.00-07W	00003268	Manicotto	3.937	6	0.197	43,0 °	4.409	1.500	3.543	1.969	4400	4.410	OF..0704

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Cuneo inserto	Vite cuneo
				
R220.43-03.00	UF6S1/2UNFX1-1/2	1/4HEX-T25PX50	CW0810	LD8018-T25P
R220.43-04.00	UF6S3/4UNFX2	1/4HEX-T25PX50	CW0810	LD8020-T25P

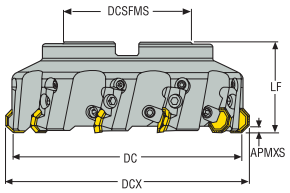
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura
		
R220.43-02.50-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

Octomill R220.43-07C/CG/CT – In mm

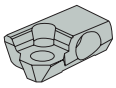
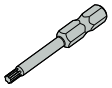
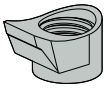




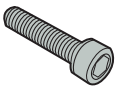
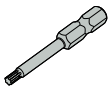
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 324-326
—Per il programma inserti completo, vedere le pagine 869
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.43-8160-07C	75077240	Manicotto	160,0	10	5,0	43,0 °	172,0	40,0	66,7	90,0	63,0	3300	5,7	OF..0704
R220.43-8160-07CT	75077241	Manicotto	160,0	14	5,0	43,0 °	172,0	40,0	66,7	90,0	63,0	3300	5,6	OF..0704
R220.43-8200-07C	75077243	Manicotto	200,0	12	5,0	43,0 °	212,0	60,0	101,6	130,0	63,0	3000	8,3	OF..0704
R220.43-8250-07C	75077246	Manicotto	250,0	16	5,0	43,0 °	262,0	60,0	101,6	130,0	63,0	2700	14,3	OF..0704

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Modulo	Vite modulo	Chiave per vite inserto	Cuneo inserto	Vite cuneo
						
R220.43-0125-8200-C	AU1114T-T15P	OF07AR	FS96018	1/4HEX-T25PX50	CW0810	LD8020-T25P
R220.43-8160-CT	AU1114T-T15P	OF07AR	FS96018	1/4HEX-T25PX50	334.5-640	LD8020-T25P

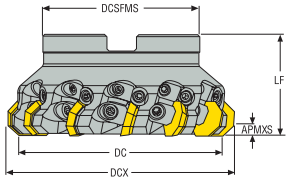
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave vite modulo	Chiave di regolazione
					
R220.43-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.43-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50

Chiavi dinamometriche e fisse, vedere pagina 931

Octomill R220.43-07T – In mm

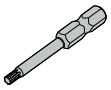
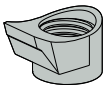
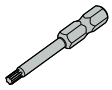
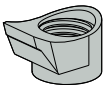




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 324-326
—Per il programma inserti completo, vedere le pagine 869
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		kg	
R220.43-0063-07-6T	00004368	Manicotto	63,0	6	5,0	43,0 °	75,0	22,0	47,0	50,0	5600	0,7	OF..0704
R220.43-0080-07-9T	00004369	Manicotto	80,0	9	5,0	43,0 °	92,0	27,0	62,0	50,0	5000	1,2	OF..0704
R220.43-0100-07-12T	00004371	Manicotto	100,0	12	5,0	43,0 °	112,0	32,0	77,0	50,0	4400	1,6	OF..0704

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Unità di regolazione assiale	Chiave per vite inserto	Cuneo inserto	Chiave di regolazione	Vite di regolazione (assiale)	Calibro di regolazione assiale	Vite cuneo
								
R220.43-0063	MF6S10X40	AS6011	1/4HEX-T25PX50	334.5-640	1/4HEX-T15PX50	LD6019-T15P	CW0608	LD8020-T25P
R220.43-0080	MC6S12X35	AS6011	1/4HEX-T25PX50	334.5-640	1/4HEX-T15PX50	LD6019-T15P	CW0608	LD8020-T25P
R220.43-0100-0125	–	AS6011	1/4HEX-T25PX50	334.5-640	1/4HEX-T15PX50	LD6019-T15P	CW0608	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura
			
R220.43-0063-0080	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE
R220.43-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

R220.43-07 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	OFER070405TN-ME15 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P2	OFER070405TN-ME15 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,42 0.017
P3	OFER070405TN-M16 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,42 0.017
P4	OFER070405TN-M16 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,40 0.016
P5	OFER070405TN-M16 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P6	OFER070405TN-M16 MP2501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P7	OFER070405TN-M16 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P8	OFER070405TN-M16 MP3501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,34 0.013	0,42 0.017
P11	OFER070405TN-ME15 MP3501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P12	OFER070405TN-ME15 MP3501	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
M1	OFER070405TN-ME10 F40M	3,0 *0.12*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M2	OFER070405TN-ME10 F40M	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
M3	OFER070405TN-ME10 F40M	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
M4	OFER070405TN-ME10 F40M	1,8 *0.070*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
M5	OFER070405TN-ME10 F40M	1,8 *0.070*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
K1	OFER070405TN-M16 MK1501	3,0 *0.12*	0,34 0.013	0,34 0.013	0,36 0.014	0,44 0.017
K2	OFER070405TN-M16 MK1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K3	OFER070405TN-M16 MP1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K4	OFER070405TN-M16 MP1501	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K5	OFER070405TN-M16 MP1501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
K6	OFER070405TN-M16 MK2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
K7	OFER070405TN-M16 MK2050	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
N1	OFER070405N-E07 H15	3,0 *0.12*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,25 0.010
N2	OFER070405N-E07 H15	3,0 *0.12*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,25 0.010
N3	OFER070405N-E07 H15	3,0 *0.12*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,25 0.010
N11	OFER070405N-E07 H15	3,0 *0.12*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,25 0.010
S1	OFER070405TN-ME10 F40M	1,8 *0.070*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
S2	OFER070405TN-ME10 F40M	1,8 *0.070*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
S3	OFER070405TN-ME10 F40M	1,8 *0.070*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,17 0.0065
S11	OFER070405TN-ME10 F40M	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S12	OFER070405TN-ME10 F40M	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,16 0.0065	0,20 0.0080
S13	OFER070405TN-ME10 F40M	1,8 *0.070*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,18 0.0070
H5	OFEN070405TN-D18 MP1501	2,5 *0.10*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
H8	OFEN070405TN-D18 MP1501	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H11	OFEN070405TN-D18 MP1501	2,5 *0.10*	0,24 0.0095	0,24 0.0095	0,25 0.010	0,30 0.012
H12	OFEN070405TN-D18 MP1501	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
H21	OFEN070405TN-D18 MP1501	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.43-07 – Parametri di taglio v_c = (m/min)/(sf/min)

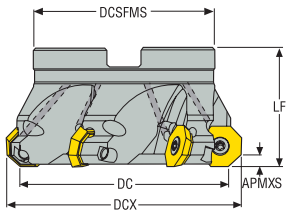
SMG	F15M				MK2050				F30M				F40M				H15			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	—	—	—	—	265	285	315	360	245	265	295	330	210	225	245	280	—	—	—	—
	—	—	—	—	*870*	*940*	*1025*	*1175*	*800*	*870*	*970*	*1075*	*690*	*740*	*800*	*920*	—	—	—	—
P2	—	—	—	—	255	275	305	345	240	260	290	325	200	215	240	275	—	—	—	—
	—	—	—	—	*840*	*900*	*1000*	*1125*	*790*	*850*	*950*	*1075*	*660*	*710*	*790*	*900*	—	—	—	—
P3	—	—	—	—	220	240	270	305	210	230	250	285	175	190	210	240	—	—	—	—
	—	—	—	—	*720*	*790*	*890*	*1000*	*690*	*750*	*820*	*940*	*570*	*620*	*690*	*790*	—	—	—	—
P4	—	—	—	—	200	215	235	270	185	200	220	250	155	170	185	210	—	—	—	—
	—	—	—	—	*660*	*710*	*770*	*890*	*610*	*660*	*720*	*820*	*510*	*560*	*610*	*690*	—	—	—	—
P5	—	—	—	—	190	205	225	255	180	195	215	240	150	160	175	205	—	—	—	—
	—	—	—	—	*620*	*670*	*740*	*840*	*590*	*640*	*710*	*790*	*490*	*520*	*570*	*670*	—	—	—	—
P6	—	—	—	—	215	230	260	295	200	215	240	270	170	180	205	230	—	—	—	—
	—	—	—	—	*710*	*750*	*850*	*970*	*660*	*710*	*790*	*890*	*560*	*590*	*670*	*750*	—	—	—	—
P7	—	—	—	—	200	220	245	275	190	205	225	255	160	170	190	215	—	—	—	—
	—	—	—	—	*660*	*720*	*800*	*900*	*620*	*670*	*740*	*840*	*520*	*560*	*620*	*710*	—	—	—	—
P8	—	—	—	—	185	200	225	255	180	195	210	240	145	160	175	200	—	—	—	—
	—	—	—	—	*610*	*660*	*740*	*840*	*590*	*640*	*690*	*790*	*475*	*520*	*570*	*660*	—	—	—	—
P11	—	—	—	—	195	210	235	270	185	200	220	250	155	165	185	210	—	—	—	—
	—	—	—	—	*640*	*690*	*770*	*890*	*610*	*660*	*720*	*820*	*510*	*540*	*610*	*690*	—	—	—	—
P12	—	—	—	—	130	140	155	175	120	130	145	160	105	110	120	140	—	—	—	—
	—	—	—	—	*425*	*460*	*510*	*570*	*395*	*425*	*475*	*520*	*345*	*360*	*395*	*460*	—	—	—	—
M1	—	—	—	—	—	—	—	—	195	210	230	260	160	175	195	220	—	—	—	—
	—	—	—	—	—	—	—	—	*640*	*690*	*750*	*850*	*520*	*570*	*640*	*720*	—	—	—	—
M2	—	—	—	—	—	—	—	—	160	175	195	215	135	145	160	185	—	—	—	—
	—	—	—	—	—	—	—	—	*520*	*570*	*640*	*710*	*445*	*475*	*520*	*610*	—	—	—	—
M3	—	—	—	—	—	—	—	—	130	140	155	175	110	120	130	150	—	—	—	—
	—	—	—	—	—	—	—	—	*425*	*460*	*510*	*570*	*360*	*395*	*425*	*490*	—	—	—	—
M4	—	—	—	—	—	—	—	—	100	105	120	135	85	90	100	115	—	—	—	—
	—	—	—	—	—	—	—	—	*330*	*345*	*395*	*445*	*280*	*295*	*330*	*375*	—	—	—	—
M5	—	—	—	—	—	—	—	—	85	90	100	115	70	75	85	100	—	—	—	—
	—	—	—	—	—	—	—	—	*280*	*295*	*330*	*375*	*230*	*245*	*280*	*330*	—	—	—	—
K1	270	290	325	365	275	295	330	370	190	205	230	255	155	170	190	215	—	—	—	—
	890	*950*	*1075*	*1200*	*900*	*970*	*1075*	*1225*	*620*	*670*	*750*	*840*	*510*	*560*	*620*	*710*	—	—	—	—
K2	245	260	285	325	245	265	290	330	170	185	205	225	140	155	170	195	—	—	—	—
	800	*850*	*940*	*1075*	*800*	*870*	*950*	*1075*	*560*	*610*	*670*	*740*	*460*	*510*	*560*	*640*	—	—	—	—
K3	205	220	240	275	210	225	245	280	145	155	170	190	120	130	140	165	—	—	—	—
	670	*720*	*790*	*900*	*690*	*740*	*800*	*920*	*475*	*510*	*560*	*620*	*395*	*425*	*460*	*540*	—	—	—	—
K4	195	210	230	260	200	215	235	270	135	150	165	185	115	125	135	155	—	—	—	—
	640	*690*	*750*	*850*	*660*	*710*	*770*	*890*	*445*	*490*	*540*	*610*	*375*	*410*	*445*	*510*	—	—	—	—
K5	120	130	140	160	120	130	145	165	85	90	100	110	70	75	85	95	—	—	—	—
	395	*425*	*460*	*520*	*395*	*425*	*475*	*540*	*280*	*295*	*330*	*360*	*230*	*245*	*280*	*310*	—	—	—	—
K6	175	185	205	230	175	190	210	235	120	130	145	160	100	110	120	140	—	—	—	—
	570	*610*	*670*	*750*	*570*	*620*	*690*	*770*	*395*	*425*	*475*	*520*	*330*	*360*	*395*	*460*	—	—	—	—
K7	155	165	180	205	155	165	185	215	110	115	125	145	90	95	110	125	—	—	—	—
	510	*540*	*590*	*670*	*510*	*540*	*610*	*710*	*360*	*375*	*410*	*475*	*295*	*310*	*360*	*410*	—	—	—	—
N1	2000	2175	2425	2725	—	—	—	—	1400	1500	1650	1875	1150	1250	1375	1575	1600	1725	1900	2150
	6550	*7125*	*7950*	*8950*	—	—	—	—	*4600*	*4925*	*5425*	*6150*	*3775*	*4100*	*4500*	*5175*	*5250*	*5650*	*6225*	*7050*
N2	810	880	970	1100	—	—	—	—	560	610	670	760	465	510	560	630	640	690	770	870
	2650	*2875*	*3175*	*3600*	—	—	—	—	*1825*	*2000*	*2200*	*2500*	*1525*	*1675*	*1825*	*2075*	*2100*	*2275*	*2525*	*2850*
N3	540	580	650	730	—	—	—	—	375	405	445	510	310	335	375	420	430	460	510	580
	1775	*1900*	*2125*	*2400*	—	—	—	—	*1225*	*1325*	*1450*	*1675*	*1025*	*1100*	*1225*	*1375*	*1400*	*1500*	*1675*	*1900*
N11	620	670	740	840	—	—	—	—	430	465	510	580	355	385	425	480	490	530	590	660
	2025	*2200*	*2425*	*2750*	—	—	—	—	*1400*	*1525*	*1675*	*1900*	*1175*	*1275*	*1400*	*1575*	*1600*	*1750*	*1925*	*2175*
S1	—	—	—	—	—	—	—	—	—	—	—	—	40	43	48	55	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*140*	*155*	*180*	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	32	34	38	44	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*105*	*110*	*125*	*145*	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	28	31	34	38	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*110*	*125*	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	55	60	65	75	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*215*	*245*	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	38	42	46	50	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*125*	*140*	*150*	*165*	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	22	24	27	31	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*70*	*80*	*90*	*100*	—	—	—	—
H5	—	—	—	—	—	—	—	—	40	43	47	55	34	37	40	46	—	—	—	—
	—	—	—	—	—	—	—	—	*130*	*140*	*155*	*180*	*110*	*120*	*130*	*150*	—	—	—	—
H8	—	—	—	—	—	—	—	—	42	45	50	55	37	39	44	49	—	—	—	—
	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*	*120*	*130*	*145*	*160*	—	—	—	—
H11	—	—	—	—	—	—	—	—	50	55	60	70	44	47	50	60	—	—	—	—
	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*230*	*145*	*155*	*165*	*195*	—	—	—	—
H12	—	—	—	—	—	—	—	—	75	80	90	105	65	70	80	90	—	—	—	—
	—	—	—	—	—	—	—	—	*245*	*260*	*295*	*345*	*215*	*230*	*260*	*295*	—	—	—	—
H21	—	—	—	—	—	—	—	—	42	45	50	55	37	39	44	49	—	—	—	—
	—	—	—	—	—	—	—	—	*140*	*150*	*165*	*180*	*120*	*130*	*145*	*160*	—	—	—	—

R220.43-07 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MP3501				T25M			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	360	370	395	435	350	360	385	420	360	365	395	440	210	225	240	265
	—	—	—	—	*1175*	*1225*	*1300*	*1425*	*1150*	*1175*	*1275*	*1375*	*1175*	*1200*	*1300*	*1450*	*690*	*740*	*790*	*870*
P2	—	—	—	—	350	360	385	420	340	350	375	410	350	355	385	420	205	220	235	260
	—	—	—	—	*1150*	*1175*	*1275*	*1375*	*1125*	*1150*	*1225*	*1350*	*1150*	*1175*	*1275*	*1375*	*670*	*720*	*770*	*850*
P3	—	—	—	—	310	320	340	370	300	310	330	360	310	315	340	370	180	190	205	225
	—	—	—	—	*1025*	*1050*	*1125*	*1225*	*980*	*1025*	*1075*	*1175*	*1025*	*1025*	*1125*	*1225*	*590*	*620*	*670*	*740*
P4	—	—	—	—	275	280	300	325	265	270	290	315	270	275	300	330	160	170	180	200
	—	—	—	—	*900*	*920*	*980*	*1075*	*870*	*890*	*950*	*1025*	*890*	*900*	*980*	*1075*	*520*	*560*	*590*	*660*
P5	—	—	—	—	260	265	285	320	255	260	280	310	260	265	285	315	150	160	175	195
	—	—	—	—	*850*	*870*	*940*	*1050*	*840*	*850*	*920*	*1025*	*850*	*870*	*940*	*1025*	*490*	*520*	*570*	*640*
P6	—	—	—	—	290	300	320	355	285	290	310	350	290	295	320	355	170	180	195	220
	—	—	—	—	*950*	*980*	*1050*	*1175*	*940*	*950*	*1025*	*1150*	*950*	*970*	*1050*	*1175*	*560*	*590*	*640*	*720*
P7	—	—	—	—	275	285	305	335	270	275	295	330	275	280	300	335	160	170	185	205
	—	—	—	—	*900*	*940*	*1000*	*1100*	*890*	*900*	*970*	*1075*	*900*	*920*	*980*	*1100*	*520*	*560*	*610*	*670*
P8	—	—	—	—	260	265	285	310	255	260	280	305	260	265	285	310	150	160	175	190
	—	—	—	—	*850*	*870*	*940*	*1025*	*840*	*850*	*920*	*1000*	*850*	*870*	*940*	*1025*	*490*	*520*	*570*	*620*
P11	—	—	—	—	270	275	295	325	260	265	285	320	265	275	295	325	155	165	180	200
	—	—	—	—	*890*	*900*	*970*	*1075*	*850*	*870*	*940*	*1050*	*870*	*900*	*970*	*1075*	*510*	*540*	*590*	*660*
P12	—	—	—	—	180	185	200	215	175	180	195	210	185	190	200	220	105	110	120	130
	—	—	—	—	*590*	*610*	*660*	*710*	*570*	*590*	*640*	*690*	*610*	*620*	*660*	*720*	*345*	*360*	*395*	*425*
M1	—	—	—	—	—	—	—	—	180	190	205	225	190	200	220	240	165	175	190	210
	—	—	—	—	—	—	—	—	*590*	*620*	*670*	*740*	*620*	*660*	*720*	*790*	*540*	*570*	*620*	*690*
M2	—	—	—	—	—	—	—	—	145	155	170	190	155	165	180	200	135	145	155	175
	—	—	—	—	—	—	—	—	*475*	*510*	*560*	*620*	*510*	*540*	*590*	*660*	*445*	*475*	*510*	*570*
M3	—	—	—	—	—	—	—	—	120	130	140	155	130	135	145	165	115	120	130	140
	—	—	—	—	—	—	—	—	*395*	*425*	*460*	*510*	*425*	*445*	*475*	*540*	*375*	*395*	*425*	*460*
M4	—	—	—	—	—	—	—	—	95	100	110	120	100	105	115	125	90	95	100	110
	—	—	—	—	—	—	—	—	*310*	*330*	*360*	*395*	*330*	*345*	*375*	*410*	*295*	*310*	*330*	*360*
M5	—	—	—	—	—	—	—	—	80	85	90	100	85	85	95	105	75	80	85	95
	—	—	—	—	—	—	—	—	*260*	*280*	*295*	*330*	*280*	*280*	*310*	*345*	*245*	*260*	*280*	*310*
K1	330	400	460	540	355	365	390	425	345	350	380	415	350	360	385	420	165	175	185	205
	1075	*1300*	*1500*	*1775*	*1175*	*1200*	*1275*	*1400*	*1125*	*1150*	*1250*	*1350*	*1150*	*1175*	*1275*	*1375*	*540*	*570*	*610*	*670*
K2	290	350	400	475	315	325	345	385	305	315	335	375	315	320	345	385	145	155	165	185
	950	*1150*	*1300*	*1550*	*1025*	*1075*	*1125*	*1275*	*1000*	*1025*	*1100*	*1225*	*1025*	*1050*	*1125*	*1275*	*475*	*510*	*540*	*610*
K3	220	245	270	310	265	275	295	325	260	265	285	315	265	270	290	325	120	130	140	155
	720	*800*	*890*	*1025*	*870*	*900*	*970*	*1075*	*850*	*870*	*940*	*1025*	*870*	*890*	*950*	*1075*	*395*	*425*	*460*	*510*
K4	210	235	260	295	255	260	280	310	245	255	270	300	255	260	280	310	115	125	135	150
	690	*770*	*850*	*970*	*840*	*850*	*920*	*1025*	*800*	*840*	*890*	*980*	*840*	*850*	*920*	*1025*	*375*	*410*	*445*	*490*
K5	130	145	160	180	160	165	175	190	155	160	170	185	160	165	175	190	75	75	85	90
	425	*475*	*520*	*590*	*520*	*540*	*570*	*620*	*510*	*520*	*560*	*610*	*520*	*540*	*570*	*620*	*245*	*245*	*280*	*295*
K6	185	205	225	260	225	230	245	275	220	225	240	265	225	230	245	275	105	110	120	130
	610	*670*	*740*	*850*	*740*	*750*	*800*	*900*	*720*	*740*	*790*	*870*	*740*	*750*	*800*	*900*	*345*	*360*	*395*	*425*
K7	170	185	205	230	205	210	225	240	200	205	220	235	205	210	225	240	95	100	105	115
	560	*610*	*670*	*750*	*670*	*690*	*740*	*790*	*660*	*670*	*720*	*770*	*670*	*690*	*740*	*790*	*310*	*330*	*345*	*375*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	46	49	55	60	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*160*	*180*	*195*	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	37	39	43	47	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*140*	*155*	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	33	35	38	42	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*115*	*125*	*140*	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	70	75	85	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*245*	*280*	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	45	48	50	55	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*165*	*180*	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	26	28	30	33	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*100*	*110*	—	—	—	—
H5	—	—	—	—	47	50	55	60	—	—	—	—	42	44	48	55	—	—	—	—
	—	—	—	—	*155*	*165*	*180*	*195*	—	—	—	—	*140*	*145*	*155*	*180*	—	—	—	—
H8	—	—	—	—	50	55	60	65	—	—	—	—	44	47	50	55	—	—	—	—
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*145*	*155*	*165*	*180*	—	—	—	—
H11	—	—	—	—	60	65	70	75	—	—	—	—	55	55	60	70	—	—	—	—
	—	—	—	—	*195*	*215*	*230*	*245*	—	—	—	—	*180*	*180*	*195*	*230*	—	—	—	—
H12	—	—	—	—	90	95	105	115	—	—	—	—	80	85	95	100	—	—	—	—
	—	—	—	—	*295*	*310*	*345*	*375*	—	—	—	—	*260*	*280*	*310*	*330*	—	—	—	—
H21	—	—	—	—	50	55	60	65	—	—	—	—	44	47	50	55	—	—	—	—
	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—	*145*	*155*	*165*	*180*	—	—	—	—

Octomill R220.43-07S/SA – In mm

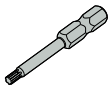




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 328 - 329
—Per il programma inserti completo, vedere le pagine 870
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm		kg	
R220.43-0080-07SA	00090771	Manicotto	80,0	5	5,0	43,0 °	92,0	27,0	62,0	50,0	6200	1,0	OF..0704
R220.43-0100-07SA	00090773	Manicotto	100,0	6	5,0	43,0 °	112,0	32,0	77,0	50,0	5600	1,8	OF..0704
R220.43-0125-07S	00045811	Manicotto	125,0	8	5,0	43,0 °	137,0	40,0	90,0	63,0	5100	3,1	OF..0704

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R220.43-0080	1/4HEX-T20PX50	C05013-T20P
R220.43-0100-0125	1/4HEX-T20PX90	C05013-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.43-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.43-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.43-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

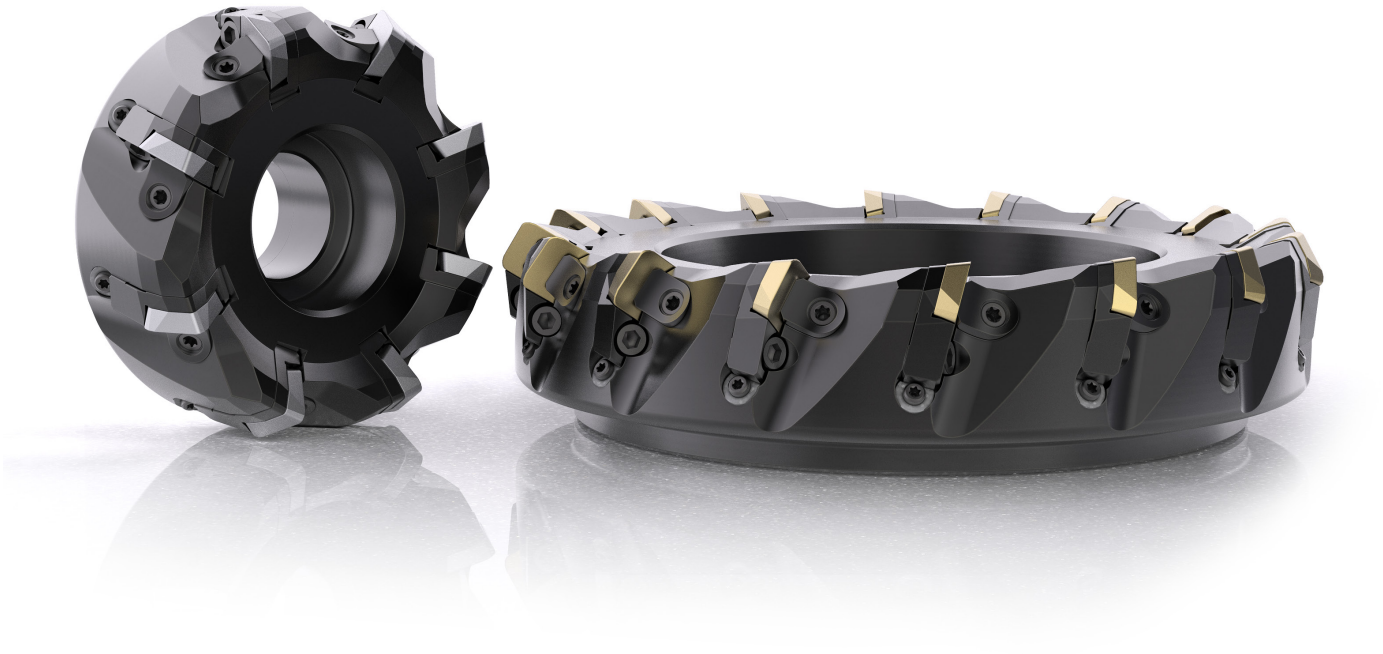
R220.43-7S – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	OFMT070405TN-ME13 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P2	OFMT070405TN-ME13 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,30 0.012	0,36 0.014
P3	OFMT070405TN-ME13 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P4	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,40 0.016
P5	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
P6	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P7	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P8	OFMT070405TN-ME13 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
P11	OFMT070405TN-ME13 MP2501	3,0 *0.12*	0,26 0.010	0,26 0.010	0,26 0.010	0,34 0.013
P12	OFMT070405TN-ME13 MP2501	2,5 *0.10*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
M1	OFET070405TN-ME10 F40M	3,0 *0.12*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M2	OFET070405TN-ME10 F40M	3,0 *0.12*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
M3	OFET070405TN-ME10 F40M	2,5 *0.10*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
M4	OFET070405TN-ME10 F40M	1,8 *0.070*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
M5	OFET070405TN-ME10 F40M	1,8 *0.070*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075
K1	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K2	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K3	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K4	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K5	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
K6	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
K7	OFMT070405TN-M15 MP2501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,28 0.011	0,34 0.013
S1	OFET070405TN-ME15 F40M	1,8 *0.070*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S2	OFET070405TN-ME15 F40M	1,8 *0.070*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
S3	OFET070405TN-ME15 F40M	1,8 *0.070*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,26 0.010
S11	OFET070405TN-ME10 F40M	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
S12	OFET070405TN-ME10 F40M	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
S13	OFET070405TN-ME10 F40M	1,8 *0.070*	0,15 0.0060	0,15 0.0060	0,15 0.0060	0,19 0.0075

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.43-07S – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M				MP2501				F30M			
	80%	60%	40%	20%	80%	60%	40%	20%	80%	60%	40%	20%
P1	235 *770*	255 *840*	280 *920*	315 *1025*	285 *940*	310 *1025*	340 *1125*	390 *1275*	275 *900*	300 *980*	335 *1100*	375 *1225*
P2	225 *740*	240 *790*	270 *890*	305 *1000*	280 *920*	300 *980*	330 *1075*	380 *1250*	270 *890*	290 *950*	325 *1075*	365 *1200*
P3	195 *640*	210 *690*	235 *770*	270 *890*	240 *790*	260 *850*	290 *950*	330 *1075*	240 *790*	255 *840*	280 *920*	320 *1050*
P4	175 *570*	190 *620*	210 *690*	235 *770*	215 *710*	235 *770*	255 *840*	290 *950*	210 *690*	225 *740*	245 *800*	280 *920*
P5	170 *560*	180 *590*	200 *660*	230 *750*	205 *670*	225 *740*	250 *820*	280 *920*	200 *660*	215 *710*	240 *790*	270 *890*
P6	190 *620*	205 *670*	230 *750*	255 *840*	230 *750*	250 *820*	280 *920*	310 *1025*	225 *740*	245 *800*	270 *890*	305 *1000*
P7	180 *590*	195 *640*	215 *710*	245 *800*	220 *720*	235 *770*	265 *870*	295 *970*	215 *710*	230 *750*	255 *840*	290 *950*
P8	165 *540*	180 *590*	200 *660*	225 *740*	200 *660*	220 *720*	245 *800*	280 *920*	200 *660*	215 *710*	235 *770*	270 *890*
P11	175 *570*	185 *610*	210 *690*	235 *770*	215 *710*	230 *750*	255 *840*	285 *940*	205 *670*	225 *740*	250 *820*	280 *920*
P12	115 *375*	125 *410*	135 *445*	155 *510*	140 *460*	150 *490*	165 *540*	190 *620*	135 *445*	145 *475*	160 *520*	180 *590*
M1	180 *590*	195 *640*	220 *720*	245 *800*	200 *660*	220 *720*	240 *790*	270 *890*	215 *710*	235 *770*	260 *850*	295 *970*
M2	150 *490*	165 *540*	180 *590*	205 *670*	165 *540*	180 *590*	200 *660*	225 *740*	180 *590*	195 *640*	215 *710*	240 *790*
M3	125 *410*	135 *445*	145 *475*	170 *560*	135 *445*	145 *475*	160 *520*	185 *610*	145 *475*	160 *520*	170 *560*	195 *640*
M4	95 *310*	105 *345*	115 *375*	130 *425*	105 *345*	115 *375*	125 *410*	140 *460*	110 *360*	120 *395*	135 *445*	150 *490*
M5	80 *260*	85 *280*	95 *310*	110 *360*	85 *280*	95 *310*	105 *345*	120 *395*	95 *310*	100 *330*	110 *360*	125 *410*
K1	175 *570*	190 *620*	215 *710*	245 *800*	220 *720*	240 *790*	260 *850*	300 *980*	— —	— —	— —	— —
K2	160 *520*	175 *570*	190 *620*	215 *710*	195 *640*	210 *690*	235 *770*	265 *870*	— —	— —	— —	— —
K3	135 *445*	145 *475*	160 *520*	185 *610*	165 *540*	180 *590*	200 *660*	225 *740*	— —	— —	— —	— —
K4	130 *425*	140 *460*	155 *510*	175 *570*	160 *520*	170 *560*	190 *620*	215 *710*	— —	— —	— —	— —
K5	80 *260*	85 *280*	95 *310*	110 *360*	95 *310*	105 *345*	115 *375*	130 *425*	— —	— —	— —	— —
K6	115 *375*	125 *410*	135 *445*	155 *510*	140 *460*	150 *490*	170 *560*	190 *620*	— —	— —	— —	— —
K7	100 *330*	110 *360*	120 *395*	140 *460*	125 *410*	135 *445*	150 *490*	170 *560*	— —	— —	— —	— —
N1	1300 *4275*	1400 *4600*	1550 *5075*	1750 *5750*	— —	— —	— —	— —	1575 *5175*	1700 *5575*	1850 *6075*	2125 *6975*
N2	530 *1750*	570 *1875*	630 *2075*	710 *2325*	— —	— —	— —	— —	630 *2075*	680 *2225*	750 *2450*	860 *2825*
N3	350 *1150*	380 *1250*	420 *1375*	475 *1550*	— —	— —	— —	— —	420 *1375*	455 *1500*	500 *1650*	570 *1875*
N11	400 *1300*	435 *1425*	480 *1575*	540 *1775*	— —	— —	— —	— —	480 *1575*	520 *1700*	570 *1875*	650 *2125*
S1	45 *150*	48 *155*	55 *180*	60 *195*	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	70 *230*
S2	36 *120*	39 *130*	43 *140*	49 *160*	— —	— —	— —	— —	42 *140*	45 *150*	50 *165*	55 *180*
S3	32 *105*	34 *110*	38 *125*	43 *140*	— —	— —	— —	— —	37 *120*	40 *130*	44 *145*	50 *165*
S11	60 *195*	70 *230*	75 *245*	85 *280*	— —	— —	— —	— —	75 *245*	80 *260*	85 *280*	100 *330*
S12	43 *140*	47 *155*	50 *165*	60 *195*	— —	— —	— —	— —	42 *140*	46 *150*	50 *165*	60 *195*
S13	25 *80*	27 *90*	30 *100*	35 *115*	— —	— —	— —	— —	24 *80*	26 *85*	29 *95*	33 *110*
H5	38 *125*	41 *135*	45 *150*	50 *165*	— —	— —	— —	— —	— —	— —	— —	— —
H8	41 *135*	44 *145*	49 *160*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —
H11	49 *160*	55 *180*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	— —	— —
H12	75 *245*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	— —	— —	— —	— —
H21	41 *135*	44 *145*	49 *160*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —



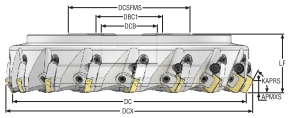
R220.60

Frese per spianatura frontale per impieghi pesanti. Gli inserti robusti e la fresa sono dotati di moduli per un'elevata asportazione.

– Gamma di frese 63-250 mm (2,5-250")
– Inserti SPEN/SPER/SPMR19
– Disponibili in numerose qualità per la maggior parte dei materiali da lavorare più comuni

R220.60-19CM – In mm

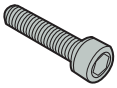
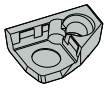
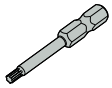
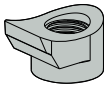




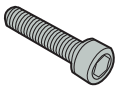
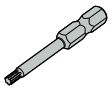
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 332 - 333
—Per il programma inserti completo, vedere le pagine 895
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.60-0063-19-4CM	00073305	Manicotto	63,0	4	12,0	60,0 °	77,6	22,0	–	47,0	50,0	3700	1,2	SP..1906Z..R
R220.60-0080-19-5CM	00073306	Manicotto	80,0	5	12,0	60,0 °	94,5	27,0	–	62,0	50,0	3300	1,9	SP..1906Z..R
R220.60-0100-19-6CM	00073307	Manicotto	100,0	6	12,0	60,0 °	114,4	32,0	–	77,0	50,0	2900	2,6	SP..1906Z..R
R220.60-0125-19-8CM	00073309	Manicotto	125,0	8	12,0	60,0 °	139,3	40,0	–	90,0	63,0	2600	4,2	SP..1906Z..R
R220.60-8160-19-10CM	00073311	Manicotto	160,0	10	12,0	60,0 °	174,3	40,0	66,7	90,0	63,0	2300	6,7	SP..1906Z..R
R220.60-8200-19-12CM	00073313	Manicotto	200,0	12	12,0	60,0 °	214,2	60,0	101,6	168,0	63,0	2000	9,1	SP..1906Z..R
R220.60-8250-19-16CM	00073318	Manicotto	250,0	16	12,0	60,0 °	264,2	60,0	101,6	218,0	63,0	1800	20,0	SP..1906Z..R

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Modulo	Vite modulo	Chiave per vite inserto	Cuneo inserto	Vite cuneo
							
R220.66-0063	AU1114T-T15P	220.17-692	SP19DRM	FS96018	1/4HEX-T25PX50	CW0813	LD8020-T25P
R220.66-0080	AU1114T-T15P	MC6S12X35	SP19DRM	FS96018	1/4HEX-T25PX50	CW0813	LD8020-T25P
R220.66-0100-8250	AU1114T-T15P	–	SP19DRM	FS96018	1/4HEX-T25PX50	CW0813	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Vite attacco 2	Impugnatura	Chiave	Chiave di regolazione
						
R220.66-0063	1/4HEX-S-HANDLE-0.8-5.0NM	–	–	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.66-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	–	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.66-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	–	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.66-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	–	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.66-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	MC6S12X50	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50
R220.66-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	–	1/4HEX-S-HANDLE	1/4HEX-H5.0X50	1/4HEX-T15PX50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.60-19 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,30 0.012	0,36 0.014
P2	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P3	SPEN1906ZETR-MD20 MP2501	7,0 *0.28*	0,32 0.013	0,32 0.013	0,32 0.013	0,40 0.016
P4	SPEN1906ZETR-MD20 MP2501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,32 0.013	0,38 0.015
P5	SPEN1906ZETR-MD20 MP2501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P6	SPEN1906ZETR-MD20 MP2501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
P7	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
P8	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,28 0.011	0,28 0.011	0,28 0.011	0,36 0.014
P11	SPMR1906ZETR-M17 MP2051	7,0 *0.28*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
P12	SPMR1906ZETR-M17 MP2051	6,0 *0.24*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,24 0.0095
M1	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,30 0.012	0,30 0.012	0,30 0.012	0,38 0.015
M2	SPER1906ZETR-M17 MP3501	7,0 *0.28*	0,26 0.010	0,26 0.010	0,28 0.011	0,34 0.013
M3	SPMR1906ZETR-M17 MP2051	6,0 *0.24*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,28 0.011
M4	SPMR1906ZETR-M17 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
M5	SPMR1906ZETR-M17 MP2051	4,5 *0.18*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
K1	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,42 0.017	0,42 0.017	0,42 0.017	0,50 0.020
K2	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,38 0.015	0,48 0.019
K3	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,38 0.015	0,48 0.019
K4	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,38 0.015	0,48 0.019
K5	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017
K6	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,38 0.015	0,38 0.015	0,38 0.015	0,48 0.019
K7	SPEN1906ZETR-D25 MP1501	7,0 *0.28*	0,34 0.013	0,34 0.013	0,34 0.013	0,42 0.017

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.60-19 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2051				MP1501				MP2501				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	175 *570*	170 *560*	200 *660*	255 *840*	240 *790*	245 *800*	265 *870*	295 *970*	260 *850*	265 *870*	285 *940*	310 *1025*	230 *750*	230 *750*	250 *820*	275 *900*
P2	170 *560*	170 *560*	195 *640*	250 *820*	230 *750*	235 *770*	250 *820*	285 *940*	245 *800*	250 *820*	270 *890*	305 *1000*	215 *710*	215 *710*	235 *770*	265 *870*
P3	155 *510*	155 *510*	180 *590*	230 *750*	205 *670*	205 *670*	220 *720*	250 *820*	215 *710*	220 *720*	240 *790*	270 *890*	190 *620*	195 *640*	210 *690*	235 *770*
P4	140 *460*	135 *445*	160 *520*	200 *660*	185 *610*	185 *610*	200 *660*	220 *720*	195 *640*	200 *660*	215 *710*	235 *770*	175 *570*	175 *570*	190 *620*	210 *690*
P5	130 *425*	130 *425*	155 *510*	190 *620*	175 *570*	175 *570*	190 *620*	215 *710*	190 *620*	190 *620*	205 *670*	230 *750*	165 *540*	170 *560*	180 *590*	205 *670*
P6	160 *520*	160 *520*	185 *610*	215 *710*	195 *640*	200 *660*	215 *710*	245 *800*	210 *690*	215 *710*	230 *750*	260 *850*	185 *610*	190 *620*	205 *670*	230 *750*
P7	150 *490*	150 *490*	175 *570*	205 *670*	185 *610*	190 *620*	205 *670*	230 *750*	200 *660*	200 *660*	220 *720*	245 *800*	175 *570*	180 *590*	190 *620*	215 *710*
P8	130 *425*	130 *425*	155 *510*	190 *620*	170 *560*	175 *570*	185 *610*	210 *690*	185 *610*	185 *610*	200 *660*	225 *740*	160 *520*	160 *520*	175 *570*	200 *660*
P11	135 *445*	140 *460*	165 *540*	200 *660*	180 *590*	180 *590*	195 *640*	225 *740*	195 *640*	195 *640*	210 *690*	240 *790*	170 *560*	175 *570*	185 *610*	210 *690*
P12	115 *375*	120 *395*	140 *460*	165 *540*	125 *410*	130 *425*	140 *460*	155 *510*	135 *445*	140 *460*	150 *490*	165 *540*	120 *395*	125 *410*	130 *425*	145 *475*
M1	140 *460*	140 *460*	165 *540*	220 *720*	— —	— —	— —	— —	135 *445*	140 *460*	150 *490*	170 *560*	125 *410*	130 *425*	140 *460*	160 *520*
M2	120 *395*	120 *395*	145 *475*	190 *620*	— —	— —	— —	— —	110 *360*	120 *395*	130 *425*	145 *475*	105 *345*	110 *360*	120 *395*	135 *445*
M3	115 *375*	120 *395*	140 *460*	180 *590*	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	115 *375*	85 *280*	90 *295*	100 *330*	110 *360*
M4	100 *330*	105 *345*	120 *395*	150 *490*	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	90 *295*	65 *215*	70 *230*	75 *245*	85 *280*
M5	85 *280*	85 *280*	100 *330*	125 *410*	— —	— —	— —	— —	60 *195*	60 *195*	65 *215*	75 *245*	55 *180*	60 *195*	65 *215*	70 *230*
K1	— —	— —	— —	— —	230 *750*	235 *770*	255 *840*	290 *950*	250 *820*	250 *820*	270 *890*	305 *1000*	220 *720*	220 *720*	235 *770*	270 *890*
K2	— —	— —	— —	— —	210 *690*	215 *710*	230 *750*	260 *850*	230 *750*	230 *750*	250 *820*	280 *920*	200 *660*	205 *670*	220 *720*	250 *820*
K3	— —	— —	— —	— —	180 *590*	180 *590*	195 *640*	220 *720*	195 *640*	195 *640*	210 *690*	235 *770*	170 *560*	170 *560*	185 *610*	210 *690*
K4	— —	— —	— —	— —	170 *560*	175 *570*	185 *610*	210 *690*	185 *610*	185 *610*	200 *660*	225 *740*	160 *520*	165 *540*	175 *570*	200 *660*
K5	— —	— —	— —	— —	105 *345*	110 *360*	115 *375*	130 *425*	115 *375*	115 *375*	125 *410*	140 *460*	100 *330*	100 *330*	110 *360*	125 *410*
K6	— —	— —	— —	— —	150 *490*	150 *490*	165 *540*	185 *610*	160 *520*	165 *540*	175 *570*	200 *660*	145 *475*	145 *475*	155 *510*	175 *570*
K7	— —	— —	— —	— —	135 *445*	140 *460*	150 *490*	170 *560*	145 *475*	145 *475*	160 *520*	180 *590*	130 *425*	130 *425*	140 *460*	155 *510*

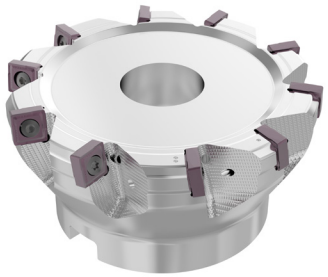


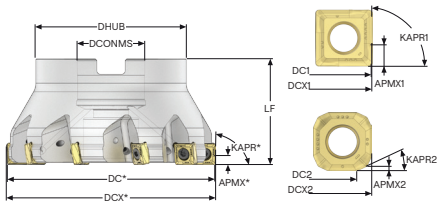
R220.38

.38-SN12 è una fresa per finitura frontale dedicata, progettataper materiali del gruppo SMG K, P e H, e a supporto dei materialir SMG M.
Gli inserti bilaterali con tolleranza F offrono otto taglienti per inserto e sono disponibili in due tipi: 88° e 27°.
Progettato per la finitura di superfici aperte con inserti SNFX1204ZZ o per lavorazioni in prossimità di pareti o staffaggi con inserti SNFX120408PZ, il sistema offre prestazioni eccellenti nella lavorazione di ghisa, acciaio e acciaio temprato.
La versione SA con sede dell'inserto fissa è una soluzione plug and play. La configurazione degli utensili può spesso essere un compito impegnativo e costoso. Con la variante a sede fissa, la configurazione è semplice e veloce. Non sono necessari passaggi aggiuntivi. Dopo aver scelto l'inserto, è possibile partire con un eccellente run-out.
La versione CSA ibrida offre maggiore versatilità. Non è obbligatorio montare i moduli, ma possono essere regolati in base alle esigenze dell'applicazione. Quando si affrontano problemi di formazione di bave difficili o configurazioni meno stabili, la variante ibrida è la soluzione ideale.
La versione regolabile HSA garantisce la massima precisione ed è ideale in presenza delle più elevate esigenze di qualità delle superfici. Regolare il run-out al micron.

– Dimensione dell'inserto 12, gamma utensili da taglio 63-250 mm (3" - 8.00")
– 8 taglienti, inserti bilaterali

R220.38-SN12 In mm



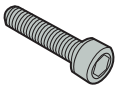
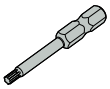
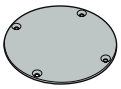
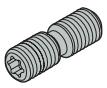


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

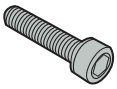
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			mm	mm		mm	mm			mm	mm
R220.38-0063-SN12-04SA	10271416	Manicotto	62,08	55,26	4	3,0	1,0	88,0	27,0	22,0	47,0
R220.38-0080-SN12-06SA	10271417	Manicotto	79,1	72,28	6	3,0	1,0	88,0	27,0	27,0	62,0
R220.38-0100-SN12-08SA	10271420	Manicotto	99,12	92,3	8	3,0	1,0	88,0	27,0	32,0	77,0
R220.38-0100-SN12-14WA	10271421	Manicotto	99,12	92,3	14	3,0	1,0	88,0	27,0	32,0	77,0
R220.38-0125-SN12-10SA	10271424	Manicotto	124,13	117,31	10	3,0	1,0	88,0	27,0	40,0	90,0
R220.38-0125-SN12-18WA	10271425	Manicotto	124,13	117,31	18	3,0	1,0	88,0	27,0	40,0	90,0
R220.38-8160-SN12-12SA	10271428	Manicotto	159,14	152,32	12	3,0	1,0	88,0	27,0	40,0	130,0
R220.38-8160-SN12-22WA	10271429	Manicotto	159,14	152,32	22	3,0	1,0	88,0	27,0	40,0	130,0
R220.38-8200-SN12-16SA	10271432	Manicotto	199,15	192,32	16	3,0	1,0	88,0	27,0	60,0	160,0
R220.38-8250-SN12-22SA	10271434	Manicotto	249,16	242,33	22	3,0	1,0	88,0	27,0	60,0	200,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			mm	mm	mm	mm		kg	
R220.38-0063-SN12-04SA	10271416	Manicotto	63,0	62,82	22,0	40,0	10100	0,6	SNFX1204
R220.38-0080-SN12-06SA	10271417	Manicotto	80,0	79,83	27,0	50,0	9000	1,2	SNFX1204
R220.38-0100-SN12-08SA	10271420	Manicotto	100,0	99,84	32,0	50,0	8000	1,9	SNFX1204
R220.38-0100-SN12-14WA	10271421	Manicotto	100,0	99,84	32,0	50,0	8500	2,0	SNFX1204
R220.38-0125-SN12-10SA	10271424	Manicotto	125,0	124,84	40,0	63,0	7200	3,4	SNFX1204
R220.38-0125-SN12-18WA	10271425	Manicotto	125,0	124,84	40,0	63,0	7600	4,0	SNFX1204
R220.38-8160-SN12-12SA	10271428	Manicotto	160,0	159,85	40,0	63,0	6300	5,6	SNFX1204
R220.38-8160-SN12-22WA	10271429	Manicotto	160,0	159,85	40,0	63,0	6700	6,0	SNFX1204
R220.38-8200-SN12-16SA	10271432	Manicotto	200,0	199,85	60,0	63,0	5700	10,0	SNFX1204
R220.38-8250-SN12-22SA	10271434	Manicotto	250,0	249,85	60,0	63,0	5100	18,3	SNFX1204

Parti di ricambio, comprese nella fornitura

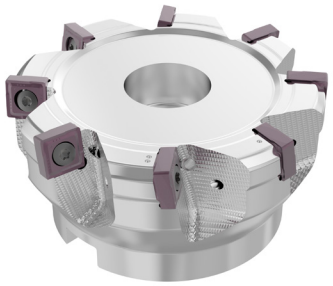
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
							
R220.38-0063	220.17-692	1/4HEX-T15PX50	CR4010-T15P	–	–	–	–
R220.38-0080	MC6S12X35	1/4HEX-T15PX50	CR4010-T15P	–	–	–	–
R220.38-0100-08SA	MC6S16X35	1/4HEX-T15PX50	CR4010-T15P	–	–	–	–
R220.38-0100-14WA	MC6S16X35	1/4HEX-T15PX50	–	–	–	CW0512M	LD5018F-T15P
R220.38-0125-10SA	MC6S20X40	1/4HEX-T15PX50	CR4010-T15P	–	–	–	–
R220.38-0125-18WA	MC6S20X40	1/4HEX-T15PX50	–	–	–	CW0512M	LD5018F-T15P
R220.38-8160-12SA	–	1/4HEX-T15PX50	CR4010-T15P	SC-160-90	MF6S4X10	–	–
R220.38-8160-22WA	–	1/4HEX-T15PX50	–	SC-160-90	MF6S4X10	CW0512M	LD5018F-T15P
R220.38-8200-16SA	–	1/4HEX-T15PX50	CR4010-T15P	SC-200-90	MF6S4X10	–	–
R220.38-8250-22SA	–	1/4HEX-T15PX50	CR4010-T15P	–	–	–	–

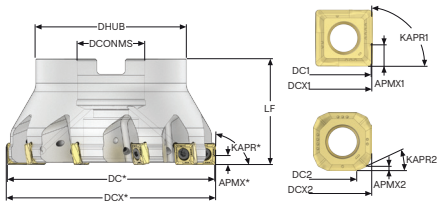
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-0063-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.38-SN12 Pollici



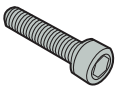
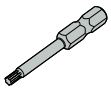


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			inch	inch		inch	inch			inch	inch
R220.38-03.00-SN12-06SA	10271436	Manicotto	2.965	2.696	6	0.118	0.039	88,0	27,0	1.000	2.441
R220.38-04.00-SN12-08SA	10271438	Manicotto	3.965	3.697	8	0.118	0.039	88,0	27,0	1.500	3.031
R220.38-05.00-SN12-10SA	10271440	Manicotto	4.966	4.697	10	0.118	0.039	88,0	27,0	1.500	3.543
R220.38-06.00-SN12-12SA	10271443	Manicotto	5.966	5.697	12	0.118	0.039	88,0	27,0	2.000	5.118

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			inch	inch	inch	inch		lb	
R220.38-03.00-SN12-06SA	10271436	Manicotto	3.000	2.993	1.000	1.969	9200	2.650	SNFX1204
R220.38-04.00-SN12-08SA	10271438	Manicotto	4.000	3.994	1.500	1.969	8000	4.410	SNFX1204
R220.38-05.00-SN12-10SA	10271440	Manicotto	5.000	4.994	1.500	2.480	7100	7.720	SNFX1204
R220.38-06.00-SN12-12SA	10271443	Manicotto	6.000	5.994	2.000	2.480	6500	11.240	SNFX1204

Parti di ricambio, comprese nella fornitura

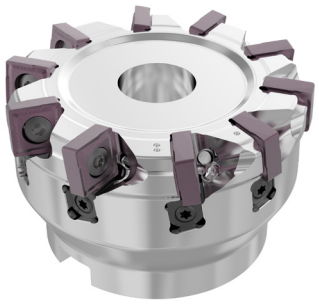
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.38-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	CR4010-T15P
R220.38-04.00-05.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	CR4010-T15P
R220.38-06.00	–	1/4HEX-T15PX50	CR4010-T15P

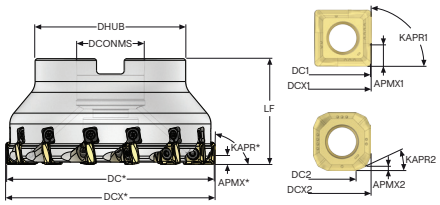
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-03.00-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.38-SN12 In mm



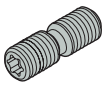
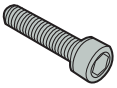
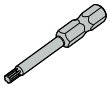
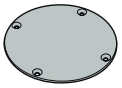


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

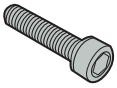
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			mm	mm		mm	mm			mm	mm
R220.38-0080-SN12-10HSA	10271419	Manicotto	79,1	72,28	10	3,0	1,0	88,0	27,0	27,0	62,0
R220.38-0100-SN12-12HSA	10271423	Manicotto	99,1172	92,295	12	3,0	1,0	88,0	27,0	32,0	77,0
R220.38-0125-SN12-14HSA	10271427	Manicotto	124,13	117,31	14	3,0	1,0	88,0	27,0	40,0	90,0
R220.38-8160-SN12-18HSA	10271431	Manicotto	159,14	152,31	18	3,0	1,0	88,0	27,0	40,0	130,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			mm	mm	mm	mm		kg	
R220.38-0080-SN12-10HSA	10271419	Manicotto	80,0	79,83	27,0	50,0	9000	1,0	SNFX1204
R220.38-0100-SN12-12HSA	10271423	Manicotto	100,0	99,8345	32,0	50,0	8000	2,1	SNFX1204
R220.38-0125-SN12-14HSA	10271427	Manicotto	125,0	124,84	40,0	63,0	7200	3,9	SNFX1204
R220.38-8160-SN12-18HSA	10271431	Manicotto	160,0	159,84	40,0	63,0	6300	5,9	SNFX1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Unità di regolazione	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
							
R220.38-0080	LD5018F-T15P	AS608	MC6S12X35	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-0100	LD5018F-T15P	AS608	MC6S16X35	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-0125	LD5018F-T15P	AS608	MC6S20X40	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-8160	LD5018F-T15P	AS608	–	1/4HEX-T15PX50	CR4010-T15P	SC-160-90	MF6S4X10

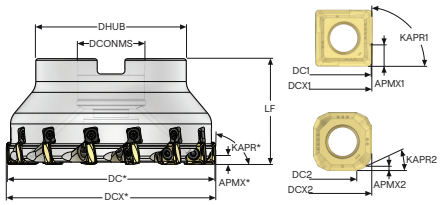
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-0063-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.38-SN12 Pollici



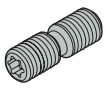
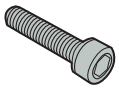
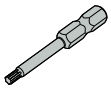
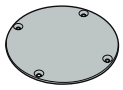


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			inch	inch		inch	inch			inch	inch
R220.38-05.00-SN12-14HSA	10271442	Manicotto	4.969	4.697	14	0.118	0.039	88,0	27,0	1.500	3.543
R220.38-06.00-SN12-18HSA	10271445	Manicotto	5.966	5.697	18	0.118	0.039	88,0	27,0	2.000	5.118

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			inch	inch	inch	inch		lb	
R220.38-05.00-SN12-14HSA	10271442	Manicotto	5.000	4.994	1.500	2.480	7200	6.610	SNFX1204
R220.38-06.00-SN12-18HSA	10271445	Manicotto	6.000	5.994	2.000	2.480	6300	11.900	SNFX1204

Parti di ricambio, comprese nella fornitura

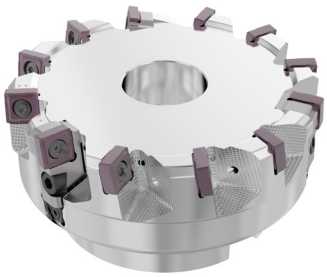
Per fresa	Vite di regolazione	Unità di regolazione	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
							
R220.38-05.00	LD5018F-T15P	AS608	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-06.00	LD5018F-T15P	AS608	–	1/4HEX-T15PX50	CR4010-T15P	SC-160-90	MF6S4X10

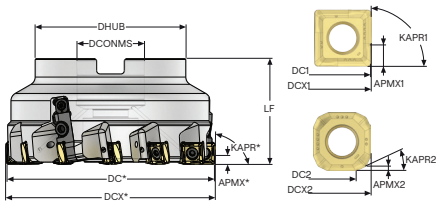
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.38-SN12 In mm



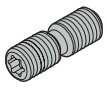
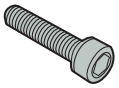
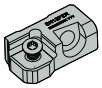
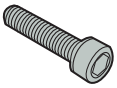
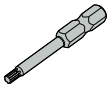
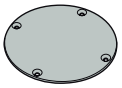


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

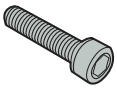
Codice di ordinazione	Codice prodotto	Tipo di attacco	Dc1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			mm	mm		mm	mm			mm	mm
R220.38-0080-SN12-08CSA	10271418	Manicotto	79,1	72,3	8	3,0	1,0	88,0	27,0	27,0	62,0
R220.38-0100-SN12-10CSA	10271422	Manicotto	99,1	92,3	10	3,0	1,0	88,0	27,0	32,0	77,0
R220.38-0125-SN12-12CSA	10271426	Manicotto	124,1	117,3	12	3,0	1,0	88,0	27,0	40,0	90,0
R220.38-8160-SN12-15CSA	10271430	Manicotto	159,1	152,3	15	3,0	1,0	88,0	27,0	40,0	130,0
R220.38-8200-SN12-20CSA	10271433	Manicotto	199,1	192,3	20	3,0	1,0	88,0	27,0	60,0	160,0
R220.38-8250-SN12-25CSA	10271435	Manicotto	249,2	242,3	25	3,0	1,0	88,0	27,0	60,0	200,0

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			mm	mm	mm	mm		kg	
R220.38-0080-SN12-08CSA	10271418	Manicotto	80,0	79,8	27,0	63,0	9000	1,6	SNFX1204
R220.38-0100-SN12-10CSA	10271422	Manicotto	100,0	99,8	32,0	63,0	8000	2,7	SNFX1204
R220.38-0125-SN12-12CSA	10271426	Manicotto	125,0	124,8	40,0	63,0	7200	4,1	SNFX1204
R220.38-8160-SN12-15CSA	10271430	Manicotto	160,0	159,8	40,0	63,0	6300	6,2	SNFX1204
R220.38-8200-SN12-20CSA	10271433	Manicotto	200,0	199,8	60,0	63,0	5700	8,9	SNFX1204
R220.38-8250-SN12-25CSA	10271435	Manicotto	250,0	249,9	60,0	63,0	5100	19,6	SNFX1204

Parti di ricambio, comprese nella fornitura

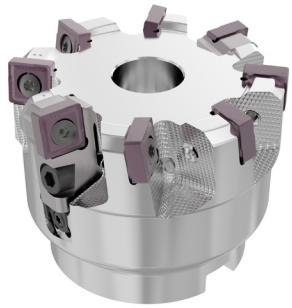
Per fresa	Vite di regolazione	Unità di regolazione	Vite attacco	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
									
R220.38-0080	LD5018F-T15P	AS608	MC6S12X35	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-0100	LD5018F-T15P	AS608	MC6S16X35	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-0125	LD5018F-T15P	AS608	MC6S20X40	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-8160	LD5018F-T15P	AS608	–	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	SC-160-90	MF6S4X10
R220.38-8200	LD5018F-T15P	AS608	–	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	SC-200-90	MF6S4X10
R220.38-8250	LD5018F-T15P	AS608	–	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–

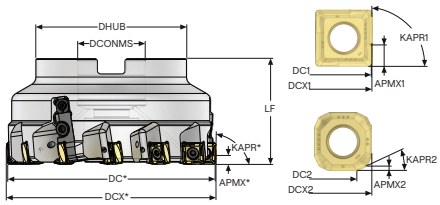
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-0080-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-8200-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

R220.38-SN12 Pollici



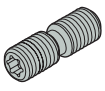
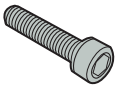
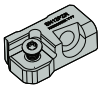
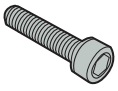
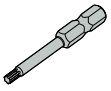
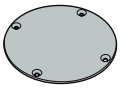


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 342-2, 345
—Per il programma inserti completo, vedere le pagine 884
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC1	DC2	ZEFP	APMX1	APMX2	KAPR1°	KAPR2	DCB	DHUB
			inch	inch		inch	inch			inch	inch
R220.38-03.00-SN12-08CSA	10271437	Manicotto	2.964	2.696	8	0.118	0.039	88,0	27,0	1.000	2.441
R220.38-04.00-SN12-10CSA	10271439	Manicotto	3.965	3.696	10	0.118	0.039	88,0	27,0	1.500	3.031
R220.38-05.00-SN12-12CSA	10271441	Manicotto	4.969	4.697	12	0.118	0.039	88,0	27,0	1.500	3.543
R220.38-06.00-SN12-15CSA	10271444	Manicotto	5.966	5.697	15	0.118	0.039	88,0	-27,0	2.000	5.118

Codice di ordinazione	Codice prodotto	Tipo di attacco	DCX1	DCX2	DCONMS	LF	RPMX	Peso	Inserto
			inch	inch	inch	inch		lb	
R220.38-03.00-SN12-08CSA	10271437	Manicotto	3.000	2.993	1.000	2.480	9200	3.310	SNFX1204
R220.38-04.00-SN12-10CSA	10271439	Manicotto	4.000	3.993	1.500	2.480	8000	5.950	SNFX1204
R220.38-05.00-SN12-12CSA	10271441	Manicotto	5.000	4.994	1.500	2.480	7200	9.480	SNFX1204
R220.38-06.00-SN12-15CSA	10271444	Manicotto	6.000	5.994	2.000	2.480	6500	12.570	SNFX1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Unità di regolazione	Vite attacco	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
									
R220.38-03.00	LD5018F-T15P	AS608	UC6S1/2UNFX1-1/4	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-04.00-05.00	LD5018F-T15P	AS608	UC6S3/4UNFX1-1/4	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	–	–
R220.38-06.00	LD5018F-T15P	AS608	–	SN12PZR	MC6S5X16	1/4HEX-T15PX50	CR4010-T15P	SC-160-90	MF6S4X10

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave dinamometrica	Torque value
					
R220.38-03.00-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	T00-15P35	3.5NM
R220.38-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	T00-15P35	3.5NM

Chiavi dinamometriche e fisse, vedere pagina 931

38-SNFX120408 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	
		80%	30%
P1	SNFX120408PZER-W8-M08 MP3000	0,14 *0.0055*	0,15 0.0060
P2	SNFX120408PZER-W8-M08 MP3000	0,14 *0.0055*	0,15 0.0060
P3	SNFX120408PZER-W8-M08 MP3000	0,13 *0.0050*	0,15 0.0060
P4	SNFX120408PZER-W8-M08 MP3000	0,13 *0.0050*	0,14 0.0055
P5	SNFX120408PZER-W8-M08 MP3000	0,13 *0.0050*	0,14 0.0055
P6	SNFX120408PZER-W8-M08 MP3000	0,13 *0.0050*	0,14 0.0055
P7	SNFX120408PZER-W8-M08 MP3000	0,13 *0.0050*	0,14 0.0055
P8	SNFX120408PZER-W8-M08 MS2050	0,13 *0.0050*	0,15 0.0060
P11	SNFX120408PZER-W8-M08 MS2050	0,13 *0.0050*	0,14 0.0055
P12	SNFX120408PZER-W8-M08 MS2050	0,090 *0.0036*	0,10 0.0040
K1	SNFX120408PZSR-W8-M10 MH1051	0,16 *0.0065*	0,17 0.0065
K2	SNFX120408PZSR-W8-M10 MH1051	0,14 *0.0055*	0,16 0.0065
K3	SNFX120408PZSR-W8-M10 MK2050	0,14 *0.0055*	0,16 0.0065
K4	SNFX120408PZSR-W8-M10 MK2050	0,14 *0.0055*	0,16 0.0065
K5	SNFX120408PZSR-W8-M10 MK2050	0,13 *0.0050*	0,14 0.0055
K6	SNFX120408PZSR-W8-M10 MK2050	0,14 *0.0055*	0,16 0.0065
K7	SNFX120408PZSR-W8-M10 MK2050	0,13 *0.0050*	0,14 0.0055
H5	SNFX120408PZSR-W8-M10 MH1051	0,10 *0.0040*	0,11 0.0044
H8	SNFX120408PZSR-W8-M10 MH1051	0,080 *0.0032*	0,085 0.0034
H11	SNFX120408PZSR-W8-M10 MH1051	0,10 *0.0040*	0,11 0.0044
H12	SNFX120408PZSR-W8-M10 MH1051	0,080 *0.0032*	0,085 0.0034
H21	SNFX120408PZSR-W8-M10 MH1051	0,080 *0.0032*	0,085 0.0034

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

38-SNFX1204ZZ – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	
		80%	30%
P1	SNFX1204ZZEN-W8-M08 MP3000	0,38 *0.015*	0,42 0.017
P2	SNFX1204ZZEN-W8-M08 MP3000	0,38 *0.015*	0,42 0.017
P3	SNFX1204ZZEN-W8-M08 MP3000	0,36 *0.014*	0,40 0.016
P4	SNFX1204ZZEN-W8-M08 MP3000	0,36 *0.014*	0,40 0.016
P5	SNFX1204ZZEN-W8-M08 MP3000	0,36 *0.014*	0,38 0.015
P6	SNFX1204ZZEN-W8-M08 MP3000	0,34 *0.013*	0,38 0.015
P7	SNFX1204ZZEN-W8-M08 MP3000	0,34 *0.013*	0,38 0.015
P8	SNFX1204ZZEN-W8-M08 MS2050	0,36 *0.014*	0,40 0.016
P11	SNFX1204ZZEN-W8-M08 MS2050	0,34 *0.013*	0,38 0.015
P12	SNFX1204ZZEN-W8-M08 MS2050	0,25 *0.010*	0,28 0.011
K1	SNFX1204ZZSN-W8-M12 MH1051	0,42 *0.017*	0,48 0.018
K2	SNFX1204ZZSN-W8-M12 MH1051	0,38 *0.015*	0,42 0.017
K3	SNFX1204ZZSN-W8-M12 MK2050	0,38 *0.015*	0,42 0.017
K4	SNFX1204ZZSN-W8-M12 MK2050	0,38 *0.015*	0,42 0.017
K5	SNFX1204ZZSN-W8-M12 MK2050	0,36 *0.014*	0,38 0.015
K6	SNFX1204ZZSN-W8-M12 MK2050	0,38 *0.015*	0,42 0.017
K7	SNFX1204ZZSN-W8-M12 MK2050	0,36 *0.014*	0,38 0.015
H5	SNFX1204ZZSN-W8-M12 MH1051	0,28 *0.011*	0,30 0.012
H8	SNFX1204ZZSN-W8-M12 MH1051	0,22 *0.0085*	0,24 0.0095
H11	SNFX1204ZZSN-W8-M12 MH1051	0,28 *0.011*	0,30 0.012
H12	SNFX1204ZZSN-W8-M12 MH1051	0,22 *0.0085*	0,24 0.0095
H21	SNFX1204ZZSN-W8-M12 MH1051	0,22 *0.0085*	0,24 0.0095

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.38 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			F15M			MK2050			MP3000			MS2050			MP1020			H15		
	90%	70%	30%	90%	70%	30%	90%	70%	30%	90%	70%	30%	90%	70%	30%	90%	70%	30%	90%	70%	30%
P1	—	—	—	245	265	315	270	285	345	290	310	380	250	265	320	320	335	395	—	—	—
	—	—	—	*800*	*870*	*1025*	*890*	*940*	*1125*	*950*	*1025*	*1250*	*820*	*870*	*1050*	*1050*	*1100*	*1300*	—	—	—
P2	—	—	—	235	250	310	255	270	335	280	300	370	245	260	315	315	325	385	—	—	—
	—	—	—	*770*	*820*	*1025*	*840*	*890*	*1100*	*920*	*980*	*1225*	*800*	*850*	*1025*	*1025*	*1075*	*1275*	—	—	—
P3	—	—	—	205	220	270	225	240	290	250	265	320	215	230	270	280	290	330	—	—	—
	—	—	—	*670*	*720*	*890*	*740*	*790*	*950*	*820*	*870*	*1050*	*710*	*750*	*890*	*920*	*950*	*1075*	—	—	—
P4	—	—	—	180	195	240	195	210	255	220	235	285	190	200	240	250	255	295	—	—	—
	—	—	—	*590*	*640*	*790*	*640*	*690*	*840*	*720*	*770*	*940*	*620*	*660*	*790*	*820*	*840*	*970*	—	—	—
P5	375	400	495	175	190	225	190	205	245	210	225	275	180	195	230	235	245	285	—	—	—
	1225	*1300*	*1625*	*570*	*620*	*740*	*620*	*670*	*800*	*690*	*740*	*900*	*590*	*640*	*750*	*770*	*800*	*940*	—	—	—
P6	420	450	570	200	210	260	215	230	280	235	250	305	205	215	260	265	275	315	—	—	—
	1375	*1475*	*1875*	*660*	*690*	*850*	*710*	*750*	*920*	*770*	*820*	*1000*	*670*	*710*	*850*	*870*	*900*	*1025*	—	—	—
P7	400	425	540	190	200	245	205	215	265	220	235	290	195	205	245	250	260	300	—	—	—
	1300	*1400*	*1775*	*620*	*660*	*800*	*670*	*710*	*870*	*720*	*770*	*950*	*640*	*670*	*800*	*820*	*850*	*980*	—	—	—
P8	365	390	495	175	185	225	190	200	245	210	225	265	180	195	225	235	245	275	—	—	—
	1200	*1275*	*1625*	*570*	*610*	*740*	*620*	*660*	*800*	*690*	*740*	*870*	*590*	*640*	*740*	*770*	*800*	*900*	—	—	—
P11	385	415	520	185	195	235	200	210	255	215	230	280	185	200	240	245	255	290	—	—	—
	1275	*1350*	*1700*	*610*	*640*	*770*	*660*	*690*	*840*	*710*	*750*	*920*	*610*	*660*	*790*	*800*	*840*	*950*	—	—	—
P12	270	285	345	120	125	150	130	135	165	145	155	180	125	130	155	165	170	170	—	—	—
	890	*940*	*1125*	*395*	*410*	*490*	*425*	*445*	*540*	*475*	*510*	*590*	*410*	*425*	*510*	*540*	*560*	*560*	—	—	—
K1	490	520	670	185	200	245	275	295	360	200	215	265	—	—	—	195	205	255	155	165	200
	1600	*1700*	*2200*	*610*	*660*	*800*	*900*	*970*	*1175*	*660*	*710*	*870*	—	—	—	*640*	*670*	*840*	*510*	*540*	*660*
K2	455	485	600	170	180	215	250	265	320	180	190	230	—	—	—	170	185	225	135	145	175
	1500	*1600*	*1975*	*560*	*590*	*710*	*820*	*870*	*1050*	*590*	*620*	*750*	—	—	—	*560*	*610*	*740*	*445*	*475*	*570*
K3	385	410	510	140	150	180	210	225	270	150	160	195	—	—	—	145	155	190	115	125	150
	1275	*1350*	*1675*	*460*	*490*	*590*	*690*	*740*	*890*	*490*	*520*	*640*	—	—	—	*475*	*510*	*620*	*375*	*410*	*490*
K4	365	390	485	135	145	175	200	215	255	145	155	190	—	—	—	140	150	180	110	115	145
	1200	*1275*	*1600*	*445*	*475*	*570*	*660*	*710*	*840*	*475*	*510*	*620*	—	—	—	*460*	*490*	*590*	*360*	*375*	*475*
K5	225	240	305	85	90	105	120	130	160	90	95	115	—	—	—	85	90	110	65	70	85
	740	*790*	*1000*	*280*	*295*	*345*	*395*	*425*	*520*	*295*	*310*	*375*	—	—	—	*280*	*295*	*360*	*215*	*230*	*280*
K6	325	345	425	120	130	155	175	190	225	125	135	165	—	—	—	120	130	160	95	105	125
	1075	*1125*	*1400*	*395*	*425*	*510*	*570*	*620*	*740*	*410*	*445*	*540*	—	—	—	*395*	*425*	*520*	*310*	*345*	*410*
K7	290	310	390	105	115	135	155	165	200	115	120	145	—	—	—	110	115	140	85	90	110
	950	*1025*	*1275*	*345*	*375*	*445*	*510*	*540*	*660*	*375*	*395*	*475*	—	—	—	*360*	*375*	*460*	*280*	*295*	*360*
H5	140	145	175	40	42	50	44	47	55	40	42	50	—	—	—	—	—	—	—	—	—
	460	*475*	*570*	*130*	*140*	*165*	*145*	*155*	*180*	*130*	*140*	*165*	—	—	—	—	—	—	—	—	—
H8	150	160	190	42	45	55	47	50	60	42	45	55	—	—	—	—	—	—	—	—	—
	490	*520*	*620*	*140*	*150*	*180*	*155*	*165*	*195*	*140*	*150*	*180*	—	—	—	—	—	—	—	—	—
H11	175	185	225	50	55	65	55	60	70	50	55	65	—	—	—	—	—	—	—	—	—
	570	*610*	*740*	*165*	*180*	*215*	*180*	*195*	*230*	*165*	*180*	*215*	—	—	—	—	—	—	—	—	—
H12	175	185	220	75	80	95	80	85	105	80	85	105	—	—	—	—	—	—	—	—	—
	570	*610*	*720*	*245*	*260*	*310*	*260*	*280*	*345*	*260*	*280*	*345*	—	—	—	—	—	—	—	—	—
H21	150	160	190	42	45	55	47	50	60	—	—	—	—	—	—	—	—	—	—	—	—
	490	*520*	*620*	*140*	*150*	*180*	*155*	*165*	*195*	—	—	—	—	—	—	—	—	—	—	—	—

R220.38 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1500			MP1501			MP2501			MP3501		
	90%	70%	30%	90%	70%	30%	90%	70%	30%	90%	70%	30%
P1	—	—	—	385	405	465	380	395	460	345	365	425
	—	—	—	*1275*	*1325*	*1525*	*1250*	*1300*	*1500*	*1125*	*1200*	*1400*
P2	—	—	—	370	385	455	360	380	450	335	355	415
	—	—	—	*1225*	*1275*	*1500*	*1175*	*1250*	*1475*	*1100*	*1175*	*1350*
P3	—	—	—	325	340	395	315	335	390	295	310	355
	—	—	—	*1075*	*1125*	*1300*	*1025*	*1100*	*1275*	*970*	*1025*	*1175*
P4	—	—	—	285	300	350	280	295	345	260	275	320
	—	—	—	*940*	*980*	*1150*	*920*	*970*	*1125*	*850*	*900*	*1050*
P5	—	—	—	275	290	335	270	285	330	250	260	305
	—	—	—	*900*	*950*	*1100*	*890*	*940*	*1075*	*820*	*850*	*1000*
P6	—	—	—	310	325	380	305	320	375	280	295	340
	—	—	—	*1025*	*1075*	*1250*	*1000*	*1050*	*1225*	*920*	*970*	*1125*
P7	—	—	—	295	305	355	290	300	355	265	275	320
	—	—	—	*970*	*1000*	*1175*	*950*	*980*	*1175*	*870*	*900*	*1050*
P8	—	—	—	270	285	335	265	280	330	250	260	300
	—	—	—	*890*	*940*	*1100*	*870*	*920*	*1075*	*820*	*850*	*980*
P11	—	—	—	285	300	345	280	295	345	255	270	315
	—	—	—	*940*	*980*	*1125*	*920*	*970*	*1125*	*840*	*890*	*1025*
P12	—	—	—	185	190	215	180	190	215	165	175	195
	—	—	—	*610*	*620*	*710*	*590*	*620*	*710*	*540*	*570*	*640*
K1	295	315	385	370	390	460	365	385	450	340	355	420
	970	*1025*	*1275*	*1225*	*1275*	*1500*	*1200*	*1275*	*1475*	*1125*	*1175*	*1375*
K2	260	280	335	335	350	405	330	345	395	300	315	370
	850	*920*	*1100*	*1100*	*1150*	*1325*	*1075*	*1125*	*1300*	*980*	*1025*	*1225*
K3	220	235	285	285	295	340	280	290	335	255	265	310
	720	*770*	*940*	*940*	*970*	*1125*	*920*	*950*	*1100*	*840*	*870*	*1025*
K4	210	225	270	270	285	325	265	280	320	245	255	295
	690	*740*	*890*	*890*	*940*	*1075*	*870*	*920*	*1050*	*800*	*840*	*970*
K5	130	135	165	165	170	200	160	170	195	150	155	180
	425	*445*	*540*	*540*	*560*	*660*	*520*	*560*	*640*	*490*	*510*	*590*
K6	185	200	240	240	250	285	235	245	280	215	225	260
	610	*660*	*790*	*790*	*820*	*940*	*770*	*800*	*920*	*710*	*740*	*850*
K7	165	175	215	210	220	255	205	215	250	190	200	230
	540	*570*	*710*	*690*	*720*	*840*	*670*	*710*	*820*	*620*	*660*	*750*
H5	—	—	—	49	50	65	—	—	—	—	—	—
	—	—	—	*160*	*165*	*215*	—	—	—	—	—	—
H8	—	—	—	50	55	65	—	—	—	—	—	—
	—	—	—	*165*	*180*	*215*	—	—	—	—	—	—
H11	—	—	—	65	65	80	—	—	—	—	—	—
	—	—	—	*215*	*215*	*260*	—	—	—	—	—	—
H12	—	—	—	95	100	120	—	—	—	—	—	—
	—	—	—	*310*	*330*	*395*	—	—	—	—	—	—
H21	—	—	—	50	55	65	—	—	—	—	—	—
	—	—	—	*165*	*180*	*215*	—	—	—	—	—	—

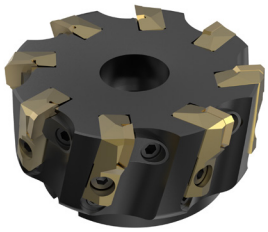


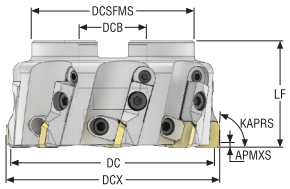
R220.30 -12

Questa famiglia di frese è in grado di soddisfare i più elevati requisiti di finitura superficiale in una varietà di materiali. Il punto di forza è nei componenti ghisa grazie a un'offerta completa di combinazioni di geometrie e qualità. La sede regolabile garantisce un'elevata precisione di run-out, mentre gli inserti di precisione riducono gli sforzi per il posizionamento della fresa. Gli inserti monolaterali hanno una bassa profondità di taglio e includono un tratto raschiante lungo per soddisfare i requisiti delle frese di diametro maggiore. Il design della corona incluso sugli inserti SEEX1203 compensa il disallineamento tra la testa del mandrino e il pezzo in lavorazione per garantire una finitura e un aspetto della superficie eccellenti. Gli inserti sono ideali per frese speciali, come le frese ibride per la sgrossatura-finitura con inserti per sgrossatura dedicati, nonché frese per finitura pura con passi e unità di manipolazione personalizzati.

- DC = 80 – 355 mm
- Disponibili in versioni a passo largo e a passo stretto
- Disponibili sia nella versione a moduli che a sede fissa nonché per attacco CAP

R220.30-12CT – In mm

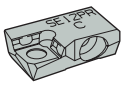
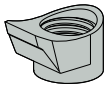




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 350 - 2, 351
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.30-0080-12CT	75068850	Manicotto	80,0	6	1,0	88,0 °	80,75	27,0	–	56,0	50,0	4800	1,3	SE..1203
R220.30-0100-12CT	75068851	Manicotto	100,0	8	1,0	88,0 °	100,72	32,0	–	77,0	50,0	4300	1,8	SE..1203
R220.30-0125-12CT	75068852	Manicotto	125,0	10	1,0	88,0 °	126,02	40,0	–	90,0	63,0	3800	3,5	SE..1203
R220.30-8250-12CT	75068855	Manicotto	250,0	22	1,0	88,0 °	250,91	60,0	101,6	130,0	63,0	2700	17,8	SE..1203

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Modulo	Vite modulo	Chiave per vite inserto	Cuneo inserto	Vite cuneo
							
R220.30-0080	AU1114T-T15P	MF6S12X45	SE12PRC	FS95018	1/4HEX-H4.0X50	334.5-640	268-650
R220.30-0100	AU1114T-T15P	MC6S16X35	SE12PRC	FS95018	1/4HEX-H4.0X50	334.5-640	268-650
R220.30-0125-8250	AU1114T-T15P	–	SE12PRC	FS95018	1/4HEX-H4.0X50	334.5-640	268-650

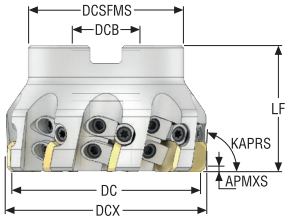
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura
			
R220.30-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE
R220.30-0100	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE
R220.30-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE
R220.30-8250	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

R220.30-12ST – In mm

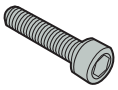
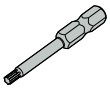
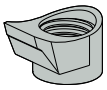




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 350 - 2, 351
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DBC1	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm	mm	mm		kg	
R220.30-0080-12ST	75038551	Manicotto	80,0	9	1,0	88,0 °	80,75	27,0	–	56,0	50,0	5300	1,4	SE..X1203
R220.30-8160-12ST	75036394	Manicotto	160,0	20	1,0	88,0 °	160,97	40,0	66,7	90,0	63,0	3800	5,6	SE..1203
R220.30-8200-12ST	75066297	Manicotto	200,0	25	1,0	88,0 °	200,94	60,0	101,6	130,0	63,0	3300	7,8	SE..1203

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Cuneo inserto	Chiave	Calibro di regolazione	Vite di regolazione	Vite cuneo
							
R220.30-0080	MC6S12X40	1/4HEX-T15PX50	CW0608	T15P-4ST	AS6011	LD6019-T15P	LD6018T-T15P
R220.30-8160-8200	–	1/4HEX-T15PX50	CW0608	T15P-4ST	AS6011	LD6019-T15P	LD6018T-T15P

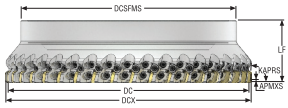
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura
			
R220.30-0080	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE
R220.30-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE
R220.30-8200	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S16X50	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

R220.30-12ST CAP – In mm

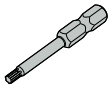
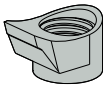




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 350 - 2, 351
—Per il programma inserti completo, vedere le pagine 882
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm		kg	
R220.30-9250-12ST	75077274	Manicotto	250,0	32	1,0	88,0 °	250,97	220,0	63,0	3000	9,2	SE..1203
R220.30-9355-12ST	75077276	Manicotto	355,0	44	1,0	88,0 °	355,94	285,0	63,0	2500	15,9	SE..1203

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Cuneo inserto	Chiave	Calibro di regolazione	Vite di regolazione	Vite cuneo
						
R220.30-9250-9355	1/4HEX-T15PX50	CW0608	T15P-4ST	AS6011	LD6019-T15P	LD6018T-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura
		
R220.30-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE

Chiavi dinamometriche e fisse, vedere pagina 931

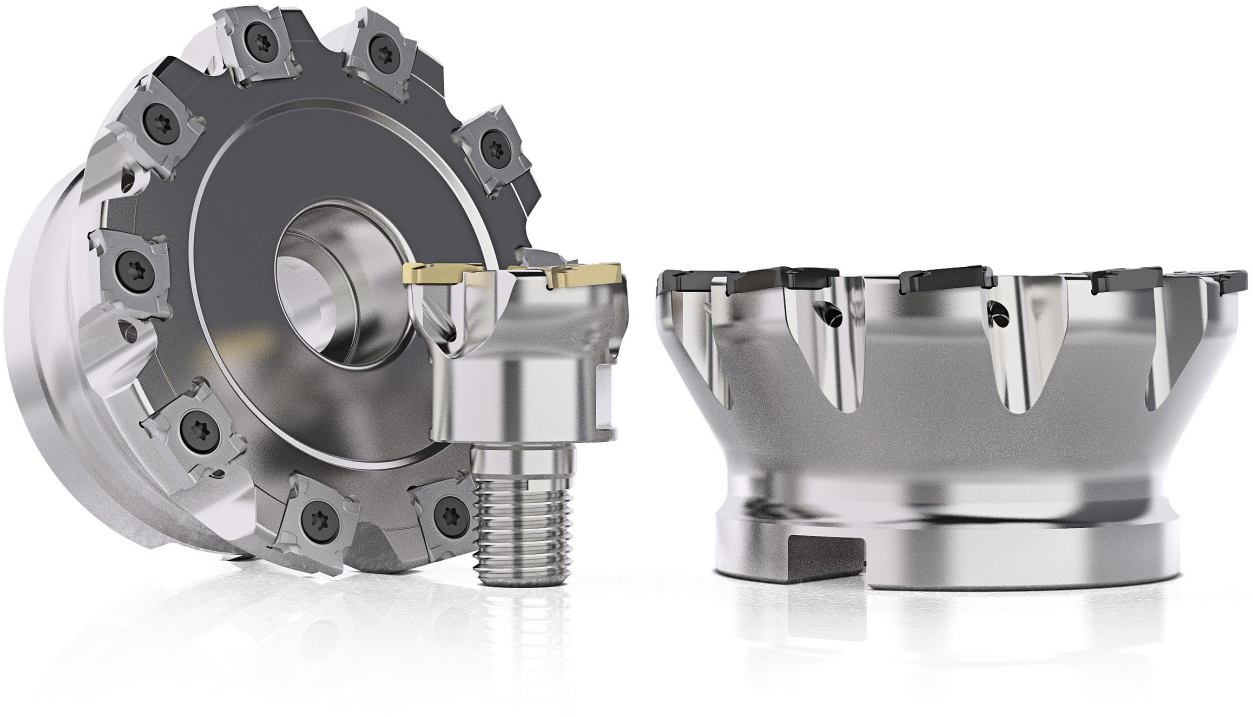
R220.30-12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
P2	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
P3	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
P4	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,18 0.0070	0,22 0.0085
P5	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
P6	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
P7	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
P8	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,18 0.0070	0,22 0.0085
P11	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,20 0.0080
P12	SEEX1203AFTN-M13 MP3501	0,48 *0.019*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
M1	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,19 0.0075	0,19 0.0075	0,19 0.0075	0,24 0.0095
M2	SEEX1203AFTN-M13 MP3501	0,60 *0.024*	0,17 0.0065	0,17 0.0065	0,17 0.0065	0,22 0.0085
M3	SEEX1203AFTN-M13 MP3501	0,48 *0.019*	0,14 0.0055	0,14 0.0055	0,14 0.0055	0,17 0.0065
M4	SEEX1203AFTN-M13 MP3501	0,36 *0.014*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
M5	SEEX1203AFTN-M13 MP3501	0,36 *0.014*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
K1	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,20 0.0080	0,20 0.0080	0,20 0.0080	0,25 0.010
K2	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
K3	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
K4	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
K5	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
K6	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,22 0.0085
K7	SEEX1203AFTN-MD14 MH1051	0,60 *0.024*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,20 0.0080
H5	SEEX1203AFTN-MD14 MH1051	0,48 *0.019*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,15 0.0065
H8	SEEX1203AFTN-MD14 MH1051	0,42 *0.017*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
H11	SEEX1203AFTN-MD14 MH1051	0,48 *0.019*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,15 0.0065
H12	SEEX1203AFTN-MD14 MH1051	0,42 *0.017*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
H21	SEEX1203AFTN-MD14 MH1051	0,42 *0.017*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.30-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051				F15M				H15				MK1500				MP3501			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	—	—	—	—	225	240	255	285	—	—	—	—	—	—	—	—	320	330	350	380
	—	—	—	—	*740*	*790*	*840*	*940*	—	—	—	—	—	—	—	—	*1050*	*1075*	*1150*	*1250*
P2	—	—	—	—	220	230	250	280	—	—	—	—	—	—	—	—	305	315	335	370
	—	—	—	—	*720*	*750*	*820*	*920*	—	—	—	—	—	—	—	—	*1000*	*1025*	*1100*	*1225*
P3	—	—	—	—	190	200	220	240	—	—	—	—	—	—	—	—	270	275	295	325
	—	—	—	—	*620*	*660*	*720*	*790*	—	—	—	—	—	—	—	—	*890*	*900*	*970*	*1075*
P4	—	—	—	—	170	180	190	215	—	—	—	—	—	—	—	—	240	245	265	285
	—	—	—	—	*560*	*590*	*620*	*710*	—	—	—	—	—	—	—	—	*790*	*800*	*870*	*940*
P5	325	330	360	405	165	175	185	205	—	—	—	—	—	—	—	—	230	235	250	275
	1075	*1075*	*1175*	*1325*	*540*	*570*	*610*	*670*	—	—	—	—	—	—	—	—	*750*	*770*	*820*	*900*
P6	365	370	405	470	185	195	210	230	—	—	—	—	—	—	—	—	260	265	280	310
	1200	*1225*	*1325*	*1550*	*610*	*640*	*690*	*750*	—	—	—	—	—	—	—	—	*850*	*870*	*920*	*1025*
P7	345	350	385	440	175	185	195	220	—	—	—	—	—	—	—	—	245	250	265	295
	1125	*1150*	*1275*	*1450*	*570*	*610*	*640*	*720*	—	—	—	—	—	—	—	—	*800*	*820*	*870*	*970*
P8	315	320	350	405	160	170	185	205	—	—	—	—	—	—	—	—	225	230	245	270
	1025	*1050*	*1150*	*1325*	*520*	*560*	*610*	*670*	—	—	—	—	—	—	—	—	*740*	*750*	*800*	*890*
P11	335	340	370	430	170	180	190	215	—	—	—	—	—	—	—	—	240	245	260	285
	1100	*1125*	*1225*	*1400*	*560*	*590*	*620*	*710*	—	—	—	—	—	—	—	—	*790*	*800*	*850*	*940*
P12	245	250	270	295	—	—	—	—	—	—	—	—	—	—	—	—	160	165	175	185
	800	*820*	*890*	*970*	—	—	—	—	—	—	—	—	—	—	—	—	*520*	*540*	*570*	*610*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	165	175	185	210
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*540*	*570*	*610*	*690*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	140	145	155	175
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*460*	*475*	*510*	*570*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110	115	125	140
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*360*	*375*	*410*	*460*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85	90	100	110
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*280*	*295*	*330*	*360*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75	75	85	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*245*	*245*	*280*	*295*
K1	425	435	475	550	175	185	200	220	140	145	155	175	270	285	310	345	310	315	335	370
	1400	*1425*	*1550*	*1800*	*570*	*610*	*660*	*720*	*460*	*475*	*510*	*570*	*890*	*940*	*1025*	*1125*	*1025*	*1025*	*1100*	*1225*
K2	390	400	435	490	155	165	175	195	125	130	140	155	245	255	275	300	280	285	305	335
	1275	*1300*	*1425*	*1600*	*510*	*540*	*570*	*640*	*410*	*425*	*460*	*510*	*800*	*840*	*900*	*980*	*920*	*940*	*1000*	*1100*
K3	330	335	370	415	130	140	150	165	105	110	120	130	205	215	235	255	235	240	255	285
	1075	*1100*	*1225*	*1350*	*425*	*460*	*490*	*540*	*345*	*360*	*395*	*425*	*670*	*710*	*770*	*840*	*770*	*790*	*840*	*940*
K4	315	320	355	395	125	130	145	155	100	105	115	125	195	205	220	245	225	230	245	270
	1025	*1050*	*1175*	*1300*	*410*	*425*	*475*	*510*	*330*	*345*	*375*	*410*	*640*	*670*	*720*	*800*	*740*	*750*	*800*	*890*
K5	200	205	225	250	75	80	90	95	60	65	70	75	120	125	135	150	140	145	150	165
	660	*670*	*740*	*820*	*245*	*260*	*295*	*310*	*195*	*215*	*230*	*245*	*395*	*410*	*445*	*490*	*460*	*475*	*490*	*540*
K6	280	285	310	350	110	115	125	140	90	90	100	110	175	180	195	215	200	205	215	240
	920	*940*	*1025*	*1150*	*360*	*375*	*410*	*460*	*295*	*295*	*330*	*360*	*570*	*590*	*640*	*710*	*660*	*670*	*710*	*790*
K7	255	260	285	320	100	105	110	125	80	85	90	95	155	165	175	190	180	185	195	210
	840	*850*	*940*	*1050*	*330*	*345*	*360*	*410*	*260*	*280*	*295*	*310*	*510*	*540*	*570*	*620*	*590*	*610*	*640*	*690*
H5	125	130	140	150	37	39	42	46	—	—	—	—	—	—	—	—	36	38	41	45
	410	*425*	*460*	*490*	*120*	*130*	*140*	*150*	—	—	—	—	—	—	—	—	*120*	*125*	*135*	*150*
H8	135	140	155	170	39	42	45	49	—	—	—	—	—	—	—	—	38	41	44	48
	445	*460*	*510*	*560*	*130*	*140*	*150*	*160*	—	—	—	—	—	—	—	—	*125*	*135*	*145*	*155*
H11	160	165	175	195	47	50	55	60	—	—	—	—	—	—	—	—	46	49	55	55
	520	*540*	*570*	*640*	*155*	*165*	*180*	*195*	—	—	—	—	—	—	—	—	*150*	*160*	*180*	*180*
H12	160	165	180	200	70	75	80	90	—	—	—	—	—	—	—	—	70	75	80	85
	520	*540*	*590*	*660*	*230*	*245*	*260*	*295*	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*280*
H21	135	140	155	170	39	42	45	49	—	—	—	—	—	—	—	—	38	41	44	48
	445	*460*	*510*	*560*	*130*	*140*	*150*	*160*	—	—	—	—	—	—	—	—	*125*	*135*	*145*	*155*



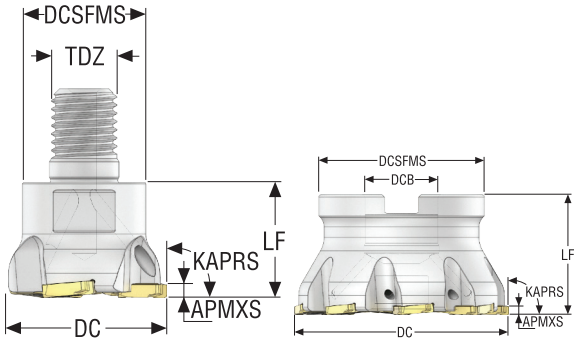
R230.19

Questa fresa per finitura offre un run-out eccezionale anche se è una soluzione a sede fissa. Gli inserti assiali hanno un'elevata precisione e hanno al contempo una bassa profondità di taglio grazie al disegno positivo della faccia di spoglia. La lunghezza ridotta del tratto raschiante crea una bassa pressione assiale dell'utensile e l'elevata precisione di run-out consente di passare sopra il tratto raschiante e di ottenere comunque un'eccellente finitura superficiale. Questa famiglia è ideale per macchine instabili e diametri ridotti su acciaio e acciaio inossidabile.

- DC = 30 – 100 mm
- Frese per spianatura frontale per finitura R230.19
- Inserti con 4 taglienti
- Inserti monolaterali

R230.19 – In mm

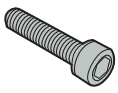
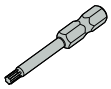




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 354 - 2, 355
—Per il programma inserti completo, vedere le pagine 886, 887
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	KAPRS°	DCX	DCB	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm		mm	mm	mm		mm		kg	
R230.19-0050-SN1203-5A	02735719	Manicotto	50,0	5	3,1	90,0 °	50,0	22,0	42,0	–	40,0	12300	0,4	SNHQ1203-R
R230.19-0063-SN1203-6A	02735734	Manicotto	63,0	6	3,1	90,0 °	63,0	27,0	50,0	–	45,0	10900	0,6	SNHQ1203-R
R230.19-0080-SN1203-8A	02735736	Manicotto	80,0	8	3,1	90,0 °	80,0	27,0	62,0	–	45,0	9700	1,1	SNHQ1203-R
R230.19-0100-SN1203-10A	02735737	Manicotto	100,0	10	3,1	90,0 °	100,0	32,0	77,0	–	50,0	8700	1,8	SNHQ1203-R
R230.19-1030.RE-SN1103-3A	02735709	Combimaster	30,0	3	2,6	90,0 °	30,0	–	18,5	M10	20,0	18900	0,1	SNHQ1103-R
R230.19-1640.RE-SN1203-3A	02735718	Combimaster	40,0	3	3,1	90,0 °	40,0	–	30,0	M16	28,0	16700	0,2	SNHQ1203-R

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R230.19-1103	–	1/4HEX-T09PX50	C93505-T09P
R230.19-1203	–	1/4HEX-T15PX50	C94006-T15P
R230.19-1203 ø100	MC6S16X40	1/4HEX-T15PX50	C94006-T15P
R230.19-1203 ø50	220.17-692M	1/4HEX-T15PX50	C94006-T15P
R230.19-1203 ø63-80	MC6S12X35	1/4HEX-T15PX50	C94006-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R230.19-1103	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R230.19-1203	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R230.19 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			80%	60%	40%	20%
P1	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,15 0.0060
P2	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,15 0.0060
P3	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,14 0.0055
P4	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,14 0.0055
P5	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
P6	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
P7	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
P8	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,14 0.0055
P11	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
P12	SNHQ120308TR4-M07 F40M	1,5 *0.060*	0,080 0.0032	0,080 0.0032	0,080 0.0032	0,10 0.0040
M1	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,15 0.0060
M2	SNHQ120308TR4-M07 F40M	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
M3	SNHQ120308TR4-M07 F40M	1,5 *0.060*	0,095 0.0038	0,095 0.0038	0,095 0.0038	0,12 0.0048
M4	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,090 0.0036	0,11 0.0044
M5	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,090 0.0036	0,11 0.0044
K1	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,15 0.0060
K2	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
K3	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
K4	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
K5	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
K6	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,14 0.0055
K7	SNHQ120308TR4-M07 MP2501	1,9 *0.075*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,13 0.0050
S1	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,090 0.0036	0,11 0.0044
S2	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,090 0.0036	0,11 0.0044
S3	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,10 0.0040
S11	SNHQ120308TR4-M07 F40M	1,3 *0.050*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
S12	SNHQ120308TR4-M07 F40M	1,3 *0.050*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,12 0.0048
S13	SNHQ120308TR4-M07 F40M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,090 0.0036	0,11 0.0044

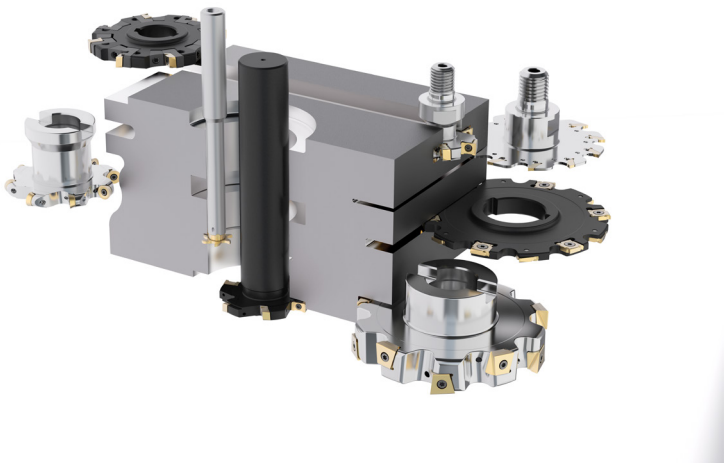
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R230.19 – Parametri di taglio v_c = (m/min)/(sf/min)

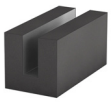
SMG	F30M				F40M				MP2501				H25			
	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%	100%	80%	60%	40%
P1	240 *790*	250 *820*	270 *890*	290 *950*	225 *740*	240 *790*	255 *840*	280 *920*	425 *1400*	440 *1450*	460 *1500*	500 *1650*	— —	— —	— —	— —
P2	225 *740*	240 *790*	255 *840*	285 *940*	215 *710*	225 *740*	245 *800*	270 *890*	415 *1350*	425 *1400*	450 *1475*	480 *1575*	— —	— —	— —	— —
P3	200 *660*	210 *690*	225 *740*	250 *820*	190 *620*	200 *660*	215 *710*	240 *790*	355 *1175*	365 *1200*	385 *1275*	420 *1375*	— —	— —	— —	— —
P4	175 *570*	185 *610*	200 *660*	220 *720*	165 *540*	175 *570*	190 *620*	210 *690*	315 *1025*	325 *1075*	340 *1125*	370 *1225*	— —	— —	— —	— —
P5	165 *540*	175 *570*	190 *620*	210 *690*	160 *520*	170 *560*	180 *590*	200 *660*	305 *1000*	315 *1025*	330 *1075*	350 *1150*	— —	— —	— —	— —
P6	190 *620*	200 *660*	215 *710*	235 *770*	180 *590*	190 *620*	205 *670*	225 *740*	340 *1125*	355 *1175*	375 *1225*	400 *1300*	— —	— —	— —	— —
P7	175 *570*	185 *610*	200 *660*	225 *740*	170 *560*	180 *590*	190 *620*	215 *710*	320 *1050*	335 *1100*	350 *1150*	380 *1250*	— —	— —	— —	— —
P8	165 *540*	175 *570*	190 *620*	210 *690*	160 *520*	170 *560*	180 *590*	200 *660*	300 *980*	310 *1025*	325 *1075*	350 *1150*	— —	— —	— —	— —
P11	170 *560*	180 *590*	195 *640*	215 *710*	165 *540*	175 *570*	185 *610*	205 *670*	315 *1025*	325 *1075*	340 *1125*	370 *1225*	— —	— —	— —	— —
P12	110 *360*	120 *395*	130 *425*	140 *460*	105 *345*	115 *375*	120 *395*	135 *445*	195 *640*	205 *670*	215 *710*	225 *740*	— —	— —	— —	— —
M1	180 *590*	190 *620*	205 *670*	230 *750*	175 *570*	185 *610*	195 *640*	220 *720*	210 *690*	220 *720*	240 *790*	260 *850*	— —	— —	— —	— —
M2	150 *490*	160 *520*	170 *560*	190 *620*	145 *475*	150 *490*	165 *540*	180 *590*	175 *570*	185 *610*	200 *660*	215 *710*	— —	— —	— —	— —
M3	125 *410*	130 *425*	140 *460*	155 *510*	115 *375*	125 *410*	135 *445*	145 *475*	140 *460*	150 *490*	160 *520*	175 *570*	— —	— —	— —	— —
M4	95 *310*	100 *330*	110 *360*	120 *395*	90 *295*	95 *310*	105 *345*	115 *375*	110 *360*	115 *375*	125 *410*	135 *445*	— —	— —	— —	— —
M5	80 *260*	85 *280*	90 *295*	100 *330*	75 *245*	80 *260*	85 *280*	95 *310*	90 *295*	95 *310*	105 *345*	110 *360*	— —	— —	— —	— —
K1	180 *590*	190 *620*	205 *670*	225 *740*	170 *560*	180 *590*	195 *640*	215 *710*	415 *1350*	430 *1400*	455 *1500*	485 *1600*	— —	— —	— —	— —
K2	160 *520*	170 *560*	180 *590*	200 *660*	150 *490*	160 *520*	170 *560*	190 *620*	370 *1225*	380 *1250*	400 *1300*	425 *1400*	— —	— —	— —	— —
K3	135 *445*	140 *460*	155 *510*	170 *560*	130 *425*	135 *445*	145 *475*	160 *520*	310 *1025*	320 *1050*	340 *1125*	360 *1175*	— —	— —	— —	— —
K4	130 *425*	135 *445*	145 *475*	160 *520*	120 *395*	130 *425*	140 *460*	155 *510*	295 *970*	305 *1000*	325 *1075*	345 *1125*	— —	— —	— —	— —
K5	80 *260*	85 *280*	90 *295*	100 *330*	75 *245*	80 *260*	85 *280*	95 *310*	180 *590*	185 *610*	195 *640*	210 *690*	— —	— —	— —	— —
K6	115 *375*	120 *395*	130 *425*	140 *460*	110 *360*	115 *375*	120 *395*	135 *445*	260 *850*	270 *890*	285 *940*	300 *980*	— —	— —	— —	— —
K7	100 *330*	105 *345*	115 *375*	125 *410*	95 *310*	100 *330*	110 *360*	120 *395*	230 *750*	240 *790*	250 *820*	270 *890*	— —	— —	— —	— —
S1	45 *150*	48 *155*	50 *165*	55 *180*	43 *140*	45 *150*	48 *155*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —
S2	36 *120*	38 *125*	41 *135*	45 *150*	35 *115*	36 *120*	39 *130*	43 *140*	— —	— —	— —	— —	— —	— —	— —	— —
S3	32 *105*	34 *110*	36 *120*	39 *130*	30 *100*	32 *105*	34 *110*	37 *120*	— —	— —	— —	— —	— —	— —	— —	— —
S11	65 *215*	65 *215*	70 *230*	75 *245*	60 *195*	65 *215*	70 *230*	75 *245*	— —	— —	— —	— —	— —	— —	— —	— —
S12	36 *120*	38 *125*	41 *135*	44 *145*	41 *135*	44 *145*	47 *155*	50 *165*	— —	— —	— —	— —	— —	— —	— —	— —
S13	21 *70*	22 *70*	24 *80*	26 *85*	24 *80*	25 *80*	27 *90*	30 *100*	— —	— —	— —	— —	— —	— —	— —	— —

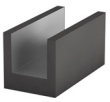
Gamma completa di frese a disco per tutti i tipi di operazioni di fresatura a disco

Le frese a disco Seco, disponibili con larghezze da 0,7 a 32 mm (da 0,029 a 1,25”), offrono una vasta gamma di diametri e tipi di attacco e sono adatte a tutte le macchine utensili e tutte le applicazioni di fresatura a disco.



Il cuore della gamma è composto da 4 principali famiglie di frese

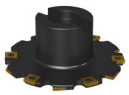




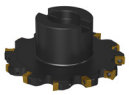
Min — Max



335.10 per cave di piccolo spessore e taglio
Larghezza 2,25-4,1 mm, 0,089”-0,122”



335.19 per piccole larghezze di taglio
A sedi fisse
Larghezza 4-12 mm, 0,156”-0,500”

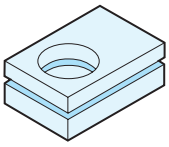


335.18 per medie larghezze di taglio
Larghezza fissa e regolabile
Larghezza 8-20 mm, 0,312”-0,750”



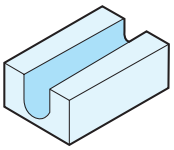
335.25 per grandi larghezze di taglio
Larghezza fissa e regolabile
Larghezza 13,5-32 mm, 0,53”-1,26”

Ed altre 4 famiglie dedicate ad operazioni specifiche



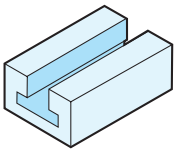


335.14 e 335.15 per sedi anelli elastici e cave di piccolo spessore
Larghezza 0,7-5,15 mm, 0,029”-0,203”



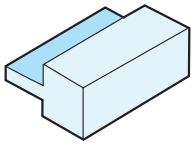


335.29, 335.18 e 335.25 dotati di inserto rotondo - profilo sferico e copiatura.
Larghezza fissa e regolabile
Larghezza 5-20 mm, 0,197”-0,787”





335.16 per cave a T
Larghezza 11-22 mm, 0,387”-0,823”





335.98 per metà lato e faccia



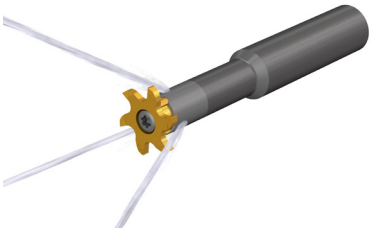
335.14

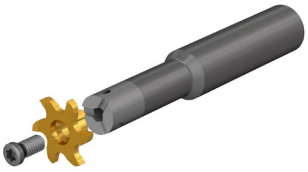
Sistema di fresa a disco di piccolo diametro dedicato per scanalature poco profonde, scanalature per anelli elastici,
smussatura superiore e inferiore, profilo a raggio pieno e filettatura

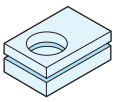
– Sistemi con testina in metallo duro intercambiabile per favorire il controllo dei costi di lavorazione
– Gamma delle larghezze di taglio 0,3-10,0 mm (0,012-0,394")
– Gamma diametri dell'inserto 6,7-50 mm (264-1,969")
– Una gamma completa di steli cilindrici in metallo duro e acciaio, e c porta pinze ER integrati
– Larghezza di taglio ad alta precisione +/-0,02 mm - +/-0,0008"

Fresa a disco 335.14

Fresa a disco con testina intercambiabile in metallo duro

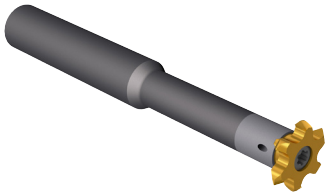




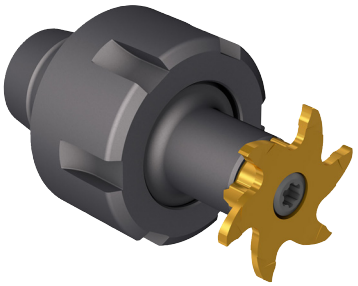


È disponibile una vasta gamma di testine e steli, per tutte le applicazioni di fresatura a disco in interpolazione circolare o scanalatura.
- Connessione tra testina e corpo fresa robusta, affidabile e precisa
- Copre tutti i tipi di materiale con la geometria universale M e la qualità F3xM
- Testina da diametro 6,7 mm

Cilindrico



Porta pinze ER



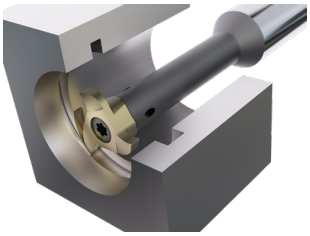
2 tipi di steli disponibili: cilindrico disponibile sia in acciaio che in metallo duro o sistema con porta pinze ER

Fresa a disco 335.14

Scanalatura

Testine da diametro 6,7 a 50 mm (da 0,264“ a 1,969”) per foro con diametro minimo di 7 mm (0,275")
Larghezza da 0,3 a 10 mm (da 0,012 a 0,394")

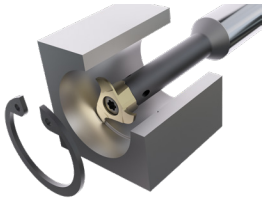


Sede anelli elastici

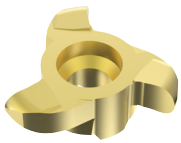
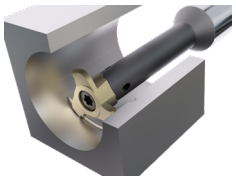
Testine da diametro 6,7 a 27,7 mm (da 0,264 a 0,976") e larghezza da 0,7 a 5,15 mm (da 029” a 203")





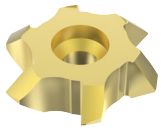
Profilo sferico

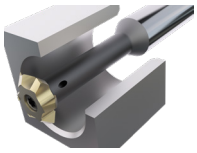
Testina da diam. 11,7 a 21,7 (da 0,460 a 0,854") e larghezza da 1 a 5 mm (da 0,039 a 0,197")

Profilo per doppia smussatura

Testine da diametro 9,7 a 27,7 (da 0,382 a 0,976") per angoli di smusso di 45° /30° /20° /15°.

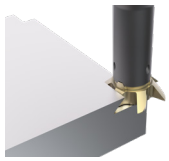




Coda di rondine

Testine con diametro da 11,7 a 21,7 mm (da 0,343 a 0,854") con angolo di 45°.





Testine toriche

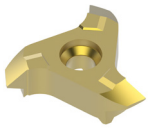
Diametro testina 21,7 mm (0,854") con raggi da 0,2 a 3,0 mm (da 0,008 a 0,118")

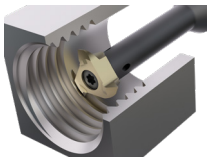




Filettatura

Testine da diametro 6,7-27,7 mm (da 0,264 a 0,976") per filettature metriche a profilo completo e parziale con passo da 1 a 6 mm e filettature Whitworth a profilo completo con passo da 19 a 11 tpi e filettature UN con passo da 24 a 6 tpi.





Chiave di codifica – Testine

R	335	.	14	-	217	150	.	12	Z3	-	M03	F32M
1	2		3		4	5		6	7		8	9

1.	2.	3.
Rotazione destra	Codice fresa a disco	Sistema
4.	**5.**	**6.**
Esempio di diametro testina: 21,7 mm	Larghezza di taglio: esempio 1,50 mm Alternativa: R20: Raggio per profilo sferico - esempio R=2,0 mm C45: Smussatura superiore/inferiore, esempio 45° DT45: Coda di rondine 45° CR080: Raggio di puntaRE=0,80mm Variante aggiuntiva come 100C o 400R indica ulteriori varianti di profilo VS simile - vedi pagine di prodotto Codice di filettatura: vedi pagina 2, 362	Dimensione connessione (testina/stelo) in mm Esempio: 12 mm
7.	**8.**	**9.**
Numero di denti Esempio ZNP=3	Geometria tagliente	Qualità

Chiave di codifica – Testine Filettatura

R	335	.	14	-	217	M	N	P	250500	-	12	Z3
1	2		3		4	5	6	7	8		9	10

1.
Destro

2.
Codice fresa a disco

3.
Sistema

4.
Diametro testina
esempio: 21,7 mm

5.
Tipo di filettatura
(W e UN)

6.
Filettatura interna
(E = esterna,
X = interna/esterna)

7.
Profilo parziale (F = profilo completo)

8.
Dimensione passo (2,50-5,00 mm
oppure per esempio solamente fisso
2,5 mm, 16 tpi...)

9.
Dimensione filetto di connessione

10
Num. di denti

Chiave di codifica – Stelo

Stelo cilindrico

335	.	14	-	16	9	.	0	-	45	-	110	-	E
1		2		3	4		5		6		7		8

1.
Codice fresa a disco

2.
Sistema

3.
Diametro dello stelo
DMM = 16 mm
Alternativa in pollici, esempio 0625 per DMM = 0,625"

4.
Dimensione connessione (testina/stelo) in mm
Esempio: 9 mm

5.
0,0 versione con connessione cilindrica

6.
Lunghezza di accesso, testina inclusa 45 mm
Alternativa in pollici, esempio 177 per 1,77"

7.
Lunghezza complessiva, testina inclusa 110 mm
Alternativa in pollici, esempio 433 per 4,33"

8.
-E per stelo in metallo duro, o stelo in acciaio

Porta pinze

335	.	14	-	ER25	-	12	-	30
1		2		3		4		5

1.
Codice fresa a disco

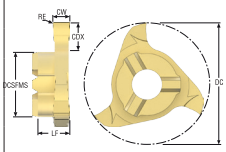
2.
Sistema

3.
Dimensione porta pinze ER

4.
Dimensione connessione (testina/stelo) in mm
Esempio: 12 mm

5.
Lunghezza di accesso in mm
testina inclusa
Esempio 30 mm

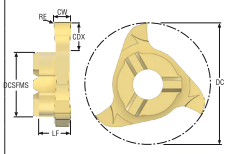
Selezione – testine



			Diametro fresa in mm (diametro minimo del foro in mm)																											
			6,7	7,7	8,7	10,7	9,7		11,7		13,7		15,7		14,7	17,7		19,7	21,7	36,7	39,7	21,7	24,8	27,7	34,7	50				
			Diametro fresa in inch (diametro minimo del foro in inch)																											
			0.264	0.303	0.343	0.421	0.382		0.343		0.343		0.343		0.579	0.343		0.776	0.343	1.445	1.563		0.976	1.563	1.366	1.969				
			Dimensione connessione DCSFMS in mm																											
			5				6				8				9				12			14				16				
			ZNP																											
	mm	inch	3	3	3	3	3	6	3	6	3	6	3	6	6	3	6	3	6	3	6	6	6	3	3	6	6	12		Vedere pagina
Scanalatura Larghezza di taglio in mm	0,3	0.012		x		x																								
	0,4	0.016		x		x															x									
	0,5	0.020	x	x		x														x	x							x		
	0,6	0.024		x																x	x									
	0,7	0.028		x																										
	0,8	0.031		x																x	x									
	0,9	0.035		x																										
	1	0.039	x	x	x		x				x								x	x	x					x		x		
	1,5	0.059					x		x	x	x		x	x		x	x	x	x	x	x	x	x			x	x	x	x	2, 367, 368, 369, 370
	2	0.079					x		x	x	x		x	x		x	x	x	x	x	x				x	x	x	x	x	
	2,5	0.098					x		x		x		x	x		x	x	x	x	x	x				x	x	x	x	x	
	3	0.118							x							x	x		x	x	x				x	x	x	x	x	
	3,5	0.138																		x					x	x				
	4	0.157														x				x	x				x	x	x		x	
	5	0.197																		x					x	x	x		x	
	6	0.236																								x	x		x	
	10	0.394																								x				
	*CDX (mm)=		0,6	1,1	1,6	2,6	1,5		2,5	2,5	2,5		3,5	3,5		3,5	4	4,5	5	4,5		12	13,5	13,5	5	6,5	6,5	10	16,5	
Scanalatura per anelli elastici Larghezza di taglio nominale in mm	0.7	0,028					x									x				x										
	0,8	0.031					x									x				x										
	0,9	0.035	x				x									x				x										
	1	0.043	x				x													x										
	1,1	0.043	x				x		x							x	x			x										
	1,3	0.051					x		x							x	x			x										
	1,6	0.063					x		x				x			x	x			x										2, 372, 373
	1,85	0.073																		x							x			
	2,15	0.085																		x							x			
	2,65	0.104																		x										
	3,15	0.124																		x										
	4,15	0.163																		x										
	5,15	0.203																		x										
Profilo sferico Larghezza di taglio e (raggio) - mm	1 (R0,5)	0.039(0.020)							x											x										
	1,5(R0.75)	0.059(0.03)							x																					
	1,57(R0.79)	0.062(0.031)							x																					
	2(R1)	0.079(0.039)							x							x				x										
	2,2(R1,1)	0.087(0.043)							x				x			x														2, 374
	2,39(R1,2)	0.094(0.047)							x							x														
	3(R1,5)	0.118(0.059)							x							x				x										
	4(R2)	0.157(0.079)																		x										
	5(R2,5)	0.197(0.098)																		x										
	*CDX (mm)=								2,5				3,5			3,5				4,5										
Smussatura Angolo	45°	45°						x				x			x		x				x						x			2, 375
	30°	30°						x				x					x													
	20°	20°						x				x																		
	15°	10°						x				x																		

X **Soluzione disponibile - qualità F32M/F33M**

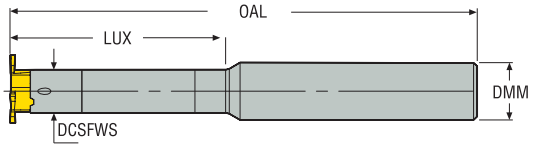
Selezione – testine

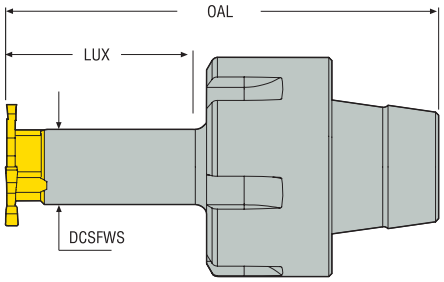


		Diametro fresa in mm (diametro minimo del foro in mm)																									
		6,7	7,7	8,7	10,7	9,7		11,7		13,7		15,7		14,7	17,7	19,7		21,7	36,7	39,7	21,7	24,8	27,7	34,7	50	
		Diametro fresa in inch (diametro minimo del foro in inch)																								
		0.264	0.303	0.343	0.421	0.382		0.343		0.343		0.343		0.579	0.343	0.776		0.343	1.445	1.563		0.976	1.563	1.366	1.969	
		Dimensione connessione DCSFMS in mm																								
		5				6				8				9				12			14				16	
		ZNP																								
mm	inch	3	3	3	3	3	6	3	6	3	6	3	6	6	3	6	3	6	3	6	6	6	6	3	3	6	6	12	Vedere pagina
45°	45°								x				x			x													
Raggio di punta RE	R0.2	R0.008																		x									2, 367, 368, 369, 370
	R0.5	R0.020																		x									
	R0.6	R0.024																		x									
	R0.8	R0.031																		x									
	R1.0	R0.039																		x									
	R1.25	R0.049																		x									
	R1.5	R0.059																		x									
	R2.0	R0.079																		x									
	R2.25	R0.089																		x									
	R2.5	R0.098																		x									
	R3.0	R0.118																		x									
Tipo di filettatura	In mm Parziale							x	x		x	x			x				x						x	x			2, 375
	In mm Full	x	x			x				x					x	x			x										
	Withworth							x				x			x														
	UN														x														

x **Soluzione disponibile - qualità F32M/F33M**

Selezione - steli





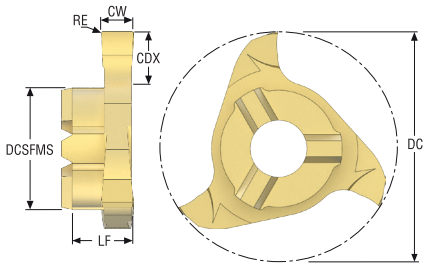
		Diametro codolo										Diametro codolo				Dimensione porta pinze ER			
		DMM = 8		DMM = 10		DMM = 12		DMM = 16		DMM = 20		DMM=0.5		DMM=0.625		ER11	ER16	ER25	ER32
		OAL	LUX	OAL	LUX	OAL	LUX	OAL	LUX	OAL	LUX	OAL	LUX	OAL	LUX	LUX mm (inch)			
Dimensione connessione (DCSFWS)	5	65	17	60	10														
		75	25																
		85	35																
	6			60	15	80	21					3.15	0.83			16 (0.63)			
						90	30					3.54	1.18						
						100	42					3.94	1.65						
	8			60	17	95	29					3.74	1.14			16 (0.63)	22 (0.866)		
						110	42					4.33	1.65						
						120	56					4.72	2.2						
	9							80	18					3.15	0.71	22 (0.866)	22 (0.866)	22 (0.866)	
								100	32					3.94	1.26				
								110	45					4.33	1.77				
								130	64					5.12	2.52				
	12							80	24					3.15	0.94	30 (1.181)	30 (1.181)	30 (1.181)	
						100	55	100	42					3.94	1.65				
						130	85	130	60					5.12	2.36				
								160	85					6.3	3.35				
	14							100	42					3.94	1.65			19 (0.748)	19 (0.748)
								130	60					5.12	2.36			35 (1.378)	35 (1.378)
								160	85	100	35			6.3	3.35				
	16							125	60										
								155	90										
								185	120	100	32								
Vedere pagina		2, 382, 383-2, 384														2, 385			

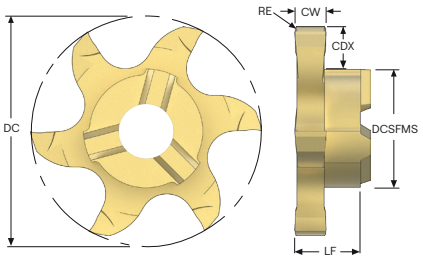
Le dimensioni OAL e LUX sono indicate per un utensile con 3 denti.

	Codolo in acciaio
	Codolo in metallo duro

335.14 Inserto: scanalatura generica







—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

									Qualità
Codice di ordinazione	**DC**	**CW**	**CDX**	**RE**	**DCSFMS**	**LF**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-067050.05Z3-M01	6,7 *0.264*	0,5 *0.020*	0,6 *0.024*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-067090C.05Z3-M01	6,7 *0.264*	0,94 *0.037*	0,6 *0.024*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-067100.05Z3-M01	6,7 *0.264*	1,0 *0.039*	0,6 *0.024*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-067100C.05Z3-M01	6,7 *0.264*	1,04 *0.041*	0,6 *0.024*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-067110C.05Z3-M01	6,7 *0.264*	1,21 *0.048*	0,6 *0.024*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-077030.05Z3-M01	7,7 *0.303*	0,3 *0.012*	1,1 *0.043*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-077040.05Z3-M01	7,7 *0.303*	0,4 *0.016*	1,1 *0.043*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-077050.05Z3-M01	7,7 *0.303*	0,5 *0.020*	1,1 *0.043*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-077060.05Z3-M01	7,7 *0.303*	0,6 *0.024*	1,1 *0.043*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-077070.05Z3-M01	7,7 *0.303*	0,7 *0.028*	1,1 *0.043*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-077080.05Z3-M01	7,7 *0.303*	0,8 *0.031*	1,1 *0.043*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-077090.05Z3-M01	7,7 *0.303*	0,9 *0.035*	1,1 *0.043*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-077100.05Z3-M01	7,7 *0.303*	1,0 *0.039*	1,1 *0.043*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-087100.05Z3-M01	8,7 *0.343*	1,0 *0.039*	1,6 *0.063*	–	4,8 *0.189*	3,35 *0.132*	3	○	■
R335.14-097100.06Z3-M01	9,7 *0.382*	1,0 *0.039*	1,5 *0.059*	0,1 *0.004*	6,0 *0.236*	3,35 *0.132*	3	•	■
R335.14-097150.06Z3-M01	9,7 *0.382*	1,5 *0.059*	1,5 *0.059*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	•	■
R335.14-097200.06Z3-M01	9,7 *0.382*	2,0 *0.079*	1,5 *0.059*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	•	■
R335.14-097250.06Z3-M01	9,7 *0.382*	2,5 *0.098*	1,5 *0.059*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	•	■
R335.14-107030.05Z3-M01	10,7 *0.421*	0,3 *0.012*	2,6 *0.102*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-107040.05Z3-M01	10,7 *0.421*	0,4 *0.016*	2,6 *0.102*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-107050.05Z3-M01	10,7 *0.421*	0,5 *0.020*	2,6 *0.102*	–	4,8 *0.189*	3,25 *0.128*	3	○	■
R335.14-117150.06Z3-M01	11,7 *0.461*	1,5 *0.059*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117250.06Z3-M01	11,7 *0.461*	2,5 *0.098*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117300.06Z3-M01	11,7 *0.461*	3,0 *0.118*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117200.06Z3-M01	11,7 *0.461*	2,0 *0.079*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	3	○	■

									Qualità
Codice di ordinazione	DC	CW	CDX	RE	DCSFMS	LF	ZNP	CZCMS	Rivestite
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-117150.06Z6-M01	11,7 *0.461*	1,5 *0.059*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	6	○	■
R335.14-117200.06Z6-M01	11,7 *0.461*	2,0 *0.079*	2,5 *0.098*	0,2 *0.008*	6,0 *0.236*	3,5 *0.138*	6	○	■
R335.14-137100.08Z3-M01	13,7 *0.539*	1,0 *0.039*	2,5 *0.098*	0,1 *0.004*	8,0 *0.315*	4,35 *0.171*	3	●	■
R335.14-137150.08Z3-M01	13,7 *0.539*	1,5 *0.059*	2,5 *0.098*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	●	■
R335.14-137200.08Z3-M01	13,7 *0.539*	2,0 *0.079*	2,5 *0.098*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	●	■
R335.14-137250.08Z3-M01	13,7 *0.539*	2,5 *0.098*	2,5 *0.098*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	●	■
R335.14-157150.08Z3-M01	15,7 *0.618*	1,5 *0.059*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	○	■
R335.14-157200.08Z3-M01	15,7 *0.618*	2,0 *0.079*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	○	■
R335.14-157250.08Z3-M01	15,7 *0.618*	2,5 *0.098*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	3	○	■
R335.14-157150.08Z6-M01	15,7 *0.618*	1,5 *0.059*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	6	○	■
R335.14-157200.08Z6-M01	15,7 *0.618*	2,0 *0.079*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	6	○	■
R335.14-157250.08Z6-M01	15,7 *0.618*	2,5 *0.098*	3,5 *0.138*	0,2 *0.008*	8,0 *0.315*	4,5 *0.177*	6	○	■
R335.14-177150.09Z3-M02	17,7 *0.697*	1,5 *0.059*	3,5 *0.138*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	●	■
R335.14-177200.09Z3-M02	17,7 *0.697*	2,0 *0.079*	3,5 *0.138*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	●	■
R335.14-177250.09Z3-M02	17,7 *0.697*	2,5 *0.098*	3,5 *0.138*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	●	■
R335.14-177300.09Z3-M02	17,7 *0.697*	3,0 *0.118*	3,5 *0.138*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	●	■
R335.14-177400.09Z3-M02	17,7 *0.697*	4,0 *0.157*	3,5 *0.138*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	●	■
R335.14-177150.09Z6-M02	17,7 *0.697*	1,5 *0.059*	4,0 *0.157*	0,1 *0.004*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-177200.09Z6-M02	17,7 *0.697*	2,0 *0.079*	4,0 *0.157*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-177250.09Z6-M02	17,7 *0.697*	2,5 *0.098*	4,0 *0.157*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-177300.09Z6-M02	17,7 *0.697*	3,0 *0.118*	4,0 *0.157*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-197150.09Z3-M02	19,7 *0.776*	1,5 *0.059*	4,5 *0.177*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-197200.09Z3-M02	19,7 *0.776*	2,0 *0.079*	4,5 *0.177*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-197250.09Z3-M02	19,7 *0.776*	2,5 *0.098*	4,5 *0.177*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-197150.09Z6-M02	19,7 *0.776*	1,5 *0.059*	5,0 *0.197*	0,1 *0.004*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-197200.09Z6-M02	19,7 *0.776*	2,0 *0.079*	5,0 *0.197*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-197250.09Z6-M02	19,7 *0.776*	2,5 *0.098*	5,0 *0.197*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-197300.09Z6-M02	19,7 *0.776*	3,0 *0.118*	5,0 *0.197*	0,2 *0.008*	9,0 *0.354*	5,75 *0.226*	6	○	■
R335.14-217150.12Z3-M03	21,7 *0.854*	1,5 *0.059*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■
R335.14-217200.12Z3-M03	21,7 *0.854*	2,0 *0.079*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■
R335.14-217250.12Z3-M03	21,7 *0.854*	2,5 *0.098*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■
R335.14-217300.12Z3-M03	21,7 *0.854*	3,0 *0.118*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■
R335.14-217400.12Z3-M03	21,7 *0.854*	4,0 *0.157*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■
R335.14-217500.12Z3-M03	21,7 *0.854*	5,0 *0.197*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	●	■

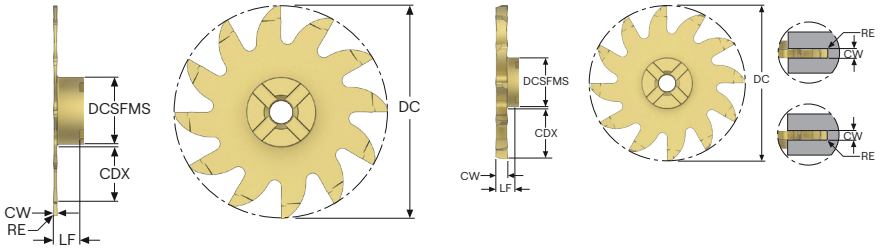
									Qualità
Codice di ordinazione	DC	CW	CDX	RE	DCSFMS	LF	ZNP	CZCMS	Rivestite
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-217100.12Z3-M03	21,7 *0.854*	1,0 *0.039*	4,5 *0.177*	0,1 *0.004*	12,0 *0.472*	5,7 *0.224*	3	○	■
R335.14-217350.12Z3-M03	21,7 *0.854*	3,5 *0.138*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	5,7 *0.224*	3	○	■
R335.14-217400R.12Z3-M03	21,7 *0.854*	4,0 *0.157*	4,5 *0.177*	0,4 *0.016*	12,0 *0.472*	5,7 *0.224*	3	○	■
R335.14-217150.12Z6-M03	21,7 *0.854*	1,5 *0.059*	4,5 *0.177*	0,1 *0.004*	12,0 *0.472*	6,25 *0.246*	6	●	■
R335.14-217200.12Z6-M03	21,7 *0.854*	2,0 *0.079*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	6,25 *0.246*	6	●	■
R335.14-217250.12Z6-M03	21,7 *0.854*	2,5 *0.098*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	6,25 *0.246*	6	●	■
R335.14-217300.12Z6-M03	21,7 *0.854*	3,0 *0.118*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	6,25 *0.246*	6	●	■
R335.14-217400.12Z6-M03	21,7 *0.854*	4,0 *0.157*	4,5 *0.177*	0,2 *0.008*	12,0 *0.472*	6,25 *0.246*	6	●	■
R335.14-217100.12Z6-M03	21,7 *0.854*	1,0 *0.039*	4,5 *0.177*	0,1 *0.004*	12,0 *0.472*	5,85 *0.230*	6	○	■
R335.14-248200.14Z3-M03	24,8 *0.976*	2,0 *0.079*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-248250.14Z3-M03	24,8 *0.976*	2,5 *0.098*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-248300.14Z3-M03	24,8 *0.976*	3,0 *0.118*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-248350.14Z3-M03	24,8 *0.976*	3,5 *0.138*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-248400.14Z3-M03	24,8 *0.976*	4,0 *0.157*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-248500.14Z3-M03	24,8 *0.976*	5,0 *0.197*	5,0 *0.197*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	○	■
R335.14-277150.14Z3-M03	27,7 *1.091*	1,5 *0.059*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277200.14Z3-M03	27,7 *1.091*	2,0 *0.079*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277250.14Z3-M03	27,7 *1.091*	2,5 *0.098*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277300.14Z3-M03	27,7 *1.091*	3,0 *0.118*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277350.14Z3-M03	27,7 *1.091*	3,5 *0.138*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277400.14Z3-M03	27,7 *1.091*	4,0 *0.157*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,5 *0.256*	3	●	■
R335.14-277500.14Z3-M03	27,7 *1.091*	5,0 *0.197*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	●	■
R335.14-277600.14Z3-M03	27,7 *1.091*	6,0 *0.236*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,6 *0.260*	3	●	■
R335.14-2771000.14Z3-M03	27,7 *1.091*	10,0 *0.394*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	10,05 *0.396*	3	○	■
R335.14-277150.14Z6-M03	27,7 *1.091*	1,5 *0.059*	6,5 *0.256*	0,1 *0.004*	14,0 *0.551*	6,45 *0.254*	6	●	■
R335.14-277200.14Z6-M03	27,7 *1.091*	2,0 *0.079*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,4 *0.252*	6	●	■
R335.14-277250.14Z6-M03	27,7 *1.091*	2,5 *0.098*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,4 *0.252*	6	●	■
R335.14-277300.14Z6-M03	27,7 *1.091*	3,0 *0.118*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,4 *0.252*	6	●	■
R335.14-277400.14Z6-M03	27,7 *1.091*	4,0 *0.157*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,4 *0.252*	6	●	■
R335.14-277500.14Z6-M03	27,7 *1.091*	5,0 *0.197*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,35 *0.250*	6	●	■
R335.14-277600.14Z6-M03	27,7 *1.091*	6,0 *0.236*	6,5 *0.256*	0,2 *0.008*	14,0 *0.551*	6,35 *0.250*	6	●	■
R335.14-277100.14Z6-M03	27,7 *1.091*	1,0 *0.039*	6,5 *0.256*	0,1 *0.004*	14,0 *0.551*	6,05 *0.238*	6	○	■
R335.14-347150.14Z6-M03	34,7 *1.366*	1,5 *0.059*	10,0 *0.394*	0,1 *0.004*	14,0 *0.551*	6,25 *0.246*	6	●	■
R335.14-347200.14Z6-M03	34,7 *1.366*	2,0 *0.079*	10,0 *0.394*	0,2 *0.008*	14,0 *0.551*	6,25 *0.246*	6	●	■

									Qualità
Codice di ordinazione	DC	CW	CDX	RE	DCSFMS	LF	ZNP	CZCMS	Rivestite
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-347250.14Z6-M03	34,7 *1.366*	2,5 *0.098*	10,0 *0.394*	0,2 *0.008*	14,0 *0.551*	6,25 *0.246*	6	●	■
R335.14-347300.14Z6-M03	34,7 *1.366*	3,0 *0.118*	10,0 *0.394*	0,2 *0.008*	14,0 *0.551*	6,25 *0.246*	6	●	■
R335.14-367050.12Z6-M03	36,7 *1.445*	0,5 *0.020*	12,0 *0.472*	–	12,0 *0.472*	6,0 *0.236*	6	○	■
R335.14-367060.12Z6-M03	36,7 *1.445*	0,6 *0.024*	12,0 *0.472*	–	12,0 *0.472*	5,7 *0.224*	6	○	■
R335.14-367080.12Z6-M03	36,7 *1.445*	0,8 *0.031*	12,0 *0.472*	–	12,0 *0.472*	5,9 *0.232*	6	○	■
R335.14-367100.12Z6-M03	36,7 *1.445*	1,0 *0.039*	12,0 *0.472*	0,1 *0.004*	12,0 *0.472*	6,15 *0.242*	6	○	■
R335.14-367150.12Z6-M03	36,7 *1.445*	1,5 *0.059*	12,0 *0.472*	0,1 *0.004*	12,0 *0.472*	6,25 *0.246*	6	○	■
R335.14-397040.12Z6-M03	39,7 *1.563*	0,4 *0.016*	13,5 *0.531*	–	12,0 *0.472*	6,0 *0.236*	6	○	■
R335.14-397050.12Z6-M03	39,7 *1.563*	0,5 *0.020*	13,5 *0.531*	–	12,0 *0.472*	6,0 *0.236*	6	○	■
R335.14-397060.12Z6-M03	39,7 *1.563*	0,6 *0.024*	13,5 *0.531*	–	12,0 *0.472*	5,7 *0.224*	6	○	■
R335.14-397080.12Z6-M03	39,7 *1.563*	0,8 *0.031*	13,5 *0.531*	–	12,0 *0.472*	5,9 *0.232*	6	○	■
R335.14-397100.12Z6-M03	39,7 *1.563*	1,0 *0.039*	13,5 *0.531*	0,1 *0.004*	12,0 *0.472*	5,85 *0.230*	6	○	■
R335.14-397150.12Z6-M03	39,7 *1.563*	1,5 *0.059*	13,5 *0.531*	0,1 *0.004*	12,0 *0.472*	6,3 *0.248*	6	○	■

● = Standard a magazzino O = Disponibile su richiesta (entro 2 settimane)

335.14 Inserto: scanalatura generica

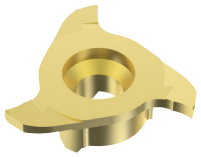


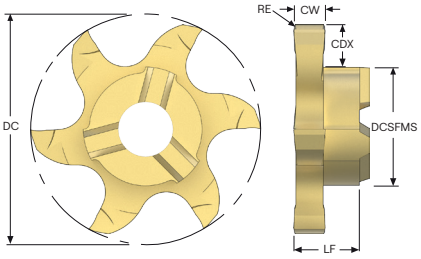


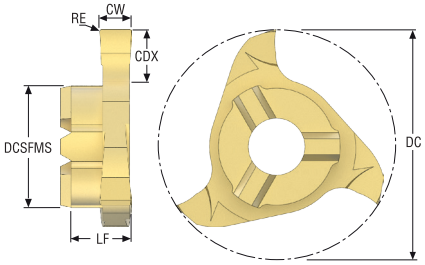
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

										Qualità
Codice di ordinazione	DC	CW	CDX	RE	DCSFMS	LF	ZNP	ZEFP	CZCMS	Rivestite
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*				F33M
R335.14-500050.16Z12-M02	50,0 *1.969*	0,5 *0.020*	16,5 *0.650*	–	16,0 *0.630*	6,35 *0.250*	12	12	○	■
R335.14-500100.16Z12-M02	50,0 *1.969*	1,0 *0.039*	16,5 *0.650*	–	16,0 *0.630*	6,15 *0.242*	12	12	○	■
R335.14-500150.16Z12-M02	50,0 *1.969*	1,5 *0.059*	16,5 *0.650*	0,1 *0.004*	16,0 *0.630*	6,25 *0.246*	12	6	○	■
R335.14-500200.16Z12-M02	50,0 *1.969*	2,0 *0.079*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■
R335.14-500250.16Z12-M02	50,0 *1.969*	2,5 *0.098*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■
R335.14-500300.16Z12-M02	50,0 *1.969*	3,0 *0.118*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■
R335.14-500400.16Z12-M02	50,0 *1.969*	4,0 *0.157*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■
R335.14-500500.16Z12-M02	50,0 *1.969*	5,0 *0.197*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■
R335.14-500600.16Z12-M02	50,0 *1.969*	6,0 *0.236*	16,5 *0.650*	0,2 *0.008*	16,0 *0.630*	6,45 *0.254*	12	6	○	■

335.14 Inserto: Per scanalatura per anelli elastici





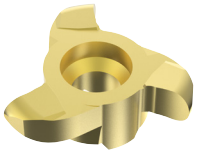


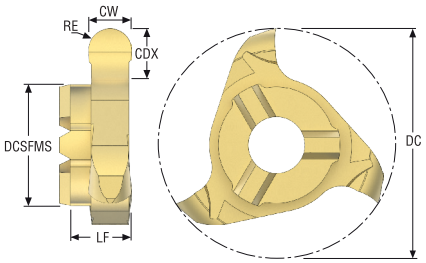
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

									Qualità
Codice di ordinazione	**DC**	**CW**	**CDX**	**DCSFMS**	**LF**	**RE**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-097070.06Z3-M01	9,7 *0.382*	0,74 *0.029*	1,5 *0.059*	6,0 *0.236*	3,35 *0.132*	–	3	●	■
R335.14-097080.06Z3-M01	9,7 *0.382*	0,84 *0.033*	1,5 *0.059*	6,0 *0.236*	3,35 *0.132*	–	3	●	■
R335.14-097090.06Z3-M01	9,7 *0.382*	0,94 *0.037*	1,5 *0.059*	6,0 *0.236*	3,35 *0.132*	–	3	●	■
R335.14-097110.06Z3-M01	9,7 *0.382*	1,21 *0.048*	1,5 *0.059*	6,0 *0.236*	3,5 *0.138*	–	3	●	■
R335.14-097130.06Z3-M01	9,7 *0.382*	1,41 *0.056*	1,5 *0.059*	6,0 *0.236*	3,5 *0.138*	0,1 *0.004*	3	●	■
R335.14-097100C.06Z3-M01	9,7 *0.382*	1,04 *0.041*	1,5 *0.059*	6,0 *0.236*	3,35 *0.132*	–	3	○	■
R335.14-097160C.06Z3-M01	9,7 *0.382*	1,71 *0.067*	1,5 *0.059*	6,0 *0.236*	3,5 *0.138*	0,1 *0.004*	3	○	■
R335.14-117110C.06Z3-M01	11,7 *0.461*	1,21 *0.048*	2,5 *0.098*	6,0 *0.236*	3,5 *0.138*	–	3	○	■
R335.14-117130C.06Z3-M01	11,7 *0.461*	1,41 *0.056*	2,5 *0.098*	6,0 *0.236*	3,5 *0.138*	0,1 *0.004*	3	○	■
R335.14-117160C.06Z3-M01	11,7 *0.461*	1,71 *0.067*	2,5 *0.098*	6,0 *0.236*	3,5 *0.138*	0,1 *0.004*	3	○	■
R335.14-157160C.08Z3-M01	15,7 *0.618*	1,71 *0.067*	3,5 *0.138*	8,0 *0.315*	4,5 *0.177*	0,1 *0.004*	3	○	■
R335.14-177110.09Z3-M02	17,7 *0.697*	1,21 *0.048*	3,5 *0.138*	9,0 *0.354*	5,75 *0.226*	–	3	●	■
R335.14-177130.09Z3-M02	17,7 *0.697*	1,41 *0.056*	3,5 *0.138*	9,0 *0.354*	5,75 *0.226*	0,1 *0.004*	3	●	■
R335.14-177160.09Z3-M02	17,7 *0.697*	1,71 *0.067*	3,5 *0.138*	9,0 *0.354*	5,75 *0.226*	0,1 *0.004*	3	●	■
R335.14-177070C.09Z3-M02	17,7 *0.697*	0,74 *0.029*	1,5 *0.059*	9,0 *0.354*	5,65 *0.222*	–	3	○	■
R335.14-177080C.09Z3-M02	17,7 *0.697*	0,84 *0.033*	1,7 *0.067*	9,0 *0.354*	5,65 *0.222*	–	3	○	■
R335.14-177090C.09Z3-M02	17,7 *0.697*	0,94 *0.037*	1,9 *0.075*	9,0 *0.354*	5,65 *0.222*	–	3	○	■
R335.14-177110C.09Z6-M02	17,7 *0.697*	1,21 *0.048*	4,0 *0.157*	9,0 *0.354*	5,75 *0.226*	–	6	○	■
R335.14-177130C.09Z6-M02	17,7 *0.697*	1,41 *0.056*	4,0 *0.157*	9,0 *0.354*	5,75 *0.226*	–	6	○	■
R335.14-177160C.09Z6-M02	17,7 *0.697*	1,71 *0.067*	4,0 *0.157*	9,0 *0.354*	5,75 *0.226*	–	6	○	■
R335.14-217160.12Z3-M03	21,7 *0.854*	1,71 *0.067*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,1 *0.004*	3	●	■
R335.14-217185.12Z3-M03	21,7 *0.854*	1,96 *0.077*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	●	■
R335.14-217215.12Z3-M03	21,7 *0.854*	2,26 *0.089*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	●	■
R335.14-217265.12Z3-M03	21,7 *0.854*	2,76 *0.109*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	●	■
R335.14-217315.12Z3-M03	21,7 *0.854*	3,26 *0.128*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	●	■

									Qualità
Codice di ordinazione	**DC**	**CW**	**CDX**	**DCSFMS**	**LF**	**RE**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-217415.12Z3-M03	21,7 *0.854*	4,26 *0.168*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	•	■
R335.14-217515.12Z3-M03	21,7 *0.854*	5,26 *0.207*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,15 *0.006*	3	•	■
R335.14-217070C.12Z3-M03	21,7 *0.854*	0,74 *0.029*	1,5 *0.059*	12,0 *0.472*	5,6 *0.220*	–	3	○	■
R335.14-217080C.12Z3-M03	21,7 *0.854*	0,84 *0.033*	1,7 *0.067*	12,0 *0.472*	5,6 *0.220*	–	3	○	■
R335.14-217090C.12Z3-M03	21,7 *0.854*	0,94 *0.037*	1,9 *0.075*	12,0 *0.472*	5,6 *0.220*	–	3	○	■
R335.14-217100C.12Z3-M03	21,7 *0.854*	1,04 *0.041*	2,1 *0.083*	12,0 *0.472*	5,6 *0.220*	–	3	○	■
R335.14-217110C.12Z3-M03	21,7 *0.854*	1,21 *0.048*	2,5 *0.098*	12,0 *0.472*	5,7 *0.224*	–	3	○	■
R335.14-217130C.12Z3-M03	21,7 *0.854*	1,41 *0.056*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	–	3	○	■
R335.14-217515R.12Z3-M03	21,7 *0.854*	5,29 *0.208*	4,5 *0.177*	12,0 *0.472*	5,7 *0.224*	0,4 *0.016*	3	○	■
R335.14-277185C.14Z6-M03	27,7 *1.091*	1,96 *0.077*	6,5 *0.256*	14,0 *0.551*	6,35 *0.250*	0,15 *0.006*	6	○	■
R335.14-277215C.14Z6-M03	27,7 *1.091*	2,26 *0.089*	6,5 *0.256*	14,0 *0.551*	6,16 *0.243*	0,15 *0.006*	6	○	■

335.14 Inserto: Profilo sferico

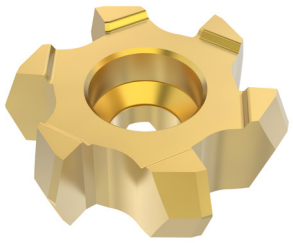


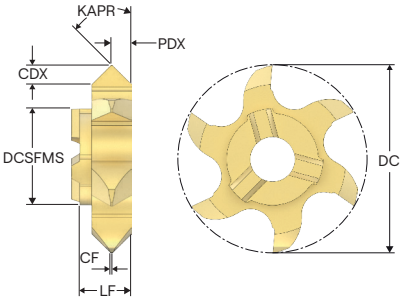


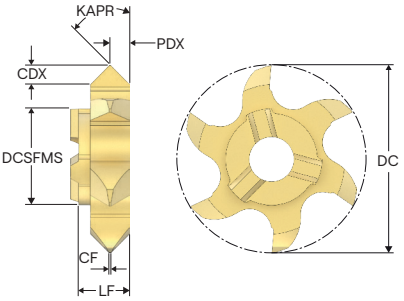
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

									Qualità
Codice di ordinazione	**DC**	**CW**	**CDX**	**RE**	**DCSFMS**	**LF**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-117R050.06Z3-M01	11,7 *0.461*	1,0 *0.039*	2,5 *0.098*	0,5 *0.020*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R075.06Z3-M01	11,7 *0.461*	1,5 *0.059*	2,5 *0.098*	0,75 *0.030*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R079.06Z3-M01	11,7 *0.461*	1,57 *0.062*	2,5 *0.098*	0,787 *0.031*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R100.06Z3-M01	11,7 *0.461*	2,0 *0.079*	2,5 *0.098*	1,0 *0.039*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R119.06Z3-M01	11,7 *0.461*	2,39 *0.094*	2,5 *0.098*	1,194 *0.047*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R150.06Z3-M01	11,7 *0.461*	3,0 *0.118*	2,5 *0.098*	1,5 *0.059*	6,0 *0.236*	3,5 *0.138*	3	○	■
R335.14-117R11.06Z3-M01	11,7 *0.461*	2,2 *0.087*	2,5 *0.098*	1,1 *0.043*	6,0 *0.236*	3,5 *0.138*	3	•	■
R335.14-157R110.08Z3-M01	15,7 *0.618*	2,2 *0.087*	3,5 *0.138*	1,1 *0.043*	8,0 *0.315*	4,5 *0.177*	3	○	■
R335.14-177R10.09Z3-M02	17,7 *0.697*	2,0 *0.079*	3,5 *0.138*	1,0 *0.039*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-177R12.09Z3-M02	17,7 *0.697*	2,39 *0.094*	3,5 *0.138*	1,194 *0.047*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-177R15.09Z3-M02	17,7 *0.697*	3,0 *0.118*	3,5 *0.138*	1,5 *0.059*	9,0 *0.354*	5,75 *0.226*	3	○	■
R335.14-177R11.09Z3-M02	17,7 *0.697*	2,2 *0.087*	3,5 *0.138*	1,1 *0.043*	9,0 *0.354*	5,75 *0.226*	3	•	■
R335.14-217R05.12Z3-M03	21,7 *0.854*	1,0 *0.039*	4,5 *0.177*	0,5 *0.020*	12,0 *0.472*	5,6 *0.220*	3	•	■
R335.14-217R10.12Z3-M03	21,7 *0.854*	2,0 *0.079*	4,5 *0.177*	1,0 *0.039*	12,0 *0.472*	5,75 *0.226*	3	•	■
R335.14-217R15.12Z3-M03	21,7 *0.854*	3,0 *0.118*	4,5 *0.177*	1,5 *0.059*	12,0 *0.472*	5,75 *0.226*	3	•	■
R335.14-217R20.12Z3-M03	21,7 *0.854*	4,0 *0.157*	4,5 *0.177*	2,0 *0.079*	12,0 *0.472*	5,75 *0.226*	3	•	■
R335.14-217R25.12Z3-M03	21,7 *0.854*	5,0 *0.197*	4,5 *0.177*	2,5 *0.098*	12,0 *0.472*	5,75 *0.226*	3	•	■

335.14 Inserto: Doppia smussatura







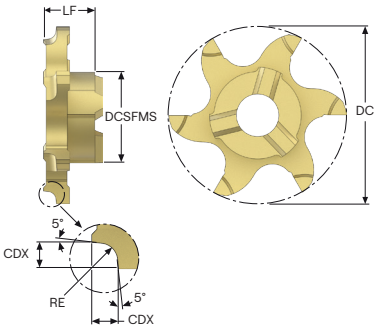
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

										Qualità
Codice di ordinazione	**DC**	**KAPR°**	**CDX**	**CF**	**PDX**	**DCSFMS**	**LF**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	*Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm			F32M
R335.14-097C45.06Z6-M01	9,7 *0.382*	45,0 *0.047*	1,2 *0.008*	0,2 *0.059*	1,5 *0.236*	6,0 *0.134*	3,4	6	●	■
R335.14-097C30.06Z6-M01	9,7 *0.382*	60,0 *0.028*	0,7 *0.008*	0,2 *0.069*	1,75 *0.236*	6,0 *0.142*	3,6	6	○	■
R335.14-097C20.06Z6-M01	9,7 *0.382*	70,0 *0.018*	0,45 *0.008*	0,2 *0.069*	1,75 *0.236*	6,0 *0.142*	3,6	6	○	■
R335.14-097C15.06Z6-M01	9,7 *0.382*	75,0 *0.014*	0,35 *0.008*	0,2 *0.069*	1,75 *0.236*	6,0 *0.142*	3,6	6	○	■
R335.14-137C45.08Z6-M01	13,7 *0.539*	45,0 *0.071*	1,8 *0.008*	0,2 *0.089*	2,25 *0.315*	8,0 *0.181*	4,6	6	●	■
R335.14-137C30.08Z6-M01	13,7 *0.539*	60,0 *0.028*	0,7 *0.008*	0,2 *0.089*	2,25 *0.315*	8,0 *0.181*	4,6	6	○	■
R335.14-137C20.08Z6-M01	13,7 *0.539*	70,0 *0.018*	0,45 *0.008*	0,2 *0.089*	2,25 *0.315*	8,0 *0.181*	4,6	6	○	■
R335.14-137C15.08Z6-M01	13,7 *0.539*	75,0 *0.014*	0,35 *0.008*	0,2 *0.089*	2,25 *0.315*	8,0 *0.181*	4,6	6	○	■
R335.14-147C45.09Z6-M02	14,7 *0.579*	45,0 *0.063*	1,6 *0.020*	0,5 *0.083*	2,1 *0.354*	9,0 *0.219*	5,55	6	○	■
R335.14-177C45.09Z6-M02	17,7 *0.697*	45,0 *0.087*	2,2 *0.008*	0,2 *0.110*	2,8 *0.354*	9,0 *0.228*	5,8	6	●	■
R335.14-177C30.09Z6-M02	17,7 *0.697*	60,0 *0.059*	1,5 *0.008*	0,2 *0.110*	2,8 *0.354*	9,0 *0.230*	5,85	6	○	■
R335.14-217C45.12Z6-M03	21,7 *0.854*	45,0 *0.079*	2,0 *0.008*	0,2 *0.091*	2,3 *0.472*	12,0 *0.238*	6,05	6	●	■
R335.14-277C45.14Z6-M03	27,7 *1.091*	45,0 *0.079*	2,0 *0.008*	0,2 *0.102*	2,6 *0.551*	14,0 *0.256*	6,5	6	○	■

● = Standard a magazzino O = Disponibile su richiesta (entro 2 settimane)

335.14 Inserto:





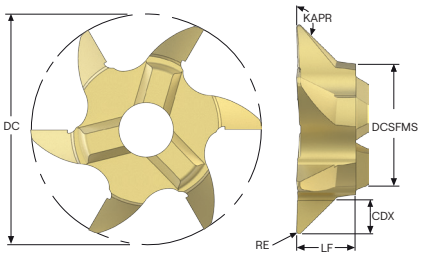
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

								Qualità
Codice di ordinazione	**DC**	**CDX**	**RE**	**DCSFMS**	**LF**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-217CR020.12Z6-M03	21,7 *0.854*	0,7 *0.028*	0,2 *0.008*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR050.12Z6-M03	21,7 *0.854*	1,0 *0.039*	0,5 *0.020*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR060.12Z6-M03	21,7 *0.854*	1,1 *0.043*	0,6 *0.024*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR080.12Z6-M03	21,7 *0.854*	1,3 *0.051*	0,8 *0.031*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR100.12Z6-M03	21,7 *0.854*	1,5 *0.059*	1,0 *0.039*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR125.12Z6-M03	21,7 *0.854*	1,75 *0.069*	1,25 *0.049*	12,0 *0.472*	6,35 *0.250*	6	○	■
R335.14-217CR150.12Z6-M03	21,7 *0.854*	2,0 *0.079*	1,5 *0.059*	12,0 *0.472*	6,05 *0.238*	6	○	■
R335.14-217CR200.12Z6-M03	21,7 *0.854*	2,5 *0.098*	2,0 *0.079*	12,0 *0.472*	6,05 *0.238*	6	○	■
R335.14-217CR225.12Z6-M03	21,7 *0.854*	2,75 *0.108*	2,25 *0.089*	12,0 *0.472*	6,05 *0.238*	6	○	■
R335.14-217CR250.12Z6-M03	21,7 *0.854*	3,0 *0.118*	2,5 *0.098*	12,0 *0.472*	6,05 *0.238*	6	○	■
R335.14-217CR300.12Z6-M03	21,7 *0.854*	3,5 *0.138*	3,0 *0.118*	12,0 *0.472*	6,05 *0.238*	6	○	■

● = Standard a magazzino O = Disponibile su richiesta (entro 2 settimane)

335.14 Inserto: 45°



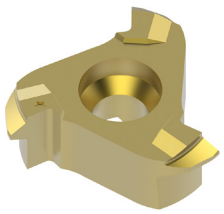


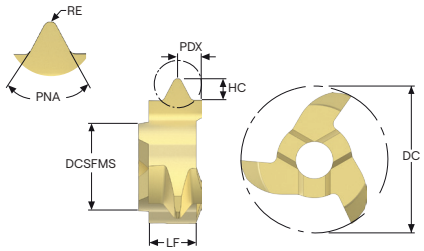
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 389
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

									Qualità
Codice di ordinazione	**DC**	**KAPRS°**	**CDX**	**RE**	**DCSFMS**	**LF**	**ZNP**	**CZCMS**	**Rivestite**
	mm *Inch*	*Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm			F32M
R335.14-117DT45.06Z6-M01	11,7 *0.461*	135,0 *0.098*	2,5 *0.008*	0,2 *0.236*	6,0 *0.138*	3,5	6	○	■
R335.14-157DT45.08Z6-M01	15,7 *0.618*	135,0 *0.098*	2,5 *0.008*	0,2 *0.315*	8,0 *0.177*	4,5	6	○	■
R335.14-177DT45.09Z6-M02	17,7 *0.697*	135,0 *0.157*	4,0 *0.008*	0,2 *0.354*	9,0 *0.226*	5,75	6	○	■
R335.14-217DT45.12Z6-M03	21,7 *0.854*	135,0 *0.157*	4,0 *0.008*	0,2 *0.472*	12,0 *0.244*	6,2	6	○	■

● = Standard a magazzino O = Disponibile su richiesta (entro 2 settimane)

335.14 Inserto: Profilo filettatura Whitworth

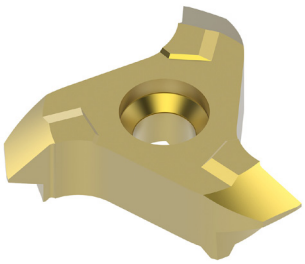


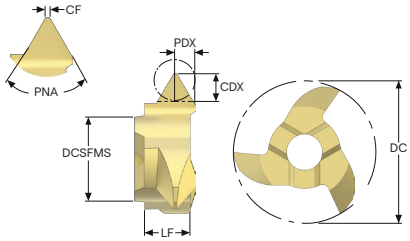


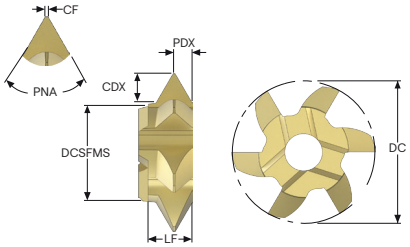
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

												Qualità
Codice di ordinazione	Passo		DC	RE	DCSFMS	HC	LF	PDX	PNA	ZEFP	CZCMS	Rivestite
	mm	TPIX	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-117WXF11.06Z3	–	11	11,7 *0.461*	0,31 *0.012*	6,0 *0.236*	1,48 *0.058*	3,6 *0.142*	1,6 *0.063*	55,0 *2.165*	3	•	■
R335.14-177WXF11.09Z3	–	11	17,7 *0.697*	0,31 *0.012*	9,0 *0.354*	1,48 *0.058*	5,85 *0.230*	1,45 *0.057*	55,0 *2.165*	3	•	■
R335.14-117WXF14.06Z3	–	14	11,7 *0.461*	0,24 *0.009*	6,0 *0.236*	1,16 *0.046*	3,6 *0.142*	1,3 *0.051*	55,0 *2.165*	3	•	■
R335.14-157WXF14.08Z3	–	14	15,7 *0.618*	0,24 *0.009*	8,0 *0.315*	1,17 *0.046*	4,6 *0.181*	1,5 *0.059*	55,0 *2.165*	3	•	■
R335.14-177WXF14.09Z3	–	14	17,7 *0.697*	0,24 *0.009*	9,0 *0.354*	1,16 *0.046*	5,85 *0.230*	1,25 *0.049*	55,0 *2.165*	3	•	■
R335.14-117WXF19.06Z3	–	19	11,7 *0.461*	0,18 *0.007*	6,0 *0.236*	0,86 *0.034*	3,6 *0.142*	1,1 *0.043*	55,0 *2.165*	3	•	■
R335.14-177WXF19.09Z3	–	19	17,7 *0.697*	0,18 *0.007*	9,0 *0.354*	0,856 *0.034*	5,85 *0.230*	0,95 *0.037*	55,0 *2.165*	3	•	■

335.14 Inserto: Filettatura Profilo parziale



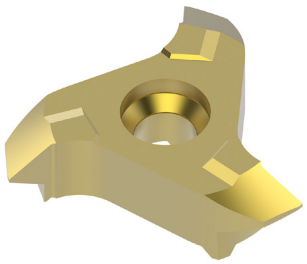


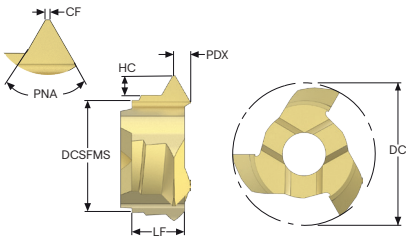


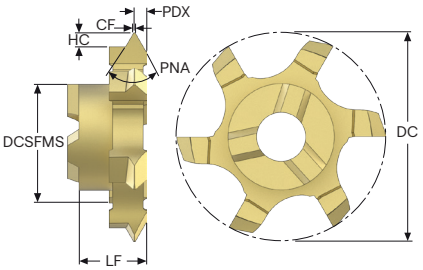
—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

												Qualità
Codice di ordinazione	Passo		DC	CF	CDX	DCSFMS	LF	PDX	PNA	ZEFP	CZCMS	Rivestite
	mm	TPI	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-111MNP200300.06Z6	2-3	0.079-0.118	11,1 *0.437*	0,17 *0.007*	1,78 *0.070*	6,0 *0.236*	3,2 *0.126*	1,4 *0.055*	60,0 *2.362*	6	○	■
R335.14-117MNP100200.06Z3	1-2	0.039-0.079	11,7 *0.461*	0,13 *0.005*	1,25 *0.049*	6,0 *0.236*	3,6 *0.142*	0,8 *0.031*	60,0 *2.362*	3	●	■
R335.14-117MNP200300.06Z3	2-3	0.079-0.118	11,7 *0.461*	0,25 *0.010*	1,78 *0.070*	6,0 *0.236*	3,6 *0.142*	1,2 *0.047*	60,0 *2.362*	3	●	■
R335.14-117MNP100200.06Z6	1-2	0.039-0.079	11,7 *0.461*	0,06 *0.002*	1,25 *0.049*	6,0 *0.236*	3,6 *0.142*	1,04 *0.041*	60,0 *2.362*	6	○	■
R335.14-132MNP150275.08Z6	1,5-2,75	0.059-0.108	13,2 *0.520*	0,13 *0.005*	1,67 *0.066*	8,0 *0.315*	4,2 *0.165*	1,3 *0.051*	60,0 *2.362*	6	○	■
R335.14-133MNP200300.08Z6	2-3	0.079-0.118	13,3 *0.524*	0,17 *0.007*	1,78 *0.070*	8,0 *0.315*	4,2 *0.165*	2,5 *0.098*	60,0 *2.362*	6	○	■
R335.14-157MNP150275.08Z3	1,5-2,75	0.059-0.108	15,7 *0.618*	0,19 *0.007*	1,67 *0.066*	8,0 *0.315*	4,6 *0.181*	1,1 *0.043*	60,0 *2.362*	3	●	■
R335.14-157MNP250300.08Z3	2,5-3	0.098-0.118	15,7 *0.618*	0,31 *0.012*	1,78 *0.070*	8,0 *0.315*	4,6 *0.181*	1,2 *0.047*	60,0 *2.362*	3	●	■
R335.14-177MNP100200.09Z3	1-2	0.039-0.079	17,7 *0.697*	0,12 *0.005*	1,19 *0.047*	9,0 *0.354*	5,85 *0.230*	1,15 *0.045*	60,0 *2.362*	3	●	■
R335.14-177MNP150275.09Z3	1,5-2,75	0.059-0.108	17,7 *0.697*	0,19 *0.007*	1,62 *0.064*	9,0 *0.354*	5,85 *0.230*	1,25 *0.049*	60,0 *2.362*	3	●	■
R335.14-177MNP200375.09Z3	2-3,75	0.079-0.148	17,7 *0.697*	0,25 *0.010*	2,22 *0.087*	9,0 *0.354*	5,85 *0.230*	1,65 *0.065*	60,0 *2.362*	3	●	■
R335.14-177MNP300550.09Z3	3-5,5	0.118-0.217	17,7 *0.697*	0,38 *0.015*	3,25 *0.128*	9,0 *0.354*	5,85 *0.230*	2,25 *0.089*	60,0 *2.362*	3	●	■
R335.14-217MNP100200.12Z3	1-2	0.039-0.079	21,7 *0.854*	0,12 *0.005*	1,19 *0.047*	12,0 *0.472*	5,85 *0.230*	1,25 *0.049*	60,0 *2.362*	3	●	■
R335.14-217MNP200375.12Z3	2-3,75	0.079-0.148	21,7 *0.854*	0,25 *0.010*	2,22 *0.087*	12,0 *0.472*	5,85 *0.230*	1,65 *0.065*	60,0 *2.362*	3	●	■
R335.14-217MNP250450.12Z3	2,5-4,5	0.098-0.177	21,7 *0.854*	0,25 *0.010*	2,7 *0.106*	12,0 *0.472*	5,85 *0.230*	2,15 *0.085*	60,0 *2.362*	3	●	■
R335.14-217MNP350600.12Z3	3,5-6	0.138-0.236	21,7 *0.854*	0,44 *0.017*	3,52 *0.139*	12,0 *0.472*	5,85 *0.230*	2,65 *0.104*	60,0 *2.362*	3	●	■
R335.14-277MNP250500.14Z3	2,5-5	0.098-0.197	27,7 *1.091*	0,37 *0.015*	2,93 *0.115*	14,0 *0.551*	6,6 *0.260*	2,6 *0.102*	60,0 *2.362*	3	●	■
R335.14-277MNP400600.14Z3	4-6	0.157-0.236	27,7 *1.091*	0,5 *0.020*	4,6 *0.181*	14,0 *0.551*	6,6 *0.260*	3,0 *0.118*	60,0 *2.362*	3	●	■
R335.14-277MNP150250.14Z3	1,5-2,5	0.059-0.098	27,7 *1.091*	0,18 *0.007*	1,49 *0.059*	14,0 *0.551*	6,6 *0.260*	2,4 *0.094*	60,0 *2.362*	3	○	■
R335.14-277MNP150250.14Z6	1,5-2,5	0.059-0.098	27,7 *1.091*	0,19 *0.007*	1,6 *0.063*	14,0 *0.551*	6,5 *0.256*	– –	60,0 *2.362*	6	○	■

335.14 Inserto: Profili filetti metrici



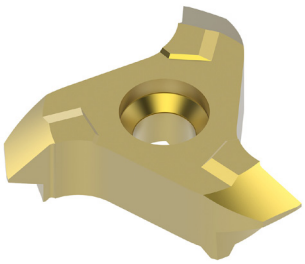


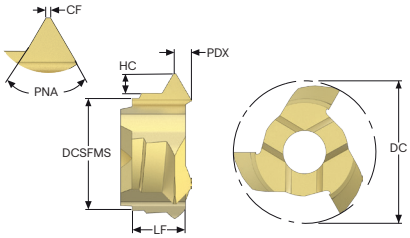


—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

												Qualità
Codice di ordinazione	Passo		DC	CF	HC	DCSFMS	LF	PDX	PNA	ZEFP	CZCMS	Rivestite
	mm	TPI	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-067MNF050.05Z3	0,5	0.02	6,7 *0.264*	0,06 *0.002*	0,28 *0.011*	4,8 *0.189*	3,25 *0.128*	0,4 *0.016*	60,0 *2.362*	3	○	■
R335.14-077MNF075.05Z3	0,75	0.03	7,7 *0.303*	0,1 *0.004*	0,416 *0.016*	4,8 *0.189*	3,25 *0.128*	0,5 *0.020*	60,0 *2.362*	3	○	■
R335.14-077MNF100.05Z3	1	0.039	7,7 *0.303*	0,12 *0.005*	0,557 *0.022*	4,8 *0.189*	3,55 *0.140*	0,9 *0.035*	60,0 *2.362*	3	○	■
R335.14-097MNF100.06Z3	1	0.039	9,7 *0.382*	0,09 *0.004*	0,58 *0.023*	6,0 *0.236*	3,6 *0.142*	0,7 *0.028*	60,0 *2.362*	3	○	■
R335.14-097MNF150.06Z3	1,5	0.059	9,7 *0.382*	0,125 *0.005*	0,86 *0.034*	6,0 *0.236*	3,6 *0.142*	0,9 *0.035*	60,0 *2.362*	3	○	■
R335.14-097MNF175.06Z3	1,75	0.069	9,7 *0.382*	0,21 *0.008*	0,95 *0.037*	6,0 *0.236*	3,6 *0.142*	1,0 *0.039*	60,0 *2.362*	3	○	■
R335.14-097MNF200.06Z3	2	0.079	9,7 *0.382*	0,165 *0.006*	1,16 *0.046*	6,0 *0.236*	3,6 *0.142*	1,1 *0.043*	60,0 *2.362*	3	○	■
R335.14-097MNF250.06Z3	2,5	0.098	9,7 *0.382*	0,2 *0.008*	1,44 *0.057*	6,0 *0.236*	3,49 *0.137*	1,19 *0.047*	60,0 *2.362*	3	○	■
R335.14-137MNF100.08Z3	1	0.039	13,7 *0.539*	0,1 *0.004*	0,58 *0.023*	8,0 *0.315*	4,6 *0.181*	0,9 *0.035*	60,0 *2.362*	3	○	■
R335.14-137MNF150.08Z3	1,5	0.059	13,7 *0.539*	0,125 *0.005*	0,86 *0.034*	8,0 *0.315*	4,6 *0.181*	1,2 *0.047*	60,0 *2.362*	3	○	■
R335.14-137MNF200.08Z3	2	0.079	13,7 *0.539*	0,165 *0.006*	1,16 *0.046*	8,0 *0.315*	4,6 *0.181*	1,4 *0.055*	60,0 *2.362*	3	○	■
R335.14-137MNF250.08Z3	2,5	0.098	13,7 *0.539*	0,2 *0.008*	1,44 *0.057*	8,0 *0.315*	4,6 *0.181*	1,6 *0.063*	60,0 *2.362*	3	○	■
R335.14-177MNF150.09Z3	1,5	0.059	17,7 *0.697*	0,12 *0.005*	0,86 *0.034*	9,0 *0.354*	5,85 *0.230*	1,15 *0.045*	60,0 *2.362*	3	○	■
R335.14-177MNF150.09Z6	1,5	0.059	17,7 *0.697*	0,12 *0.005*	0,86 *0.034*	9,0 *0.354*	5,85 *0.230*	0,85 *0.033*	60,0 *2.362*	6	○	■
R335.14-177MNF200.09Z3	2	0.079	17,7 *0.697*	0,16 *0.006*	1,16 *0.046*	9,0 *0.354*	5,85 *0.230*	1,35 *0.053*	60,0 *2.362*	3	○	■
R335.14-177MNF200.09Z6	2	0.079	17,7 *0.697*	0,16 *0.006*	1,16 *0.046*	9,0 *0.354*	5,85 *0.230*	1,15 *0.045*	60,0 *2.362*	6	○	■
R335.14-177MNF300.09Z3	3	0.118	17,7 *0.697*	0,25 *0.010*	1,73 *0.068*	9,0 *0.354*	5,85 *0.230*	1,65 *0.065*	60,0 *2.362*	3	○	■
R335.14-177MNF350.09Z3	3,5	0.138	17,7 *0.697*	0,28 *0.011*	2,02 *0.080*	9,0 *0.354*	5,85 *0.230*	1,95 *0.077*	60,0 *2.362*	3	○	■
R335.14-217MNF400.12Z3	4	0.157	21,7 *0.854*	0,5 *0.020*	2,16 *0.085*	12,0 *0.472*	5,85 *0.230*	1,95 *0.077*	60,0 *2.362*	3	○	■
R335.14-217MNF450.12Z3	4,5	0.177	21,7 *0.854*	0,56 *0.022*	2,43 *0.096*	12,0 *0.472*	5,85 *0.230*	2,25 *0.089*	60,0 *2.362*	3	○	■

335.14 Inserto: Filettatura profilo UN

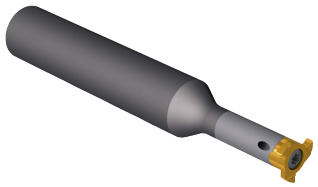


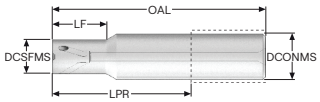


—Stelo adatto, vedere pagina 2, 382, 383-2, 385
—Parametri di taglio, vedere pagine 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

												Qualità
Codice di ordinazione	Passo		DC	CF	DCSFMS	HC	LF	PDX	PNA	ZEFP	CZCMS	Rivestite
	mm	TPIX	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			F32M
R335.14-177UNNF6.09Z3	–	6	17,7 *0.697*	0,53 *0.021*	9,0 *0.354*	2,291 *0.090*	5,85 *0.230*	1,65 *0.065*	60,0 *2.362*	3	•	■
R335.14-177UNNF8.09Z3	–	8	17,7 *0.697*	0,4 *0.016*	9,0 *0.354*	1,718 *0.068*	5,85 *0.230*	1,45 *0.057*	60,0 *2.362*	3	•	■
R335.14-177UNNF10.09Z3	–	10	17,7 *0.697*	0,32 *0.013*	9,0 *0.354*	1,375 *0.054*	5,85 *0.230*	1,25 *0.049*	60,0 *2.362*	3	•	■
R335.14-177UNNF11.09Z3	–	11	17,7 *0.697*	0,29 *0.011*	9,0 *0.354*	1,249 *0.049*	5,85 *0.230*	1,05 *0.041*	60,0 *2.362*	3	•	■
R335.14-177UNNF12.09Z3	–	12	17,7 *0.697*	0,27 *0.011*	9,0 *0.354*	1,146 *0.045*	5,85 *0.230*	1,05 *0.041*	60,0 *2.362*	3	•	■
R335.14-177UNNF14.09Z3	–	14	17,7 *0.697*	0,23 *0.009*	9,0 *0.354*	0,982 *0.039*	5,85 *0.230*	0,85 *0.033*	60,0 *2.362*	3	•	■
R335.14-177UNNF16.09Z3	–	16	17,7 *0.697*	0,2 *0.008*	9,0 *0.354*	0,859 *0.034*	5,85 *0.230*	0,85 *0.033*	60,0 *2.362*	3	•	■
R335.14-177UNNF18.09Z3	–	18	17,7 *0.697*	0,18 *0.007*	9,0 *0.354*	0,763 *0.030*	5,85 *0.230*	0,85 *0.033*	60,0 *2.362*	3	•	■
R335.14-177UNNF20.09Z3	–	20	17,7 *0.697*	0,16 *0.006*	9,0 *0.354*	0,687 *0.027*	5,85 *0.230*	0,65 *0.026*	60,0 *2.362*	3	•	■
R335.14-177UNNF24.09Z3	–	24	17,7 *0.697*	0,13 *0.005*	9,0 *0.354*	0,572 *0.023*	5,85 *0.230*	0,65 *0.026*	60,0 *2.362*	3	•	■

335.14 Stelo - Versione cilindrica – In mm

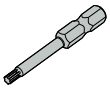




–Parametri di taglio, vedere pagine 2, 385, 386 - 2, 390
–Informazioni tecniche, vedere pagina 2, 391
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	DCSFWS	DCONMS	LF	LPR	OAL	RPMX	CSP	Peso
		mm	mm	mm	mm	mm			kg
335.14-0805.0-017-065-E	10268993	4,8	8,0	13,5	25,5	61,5	30000	■	0,1
335.14-0805.0-025-075-E	10268994	4,8	8,0	21,5	35,5	71,5	30000	■	0,1
335.14-0805.0-035-085-E	10268995	4,8	8,0	31,5	45,5	81,5	30000	■	0,1
335.14-1005.0-010-060	10268996	4,8	10,0	6,5	16,5	56,5	30000	–	0,1
335.14-1006.0-015-060	03042024	6,0	10,0	11,5	16,5	56,5	30000	–	0,1
335.14-1206.0-021-080-E	03042025	6,0	12,0	17,5	31,5	76,5	30000	■	0,2
335.14-1206.0-030-090-E	03042026	6,0	12,0	26,5	41,5	86,5	30000	■	0,2
335.14-1206.0-042-100-E	03042027	6,0	12,0	38,5	51,5	96,5	30000	■	0,2
335.14-1008.0-017-060	03042040	8,0	10,0	12,5	15,5	55,5	30000	■	0,1
335.14-1208.0-029-095-E	03042041	8,0	12,0	24,5	45,5	90,5	30000	■	0,2
335.14-1208.0-042-110-E	03042042	8,0	12,0	37,5	60,5	105,5	30000	■	0,2
335.14-1208.0-056-120-E	03042043	8,0	12,0	51,5	70,5	115,5	30000	■	0,2
335.14-1212.0-042-100-E	10268997	12,0	12,0	49,3	49,3	94,3	30000	■	0,2
335.14-1212.0-060-130-E	10268998	12,0	12,0	79,3	79,3	124,3	30000	■	0,3
335.14-1609.0-018-080	03042028	9,0	16,0	12,2	26,2	74,2	30000	■	0,2
335.14-1609.0-032-100-E	03042029	9,0	16,0	26,2	46,2	94,2	30000	■	0,3
335.14-1609.0-045-110-E	03042030	9,0	16,0	39,2	56,2	104,2	30000	■	0,3
335.14-1609.0-064-130-E	03042031	9,0	16,0	58,2	76,2	124,2	30000	■	0,3
335.14-1612.0-024-080	03042032	12,0	16,0	18,3	26,3	74,3	30000	■	0,2
335.14-1612.0-042-100-E	03042033	12,0	16,0	36,3	46,3	94,3	30000	■	0,2
335.14-1612.0-060-130-E	03042034	12,0	16,0	54,3	76,3	124,3	30000	■	0,3
335.14-1612.0-085-160-E	03042035	12,0	16,0	76,3	106,3	154,3	30000	■	0,4
335.14-1614.0-042-100-E	03042036	14,3	16,0	35,5	45,5	93,5	30000	■	0,3
335.14-1614.0-060-130-E	03042037	14,3	16,0	53,5	75,5	123,5	30000	■	0,3
335.14-1614.0-085-160-E	03042038	14,3	16,0	78,5	105,5	153,5	30000	■	0,4
335.14-2014.0-036-100	03042039	14,0	20,0	29,2	43,5	93,5	30000	■	0,2
335.14-1616.0-060-125-E	10268999	16,0	16,0	70,65	70,65	118,65	30000	■	0,4
335.14-1616.0-090-155-E	10269000	16,0	16,0	100,65	100,65	148,65	30000	■	0,5
335.14-1616.0-120-185-E	10269001	16,0	16,0	130,65	130,65	178,65	30000	■	0,6
335.14-2016.0-032-100	10269002	16,0	20,0	25,65	43,65	93,65	30000	■	0,3

Parti di ricambio, comprese nella fornitura

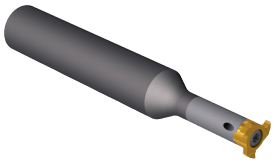
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
335.14-..05	1/4HEX-T07PX50	C92075-T07P	–
335.14-..06	H4B-T08P	C92608-T08P	DOUBLE-T
335.14-..08	H4B-T10P	C93510-T10P	DOUBLE-T
335.14-..09	H4B-T15P	C94012-T15P	DOUBLE-T
335.14-..12	1/4HEX-T20PX50	C95012-T20P	–
335.14-..14	H6B-T20P	C95012-T20P	DOUBLE-T
335.14-..16	1/4HEX-T20PX50	C95016-T20P	–
335.14-..1612	H6B-T20P	C95012-T20P	DOUBLE-T

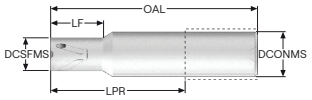
Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.14-..05	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.8NM	–
335.14-..06	–	–	2.0NM	T00-08P20
335.14-..08	–	–	3.5NM	T00-10P35
335.14-..09	–	–	5.0NM	T00-15P50
335.14-..12	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-S-HANDLE	7.0NM	–
335.14-..14	–	–	7.0NM	–
335.14-..16	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-S-HANDLE	10.0NM	–
335.14-..1612	–	–	7.0NM	–

-E = Stelo in metallo duro con tolleranza DMM = h6
Stelo in acciaio: Tolleranza DMM = g6

335.14 Stelo - Versione cilindrica – Pollici





—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	DCSFMS	DCONMS	LF	LPR	OAL	RPMX	CSP	Peso
		inch	inch	inch	inch	inch			lb
335.14-050006.0-083-315-E	03042121	0.236	0.500	0.689	1.240	3.012	30000	■	0.220
335.14-050006.0-118-354-E	03042122	0.236	0.500	1.043	1.634	3.406	30000	■	0.440
335.14-050006.0-165-394-E	03042107	0.236	0.500	1.516	2.028	3.799	30000	■	0.440
335.14-050008.0-114-374-E	03042123	0.315	0.500	0.965	1.791	3.563	30000	■	0.440
335.14-050008.0-165-433-E	03042124	0.315	0.500	1.476	2.382	4.154	30000	■	0.440
335.14-050008.0-220-472-E	03042119	0.315	0.500	2.028	2.776	4.547	30000	■	0.440
335.14-062509.0-071-315	03042108	0.354	0.625	0.480	1.031	2.921	30000	■	0.440
335.14-062509.0-126-394-E	03042109	0.354	0.625	1.031	1.819	3.709	30000	■	0.440
335.14-062509.0-177-433-E	03042110	0.354	0.625	1.543	2.213	4.102	30000	■	0.440
335.14-062509.0-252-512-E	03042111	0.354	0.625	2.291	3.000	4.890	30000	■	0.660
335.14-062512.0-094-315	03042112	0.472	0.625	0.720	1.035	2.925	30000	■	0.440
335.14-062512.0-165-394-E	03042113	0.472	0.625	1.429	1.823	3.713	30000	■	0.440
335.14-062512.0-236-512-E	03042114	0.472	0.625	2.138	3.004	4.894	30000	■	0.660
335.14-062512.0-335-630-E	03042115	0.472	0.625	3.122	4.185	6.075	30000	■	0.880
335.14-062514.0-165-394-E	03042116	0.551	0.625	1.398	1.791	3.681	30000	■	0.660
335.14-062514.0-236-512-E	03042117	0.551	0.625	2.106	2.972	4.862	30000	■	0.880
335.14-062514.0-335-630-E	03042118	0.551	0.625	3.091	4.154	6.043	30000	■	0.880

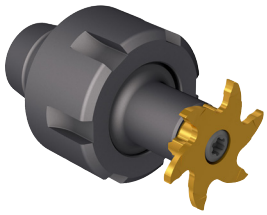
Parti di ricambio, comprese nella fornitura

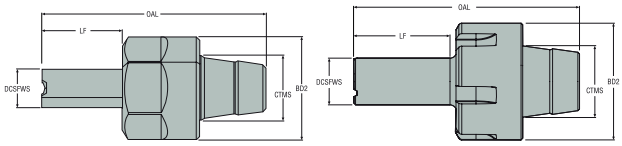
Accessori

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
					
335.14-..06	H4B-T08P	C92608-T08P	DOUBLE-T	2.0NM	T00-08P20
335.14-..08	H4B-T10P	C93510-T10P	DOUBLE-T	3.5NM	T00-10P35
335.14-..09	H4B-T15P	C94012-T15P	DOUBLE-T	5.0NM	T00-15P50
335.14-..12/14	H6B-T20P	C95012-T20P	DOUBLE-T	7.0NM	–

-E = Stelo in metallo duro con tolleranza DMM = h6
Stelo in acciaio: Tolleranza DMM = g6

335.14 Stelo con pinza ER





—Parametri di taglio, vedere pagine 2, 385, 386 - 2, 390
—Informazioni tecniche, vedere pagina 2, 391
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	DCSFWS	DCONMS	LF	OAL	CTMS	BD2	RPMX	Peso
		mm	mm	mm	mm	mm	mm		kg
335.14-ER11-06-016	03042072	6,0	11,0	12,5	34,9	ER 11	16,0	20000	0,1
335.14-ER11-08-016	03042085	8,0	11,0	11,5	33,8	ER 11	16,0	20000	0,1
335.14-ER16-08-022	03042086	8,0	16,0	17,5	49,6	ER 16	32,0	20000	0,2
335.14-ER11-09-022	03042073	9,0	11,0	16,2	38,5	ER 11	16,0	20000	0,1
335.14-ER16-09-022	03042074	9,0	16,0	16,2	48,3	ER 16	32,0	20000	0,2
335.14-ER25-09-022	03042075	9,0	25,0	16,2	55,3	ER 25	35,0	20000	0,2
335.14-ER16-12-030	03042076	12,0	16,0	24,3	56,4	ER 16	32,0	20000	0,2
335.14-ER25-12-030	03042078	12,0	25,0	24,3	63,4	ER 25	35,0	20000	0,2
335.14-ER32-12-030	03042079	12,0	32,0	24,3	69,4	ER 32	50,0	20000	0,4
335.14-ER25-14-019	03042080	14,0	25,0	12,5	52,3	ER 25	35,0	20000	0,2
335.14-ER25-14-035	03042081	14,0	25,0	28,5	67,6	ER 25	35,0	20000	0,2
335.14-ER32-14-019	03042082	14,0	32,0	12,5	58,3	ER 32	50,0	20000	0,5
335.14-ER32-14-035	03042083	14,0	32,0	28,5	73,6	ER 32	50,0	20000	0,4

Parti di ricambio, comprese nella fornitura

Accessori

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
					
335.14-ER..-06	H4B-T08P	C92608-T08P	DOUBLE-T	2.0NM	T00-08P20
335.14-ER..-08	H4B-T10P	C93510-T10P	DOUBLE-T	3.5NM	T00-10P35
335.14-ER..-09	H4B-T15P	C94012-T15P	DOUBLE-T	5.0NM	T00-15P50
335.14-ER..-12/14	H6B-T20P	C95012-T20P	DOUBLE-T	7.0NM	–

R335.14 – Scanalatura – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		15%	10%	5%
P1	R335.14...-M01 F32M	0,036 *0.0014*	0,042 0.0017	0,060 0.0024
P2	R335.14...-M01 F32M	0,036 *0.0014*	0,042 0.0017	0,060 0.0024
P3	R335.14...-M01 F32M	0,034 *0.0013*	0,040 0.0016	0,055 0.0022
P4	R335.14...-M01 F32M	0,034 *0.0013*	0,040 0.0016	0,055 0.0022
P5	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
P6	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
P7	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
P8	R335.14...-M01 F32M	0,034 *0.0013*	0,040 0.0016	0,055 0.0022
P11	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
P12	R335.14...-M01 F32M	0,020 *0.00075*	0,024 0.00090	0,032 0.0013
M1	R335.14...-M01 F32M	0,036 *0.0014*	0,042 0.0017	0,060 0.0024
M2	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
M3	R335.14...-M01 F32M	0,026 *0.0010*	0,030 0.0012	0,042 0.0017
M4	R335.14...-M01 F32M	0,020 *0.00080*	0,025 0.00095	0,034 0.0013
M5	R335.14...-M01 F32M	0,020 *0.00080*	0,025 0.00095	0,034 0.0013
K1	R335.14...-M01 F32M	0,036 *0.0014*	0,042 0.0017	0,060 0.0024
K2	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
K3	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
K4	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
K5	R335.14...-M01 F32M	0,030 *0.0012*	0,034 0.0013	0,048 0.0019
K6	R335.14...-M01 F32M	0,032 *0.0013*	0,038 0.0015	0,055 0.0022
K7	R335.14...-M01 F32M	0,030 *0.0012*	0,034 0.0013	0,048 0.0019
N1	R335.14...-M01 F32M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
N2	R335.14...-M01 F32M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
N3	R335.14...-M01 F32M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
N11	R335.14...-M01 F32M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
S1	R335.14...-M01 F32M	0,020 *0.00080*	0,025 0.00095	0,034 0.0013
S2	R335.14...-M01 F32M	0,020 *0.00080*	0,025 0.00095	0,034 0.0013
S3	R335.14...-M01 F32M	0,018 *0.00070*	0,022 0.00085	0,030 0.0012
S11	R335.14...-M01 F32M	0,026 *0.0010*	0,030 0.0012	0,042 0.0017
S12	R335.14...-M01 F32M	0,026 *0.0010*	0,030 0.0012	0,042 0.0017
S13	R335.14...-M01 F32M	0,020 *0.00080*	0,025 0.00095	0,034 0.0013
H5	R335.14...-M01 F32M	0,020 *0.00075*	0,024 0.00090	0,032 0.0013
H8	R335.14...-M01 F32M	0,011 *0.00044*	0,014 0.00055	0,019 0.00075
H11	R335.14...-M01 F32M	0,020 *0.00075*	0,024 0.00090	0,032 0.0013
H12	R335.14...-M01 F32M	0,011 *0.00044*	0,014 0.00055	0,019 0.00075
H21	R335.14...-M01 F32M	0,011 *0.00044*	0,014 0.00055	0,019 0.00075

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R335.14 – Scanalatura – Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			15%	10%	5%
P1	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,060 *0.0024*	0,070 *0.0028*	0,095 *0.0038*
P2	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,060 *0.0024*	0,070 *0.0028*	0,10 *0.0040*
P3	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,095 *0.0038*
P4	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
P5	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
P6	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
P7	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
P8	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,095 *0.0038*
P11	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
P12	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,032 *0.0013*	0,038 *0.0015*	0,055 *0.0022*
M1	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,060 *0.0024*	0,070 *0.0028*	0,10 *0.0040*
M2	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
M3	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,044 *0.0017*	0,050 *0.0020*	0,070 *0.0028*
M4	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,034 *0.0014*	0,042 *0.0016*	0,055 *0.0022*
M5	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,034 *0.0014*	0,042 *0.0016*	0,055 *0.0022*
K1	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,060 *0.0024*	0,070 *0.0028*	0,10 *0.0040*
K2	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
K3	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
K4	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
K5	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,048 *0.0019*	0,060 *0.0024*	0,080 *0.0032*
K6	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,055 *0.0022*	0,065 *0.0026*	0,090 *0.0036*
K7	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,048 *0.0019*	0,060 *0.0024*	0,080 *0.0032*
N1	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,075 *0.0030*	0,090 *0.0036*	0,13 *0.0050*
N2	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,075 *0.0030*	0,090 *0.0036*	0,13 *0.0050*
N3	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,075 *0.0030*	0,090 *0.0036*	0,13 *0.0050*
N11	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,075 *0.0030*	0,090 *0.0036*	0,13 *0.0050*
S1	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,034 *0.0014*	0,042 *0.0016*	0,055 *0.0022*
S2	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,034 *0.0014*	0,042 *0.0016*	0,055 *0.0022*
S3	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,030 *0.0012*	0,036 *0.0014*	0,048 *0.0019*
S11	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,044 *0.0017*	0,050 *0.0020*	0,070 *0.0028*
S12	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,044 *0.0017*	0,050 *0.0020*	0,070 *0.0028*
S13	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,034 *0.0014*	0,042 *0.0016*	0,055 *0.0022*
H5	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,032 *0.0013*	0,038 *0.0015*	0,055 *0.0022*
H8	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,019 *0.00075*	0,022 *0.00090*	0,032 *0.0012*
H11	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,032 *0.0013*	0,038 *0.0015*	0,055 *0.0022*
H12	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,019 *0.00075*	0,022 *0.00090*	0,032 *0.0012*
H21	R335.14...-M02 F3xM	R335.14...-M03 F3xM CW≤1.5mm	0,019 *0.00075*	0,022 *0.00090*	0,032 *0.0012*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R335.14 – Scanalatura – Selezione dell'inserto – In mm/ In pollici

SMG		f_z			
		20%	15%	10%	5%
P1	R335.14...-M03 F32M	0,065 *0.0026*	0,070 0.0028	0,085 0.0034	0,12 0.0048
P2	R335.14...-M03 F32M	0,065 *0.0026*	0,070 0.0028	0,085 0.0034	0,12 0.0048
P3	R335.14...-M03 F32M	0,060 *0.0024*	0,070 0.0028	0,080 0.0032	0,11 0.0044
P4	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
P5	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
P6	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,075 0.0030	0,11 0.0044
P7	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,075 0.0030	0,11 0.0044
P8	R335.14...-M03 F32M	0,060 *0.0024*	0,070 0.0028	0,080 0.0032	0,11 0.0044
P11	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,075 0.0030	0,11 0.0044
P12	R335.14...-M03 F32M	0,036 *0.0014*	0,040 0.0016	0,046 0.0018	0,065 0.0026
M1	R335.14...-M03 F32M	0,065 *0.0026*	0,070 0.0028	0,085 0.0034	0,12 0.0048
M2	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
M3	R335.14...-M03 F32M	0,046 *0.0018*	0,050 0.0020	0,065 0.0026	0,085 0.0034
M4	R335.14...-M03 F32M	0,038 *0.0015*	0,042 0.0016	0,050 0.0020	0,070 0.0028
M5	R335.14...-M03 F32M	0,038 *0.0015*	0,042 0.0016	0,050 0.0020	0,070 0.0028
K1	R335.14...-M03 F32M	0,065 *0.0026*	0,070 0.0028	0,085 0.0034	0,12 0.0048
K2	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
K3	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
K4	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
K5	R335.14...-M03 F32M	0,055 *0.0022*	0,060 0.0024	0,070 0.0028	0,095 0.0038
K6	R335.14...-M03 F32M	0,060 *0.0024*	0,065 0.0026	0,080 0.0032	0,11 0.0044
K7	R335.14...-M03 F32M	0,055 *0.0022*	0,060 0.0024	0,070 0.0028	0,095 0.0038
N1	R335.14...-M03 F32M	0,080 *0.0032*	0,090 0.0036	0,11 0.0044	0,15 0.0060
N2	R335.14...-M03 F32M	0,080 *0.0032*	0,090 0.0036	0,11 0.0044	0,15 0.0060
N3	R335.14...-M03 F32M	0,080 *0.0032*	0,090 0.0036	0,11 0.0044	0,15 0.0060
N11	R335.14...-M03 F32M	0,080 *0.0032*	0,090 0.0036	0,11 0.0044	0,15 0.0060
S1	R335.14...-M03 F32M	0,038 *0.0015*	0,042 0.0016	0,050 0.0020	0,070 0.0028
S2	R335.14...-M03 F32M	0,038 *0.0015*	0,042 0.0016	0,050 0.0020	0,070 0.0028
S3	R335.14...-M03 F32M	0,032 *0.0013*	0,036 0.0014	0,042 0.0017	0,060 0.0024
S11	R335.14...-M03 F32M	0,046 *0.0018*	0,050 0.0020	0,065 0.0026	0,085 0.0034
S12	R335.14...-M03 F32M	0,046 *0.0018*	0,050 0.0020	0,065 0.0026	0,085 0.0034
S13	R335.14...-M03 F32M	0,038 *0.0015*	0,042 0.0016	0,050 0.0020	0,070 0.0028
H5	R335.14...-M03 F32M	0,036 *0.0014*	0,040 0.0016	0,046 0.0018	0,065 0.0026
H8	R335.14...-M03 F32M	0,020 *0.00080*	0,024 0.00090	0,028 0.0011	0,038 0.0015
H11	R335.14...-M03 F32M	0,036 *0.0014*	0,040 0.0016	0,046 0.0018	0,065 0.0026
H12	R335.14...-M03 F32M	0,020 *0.00080*	0,024 0.00090	0,028 0.0011	0,038 0.0015
H21	R335.14...-M03 F32M	0,020 *0.00080*	0,024 0.00090	0,028 0.0011	0,038 0.0015

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R335.14 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	335.14			
	20%	15%	10%	5%
P1	230 *750*	240 *790*	255 *840*	275 *900*
P2	225 *740*	235 *770*	245 *800*	265 *870*
P3	195 *640*	200 *660*	215 *710*	230 *750*
P4	170 *560*	180 *590*	190 *620*	205 *670*
P5	165 *540*	170 *560*	180 *590*	195 *640*
P6	185 *610*	190 *620*	205 *670*	220 *720*
P7	175 *570*	180 *590*	195 *640*	205 *670*
P8	165 *540*	170 *560*	180 *590*	195 *640*
P11	170 *560*	175 *570*	190 *620*	200 *660*
P12	105 *345*	110 *360*	120 *395*	130 *425*
M1	195 *640*	205 *670*	215 *710*	235 *770*
M2	160 *520*	165 *540*	175 *570*	190 *620*
M3	125 *410*	135 *445*	140 *460*	150 *490*
M4	100 *330*	100 *330*	110 *360*	115 *375*
M5	80 *260*	85 *280*	90 *295*	95 *310*
K1	225 *740*	235 *770*	250 *820*	270 *890*
K2	200 *660*	205 *670*	220 *720*	235 *770*
K3	165 *540*	175 *570*	185 *610*	200 *660*
K4	160 *520*	165 *540*	175 *570*	190 *620*
K5	95 *310*	100 *330*	105 *345*	115 *375*
K6	140 *460*	145 *475*	155 *510*	170 *560*
K7	125 *410*	130 *425*	135 *445*	150 *490*
N1	1000 *3275*	1050 *3450*	1100 *3600*	1200 *3925*
N2	325 *1075*	340 *1125*	355 *1175*	385 *1275*
N3	215 *710*	225 *740*	235 *770*	260 *850*
N11	290 *950*	300 *980*	315 *1025*	345 *1125*
S1	29 *95*	31 *100*	32 *105*	35 *115*
S2	24 *80*	25 *80*	26 *85*	28 *90*
S3	21 *70*	22 *70*	23 *75*	25 *80*
S11	41 *135*	43 *140*	45 *150*	49 *160*
S12	38 *125*	40 *130*	42 *140*	45 *150*
S13	22 *70*	23 *75*	24 *80*	26 *85*
H5	55 *180*	55 *180*	60 *195*	65 *215*
H8	60 *195*	60 *195*	65 *215*	70 *230*
H11	70 *230*	75 *245*	80 *260*	85 *280*
H12	70 *230*	70 *230*	75 *245*	80 *260*
H21	60 *195*	60 *195*	65 *215*	70 *230*

335.14 – Filettatura – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	R335.14	
	f_z	v_c
P1	0,070 *0.0028*	275 *900*
P2	0,070 *0.0028*	270 *890*
P3	0,070 *0.0028*	230 *750*
P4	0,065 *0.0026*	205 *670*
P5	0,065 *0.0026*	195 *640*
P6	0,065 *0.0026*	215 *710*
P7	0,065 *0.0026*	205 *670*
P8	0,070 *0.0028*	195 *640*
P11	0,065 *0.0026*	200 *660*
P12	0,044 *0.0017*	120 *395*
M1	0,070 *0.0028*	215 *710*
M2	0,065 *0.0026*	175 *570*
M3	0,050 *0.0020*	130 *425*
M4	0,046 *0.0018*	100 *330*
M5	0,046 *0.0018*	80 *260*
K1	0,070 *0.0028*	210 *690*
K2	0,065 *0.0026*	185 *610*
K3	0,065 *0.0026*	180 *590*
K4	0,065 *0.0026*	150 *490*
K5	0,060 *0.0024*	90 *295*
K6	0,065 *0.0026*	130 *425*
K7	0,060 *0.0024*	115 *375*
N1	0,090 *0.0036*	970 *3175*
N2	0,090 *0.0036*	620 *2025*
N3	0,090 *0.0036*	415 *1350*
N11	0,090 *0.0036*	475 *1550*
S1	0,046 *0.0018*	50 *165*
S2	0,046 *0.0018*	41 *135*
S3	0,042 *0.0017*	35 *115*
S11	0,050 *0.0020*	65 *215*
S12	0,050 *0.0020*	50 *165*
S13	0,046 *0.0018*	39 *130*
H5	0,044 *0.0017*	43 *140*
H8	0,034 *0.0013*	45 *150*
H11	0,044 *0.0017*	60 *195*
H12	0,034 *0.0013*	55 *180*
H21	0,034 *0.0013*	45 *150*

Informazioni tecniche

Raccomandazioni per interpolazione circolare

Per evitare vibrazioni e rotture della testina nelle operazioni di interpolazione circolare interna, raccomandiamo un'entrata progressiva nel materiale. L'arco d'entrata deve essere compreso tra 45° e 180°



Nel calcolo dei parametri di taglio per interpolazione circolare, è necessario tenere conto della profondità di taglio radiale effettiva e della velocità di avanzamento rispetto al centro della fresa - Vedere pag. 924 per maggiori informazioni

Testina a 6 taglienti





Se compaiono vibrazioni lavorando con testine a 6 taglienti, diminuire la profondità di taglio radiale per ridurre il numero di denti in presa, oppure utilizzare testine a 3 taglienti.

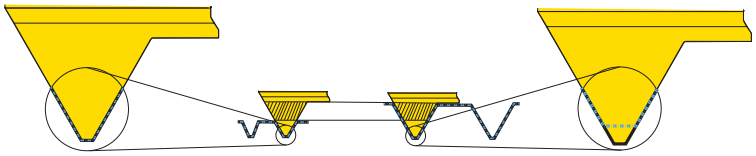
Raccomandazioni sull'attacco

Per i migliori risultati in termini di stabilità, precisione ed affidabilità, si consiglia l'uso dei seguenti attacchi Seco-Tooling
-Porta pinze ad alta precisione ERHP 5672
-Attacchi per calettamento termico SFD 5603, SFR 5600 e SFS 5801
-Porta pinze ER 5675
-Mandrino idraulico HC/HCR/HCS
Per maggiori informazioni, vedere il catalogo Sistemi di utensili Seco.



Informazione tecniche – Filettatura

Passo (dimensione/fino a)



Filettatura realizzata

Filettatura standard

La filettatura di fresatura per interpolazione circolare può generare profili non corretti quando si impiegano inserti a profilo parziale. Occorre tenerlo presente durante il processo di selezione dell'utensile. Il diametro dell'utensile dev'essere sufficientemente piccolo rispetto al diametro del foro. È da considerare anche il passo.

Ogni inserto a profilo parziale per filetti metrici ISO può effettuare filettature con passi diversi. L'inserto è progettato per realizzare il passo minimo (TPN); lavorare questo passo garantisce una filettatura conforme allo standard.

Il passo massimo (TPX) può essere realizzato anche con questo inserto, ma si perde la conformità allo standard: Il risultato sarà un filetto leggermente più profondo dello standard. Un filetto più profondo è normalmente accettato, ma è da valutare in funzione dell'applicazione e dell'impiego del componente.

La seguente tabella indica il diametro massimo raccomandato dell'utensile in relazione alla dimensione ed al passo della filettatura:

Filettatura ISO, profilo parziale

Passo	M12	M16	M20	M24	M27	M30	M36	M42	M48	M56	M60
1	10	14	18	22	25	28	34	40	45	53	57
1,5	8	12	16	20	24	26	32	37	43	51	55
2	7	10	14	18	22	24	30	35	40	48	52
2,5	6	8	12	16	20	22	28	32	37	45	48
3		6	10	14	18	20	26	30	36	43	47
3,5				12	16	18	24	29	35	42	46
4							22	27	32	39	43
4,5								24	30	37	40
5								22	27	34	37
5,5								20	25	31	35
6								19	23	29	32

Chiave di codifica - Frese a sede fissa - In mm

Tipo a manicotto o foro di centraggio

R	335	.	25	-	080	.	15	.	22	-	4	-	NA
1	2		3		4		5		6		7		8

1.

Per attacco a manicotto/
rotazione destra

2.

Frese a disco

3.

Sistema

4.

Diametro fresa

5.

Larghezza della fresa / profondità di taglio assiale

6.

Diametro foro di centraggio

7.

4 = valore ZEFP

8.

N=Tre tagli
L o R: 2 Tagli sinistro o destro
A = Alimentazione del refrigerante passante

Tipo cilindrico o Combimaster

R	335	.	18	-	16	50	.	RE	-	10	.	3	-	NA
1	2		3		4	5		6		7		8		9

1.

Rotazione destra

2.

Fresa a disco

3.

Sistema

4.

-DMM per versione cilindrica
-M (filetto) per versione Combimaster

5.

Diametro fresa

6.

-RE per Combimaster
-.0 per steli cilindrici

7.

3=Valore ZEFP

8.

N=Fresa a tre tagli
A=Adduzione interna refrigerante

Chiave di codifica – Frese regolabili – In mm

Per frese a disco regolabili

R	335	.	18	-	200	.	12	15	XL	.	40	-	8N	-	R6
1	2		3		4		5	6	7		8		9		10

1.

Per attacco a manicotto/
rotazione destra

2.

Frese a disco

3.

Sistema

4.

Diametro del corpo base
Vedere la pagina del prodotto per il diametro esatto

5.

Larghezza minima della fresa
(configurazione moduli regolabili -3 tagli)

6.

Larghezza massima della fresa
(configurazione moduli regolabili -3 tagli)

7.

XL per un maggiore vano truciolo

8.

Diametro foro
di centraggio

9.

8=Valore ZEFP
N=Fresa a tre tagli
R=Versione destra a due tagli
L=Versione sinistra a due tagli

10.

Raggio dell'inserto se si utilizzano inserti tondi
o tipo di inserto

Chiave di codifica - Frese a sede fissa - Pollici

Tipo a manicotto o foro di centraggio

R	335	.	18	-	03.00	-	0.37F	-	4N
1	2		3		4		5		6

1.	2.	3.
Per attacco a manicotto/ rotazione destra	Frese a disco	Sistema

4.	5.	6.
Diametro fresa	Larghezza della fresa (0,37 = 0,375") F=larghezza fissa, opzione del produttore	4=Valore ZEFP N=Fresa a tre tagli A=Adduzione refrigerante interna

Tipo cilindrico o Combimaster

R	335	.	18	-	02.00	-	RE	-	3NA
1	2		3		4		5		6

1.	2.	3.
Rotazione destra	Fresa a disco	Sistema

4.	5.	6.
Diametro fresa	.RE = Combimaster, dimensione connessione .0 = Per steli cilindrici	3 = Valore ZEFP N = Fresa a tre tagli A = Adduzione refrigerante interna

Chiave di codifica – Frese regolabili – Pollici

Per frese a disco regolabili

R	335	.	18	-	08.00	-	XL0809N	-	R6
1	2		3		4		5		6

1.

Per attacco a manicotto/
rotazione destra

2.

Frese a disco

3.

Sistema

4.

Diametro della fresa del corpo base
Vedere la pagina del prodotto per il diametro esatto

5.

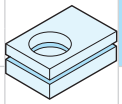
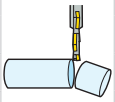
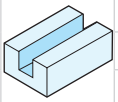
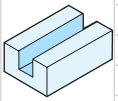
08 Larghezza corpo fresa minima (1/16 di pollice)
09 Larghezza corpo fresa massima (1/16 di pollice)
XL: Per vano truciolo maggiorato, opzione del produttore
N=Fresa a tre tagli
R=Versione destra a due tagli
L=Versione sinistra a due tagli

6.

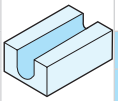
Raggio dell'inserto in mm se si utilizzano inserti tondi
o tipo di inserto

Selezione – In mm

Tre tagli e due tagli - versione a sedi fisse

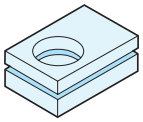
Sistema	Inserto	a_p	Applicazione	Diametri (mm) disponibili e massima profondità di taglio (mm) 24	32	40	50	63	80	100	125	160	200	250	315	CEDC	RE	Vedere pagina
335.15	335.15 	1,1 - 2,65	 Scanalature per anelli elastici	3	3			3								2	-	2, 401
		3,15 - 5,15						5										
335.10	150.10 	2,25/2,5				12	15	15	24	30	34	39				1	R0,15/R0,3	406
		3,1				12	15	15	24	30	43	39	59	84	117			
		4,1						16	22	29	34	39	59	84	117			
335.19	SNHQ / 335.19 	4				11	14	17	26	32	45	42				4	R0,2/R0,4/R0,8/ R1,2/R1,6/R2,0/ R2,4/R3,0/R3,1/ R3,5/ R4,0/ R5,0/R6,0	418
		5				11	14	17	26	32	45	43						
		6					14	17	26	32	31	43	61	86				
		7/ 8						17	26	26	32	44	62	87				
		10								27	33	46	63	88				
		12								27	29	45	64	89				
335.18 LNK	LNKT 	8			9	12	15	15	23	27	34					4	R0,4/R0,8/R1,6/ R2,0/R2,4/R3,1/ R4,0	436
		10			9	12	15	15	24	28	34							
		12					15	15	24	28	34							
		14						15	23	26	34	51						
		17							24	26	33	50						
		20							24	26	34	51						
335.25	XNHQ 	15							22	25	32	52	64			4	R0,4,/R0,8/ R1,2/R1,6/R2,0/ R2,4/R3,1/R4,0/ R5,0/R6,0	463
		20								25	32	51	64	88				
		25									33	50	62	87				

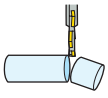
Profilo sferico – versione a sedi fisse

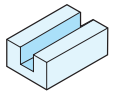
Sistema	Inserto	a_p	Applicazione	Diametri (mm) disponibili e massima profondità di taglio (mm) 25	32	40	50	63	80	100	125	160	200	250	315	CEDC	RE	Vedere pagina
335.19	SNHQ / 335.19 	4				11	14	17	26	32	45	42				4	R2,0/R3,0/ R3,5/R4,0/R5,0/ R6,0	418
		6					14	17	26	32	31	43	61	86				
		7/8						17	26	32	32	44	62	87				
		10								27	33	46	63	88				
		12								27	29	45	64	89				
335.29	Inserto tondo 	5		6	8	10	12									4	R2,5/R3,0/ R3,5/R4,0/R5,0/ R6,0	496
		6		6	8	10	12	15										
		7			8	10	12	15										
		8			8	10	12	15	20									
		10					12	15	20									
		12	Profilo sferico				12	15	20									

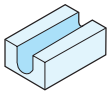
Scelta base (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in mm) X

Scelta alternativa (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in mm) X


Sedi anelli elastici e cave poco profonde


Taglio


Tre tagli e spianatura


Profilo raggio pieno

CEDC = Numero massimo di taglienti
RE = Raggi disponibili (mm)

Selezione – In mm

Tre tagli e due tagli - larghezza regolabile

Sistema	Inserto	a_p	Applicazione	Diametri (mm) disponibili e massima profondità di taglio (mm) 80	100	125	160	200	250	315	CEDC	RE	Vedere pagina
335.18 LNK	LNK	8 - 10		14	27	32	50	63	88	121	4	R0,4/R0,8/R1,6/R2,0/R2,4/R3,1/R4,0	436
		10 - 12		14	27	32	50	63	88	121			
		12 - 15		14	27	32	50	63	88	121			
335.25	XNHQ	13,5 - 17			24	32	50	63	88	121	4	R0,4/R0,8/R1,2/R1,6/R2,0/R2,4/R3,1/R4,0/R5,0/R6,0	463
		17 - 21			24	32	50	63	88	121			
		21 - 26				32	50	63	88	113			
		26 - 32					50	63	88	113			
335.18/335.25	Inserto tondo	8 - 10	Profilo sferico	15	28	33	51	63	88	121	4	R4,0	436-463
		10 - 12		15	28	33	51	63	88	121		R5,0	
		12 - 15		15	28	33	51	63	88	121		R6,0	
		16 - 17			28	36	54	67	92	124		R8,0	
		20 - 21							92	124		R10,0	

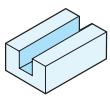
Due tagli e spianatura

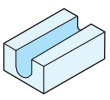
Sistema	Inserto	a_p	Applicazione	Diametri (mm) disponibili e massima profondità di taglio (mm) 80	100	125	160	200	250	315	CEDC	RE	Vedere pagina
335.98/.18	XN05	≤5		14	27	32	50	63	88	121	4+4	R0.4/R0.8/R1.6	490, 486
335.98/.25	XN07	≤6,9				32	50	63	88	121	4+4	R0.8/R1.6/R3.1	492, 487
335.18 LNK	LNK	≤5		14	27	32	50	63	88	121	2+2	R0,4/R0,8/R1,6/R2,0/R2,4/R3,1/R4,0	436
		≤6		14	27	32	50	63	88	121			
		≤7,5		14	27	32	50	63	88	121			
335.25	XNHQ	≤8,5			24	32	50	63	88	121	2+2	R0,4/R0,8/R1,2/R1,6/R2,0/R2,4/R3,1/R4,0/R5,0/R6,0	463
		≤11			24	32	50	63	88	121			
		≤13				32	50	63	88	113			
		≤16					50	63	88	113			
335.18/335.25	Inserto tondo	≤4		15	28	33	51	63	88	121	4	R4,0	436-463
		≤5		15	28	33	51	63	88	121		R5,0	
		≤6		15	28	33	51	63	88	121		R6,0	
		≤8			28	36	54	67	92	124		R8,0	
		≤10							92	124		R10,0	

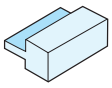
Scelta base (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in mm) X

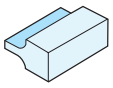
Scelta alternativa (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in mm) X

CEDC = Numero massimo di taglienti
RE = Raggi disponibili (mm)


Tre tagli e spianatura


Profilo raggio pieno


Due tagli e spianatura


Profilo semisferico

Selezione – Pollici

Tre tagli e due tagli - versione a sedi fisse

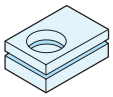
Sistema	Inserto	a_p	Applicazione	Diametri disponibili (pollici) e profondità di taglio massima (pollici) 1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	CEDC	RE	Vedere pagina
335.15	335.15 	.124-.203	 Scanalature per anelli elastici					0.22							2	–	2, 401
335.10	150.10 	.089-.098					0.62	0.63	0.73	1.06	1.36	1.41			1	.006 .012	406
		0.122					0.62	0.63	0.73	1.06	1.36	1.41					
335.19	SNHQ / 335.19 	0.156				0.45	0.6	0.7	0.95	1.32					4	.008 / .016 .031 / .047 .063 / .079 .094 / .118 .122 / .138 .157 / .197 .236	418
		0.187				0.45	0.6	0.7	0.95	1.32	1.41	1.91					
		0.250					0.6	0.7	0.95	1.32	1.45	1.95	2.51				
		0.313						0.56	0.81	1.07	1.45	1.95					
		0.375						0.56	0.81	1.11	1.49	2.02					
		0.500								1.13	1.52	2.00					
335.18 LNK	LNKT 	0.312			0.35	0.41	0.59	0.63	0.71	1.06	1.38				4	.016 / .031 .063 / .079 .094 / .122 .157	436
		0.375			0.35	0.41	0.59	0.63	0.71	1.06	1.38						
		0.500					0.59	0.62	0.87	1.14	1.38	1.81					
		0.625							0.71	1.06							
		0.750							0.71	1.06	1.38						
335.25	XNHQ 	0.750									1.33	1.83	2.48		4	.031 / .047 .063 / .079 .094 / .122 .157 / .197 .236	463
		1.00									1.35	1.85	2.43	3.43			

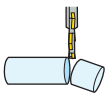
Profilo sferico – versione a sedi fisse

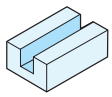
Sistema	Inserto	a_p	Applicazione	Diametri disponibili (pollici) e profondità di taglio massima (pollici) 1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	CEDC	RE	Vedere pagina
335.29	Inserto tondo 	0.236	 Profilo sferico			0.30	0.41								4	0.118 0.157 0.197	496
		0.315					0.41	0.60									
		0.394						0.59	0.70								

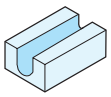
Scelta base (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in pollici) X

Scelta alternativa (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in pollici) X


Sedi anelli elastici e cave poco profonde


Taglio


Tre tagli e spianatura


Profilo raggio pieno

CEDC = Numero massimo di taglienti
RE = Raggi disponibili (pollici)

Selezione – Pollici

Tre tagli e due tagli - larghezza regolabile

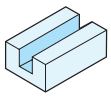
Sistema	Inserto	a_p	Applicazione	Diametri disponibili (pollici) e profondità di taglio massima (pollici) 4.00	5.00	6.00	8.00	10.00	12.00	CEDC	RE	Vedere pagina
335.18 LNK	LNK	.315 - .394		1.1	1.34	1.77	2.42	3.39	4.39	4	.0157 / .031 .063 / .079 .094 / .122 .157	436
		.394 - .472		1.01	1.33	1.77	2.42	3.39	4.39			
		.472 - .591		1.01	1.33	1.77	2.42	3.39	4.39			
335.25	XNHQ	.53 - .67		1.01	1.33	1.80	2.42	3.42	4.46	4	.016 / .031 .063 / .079 .094 / .122 .157 / .197 .236	463
		.67 - .83		1.01	1.33	1.80	2.42	3.42	4.46			
		.83 - 1.02			1.33	1.79	2.41	3.41	4.41			
		1.02 - 1.26				1.79	2.41	3.41	4.41			
335.18	Inserto tondo	.315 - .394	Profilo sferico	1.14	1.38	1.77	2.42	3.39	4.39	4	.157 /.197 .236 /.315 .393	436
		.394 - .472		1.06	1.38	1.81	2.42	3.39	4.39			
		.472 - .591		1.05	1.37	1.83	2.42	3.39	4.39			
		.630 - .669			1.41	1.91	2.54	3.54	4.58			
		.789 - .827						3.54	4.54			

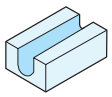
Due tagli e spianatura

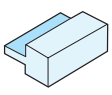
Sistema	Inserto	a_p	Applicazione	Diametri disponibili (pollici) e profondità di taglio massima (pollici) 4.00	5.00	6.00	8.00	10.00	12.00	CEDC	RE	Vedere pagina
	XN05	≤0.197		1.01	1.33	1.77	2.42	3.39	4.39	4+4	R0.016/R0.031/ R0.063	436
335.98/.25	XN07	≤0.271			1.33	1.79	2.41	3.41	4.41	4+4	R0.031/R0.063/R0.12	436
335.18 LNK	LNK	≤0.197		1.10	1.34	1.77	2.42	3.39	4.39	2+2	.016 / .031 .063 / .079 .094 / .122 .157	436
		≤0.236		1.01	1.33	1.77	2.42	3.39	4.39			
		≤0.295		1.01	1.33	1.79	2.42	3.39	4.39			
335.25	XNHQ	≤0.354		1.01	1.33	1.80	2.42	3.42	4.46	2+2	.016 / .031 .063 / .079 .094 / .122 .157 / .197 .236	463
		≤0.437		1.01	1.33	1.80	2.42	3.42	4.46			
		≤0.512			1.33	1.79	2.41	3.41	4.41			
		≤0.630				1.79	2.41	3.41	4.41			
335.18	Inserto tondo	≤0.157	Profilo sferico	1.14	1.38	1.77	2.42	3.39	4.39	4	.157	436
		≤0.197		1.06	1.38	1.81	2.42	3.39	4.39		.157	
		≤0.236		1.05	1.37	1.83	2.42	3.39	4.39		.197	
		≤0.315			1.41	1.91	2.54	3.54	4.58		.315	
		≤0.393						3.54	4.54		.315	

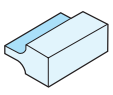
Scelta base (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in pollici) X

Scelta alternativa (X indica la profondità di taglio radiale massima "CDX" nella scanalatura in pollici) X


Tre tagli e spianatura


Profilo raggio pieno


Due tagli e spianatura


Profilo semisferico

CEDC = Numero massimo di taglienti
RE = Raggi disponibili (pollici)



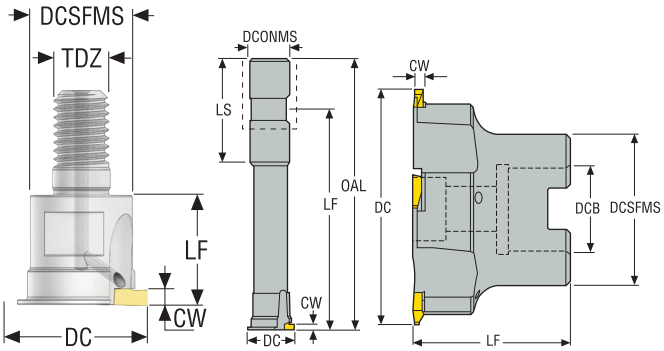
335.15

Sistema di fresa a disco progettato per generare scanalature su anelli elastici circolari e scanalature poco profonde

- Larghezza di taglio 1,1-5,15 mm (0,043-0,202”)
- Diametro della gamma di frese 24-63 mm (1-2,5”)
- Disponibile con attacchi Weldon, a manicotto e Combimaster con collegamento per adduzione refrigerante
- Conveniente inserto per bassa profondità di taglio con 2 taglienti
- Precisione della larghezza dell’inserto +0/+0,05 mm - +0/+0,002”

R335.15 – In mm





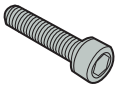
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 403, 404 - 2, 405
—Per il programma inserti completo, vedere le pagine 921
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	DCONMS	LF	LS	OAL	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm		mm	mm	mm	mm		kg	
R335.15-20024.3-03-1	75002642	Weldon	24,0	1,1	2,65	2,2	1	1	–	–	–	20,0	105,05	50,0	130,0	28200	0,4	R335.15-13..
R335.15-25034.3-03-2	75002643	Weldon	34,0	1,1	2,65	2,9	2	2	–	–	–	25,0	98,05	56,0	130,0	23600	0,5	R335.15-13..
R335.15-063-03.22-5	75011752	Manicotto	63,0	1,1	2,65	3,8	5	5	22,0	40,0	–	–	40,0	–	–	17300	0,5	R335.15-13..
R335.15-063-05.22-5	75011753	Manicotto	63,0	3,15	5,15	5,5	5	5	22,0	40,0	–	–	40,0	–	–	17300	0,5	R335.15-18..
R335.15-1024.RE-03.1A	03329402	Combimaster	24,0	1,1	2,65	2,2	1	1	–	18,5	M10	–	20,0	–	–	28200	0,5	R335.15-13..
R335.15-1234.RE-03.2A	03329403	Combimaster	34,0	1,1	2,65	2,9	2	2	–	23,0	M12	–	30,0	–	–	23600	0,2	R335.15-13..

CW in funzione della larghezza inserto

Per la profondità della cava (CDX), vedere le pagine inserti alle pagine 921

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R335.15 DC = 24/34	–	H4B-T15P	C03509-T15P	DOUBLE-T
R335.15 DC = 63	220.17-692	H4B-T15P	C03509-T15P	DOUBLE-T

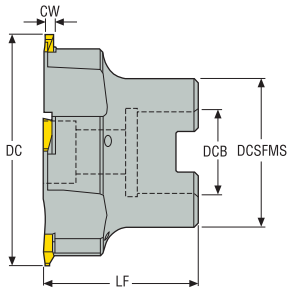
Accessori

Per	Coppia di serraggio inserto	Chiave dinamometrica
		
R335.15 DC = 24/34	3.0NM	T00-15P30
R335.15 DC = 63	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R335.15 – inch





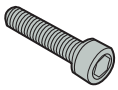
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 2, 403, 404 - 2, 405
—Per il programma inserti completo, vedere le pagine 921
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch	inch	inch	inch			inch	inch	inch		lb	
R335.15-02.50-18	75072222	Manicotto	2.500	0.124	0.203	0.217	5	5	0.750	1.571	1.571	17300	1.100	R335.15-18...

CW in funzione della larghezza inserto

Per la profondità della cava (CDX), vedere le pagine inserti alle pagine 921

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R335.15-02.50-..	UC6S3/8UNFX1-1/4	H4B-T15P	C03509-T15P	DOUBLE-T

Accessori

Per	Coppia di serraggio inserto	Chiave dinamometrica
		
R335.15-02.50-..	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R335.15– Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			10%	5%	2%
P1	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,19 *0.0075*	0,26 *0.010*	0,42 *0.017*
P2	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,19 *0.0075*	0,26 *0.010*	0,42 *0.017*
P3	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,18 *0.0070*	0,25 *0.010*	0,40 *0.016*
P4	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,18 *0.0070*	0,25 *0.010*	0,40 *0.016*
P5	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
P6	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
P7	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
P8	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,18 *0.0070*	0,25 *0.010*	0,40 *0.016*
P11	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
P12	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,16 *0.0065*	0,26 *0.010*
M1	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,19 *0.0075*	0,26 *0.010*	0,42 *0.017*
M2	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
M3	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,14 *0.0055*	0,19 *0.0075*	0,30 *0.012*
M4	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,17 *0.0065*	0,26 *0.010*
M5	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,17 *0.0065*	0,26 *0.010*
K1	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,19 *0.0075*	0,26 *0.010*	0,42 *0.017*
K2	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
K3	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
K4	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
K5	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,16 *0.0065*	0,22 *0.0085*	0,34 *0.013*
K6	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,17 *0.0065*	0,24 *0.0095*	0,38 *0.015*
K7	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,16 *0.0065*	0,22 *0.0085*	0,34 *0.013*
N1	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,24 *0.0095*	0,34 *0.013*	0,55 *0.022*
N2	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,24 *0.0095*	0,34 *0.013*	0,55 *0.022*
N3	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,24 *0.0095*	0,34 *0.013*	0,55 *0.022*
N11	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,24 *0.0095*	0,34 *0.013*	0,55 *0.022*
S1	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,17 *0.0065*	0,26 *0.010*
S2	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,17 *0.0065*	0,26 *0.010*
S3	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,11 *0.0044*	0,16 *0.0065*	0,25 *0.010*
S11	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,14 *0.0055*	0,19 *0.0075*	0,30 *0.012*
S12	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,14 *0.0055*	0,19 *0.0075*	0,30 *0.012*
S13	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,17 *0.0065*	0,26 *0.010*
H5	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,16 *0.0065*	0,26 *0.010*
H8	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,090 *0.0036*	0,12 *0.0048*	0,20 *0.0080*
H11	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,12 *0.0048*	0,16 *0.0065*	0,26 *0.010*
H12	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,090 *0.0036*	0,12 *0.0048*	0,20 *0.0080*
H21	R335.15-13..FG-E08 F40M	R335.15-18..FG-M12 F40M	0,090 *0.0036*	0,12 *0.0048*	0,20 *0.0080*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R335.15 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M		
	10%	5%	2%
P1	260 *850*	285 *940*	280 *920*
P2	255 *840*	275 *900*	275 *900*
P3	220 *720*	240 *790*	240 *790*
P4	195 *640*	210 *690*	210 *690*
P5	190 *620*	205 *670*	205 *670*
P6	210 *690*	230 *750*	230 *750*
P7	200 *660*	215 *710*	215 *710*
P8	185 *610*	200 *660*	200 *660*
P11	195 *640*	210 *690*	210 *690*
P12	125 *410*	135 *445*	135 *445*
M1	205 *670*	225 *740*	220 *720*
M2	170 *560*	185 *610*	185 *610*
M3	135 *445*	150 *490*	150 *490*
M4	105 *345*	115 *375*	115 *375*
M5	90 *295*	95 *310*	95 *310*
K1	200 *660*	220 *720*	220 *720*
K2	180 *590*	195 *640*	195 *640*
K3	150 *490*	165 *540*	165 *540*
K4	145 *475*	155 *510*	155 *510*
K5	90 *295*	95 *310*	95 *310*
K6	130 *425*	140 *460*	140 *460*
K7	110 *360*	120 *395*	120 *395*
N1	1500 *4925*	1625 *5325*	1600 *5250*
N2	600 *1975*	650 *2125*	650 *2125*
N3	405 *1325*	435 *1425*	430 *1400*
N11	460 *1500*	495 *1625*	495 *1625*
S1	49 *160*	55 *180*	55 *180*
S2	40 *130*	43 *140*	43 *140*
S3	35 *115*	37 *120*	37 *120*
S11	70 *230*	75 *245*	75 *245*
S12	60 *195*	65 *215*	65 *215*
S13	34 *110*	36 *120*	36 *120*
H5	41 *135*	45 *150*	45 *150*
H8	44 *145*	48 *155*	47 *155*
H11	55 *180*	60 *195*	55 *180*
H12	50 *165*	55 *180*	55 *180*
H21	44 *145*	48 *155*	47 *155*

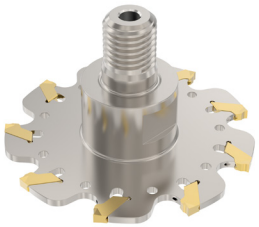


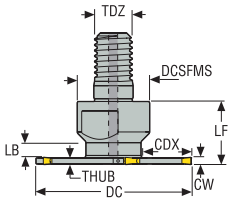
335.10

Sistema di fresa a disco facile da usare e affidabile dedicato per operazioni di scanalatura e taglio sottili.

- Bloccaggio inserto senza vite, l'inserto è trattenuto dall'azione elastica del corpo fresa in acciaio
- Larghezza di taglio 2,25-4,1 mm (0,088-0,161")
- Diametro della gamma di frese 40-315 mm (1,5-6,0")
- Disponibile con attacchi Weldon, Combimaster, a manicotto
- Corpo fresa HSS per un'elevata rigidità e affidabilità
- Sui diametri piccoli, presenza di fori per refrigerante interno e disegno a passo stretto per un'elevata produttività
- Precisione della larghezza inserto da +/- 0,05 a 0,08 mm - da +/-0,002 a 0,003"

R335.10 - Inserto 150.10 – In mm - tre tagli - disegno a passo stretto con adduzione refrigerante interna

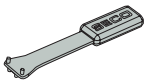




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 416–417
—Per il programma inserti completo, vedere le pagine 915
—Per la spiegazione degli attributi ISO, vedere pag. 16

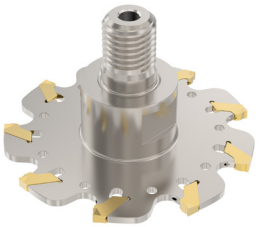
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCSFMS	TDZ	LF	THUB	LB	RPMX	Peso	Inserto 150.10
			mm	mm	mm			mm		mm	mm	mm		kg	
R335.10-1040.RE-02-4A	02926773	Combimaster	40,0	2,25	12,7	4	4	18,5	M10	20,0	1,9	5,3	3970	0,2	-2.25N/2.5N
R335.10-1040.RE-03-4A	02926776	Combimaster	40,0	3,1	12,9	4	4	18,5	M10	20,0	2,4	4,3	3970	0,2	-3N
R335.10-1250.RE-02-5A	02926774	Combimaster	50,0	2,25	15,4	5	5	23,0	M12	20,0	1,9	–	3180	0,2	-2.25N/2.5N
R335.10-1250.RE-03-5A	02926777	Combimaster	50,0	3,1	15,6	5	5	23,0	M12	20,0	2,4	4,3	3180	0,1	-3N
R335.10-1663.RE-02-7A	03054405	Combimaster	63,0	2,25	15,7	7	7	30,0	M16	23,0	1,9	–	2520	0,3	-2.25N/2.5N
R335.10-1663.RE-03-7A	03054398	Combimaster	63,0	3,1	15,9	7	7	30,0	M16	23,0	2,4	0,0	2520	0,3	-3N
R335.10-1680.RE-02-9A	03054406	Combimaster	80,0	2,25	24,1	9	9	30,0	M16	23,0	1,9	–	1980	0,3	-2.25N/2.5N
R335.10-1680.RE-03-9A	03054399	Combimaster	80,0	3,1	24,3	9	9	30,0	M16	23,0	2,4	0,0	1980	0,3	-3N
R335.10-20100.RE-02-11A	03054407	Combimaster	100,0	2,25	30,4	11	11	36,5	M20	25,0	1,9	–	1580	0,5	-2.25N/2.5N
R335.10-20100.RE-03-11A	03054400	Combimaster	100,0	3,1	30,6	11	11	36,5	M20	25,0	2,4	0,0	1580	0,5	-3N
R335.10-20125.RE-03-13A	03279546	Combimaster	125,0	3,1	43,1	13	13	36,5	M20	25,0	2,4	0,0	1270	0,6	-3N

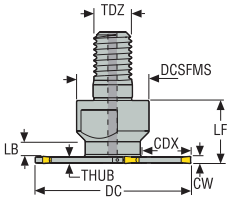
Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto
	
R335.10 DC=125	150.10-150
R335.10 DC=40-100	335.10-155

Chiavi dinamometriche e fisse, vedere pagina 931

Fresa 335.10 - Inserto 150.10 - Pollici

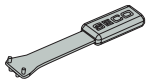




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 416-417
—Per il programma inserti completo, vedere le pagine 915
—Per la spiegazione degli attributi ISO, vedere pag. 16

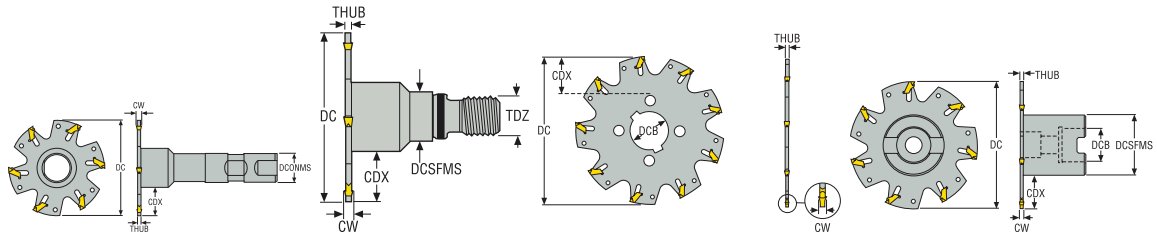
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCSFMS	TDZ	LF	THUB	LB	RPMX	Peso	Inserto 150.10
			inch	inch	inch			inch		inch	inch	inch		lb	
R335.10-02.00-12RE-02-5A	03054409	Combimaster	2.000	0.089	0.622	5	5	0.906	M12	0.787	0.075	–	3180	0.660	-2.25N/2.5N
R335.10-02.00-12RE-03-5A	03054402	Combimaster	2.000	0.122	0.630	5	5	0.906	M12	0.787	0.094	0.169	3180	0.220	-3N
R335.10-02.50-16RE-02-7A	03054410	Combimaster	2.500	0.089	0.626	7	7	1.181	M16	0.906	0.075	–	2520	0.660	-2.25N/2.5N

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto
	
	335.10-155

Chiavi dinamometriche e fisse, vedere pagina 931

R335.10/335.10 - Inserto 150.10 – In mm - tre tagli - Corpo HSS

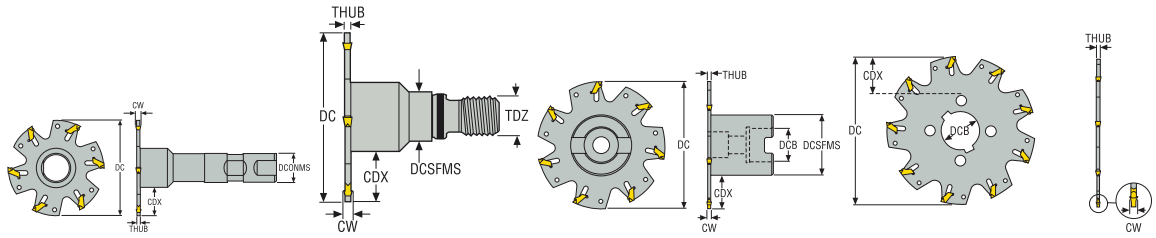


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 416-417
—Per il programma inserti completo, vedere le pagine 915
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	DCONMS	THUB	RPMX	Peso	Inserto 150.10
			mm	mm	mm			mm	mm		mm	mm		kg	
R335.10-25063.3-02-5	75034462	Weldon	63,0	2,25	15,0	5	5	–	–	–	25,0	1,9	4000	0,6	-2.25N/2.5N
R335.10-25063.3-03-5	75027293	Weldon	63,0	3,1	15,0	5	5	–	–	–	25,0	2,4	4000	0,6	-3N
R335.10-32080.3-02-6	75034463	Weldon	80,0	2,25	19,5	6	6	–	–	–	32,0	1,9	3500	1,1	-2.25N/2.5N
R335.10-32080.3-03-6	75027296	Weldon	80,0	3,1	19,5	6	6	–	–	–	32,0	2,4	3500	1,2	-3N
R335.10-063-02.22-5	75034464	Manicotto	63,0	2,25	15,0	5	5	22,0	32,0	–	–	1,9	4000	0,5	-2.25N/2.5N
R335.10-063-03.22-5	75027298	Manicotto	63,0	3,1	15,0	5	5	22,0	32,0	–	–	2,4	4000	0,5	-3N
R335.10-080-02.22-6	75034465	Manicotto	80,0	2,25	19,5	6	6	22,0	40,0	–	–	1,9	3500	0,6	-2.25N/2.5N
335.10-080-02.22-6	75034458	Manicotto	80,0	2,25	22,5	6	6	22,0	–	–	–	1,9	3500	0,2	-2.25N/2.5N
R335.10-080-03.22-6	75027301	Manicotto	80,0	3,1	19,5	6	6	22,0	40,0	–	–	2,4	3500	0,6	-3N
335.10-080-03.22-6	75012752	Manicotto	80,0	3,1	22,5	6	6	22,0	–	–	–	2,4	3500	0,2	-3N
R335.10-100-02.27-7	75034466	Manicotto	100,0	2,25	25,5	7	7	27,0	48,0	–	–	1,9	3200	0,8	-2.25N/2.5N
335.10-100-02.27-7	75034459	Manicotto	100,0	2,25	29,0	7	7	27,0	–	–	–	1,9	3200	0,2	-2.25N/2.5N
R335.10-100-03.27-7	75027303	Manicotto	100,0	3,1	25,5	7	7	27,0	48,0	–	–	2,4	3200	0,9	-3N
335.10-100-03.27-7	75012754	Manicotto	100,0	3,1	29,0	7	7	27,0	–	–	–	2,4	3200	0,3	-3N
R335.10-125-02.32-9	75034467	Manicotto	125,0	2,25	33,0	9	9	32,0	58,0	–	–	1,9	2800	1,3	-2.25N/2.5N
335.10-125-02.32-9	75028096	Manicotto	125,0	2,25	34,5	9	9	32,0	–	–	–	1,9	2800	0,3	-2.25N/2.5N
R335.10-125-03.32-9	75027307	Manicotto	125,0	3,1	33,0	9	9	32,0	58,0	–	–	2,4	2800	1,4	-3N
335.10-125-03.32-9	75012756	Manicotto	125,0	3,1	34,5	9	9	32,0	–	–	–	2,4	2800	0,3	-3N
R335.10-160-02.40-12	75034468	Manicotto	160,0	2,25	39,5	12	12	40,0	80,0	–	–	1,9	2400	2,9	-2.25N/2.5N
335.10-160-02.40-12	75034460	Manicotto	160,0	2,25	39,5	12	12	40,0	–	–	–	1,9	2400	0,4	-2.25N/2.5N
R335.10-160-03.40-12	75027311	Manicotto	160,0	3,1	39,5	12	12	40,0	80,0	–	–	2,4	2400	2,4	-3N
335.10-160-03.40-12	75012758	Manicotto	160,0	3,1	39,5	12	12	40,0	–	–	–	2,4	2400	0,4	-3N
335.10-200-03.40-14	75027697	Manicotto	200,0	3,1	59,5	14	14	40,0	–	–	–	2,4	2200	1,3	-3N
335.10-250-03.40-18	75028688	Manicotto	250,0	3,1	84,5	18	18	40,0	–	–	–	2,4	2000	1,0	-3N
335.10-315-03.40-24	75005264	Manicotto	315,0	3,1	117,0	24	24	40,0	–	–	–	2,4	1700	1,3	-3N
R335.10-1663.RE-02-5	02731371	Combimaster	63,0	2,25	16,0	5	5	–	30,0	M16	–	1,9	4000	0,3	-2.25N/2.5N
R335.10-1663.RE-03-5	02731375	Combimaster	63,0	3,1	16,0	5	5	–	30,0	M16	–	2,4	4000	0,4	-3N
R335.10-1680.RE-02-6	02731373	Combimaster	80,0	2,25	19,5	6	6	–	30,0	M16	–	1,9	3500	0,6	-2.25N/2.5N
R335.10-1680.RE-03-6	02731378	Combimaster	80,0	3,1	19,5	6	6	–	30,0	M16	–	2,4	3500	0,6	-3N

Per frese con foro di centraggio 335.10-..., senza fori guida per frese con diametro di 80-100 mm. Per diametro della fresa > 100 mm, utilizzare gli anelli guida Seco, vedere pagina 412
Nota: Per tipi fresa R335.10-... , il disco viene fornito montato sull'attacco

R335.10/335.10 - Inserto 150.10 – In mm - tre tagli - Corpo HSS

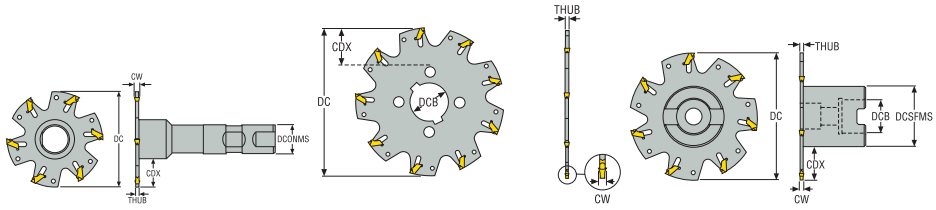


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 416-417
—Per il programma inserti completo, vedere le pagine 915
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	DCONMS	THUB	RPMX	Peso	Inserto 150.10
			mm	mm	mm			mm	mm		mm	mm		kg	
R335.10-25063.3-04-5	75027294	Weldon	63,0	4,1	15,0	5	5	–	–	–	25,0	3,4	4000	0,5	-4N
R335.10-32080.3-04-6	75027297	Weldon	80,0	4,1	19,5	6	6	–	–	–	32,0	3,4	3500	1,1	-4N
R335.10-063-04.22-5	75027299	Manicotto	63,0	4,1	15,0	5	5	22,0	32,0	–	–	3,4	4000	0,4	-4N
R335.10-080-04.22-6	75027302	Manicotto	80,0	4,1	19,5	6	6	22,0	40,0	–	–	3,4	3500	0,7	-4N
335.10-080-04.22-6	75012753	Manicotto	80,0	4,1	22,5	6	6	22,0	–	–	–	3,4	3500	0,2	-4N
R335.10-100-04.27-7	75027304	Manicotto	100,0	4,1	25,5	7	7	27,0	48,0	–	–	3,4	3200	0,9	-4N
335.10-100-04.27-7	75012755	Manicotto	100,0	4,1	29,0	7	7	27,0	–	–	–	3,4	3200	0,2	-4N
R335.10-125-04.32-9	75027309	Manicotto	125,0	4,1	33,0	9	9	32,0	58,0	–	–	3,4	2800	1,5	-4N
335.10-125-04.32-9	75012757	Manicotto	125,0	4,1	34,5	9	9	32,0	–	–	–	3,4	2800	0,4	-4N
R335.10-160-04.40-12	75027312	Manicotto	160,0	4,1	39,5	12	12	40,0	80,0	–	–	3,4	2400	3,1	-4N
335.10-160-04.40-12	75012759	Manicotto	160,0	4,1	39,5	12	12	40,0	–	–	–	3,4	2400	0,6	-4N
335.10-200-04.40-14	75027826	Manicotto	200,0	4,1	59,5	14	14	40,0	–	–	–	3,4	2200	0,9	-4N
335.10-250-04.40-18	75028689	Manicotto	250,0	4,1	84,5	18	18	40,0	–	–	–	3,4	2000	1,2	-4N
335.10-315-04.40-24	75034461	Manicotto	315,0	4,1	117,0	24	24	40,0	–	–	–	3,4	1700	1,9	-4N
R335.10-1663.RE-04-5	02731380	Combimaster	63,0	4,1	16,0	5	5	–	30,0	M16	–	3,4	4000	0,5	-4N
R335.10-1680.RE-04-6	02731382	Combimaster	80,0	4,1	19,5	6	6	–	30,0	M16	–	3,4	3500	0,5	-4N

Per frese con foro di centraggio 335.10-..., senza fori guida per frese con diametro di 80-100 mm. Per diametro della fresa > 100 mm, utilizzare gli anelli guida Seco, vedere pagina 412
Nota: Per tipi fresa R335.10-... , il disco viene fornito montato sull'attacco

R335.10/335.10 - Inserto 150.10 – inch - tre tagli - Corpo HSS



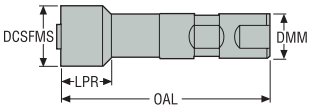
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 416-417
—Per il programma inserti completo, vedere le pagine 915
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	DCONMS	THUB	RPMX	Peso	Inserto 150.10
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.10-02.50-3-2	75054664	Weldon	2.500	0.089	0.602	5	5	–	–	1.000	0.075	4000	0.440	2.25N/2.5N
R335.10-02.50-3-3	75054666	Weldon	2.500	0.122	0.602	5	5	–	–	1.000	0.094	4000	1.540	3N
R335.10-03.00-3-2	75054665	Weldon	3.000	0.089	0.728	6	6	–	–	1.250	0.075	3500	3.090	2.25N/2.5N
R335.10-03.00-3-3	75054667	Weldon	3.000	0.122	0.728	6	6	–	–	1.250	0.094	3500	3.090	3N
R335.10-02.50-2B	75054670	Manicotto	2.500	0.089	0.600	5	5	0.750	1.575	–	0.075	4000	1.100	2.25N/2.5N
R335.10-02.50-3B	75054672	Manicotto	2.500	0.122	0.600	5	5	0.750	1.575	–	0.094	4000	1.320	3N
R335.10-03.00-2B	75054671	Manicotto	3.000	0.089	0.693	6	6	0.750	1.575	–	0.075	3500	1.760	2.25N/2.5N
335.10-03.00-2	75054743	Manicotto	3.000	0.089	0.669	6	6	1.000	–	–	0.075	3500	0.440	2.25N/2.5N
R335.10-03.00-3B	75054673	Manicotto	3.000	0.122	0.693	6	6	0.750	1.575	–	0.094	3500	1.980	3N
335.10-03.00-3	75070139	Manicotto	3.000	0.122	0.669	6	6	1.000	–	–	0.094	3500	0.440	3N
R335.10-04.00-2B	75054680	Manicotto	4.000	0.089	1.035	7	7	1.000	1.890	–	0.075	3200	1.980	2.25N/2.5N
335.10-04.00-2	75054744	Manicotto	4.000	0.089	1.161	7	7	1.000	–	–	0.075	3200	0.440	2.25N/2.5N
R335.10-04.00-3B	75054683	Manicotto	4.000	0.122	1.035	7	7	1.000	1.890	–	0.094	3200	2.650	3N
335.10-04.00-3	75014456	Manicotto	4.000	0.122	1.161	7	7	1.000	–	–	0.094	3200	0.660	3N
R335.10-05.00-2B	75054681	Manicotto	5.000	0.089	1.339	9	9	1.250	2.283	–	0.075	2800	3.750	2.25N/2.5N
335.10-05.00-2	75054745	Manicotto	5.000	0.089	1.398	9	9	1.250	–	–	0.075	2800	0.660	2.25N/2.5N
R335.10-05.00-3B	75054684	Manicotto	5.000	0.122	1.339	9	9	1.250	2.283	–	0.094	2800	3.750	3N
335.10-05.00-3	75014458	Manicotto	5.000	0.122	1.398	9	9	1.250	–	–	0.094	2800	0.660	3N
R335.10-06.00-2B	75054682	Manicotto	6.000	0.089	1.406	12	12	1.500	3.150	–	0.075	2400	6.170	2.25N/2.5N
335.10-06.00-2	75054746	Manicotto	6.000	0.089	1.555	12	12	1.250	–	–	0.075	2400	0.880	2.25N/2.5N
R335.10-06.00-3B	75054685	Manicotto	6.000	0.122	1.406	12	12	1.500	3.150	–	0.094	2400	5.510	3N
335.10-06.00-3	75014460	Manicotto	6.000	0.122	1.555	12	12	1.250	–	–	0.094	2400	0.880	3N

Per frese con foro di centraggio 335,10 - ..., nessun foro di fissaggio per diam. 3,00 - 4,00". Per il diametro della fresa > 4,00", utilizzare gli anelli guida Seco, vedere pagina 414
Nota: Per tipi fresa R335.10-... , il disco viene fornito montato sull'attacco

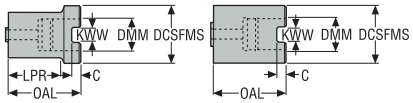
Ricambi – In mm

Attacco per tipo Weldon



Codice di ordinazione	DMM	DCSFMS	OAL	LPR
335.10-25.3	25	32	106	25
335.10-32.3	32	40	150	30

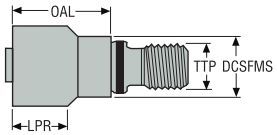
Attacco per tipo a manicotto



Codice di ordinazione	DMM	DCSFMS	OAL	LPR	KWW	C
335.10-2232	22	40	50	36	10,4	6,3
335.10-2240M	22	40	50	–	10,4	6,3
335.10-2748	27	48	50	–	12,4	7
335.10-3258	32	58	63	–	14,4	8
335.10-4080	40	80	63	–	16,4	9

Nota: viti di assemblaggio fornite con attacchi Weldon, a manicotto e Combimaster

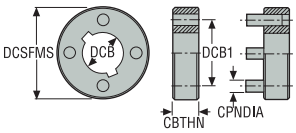
Tipo Combimaster



Codice di ordinazione	LPR	TDZ	DCSFMS	OAL
335.10-16RE-10	28	M16	30	30
335.10-16RE-18	28	M16	30	40

Nota: viti di assemblaggio fornite con attacchi Weldon, a manicotto e Combimaster

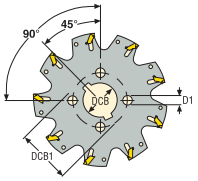
Anelli di trascinamento per tipo a manicotto



Codice di ordinazione	DCB	DCSFMS	CBTHN	DCB1	CPNDIA
335.10-14532	32	55	10	45	5,7
335.10-16340	40	80	12	63	10,7

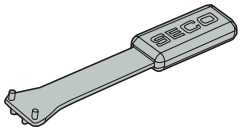
Anello di trascinamento da ordinare separatamente

Tipo foro di centraggio



Codice di ordinazione	DCB	DCB1	D1
335.10-080	22	–	–
335.10-100	27	–	–
335.10-125	32	45	6
335.10-160-315	40	63	11

Parti di ricambio (chiave compresa nella fornitura)



Per fresa	Chiave rimozione inserto
R335.10-..	150.10-150

Componenti di assemblaggio/parti standard - mm

Frese Weldon

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Coppia Nm
					
R335.10-25063.3-02-5	B-R335.10-063.10-02	335.10-25.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-32080.3-02-6	B-R335.10-080.18-02	335.10-32.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-25063.3-03-5	B-R335.10-063.10-03	335.10-25.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-32080.3-03-6	B-R335.10-080.18-03	335.10-32.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-25063.3-04-5	B-R335.10-063.10-04	335.10-25.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-32080.3-04-6	B-R335.10-080.18-04	335.10-32.3	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm

Frese a manicotto

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Coppia Nm	Vite attacco
						
R335.10-063-02.22-5	B-R335.10-063.10-02	335.10-2232	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696
R335.10-080-02.22-6	B-R335.10-080.18-02	335.10-2240M	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696
R335.10-063-03.22-5	B-R335.10-063.10-03	335.10-2232	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696
R335.10-080-03.22-6	B-R335.10-080.18-03	335.10-2240M	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696
R335.10-063-04.22-5	B-R335.10-063.10-04	335.10-2232	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696
R335.10-080-04.22-6	B-R335.10-080.18-04	335.10-2240M	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-696

Frese a manicotto

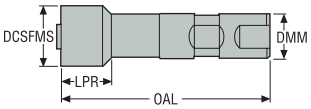
Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Coppia Nm	Vite attacco
						
R335.10-100-02.27-7	B-R335.10-100.27-02	335.10-2748	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	MC6S 12x40
R335.10-100-03.27-7	B-R335.10-100.27-03	335.10-2748	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	MC6S 12x40
R335.10-100-04.27-7	B-R335.10-100.27-04	335.10-2748	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	MC6S 12x40
R335.10-125-02.32-9	B-R335.10-125.32-02	335.10-3258	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-694
R335.10-125-03.32-9	B-R335.10-125.32-03	335.10-3258	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-694
R335.10-125-04.32-9	B-R335.10-125.32-04	335.10-3258	4 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm	220.17-694
R335.10-160-02.40-12	B-R335.10-160.40-02	335.10-4080	4 x 335.10-1030-T30P	1/4HEX-T30PX50	10Nm	MC6S 20x40
R335.10-160-03.40-12	B-R335.10-160.40-03	335.10-4080	4 x 335.10-1030-T30P	1/4HEX-T30PX50	10Nm	MC6S 20x40
R335.10-160-04.40-12	B-R335.10-160.40-04	335.10-4080	4 x 335.10-1030-T30P	1/4HEX-T30PX50	10Nm	MC6S 20x40

Combimaster

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Coppia Nm
					
R335.10-1663.RE-02-5	B-R335.10-063.10-02	335.10-16RE-10	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-1680.RE-02-6	B-R335.10-080.18-02	335.10-16RE-18	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-1663.RE-03-5	B-R335.10-063.10-03	335.10-16RE-10	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-1680.RE-03-6	B-R335.10-080.18-03	335.10-16RE-18	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-1663.RE-04-5	B-R335.10-063.10-04	335.10-16RE-10	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm
R335.10-1680.RE-04-6	B-R335.10-080.18-04	335.10-16RE-18	3 x 335.10-0516-T15P	1/4HEX-T15PX50	6.5Nm

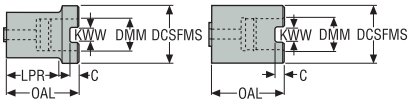
Ricambi – Pollici

Attacco per tipo Weldon



Codice di ordinazione	DMM	DCSFMS	OAL	LPR
335.10-01.00-3-A	1.00	1.25	4.17	1.00
335.10-01.25-3-A	1.25	1.50	5.90	1.18

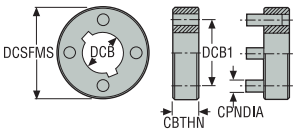
Attacco per tipo a manicotto



Codice di ordinazione	DMM	DCSFMS	OAL	LPR	KWW	C
335.10-00.75-1.25B-A	0.75	1.26	1.969	1.50	0.32	0.20
335.10-00.75-1.50B-A	0.75	1.58	1.969	–	0.32	0.20
335.10-01.00-1.89B-A	1.00	1.89	1.969	–	0.38	0.23
335.10-01.25-2.28B-A	1.25	2.28	2.480	–	0.51	0.28
335.10-01.50-3.15B-A	1.50	3.15	2.480	–	0.63	0.38

Nota: viti di assemblaggio fornite con attacchi Weldon e a manicotto

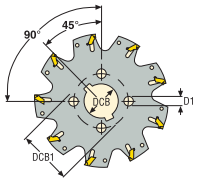
Anelli di trascinamento per tipo a manicotto



Codice di ordinazione	DCB	DCSFMS	CBTHN	DCB1	CPNDIA
335.10-14531	2.16	1.25	1.77	0.22	0.39
335.10-15531	2.83	1.25	2.16	0.42	0.47
335.10-17451	3.50	2.00	2.91	0.42	0.47

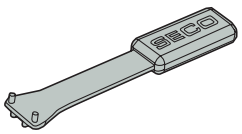
Anello di trascinamento da ordinare separatamente

Tipo foro di centraggio



Codice di ordinazione	DCB	DCB1	D1
335.10-03.00-04.00	1.00	–	–
335.10-05.00	1.25	1.77	0.24
335.10-06.00	1.25	2.16	0.43
335.10-08.00-12.00	2.00	2.91	0.43

Parti di ricambio (chiave compresa nella fornitura)



Per fresa	Chiave rimozione inserto
R335.10-..	150.10-150

Componenti di assemblaggio/parti standard - pollici

Frese Weldon

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Torque in/lbs
					
R335.10-02.50-3-2	R335.10-02.50-2	335.10-01.00-3-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb
R335.10-02.50-3-3	R335.10-02.50-3	335.10-01.00-3-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb
R335.10-03.00-3-2	R335.10-03.00-2	335.10-01.25-3-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb
R335.10-03.00-3-3	R335.10-03.00-3	335.10-01.25-3-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb

Frese a manicotto

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite staffa	Torque in/lbs	Vite attacco
						
R335.10-02.50-2B	R335.10-02.50-2	335.10-00.75-1.25B-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb	220.17-695
R335.10-02.50-3B	R335.10-02.50-3	335.10-00.75-1.25B-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb	220.17-695
R335.10-03.00-2B	R335.10-03.00-2	335.10-00.75-1.50B-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb	220.17-695
R335.10-03.00-3B	R335.10-03.00-3	335.10-00.75-1.50B-A	335.10-0516-T15P(3X)	1/4HEX-T15PX50	57.5 in-lb	220.17-695

Frese a manicotto

Codice di ordinazione	Codice di ordinazione corpo fresa	Codice di ordinazione attacco	Vite di assemblaggio	Chiave per vite inserto	Torque in/lbs	Vite attacco
						
R335.10-04.00-2B	R335.10-04.00-2	335.10-01.00-1.89B-A	335.10-0516-T15P(4X)	1/4HEX-T15PX50	57.5 in-lb	UC6S1/2UNFX1-1/2
R335.10-04.00-3B	R335.10-04.00-3	335.10-01.00-1.89B-A	335.10-0516-T15P(4X)	1/4HEX-T15PX50	57.5 in-lb	UC6S1/2UNFX1-1/2
R335.10-05.00-2B	R335.10-05.00-2	335.10-01.25-2.28B-A	335.10-0516-T15P(4X)	1/4HEX-T15PX50	57.5 in-lb	UC6S5/8UNFX11/2
R335.10-05.00-3B	R335.10-05.00-3	335.10-01.25-2.28B-A	335.10-0516-T15P(4X)	1/4HEX-T15PX50	57.5 in-lb	UC6S5/8UNFX11/2
R335.10-06.00-2B	R335.10-06.00-2	335.10-01.50-3-15B-A	335.10-1030-T30P(4X)	1/4HEX-T30PX50	88.5 in-lb	UC6S3/4UNFX1-1/4
R335.10-06.00-3B	R335.10-06.00-3	335.10-01.50-3-15B-A	335.10-1030-T30P(4X)	1/4HEX-T30PX50	88.5 in-lb	UC6S3/4UNFX1-1/4

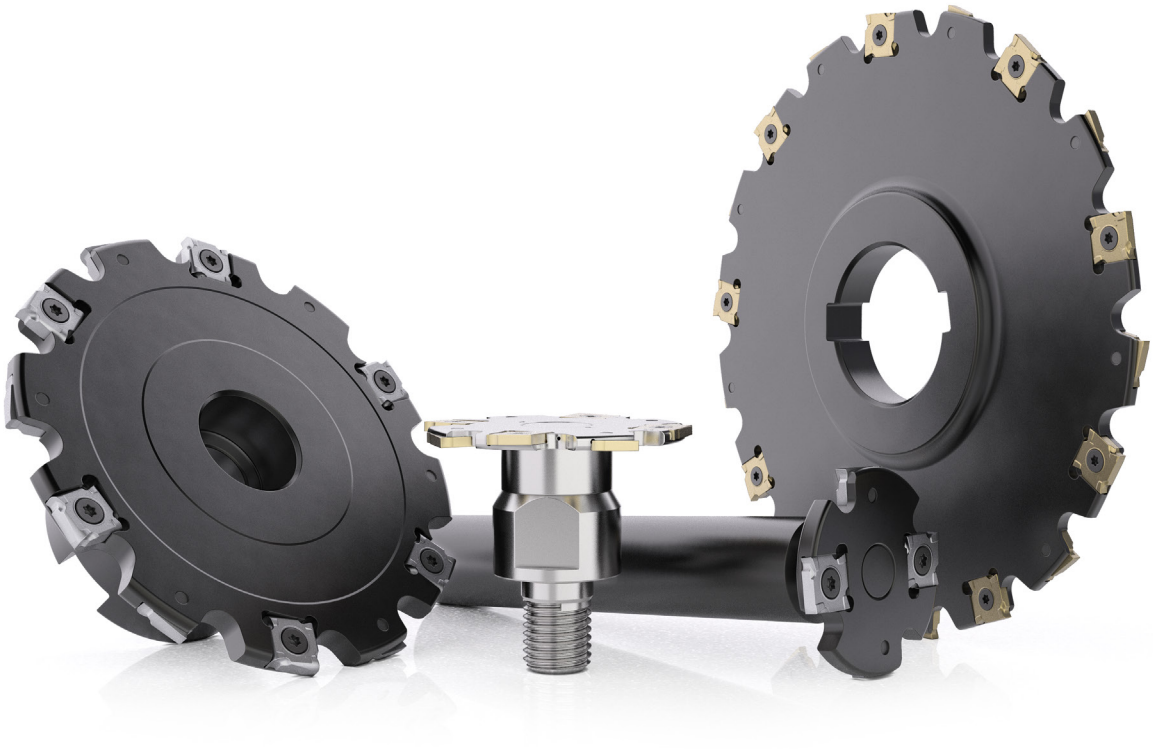
335.10 – Selezione dell'inserto – In mm/ In pollici

SMG					f_z			
					30%	20%	10%	5%
P1	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,10 *0.0040*	0,11 *0.0044*	0,15 0.0060	0,20 0.0080
P2	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,10 *0.0040*	0,11 *0.0044*	0,15 0.0060	0,22 0.0085
P3	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,095 *0.0038*	0,11 *0.0044*	0,14 0.0055	0,20 0.0080
P4	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,090 *0.0036*	0,11 *0.0044*	0,14 0.0055	0,19 0.0075
P5	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
P6	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
P7	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
P8	150.10-2.25N-16 CP500	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,095 *0.0038*	0,11 *0.0044*	0,14 0.0055	0,20 0.0080
P11	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,085 *0.0034*	0,095 *0.0038*	0,13 0.0050	0,17 0.0065
P12	150.10-2.25N-16 CP600	150.10-2.5N-12 CP600	*150.10-3N-12 CP600*	*150.10-4N-12 CP600*	0,055 *0.0022*	0,065 *0.0026*	0,085 0.0034	0,12 0.0048
M1	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,10 *0.0040*	0,11 *0.0044*	0,15 0.0060	0,22 0.0085
M2	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
M3	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,070 *0.0028*	0,085 *0.0034*	0,11 0.0044	0,15 0.0060
M4	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,065 *0.0026*	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
M5	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,065 *0.0026*	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
K1	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,10 *0.0040*	0,11 *0.0044*	0,15 0.0060	0,22 0.0085
K2	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
K3	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
K4	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
K5	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,080 *0.0032*	0,095 *0.0038*	0,12 0.0048	0,17 0.0065
K6	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,090 *0.0036*	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
K7	150.10-2.25N-16 TGP45	150.10-2.5N-16 TGP45	*150.10-3N-16 TGP45*	*150.10-4N-16 TGP45*	0,080 *0.0032*	0,095 *0.0038*	0,12 0.0048	0,17 0.0065
N1	150.10-2.25N-14 CP500	150.10-2.5N-14 CP500	*150.10-3N-14 CP500*	*150.10-4N-14 CP500*	0,12 *0.0048*	0,14 *0.0055*	0,19 0.0075	0,26 0.010
N2	150.10-2.25N-14 CP500	150.10-2.5N-14 CP500	*150.10-3N-14 CP500*	*150.10-4N-14 CP500*	0,12 *0.0048*	0,14 *0.0055*	0,19 0.0075	0,26 0.010
N3	150.10-2.25N-14 CP500	150.10-2.5N-14 CP500	*150.10-3N-14 CP500*	*150.10-4N-14 CP500*	0,12 *0.0048*	0,14 *0.0055*	0,19 0.0075	0,26 0.010
N11	150.10-2.25N-14 CP500	150.10-2.5N-14 CP500	*150.10-3N-14 CP500*	*150.10-4N-14 CP500*	0,12 *0.0048*	0,14 *0.0055*	0,19 0.0075	0,26 0.010
S1	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,065 *0.0026*	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
S2	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,065 *0.0026*	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
S3	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,060 *0.0024*	0,065 *0.0026*	0,090 0.0036	0,12 0.0048
S11	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,070 *0.0028*	0,085 *0.0034*	0,11 0.0044	0,15 0.0060
S12	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,070 *0.0028*	0,085 *0.0034*	0,11 0.0044	0,15 0.0060
S13	150.10-2.25N-14 CP600	150.10-2.5N-14 CP600	*150.10-3N-14 CP600*	*150.10-4N-14 CP600*	0,065 *0.0026*	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
H5	150.10-2.25N-16 CP500	150.10-2.5N-16 CP500	*150.10-3N-16 CP500*	*150.10-4N-16 CP500*	0,060 *0.0024*	0,070 *0.0028*	0,095 0.0038	0,13 0.0050
H8	150.10-2.25N-16 CP500	150.10-2.5N-16 CP500	*150.10-3N-16 CP500*	*150.10-4N-16 CP500*	0,048 *0.0019*	0,055 *0.0022*	0,070 0.0028	0,10 0.0040
H11	150.10-2.25N-16 CP500	150.10-2.5N-16 CP500	*150.10-3N-16 CP500*	*150.10-4N-16 CP500*	0,060 *0.0024*	0,070 *0.0028*	0,095 0.0038	0,13 0.0050
H12	150.10-2.25N-16 CP500	150.10-2.5N-16 CP500	*150.10-3N-16 CP500*	*150.10-4N-16 CP500*	0,048 *0.0019*	0,055 *0.0022*	0,070 0.0028	0,10 0.0040
H21	150.10-2.25N-16 CP500	150.10-2.5N-16 CP500	*150.10-3N-16 CP500*	*150.10-4N-16 CP500*	0,048 *0.0019*	0,055 *0.0022*	0,070 0.0028	0,10 0.0040

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	CP500				CP600				HX				TGP45				T350M			
	30%	20%	10%	5%	30%	20%	10%	5%	30%	20%	10%	5%	30%	20%	10%	5%	30%	20%	10%	5%
P1	195 *640*	210 *690*	230 *750*	250 *820*	185 *610*	200 *660*	220 *720*	240 *790*	— —	— —	— —	— —	250 *820*	270 *890*	295 *970*	325 *1075*	215 *710*	230 *750*	255 *840*	275 *900*
P2	190 *620*	205 *670*	225 *740*	245 *800*	180 *590*	195 *640*	215 *710*	235 *770*	— —	— —	— —	— —	240 *790*	260 *850*	290 *950*	310 *1025*	210 *690*	225 *740*	245 *800*	270 *890*
P3	165 *540*	180 *590*	200 *660*	215 *710*	155 *510*	170 *560*	190 *620*	205 *670*	— —	— —	— —	— —	215 *710*	225 *740*	250 *820*	270 *890*	180 *590*	195 *640*	220 *720*	235 *770*
P4	150 *490*	160 *520*	175 *570*	190 *620*	140 *460*	150 *490*	165 *540*	180 *590*	— —	— —	— —	— —	185 *610*	200 *660*	220 *720*	240 *790*	160 *520*	175 *570*	190 *620*	205 *670*
P5	140 *460*	150 *490*	165 *540*	180 *590*	135 *445*	145 *475*	160 *520*	170 *560*	— —	— —	— —	— —	180 *590*	195 *640*	215 *710*	235 *770*	155 *510*	165 *540*	185 *610*	200 *660*
P6	160 *520*	170 *560*	190 *620*	205 *670*	150 *490*	160 *520*	180 *590*	195 *640*	— —	— —	— —	— —	200 *660*	215 *710*	240 *790*	260 *850*	175 *570*	185 *610*	205 *670*	220 *720*
P7	150 *490*	160 *520*	175 *570*	190 *620*	145 *475*	150 *490*	170 *560*	180 *590*	— —	— —	— —	— —	190 *620*	205 *670*	225 *740*	245 *800*	165 *540*	175 *570*	195 *640*	210 *690*
P8	140 *460*	150 *490*	165 *540*	180 *590*	130 *425*	145 *475*	160 *520*	170 *560*	— —	— —	— —	— —	180 *590*	190 *620*	210 *690*	230 *750*	150 *490*	165 *540*	185 *610*	200 *660*
P11	145 *475*	155 *510*	170 *560*	185 *610*	140 *460*	150 *490*	165 *540*	175 *570*	— —	— —	— —	— —	185 *610*	200 *660*	220 *720*	240 *790*	160 *520*	170 *560*	190 *620*	205 *670*
P12	95 *310*	100 *330*	110 *360*	120 *395*	90 *295*	95 *310*	105 *345*	115 *375*	— —	— —	— —	— —	120 *395*	125 *410*	140 *460*	155 *510*	105 *345*	110 *360*	120 *395*	130 *425*
M1	155 *510*	165 *540*	180 *590*	200 *660*	145 *475*	155 *510*	175 *570*	190 *620*	105 *345*	110 *360*	120 *395*	130 *425*	175 *570*	185 *610*	205 *670*	225 *740*	160 *520*	175 *570*	190 *620*	205 *670*
M2	125 *410*	135 *445*	150 *490*	165 *540*	120 *395*	130 *425*	145 *475*	155 *510*	85 *280*	90 *295*	100 *330*	105 *345*	145 *475*	155 *510*	170 *560*	185 *610*	135 *445*	140 *460*	160 *520*	170 *560*
M3	105 *345*	110 *360*	120 *395*	130 *425*	100 *330*	105 *345*	115 *375*	125 *410*	70 *230*	75 *245*	80 *260*	85 *280*	115 *375*	125 *410*	140 *460*	150 *490*	110 *360*	115 *375*	125 *410*	140 *460*
M4	80 *260*	85 *280*	95 *310*	100 *330*	75 *245*	80 *260*	90 *295*	95 *310*	55 *180*	55 *180*	60 *195*	65 *215*	90 *295*	95 *310*	105 *345*	115 *375*	85 *280*	90 *295*	100 *330*	105 *345*
M5	65 *215*	70 *230*	80 *260*	85 *280*	65 *215*	70 *230*	75 *245*	80 *260*	45 *150*	47 *155*	50 *165*	55 *180*	75 *245*	80 *260*	90 *295*	95 *310*	70 *230*	75 *245*	80 *260*	90 *295*
K1	150 *490*	165 *540*	180 *590*	195 *640*	145 *475*	155 *510*	170 *560*	185 *610*	95 *310*	100 *330*	110 *360*	120 *395*	190 *620*	205 *670*	230 *750*	245 *800*	165 *540*	180 *590*	195 *640*	215 *710*
K2	135 *445*	145 *475*	160 *520*	170 *560*	130 *425*	135 *445*	150 *490*	165 *540*	85 *280*	90 *295*	100 *330*	105 *345*	170 *560*	185 *610*	205 *670*	220 *720*	145 *475*	155 *510*	175 *570*	190 *620*
K3	115 *375*	120 *395*	135 *445*	145 *475*	110 *360*	115 *375*	130 *425*	140 *460*	75 *245*	80 *260*	85 *280*	90 *295*	145 *475*	155 *510*	170 *560*	185 *610*	125 *410*	135 *445*	145 *475*	160 *520*
K4	110 *360*	115 *375*	130 *425*	140 *460*	105 *345*	110 *360*	120 *395*	130 *425*	70 *230*	75 *245*	80 *260*	85 *280*	135 *445*	150 *490*	165 *540*	180 *590*	120 *395*	125 *410*	140 *460*	150 *490*
K5	65 *215*	70 *230*	80 *260*	85 *280*	65 *215*	70 *230*	75 *245*	80 *260*	43 *140*	45 *150*	49 *160*	55 *180*	85 *280*	90 *295*	100 *330*	110 *360*	70 *230*	80 *260*	85 *280*	95 *310*
K6	95 *310*	100 *330*	115 *375*	120 *395*	90 *295*	95 *310*	105 *345*	115 *375*	60 *195*	65 *215*	70 *230*	75 *245*	120 *395*	130 *425*	145 *475*	155 *510*	105 *345*	110 *360*	125 *410*	135 *445*
K7	85 *280*	90 *295*	100 *330*	110 *360*	80 *260*	85 *280*	95 *310*	105 *345*	55 *180*	60 *195*	60 *195*	65 *215*	110 *360*	115 *375*	125 *410*	140 *460*	90 *295*	100 *330*	110 *360*	120 *395*
N1	900 *2950*	970 *3175*	1050 *3450*	1150 *3775*	850 *2800*	920 *3025*	1000 *3275*	1100 *3600*	580 *1900*	610 *2000*	670 *2200*	710 *2325*	— —	— —	— —	— —	— —	— —	— —	— —
N2	450 *1475*	490 *1600*	530 *1750*	580 *1900*	430 *1400*	465 *1525*	510 *1675*	550 *1800*	230 *750*	245 *800*	270 *890*	285 *940*	— —	— —	— —	— —	— —	— —	— —	— —
N3	300 *980*	325 *1075*	355 *1175*	390 *1275*	285 *940*	310 *1025*	340 *1125*	370 *1225*	155 *510*	165 *540*	180 *590*	190 *620*	— —	— —	— —	— —	— —	— —	— —	— —
N11	345 *1125*	370 *1225*	405 *1325*	445 *1450*	330 *1075*	355 *1175*	390 *1275*	425 *1400*	175 *570*	190 *620*	205 *670*	215 *710*	— —	— —	— —	— —	— —	— —	— —	— —
S1	37 *120*	40 *130*	44 *145*	48 *155*	35 *115*	38 *125*	42 *140*	45 *150*	20 *65*	22 *70*	24 *80*	25 *80*	— —	— —	— —	— —	39 *130*	42 *140*	46 *150*	50 *165*
S2	30 *100*	32 *105*	35 *115*	38 *125*	28 *90*	31 *100*	34 *110*	37 *120*	16 *50*	17 *55*	19 *60*	20 *65*	— —	— —	— —	— —	31 *100*	34 *110*	37 *120*	40 *130*
S3	26 *85*	28 *90*	31 *100*	33 *110*	25 *80*	27 *90*	29 *95*	32 *105*	14 *46*	15 *49*	16 *50*	17 *55*	— —	— —	— —	— —	27 *90*	29 *95*	32 *105*	35 *115*
S11	50 *165*	55 *180*	60 *195*	65 *215*	45 *150*	48 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	70 *230*
S12	37 *120*	39 *130*	43 *140*	47 *155*	42 *140*	44 *145*	49 *160*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —	46 *150*	49 *160*	55 *180*	60 *195*
S13	21 *70*	23 *75*	25 *80*	27 *90*	24 *80*	26 *85*	28 *90*	31 *100*	— —	— —	— —	— —	— —	— —	— —	— —	27 *90*	29 *95*	31 *100*	34 *110*
H5	31 *100*	34 *110*	37 *120*	40 *130*	30 *100*	32 *105*	35 *115*	38 *125*	32 *105*	33 *110*	36 *120*	39 *130*	36 *120*	38 *125*	43 *140*	46 *150*	34 *110*	37 *120*	40 *130*	44 *145*
H8	33 *110*	36 *120*	39 *130*	43 *140*	31 *100*	34 *110*	38 *125*	41 *135*	— —	— —	— —	— —	38 *125*	41 *135*	45 *150*	48 *155*	36 *120*	39 *130*	43 *140*	47 *155*
H11	40 *130*	43 *140*	47 *155*	50 *165*	38 *125*	41 *135*	45 *150*	48 *155*	— —	— —	— —	— —	46 *150*	49 *160*	55 *180*	60 *195*	44 *145*	47 *155*	50 *165*	55 *180*
H12	38 *125*	42 *140*	46 *150*	50 *165*	37 *120*	40 *130*	44 *145*	47 *155*	— —	— —	— —	— —	44 *145*	47 *155*	50 *165*	55 *180*	65 *215*	70 *230*	80 *260*	85 *280*
H21	33 *110*	36 *120*	39 *130*	43 *140*	31 *100*	34 *110*	38 *125*	41 *135*	— —	— —	— —	— —	38 *125*	41 *135*	45 *150*	48 *155*	36 *120*	39 *130*	43 *140*	47 *155*

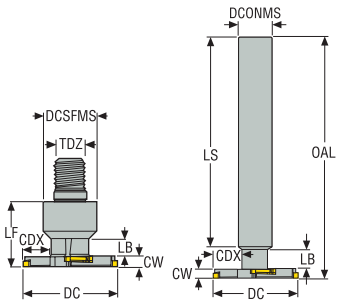


335.19

Sistema di frese a disco a taglio dolce e preciso, dedicato ad operazioni di scanalatura, per piccole larghezze.

- Larghezza di taglio 4-12 mm (0,157-0,500") - Scanalatura a fondo piano con inserti SNHQ.
- Diametro della gamma di frese 40-250 mm (1,5-8")
- Disponibile con attacco cilindrico, a manicotto, a foro di centraggio e Combimaster, con opzione per refrigerante interno e passo stretto
- Elevata precisione dell'inserto con tratto raschiante incorporato e gamma di raggi di punta 0,2-6 mm (0,008-0,236")
- Soluzione conveniente con fino a 4 taglienti per inserto
- Tolleranza di base della scanalatura 0,02/+0,08 mm - -0,001/+0,003"

R335.19 - Inserto SNHQ – In mm - tre tagli



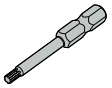
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCSFMS	TDZ	DCONMS	LF	LS	LPR	OAL	LB	RPMX	Peso	SNHQ.. R/L	335.19
			mm	mm	mm			mm		mm	mm	mm	mm	mm	mm		kg		
R335.19-1040.RE-04.2NA	03277857	Combimaster	40,0	4,0	11,6	2	4	18,5	M10	–	23,0	–	–	–	8,26	21500	0,1	1102	1102
R335.19-1040.RE-05.2NA	03277858	Combimaster	40,0	5,0	11,6	2	4	18,5	M10	–	23,0	–	–	–	7,275	18700	0,2	1103	1103
R335.19-1250.RE-04.3NA	03277859	Combimaster	50,0	4,0	14,9	3	6	23,0	M12	–	28,0	–	–	–	10,26	19100	0,2	1102	1102
R335.19-1250.RE-05.3NA	03277860	Combimaster	50,0	5,0	14,9	3	6	23,0	M12	–	28,0	–	–	–	9,275	16800	0,2	1103	1103
R335.19-1663.RE-04.4NA	03277862	Combimaster	63,0	4,0	17,7	4	8	30,0	M16	–	35,0	–	–	–	11,26	17100	0,3	1102	1102
R335.19-1663.RE-05.4NA	03277863	Combimaster	63,0	5,0	17,6	4	8	30,0	M16	–	35,0	–	–	–	10,275	14900	0,3	1103	1103
R335.19-1680.RE-04.5NA	03277866	Combimaster	80,0	4,0	26,2	5	10	30,0	M16	–	35,0	–	–	–	11,26	15200	0,4	1102	1102
R335.19-1680.RE-05.5NA	03277867	Combimaster	80,0	5,0	26,1	5	10	30,0	M16	–	35,0	–	–	–	10,275	13200	0,4	1103	1103
R335.19-20100.RE-04.7NA	03277870	Combimaster	100,0	4,0	32,7	7	14	36,5	M20	–	35,0	–	–	–	13,432	13500	0,6	1102	1102
R335.19-20100.RE-05.7NA	03277871	Combimaster	100,0	5,0	32,6	7	14	36,5	M20	–	35,0	–	–	–	12,447	11800	0,6	1103	1103
R335.19-20125.RE-04.8NA	03277873	Combimaster	125,0	4,0	45,2	8	16	36,5	M20	–	35,0	–	–	–	13,432	12200	0,6	1102	1102
R335.19-20125.RE-05.8NA	03277874	Combimaster	125,0	5,0	45,1	8	16	36,5	M20	–	35,0	–	–	–	12,447	10700	0,7	1103	1103
R335.19-2550.0-04.2	02565023	Cilindrico	50,0	4,0	13,9	2	4	–	–	25,0	–	132,2	94,0	150,0	11,0	19100	0,7	1102	1102
R335.19-2550.0-05.2	02565034	Cilindrico	50,0	5,0	13,9	2	4	–	–	25,0	–	132,2	94,0	150,0	10,0	16800	0,6	1103	1103
R335.19-3263.0-04.4	02565024	Cilindrico	63,0	4,0	13,9	4	8	–	–	32,0	–	148,6	110,0	170,0	0,0	17100	1,2	1102	1102
R335.19-3280.0-05.5	02565036	Cilindrico	80,0	5,0	22,5	5	10	–	–	32,0	–	148,6	110,0	170,0	0,0	13200	1,2	1103	1103

Parti di ricambio, comprese nella fornitura

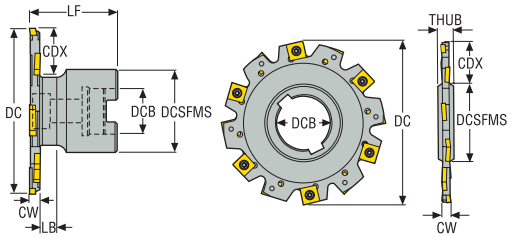
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R335.19 .0- DC=50-63 CW=4	T09P-7	C93504-T09P	–
R335.19 .0- DC=50-63 CW=5	T09P-7	C93505-T09P	–
R335.19 .0- DC=80 CW=5	1/4HEX-T09PX50	C93505-T09P	–
R335.19RE CW=4	H4B-T09P	C93504-T09P	DOUBLE-T
R335.19RE CW=5	H4B-T09P	C93505-T09P	DOUBLE-T

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite inserto	Chiave dinamometrica
					
R335.19 .0- DC=50-63 CW=4	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	1/4HEX-T09PX50	T00-09P20
R335.19 .0- DC=50-63 CW=5	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	1/4HEX-T09PX50	T00-09P20
R335.19 .0- DC=80 CW=5	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20
R335.19RE CW=4	–	–	2.0NM	–	T00-09P20
R335.19RE CW=5	–	–	2.0NM	–	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

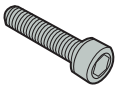
R335.19/335.19 - Inserto SNHQ - tre tagli



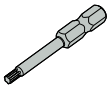
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	LB	RPMX	Peso	SNHQ.. R/L	335.19
			mm	mm	mm			mm	mm	mm	mm	mm		kg		
R335.19-063.04.22-3	75011447	Manicotto	63,0	4,0	13,9	3	6	22,0	40,0	50,0	–	11,3	17100	0,5	1102	1102
R335.19-063.04.16-4	02565016	Manicotto	63,0	4,0	13,9	4	8	16,0	33,0	35,0	–	–	17100	0,3	1102	1102
335.19-063.04.22-4	02565012	Manicotto	63,0	4,0	13,6	4	8	22,0	33,0	6,0	8,0	–	17100	0,1	1102	1102
R335.19-063.05.22-3	75011452	Manicotto	63,0	5,0	13,9	3	6	22,0	40,0	50,0	–	10,3	14900	0,5	1103	1103
R335.19-080.04.22-4	75066088	Manicotto	80,0	4,0	22,4	4	8	22,0	40,0	50,0	–	11,3	15200	0,5	1102	1102
R335.19-080.04.22-5	02565017	Manicotto	80,0	4,0	22,4	5	10	22,0	40,0	50,0	–	11,3	15200	0,5	1102	1102
R335.19-080.05.22-5	02565029	Manicotto	80,0	5,0	22,4	5	10	22,0	40,0	50,0	–	10,3	13200	0,5	1103	1103
R335.19-080.05.22-4	75066089	Manicotto	80,0	5,0	22,4	4	8	22,0	40,0	50,0	–	10,3	13200	0,5	1103	1103
335.19-080.05.22-5	02565027	Manicotto	80,0	5,0	19,6	5	10	22,0	33,0	8,5	12,0	–	13200	0,2	1103	1103
R335.19-100.04.27-6	75011449	Manicotto	100,0	4,0	22,1	6	12	27,0	48,0	50,0	–	–	13500	0,8	1102	1102
335.19-100.04.27-6	75090131	Manicotto	100,0	4,0	24,6	6	12	27,0	41,0	8,0	12,0	–	13500	0,3	1102	1102
R335.19-100.05.27-6	75011453	Manicotto	100,0	5,0	22,1	6	12	27,0	48,0	50,0	–	–	11800	0,8	1103	1103
335.19-100.05.27-6	75090132	Manicotto	100,0	5,0	25,6	6	12	27,0	41,0	8,5	12,0	–	11800	0,3	1103	1103
R335.19-125.04.32-7	02565018	Manicotto	125,0	4,0	29,6	7	14	32,0	58,0	50,0	–	–	12200	1,1	1102	1102
335.19-125.04.40-7	75090190	Manicotto	125,0	4,0	30,1	7	14	40,0	55,0	8,0	12,0	–	12200	0,4	1102	1102
335.19-125.05.40-7	75090191	Manicotto	125,0	5,0	31,1	7	14	40,0	55,0	8,5	12,0	–	10700	0,5	1103	1103
R335.19-125.05.32-7	02565031	Manicotto	125,0	5,0	29,6	7	14	32,0	58,0	50,0	–	–	10700	1,2	1103	1103
R335.19-160.04.40-9	02565020	Manicotto	160,0	4,0	41,1	9	18	40,0	70,0	50,0	–	–	10700	1,2	1102	1102
335.19-160.04.40-9	75090137	Manicotto	160,0	4,0	42,6	9	18	40,0	65,0	8,0	12,0	–	10700	0,7	1102	1102
335.19-160.05.40-9	75090138	Manicotto	160,0	5,0	43,6	9	18	40,0	65,0	8,5	12,0	–	9300	0,8	1103	1103
R335.19-160.05.40-9	02565032	Manicotto	160,0	5,0	41,1	9	18	40,0	70,0	50,0	–	–	9300	1,2	1103	1103

Parti di ricambio, comprese nella fornitura

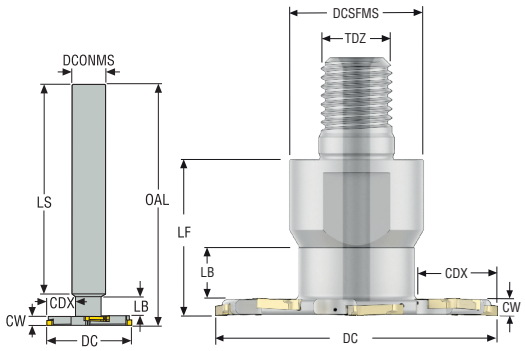
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.19 DC=63 CW=4	–	T09P-7	C93504-T09P
335.19 DC=80-160 CW=4	–	1/4HEX-T09PX50	C93504-T09P
335.19 DC=80-160 CW=5	–	1/4HEX-T09PX50	C93505-T09P
R335.19 DC=63 DCB=16 CW=4	TCEI0825	T09P-7	C93504-T09P
R335.19 DC=63 DCB=22 CW=4	MC6S10X40	T09P-7	C93504-T09P
R335.19 DC=63 DCB=22 CW=5	MC6S10X40	T09P-7	C93505-T09P
R335.19 DC=80 DCB=22 CW=4	MC6S10X40	1/4HEX-T09PX50	C93504-T09P
R335.19 DC=80 DCB=22 CW=5	MC6S10X40	1/4HEX-T09PX50	C93505-T09P
R335.19 DCB=27 CW=4	MC6S12X35	1/4HEX-T09PX50	C93504-T09P
R335.19 DCB=27 CW=5	MC6S12X35	1/4HEX-T09PX50	C93505-T09P
R335.19 DCB=32 CW=4	MC6S16X35	1/4HEX-T09PX50	C93504-T09P
R335.19 DCB=32 CW=5	MC6S16X35	1/4HEX-T09PX50	C93505-T09P
R335.19 DCB=40 CW=4	MLC6S20X40	1/4HEX-T09PX50	C93504-T09P
R335.19 DCB=40 CW=5	MLC6S20X40	1/4HEX-T09PX50	C93505-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite inserto	Chiave dinamometrica
					
335/R335.19 DC=080-180	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20
335/R335.19 DC=63	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	1/4HEX-T09PX50	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R335.19 - Inserto SNHQ – In mm - tre tagli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

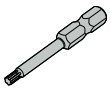
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCSFMS	TDZ	DCONMS	LF	LS	OAL	LB	RPMX	Peso	SNHQ.. R/L	335.19
			mm	mm	mm			mm		mm	mm	mm	mm	mm		kg		
R335.19-1250.RE-06.2NA	03277861	Combimaster	50,0	6,0	14,9	2	4	23,0	M12	–	28,0	–	–	8,285	12300	0,2	1203	1203
R335.19-1663.RE-06.3NA	03277864	Combimaster	63,0	6,0	17,6	3	6	30,0	M16	–	35,0	–	–	9,285	10900	0,3	1203	1203
R335.19-1663.RE-07.3NA	03277865	Combimaster	63,0	7,0	17,6	3	6	30,0	M16	–	35,0	–	–	8,285	9400	0,3	1204/12045*	1204/12045*
R335.19-1680.RE-06.4NA	03277868	Combimaster	80,0	6,0	26,3	4	8	30,0	M16	–	35,0	–	–	9,285	9700	0,4	1203	1203
R335.19-1680.RE-07.4NA	03277869	Combimaster	80,0	7,0	26,3	4	8	30,0	M16	–	35,0	–	–	8,285	8400	0,4	1204/12045*	1204/12045*
R335.19-20100.RE-06.6NA	03277872	Combimaster	100,0	6,0	32,8	6	12	36,5	M20	–	35,0	–	–	11,457	8700	0,6	1203	1203
R335.19-2550.0-06.2	02565041	Cilindrico	50,0	6,0	13,9	2	4	–	–	25,0	–	132,2	150,0	9,0	12300	0,7	1203	1203
R335.19-3263.0-06.3	02565042	Cilindrico	63,0	6,0	14,0	3	6	–	–	32,0	–	148,6	170,0	0,0	10900	1,1	1203	1203
R335.19-3280.0-06.4	02565043	Cilindrico	80,0	6,0	22,5	4	8	–	–	32,0	–	148,6	170,0	0,0	9700	1,3	1203	1203

*Per generare CW=8 mm utilizzare l'inserto SNHQ12045..., LF=50,5 mm e 35,5 mm

Parti di ricambio, comprese nella fornitura

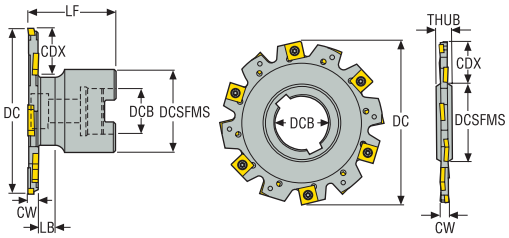
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R335.19 CW=6 RE	H4B-T15P	C94005-T15P	DOUBLE-T
R335.19 CW=7 RE	H4B-T15P	C94006-T15P	DOUBLE-T
R335.19 DC=50-63 .0-	T10P-7	C94005-T10P	–
R335.19 DC=80 .0-	1/4HEX-T10PX50	C94005-T10P	–

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite inserto	Chiave dinamometrica
					
R335.19 DC=50-63 .0-	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T10PX50	T00-10P35
R335.19 DC=80 .0-	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-10P35
R335.19 RE	–	–	3.5NM	–	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R335.19/335.19 - Inserto SNHQ – In mm - tre tagli

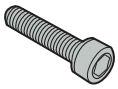


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

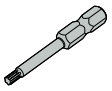
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	LB	RPMX	Peso	SNHQ.. R/L	335.19
			mm	mm	mm			mm	mm	mm	mm	mm		kg		
R335.19-063.06.16-3	02565038	Manicotto	63,0	6,0	13,9	3	6	16,0	33,0	35,0	–	–	10900	0,3	1203	1203
R335.19-063.06.22-3	75011448	Manicotto	63,0	6,0	13,9	3	6	22,0	40,0	50,0	–	9,3	10900	0,5	1203	1203
335.19-063.06.22-3	02565037	Manicotto	63,0	6,0	13,6	3	6	22,0	33,0	9,0	12,0	–	10900	0,2	1203	1203
R335.19-063.07.16-3	02565044	Manicotto	63,0	7,0	13,8	3	6	16,0	33,0	35,0	–	–	9400	0,3	1204/12045*	1204/12045*
R335.19-063.07.22-3	75012680	Manicotto	63,0	7,0	13,8	3	6	22,0	40,0	50,0	–	8,3	9400	0,5	1204/12045*	1204/12045*
R335.19-080.06.22-4	75066090	Manicotto	80,0	6,0	22,4	4	8	22,0	40,0	50,0	–	9,3	9700	0,6	1203	1203
R335.19-080.07.22-4	75066091	Manicotto	80,0	7,0	22,0	4	8	22,0	40,0	50,0	–	8,3	8400	0,6	1204/12045*	1204/12045*
335.19-080.07.22-4	00088988	Manicotto	80,0	7,0	20,6	4	8	22,0	33,0	9,5	12,0	–	8400	0,3	1204/12045*	1204/12045*
R335.19-100.06.27-5	75011450	Manicotto	100,0	6,0	22,0	5	10	27,0	48,0	50,0	–	–	8700	0,9	1203	1203
335.19-100.06.27-5	75011284	Manicotto	100,0	6,0	25,6	5	10	27,0	41,0	9,0	12,0	–	8700	0,4	1203	1203
R335.19-100.07.27-5	75012681	Manicotto	100,0	7,0	22,0	5	10	27,0	48,0	50,0	–	–	7500	0,9	1204/12045*	1204/12045*
335.19-100.07.27-5	75012670	Manicotto	100,0	7,0	26,6	5	10	27,0	41,0	9,5	12,0	–	7500	0,4	1204/12045*	1204/12045*
R335.19-125.06.32-6	02565039	Manicotto	125,0	6,0	29,6	6	12	32,0	58,0	50,0	–	–	7700	1,2	1203	1203
335.19-125.06.40-6	75011289	Manicotto	125,0	6,0	31,1	6	12	40,0	55,0	9,0	12,0	–	7700	0,5	1203	1203
R335.19-125.07.32-6	02565045	Manicotto	125,0	7,0	29,6	6	12	32,0	58,0	50,0	–	–	6700	1,4	1204/12045*	1204/12045*
335.19-125.07.40-6	75012672	Manicotto	125,0	7,0	32,1	6	12	40,0	55,0	9,5	12,0	–	6700	0,6	1204/12045*	1204/12045*
R335.19-160.06.40-8	75012913	Manicotto	160,0	6,0	41,1	8	16	40,0	70,0	50,0	–	–	6800	1,2	1203	1203
335.19-160.06.40-8	75011294	Manicotto	160,0	6,0	43,6	8	16	40,0	65,0	9,0	12,0	–	6800	1,0	1203	1203
R335.19-160.07.40-8	75012685	Manicotto	160,0	7,0	41,1	8	16	40,0	70,0	50,0	–	–	5900	1,4	1204/12045*	1204/12045*
335.19-160.07.40-8	75012674	Manicotto	160,0	7,0	44,6	8	16	40,0	65,0	9,5	12,0	–	5900	0,9	1204/12045*	1204/12045*
335.19-200.06.50-9	75090141	Manicotto	200,0	6,0	61,6	9	18	50,0	69,0	9,0	12,0	–	6300	1,2	1203	1203
335.19-200.07.50-9	75012676	Manicotto	200,0	7,0	62,6	9	18	50,0	69,0	9,5	12,0	–	5200	1,4	1204/12045*	1204/12045*
335.19-250.06.50-12	75012301	Manicotto	250,0	6,0	86,6	12	24	50,0	69,0	9,0	12,0	–	5600	1,9	1203	1203
335.19-250.07.50-12	75012678	Manicotto	250,0	7,0	87,6	12	24	50,0	69,0	9,5	12,0	–	4700	2,1	1204/12045*	1204/12045*

*Per generare CW=8 mm utilizzare l'inserto SNHQ12045..., LF=50,5 mm e 35,5 mm

Parti di ricambio, comprese nella fornitura

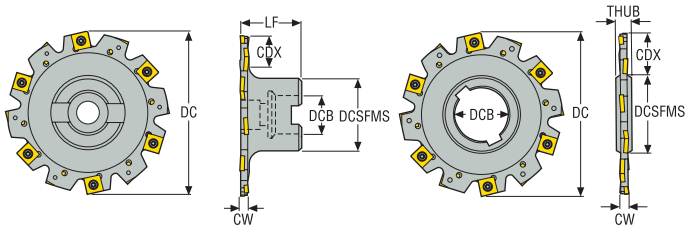
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.19 DC=63 CW=6	–	T10P-7	C94005-T10P
335.19 DC=80-250 CW=6	–	1/4HEX-T10PX50	C94005-T10P
335.19 DC=80-250 CW=7	–	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=63 DCB=16 CW=6	TCEI0825	T10P-7	C94005-T10P
R335.19 DC=63 DCB=16 CW=7	TCEI0825	T15P-7	C94006-T15P
R335.19 DC=63 DCB=22 CW=6	MC6S10X40	T10P-7	C94005-T10P
R335.19 DC=63 DCB=22 CW=7	MC6S10X40	T15P-7	C94006-T15P
R335.19 DC=80-160 DCB=22 CW=6	MC6S10X40	1/4HEX-T10PX50	C94005-T10P
R335.19 DC=80-160 DCB=22 CW=7	MC6S10X40	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=80-160 DCB=27 CW=6	MC6S12X35	1/4HEX-T10PX50	C94005-T10P
R335.19 DC=80-160 DCB=27 CW=7	MC6S12X35	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=80-160 DCB=32 CW=6	MC6S16X35	1/4HEX-T10PX50	C94005-T10P
R335.19 DC=80-160 DCB=32 CW=7	MC6S16X35	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=80-160 DCB=40 CW=6	MLC6S20X40	1/4HEX-T10PX50	C94005-T10P
R335.19 DC=80-160 DCB=40 CW=7	MLC6S20X40	1/4HEX-T15PX50	C94006-T15P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite inserto	Chiave dinamometrica
					
335.19 DC=63 CW=6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T10PX50	T00-10P35
335.19 DC=80-250 CW=6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-10P35
335.19 DC=80-250 CW=7	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35
R335.19 DC=63 DCB=16 CW=6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T10PX50	T00-10P35
R335.19 DC=63 DCB=16 CW=7	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T15PX50	T00-15P35
R335.19 DC=63 DCB=22 CW=6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T15PX90	T00-10P35
R335.19 DC=63 DCB=22 CW=7	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T15PX50	T00-15P35
R335.19 DC=80-160 CW=6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-10P35
R335.19 DC=80-160 CW=7	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

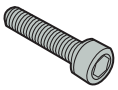
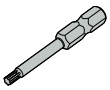
R335.19/335.19 - Inserto SNHQ – In mm - tre tagli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	SNHQ.. R/L	335.19
			mm	mm	mm			mm	mm	mm	mm		kg		
R335.19-100.10.27-5	75011451	Manicotto	100,0	10,0	22,0	5	10	27,0	48,0	50,0	–	6600	1,0	1205	1205
335.19-100.10.27-5	75011288	Manicotto	100,0	10,0	27,6	5	10	27,0	41,0	11,0	12,0	6600	0,5	1205	1205
R335.19-100.12.27-5	75012682	Manicotto	100,0	12,0	22,0	5	10	27,0	48,0	50,0	–	6000	1,0	1207	1207
335.19-100.12.27-5	75012671	Manicotto	100,0	12,0	27,9	5	10	27,0	41,0	12,0	12,0	6000	0,5	1207	1207
R335.19-125.10.32-6	02565046	Manicotto	125,0	10,0	29,6	6	12	32,0	58,0	50,0	–	6000	1,4	1205	1205
335.19-125.10.40-6	75011293	Manicotto	125,0	10,0	33,1	6	12	40,0	55,0	11,0	12,0	6000	0,7	1205	1205
R335.19-125.12.32-6	02565047	Manicotto	125,0	12,0	29,6	6	12	32,0	58,0	50,0	–	5300	1,5	1207	1207
R335.19-160.10.40-8	75012914	Manicotto	160,0	10,0	41,1	8	16	40,0	70,0	50,0	–	5200	1,6	1205	1205
335.19-160.10.40-8	75011298	Manicotto	160,0	10,0	46,2	8	16	40,0	65,0	11,0	12,0	5200	1,3	1205	1205
R335.19-160.12.40-8	75012686	Manicotto	160,0	12,0	41,1	8	16	40,0	70,0	50,0	–	4700	1,8	1207	1207
335.19-160.12.40-8	75012339	Manicotto	160,0	12,0	45,9	8	16	40,0	65,0	12,0	12,0	4700	1,3	1207	1207
335.19-200.10.50-9	75011373	Manicotto	200,0	10,0	63,6	9	18	50,0	69,0	11,0	12,0	4700	1,9	1205	1205
335.19-200.12.50-9	75012677	Manicotto	200,0	12,0	64,2	9	18	50,0	69,0	12,0	12,0	4200	2,2	1207	1207
335.19-250.10.50-12	75012210	Manicotto	250,0	10,0	88,6	12	24	50,0	69,0	11,0	12,0	4200	3,0	1205	1205
335.19-250.12.50-11	75012679	Manicotto	250,0	12,0	89,2	11	22	50,0	69,0	12,0	12,0	3700	3,7	1207	1207

Parti di ricambio, comprese nella fornitura

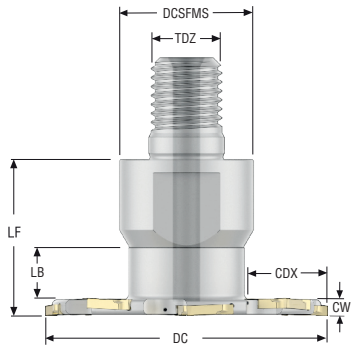
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.19 CW=10	–	1/4HEX-T15PX50	C94008-T15P
335.19 CW=12	–	1/4HEX-T15PX50	C94010-T15P
R335.19 DCB=27 CW=10	MC6S12X35	1/4HEX-T15PX50	C94008-T15P
R335.19 DCB=27 CW=12	MC6S12X35	1/4HEX-T15PX50	C94010-T15P
R335.19 DCB=32 CW=10	MC6S16X35	1/4HEX-T15PX50	C94008-T15P
R335.19 DCB=32 CW=12	MC6S16X35	1/4HEX-T15PX50	C94010-T15P
R335.19 DCB=40 CW=10	MLC6S20X40	1/4HEX-T15PX50	C94008-T15P
R335.19 DCB=40 CW=12	MLC6S20X40	1/4HEX-T15PX50	C94010-T15P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R335/335.19-...	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R335.19 - Inserto SNHQ – inch - tre tagli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
—Per il programma inserti completo, vedere le pagine 886, 887, 892
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
—Vedere la pagina "CW" spessore di taglio 380
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCSFMS	TDZ	LF	LB	RPMX	Peso	SNHQ.. R/L	335.19
			inch	inch	inch			inch		inch	inch		lb		
R335.19-01.50-RE-0.15-2NA	03277875	Combimaster	1.500	0.156	0.445	2	4	0.728	M10	0.906	0.326	22000	0.220	1102	1102
R335.19-01.50-RE-0.18-2NA	03277876	Combimaster	1.500	0.187	0.445	2	4	0.728	M10	0.906	0.295	19100	0.220	1103	1103
R335.19-02.00-RE-0.15-3NA	03277877	Combimaster	2.000	0.156	0.602	3	6	0.906	M12	1.102	0.405	19100	0.440	1102	1102
R335.19-02.00-RE-0.18-3NA	03277878	Combimaster	2.000	0.187	0.602	3	6	0.906	M12	1.102	0.374	16800	0.440	1103	1103
R335.19-02.00-RE-0.25-2NA	03277879	Combimaster	2.000	0.250	0.602	2	4	0.906	M12	1.102	0.312	12300	0.440	1204	1204
R335.19-02.50-RE-0.15-4NA	03277880	Combimaster	2.500	0.156	0.705	4	8	1.181	M16	1.378	0.444	17100	0.660	1102	1102
R335.19-02.50-RE-0.25-3NA	03277882	Combimaster	2.500	0.250	0.705	3	6	1.181	M16	1.378	0.352	9400	0.660	1204	1204
R335.19-03.00-RE-0.15-5NA	03277883	Combimaster	3.000	0.156	0.957	5	10	1.181	M16	1.378	0.444	15200	0.880	1102	1102
R335.19-03.00-RE-0.18-5NA	03277884	Combimaster	3.000	0.187	0.953	5	10	1.181	M16	1.378	0.414	13200	0.880	1103	1103
R335.19-03.00-RE-0.25-4NA	03277885	Combimaster	3.000	0.250	0.961	4	8	1.181	M16	1.378	0.352	8400	0.880	1204	1204
R335.19-04.00-RE-0.15-7NA	03277886	Combimaster	4.000	0.156	1.319	7	14	1.437	M20	1.378	0.444	13500	1.100	1102	1102
R335.19-04.00-RE-0.18-7NA	03277887	Combimaster	4.000	0.187	1.315	7	14	1.437	M20	1.378	0.414	11800	1.320	1103	1103
R335.19-04.00-RE-0.25-6NA	03277888	Combimaster	4.000	0.250	1.323	6	12	1.437	M20	1.378	0.352	7500	1.320	1204	1204

Parti di ricambio, comprese nella fornitura

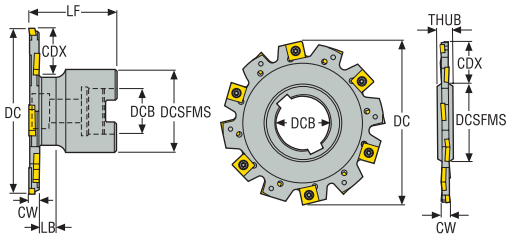
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
			
R335.19RE CW=0.156	H4B-T09P	C93504-T09P	DOUBLE-T
R335.19RE CW=0.187	H4B-T09P	C93505-T09P	DOUBLE-T
R335.19 RE CW=0.250	H4B-T15P	C94055-T15P	DOUBLE-T

Accessori

Per	Coppia di serraggio inserto	Chiave dinamometrica
		
R335.19RE CW=0.156	2.0NM	T00-09P20
R335.19RE CW=0.187	2.0NM	T00-09P20
R335.19 RE CW=0.250	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

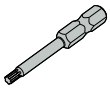
R335.19/335.19 - Inserto SNHQ – inch - tre tagli



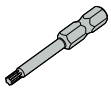
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 434-435
–Per il programma inserti completo, vedere le pagine 886, 887, 892
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 430-431
–Vedere la pagina "CW" spessore di taglio 380
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	LB	RPMX	Peso	SNHQ.. R/L	335.19
			inch	inch	inch			inch	inch	inch	inch	inch		lb		
R335.19-02.50-0.15-4	02881176	Manicotto	2.500	0.156	0.559	4	8	0.750	1.575	2.000	–	0.445	17100	1.100	1102	1102
R335.19-02.50-0.18-4	02881177	Manicotto	2.500	0.187	0.555	4	8	0.750	1.575	2.000	–	0.413	14900	1.100	1103	1103
R335.19-02.50-0.25-3	02881178	Manicotto	2.500	0.250	0.555	3	6	0.750	1.575	2.000	–	0.350	9400	1.100	1204	1204
R335.19-02.50-0.31-3	02881179	Manicotto	2.500	0.313	0.555	3	6	0.750	1.575	2.000	–	0.287	9400	1.100	12045	12045
R335.19-02.50-0.37-3	02881180	Manicotto	2.500	0.375	0.555	3	6	0.750	1.575	2.000	–	0.224	8400	1.100	1205	1205
R335.19-03.00-0.15-5	02881184	Manicotto	3.000	0.156	0.807	5	10	0.750	1.575	2.000	–	0.445	15200	1.320	1102	1102
R335.19-03.00-0.18-5	02881185	Manicotto	3.000	0.187	0.807	5	10	0.750	1.575	2.000	–	0.413	13200	1.100	1103	1103
R335.19-03.00-0.25-4	02881186	Manicotto	3.000	0.250	0.807	4	8	0.750	1.575	2.000	–	0.350	8400	1.320	1204	1204
R335.19-03.00-0.31-4	02881187	Manicotto	3.000	0.313	0.807	4	8	0.750	1.575	2.000	–	0.287	8400	1.320	12045	12045
R335.19-03.00-0.37-4	02881188	Manicotto	3.000	0.375	0.807	4	8	0.750	1.575	2.000	–	0.224	8400	1.100	1205	1205
335.19-04.00-0.18-6	02869718	Manicotto	4.000	0.187	1.035	6	12	1.000	1.625	0.344	0.500	–	11800	0.660	1103	1103
R335.19-04.00-0.18-6	02869759	Manicotto	4.000	0.187	0.906	6	12	1.000	1.880	2.000	–	–	11800	1.980	1103	1103
335.19-04.00-0.25-5	02869721	Manicotto	4.000	0.250	1.075	5	10	1.000	1.625	0.375	0.500	–	7500	0.660	1204	1204
R335.19-04.00-0.25-5	02869760	Manicotto	4.000	0.250	0.906	5	10	1.000	1.880	2.000	–	–	7500	1.760	1204	1204
R335.19-04.00-0.31-5	02869763	Manicotto	4.000	0.313	0.906	5	10	1.000	1.880	2.000	–	–	7500	1.760	12045	12045
335.19-04.00-0.37-5	02869731	Manicotto	4.000	0.375	1.114	5	10	1.000	1.625	0.437	0.500	–	6600	1.100	1205	1205
R335.19-04.00-0.37-5	02869766	Manicotto	4.000	0.375	0.906	5	10	1.000	1.880	2.000	–	–	6600	1.980	1205	1205
335.19-04.00-0.50-5	02869736	Manicotto	4.000	0.500	1.126	5	10	1.000	1.625	0.500	0.500	–	6000	1.100	1207	1207
R335.19-04.00-0.50-5	02869769	Manicotto	4.000	0.500	0.906	5	10	1.000	1.880	2.000	–	–	6000	2.430	1207	1207
335.19-05.00-0.18-7	02869719	Manicotto	5.000	0.187	1.409	7	14	1.250	1.875	0.344	0.500	–	10700	1.100	1103	1103
335.19-05.00-0.25-6	02869722	Manicotto	5.000	0.250	1.449	6	12	1.250	1.875	0.375	0.500	–	6700	1.100	1204	1204
R335.19-05.00-0.25-6	02869761	Manicotto	5.000	0.250	1.220	6	12	1.250	2.250	2.000	–	–	6700	2.650	1204	1204
335.19-05.00-0.31-6	02869727	Manicotto	5.000	0.313	1.449	6	12	1.250	1.875	0.406	0.500	–	6700	1.320	12045	12045
335.19-05.00-0.37-6	02869732	Manicotto	5.000	0.375	1.488	6	12	1.250	1.875	0.437	0.500	–	6000	1.540	1205	1205
R335.19-05.00-0.50-6	02869770	Manicotto	5.000	0.500	1.220	6	12	1.250	2.250	2.000	–	–	5300	3.750	1207	1207
335.19-06.00-0.18-9	02869720	Manicotto	6.000	0.187	1.909	9	18	1.250	1.875	0.344	0.500	–	9300	1.320	1103	1103
335.19-06.00-0.25-7	02869723	Manicotto	6.000	0.250	1.949	7	14	1.250	1.875	0.375	0.500	–	5900	1.760	1204	1204
R335.19-06.00-0.25-7	02869762	Manicotto	6.000	0.250	1.220	7	14	1.500	2.750	2.000	–	–	5900	3.750	1204	1204
335.19-06.00-0.31-7	02869728	Manicotto	6.000	0.313	1.949	7	14	1.250	1.875	0.406	0.500	–	5900	2.430	12045	12045
335.19-06.00-0.37-7	02869733	Manicotto	6.000	0.375	2.020	7	14	1.250	1.875	0.437	0.500	–	5200	2.200	1205	1205
335.19-06.00-0.50-7	02869738	Manicotto	6.000	0.500	2.000	7	14	1.250	1.875	0.500	0.500	–	4700	2.870	1207	1207
335.19-08.00-0.25-9	02869724	Manicotto	8.000	0.250	2.512	9	18	1.500	2.750	0.375	0.500	–	5200	0.880	1204	1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.19 CW=0.187	–	1/4HEX-T09PX50	C93505-T09P
335.19 CW=0.250	–	1/4HEX-T15PX50	C94055-T15P
335.19- CW=0.313	–	1/4HEX-T15PX50	C94006-T15P
335.19 CW=0.375	–	1/4HEX-T15PX50	C94008-T15P
335.19 CW=0.500	–	1/4HEX-T15PX50	C94010-T15P
R335.19 DC=02.50 CW=0.15	UC6S3/8UNFX1-3/4	T09P-7	C93504-T09P
R335.19 DC=02.50 CW=0.18	UC6S3/8UNFX1-3/4	T09P-7	C93505-T09P
R335.19 DC=02.50 CW=0.25	UC6S3/8UNFX1-3/4	T15P-7	C94055-T15P
R335.19 DC=02.50 CW=0.31	UC6S3/8UNFX1-3/4	T15P-7	C94006-T15P
R335.19 DC=02.50 CW=0.37	UC6S3/8UNFX1-3/4	T15P-7	C94008-T15P
R335.19 DC=03.00 CW=0.15	UC6S3/8UNFX1-3/4	1/4HEX-T09PX50	C93504-T09P
R335.19 DC=03.00 CW=0.18	UC6S3/8UNFX1-3/4	1/4HEX-T09PX50	C93505-T09P
R335.19 DC=03.00 CW=0.25	UC6S3/8UNFX1-3/4	1/4HEX-T15PX50	C94055-T15P
R335.19 DC=03.00 CW=0.31	UC6S3/8UNFX1-3/4	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=03.00 CW=0.37	UC6S3/8UNFX1-3/4	1/4HEX-T15PX50	C94008-T15P
R335.19 DC=04.00 CW=0.18	UC6S1/2UNFX1-1/2	1/4HEX-T09PX50	C93505-T09P
R335.19 DC=04.00 CW=0.25	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C94055-T15P
R335.19 DC=04.00 CW=0.31	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C94006-T15P
R335.19 DC=04.00 CW=0.37	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C94008-T15P
R335.19 DC=04.00 CW=0.50	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C94010-T15P
R335.19 DC=05.00 CW=0.25	UC6S5/8UNFX11/2	1/4HEX-T15PX50	C94055-T15P
R335.19 DC=05.00 CW=0.50	UC6S5/8UNFX11/2	1/4HEX-T15PX50	C94010-T15P
R335.19 DC=06.00 CW=0.25	ULC6S3/4UNFX11/2	1/4HEX-T15PX50	C94055-T15P

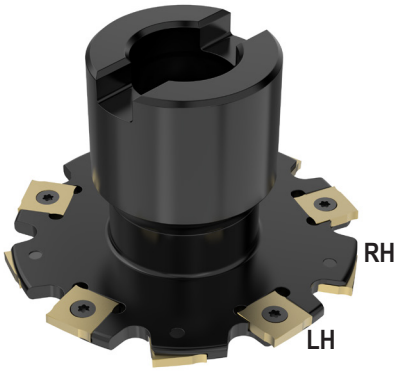
Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite inserto	Chiave dinamometrica
					
335.19 CW=0.187	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20
335.19 CW=0.250-0.500	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35
R335.19 DC=02.50 -3	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T15PX50	T00-15P35
R335.19 DC=02.50 -4	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	1/4HEX-T09PX50	T00-09P20
R335.19 DC=03.00 -4	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35
R335.19 DC=03.00 -5	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20
R335.19 DC=04.00 -5	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35
R335.19 DC=04.00 -6	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20
R335.19 DC=05.00-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

Frese a disco 335.19 – Informazioni tecniche

Lato fresa



LH = inserto sinistro
RH = inserto destro

Scelta inserti SNHQ: Scelta larghezza di taglio e raggio di punta

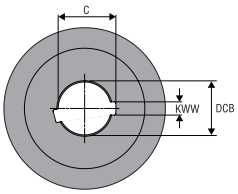


Inserti	a_p	R 0,2	R 0,4	R 0,8	R 1,0	R 1,2	R 1,6	R 2,0	R 2,4	R 3,0	R 3,1	R 3,5	R 4,0	R 5,0	R 6,0
SNHQ 1102	4	■	■	■		■	■	■							
SNHQ 1103	5	■	■	■		■	■	■							
SNHQ 1203	6	■	■	■	■	■	■	■	x	o					
SNHQ 1204	7	■	■	■		■	■	■	x		x	o			
SNHQ 12045	8	■	■	■		■	■	■	x		x		o		
SNHQ 1205	10	■	■	■	■	■	■	■	x		x		x	o	
SNHQ 1207	12	■	■	■		■	■	■	x		x		x	x	o

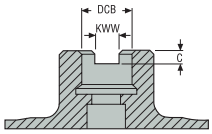
Inserti	a_p	0,008	0,016	0,031	0,039	0,047	0,063	0,079	0,094	0,118	0,122	0,138	0,157	0,197	0,236
SNHQ 1102	0,156	■	■	■		■	■	■							
SNHQ 1103	0,187	■	■	■		■	■	■							
SNHQ 1204	0,250	■	■	■		■	■	■	x		x				
SNHQ 12045	0,313	■	■	■		■	■	■	x		x				
SNHQ 1205	0,375	■	■	■	■	■	■	■	x		x		x		
SNHQ 1207	0,500		■	■		■	■	■	x		x		x	x	x

■ = SNHQ 4 taglienti
x = SNHQ 2 taglienti
o = Possibilità di raggio completo

Chiavetta per fresa con foro di centraggio e attacco a manicotto



Dimensioni in mm			Dimensioni in pollici		
DCB	KWW	C	DCB	KWW	C
22	6	24,15	*1.00*	*0.250*	*1.110*
27	7	29,9	*1.25*	*0.312*	*1.393*
40	10	43,6	*1.50*	*0.375*	*1.673*
50	12	53,6	*2.00*	*0.500*	*2.198*



Dimensioni in mm			Dimensioni in pollici		
DCB	KWW	C	DCB	KWW	C
16	8,4	5,6	*0.75*	*0.32*	*0.19*
22	10,4	6,3	*1.00*	*0.38*	*0.22*
27	12,4	7	*1.25*	*0.51*	*0.28*
32	14,4	8	*1.50*	*0.63*	*0.38*
40	16,4	9			

SNHQ – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	SNHQ...-M07 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
P2	SNHQ...-M07 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
P3	SNHQ...-M07 F40M	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
P4	SNHQ...-M07 F40M	0,12 *0.0048*	0,13 0.0050	0,18 0.0070
P5	SNHQ...-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P6	SNHQ...-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P7	SNHQ...-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P8	SNHQ...-M07 F30M	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
P11	SNHQ...-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P12	SNHQ...-M07 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
M1	SNHQ...-M07 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
M2	SNHQ...-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
M3	SNHQ...-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
M4	SNHQ...-M07 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
M5	SNHQ...-M07 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
K1	SNHQ...-M07 MP2501	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
K2	SNHQ...-M07 MP2501	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
K3	SNHQ...-M07 MP2501	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
K4	SNHQ...-M07 MP2501	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
K5	SNHQ...-M07 MP2501	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
K6	SNHQ...-M07 MP2501	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
K7	SNHQ...-M07 MP2501	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
N1	SNHQ...-E05 H25	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
N2	SNHQ...-E05 H25	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
N3	SNHQ...-E05 H25	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
N11	SNHQ...-E05 H25	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
S1	SNHQ...-M07 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
S2	SNHQ...-M07 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
S3	SNHQ...-M07 F40M	0,075 *0.0030*	0,085 0.0034	0,11 0.0044
S11	SNHQ...-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S12	SNHQ...-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S13	SNHQ...-M07 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
H5	SNHQ...-M07 F30M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
H8	SNHQ...-M07 F30M	0,060 *0.0024*	0,070 0.0028	0,090 0.0036
H11	SNHQ...-M07 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
H12	SNHQ...-M07 F40M	0,060 *0.0024*	0,070 0.0028	0,090 0.0036
H21	SNHQ...-M07 F30M	0,060 *0.0024*	0,070 0.0028	0,090 0.0036

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

SNHQ – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F30M			F40M			H25			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	195 *640*	205 *670*	230 *750*	185 *610*	195 *640*	215 *710*	— —	— —	— —	320 *1050*	335 *1100*	360 *1175*
P2	185 *610*	200 *660*	220 *720*	175 *570*	190 *620*	210 *690*	— —	— —	— —	305 *1000*	325 *1075*	350 *1150*
P3	165 *540*	175 *570*	195 *640*	155 *510*	165 *540*	185 *610*	— —	— —	— —	270 *890*	280 *920*	300 *980*
P4	145 *475*	155 *510*	170 *560*	135 *445*	150 *490*	165 *540*	— —	— —	— —	235 *770*	250 *820*	265 *870*
P5	140 *460*	150 *490*	165 *540*	135 *445*	140 *460*	155 *510*	— —	— —	— —	230 *750*	240 *790*	255 *840*
P6	155 *510*	165 *540*	185 *610*	150 *490*	160 *520*	175 *570*	— —	— —	— —	255 *840*	270 *890*	290 *950*
P7	150 *490*	160 *520*	175 *570*	140 *460*	150 *490*	165 *540*	— —	— —	— —	240 *790*	255 *840*	270 *890*
P8	135 *445*	145 *475*	165 *540*	130 *425*	140 *460*	155 *510*	— —	— —	— —	225 *740*	235 *770*	255 *840*
P11	145 *475*	155 *510*	170 *560*	135 *445*	145 *475*	160 *520*	— —	— —	— —	235 *770*	245 *800*	265 *870*
P12	95 *310*	100 *330*	110 *360*	90 *295*	95 *310*	105 *345*	— —	— —	— —	145 *475*	150 *490*	160 *520*
M1	150 *490*	165 *540*	180 *590*	140 *460*	155 *510*	170 *560*	— —	— —	— —	170 *560*	185 *610*	200 *660*
M2	125 *410*	135 *445*	150 *490*	120 *395*	125 *410*	140 *460*	— —	— —	— —	140 *460*	150 *490*	165 *540*
M3	100 *330*	110 *360*	120 *395*	95 *310*	105 *345*	115 *375*	— —	— —	— —	115 *375*	120 *395*	135 *445*
M4	80 *260*	85 *280*	90 *295*	75 *245*	80 *260*	90 *295*	— —	— —	— —	85 *280*	95 *310*	105 *345*
M5	65 *215*	70 *230*	75 *245*	60 *195*	65 *215*	75 *245*	— —	— —	— —	75 *245*	80 *260*	85 *280*
K1	145 *475*	160 *520*	175 *570*	140 *460*	150 *490*	170 *560*	— —	— —	— —	310 *1025*	330 *1075*	350 *1150*
K2	135 *445*	140 *460*	155 *510*	125 *410*	135 *445*	150 *490*	— —	— —	— —	275 *900*	290 *950*	310 *1025*
K3	115 *375*	120 *395*	135 *445*	105 *345*	115 *375*	125 *410*	— —	— —	— —	235 *770*	245 *800*	260 *850*
K4	105 *345*	115 *375*	125 *410*	100 *330*	110 *360*	120 *395*	— —	— —	— —	225 *740*	235 *770*	250 *820*
K5	65 *215*	70 *230*	75 *245*	60 *195*	65 *215*	75 *245*	— —	— —	— —	135 *445*	140 *460*	150 *490*
K6	95 *310*	100 *330*	110 *360*	90 *295*	95 *310*	105 *345*	— —	— —	— —	195 *640*	205 *670*	220 *720*
K7	85 *280*	90 *295*	100 *330*	80 *260*	85 *280*	95 *310*	— —	— —	— —	175 *570*	180 *590*	190 *620*
N1	1100 *3600*	1175 *3850*	1300 *4275*	1050 *3450*	1125 *3700*	1250 *4100*	1025 *3375*	1100 *3600*	1200 *3925*	— —	— —	— —
N2	445 *1450*	480 *1575*	530 *1750*	425 *1400*	455 *1500*	500 *1650*	415 *1350*	440 *1450*	485 *1600*	— —	— —	— —
N3	295 *970*	320 *1050*	355 *1175*	280 *920*	305 *1000*	335 *1100*	275 *900*	295 *970*	325 *1075*	— —	— —	— —
N11	340 *1125*	365 *1200*	405 *1325*	320 *1050*	345 *1125*	385 *1275*	315 *1025*	335 *1100*	370 *1225*	— —	— —	— —
S1	36 *120*	39 *130*	43 *140*	35 *115*	37 *120*	41 *135*	— —	— —	— —	— —	— —	— —
S2	29 *95*	31 *100*	35 *115*	28 *90*	30 *100*	33 *110*	— —	— —	— —	— —	— —	— —
S3	26 *85*	27 *90*	30 *100*	24 *80*	26 *85*	29 *95*	— —	— —	— —	— —	— —	— —
S11	50 *165*	55 *180*	60 *195*	49 *160*	50 *165*	55 *180*	— —	— —	— —	— —	— —	— —
S12	36 *120*	38 *125*	42 *140*	41 *135*	44 *145*	48 *155*	— —	— —	— —	— —	— —	— —
S13	21 *70*	22 *70*	24 *80*	24 *80*	25 *80*	28 *90*	— —	— —	— —	— —	— —	— —
H5	31 *100*	33 *110*	36 *120*	29 *95*	31 *100*	34 *110*	— —	— —	— —	— —	— —	— —
H8	32 *105*	34 *110*	38 *125*	31 *100*	33 *110*	36 *120*	— —	— —	— —	— —	— —	— —
H11	39 *130*	42 *140*	46 *150*	37 *120*	40 *130*	44 *145*	— —	— —	— —	— —	— —	— —
H12	38 *125*	40 *130*	45 *150*	36 *120*	38 *125*	42 *140*	— —	— —	— —	— —	— —	— —
H21	32 *105*	34 *110*	38 *125*	31 *100*	33 *110*	36 *120*	— —	— —	— —	— —	— —	— —

335.19 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	335.19-...-M08 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
P2	335.19-...-M08 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
P3	335.19-...-M08 F40M	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
P4	335.19-...-M08 F40M	0,12 *0.0048*	0,13 0.0050	0,18 0.0070
P5	335.19-...-M08 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P6	335.19-...-M08 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P7	335.19-...-M08 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P8	335.19-...-MD09 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P11	335.19-...-M08 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
P12	335.19-...-M08 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
M1	335.19-...-M08 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
M2	335.19-...-M08 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
M3	335.19-...-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
M4	335.19-...-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
M5	335.19-...-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
K1	335.19-...-MD09 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
K2	335.19-...-MD09 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K3	335.19-...-MD09 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K4	335.19-...-MD09 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K5	335.19-...-MD09 F40M	0,11 *0.0044*	0,13 0.0050	0,18 0.0070
K6	335.19-...-MD09 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K7	335.19-...-MD09 F40M	0,11 *0.0044*	0,13 0.0050	0,18 0.0070
S1	335.19-...-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
S2	335.19-...-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
S3	335.19-...-M08 F40M	0,075 *0.0030*	0,085 0.0034	0,11 0.0044
S11	335.19-...-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S12	335.19-...-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S13	335.19-...-M08 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
H5	335.19-...-MD09 F40M	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
H8	335.19-...-MD09 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
H11	335.19-...-MD09 F40M	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
H12	335.19-...-MD09 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
H21	335.19-...-MD09 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.19 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MP2501		
	30%	20%	10%	30%	20%	10%
P1	175 *570*	185 *610*	205 *670*	295 *970*	310 *1025*	330 *1075*
P2	170 *560*	180 *590*	200 *660*	285 *940*	300 *980*	320 *1050*
P3	145 *475*	155 *510*	175 *570*	250 *820*	260 *850*	280 *920*
P4	130 *425*	140 *460*	155 *510*	220 *720*	230 *750*	250 *820*
P5	125 *410*	135 *445*	150 *490*	210 *690*	220 *720*	235 *770*
P6	140 *460*	150 *490*	165 *540*	235 *770*	250 *820*	270 *890*
P7	135 *445*	140 *460*	160 *520*	225 *740*	235 *770*	255 *840*
P8	125 *410*	130 *425*	145 *475*	210 *690*	220 *720*	235 *770*
P11	130 *425*	140 *460*	155 *510*	215 *710*	230 *750*	245 *800*
P12	85 *280*	90 *295*	100 *330*	140 *460*	145 *475*	155 *510*
M1	135 *445*	145 *475*	160 *520*	155 *510*	165 *540*	185 *610*
M2	115 *375*	120 *395*	135 *445*	130 *425*	135 *445*	150 *490*
M3	90 *295*	100 *330*	105 *345*	105 *345*	110 *360*	120 *395*
M4	70 *230*	75 *245*	85 *280*	80 *260*	85 *280*	95 *310*
M5	60 *195*	65 *215*	70 *230*	65 *215*	70 *230*	80 *260*
K1	135 *445*	145 *475*	160 *520*	290 *950*	305 *1000*	325 *1075*
K2	120 *395*	125 *410*	140 *460*	255 *840*	265 *870*	285 *940*
K3	100 *330*	110 *360*	120 *395*	215 *710*	225 *740*	245 *800*
K4	95 *310*	105 *345*	115 *375*	205 *670*	215 *710*	230 *750*
K5	60 *195*	60 *195*	70 *230*	125 *410*	130 *425*	140 *460*
K6	85 *280*	90 *295*	100 *330*	180 *590*	190 *620*	205 *670*
K7	75 *245*	80 *260*	90 *295*	160 *520*	170 *560*	180 *590*
N1	990 *3250*	1075 *3525*	1175 *3850*	— —	— —	— —
N2	400 *1300*	430 *1400*	475 *1550*	— —	— —	— —
N3	265 *870*	285 *940*	315 *1025*	— —	— —	— —
N11	305 *1000*	325 *1075*	365 *1200*	— —	— —	— —
S1	33 *110*	35 *115*	39 *130*	— —	— —	— —
S2	26 *85*	28 *90*	31 *100*	— —	— —	— —
S3	23 *75*	25 *80*	27 *90*	— —	— —	— —
S11	46 *150*	50 *165*	55 *180*	— —	— —	— —
S12	39 *130*	42 *140*	46 *150*	— —	— —	— —
S13	22 *70*	24 *80*	27 *90*	— —	— —	— —
H5	28 *90*	30 *100*	33 *110*	— —	— —	— —
H8	29 *95*	31 *100*	35 *115*	— —	— —	— —
H11	36 *120*	38 *125*	42 *140*	— —	— —	— —
H12	34 *110*	36 *120*	40 *130*	— —	— —	— —
H21	29 *95*	31 *100*	35 *115*	— —	— —	— —

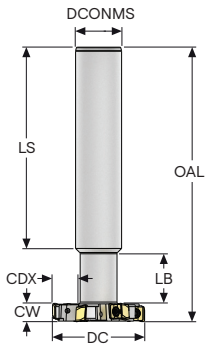


335.18

Sistema di fresa a disco a taglio dolce versatile ed estremamente conveniente, dedicata per operazioni di scanalatura con larghezza di taglio media o per due tagli e spianatura

- Larghezza di taglio 8-20 mm (0,312-0,7500") - Scanalatura con fondo piano
- Diametro gamma 32-315 mm (1,25-12")
- Larghezza di taglio fissa o regolabile con moduli sostituibili
- Disponibile con attacco cilindrico, a manicotto, a foro di centraggio e Combimaster, con opzione per refrigerante interno e passo stretto
- Gamma di raggi di punta inserto 0,4-4 mm (0,016-0,16") e possibilità di applicare inserti tondi di diametro 8/10/12 mm nel sistema regolabile
- Soluzione conveniente con 4 taglienti per inserto
- Progetta e ottieni rapidamente il prezzo dei corpi della fresa a disco 335.18 personalizzati con Seco My Design.
- Tolleranza di base della scanalatura:
  Frese a sedi fisse: +/-0,08 mm (+/-0,003")
  Frese regolabili: +/-0,07 mm (+/-0,0025")

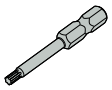
R335.18 - LNK. – In mm - tre tagli - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCONMS	LS	OAL	LB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm		kg	
R335.18-1632-0-08-1N	10092355	Cilindrico	32,0	8,0	8,5	1	2	16,0	71,0	140,0	139,7	18600	0,3	LNK.0504..
R335.18-1632-0-10-1N	10092359	Cilindrico	32,0	10,0	8,5	1	2	16,0	69,0	140,0	139,3	18600	0,3	LNK.0504..
R335.18-2040-0-08-2N	10092356	Cilindrico	40,0	8,0	11,5	2	4	20,0	66,0	140,0	139,7	16600	0,4	LNK.0504..
R335.18-2040-0-10-2N	10092360	Cilindrico	40,0	10,0	11,5	2	4	20,0	64,0	140,0	139,7	14000	0,4	LNK.0605.. / LNK.0805..
R335.18-2040-0-10-2N-LN05	10092361	Cilindrico	40,0	10,0	11,5	2	4	20,0	64,0	140,0	139,3	16600	0,4	LNK.0504..
R335.18-2550-0-08-3N	10092357	Cilindrico	50,0	8,0	14,5	3	6	25,0	59,5	150,0	149,7	14900	0,6	LNK.0504..
R335.18-2550-0-10-3N	10092362	Cilindrico	50,0	10,0	14,5	3	6	25,0	57,5	150,0	149,7	12400	0,6	LNK.0605.. / LNK.0805..
R335.18-2550-0-12-3N	10092363	Cilindrico	50,0	12,0	14,5	3	6	25,0	55,5	150,0	149,3	12400	0,6	LNK.0605.. / LNK.0805..
R335.18-3263-0-08-3N	10092358	Cilindrico	63,0	8,0	15,5	3	6	32,0	83,0	170,0	169,7	13300	1,2	LNK.0504..
R335.18-3263-0-10-3N	10092364	Cilindrico	63,0	10,0	15,5	3	6	32,0	81,0	170,0	169,7	11000	1,2	LNK.0605.. / LNK.0805..
R335.18-3263-0-12-3N	10092366	Cilindrico	63,0	12,0	15,5	3	6	32,0	79,0	170,0	169,3	11000	1,1	LNK.0605.. / LNK.0805..
R335.18-3280-0-10-4N	10092365	Cilindrico	80,0	10,0	24,0	4	8	32,0	81,0	170,0	169,7	9700	1,3	LNK.0605.. / LNK.0805..
R335.18-3280-0-12-4N	10092367	Cilindrico	80,0	12,0	24,0	4	8	32,0	79,0	170,0	169,3	9700	2,0	LNK.0605.. / LNK.0805..

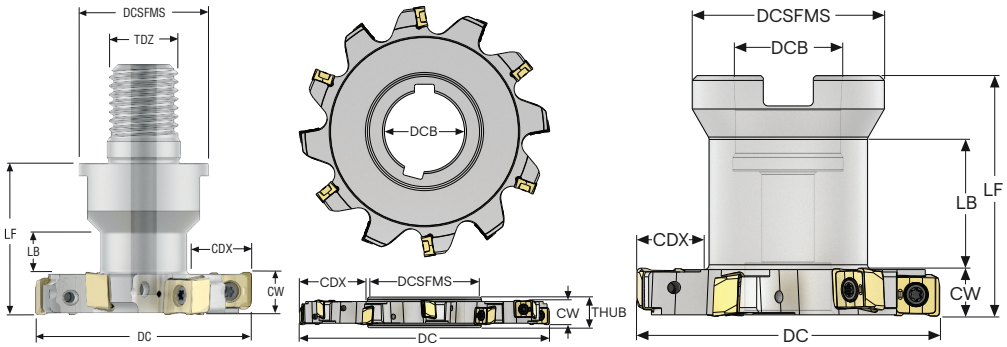
Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R335.18-LNK.0504	1/4HEX-T08PX50	C02508-T08P
R335.18-LNK.0605/LNK.0805	1/4HEX-T09PX50	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R335.18-LNK.0504	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R335.18-LNK.0605/LNK.0805	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

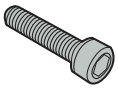
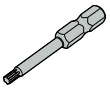
R335.18 - LNK. – In mm - tre tagli - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	LF	THUB	LB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm		mm	mm	mm		kg	
R335.18-063-08-22-3N	10092379	Manicotto	63,0	8,0	14,5	3	6	22,0	40,0	–	50,0	–	50,0	13300	0,5	LNK.0504..
R335.18-063-10-22-3N	10092383	Manicotto	63,0	10,0	14,5	3	6	22,0	40,0	–	50,0	–	50,0	11000	0,5	LNK.0605.. / LNK.0805..
R335.18-080-08-22-4N	10092380	Manicotto	80,0	8,0	23,0	4	8	22,0	40,0	–	50,0	–	49,7	11800	0,1	LNK.0504..
335.18-080-10-27-4N	10092420	Manicotto	80,0	10,0	18,0	4	8	27,0	41,0	–	–	15,0	–	9700	0,3	LNK.0605.. / LNK.0805..
R335.18-080-10-22-4N	10092384	Manicotto	80,0	10,0	23,0	4	8	22,0	40,0	–	50,0	–	50,0	9700	0,5	LNK.0605.. / LNK.0805..
335.18-100-08-27-5N	10092419	Manicotto	100,0	8,0	28,0	5	10	27,0	41,0	–	–	15,0	–	10500	1,0	LNK.0504..
R335.18-100-08-27-5N	10092381	Manicotto	100,0	8,0	25,5	5	10	27,0	48,0	–	50,0	–	49,7	10500	0,9	LNK.0504..
335.18-100-10-27-5N	10092421	Manicotto	100,0	10,0	28,0	5	10	27,0	41,0	–	–	15,0	–	8700	0,6	LNK.0605.. / LNK.0805..
R335.18-100-10-27-5N	10092385	Manicotto	100,0	10,0	25,5	5	10	27,0	48,0	–	50,0	–	50,0	8700	0,9	LNK.0605.. / LNK.0805..
R335.18-125-08-32-6N	10092382	Manicotto	125,0	8,0	33,0	6	12	32,0	58,0	–	50,0	–	49,7	9400	1,3	LNK.0504..
R335.18-125-10-32-6N	10092386	Manicotto	125,0	10,0	33,0	6	12	32,0	58,0	–	50,0	–	50,0	7700	1,4	LNK.0605.. / LNK.0805..
R335.18-1032.RE-08.2NA	03277891	Combimaster	32,0	8,0	8,4	2	4	–	18,5	M10	28,0	–	8,89	17300	0,1	LNK.0504
R335.18-1032.RE-10.2NA	03277892	Combimaster	32,0	10,0	8,5	2	4	–	18,5	M10	28,0	–	6,89	17300	0,1	LNK.0504
R335.18-1240.RE-08.2NA	03277893	Combimaster	40,0	8,0	11,2	2	4	–	23,0	M12	30,0	–	8,39	15400	0,2	LNK.0504
R335.18-1240.RE-10.2NA	03277894	Combimaster	40,0	10,0	11,5	2	4	–	23,0	M12	30,0	–	6,39	15400	0,2	LNK.0504
R335.18-1650.RE-08.3NA	03277895	Combimaster	50,0	8,0	14,2	3	6	–	30,0	M16	35,0	–	10,59	13800	0,3	LNK.0504
R335.18-1650.RE-10.3NA	03279026	Combimaster	50,0	10,0	14,4	3	6	–	30,0	M16	35,0	–	8,59	13400	0,3	LNK.0605 / LNK.0805
R335.18-2063.RE-08.4NA	03277897	Combimaster	63,0	8,0	15,0	4	8	–	36,5	M20	40,0	–	14,89	12300	0,4	LNK.0504
R335.18-2063.RE-10.4NA	03277898	Combimaster	63,0	10,0	15,1	4	8	–	36,5	M20	40,0	–	12,89	11900	0,5	LNK.0605 / LNK.0805

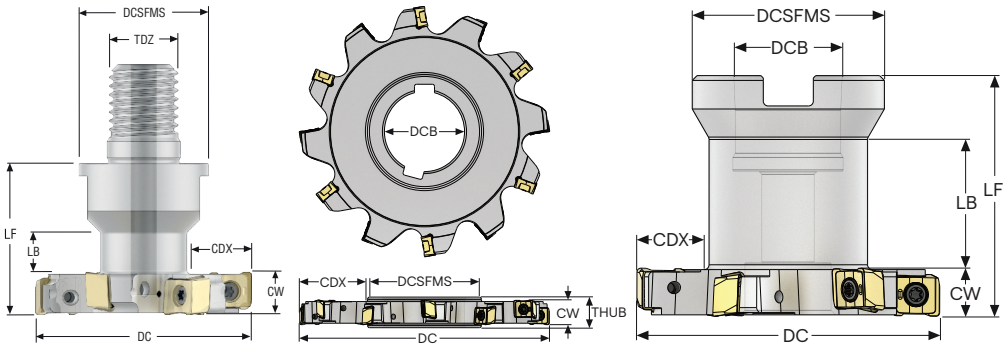
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.18 DC=100 LNK.0605/LNK.0805	–	1/4HEX-T09PX90	C73009-T09P
335.18 DC=80 LNK.0605/LNK.0805	–	1/4HEX-T09PX50	C73009-T09P
335.18 LNK.0504	–	1/4HEX-T08PX90	C02508-T08P
R335.18 .RE LNK.0504	–	1/4HEX-T08PX50	C02508-T08P
R335.18 .RE LNK.0605/LNK.0805	–	1/4HEX-T09PX50	C73009-T09P
R335.18-DCB=22 LNK.0504	MC6S10X40	1/4HEX-T08PX50	C02508-T08P
R335.18 DCB=22 LNK.0605/LNK.0805	MC6S10X40	1/4HEX-T09PX50	C73009-T09P
R335.18 DCB=27 LNK.0504	MC6S12X40	1/4HEX-T08PX90	C02508-T08P
R335.18 DCB=27 LNK.0605/LNK.0805	MC6S12X40	1/4HEX-T09PX90	C73009-T09P
R335.18 DCB=32 LNK.0504	MC6S16X40	1/4HEX-T08PX90	C02508-T08P
R335.18 DCB=32 LNK.0605/LNK.0805	MC6S16X40	1/4HEX-T09PX90	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335/R335.18 LNK.0504	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
335/R335.18 LNK.0605/LNK.0805	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

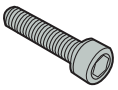
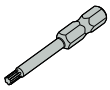
R335.18 - LNK. – In mm - tre tagli - Sede fissa



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
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Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	LF	THUB	LB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm		mm	mm	mm		kg	
R335.18-063-12-22-3N	10092387	Manicotto	63,0	12,0	14,5	3	6	22,0	40,0	–	50,0	–	50,0	11000	0,4	LNK.0605.. / LNK.0805..
R335.18-063-14-22-3N	10092391	Manicotto	63,0	14,0	14,5	3	6	22,0	40,0	–	50,0	–	50,0	11000	0,5	LNK.0605.. / LNK.0805..
335.18-080-12-27-4N	10092422	Manicotto	80,0	12,0	18,0	4	8	27,0	41,0	–	–	15,0	–	9700	0,3	LNK.0605.. / LNK.0805..
R335.18-080-12-22-4N	10092388	Manicotto	80,0	12,0	23,0	4	8	22,0	40,0	–	50,0	–	50,0	9700	0,7	LNK.0605.. / LNK.0805..
R335.18-080-14-22-4N	10092392	Manicotto	80,0	14,0	23,0	4	8	22,0	40,0	–	50,0	–	50,0	9700	0,6	LNK.0605.. / LNK.0805..
335.18-100-12-27-5N	10092423	Manicotto	100,0	12,0	28,0	5	10	27,0	41,0	–	–	15,0	–	8700	0,6	LNK.0605.. / LNK.0805..
R335.18-100-12-27-5N	10092389	Manicotto	100,0	12,0	25,5	5	10	27,0	48,0	–	50,0	–	50,0	8700	1,1	LNK.0605.. / LNK.0805..
R335.18-100-14-27-5N	10092393	Manicotto	100,0	14,0	25,5	5	10	27,0	48,0	–	50,0	–	50,0	8700	1,2	LNK.0605.. / LNK.0805..
335.18-125-12-40-6N	10092424	Manicotto	125,0	12,0	33,5	6	12	40,0	55,0	–	–	15,0	–	7700	1,0	LNK.0605.. / LNK.0805..
R335.18-125-12-32-6N	10092390	Manicotto	125,0	12,0	33,0	6	12	32,0	58,0	–	50,0	–	50,0	7700	1,5	LNK.0605.. / LNK.0805..
R335.18-125-14-32-6N	10092394	Manicotto	125,0	14,0	33,0	6	12	32,0	58,0	–	50,0	–	50,0	7700	1,7	LNK.0605.. / LNK.0805..
335.18-160-14-40-7N	10092425	Manicotto	160,0	14,0	51,0	7	14	40,0	55,0	–	–	15,0	–	6800	1,7	LNK.0605.. / LNK.0805..
R335.18-1650.RE-12.3NA	03277896	Combimaster	50,0	12,0	14,5	3	6	–	30,0	M16	35,0	–	6,59	13400	0,3	LNK.0605 / LNK.0805

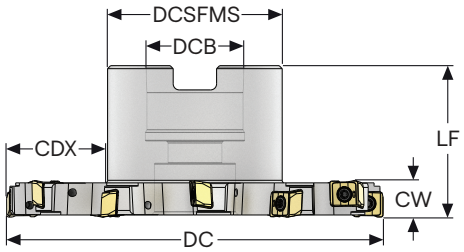
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.18 DC=100-160 CW=12/14	–	1/4HEX-T09PX90	C73009-T09P
335.18 DC=80 CW=12	–	1/4HEX-T09PX50	C73009-T09P
R335.18 .RE	–	1/4HEX-T09PX50	C73009-T09P
R335.18 DCB=22	MC6S10X40	1/4HEX-T09PX50	C73009-T09P
R335.18 DCB=27	MC6S12X40	1/4HEX-T09PX90	C73009-T09P
R335.18 DCB=32	MC6S16X40	1/4HEX-T09PX90	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335/R335.18-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

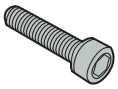
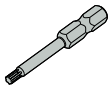
R335.18 - LNK. – In mm - tre tagli - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	DCONMS	LF	LB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm	mm		kg	
R335.18-080-17-22-3N	10092395	Manicotto	80,0	17,0	23,0	3	9	22,0	40,0	22,0	50,0	50,0	9700	0,6	LNK.0605.. / LNK.0805..
R335.18-080-20-22-4N	10092398	Manicotto	80,0	20,0	23,0	4	12	22,0	40,0	22,0	50,0	49,3	9700	0,7	LNK.0605.. / LNK.0805..
R335.18-100-20-27-5N	10092399	Manicotto	100,0	20,0	25,5	5	15	27,0	48,0	27,0	50,0	49,3	8700	1,2	LNK.0605.. / LNK.0805..
R335.18-125-17-32-4N	10092396	Manicotto	125,0	17,0	33,0	4	12	32,0	58,0	32,0	50,0	50,0	7700	1,9	LNK.0605.. / LNK.0805..
R335.18-125-20-32-6N	10092400	Manicotto	125,0	20,0	33,0	6	18	32,0	58,0	32,0	50,0	49,3	7700	1,8	LNK.0605.. / LNK.0805..
R335.18-160-17-40-5N	10092397	Manicotto	160,0	17,0	44,5	5	15	40,0	70,0	40,0	50,0	50,0	6800	3,0	LNK.0605.. / LNK.0805..
R335.18-160-20-40-7N	10092401	Manicotto	160,0	20,0	44,5	7	21	40,0	70,0	40,0	50,0	49,3	6800	3,0	LNK.0605.. / LNK.0805..

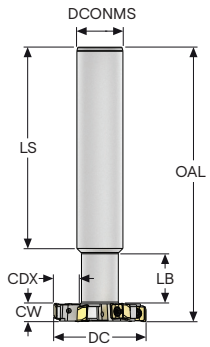
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R335.18 DCB=22	MC6S10X40	1/4HEX-T09PX50	C73009-T09P
R335.18 DCB=27	MC6S12X40	1/4HEX-T09PX90	C73009-T09P
R335.18 DCB=32	MC6S16X40	1/4HEX-T09PX90	C73009-T09P
R335.18 DCB=40	MLC6S20X40	1/4HEX-T09PX90	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335/R335.18-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

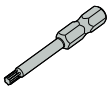
R335.18 - LNK. – Pollici - tre tagli - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCONMS	LS	OAL	LB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.18-01.25-0-0.31-1N	10092368	Cilindrico	1.250	0.312	0.332	1	2	0.625	2.957	5.500	5.488	18700	0.660	LNK.0504..
R335.18-01.25-0-0.37-1N	10092372	Cilindrico	1.250	0.375	0.332	1	2	0.625	2.894	5.500	5.488	18700	0.660	LNK.0504..
R335.18-01.50-0-0.31-2N	10092369	Cilindrico	1.500	0.312	0.395	2	4	0.750	2.707	5.500	5.488	17000	0.880	LNK.0504..
R335.18-01.50-0-0.37-2N	10092373	Cilindrico	1.500	0.375	0.395	2	4	0.750	2.644	5.500	5.488	17000	0.880	LNK.0504..
R335.18-02.00-0-0.31-3N	10092370	Cilindrico	2.000	0.312	0.571	3	6	1.000	2.360	6.000	5.988	14800	1.540	LNK.0504..
R335.18-02.00-0-0.37-3N	10092374	Cilindrico	2.000	0.375	0.571	3	6	1.000	2.297	6.000	5.988	14800	1.540	LNK.0504..
R335.18-02.00-0-0.50-3N	10092376	Cilindrico	2.000	0.500	0.571	3	6	1.000	2.172	6.000	5.972	12300	1.540	LNK.0605.. / LNK.0805..
R335.18-02.50-0-0.31-3N	10092371	Cilindrico	2.500	0.312	0.625	3	6	1.250	3.348	6.750	6.738	13200	2.650	LNK.0504..
R335.18-02.50-0-0.37-3N	10092375	Cilindrico	2.500	0.375	0.625	3	6	1.250	3.284	6.750	6.738	13200	2.650	LNK.0504..
R335.18-02.50-0-0.50-3N	10092377	Cilindrico	2.500	0.500	0.625	3	6	1.250	3.159	6.750	6.722	11000	2.430	LNK.0605.. / LNK.0805..
R335.18-03.00-0-0.50-4N	10092378	Cilindrico	3.000	0.500	0.875	4	8	1.250	3.159	6.750	6.722	10000	4.410	LNK.0605.. / LNK.0805..

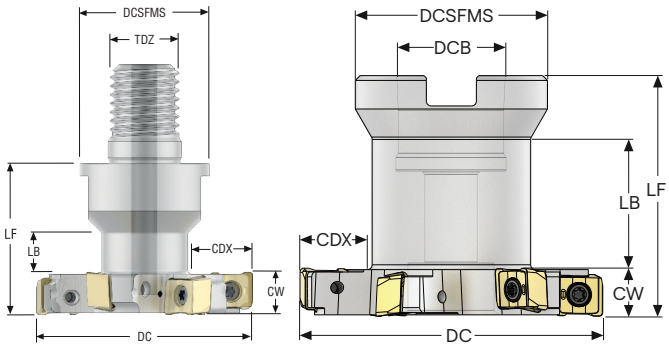
Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R335.18 LNK.0504	1/4HEX-T08PX50	C02508-T08P
R335.18 LNK.0605/LNK.0805	1/4HEX-T09PX50	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R335.18 LNK.0504	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R335.18 LNK.0605/ LNK.0805	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

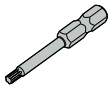
R335.18 - LNK. – Pollici - tre tagli - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	TDZ	LF	LB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch		inch	inch		lb	
R335.18-02.50-0.31-3N	10092402	Manicotto	2.500	0.312	0.581	3	6	0.750	1.619	–	2.000	1.988	13200	1.320	LNK.0504..
R335.18-02.50-0.37-3N	10092406	Manicotto	2.500	0.375	0.581	3	6	0.750	1.619	–	2.000	1.988	13200	0.880	LNK.0504..
R335.18-03.00-0.31-4N	10092403	Manicotto	3.000	0.312	0.693	4	8	1.000	1.880	–	2.000	1.988	12000	1.320	LNK.0504..
R335.18-03-00-0.37-4N	10092407	Manicotto	3.000	0.375	0.693	4	8	1.000	1.880	–	2.000	1.988	12000	0.220	LNK.0504..
R335.18-04.00-0.31-5N	10092404	Manicotto	4.000	0.312	1.193	5	10	1.000	1.880	–	2.000	1.988	10400	4.410	LNK.0504..
R335.18-04.00-0.37-5N	10092408	Manicotto	4.000	0.375	1.193	5	10	1.000	1.880	–	2.000	1.988	10400	1.980	LNK.0504..
R335.18-05.00-0.31-6N	10092405	Manicotto	5.000	0.312	1.355	6	12	1.250	2.250	–	2.000	1.988	9300	3.090	LNK.0504..
R335.18-05.00-0.37-6N	10092409	Manicotto	5.000	0.375	1.355	6	12	1.250	2.250	–	2.000	1.988	9300	3.090	LNK.0504..
R335.18-01.50-RE-0.31F-2NA	03277902	Combimaster	1.500	0.312	0.406	2	4	–	0.906	M12	1.181	0.333	15400	0.440	LNK.0504
R335.18-01.50-RE-0.37F-2NA	03277903	Combimaster	1.500	0.375	0.413	2	4	–	0.906	M12	1.181	0.270	15400	0.440	LNK.0504
R335.18-02.00-RE-0.31F-3NA	03277904	Combimaster	2.000	0.312	0.575	3	6	–	1.181	M16	1.378	0.420	13800	0.660	LNK.0504
R335.18-02.00-RE-0.37F-3NA	03277905	Combimaster	2.000	0.375	0.587	3	6	–	1.181	M16	1.378	0.357	13800	0.660	LNK.0504

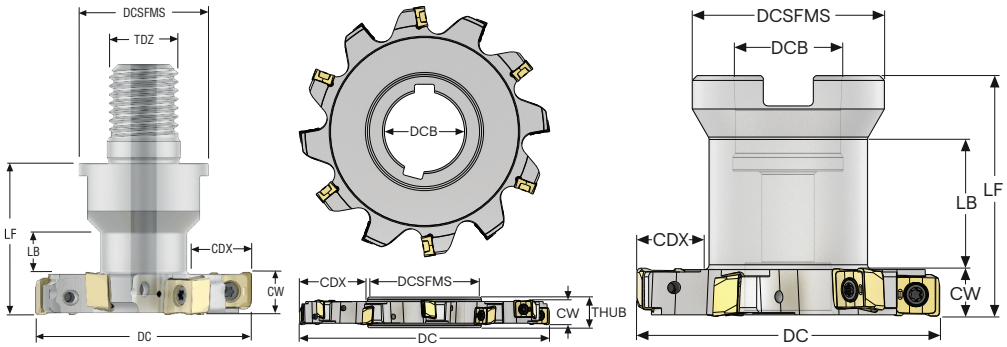
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R335.18 DC=02.50	UC6S3/8UNFX1-3/4	1/4HEX-T08PX50	C02508-T08P
R335.18 DC=03.00	UC6S1/2UNFX1-1/2	1/4HEX-T08PX50	C02508-T08P
R335.18 DC=04.00	UC6S1/2UNFX1-1/2	1/4HEX-T08PX90	C02508-T08P
R335.18 DC=05.00	UC6S5/8UNFX11/2	1/4HEX-T08PX90	C02508-T08P
R335.18-RE	–	1/4HEX-T08PX50	C02508-T08P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R335/335.18-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

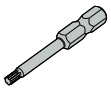
R335.18 - LNK. – Pollici - tre tagli - Sede fissa



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
–Per il programma inserti completo, vedere le pagine 865-866
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC inch	CW inch	CDX inch	ZEFP	ZNP	DCB inch	DCSFMS inch	TDZ	LF inch	THUB inch	LB inch	RPMX	Peso lb	Inserto
R335.18-02.50-0.50-3N	10092410	Manicotto	2.500	–	0.581	3	6	0.750	1.619	–	2.000	–	–	11000	1.100	LNK.0605.. / LNK.0805..
R335.18-03.00-0.50-4N	10092411	Manicotto	3.000	0.500	0.693	4	8	1.000	1.880	–	2.000	–	1.972	10000	1.320	LNK.0605.. / LNK.0805..
335.18-03.00-0.50-4N	10092429	Manicotto	3.000	0.500	0.665	4	8	1.000	1.551	–	–	0.625	–	10000	0.660	LNK.0605.. / LNK.0805..
R335.18-03.00-0.75-3N	10092416	Manicotto	3.000	0.750	0.693	3	9	1.000	1.880	–	2.000	–	1.972	10000	1.980	LNK.0605.. / LNK.0805..
R335.18-04.00-0.50-5N	10092412	Manicotto	4.000	0.500	1.193	5	10	1.000	1.880	–	2.000	–	1.972	8600	1.980	LNK.0605.. / LNK.0805..
R335.18-04.00-0.62-3N	10092415	Manicotto	4.000	0.625	1.193	3	9	1.000	1.880	–	2.000	–	1.972	8600	2.200	LNK.0605.. / LNK.0805..
R335.18-04.00-0.75-3N	10092417	Manicotto	4.000	0.750	1.193	3	9	1.000	1.880	–	2.000	–	1.972	8600	2.430	LNK.0605.. / LNK.0805..
R335.18-05.00-0.50-6N	10092413	Manicotto	5.000	0.500	1.355	6	12	1.250	2.250	–	2.000	–	1.972	7700	1.320	LNK.0605.. / LNK.0805..
R335.18-05.00-0.75-4N	10092418	Manicotto	5.000	0.750	1.355	4	12	1.250	2.250	–	2.000	–	1.972	7700	3.310	LNK.0605.. / LNK.0805..
335.18-06.00-0.50-7N	10092432	Manicotto	6.000	–	1.815	7	14	1.500	2.252	–	–	0.625	–	7000	2.650	LNK.0605.. / LNK.0805..
R335.18-02.00-RE-0.5F-3NA	03277906	Combimaster	2.000	0.500	0.587	3	6	–	1.181	M16	1.378	–	0.232	13400	0.660	LNK.0605 / LNK.0805

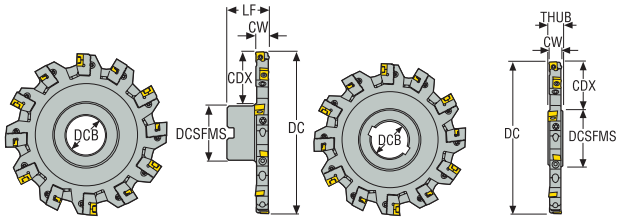
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
335.18 DC=03.00	–	1/4HEX-T09PX50	C73009-T09P
335.18 DC=06.00	–	1/4HEX-T09PX90	C73009-T09P
R335.18 DC=02.50	UC6S3/8UNFX1-3/4	1/4HEX-T09PX50	C73009-T09P
R335.18 DC=03.00	UC6S1/2UNFX1-1/2	1/4HEX-T09PX50	C73009-T09P
R335.18 DC=04.00	UC6S1/2UNFX1-1/2	1/4HEX-T09PX90	C73009-T09P
R335.18 DC=05.00	UC6S5/8UNFX11/2	1/4HEX-T09PX90	C73009-T09P
R335.18-RE	–	1/4HEX-T09PX50	C73009-T09P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R335/335.18-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

R335.18/335.18 - LNK. – In mm - tre tagli - Versione regolabile

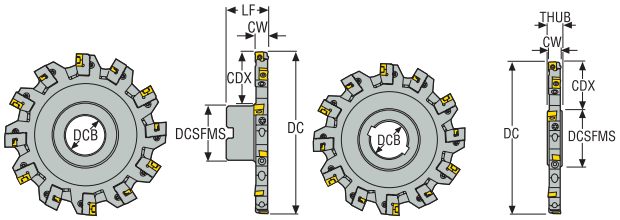


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.18-080.0810.27-3N	02611694	Manicotto	80,0	8,0	10,0	14,8	3	6	27,0	48,0	50,0	–	10900	0,8	LNK.05..
R335.18-080.1012.27-3N	00018581	Manicotto	80,0	10,0	12,0	14,8	3	6	27,0	48,0	50,0	–	10500	0,9	LNK.06..
R335.18-100.0810.27-4N	02576013	Manicotto	100,0	8,0	10,0	24,8	4	8	27,0	48,0	50,0	–	9400	0,9	LNK.05..
335.18-100.0810.27-4N	02575751	Manicotto	100,0	8,0	10,0	27,2	4	8	27,0	41,0	11,5	15,0	9400	0,4	LNK.05..
R335.18-100.1012.27-4N	00018597	Manicotto	100,0	10,0	12,0	24,8	4	8	27,0	48,0	50,0	–	9400	0,9	LNK.06..
335.18-100.1012.27-4N	00018408	Manicotto	100,0	10,0	12,0	27,2	4	8	27,0	41,0	12,5	15,0	9400	0,4	LNK.06..
R335.18-125.0810.32-5N	02576014	Manicotto	125,0	8,0	10,0	32,3	5	10	32,0	58,0	50,0	–	8400	1,0	LNK.05..
335.18-125.0810.40-5N	02575752	Manicotto	125,0	8,0	10,0	32,7	5	10	40,0	55,0	11,5	15,0	8400	0,6	LNK.05..
R335.18-125.1012.32-5N	00018613	Manicotto	125,0	10,0	12,0	32,3	5	10	32,0	58,0	50,0	–	8400	1,1	LNK.06..
335.18-125.1012.40-5N	00018417	Manicotto	125,0	10,0	12,0	32,7	5	10	40,0	55,0	12,5	15,0	8400	0,7	LNK.06..
R335.18-160.0810.40-6N	02576015	Manicotto	160,0	8,0	10,0	43,8	6	12	40,0	70,0	50,0	–	7500	1,6	LNK.05..
335.18-160.0810.40-6N	02575753	Manicotto	160,0	8,0	10,0	50,2	6	12	40,0	55,0	11,5	15,0	7500	1,0	LNK.05..
R335.18-160.1012.40-6N	00018641	Manicotto	160,0	10,0	12,0	43,8	6	12	40,0	70,0	50,0	–	7500	1,8	LNK.06..
335.18-160.1012.40-6N	00018427	Manicotto	160,0	10,0	12,0	50,2	6	12	40,0	55,0	12,5	15,0	7500	1,2	LNK.06..
R335.18-200.0810XL.40-7N	02713370	Manicotto	200,0	8,0	10,0	53,5	7	14	40,0	90,0	50,0	–	6700	2,7	LNK.05..
335.18-200.0810XL.50-7N	02712923	Manicotto	200,0	8,0	10,0	63,5	7	14	50,0	69,0	11,5	15,0	6700	1,4	LNK.05..
R335.18-200.1012XL.40-7N	02713374	Manicotto	200,0	10,0	12,0	53,5	7	14	40,0	90,0	50,0	–	6700	3,0	LNK.06..
335.18-200.1012XL.50-7N	02712930	Manicotto	200,0	10,0	12,0	63,5	7	14	50,0	69,0	12,5	15,0	6700	1,5	LNK.06..
R335.18-250.0810XL.40-9N	02713381	Manicotto	250,0	8,0	10,0	78,0	18	18	40,0	90,0	50,0	–	6000	4,4	LNK.05..
335.18-250.0810XL.50-9N	02712939	Manicotto	250,0	8,0	10,0	88,5	9	18	50,0	69,0	11,5	15,0	6000	2,3	LNK.05..
R335.18-250.1012XL.40-9N	02713382	Manicotto	250,0	10,0	12,0	78,0	9	18	40,0	90,0	50,0	–	6000	4,5	LNK.06..
335.18-250.1012XL.50-9N	02712940	Manicotto	250,0	10,0	12,0	88,5	9	18	50,0	69,0	12,5	15,0	6000	2,8	LNK.06..
335.18-315.0810XL.50-12N	02712948	Manicotto	315,0	8,0	10,0	121,0	12	24	50,0	69,0	11,5	15,0	5300	2,4	LNK.05..
335.18-315.1012XL.50-12N	02712950	Manicotto	315,0	10,0	12,0	121,0	12	24	50,0	69,0	12,5	15,0	5300	4,5	LNK.06..

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.18/335.18 - LNK. – In mm - tre tagli - Versione regolabile

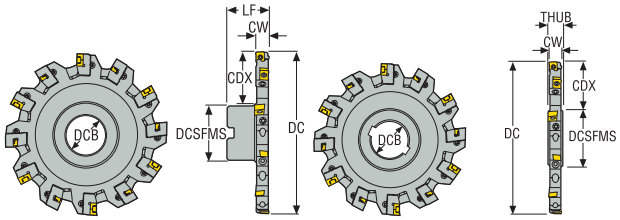


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
–Per il programma inserti completo, vedere le pagine 865-866
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.18-080.1215.27-3N	00018712	Manicotto	80,0	12,0	15,0	14,8	3	6	27,0	48,0	50,0	–	10500	0,7	LNK.08..
R335.18-100.1215.27-4N	00018734	Manicotto	100,0	12,0	15,0	24,8	4	8	27,0	48,0	50,0	–	9400	1,0	LNK.08..
335.18-100.1215.27-4N	00018513	Manicotto	100,0	12,0	15,0	27,2	4	8	27,0	41,0	13,5	15,0	9400	0,6	LNK.08..
R335.18-125.1215.32-5N	00018763	Manicotto	125,0	12,0	15,0	32,3	5	10	32,0	58,0	50,0	–	8400	1,2	LNK.08..
335.18-125.1215.40-5N	00018535	Manicotto	125,0	12,0	15,0	32,7	5	10	40,0	55,0	13,5	15,0	8400	0,8	LNK.08..
R335.18-160.1215.40-6N	00018782	Manicotto	160,0	12,0	15,0	43,8	6	12	40,0	70,0	50,0	–	7500	2,0	LNK.08..
335.18-160.1215.40-6N	00018543	Manicotto	160,0	12,0	15,0	50,2	6	12	40,0	55,0	13,5	15,0	7500	1,4	LNK.08..
R335.18-200.1215XL.40-7N	02713376	Manicotto	200,0	12,0	15,0	53,5	7	14	40,0	90,0	50,0	–	6700	3,3	LNK.08..
335.18-200.1215XL.50-7N	02712932	Manicotto	200,0	12,0	15,0	63,5	7	14	50,0	69,0	13,5	15,0	6700	2,1	LNK.08..
R335.18-250.1215XL.40-9N	02713383	Manicotto	250,0	12,0	15,0	78,0	9	18	40,0	90,0	50,0	–	6000	5,1	LNK.08..
335.18-250.1215XL.50-9N	02712941	Manicotto	250,0	12,0	15,0	88,5	9	18	50,0	69,0	13,5	15,0	6000	3,6	LNK.08..
335.18-315.1215XL.50-12N	02712951	Manicotto	315,0	12,0	15,0	121,0	12	24	50,0	69,0	13,5	15,0	5300	5,5	LNK.08..

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.18/335.18 - LNK. – Pollici - tre tagli - Versione regolabile

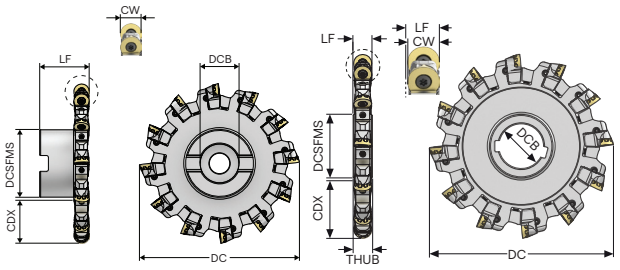


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch	inch			inch	inch	inch	inch		lb	
R335.18-04.00-0506N	02834763	Manicotto	4.000	0.312	0.394	1.024	4	8	1.000	1.880	2.000	–	9400	1.760	LNK.05
335.18-04.00-0506N	02834805	Manicotto	4.000	0.312	0.394	1.102	4	8	1.000	1.551	0.470	0.625	9400	0.880	LNK.05
R335.18-04.00-0708N	00079782	Manicotto	4.000	0.394	0.472	1.014	4	8	1.000	1.880	2.000	–	9400	2.430	LNK.06
R335.18-04.00-0809N	00079963	Manicotto	4.000	0.472	0.591	1.014	4	8	1.000	1.880	2.000	–	9400	3.090	LNK.08
R335.18-05.00-0506N	02834764	Manicotto	5.000	0.312	0.394	1.339	5	10	1.250	2.250	2.000	–	8400	2.650	LNK.05
335.18-05.00-0506N	02834810	Manicotto	5.000	0.312	0.394	1.299	5	10	1.500	2.252	0.470	0.625	8400	1.320	LNK.05
R335.18-05.00-0708N	00079783	Manicotto	5.000	0.394	0.472	1.329	5	10	1.250	2.250	2.000	–	8400	3.090	LNK.06
335.18-05.00-0708N	00079701	Manicotto	5.000	0.394	0.472	1.258	5	10	1.500	2.252	0.509	0.625	8400	1.760	LNK.06
R335.18-05.00-0809N	00079964	Manicotto	5.000	0.472	0.591	1.329	5	10	1.250	2.250	2.000	–	8400	3.530	LNK.08
335.18-05.00-0809N	00079932	Manicotto	5.000	0.472	0.591	1.285	5	10	1.500	2.252	0.549	0.625	8400	1.980	LNK.08
R335.18-06.00-0506N	02834765	Manicotto	6.000	0.312	0.394	1.575	6	12	1.500	2.750	2.000	–	7500	3.310	LNK.05
335.18-06.00-0506N	02834762	Manicotto	6.000	0.312	0.394	1.772	6	12	1.500	2.252	0.470	0.625	7500	1.980	LNK.05
R335.18-06.00-0708N	00079784	Manicotto	6.000	0.394	0.472	1.534	6	12	1.500	2.750	2.000	–	7500	4.850	LNK.06
335.18-06.00-0708N	00079702	Manicotto	6.000	0.394	0.472	1.766	6	12	1.500	2.252	0.509	0.625	7500	2.430	LNK.06
R335.18-06.00-0809N	00079965	Manicotto	6.000	0.472	0.591	1.585	6	12	1.500	2.750	2.000	–	7500	4.190	LNK.08
335.18-06.00-0809N	00079933	Manicotto	6.000	0.472	0.591	1.790	6	12	1.500	2.252	0.549	0.625	7500	2.870	LNK.08
R335.18-08.00-XL0506N	02740895	Manicotto	8.000	0.312	0.394	2.224	7	14	1.500	3.500	2.000	–	6700	6.170	LNK.05
335.18-08.00-XL0506N	02740202	Manicotto	8.000	0.312	0.394	2.421	7	14	2.000	3.000	0.469	0.625	6700	3.310	LNK.05
R335.18-08.00-XL0708N	02740896	Manicotto	8.000	0.394	0.472	2.224	7	14	1.500	3.500	2.000	–	6700	2.870	LNK.06
335.18-08.00-XL0708N	02740235	Manicotto	8.000	0.394	0.472	2.421	7	14	2.000	3.000	0.509	0.625	6700	4.190	LNK.06
R335.18-08.00-XL0809N	02740897	Manicotto	8.000	0.472	0.591	2.224	7	14	1.500	3.500	2.000	–	6700	9.920	LNK.08
335.18-08.00-XL0809N	02740236	Manicotto	8.000	0.472	0.591	2.421	7	14	2.000	3.000	0.549	0.625	6700	7.500	LNK.08
R335.18-10.00-XL0506N	02741525	Manicotto	10.000	0.312	0.394	3.209	9	18	1.500	3.500	2.000	–	6000	17.640	LNK.05
335.18-10.00-XL0506N	02740460	Manicotto	10.000	0.312	0.394	3.386	9	18	2.000	3.000	0.469	0.625	6000	5.290	LNK.05
R335.18-10.00-XL0708N	02741541	Manicotto	10.000	0.394	0.472	3.209	9	18	1.500	3.500	2.000	–	6000	18.960	LNK.06
335.18-10.00-XL0708N	02740497	Manicotto	10.000	0.394	0.472	3.386	9	18	2.000	3.000	0.509	0.625	6000	9.260	LNK.06
R335.18-10.00-XL0809N	02741544	Manicotto	10.000	0.472	0.591	3.209	9	18	1.500	3.500	2.000	–	6000	10.580	LNK.08
335.18-10.00-XL0809N	02740498	Manicotto	10.000	0.472	0.591	3.386	9	18	2.000	3.000	0.549	0.625	6000	8.160	LNK.08
335.18-12.00-XL0506N	02740860	Manicotto	12.000	0.312	0.394	4.390	11	22	2.000	3.000	0.469	0.625	5300	8.160	LNK.05
335.18-12.00-XL0708N	02740866	Manicotto	12.000	0.394	0.472	4.390	11	22	2.000	3.000	0.509	0.625	5300	9.920	LNK.06
335.18-12.00-XL0809N	02740867	Manicotto	12.000	0.472	0.591	4.390	11	22	2.000	3.000	0.549	0.625	5300	15.430	LNK.08

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.18/335.18 - RD..08/RD..10T3 – In mm - tre tagli - profilo sferico - Versione regolabile

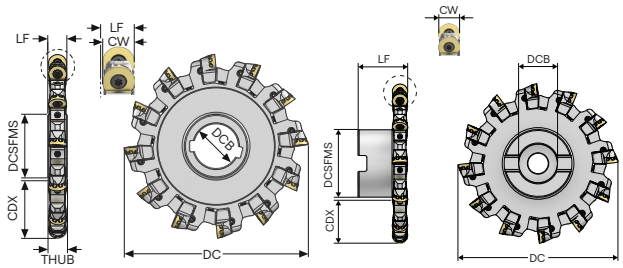


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 527-532
—Per il programma inserti completo, vedere le pagine 874
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.18-080.0810.27-6N-R4	02611700	Manicotto	82,0	8,0	10,0	15,8	6	6	27,0	48,0	50,0	–	10500	0,7	RD..08..
R335.18-080.1012.27-3N-R5	00030352	Manicotto	82,0	10,0	12,0	15,8	3	6	27,0	48,0	50,0	–	10500	0,7	RD..10T3
R335.18-100.0810.27-8N-R4	02576017	Manicotto	102,0	8,0	10,0	25,8	8	8	27,0	48,0	50,0	–	9400	0,8	RD..08..
335.18-100.0810.27-8N-R4	02575800	Manicotto	102,0	8,0	10,0	28,2	8	8	27,0	41,0	11,5	15,0	9400	0,4	RD..08..
R335.18-100.1012.27-4N-R5	00030355	Manicotto	102,0	10,0	12,0	25,8	4	8	27,0	48,0	50,0	–	9400	1,0	RD..10T3
335.18-100.1012.27-4N-R5	00030328	Manicotto	102,0	10,0	12,0	28,2	4	8	27,0	41,0	12,5	15,0	9400	0,6	RD..10T3
R335.18-125.0810.32-10N-R4	02576018	Manicotto	127,0	8,0	10,0	32,3	10	10	32,0	58,0	50,0	–	8400	1,0	RD..08..
335.18-125.0810.40-10N-R4	02575801	Manicotto	127,0	8,0	10,0	33,7	10	10	40,0	55,0	11,5	15,0	8400	0,6	RD..08..
R335.18-125.1012.32-5N-R5	00030359	Manicotto	127,0	10,0	12,0	33,3	5	10	32,0	58,0	50,0	–	8400	1,1	RD..10T3
335.18-125.1012.40-5N-R5	00030340	Manicotto	127,0	10,0	12,0	33,7	5	10	40,0	55,0	12,5	15,0	8400	0,7	RD..10T3
R335.18-160.0810.40-12N-R4	02576020	Manicotto	162,0	8,0	10,0	44,8	12	12	40,0	70,0	50,0	–	7500	1,6	RD..08..
335.18-160.0810.40-12N-R4	02575802	Manicotto	162,0	8,0	10,0	51,2	12	12	40,0	55,0	11,5	15,0	7500	1,0	RD..08..
R335.18-160.1012.40-6N-R5	00030362	Manicotto	162,0	10,0	12,0	44,8	6	12	40,0	70,0	50,0	–	7500	1,7	RD..10T3
335.18-160.1012.40-6N-R5	00030343	Manicotto	162,0	10,0	12,0	51,2	6	12	40,0	55,0	12,5	15,0	7500	1,3	RD..10T3
R335.18-200.0810XL.40-14N-R4	02713377	Manicotto	200,0	8,0	10,0	53,5	14	14	40,0	90,0	50,0	–	6700	2,6	RD..08..
335.18-200.0810XL.50-14N-R4	02712934	Manicotto	200,0	8,0	10,0	63,5	14	14	50,0	69,0	11,5	15,0	6700	1,4	RD..08..
R335.18-200.1012XL.40-7N-R5	02713379	Manicotto	200,0	10,0	12,0	53,5	7	14	40,0	90,0	50,0	–	6700	2,2	RD..10T3
335.18-200.1012XL.50-7N-R5	02712935	Manicotto	200,0	10,0	12,0	63,5	7	14	50,0	69,0	12,5	15,0	6700	1,7	RD..10T3
R335.18-250.0810XL.40-18N-R4	02713384	Manicotto	250,0	8,0	10,0	78,0	18	18	40,0	90,0	50,0	–	6000	3,5	RD..08..
335.18-250.0810XL.50-18N-R4	02712943	Manicotto	250,0	8,0	10,0	88,5	18	18	50,0	69,0	11,5	15,0	6000	2,3	RD..08..
R335.18-250.1012XL.40-9N-R5	02713386	Manicotto	250,0	10,0	12,0	78,0	9	18	40,0	90,0	50,0	–	6000	4,0	RD..10T3
335.18-250.1012XL.50-9N-R5	02712946	Manicotto	250,0	10,0	12,0	88,5	9	18	50,0	69,0	12,5	15,0	6000	1,7	RD..10T3
335.18-315.0810XL.50-24N-R4	02712952	Manicotto	315,0	8,0	10,0	121,0	24	24	50,0	69,0	11,5	15,0	5300	3,7	RD..08..
335.18-315.1012XL.50-12N-R5	02712954	Manicotto	315,0	10,0	12,0	121,0	12	24	50,0	69,0	12,5	15,0	5300	4,6	RD..10T3

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.18/335.18 - RP..1204 – In mm - tre tagli - profilo sferico - Versione regolabile

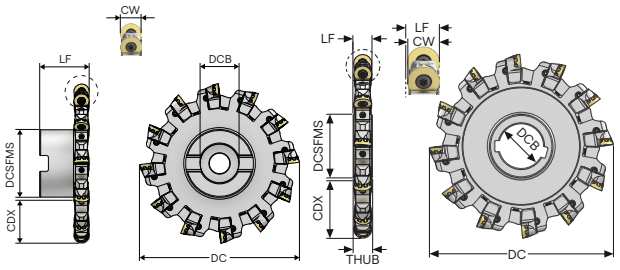


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 533-535
—Per il programma inserti completo, vedere le pagine 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.18-080.1215.27-3N-R6	00030404	Manicotto	82,0	12,0	15,0	15,8	3	6	27,0	48,0	50,0	–	10000	0,7	RP..1204
R335.18-100.1215.27-4N-R6	00030412	Manicotto	102,0	12,0	15,0	25,8	4	8	27,0	48,0	50,0	–	9400	0,9	RP..1204
335.18-100.1215.27-4N-R6	00030370	Manicotto	102,0	12,0	15,0	28,2	4	8	27,0	41,0	13,5	15,0	9400	0,8	RP..1204
R335.18-125.1215.32-5N-R6	00030417	Manicotto	127,0	12,0	15,0	33,3	5	10	32,0	58,0	50,0	–	8400	1,2	RP..1204
335.18-125.1215.40-5N-R6	00030374	Manicotto	127,0	12,0	15,0	33,7	5	10	40,0	55,0	13,5	15,0	8400	0,9	RP..1204
R335.18-160.1215.40-6N-R6	00030420	Manicotto	162,0	12,0	15,0	44,8	6	12	40,0	70,0	50,0	–	7500	1,9	RP..1204
335.18-160.1215.40-6N-R6	00030377	Manicotto	162,0	12,0	15,0	51,2	6	12	40,0	55,0	13,5	15,0	7500	1,5	RP..1204
R335.18-200.1215XL.40-7N-R6	02713380	Manicotto	200,0	12,0	15,0	53,5	7	14	40,0	90,0	50,0	–	6700	3,2	RP..1204
335.18-200.1215XL.50-7N-R6	02712937	Manicotto	200,0	12,0	15,0	63,5	7	14	50,0	69,0	13,5	15,0	6700	2,0	RP..1204
R335.18-250.1215XL.40-9N-R6	02713387	Manicotto	250,0	12,0	15,0	78,0	9	18	40,0	90,0	50,0	–	6000	4,5	RP..1204
335.18-250.1215XL.50-9N-R6	02712947	Manicotto	250,0	12,0	15,0	88,5	9	18	50,0	69,0	13,5	15,0	6000	3,4	RP..1204
335.18-315.1215XL.50-12N-R6	02712955	Manicotto	315,0	12,0	15,0	121,0	12	24	50,0	69,0	13,5	15,0	5300	5,5	RP..1204

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.18/335.18 - RD..08/RD..10/RP..12 – Pollici - tre tagli - profilo sferico - Versione regolabile

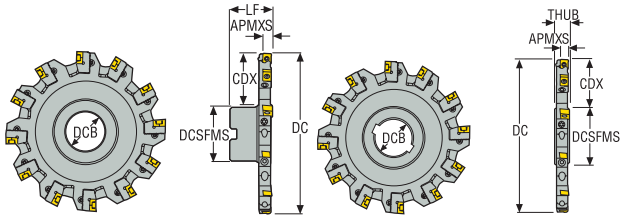


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 527-535
—Per il programma inserti completo, vedere le pagine 874
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch	inch			inch	inch	inch	inch		lb	
R335.18-04.00-0506N-R4	02834713	Manicotto	4.079	0.315	0.394	1.063	4	8	1.000	1.880	2.000	–	9400	1.760	RD..08
335.18-04.00-0506N-R4	02834707	Manicotto	4.079	0.315	0.394	1.142	4	8	1.000	1.551	0.470	0.625	9400	0.880	RD..08
R335.18-04.00-0708N-R5	00079997	Manicotto	4.079	0.394	0.472	1.063	4	8	1.000	1.880	2.000	–	9400	2.650	RD..10
R335.18-04.00-0809N-R6	00080158	Manicotto	4.079	0.472	0.591	1.053	4	8	1.000	1.880	2.000	–	9400	2.650	RP..12
R335.18-05.00-0506N-R4	02834714	Manicotto	5.079	0.315	0.394	1.378	5	10	1.250	2.250	2.000	–	8400	2.650	RD..08
335.18-05.00-0506N-R4	02834708	Manicotto	5.079	0.315	0.394	1.299	5	10	1.500	2.252	0.470	0.625	8400	1.320	RD..08
R335.18-05.00-0708N-R5	00079998	Manicotto	5.079	0.394	0.472	1.378	5	10	1.250	2.250	2.000	–	8400	3.090	RD..10
335.18-05.00-0708N-R5	00079978	Manicotto	5.079	0.394	0.472	1.295	5	10	1.500	2.252	0.509	0.625	8400	1.760	RD..10
R335.18-05.00-0809N-R6	00080160	Manicotto	5.079	0.472	0.591	1.368	5	10	1.250	2.250	2.000	–	8400	3.530	RP..12
335.18-05.00-0809N-R6	00080035	Manicotto	5.079	0.472	0.591	1.339	5	10	1.500	2.252	0.549	0.625	8400	1.980	RP..12
R335.18-06.00-0506N-R4	02834715	Manicotto	6.079	0.315	0.394	1.614	6	12	1.500	2.750	2.000	–	7500	3.310	RD..08
335.18-06.00-0506N-R4	02834709	Manicotto	6.079	0.315	0.394	1.772	6	12	1.500	2.252	0.470	0.625	7500	1.980	RD..08
R335.18-06.00-0708N-R5	00079999	Manicotto	6.079	0.394	0.472	1.614	6	12	1.500	2.750	2.000	–	7500	3.750	RD..10
335.18-06.00-0708N-R5	00079979	Manicotto	6.079	0.394	0.472	1.811	6	12	1.500	2.252	0.509	0.625	7500	2.430	RD..10
R335.18-06.00-0809N-R6	00080181	Manicotto	6.079	0.472	0.591	1.624	6	12	1.500	2.750	2.000	–	7500	5.070	RP..12
335.18-06.00-0809N-R6	00080045	Manicotto	6.079	0.472	0.591	1.829	6	12	1.500	2.252	0.549	0.625	7500	2.870	RP..12
R335.18-08.00-XL0506N-R4	02740898	Manicotto	8.000	0.315	0.394	2.224	7	14	1.500	3.500	2.000	–	6700	6.170	RD..08
335.18-08.00-XL0506N-R4	02740237	Manicotto	8.000	0.315	0.394	2.421	14	14	2.000	3.000	0.470	0.625	6700	3.310	RD..08
R335.18-08.00-XL0708N-R5	02740899	Manicotto	8.000	0.394	0.472	2.224	7	14	1.500	3.500	2.000	–	6700	7.050	RD..10
335.18-08.00-XL0708N-R5	02740238	Manicotto	8.000	0.394	0.472	2.421	7	14	2.000	3.000	0.509	0.625	6700	6.830	RD..10
R335.18-08.00-XL0809N-R6	02740900	Manicotto	8.000	0.472	0.591	2.224	7	14	1.500	3.500	2.000	–	6700	7.500	RP..12
335.18-08.00-XL0809N-R6	02740240	Manicotto	8.000	0.472	0.591	2.421	7	14	2.000	3.000	0.549	0.625	6700	4.630	RP..12
R335.18-10.00-XL0506N-R4	02741547	Manicotto	10.000	0.315	0.394	3.209	9	18	1.500	3.500	2.000	–	6000	17.640	RD..08
335.18-10.00-XL0506N-R4	02740500	Manicotto	10.000	0.315	0.394	3.386	9	18	2.000	3.000	0.470	0.625	6000	5.510	RD..08
R335.18-10.00-XL0708N-R5	02741551	Manicotto	10.000	0.394	0.472	3.209	9	18	1.500	3.500	2.000	–	6000	18.740	RD..10
335.18-10.00-XL0708N-R5	02740502	Manicotto	10.000	0.394	0.472	3.386	9	18	2.000	3.000	0.509	0.625	6000	6.610	RD..10
R335.18-10.00-XL0809N-R6	02741552	Manicotto	10.000	0.472	0.591	3.209	9	18	1.500	3.500	2.000	–	6000	2.200	RP..12
335.18-10.00-XL0809N-R6	02740503	Manicotto	10.000	0.472	0.591	3.386	9	18	2.000	3.000	0.549	0.625	6000	7.720	RP..12
335.18-12.00-XL0506N-R4	02740869	Manicotto	12.000	0.315	0.394	4.390	11	22	2.000	3.000	0.470	0.625	5300	8.160	RD..08
335.18-12.00-XL0708N-R5	02740870	Manicotto	12.000	0.394	0.472	4.390	11	22	2.000	3.000	0.509	0.625	5300	9.920	RD..10
335.18-12.00-XL0809N-R6	02740872	Manicotto	12.000	0.472	0.591	4.390	11	22	2.000	3.000	0.549	0.625	5300	15.430	RP..12

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

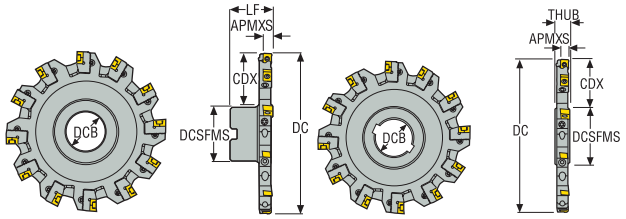
R335.18/335.18 - LNK.05/06 – In mm - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.0810.27-6R	02611697	Manicotto	80,0	5,0	14,8	6	27,0	48,0	50,0	–	10500	0,7	LNK.05..
R335.18-080.1012.27-6R	00018584	Manicotto	80,0	6,0	14,8	6	27,0	48,0	50,0	–	10500	0,8	LNK.06..
R335.18-100.0810.27-8R	02576023	Manicotto	100,0	5,0	24,8	8	27,0	48,0	50,0	–	9400	0,8	LNK.05..
335.18-100.0810.27-8R	02575757	Manicotto	100,0	5,0	27,2	8	27,0	41,0	11,5	15,0	9400	0,4	LNK.05..
R335.18-100.1012.27-8R	00018603	Manicotto	100,0	6,0	24,8	8	27,0	48,0	50,0	–	9400	1,2	LNK.06..
335.18-100.1012.27-8R	00018409	Manicotto	100,0	6,0	27,2	8	27,0	41,0	12,5	15,0	9400	0,4	LNK.06..
R335.18-125.0810.32-10R	02576025	Manicotto	125,0	5,0	32,3	10	32,0	58,0	50,0	–	8400	1,0	LNK.05..
335.18-125.0810.40-10R	02575758	Manicotto	125,0	5,0	32,7	10	40,0	55,0	11,5	15,0	8400	0,6	LNK.05..
R335.18-125.1012.32-10R	00018618	Manicotto	125,0	6,0	32,3	10	32,0	58,0	50,0	–	8400	1,0	LNK.06..
335.18-125.1012.40-10R	00018421	Manicotto	125,0	6,0	32,7	10	40,0	55,0	12,5	15,0	8400	0,7	LNK.06..
R335.18-160.0810.40-12R	02576026	Manicotto	160,0	5,0	43,8	12	40,0	70,0	50,0	–	7500	1,5	LNK.05..
335.18-160.0810.40-12R	02575759	Manicotto	160,0	5,0	50,2	12	40,0	55,0	11,5	15,0	7500	1,0	LNK.05..
R335.18-160.1012.40-12R	00018674	Manicotto	160,0	6,0	43,8	12	40,0	70,0	50,0	–	7500	1,9	LNK.06..
335.18-160.1012.40-12R	00018431	Manicotto	160,0	6,0	50,2	12	40,0	55,0	12,5	15,0	7500	1,5	LNK.06..
R335.18-200.0810XL.40-14R	02713422	Manicotto	200,0	5,0	53,5	14	40,0	90,0	50,0	–	6700	2,6	LNK.05..
335.18-200.0810XL.50-14R	02713151	Manicotto	200,0	5,0	63,5	14	50,0	69,0	11,5	15,0	6700	1,7	LNK.05..
R335.18-200.1012XL.40-14R	02713423	Manicotto	200,0	6,0	53,5	14	40,0	90,0	50,0	–	6700	2,9	LNK.06..
335.18-200.1012XL.50-14R	02713154	Manicotto	200,0	6,0	63,5	14	50,0	69,0	12,5	15,0	6700	1,7	LNK.06..
R335.18-250.0810XL.40-18R	02713432	Manicotto	250,0	5,0	78,0	18	40,0	90,0	50,0	–	6000	3,1	LNK.05..
335.18-250.0810XL.50-18R	02713163	Manicotto	250,0	5,0	88,5	18	50,0	69,0	11,5	15,0	6000	2,3	LNK.05..
R335.18-250.1012XL.40-18R	02713435	Manicotto	250,0	6,0	78,0	18	40,0	90,0	50,0	–	6000	4,0	LNK.06..
335.18-250.1012XL.50-18R	02713165	Manicotto	250,0	6,0	88,5	18	50,0	69,0	12,5	15,0	6000	2,8	LNK.06..
335.18-315.0810XL.50-24R	02713172	Manicotto	315,0	5,0	121,0	24	50,0	69,0	11,5	15,0	5300	1,9	LNK.05..
335.18-315.1012XL.50-24R	02713177	Manicotto	315,0	6,0	121,0	24	50,0	69,0	12,5	15,0	5300	1,9	LNK.06..

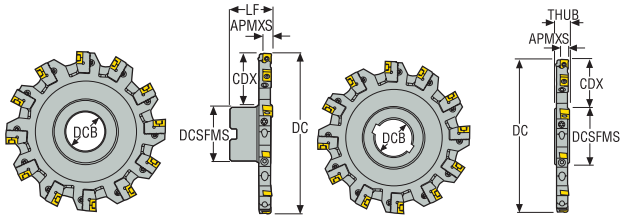
R335.18/335.18 - LNK.08 – In mm - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.1215.27-6R	00018723	Manicotto	80,0	7,5	14,8	6	27,0	48,0	50,0	–	10500	1,1	LNK.08..
R335.18-100.1215.27-8R	00018754	Manicotto	100,0	7,5	24,8	8	27,0	48,0	50,0	–	9400	0,9	LNK.08..
335.18-100.1215.27-8R	00018515	Manicotto	100,0	7,5	27,2	8	27,0	41,0	13,5	15,0	9400	0,5	LNK.08..
R335.18-125.1215.32-10R	00018766	Manicotto	125,0	7,5	32,3	10	32,0	58,0	50,0	–	8400	1,2	LNK.08..
335.18-125.1215.40-10R	00018540	Manicotto	125,0	7,5	32,7	10	40,0	55,0	13,5	15,0	8400	0,9	LNK.08..
R335.18-160.1215.40-12R	00018784	Manicotto	160,0	7,5	43,8	12	40,0	70,0	50,0	–	7500	2,7	LNK.08..
335.18-160.1215.40-12R	00018546	Manicotto	160,0	7,5	50,2	12	40,0	55,0	13,5	15,0	7500	1,5	LNK.08..
R335.18-200.1215XL.40-14R	02713424	Manicotto	200,0	7,5	53,5	14	40,0	90,0	50,0	–	6700	3,6	LNK.08..
335.18-200.1215XL.50-14R	02713155	Manicotto	200,0	7,5	63,5	14	50,0	69,0	13,5	15,0	6700	1,7	LNK.08..
R335.18-250.1215XL.40-18R	02713437	Manicotto	250,0	7,5	78,0	18	40,0	90,0	50,0	–	6000	4,5	LNK.08..
335.18-250.1215XL.50-18R	02713166	Manicotto	250,0	7,5	88,5	18	50,0	69,0	13,5	15,0	6000	2,5	LNK.08..
335.18-315.1215XL.50-24R	02713178	Manicotto	315,0	7,5	121,0	24	50,0	69,0	13,5	15,0	5300	2,2	LNK.08..

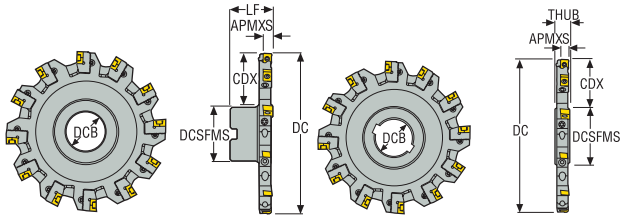
R335.18/335.18 - LNK.05/06 – Pollici - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
R335.18-04.00-0506R	02834790	Manicotto	4.000	0.197	1.024	8	1.000	1.880	2.000	–	9400	1.760	LNK.05
335.18-04.00-0506R	02834787	Manicotto	4.000	0.197	1.102	8	1.000	1.550	0.469	0.625	9400	0.880	LNK.05
R335.18-04.00-0708R	00079792	Manicotto	4.000	0.236	1.014	8	1.000	1.880	2.000	–	9400	2.200	LNK.06
R335.18-05.00-0506R	02834791	Manicotto	5.000	0.197	1.339	10	1.250	2.250	2.000	–	8400	2.650	LNK.05
335.18-05.00-0506R	02834788	Manicotto	5.000	0.197	1.299	10	1.500	2.252	0.469	0.625	8400	1.320	LNK.05
R335.18-05.00-0708R	00079832	Manicotto	5.000	0.236	1.329	10	1.250	2.250	2.000	–	8400	3.090	LNK.06
335.18-05.00-0708R	00079766	Manicotto	5.000	0.236	1.258	10	1.500	2.252	0.508	0.625	8400	1.760	LNK.06
R335.18-06.00-0506R	02834792	Manicotto	6.000	0.197	1.575	12	1.500	2.750	2.000	–	7500	3.310	LNK.05
335.18-06.00-0506R	02834789	Manicotto	6.000	0.197	1.772	12	1.500	2.252	0.469	0.625	7500	1.980	LNK.05
R335.18-06.00-0708R	00079833	Manicotto	6.000	0.236	1.534	12	1.500	2.750	2.000	–	7500	3.750	LNK.06
335.18-06.00-0708R	00079767	Manicotto	6.000	0.236	1.766	12	1.500	2.252	0.508	0.625	7500	2.430	LNK.06
R335.18-08.00-XL0506R	02740901	Manicotto	8.000	0.197	2.224	14	1.500	3.500	2.000	–	6700	6.170	LNK.05
335.18-08.00-XL0506R	02740241	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.469	0.625	6700	3.310	LNK.05
R335.18-08.00-XL0708R	02740902	Manicotto	8.000	0.236	2.224	14	1.500	3.500	2.000	–	6700	7.050	LNK.06
335.18-08.00-XL0708R	02740242	Manicotto	8.000	0.236	2.421	14	2.000	3.000	0.508	0.625	6700	4.190	LNK.06
R335.18-10.00-XL0506R	02741554	Manicotto	10.000	0.197	3.209	18	1.500	3.500	2.000	–	6000	8.380	LNK.05
335.18-10.00-XL0506R	02740505	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.469	0.625	6000	5.510	LNK.05
R335.18-10.00-XL0708R	02741556	Manicotto	10.000	0.236	3.209	18	1.500	3.500	2.000	–	6000	9.480	LNK.06
335.18-10.00-XL0708R	02740506	Manicotto	10.000	0.236	3.386	18	2.000	3.000	0.508	0.625	6000	6.610	LNK.06
335.18-12.00-XL0506R	02740874	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.469	0.625	5300	8.160	LNK.05
335.18-12.00-XL0708R	02740875	Manicotto	12.000	0.236	4.390	22	2.000	3.000	0.508	0.625	5300	9.920	LNK.06

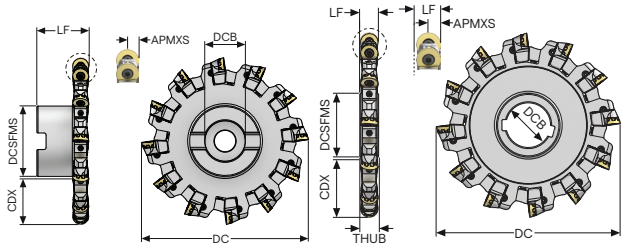
R335.18/335.18 - LNK.08 – Pollici - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
R335.18-04.00-0809R	00079968	Manicotto	4.000	0.295	1.014	8	1.000	1.880	2.000	–	9400	2.430	LNK.08
R335.18-05.00-0809R	00079969	Manicotto	5.000	0.295	1.329	10	1.250	2.250	2.000	–	8400	3.530	LNK.08
335.18-05.00-0809R	00079951	Manicotto	5.000	0.295	1.285	10	1.500	2.252	0.547	0.625	8400	2.650	LNK.08
R335.18-06.00-0809R	00079970	Manicotto	6.000	0.295	1.585	12	1.500	2.750	2.000	–	7500	4.190	LNK.08
335.18-06.00-0809R	00079952	Manicotto	6.000	0.295	1.790	12	1.500	2.252	0.547	0.625	7500	2.870	LNK.08
R335.18-08.00-XL0809R	02740903	Manicotto	8.000	0.295	2.224	14	1.500	3.500	2.000	–	6700	8.380	LNK.08
335.18-08.00-XL0809R	02740244	Manicotto	8.000	0.295	2.421	14	2.000	3.000	0.547	0.625	6700	5.070	LNK.08
R335.18-10.00-XL0809R	02741557	Manicotto	10.000	0.295	3.209	18	1.500	3.500	2.000	–	6000	11.020	LNK.08
335.18-10.00-XL0809R	02740507	Manicotto	10.000	0.295	3.386	18	2.000	3.000	0.547	0.625	6000	8.160	LNK.08
335.18-12.00-XL0809R	02740876	Manicotto	12.000	0.295	4.390	22	2.000	3.000	0.547	0.625	5300	12.130	LNK.08

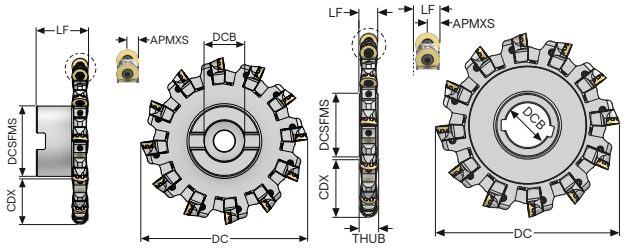
R335.18/335.18 - RD..10T3/RP..1204 – In mm -Due tagli - Destro - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 530-535
—Per il programma inserti completo, vedere le pagine 874, 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.1012.27-6R-R5	00030353	Manicotto	82,0	5,0	15,8	6	27,0	48,0	50,0	–	10500	0,8	RD..10T3
R335.18-080.1215.27-6R-R6	00030407	Manicotto	82,0	6,0	14,8	6	27,0	48,0	50,0	–	10500	0,7	RP..1204
R335.18-100.1012.27-8R-R5	00030357	Manicotto	102,0	5,0	25,8	8	27,0	48,0	50,0	–	9400	1,2	RD..10T3
335.18-100.1012.27-8R-R5	00030329	Manicotto	102,0	5,0	28,2	8	27,0	41,0	12,5	15,0	9400	0,4	RD..10T3
R335.18-100.1215.27-8R-R6	00030414	Manicotto	102,0	6,0	25,8	8	27,0	48,0	50,0	–	9400	1,1	RP..1204
335.18-100.1215.27-8R-R6	00030372	Manicotto	102,0	6,0	28,2	8	27,0	41,0	13,5	15,0	9400	0,5	RP..1204
R335.18-125.1012.32-10R-R5	00030360	Manicotto	127,0	5,0	33,3	10	32,0	58,0	50,0	–	8400	1,2	RD..10T3
335.18-125.1012.40-10R-R5	00030341	Manicotto	127,0	5,0	33,7	10	40,0	55,0	12,5	15,0	8400	1,0	RD..10T3
R335.18-125.1215.32-10R-R6	00030418	Manicotto	127,0	6,0	33,3	10	32,0	58,0	50,0	–	8400	1,4	RP..1204
335.18-125.1215.40-10R-R6	00030375	Manicotto	127,0	6,0	33,7	10	40,0	55,0	13,5	15,0	8400	0,9	RP..1204
R335.18-160.1012.40-12R-R5	00030364	Manicotto	162,0	5,0	44,8	12	40,0	70,0	50,0	–	7500	0,1	RD..10T3
335.18-160.1012.40-12R-R5	00030344	Manicotto	162,0	5,0	51,2	12	40,0	55,0	12,5	15,0	7500	1,2	RD..10T3
R335.18-160.1215.40-12R-R6	00030421	Manicotto	162,0	6,0	44,8	12	40,0	70,0	50,0	–	7500	1,9	RP..1204
335.18-160.1215.40-12R-R6	00030378	Manicotto	162,0	6,0	51,2	12	40,0	55,0	13,5	15,0	7500	1,5	RP..1204
R335.18-200.1012XL.40-14R-R5	02713429	Manicotto	200,0	5,0	53,5	14	40,0	90,0	50,0	–	6700	3,4	RD..10T3
335.18-200.1012XL.50-14R-R5	02713159	Manicotto	200,0	5,0	63,5	14	50,0	69,0	12,5	15,0	6700	1,7	RD..10T3
R335.18-200.1215XL.40-14R-R6	02713431	Manicotto	200,0	6,0	53,5	14	40,0	90,0	50,0	–	6700	4,3	RP..1204
335.18-200.1215XL.50-14R-R6	02713162	Manicotto	200,0	6,0	63,5	14	50,0	69,0	13,5	15,0	6700	3,8	RP..1204
R335.18-250.1012XL.40-18R-R5	02713438	Manicotto	250,0	5,0	78,0	18	40,0	90,0	50,0	–	6000	4,0	RD..10T3
335.18-250.1012XL.50-18R-R5	02713169	Manicotto	250,0	5,0	88,5	18	50,0	69,0	12,5	15,0	6000	3,8	RD..10T3
R335.18-250.1215XL.40-18R-R6	02713441	Manicotto	250,0	6,0	78,0	18	40,0	90,0	50,0	–	6000	4,5	RP..1204
335.18-250.1215XL.50-18R-R6	02713170	Manicotto	250,0	6,0	88,5	18	50,0	69,0	13,5	15,0	6000	4,7	RP..1204
335.18-315.1012XL.50-24R-R5	02713180	Manicotto	315,0	5,0	121,0	24	50,0	69,0	12,5	15,0	5300	4,6	RD..10T3
335.18-315.1215XL.50-24R-R6	02713182	Manicotto	315,0	6,0	121,0	24	50,0	69,0	13,5	15,0	5300	7,0	RP..1204

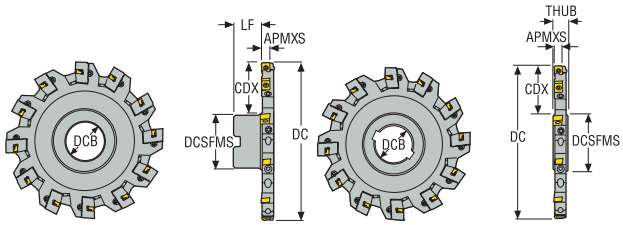
R335.18/335.18 - RD..10T3/RP..1204 – Pollici- Due tagli - Destro - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 530-535
—Per il programma inserti completo, vedere le pagine 874, 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
R335.18-04.00-0809R-R6	02599486	Manicotto	4.079	0.236	1.053	8	1.000	1.880	2.000	–	9400	2.650	RP..12
R335.18-05.00-0809R-R6	02599487	Manicotto	5.079	0.236	1.368	10	1.250	2.250	2.000	–	8400	3.530	RP..12
335.18-05.00-0809R-R6	02599495	Manicotto	5.079	0.236	1.324	10	1.500	2.252	0.548	0.625	8400	1.980	RP..12
R335.18-06.00-0809R-R6	02599488	Manicotto	6.079	0.236	1.624	12	1.500	2.750	2.000	–	7500	4.190	RP..12
335.18-06.00-0809R-R6	02599496	Manicotto	6.079	0.236	1.829	12	1.500	2.252	0.548	0.625	7500	2.870	RP..12
R335.18-08.00-XL0708R-R5	02740905	Manicotto	8.000	0.197	2.264	14	1.500	3.500	2.000	–	6700	7.050	RD..10
335.18-08.00-XL0708R-R5	02740245	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.509	0.625	6700	4.190	RD..10
R335.18-08.00-XL0809R-R6	02740906	Manicotto	8.000	0.236	2.264	14	1.500	3.500	2.000	–	6700	8.380	RP..12
335.18-08.00-XL0809R-R6	02740246	Manicotto	8.000	0.236	2.421	14	2.000	3.000	0.548	0.625	6700	5.070	RP..12
R335.18-10.00-XL0708R-R5	02741559	Manicotto	10.000	0.197	3.248	18	1.500	3.500	2.000	–	6000	9.480	RD..10
335.18-10.00-XL0708R-R5	02740508	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.509	0.625	6000	6.610	RD..10
R335.18-10.00-XL0809R-R6	02741561	Manicotto	10.000	0.236	3.248	18	1.500	3.500	2.000	–	6000	11.020	RP..12
335.18-10.00-XL0809R-R6	02740527	Manicotto	10.000	0.236	3.386	18	2.000	3.000	0.548	0.625	6000	8.160	RP..12
335.18-12.00-XL0708R-R5	02740883	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.509	0.625	5300	9.920	RD..10
335.18-12.00-XL0809R-R6	02740884	Manicotto	12.000	0.236	4.390	22	2.000	3.000	0.548	0.625	5300	12.130	RP..12

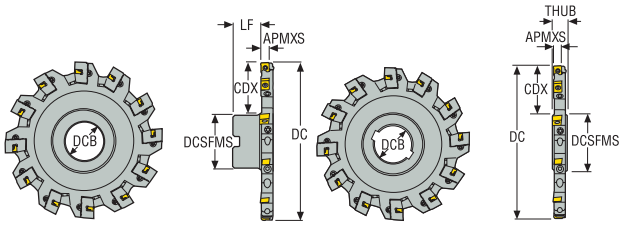
R335.18/335.18 - LNK.05/06 – In mm - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.0810.27-6L	02611696	Manicotto	80,0	5,0	14,8	6	27,0	48,0	42,0	–	10500	0,7	LNK.05..
R335.18-080.1012.27-6L	00018592	Manicotto	80,0	6,0	14,8	6	27,0	48,0	40,0	–	10500	1,0	LNK.06..
R335.18-100.0810.27-8L	02576028	Manicotto	100,0	5,0	24,8	8	27,0	48,0	42,0	–	9400	0,8	LNK.05..
335.18-100.0810.27-8L	02575778	Manicotto	100,0	5,0	27,2	8	27,0	41,0	3,5	15,0	9400	0,4	LNK.05..
R335.18-100.1012.27-8L	00018612	Manicotto	100,0	6,0	24,8	8	27,0	48,0	40,0	–	9400	0,9	LNK.06..
335.18-100.1012.27-8L	00018412	Manicotto	100,0	6,0	27,2	8	27,0	41,0	2,5	15,0	9400	0,4	LNK.06..
R335.18-125.0810.32-10L	02576029	Manicotto	125,0	5,0	32,3	10	32,0	58,0	42,0	–	8400	1,0	LNK.05..
335.18-125.0810.40-10L	02575787	Manicotto	125,0	5,0	32,7	10	40,0	55,0	3,5	15,0	8400	0,6	LNK.05..
R335.18-125.1012.32-10L	00018624	Manicotto	125,0	6,0	32,3	10	32,0	58,0	40,0	–	8400	0,9	LNK.06..
335.18-125.1012.40-10L	00018426	Manicotto	125,0	6,0	32,7	10	40,0	55,0	2,5	15,0	8400	0,8	LNK.06..
R335.18-160.0810.40-12L	02576030	Manicotto	160,0	5,0	43,8	12	40,0	70,0	42,0	–	7500	1,6	LNK.05..
335.18-160.0810.40-12L	02575796	Manicotto	160,0	5,0	50,2	12	40,0	55,0	3,5	15,0	7500	1,0	LNK.05..
R335.18-160.1012.40-12L	00018687	Manicotto	160,0	6,0	43,8	12	40,0	70,0	40,0	–	7500	1,3	LNK.06..
335.18-160.1012.40-12L	00018439	Manicotto	160,0	6,0	50,2	12	40,0	55,0	2,5	15,0	7500	1,5	LNK.06..
R335.18-200.0810XL.40-14L	02713444	Manicotto	200,0	5,0	53,5	14	40,0	90,0	42,0	–	6700	2,8	LNK.05..
335.18-200.0810XL.50-14L	02713344	Manicotto	200,0	5,0	63,5	14	50,0	69,0	3,5	15,0	6700	1,7	LNK.05..
R335.18-200.1012XL.40-14L	02713459	Manicotto	200,0	6,0	53,5	14	40,0	90,0	40,0	–	6700	2,9	LNK.06..
335.18-200.1012XL.50-14L	02713348	Manicotto	200,0	6,0	63,5	14	50,0	69,0	2,5	15,0	6700	1,7	LNK.06..
R335.18-250.0810XL.40-18L	02713466	Manicotto	250,0	5,0	78,0	18	40,0	90,0	42,0	–	6000	3,5	LNK.05..
335.18-250.0810XL.50-18L	02713355	Manicotto	250,0	5,0	88,5	18	50,0	69,0	3,5	15,0	6000	1,7	LNK.05..
R335.18-250.1012XL.40-18L	02713467	Manicotto	250,0	6,0	78,0	18	40,0	90,0	40,0	–	6000	3,9	LNK.06..
335.18-250.1012XL.50-18L	02713356	Manicotto	250,0	6,0	88,5	18	50,0	69,0	2,5	15,0	6000	1,9	LNK.06..
335.18-315.0810XL.50-24L	02713361	Manicotto	315,0	5,0	121,0	24	50,0	69,0	3,5	15,0	5300	1,9	LNK.05..
335.18-315.1012XL.50-24L	02713363	Manicotto	315,0	6,0	121,0	24	50,0	69,0	2,5	15,0	5300	4,5	LNK.06..

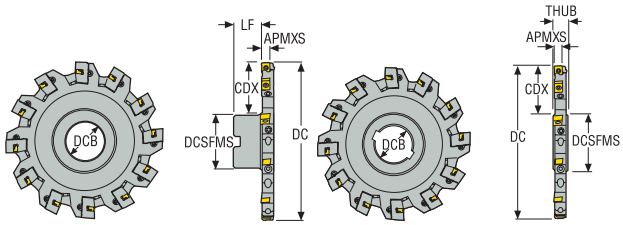
R335.18/335.18 - LNK.08 – In mm - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.1215.27-6L	00018729	Manicotto	80,0	7,5	14,8	6	27,0	48,0	38,0	–	10500	0,8	LNK.08..
R335.18-100.1215.27-8L	00018756	Manicotto	100,0	7,5	24,8	8	27,0	48,0	38,0	–	9400	1,1	LNK.08..
335.18-100.1215.27-8L	00018530	Manicotto	100,0	7,5	27,2	8	27,0	41,0	1,5	15,0	9400	0,6	LNK.08..
R335.18-125.1215.32-10L	00018777	Manicotto	125,0	7,5	33,3	10	32,0	58,0	38,0	–	8400	1,0	LNK.08..
335.18-125.1215.40-10L	00018542	Manicotto	125,0	7,5	32,7	10	40,0	55,0	1,5	15,0	8400	0,9	LNK.08..
R335.18-160.1215.40-12L	00018788	Manicotto	160,0	7,5	43,8	12	40,0	70,0	38,0	–	7500	2,1	LNK.08..
335.18-160.1215.40-12L	00018548	Manicotto	160,0	7,5	50,2	12	40,0	55,0	1,5	15,0	7500	1,4	LNK.08..
R335.18-200.1215XL.40-14L	02713461	Manicotto	200,0	7,5	53,5	14	40,0	90,0	38,0	–	6700	3,5	LNK.08..
335.18-200.1215XL.50-14L	02713349	Manicotto	200,0	7,5	63,5	14	50,0	69,0	1,5	15,0	6700	2,0	LNK.08..
R335.18-250.1215XL.40-18L	02713470	Manicotto	250,0	7,5	78,0	18	40,0	90,0	90,0	–	6000	4,5	LNK.08..
335.18-250.1215XL.50-18L	02713357	Manicotto	250,0	7,5	88,5	18	50,0	69,0	1,5	15,0	6000	3,2	LNK.08..
335.18-315.1215XL.50-24L	02713364	Manicotto	315,0	7,5	121,0	24	50,0	69,0	1,5	15,0	5300	5,6	LNK.08..

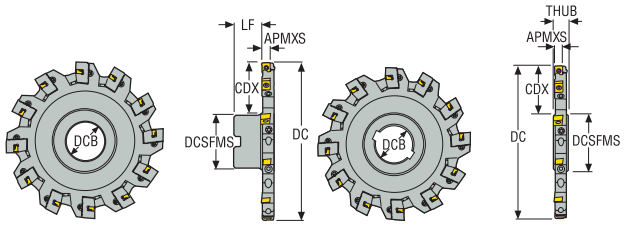
R335.18/335.18 - LNK.05/06 – Pollici - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
335.18-04.00-0506L	02834738	Manicotto	4.000	0.197	1.102	8	1.000	1.550	0.154	0.625	9400	0.880	LNK.05
R335.18-04.00-0506L	02834741	Manicotto	4.000	0.236	1.024	8	1.000	1.880	1.685	–	9400	1.760	LNK.05
R335.18-04.00-0708L	00079837	Manicotto	4.000	0.236	1.014	8	1.000	1.880	1.606	–	9400	2.200	LNK.06
R335.18-05.00-0506L	02834742	Manicotto	5.000	0.197	1.339	10	1.250	2.250	1.685	–	8400	2.650	LNK.05
335.18-05.00-0506L	02834739	Manicotto	5.000	0.197	1.299	10	1.500	2.252	0.154	0.625	8400	1.320	LNK.05
R335.18-05.00-0708L	00079838	Manicotto	5.000	0.236	1.329	10	1.250	2.250	1.606	–	8400	3.090	LNK.06
335.18-05.00-0708L	00079776	Manicotto	5.000	0.236	1.258	10	1.500	2.252	0.117	0.625	8400	1.760	LNK.06
R335.18-06.00-0506L	02834743	Manicotto	6.000	0.197	1.575	12	1.500	2.750	1.685	–	7500	3.310	LNK.05
335.18-06.00-0506L	02834740	Manicotto	6.000	0.197	1.772	12	1.500	2.252	0.154	0.625	7500	1.980	LNK.05
R335.18-06.00-0708L	00079839	Manicotto	6.000	0.236	1.534	12	1.500	2.750	1.606	–	7500	3.750	LNK.06
335.18-06.00-0708L	00079777	Manicotto	6.000	0.236	1.766	12	1.500	2.252	0.117	0.625	7500	2.430	LNK.06
R335.18-08.00-XL0506L	02740907	Manicotto	8.000	0.197	2.224	14	1.500	3.500	1.685	–	6700	6.170	LNK.05
335.18-08.00-XL0506L	02740247	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.154	0.625	6700	3.310	LNK.05
R335.18-08.00-XL0708L	02740908	Manicotto	8.000	0.236	2.224	14	1.500	3.500	1.606	–	6700	7.050	LNK.06
335.18-08.00-XL0708L	02740248	Manicotto	8.000	0.236	2.421	14	2.000	3.000	0.117	0.625	6700	4.190	LNK.06
R335.18-10.00-XL0506L	02741562	Manicotto	10.000	0.197	3.209	18	1.500	3.500	1.685	–	6000	8.380	LNK.05
335.18-10.00-XL0506L	02740528	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.154	0.625	6000	5.510	LNK.05
R335.18-10.00-XL0708L	02741564	Manicotto	10.000	0.236	3.209	18	1.500	3.500	1.606	–	6000	9.480	LNK.06
335.18-10.00-XL0708L	02740530	Manicotto	10.000	0.236	3.386	18	2.000	3.000	0.117	0.625	6000	6.610	LNK.06
335.18-12.00-XL0506L	02740885	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.154	0.625	5300	8.160	LNK.05
335.18-12.00-XL0708L	02740887	Manicotto	12.000	0.236	4.390	22	2.000	3.000	0.117	0.625	5300	9.920	LNK.06

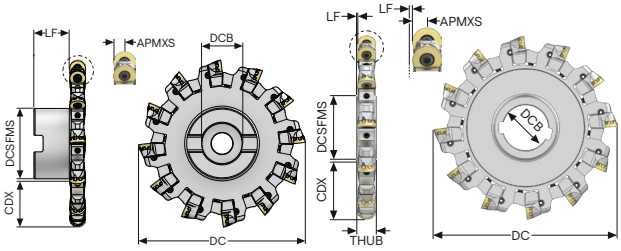
R335.18/335.18 - LNK.08 – Pollici - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
R335.18-04.00-0809L	00079973	Manicotto	4.000	0.295	1.014	8	1.000	1.880	1.528	–	9400	2.430	LNK.08
R335.18-05.00-0809L	00079974	Manicotto	5.000	0.295	1.329	10	1.250	2.250	1.528	–	8400	3.530	LNK.08
335.18-05.00-0809L	00079957	Manicotto	5.000	0.295	1.285	10	1.500	2.252	0.077	0.625	8400	1.980	LNK.08
R335.18-06.00-0809L	00079975	Manicotto	6.000	0.295	1.585	12	1.500	2.750	1.528	–	7500	4.190	LNK.08
335.18-06.00-0809L	00079958	Manicotto	6.000	0.295	1.790	12	1.500	2.252	0.077	0.625	7500	2.870	LNK.08
R335.18-08.00-XL0809L	02740909	Manicotto	8.000	0.295	2.224	14	1.500	3.500	1.528	–	6700	6.610	LNK.08
335.18-08.00-XL0809L	02740249	Manicotto	8.000	0.295	2.421	14	2.000	3.000	0.077	0.625	6700	5.070	LNK.08
R335.18-10.00-XL0809L	02741566	Manicotto	10.000	0.295	3.209	18	1.500	3.500	1.528	–	6000	11.020	LNK.08
335.18-10.00-XL0809L	02740531	Manicotto	10.000	0.295	3.386	18	2.000	3.000	0.077	0.625	6000	8.160	LNK.08
335.18-12.00-XL0809L	02740888	Manicotto	12.000	0.295	4.390	22	2.000	3.000	0.077	0.625	5300	12.130	LNK.08

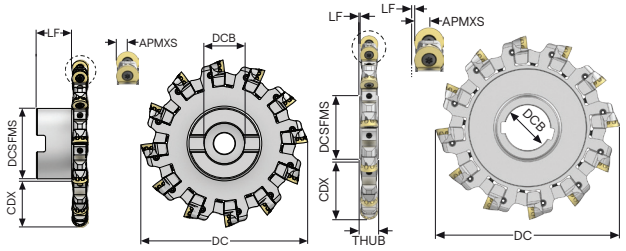
R335.18/335.18 - RD..10T3/RP..1204 – In mm - Due tagli - Versione sinistra - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 530-535
—Per il programma inserti completo, vedere le pagine 874, 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.18-080.1012.27-6L-R5	00030354	Manicotto	82,0	5,0	15,8	6	27,0	48,0	40,0	–	10500	0,8	RD..10T3
R335.18-080.1215.27-6L-R6	00030408	Manicotto	82,0	6,0	15,8	6	27,0	48,0	38,0	–	10500	0,7	RP..1204
R335.18-100.1012.27-8L-R5	00030358	Manicotto	102,0	5,0	25,8	8	27,0	48,0	40,0	–	9400	1,0	RD..10T3
335.18-100.1012.27-8L-R5	00030339	Manicotto	102,0	5,0	28,2	8	27,0	41,0	2,5	15,0	9400	0,4	RD..10T3
R335.18-100.1215.27-8L-R6	00030416	Manicotto	102,0	6,0	25,8	8	27,0	48,0	38,0	–	9400	1,2	RP..1204
335.18-100.1215.27-8L-R6	00030373	Manicotto	102,0	6,0	28,2	8	27,0	41,0	1,5	15,0	9400	0,6	RP..1204
R335.18-125.1012.32-10L-R5	00030361	Manicotto	127,0	5,0	33,3	10	32,0	58,0	42,0	–	8400	1,2	RD..10T3
335.18-125.1012.40-10L-R5	00030342	Manicotto	127,0	5,0	33,7	10	40,0	55,0	2,5	15,0	8400	0,8	RD..10T3
R335.18-125.1215.32-10L-R6	00030419	Manicotto	127,0	6,0	32,3	10	32,0	58,0	38,0	–	8400	1,1	RP..1204
335.18-125.1215.40-10L-R6	00030376	Manicotto	127,0	6,0	33,7	10	40,0	55,0	1,5	15,0	8400	1,1	RP..1204
R335.18-160.1012.40-12L-R5	00030366	Manicotto	162,0	5,0	44,8	12	40,0	70,0	40,0	–	7500	2,3	RD..10T3
335.18-160.1012.40-12L-R5	00030345	Manicotto	162,0	5,0	51,2	12	40,0	55,0	2,5	15,0	7500	11,0	RD..10T3
R335.18-160.1215.40-12L-R6	00030422	Manicotto	162,0	6,0	44,8	12	40,0	70,0	38,0	–	7500	2,0	RP..1204
335.18-160.1215.40-12L-R6	00030380	Manicotto	162,0	6,0	51,2	12	40,0	55,0	1,5	15,0	7500	1,7	RP..1204
R335.18-200.1012XL.40-14L-R5	02713464	Manicotto	200,0	5,0	53,5	14	40,0	90,0	40,0	–	6700	2,9	RD..10T3
335.18-200.1012XL.50-14L-R5	02713352	Manicotto	200,0	5,0	63,5	14	50,0	69,0	2,5	15,0	6700	3,0	RD..10T3
R335.18-200.1215XL.40-14L-R6	02713465	Manicotto	200,0	6,0	53,5	14	40,0	90,0	38,0	–	6700	3,4	RP..1204
335.18-200.1215XL.50-14L-R6	02713354	Manicotto	200,0	6,0	63,5	14	50,0	69,0	1,5	15,0	6700	1,9	RP..1204
R335.18-250.1012XL.40-18L-R5	02713476	Manicotto	250,0	5,0	78,0	18	40,0	90,0	40,0	–	6000	9,5	RD..10T3
335.18-250.1012XL.50-18L-R5	02713359	Manicotto	250,0	5,0	88,5	18	50,0	69,0	2,5	15,0	6000	1,9	RD..10T3
R335.18-250.1215XL.40-18L-R6	02713478	Manicotto	250,0	6,0	78,0	18	40,0	90,0	38,0	–	6000	4,4	RP..1204
335.18-250.1215XL.50-18L-R6	02713360	Manicotto	250,0	6,0	88,5	18	50,0	69,0	1,5	15,0	6000	2,0	RP..1204
335.18-315.1012XL.50-24L-R5	02713367	Manicotto	315,0	5,0	121,0	24	50,0	69,0	2,5	15,0	5300	2,0	RD..10T3
335.18-315.1215XL.50-24L-R6	02713368	Manicotto	315,0	6,0	121,0	24	50,0	69,0	1,5	15,0	5300	2,2	RP..1204

R335.18/335.18 - RD..10T3/RP..1204 – Pollici - Due tagli - Versione sinistra - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 530-535
—Per il programma inserti completo, vedere le pagine 874, 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch		lb	
R335.18-04.00-0809L-R6	02599491	Manicotto	4.079	0.236	1.063	4	1.000	1.880	1.528	–	9400	2.430	RP..12
335.18-05.00-0809L-R6	02599499	Manicotto	5.079	0.236	1.324	10	1.500	2.252	0.078	0.625	8400	1.980	RP..12
R335.18-05.00-0809L-R6	02599492	Manicotto	5.079	0.236	1.368	10	1.250	2.250	1.528	–	8400	3.530	RP..12
335.18-06.00-0809L-R6	02599500	Manicotto	6.079	0.236	1.829	12	1.500	2.252	0.078	0.625	7500	2.870	RP..12
R335.18-06.00-0809L-R6	02599493	Manicotto	6.079	0.236	1.624	12	1.500	2.750	1.528	–	7500	4.190	RP..12
335.18-08.00-XL0708L-R5	02740251	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.115	0.625	6700	4.190	RD..10
R335.18-08.00-XL0708L-R5	02740910	Manicotto	8.000	0.197	2.224	14	1.500	3.500	1.606	–	6700	7.050	RD..10
335.18-08.00-XL0809L-R6	02740252	Manicotto	8.000	0.236	2.421	14	2.000	3.000	0.078	0.625	6700	5.070	RP..12
R335.18-08.00-XL0809L-R6	02740911	Manicotto	8.000	0.236	2.224	14	1.500	3.500	1.528	–	6700	7.720	RP..12
335.18-10.00-XL0708L-R5	02740532	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.115	0.625	6000	6.610	RD..10
R335.18-10.00-XL0708L-R5	02741572	Manicotto	10.000	0.197	3.248	18	1.500	3.500	1.606	–	6000	9.480	RD..10
335.18-10.00-XL0809L-R6	02740534	Manicotto	10.000	0.236	3.386	18	2.000	3.000	0.078	0.625	6000	8.160	RP..12
R335.18-10.00-XL0809L-R6	02741574	Manicotto	10.000	0.236	3.248	18	1.500	3.500	1.528	–	6000	10.360	RP..12
335.18-12.00-XL0708L-R5	02740889	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.115	0.625	5300	9.920	RD..10
335.18-12.00-XL0809L-R6	02740891	Manicotto	12.000	0.236	4.390	22	2.000	3.000	0.078	0.625	5300	12.130	RP..12

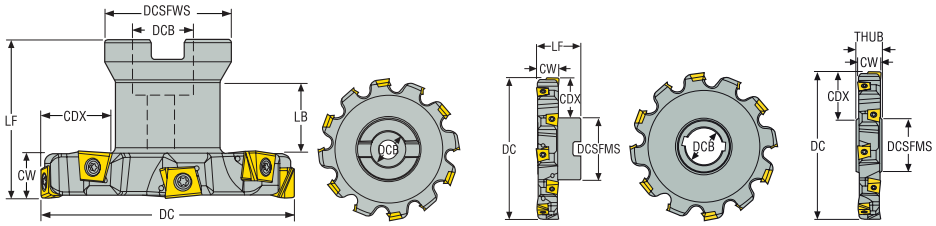


335.25

Sistema di fresa a disco facile da usare, robusto e a taglio dolce dedicato per operazioni di scanalatura e taglio con grandi larghezze di taglio

- Larghezza di taglio 13,5-32 mm (0,512-1,25") - scanalatura con fondo piano
- Diametro gamma fresa 80-315 mm (4,0-12")
- Larghezza di taglio fissa o regolabile con moduli sostituibili
- Disponibile con attacco a manicotto o foro di centraggio, con opzione per refrigerante interno fino a un diametro di 160 mm
- Gamma di raggi di punta 0,4-6 mm (0,016-0,236") e possibilità di applicare inserti tondi di diametro 16/20 mm sul sistema regolabile
- Soluzione conveniente con 4 taglienti per inserto
- Tolleranza di base della scanalatura: Frese a sedi fisse: +/-0,08 mm (+/-0,003"), Fresa regolabile: +/-0,07 mm (+/-0,0025")

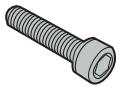
R335/335.25 - XNHQ/LNHQ09/12/14 – In mm - Tre tagli e sfacciatura - Sede fissa



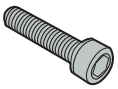
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	LB	CSP	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			mm	mm	mm			mm	mm	mm	mm	mm			kg		
R335.25-080.15.22-4NA	02989533	Manicotto	80,0	15,0	22,7	4	8	22,0	40,0	50,0	–	21,4	■	10200	0,7	XNHQ09...	–
R335.25-100.15.27-5NA	02989535	Manicotto	100,0	15,0	25,3	5	10	27,0	48,0	50,0	–	–	■	9200	1,1	XNHQ09...	–
R335.25-100.20.27-4NA	02953594	Manicotto	100,0	20,0	25,3	4	8	27,0	48,0	50,0	–	–	■	7200	1,3	XNHQ12...	–
R335.25-125.15.32-6NA	02989541	Manicotto	125,0	15,0	32,8	6	12	32,0	58,0	50,0	–	–	■	8200	1,7	XNHQ09...	–
R335.25-125.20.32-5NA	02953595	Manicotto	125,0	20,0	32,8	5	10	32,0	58,0	50,0	–	–	■	6500	1,9	XNHQ12...	–
R335.25-125.25.32-5NA	02788023	Manicotto	125,0	25,0	33,0	5	10	32,0	58,0	50,0	–	–	■	4900	2,0	XNHQ1407...	LNHQ1407...
R335.25-160.15.40-7NA	02989542	Manicotto	160,0	15,0	44,3	7	14	40,0	70,0	50,0	–	–	■	7200	2,4	XNHQ09...	–
335.25-160.15.40-7N	02989544	Manicotto	160,0	15,0	52,0	7	14	40,0	55,0	15,0	15,0	–	–	7200	1,7	XNHQ09...	–
R335.25-160.20.40-6NA	02953596	Manicotto	160,0	20,0	44,3	6	12	40,0	70,0	50,0	–	–	■	5700	2,9	XNHQ12...	–
335.25-160.20.40-6N	02961517	Manicotto	160,0	20,0	51,5	6	12	40,0	55,0	20,0	20,0	–	–	5600	2,3	XNHQ12...	–
R335.25-160.25.40-6NA	02788024	Manicotto	160,0	25,0	44,4	6	12	40,0	70,0	50,0	–	–	■	4400	3,1	XNHQ1407...	LNHQ1407...
R335.25-200.15.40-8N	02989543	Manicotto	200,0	15,0	54,3	8	16	40,0	90,0	50,0	–	–	–	6500	4,3	XNHQ09...	–
335.25-200.15.50-8N	02989545	Manicotto	200,0	15,0	64,5	8	16	50,0	69,0	15,0	15,0	–	–	6500	2,6	XNHQ09...	–
R335.25-200.20.40-7N	02953597	Manicotto	200,0	20,0	54,3	7	14	40,0	90,0	50,0	–	–	–	5100	5,1	XNHQ12...	–
335.25-200.20.50-7N	02961518	Manicotto	200,0	20,0	64,3	7	14	50,0	69,0	20,0	20,0	–	–	5100	3,5	XNHQ12...	–
R335.25-200.25.40-7N	02788025	Manicotto	200,0	25,0	54,5	7	14	40,0	90,0	50,0	–	–	–	3900	5,8	XNHQ1407...	LNHQ1407...
335.25-200.25.50-7N	02788028	Manicotto	200,0	25,0	62,7	7	14	50,0	71,0	25,0	32,0	–	–	3900	4,3	XNHQ1407...	LNHQ1407...
R335.25-250.20.60-9N	02953598	Manicotto	250,0	20,0	59,3	9	18	60,0	130,0	50,0	–	–	–	4600	7,2	XNHQ12...	–
335.25-250.20.50-9N	02961519	Manicotto	250,0	20,0	88,5	9	18	50,0	71,0	20,0	20,0	–	–	4600	5,8	XNHQ12...	–
335.25-250.25.50-9N	02788029	Manicotto	250,0	25,0	87,7	9	18	50,0	71,0	25,0	32,0	–	–	3500	7,3	XNHQ1407...	LNHQ1407...
R335.25-250.25.60-9N	02788026	Manicotto	250,0	25,0	59,5	9	18	60,0	130,0	50,0	–	–	–	3500	8,3	XNHQ1407...	LNHQ1407...

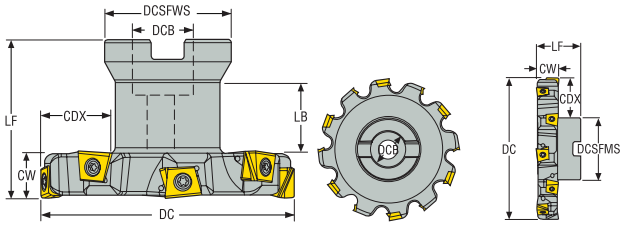
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
335.25 CW=15	–	H4B-T10P	C03509-T10P	DOUBLE-T
335.25 CW=20	–	H4B-T10P	C03511-T10P	DOUBLE-T
335.25 CW=25	–	H4B-T15PL	C04013-T15P	DOUBLE-T
R335.25 CW=15 DC=100	MLC6S12X50	H4B-T10P	C03509-T10P	DOUBLE-T
R335.25 CW=15 DC=125	950E1645	H4B-T10P	C03509-T10P	DOUBLE-T
R335.25 CW=15 DC=160	MLC6S20X40	H4B-T10P	C03509-T10P	DOUBLE-T
R335.25 CW=15 DC=200	–	H4B-T10P	C03509-T10P	DOUBLE-T
R335.25 CW=15 DC=80	MLC6S10X45	H4B-T10P	C03509-T10P	DOUBLE-T
R335.25 CW=20 DC=100	MLC6S12X50	H4B-T10P	C03511-T10P	DOUBLE-T
R335.25 CW=20 DC=125	950E1645	H4B-T10P	C03511-T10P	DOUBLE-T
R335.25 CW=20 DC=160	MLC6S20X40	H4B-T10P	C03511-T10P	DOUBLE-T
R335.25 CW=20 DC=200	–	H4B-T10P	C03511-T10P	DOUBLE-T
R335.25 CW=20 DC=250	–	H4B-T10P	C03511-T10P	DOUBLE-T
R335.25 CW=25 DC=125	MLC6S16X35	H4B-T15PL	C04013-T15P	DOUBLE-T
R335.25 CW=25 DC=160	MLC6S20X40	H4B-T15PL	C04013-T15P	DOUBLE-T
R335.25 CW=25 DC=200	–	H4B-T15PL	C04013-T15P	DOUBLE-T
R335.25 CW=25 DC=250	–	H4B-T15PL	C04013-T15P	DOUBLE-T

Accessori

Vite attacco	Coppia di serraggio inserto	Chiave dinamometrica
		
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
–	5.0NM	T00-15P50
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
MC6S12X50	3.0NM	T00-10P30
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
–	3.0NM	T00-10P30
MC6S12X50	3.0NM	T00-10P30
MC6S16X50	3.0NM	T00-10P30
–	5.0NM	T00-15P50
–	5.0NM	T00-15P50
MC6S12X50	5.0NM	T00-15P50
MC6S16X50	5.0NM	T00-15P50

R335.25/335.25 - XNHQ/LNHQ12/14 – Pollici - Tre tagli e sfacciatura - Sede fissa

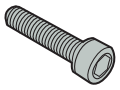


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 511–516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500–506
—Per la spiegazione degli attributi ISO, vedere pag. 16

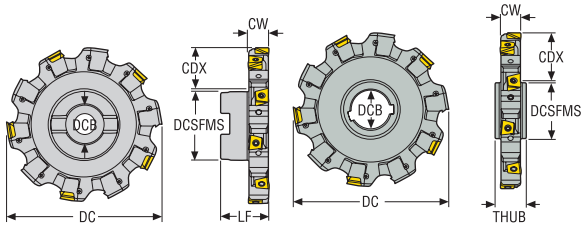
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	CSP	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			inch	inch	inch			inch	inch	inch	inch			lb		
R335.25-05.00-0.75-5NA	02989512	Manicotto	5.000	0.750	1.331	5	10	1.250	2.283	2.000	–	■	6500	4.410	XNHQ12	–
R335.25-05.00-1.000-5NA	02788030	Manicotto	5.000	1.000	1.350	5	10	1.250	2.250	2.000	–	■	4900	4.630	XNHQ14	LNHQ14
R335.25-06.00-0.75-6NA	02989513	Manicotto	6.000	0.750	1.595	6	12	1.500	2.756	2.000	–	■	5700	6.170	XNHQ12	–
R335.25-06.00-1.000-6NA	02788031	Manicotto	6.000	1.000	1.598	6	12	1.500	2.750	2.000	–	■	4400	6.390	XNHQ14	LNHQ14
335.25-06.00-1.000-6N	02788034	Manicotto	6.000	1.000	1.846	6	12	1.500	2.252	1.000	1.250	–	4400	5.730	XNHQ14	LNHQ14
R335.25-08.00-1.000-7N	02788032	Manicotto	8.000	1.000	2.224	7	14	1.500	3.500	2.000	–	–	3900	11.680	XNHQ14	LNHQ14
335.25-10.00-1.000-9N	02788036	Manicotto	10.000	1.000	3.429	9	18	2.000	3.000	1.000	1.250	–	3500	18.080	XNHQ14	LNHQ14

Parti di ricambio, comprese nella fornitura

Accessori

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
						
335.25 CW 1.000	–	H4B-T15PL	C04013-T15P	DOUBLE-T	5.0NM	T00-15P50
R335.25 CW 0.750 DC=5.000	ULC6S5/8UNFX11/2	H4B-T10P	C03511-T10P	–	3.0NM	T00-10P30
R335.25 CW 0.750 DC=6.000	ULC6S3/4UNFX11/2	H4B-T10P	C03511-T10P	–	3.0NM	T00-10P30
R335.25 CW 1.000 DC=5.000	ULC6S5/8UNFX11/2	H4B-T15PL	C04013-T15P	DOUBLE-T	5.0NM	T00-15P50
R335.25 CW 1.000 DC=6.000	ULC6S5/8UNFX11/2	H4B-T15PL	C04013-T15P	DOUBLE-T	5.0NM	T00-15P50
R335.25 CW 1.000 DC=8.000	–	H4B-T15PL	C04013-T15P	DOUBLE-T	5.0NM	T00-15P50

R335.25/335.25 - Inserto XNHQ09/12 – In mm - Tre tagli e sfacciatura - Versione regolabile

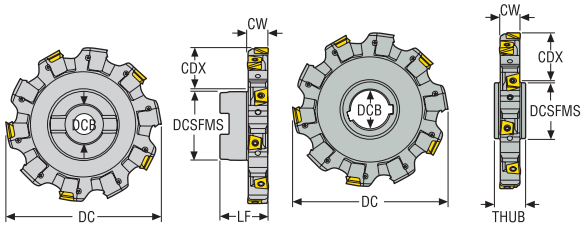


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.25-100.1317.27-3N	02993725	Manicotto	100,0	13,5	17,0	24,8	3	6	27,0	48,0	50,0	–	9200	1,0	XNHQ09..
R335.25-100.1721.27-3N	02993714	Manicotto	100,0	17,0	21,0	24,8	3	6	27,0	48,0	50,0	–	7200	1,1	XNHQ12..
R335.25-125.1317.32-4N	02993726	Manicotto	125,0	13,5	17,0	32,3	4	8	32,0	58,0	50,0	–	8200	1,4	XNHQ09..
335.25-125.1317.40-4N	02993731	Manicotto	125,0	13,5	17,0	32,9	4	8	40,0	55,0	15,25	17,0	8200	0,9	XNHQ09..
R335.25-125.1721.32-4N	02993715	Manicotto	125,0	17,0	21,0	32,3	4	8	32,0	58,0	50,0	–	6500	1,6	XNHQ12..
335.25-125.1721.40-4N	02993720	Manicotto	125,0	17,0	21,0	32,9	4	8	40,0	55,0	19,0	21,0	8200	1,2	XNHQ12..
R335.25-160.1317.40-6N	02993727	Manicotto	160,0	13,5	17,0	43,8	6	12	40,0	70,0	50,0	–	7200	2,3	XNHQ09..
335.25-160.1317.40-6N	02993732	Manicotto	160,0	13,5	17,0	50,5	6	12	40,0	55,0	15,25	17,0	7200	1,5	XNHQ09..
R335.25-160.1721.40-5N	02993716	Manicotto	160,0	17,0	21,0	43,8	5	10	40,0	70,0	50,0	–	5700	2,7	XNHQ12..
335.25-160.1721.40-5N	02993721	Manicotto	160,0	17,0	21,0	50,5	5	10	40,0	55,0	19,0	21,0	7200	1,9	XNHQ12..
R335.25-200.1317.40-7N	02993728	Manicotto	200,0	13,5	17,0	54,0	7	14	40,0	90,0	50,0	–	6500	3,6	XNHQ09..
335.25-200.1317.50-7N	02993733	Manicotto	200,0	13,5	17,0	63,5	7	14	50,0	69,0	15,25	17,0	6500	2,5	XNHQ09..
R335.25-200.1721.40-6N	02993717	Manicotto	200,0	17,0	21,0	54,0	6	12	40,0	90,0	50,0	–	5100	4,1	XNHQ12..
335.25-200.1721.50-6N	02993722	Manicotto	200,0	17,0	21,0	63,5	6	12	50,0	69,0	19,0	21,0	5100	3,2	XNHQ12..
R335.25-250.1317XL.60-8N	02993729	Manicotto	250,0	13,5	17,0	59,0	8	16	60,0	130,0	50,0	–	5800	6,0	XNHQ09..
335.25-250.1317XL.50-8N	02993734	Manicotto	250,0	13,5	17,0	88,5	8	16	50,0	69,0	15,25	17,0	5800	3,9	XNHQ09..
R335.25-250.1721XL.60-8N	02993718	Manicotto	250,0	17,0	21,0	59,0	8	16	60,0	130,0	50,0	–	4600	6,7	XNHQ12..
335.25-250.1721XL.50-8N	02993723	Manicotto	250,0	17,0	21,0	88,5	8	16	50,0	69,0	19,0	21,0	5800	4,9	XNHQ12..
R335.25-315.1317XL.60-10N	02993730	Manicotto	315,0	13,5	17,0	91,5	10	20	60,0	130,0	50,0	–	5200	9,0	XNHQ09..
335.25-315.1317XL.50-10N	02993735	Manicotto	315,0	13,5	17,0	121,0	10	20	50,0	69,0	15,25	17,0	5200	6,5	XNHQ09..
R335.25-315.1721XL.60-10N	02993719	Manicotto	315,0	17,0	21,0	91,5	10	20	60,0	130,0	50,0	–	4100	10,0	XNHQ12..
335.25-315.1721XL.50-10N	02993724	Manicotto	315,0	17,0	21,0	121,0	10	20	50,0	69,0	19,0	21,0	5200	8,2	XNHQ12..

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.25/335.25 - XNHQ/LNHQ14/17 – In mm - Tre tagli e sfacciatura - Versione regolabile

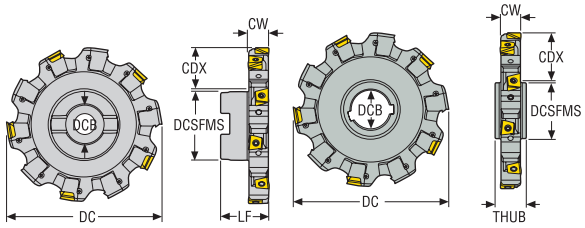


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
–Per il programma inserti completo, vedere le pagine 900
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			mm	mm	mm	mm			mm	mm	mm	mm		kg		
R335.25-125.2126.32-4N	02814578	Manicotto	125,0	21,0	26,0	32,3	4	8	32,0	58,0	50,0	–	4900	1,7	XNHQ1407...	LNHQ1407...
335.25-125.2126.40-4N	02814599	Manicotto	125,0	21,0	26,0	32,7	4	8	40,0	55,0	26,5	32,0	4900	1,3	XNHQ1407...	LNHQ1407...
R335.25-160.2126.40-5N	02814582	Manicotto	160,0	21,0	26,0	43,8	5	10	40,0	70,0	50,0	–	4400	2,9	XNHQ1407...	LNHQ1407...
335.25-160.2126.40-5N	02814603	Manicotto	160,0	21,0	26,0	50,3	5	10	40,0	55,0	26,5	32,0	4400	2,3	XNHQ1407...	LNHQ1407...
R335.25-160.2632.40-5N	02827411	Manicotto	160,0	26,0	32,0	43,8	5	10	40,0	70,0	50,0	–	4600	3,4	XNHQ1707...	LNHQ1707...
335.25-160.2632.40-5N	02829065	Manicotto	160,0	26,0	32,0	50,3	5	10	40,0	55,0	29,0	32,0	4600	3,0	XNHQ1707...	LNHQ1707...
R335.25-200.2126.40-6N	02814586	Manicotto	200,0	21,0	26,0	54,0	6	12	40,0	90,0	50,0	–	3900	4,6	XNHQ1407...	LNHQ1407...
335.25-200.2126.50-6N	02814607	Manicotto	200,0	21,0	26,0	63,3	6	12	50,0	69,0	26,5	32,0	3900	3,9	XNHQ1407...	LNHQ1407...
R335.25-200.2632.40-6N	02827415	Manicotto	200,0	26,0	32,0	54,0	6	12	40,0	90,0	50,0	–	4100	5,3	XNHQ1707...	LNHQ1707...
335.25-200.2632.50-6N	02827441	Manicotto	200,0	26,0	32,0	63,3	6	12	50,0	69,0	29,0	32,0	4100	4,8	XNHQ1707...	LNHQ1707...
R335.25-250.2126XL.60-7N	02814590	Manicotto	250,0	21,0	26,0	59,0	7	14	60,0	130,0	50,0	–	3500	7,3	XNHQ1407...	LNHQ1407...
335.25-250.2126XL.50-7N	02814611	Manicotto	250,0	21,0	26,0	88,3	7	14	50,0	69,0	26,5	32,0	3500	6,0	XNHQ1407...	LNHQ1407...
R335.25-250.2632XL.60-7N	02827419	Manicotto	250,0	26,0	32,0	59,0	7	14	60,0	130,0	50,0	–	3700	8,4	XNHQ1707...	LNHQ1707...
335.25-250.2632XL.50-7N	02827445	Manicotto	250,0	26,0	32,0	88,3	7	14	50,0	69,0	29,0	32,0	3700	7,4	XNHQ1707...	LNHQ1707...
R335.25-315.2126XL.60-9N	02814594	Manicotto	315,0	21,0	26,0	91,5	9	18	60,0	130,0	50,0	–	3100	11,3	XNHQ1407...	LNHQ1407...
335.25-315.2126XL.60-9N	02814615	Manicotto	315,0	21,0	26,0	113,3	9	18	60,0	84,0	26,5	32,0	3100	10,0	XNHQ1407...	LNHQ1407...
R335.25-315.2632XL.60-9N	02827423	Manicotto	315,0	26,0	32,0	91,5	9	18	60,0	130,0	50,0	–	3300	13,4	XNHQ1707...	LNHQ1707...
335.25-315.2632XL.60-9N	02827449	Manicotto	315,0	26,0	32,0	113,3	9	18	60,0	84,0	29,0	32,0	3300	12,3	XNHQ1707...	LNHQ1707...

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.25/335.25 - XNHQ09/12 – Pollici - Tre tagli e sfacciatura - Versione regolabile

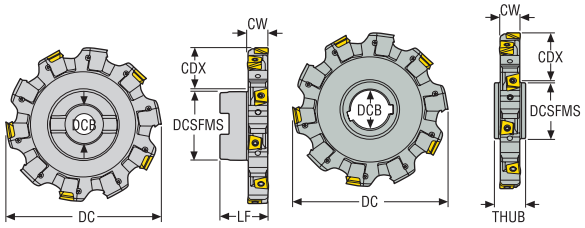


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-512
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911N	02993907	Manicotto	4.000	0.531	0.669	1.014	3	6	1.000	1.880	2.000	–	9200	2.870	XNHQ09
R335.25-04.00-1113N	02993850	Manicotto	4.000	0.669	0.827	1.014	3	6	1.000	1.880	2.000	–	7200	2.870	XNHQ12
R335.25-05.00-0911N	02993911	Manicotto	5.000	0.531	0.669	1.329	4	8	1.250	2.250	2.000	–	8200	3.970	XNHQ09
335.25-05.00-0911N	02993931	Manicotto	5.000	0.531	0.669	1.289	4	8	1.500	2.250	0.641	0.750	8200	1.980	XNHQ09
R335.25-05.00-1113N	02993854	Manicotto	5.000	0.669	0.827	1.329	4	8	1.250	2.250	2.000	–	6500	4.410	XNHQ12
335.25-05.00-1113N	02993881	Manicotto	5.000	0.669	0.827	1.289	4	8	1.500	2.250	0.835	1.000	6500	2.650	XNHQ12
R335.25-06.00-0911N	02993915	Manicotto	6.000	0.531	0.669	1.579	5	10	1.500	2.750	2.000	–	7200	4.850	XNHQ09
335.25-06.00-0911N	02993935	Manicotto	6.000	0.531	0.669	1.795	5	10	1.500	2.250	0.641	0.750	7200	3.750	XNHQ09
R335.25-06.00-1113N	02993858	Manicotto	6.000	0.669	0.827	1.579	5	10	1.500	2.750	2.000	–	5700	5.510	XNHQ12
335.25-06.00-1113N	02993885	Manicotto	6.000	0.669	0.827	1.795	5	10	1.500	2.250	0.835	1.000	5700	4.630	XNHQ12
R335.25-08.00-0911N	02993919	Manicotto	8.000	0.531	0.669	2.210	7	14	1.500	3.500	2.000	–	6500	9.260	XNHQ09
335.25-08.00-0911N	02993939	Manicotto	8.000	0.531	0.669	2.420	7	14	2.000	3.000	0.641	0.750	6500	5.950	XNHQ09
R335.25-08.00-1113N	02993862	Manicotto	8.000	0.669	0.827	2.210	6	12	1.500	3.500	2.000	–	5100	10.800	XNHQ12
335.25-08.00-1113N	02993889	Manicotto	8.000	0.669	0.827	2.420	6	12	2.000	3.000	0.835	1.000	5100	9.920	XNHQ12
R335.25-10.00-XL0911N	02993923	Manicotto	10.000	0.531	0.669	2.400	8	16	2.500	5.120	2.000	–	5800	13.450	XNHQ09
335.25-10.00-XL0911N	02993943	Manicotto	10.000	0.531	0.669	3.420	8	16	2.000	3.000	0.641	0.750	5800	9.040	XNHQ09
R335.25-10.00-XL1113N	02993866	Manicotto	10.000	0.669	0.827	2.400	8	16	2.500	5.120	2.000	–	4600	15.210	XNHQ12
335.25-10.00-XL1113N	02993893	Manicotto	10.000	0.669	0.827	3.420	8	16	2.000	3.000	0.835	1.000	4600	13.890	XNHQ12
R335.25-12.00-XL0911N	02993927	Manicotto	12.000	0.531	0.669	3.400	10	20	2.500	5.120	2.000	–	5200	17.860	XNHQ09
335.25-12.00-XL0911N	02993947	Manicotto	12.000	0.531	0.669	4.460	10	20	2.000	3.000	0.641	0.750	5200	16.530	XNHQ09
R335.25-12.00-XL1113N	02993870	Manicotto	12.000	0.669	0.827	3.400	10	20	2.500	5.120	2.000	–	4100	20.940	XNHQ12
335.25-12.00-XL1113N	02993897	Manicotto	12.000	0.669	0.827	4.420	10	20	2.000	3.000	0.835	1.000	4100	17.200	XNHQ12

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.25/335.25 - XNHQ/LNHQ14/17 – Pollici - Tre tagli e sfacciatura - Versione regolabile

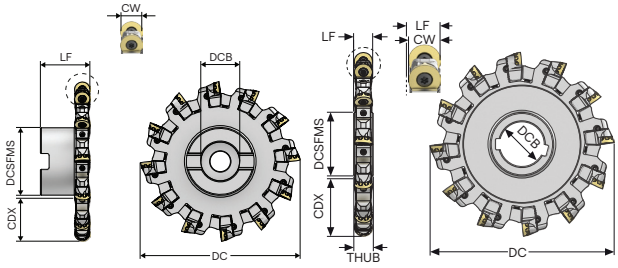


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			inch	inch	inch	inch			inch	inch	inch	inch		lb		
R335.25-05.00-1316N	02814619	Manicotto	5.000	0.827	1.024	1.327	4	8	1.250	2.250	2.000	–	4900	3.970	XNHQ14	LNHQ14
335.25-05.00-1316N	02814639	Manicotto	5.000	0.827	1.024	1.291	4	8	1.500	2.250	1.038	1.250	4900	3.090	XNHQ14	LNHQ14
R335.25-06.00-1316N	02814623	Manicotto	6.000	0.827	1.024	1.579	5	10	1.500	2.750	2.000	–	4500	5.950	XNHQ14	LNHQ14
335.25-06.00-1316N	02814643	Manicotto	6.000	0.827	1.024	1.791	5	10	1.500	2.250	1.038	1.250	4500	4.630	XNHQ14	LNHQ14
R335.25-06.00-1620N	02827713	Manicotto	6.000	1.024	1.260	1.579	5	10	1.500	2.750	2.000	–	4700	6.830	XNHQ17	LNHQ17
335.25-06.00-1620N	02827735	Manicotto	6.000	1.024	1.260	1.791	5	10	1.500	2.250	1.137	1.250	4700	5.730	XNHQ17	LNHQ17
R335.25-08.00-1316N	02814627	Manicotto	8.000	0.827	1.024	2.209	6	12	1.500	3.500	2.000	–	3900	10.800	XNHQ14	LNHQ14
335.25-08.00-1316N	02814647	Manicotto	8.000	0.827	1.024	2.413	6	12	2.000	3.000	1.038	1.250	3900	9.040	XNHQ14	LNHQ14
R335.25-08.00-1620N	02827717	Manicotto	8.000	1.024	1.260	2.209	6	12	1.500	3.500	2.000	–	4100	12.570	XNHQ17	LNHQ17
335.25-08.00-1620N	02827740	Manicotto	8.000	1.024	1.260	2.413	6	12	2.000	3.000	1.137	1.250	4100	11.020	XNHQ17	LNHQ17
R335.25-10.00-XL1316N	02814631	Manicotto	10.000	0.827	1.024	2.402	7	14	2.500	5.118	2.000	–	3500	16.530	XNHQ14	LNHQ14
335.25-10.00-XL1316N	02814651	Manicotto	10.000	0.827	1.024	3.413	7	14	2.000	3.000	1.038	1.250	3500	13.890	XNHQ14	LNHQ14
R335.25-10.00-XL1620N	02827721	Manicotto	10.000	1.024	1.260	2.402	7	14	2.500	5.118	2.000	–	3600	18.960	XNHQ17	LNHQ17
335.25-10.00-XL1620N	02827744	Manicotto	10.000	1.024	1.260	3.413	7	14	2.000	3.000	1.137	1.250	3600	16.980	XNHQ17	LNHQ17
R335.25-12.00-XL1316N	02814635	Manicotto	12.000	0.827	1.024	3.402	9	18	2.500	5.118	2.000	–	3200	23.150	XNHQ14	LNHQ14
335.25-12.00-XL1316N	02814655	Manicotto	12.000	0.827	1.024	4.413	9	18	2.000	3.000	1.038	1.250	3200	20.500	XNHQ14	LNHQ14
R335.25-12.00-XL1620N	02827725	Manicotto	12.000	1.024	1.260	3.402	9	18	2.500	5.118	2.000	–	3300	27.120	XNHQ17	LNHQ17
335.25-12.00-XL1620N	02827748	Manicotto	12.000	1.024	1.260	4.413	9	18	2.000	3.000	1.137	1.250	3300	25.350	XNHQ17	LNHQ17

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.25/335.25 - RP..1605/RP..2006 – In mm - tre tagli - profilo sferico - Versione regolabile

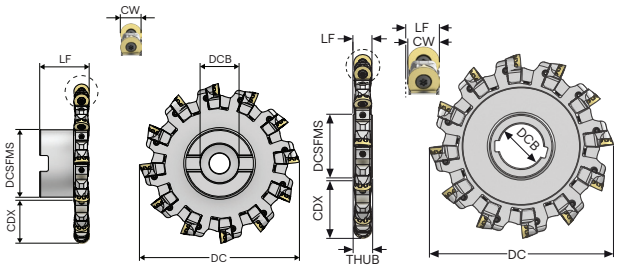


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
—Per il programma inserti completo, vedere le pagine 879
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm	mm			mm	mm	mm	mm		kg	
R335.25-100.1317.27-3N-R8	02993815	Manicotto	105,0	16,03	17,0	28,0	3	6	27,0	48,0	51,265	–	9200	1,0	RP..1605
R335.25-125.1317.32-4N-R8	02993818	Manicotto	130,0	16,03	17,0	35,5	4	8	32,0	58,0	51,265	–	8200	1,4	RP..1605
335.25-125.1317.40-4N-R8	02993833	Manicotto	130,0	16,03	17,0	36,0	4	8	40,0	55,0	16,52	17,0	8200	1,0	RP..1605
R335.25-160.1317.40-6N-R8	02993821	Manicotto	165,0	16,03	17,0	47,0	6	12	40,0	70,0	51,265	–	7200	2,3	RP..1605
335.25-160.1317.40-6N-R8	02993836	Manicotto	165,0	16,03	17,0	53,5	6	12	40,0	55,0	16,52	17,0	7200	1,5	RP..1605
R335.25-200.1317.40-7N-R8	02993824	Manicotto	205,0	16,03	17,0	57,0	7	14	40,0	90,0	51,265	–	6500	4,0	RP..1605
335.25-200.1317.50-7N-R8	02993839	Manicotto	205,0	16,03	17,0	66,5	7	14	50,0	69,0	16,52	17,0	6500	2,4	RP..1605
R335.25-250.1317XL.60-8N-R8	02993827	Manicotto	255,0	16,03	17,0	62,0	8	16	60,0	130,0	51,265	–	5800	10,3	RP..1605
335.25-250.1317XL.50-8N-R8	02993842	Manicotto	255,0	16,03	17,0	91,5	8	16	50,0	69,0	16,52	17,0	5800	5,2	RP..1605
335.25-250.1721XL.50-8N-R10I	10296551	Manicotto	255,0	20,03	21,0	91,5	8	16	50,0	69,0	20,52	21,0	4600	5,0	RP..2006
R335.25-250.1721XL.60-8N-R10I	10296553	Manicotto	255,0	20,03	21,0	62,0	8	16	60,0	130,0	51,515	–	4600	6,8	RP..2006
R335.25-315.1317XL.60-10N-R8	02993830	Manicotto	320,0	16,03	17,0	94,5	10	20	60,0	130,0	51,265	–	5200	8,6	RP..1605
335.25-315.1317XL.50-10N-R8	02993845	Manicotto	320,0	16,03	17,0	124,0	10	20	50,0	69,0	16,52	17,0	5200	6,5	RP..1605
335.25-315.1721XL.50-10N-R10I	10296552	Manicotto	320,0	20,03	21,0	124,1	10	20	50,0	69,0	20,52	21,0	4100	7,0	RP..2006
R335.25-315.1721XL.60-10N-R10I	10296554	Manicotto	320,0	20,03	21,0	94,5	10	20	60,0	130,0	51,515	–	4100	8,8	RP..2006

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

R335.25/335.25 - RP..1605/RP..2006 – Pollici - tre tagli - profilo sferico - Versione regolabile

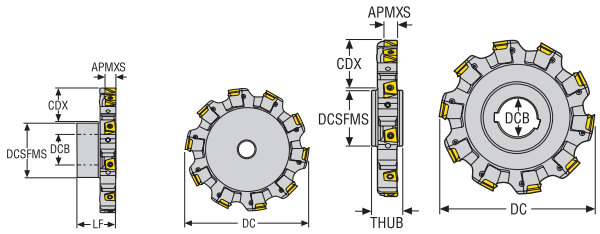


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
—Per il programma inserti completo, vedere le pagine 879
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CWN	CWX	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911N-R8	02993951	Manicotto	4.197	0.631	0.669	1.139	3	6	1.000	1.880	2.050	–	9200	2.200	RP..1605
335.25-05.00-0911N-R8	02993969	Manicotto	5.197	0.631	0.669	1.415	4	8	1.500	2.250	0.691	0.750	8200	2.200	RP..1605
R335.25-05.00-0911N-R8	02993954	Manicotto	5.197	0.631	0.669	1.454	4	8	1.250	2.250	2.050	–	8200	3.970	RP..1605
335.25-06.00-0911N-R8	02993972	Manicotto	6.197	0.631	0.669	1.914	5	10	1.500	2.250	0.691	0.750	7200	3.090	RP..1605
R335.25-06.00-0911N-R8	02993957	Manicotto	6.197	0.631	0.669	1.704	5	10	1.500	2.750	2.050	–	7200	6.390	RP..1605
335.25-08.00-0911N-R8	02993975	Manicotto	8.197	0.631	0.669	2.539	7	14	2.000	3.000	0.691	0.750	6500	5.730	RP..1605
R335.25-08.00-0911N-R8	02993960	Manicotto	8.197	0.631	0.669	2.329	7	14	1.500	3.500	2.050	–	6500	8.380	RP..1605
335.25-10.00-XL0911N-R8	02993978	Manicotto	10.197	0.631	0.669	3.539	8	16	2.000	3.000	0.691	0.750	5800	9.260	RP..1605
R335.25-10.00-XL0911N-R8	02993963	Manicotto	10.197	0.631	0.669	2.519	8	16	2.500	5.120	2.050	–	5800	13.670	RP..1605
335.25-10.00-XL1113N-R10I	10296555	Manicotto	10.197	0.789	0.827	3.539	8	16	2.000	3.000	0.894	1.000	4600	9.480	RP..2006
R335.25-10.00-XL1113N-R10I	10296557	Manicotto	10.197	0.789	0.827	2.520	8	16	2.500	5.120	2.060	–	4600	13.670	RP..2006
335.25-12.00-XL0911N-R8	02993981	Manicotto	12.197	0.631	0.669	4.579	10	20	2.000	3.000	0.691	0.750	5200	13.450	RP..1605
R335.25-12.00-XL0911N-R8	02993966	Manicotto	12.197	0.631	0.669	3.519	10	20	2.500	5.120	2.050	–	5200	31.530	RP..1605
335.25-12.00-XL1113N-R10I	10296556	Manicotto	12.197	0.789	0.827	4.539	10	20	2.000	3.000	0.894	1.000	4100	17.200	RP..2006
R335.25-12.00-XL1113N-R10I	10296558	Manicotto	12.197	0.789	0.827	3.520	10	20	2.500	5.120	2.060	–	4100	18.740	RP..2006

Tutte le frese regolabili sono impostate sulla larghezza di taglio minima CWN (impostazione di fabbrica).
La fresa regolabile può essere ordinata con la larghezza di taglio impostata su un valore compreso nella gamma (CWN - CWX); per ulteriori informazioni, vedere i dati tecnici alla pagina 500

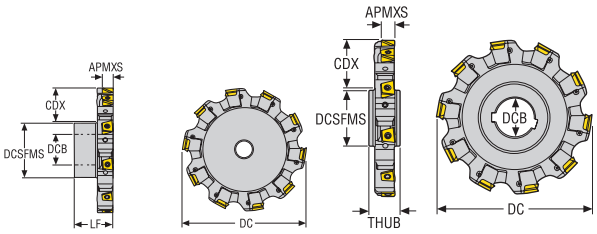
R335.25/335.25 - XNHQ09/12 – In mm - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-512
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm		kg	
R335.25-100.1317.27-6R	02993783	Manicotto	100,0	8,5	24,8	6	27,0	48,0	50,0	–	9200	1,2	XNHQ09..
R335.25-100.1721.27-6R	02993737	Manicotto	100,0	11,0	24,8	6	27,0	48,0	50,0	–	7200	1,1	XNHQ12..
R335.25-125.1317.32-8R	02993786	Manicotto	125,0	8,5	32,3	8	32,0	58,0	50,0	–	8200	1,4	XNHQ09..
335.25-125.1317.40-8R	02993801	Manicotto	125,0	8,5	32,9	8	40,0	55,0	15,25	17,0	8200	0,9	XNHQ09..
R335.25-125.1721.32-8R	02993740	Manicotto	125,0	11,0	32,3	8	32,0	58,0	50,0	–	6500	1,7	XNHQ12..
335.25-125.1721.40-8R	02993761	Manicotto	125,0	11,0	32,9	8	40,0	55,0	19,0	21,0	6500	1,0	XNHQ12..
R335.25-160.1317.40-12R	02993789	Manicotto	160,0	8,5	43,8	12	40,0	70,0	50,0	–	7200	2,8	XNHQ09..
335.25-160.1317.40-12R	02993804	Manicotto	160,0	8,5	50,5	12	40,0	55,0	15,25	17,0	7200	1,5	XNHQ09..
R335.25-160.1721.40-10R	02993743	Manicotto	160,0	11,0	43,8	10	40,0	70,0	50,0	–	5700	3,2	XNHQ12..
335.25-160.1721.40-10R	02993764	Manicotto	160,0	11,0	50,5	10	40,0	55,0	19,0	21,0	5700	1,9	XNHQ12..
R335.25-200.1317.40-14R	02993792	Manicotto	200,0	8,5	54,0	14	40,0	90,0	50,0	–	6500	3,7	XNHQ09..
335.25-200.1317.50-14R	02993807	Manicotto	200,0	8,5	63,5	14	50,0	69,0	15,25	17,0	6500	3,1	XNHQ09..
R335.25-200.1721.40-12R	02993746	Manicotto	200,0	11,0	54,0	12	40,0	90,0	50,0	–	5100	4,1	XNHQ12..
335.25-200.1721.50-12R	02993767	Manicotto	200,0	11,0	63,5	12	50,0	69,0	19,0	21,0	5100	3,1	XNHQ12..
R335.25-250.1317XL.60-16R	02993795	Manicotto	250,0	8,5	59,0	16	60,0	130,0	50,0	–	5800	6,0	XNHQ09..
335.25-250.1317XL.50-16R	02993810	Manicotto	250,0	8,5	88,5	16	50,0	69,0	15,25	17,0	5800	3,8	XNHQ09..
R335.25-250.1721XL.60-16R	02993749	Manicotto	250,0	11,0	59,0	16	60,0	130,0	50,0	–	4600	11,5	XNHQ12..
335.25-250.1721XL.50-16R	02993770	Manicotto	250,0	11,0	88,5	16	50,0	69,0	19,0	21,0	4600	8,2	XNHQ12..
R335.25-315.1317XL.60-20R	02993798	Manicotto	315,0	8,5	91,5	20	60,0	130,0	50,0	–	5200	8,5	XNHQ09..
335.25-315.1317XL.50-20R	02993813	Manicotto	315,0	8,5	121,0	20	50,0	69,0	15,25	17,0	5200	6,4	XNHQ09..
R335.25-315.1721XL.60-20R	02993752	Manicotto	315,0	11,0	91,5	20	60,0	130,0	50,0	–	4100	16,4	XNHQ12..
335.25-315.1721XL.50-20R	02993773	Manicotto	315,0	11,0	121,0	20	50,0	69,0	19,0	21,0	4100	8,1	XNHQ12..

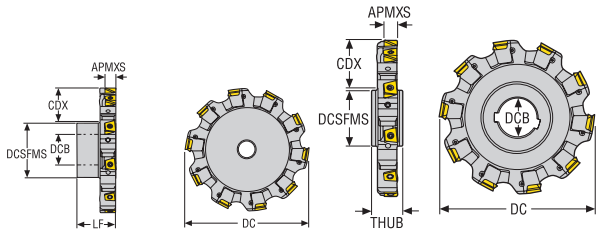
R335.25/335.25 - XNHQ/LNHQ14/17 – In mm - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			mm	mm	mm			mm	mm	mm	mm		kg		
R335.25-125.2126.32-8R	02814580	Manicotto	125,0	13,0	32,3	8	8	32,0	58,0	50,0	–	4900	1,7	XNHQ1407...	LNHQ1407...
335.25-125.2126.40-8R	02814601	Manicotto	125,0	13,0	32,7	8	8	40,0	55,0	26,5	32,0	4900	1,3	XNHQ1407...	LNHQ1407...
R335.25-160.2126.40-10R	02814584	Manicotto	160,0	13,0	43,8	10	10	40,0	70,0	50,0	–	4400	2,9	XNHQ1407...	LNHQ1407...
335.25-160.2126.40-10R	02814605	Manicotto	160,0	13,0	50,3	10	10	40,0	55,0	26,5	32,0	4400	2,3	XNHQ1407...	LNHQ1407...
R335.25-160.2632.40-10R	02827413	Manicotto	160,0	16,0	43,8	10	10	40,0	70,0	50,0	–	4600	3,4	XNHQ1707...	LNHQ1707...
335.25-160.2632.40-10R	02829067	Manicotto	160,0	16,0	50,3	10	10	40,0	55,0	29,0	32,0	4600	2,9	XNHQ1707...	LNHQ1707...
R335.25-200.2126.40-12R	02814588	Manicotto	200,0	13,0	54,0	12	12	40,0	90,0	50,0	–	3900	4,6	XNHQ1407...	LNHQ1407...
335.25-200.2126.50-12R	02814609	Manicotto	200,0	13,0	63,3	12	12	50,0	69,0	26,5	32,0	3900	3,9	XNHQ1407...	LNHQ1407...
R335.25-200.2632.40-12R	02827417	Manicotto	200,0	16,0	54,0	12	12	40,0	90,0	50,0	–	4100	5,4	XNHQ1707...	LNHQ1707...
335.25-200.2632.50-12R	02827443	Manicotto	200,0	16,0	63,3	12	12	50,0	69,0	29,0	32,0	4100	5,2	XNHQ1707...	LNHQ1707...
R335.25-250.2126XL.60-14R	02814592	Manicotto	250,0	13,0	59,0	14	14	60,0	130,0	50,0	–	3500	7,3	XNHQ1407...	LNHQ1407...
335.25-250.2126XL.50-14R	02814613	Manicotto	250,0	13,0	88,3	14	14	50,0	69,0	26,5	32,0	3500	6,0	XNHQ1407...	LNHQ1407...
R335.25-250.2632XL.60-14R	02827421	Manicotto	250,0	16,0	59,0	14	14	60,0	130,0	50,0	–	3700	8,4	XNHQ1707...	LNHQ1707...
335.25-250.2632XL.50-14R	02827447	Manicotto	250,0	16,0	88,3	14	14	50,0	69,0	29,0	32,0	3700	7,4	XNHQ1707...	LNHQ1707...
R335.25-315.2126XL.60-18R	02814597	Manicotto	315,0	13,0	91,5	18	18	60,0	130,0	50,0	–	3100	11,3	XNHQ1407...	LNHQ1407...
335.25-315.2126XL.60-18R	02814617	Manicotto	315,0	13,0	113,3	18	18	60,0	84,0	26,5	32,0	3100	10,0	XNHQ1407...	LNHQ1407...
R335.25-315.2632XL.60-18R	02827425	Manicotto	315,0	16,0	91,5	18	18	60,0	130,0	50,0	–	3300	13,4	XNHQ1707...	LNHQ1707...
335.25-315.2632XL.60-18R	02827451	Manicotto	315,0	16,0	113,3	18	18	60,0	84,0	29,0	32,0	3300	12,3	XNHQ1707...	LNHQ1707...

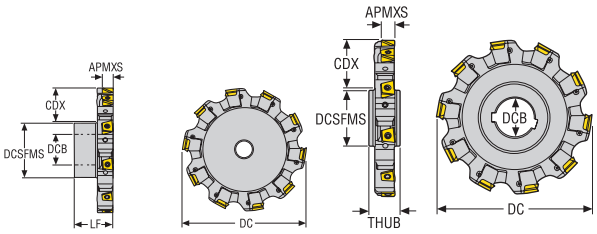
R335.25/335.25 - XNHQ09/12 – Pollici - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-512
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911R	02993909	Manicotto	4.000	0.335	1.014	6	6	1.000	1.880	2.000	–	9200	2.200	XNHQ09
R335.25-04.00-1113R	02993852	Manicotto	4.000	0.433	1.014	6	6	1.000	1.880	2.000	–	7200	2.650	XNHQ12
R335.25-05.00-0911R	02993913	Manicotto	5.000	0.335	1.329	8	8	1.250	2.250	2.000	–	8200	3.310	XNHQ09
335.25-05.00-0911R	02993933	Manicotto	5.000	0.335	1.289	8	8	1.500	2.250	0.641	0.750	8200	2.200	XNHQ09
R335.25-05.00-1113R	02993856	Manicotto	5.000	0.433	1.329	8	8	1.250	2.250	2.000	–	6500	3.750	XNHQ12
335.25-05.00-1113R	02993883	Manicotto	5.000	0.433	1.289	8	8	1.500	2.250	0.835	1.000	6500	2.650	XNHQ12
R335.25-06.00-0911R	02993917	Manicotto	6.000	0.335	1.579	10	10	1.500	2.750	2.000	–	7200	6.390	XNHQ09
335.25-06.00-0911R	02993937	Manicotto	6.000	0.335	1.795	10	10	1.500	2.250	0.641	0.750	7200	4.410	XNHQ09
R335.25-06.00-1113R	02993860	Manicotto	6.000	0.433	1.579	10	10	1.500	2.750	2.000	–	5700	5.510	XNHQ12
335.25-06.00-1113R	02993887	Manicotto	6.000	0.433	1.795	10	10	1.500	2.250	0.835	1.000	5700	4.630	XNHQ12
R335.25-08.00-0911R	02993921	Manicotto	8.000	0.335	2.210	14	14	1.500	3.500	2.000	–	6500	8.380	XNHQ09
335.25-08.00-0911R	02993941	Manicotto	8.000	0.335	2.420	14	14	2.000	3.000	0.641	0.750	6500	5.950	XNHQ09
R335.25-08.00-1113R	02993864	Manicotto	8.000	0.433	2.210	12	12	1.500	3.500	2.000	–	5100	9.920	XNHQ12
335.25-08.00-1113R	02993891	Manicotto	8.000	0.433	2.420	12	12	2.000	3.000	0.835	1.000	5100	10.140	XNHQ12
R335.25-10.00-XL0911R	02993925	Manicotto	10.000	0.335	2.400	16	16	2.500	5.120	2.000	–	5800	13.450	XNHQ09
335.25-10.00-XL0911R	02993945	Manicotto	10.000	0.335	3.420	16	16	2.000	3.000	0.641	0.750	5800	9.040	XNHQ09
R335.25-10.00-XL1113R	02993868	Manicotto	10.000	0.433	2.400	16	16	2.500	5.120	2.000	–	4600	15.430	XNHQ12
335.25-10.00-XL1113R	02993895	Manicotto	10.000	0.433	3.420	16	16	2.000	3.000	0.835	1.000	4600	11.680	XNHQ12
R335.25-12.00-XL0911R	02993929	Manicotto	12.000	0.335	3.400	20	20	2.500	5.120	2.000	–	5200	17.860	XNHQ09
335.25-12.00-XL0911R	02993949	Manicotto	12.000	0.335	4.460	20	20	2.000	3.000	0.641	0.750	5200	13.450	XNHQ09
R335.25-12.00-XL1113R	02993872	Manicotto	12.000	0.433	3.400	20	20	2.500	5.120	2.000	–	4100	20.940	XNHQ12
335.25-12.00-XL1113R	02993899	Manicotto	12.000	0.433	4.420	20	20	2.000	3.000	0.835	1.000	4100	17.200	XNHQ12

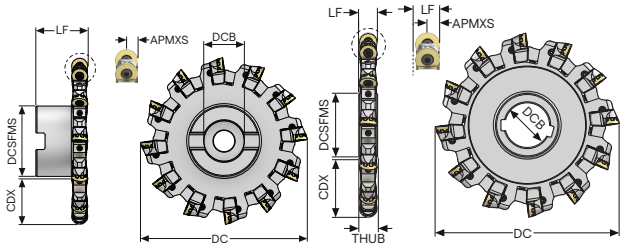
R335.25/335.25 - XNHQ/LNHQ14/17 – Pollici - Due tagli - Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			inch	inch	inch			inch	inch	inch	inch		lb		
R335.25-05.00-1316R	02814621	Manicotto	5.000	0.512	1.327	8	8	1.250	2.250	2.000	–	4900	3.970	XNHQ14	LNHQ14
335.25-05.00-1316R	02814641	Manicotto	5.000	0.512	1.291	8	8	1.500	2.250	1.038	1.250	4900	3.090	XNHQ14	LNHQ14
R335.25-06.00-1316R	02814625	Manicotto	6.000	0.512	1.579	10	10	1.500	2.750	2.000	–	4500	5.950	XNHQ14	LNHQ14
335.25-06.00-1316R	02814645	Manicotto	6.000	0.512	1.791	10	10	1.500	2.250	1.038	1.250	4500	4.850	XNHQ14	LNHQ14
R335.25-06.00-1620R	02827715	Manicotto	6.000	0.630	1.579	10	10	1.500	2.750	2.000	–	4700	6.830	XNHQ17	LNHQ17
335.25-06.00-1620R	02827738	Manicotto	6.000	0.630	1.791	10	10	1.500	2.250	1.137	1.250	4700	5.730	XNHQ17	LNHQ17
R335.25-08.00-1316R	02814629	Manicotto	8.000	0.512	2.209	12	12	1.500	3.500	2.000	–	3900	12.130	XNHQ14	LNHQ14
335.25-08.00-1316R	02814649	Manicotto	8.000	0.512	2.413	12	12	2.000	3.000	1.038	1.250	3900	9.040	XNHQ14	LNHQ14
R335.25-08.00-1620R	02827719	Manicotto	8.000	0.630	2.209	12	12	1.500	3.500	2.000	–	4100	12.570	XNHQ17	LNHQ17
335.25-08.00-1620R	02827742	Manicotto	8.000	0.630	2.413	12	12	2.000	3.000	1.137	1.250	4100	11.020	XNHQ17	LNHQ17
R335.25-10.00-XL1316R	02814633	Manicotto	10.000	0.512	2.402	14	14	2.500	5.118	2.000	–	3500	16.530	XNHQ14	LNHQ14
335.25-10.00-XL1316R	02814653	Manicotto	10.000	0.512	3.413	14	14	2.000	3.000	1.038	1.250	3500	13.890	XNHQ14	LNHQ14
R335.25-10.00-XL1620R	02827723	Manicotto	10.000	0.630	2.402	14	14	2.500	5.118	2.000	–	3600	18.740	XNHQ17	LNHQ17
335.25-10.00-XL1620R	02827746	Manicotto	10.000	0.630	3.413	14	14	2.000	3.000	1.137	1.250	3600	16.980	XNHQ17	LNHQ17
R335.25-12.00-XL1316R	02814637	Manicotto	12.000	0.512	3.402	18	18	2.500	5.118	2.000	–	3200	23.150	XNHQ14	LNHQ14
335.25-12.00-XL1316R	02814657	Manicotto	12.000	0.512	4.413	18	18	2.000	3.000	1.038	1.250	3200	20.720	XNHQ14	LNHQ14
R335.25-12.00-XL1620R	02827727	Manicotto	12.000	0.630	3.402	18	18	2.500	5.118	2.000	–	3300	27.340	XNHQ17	LNHQ17
335.25-12.00-XL1620R	02827750	Manicotto	12.000	0.630	4.413	18	18	2.000	3.000	1.137	1.250	3300	25.350	XNHQ17	LNHQ17

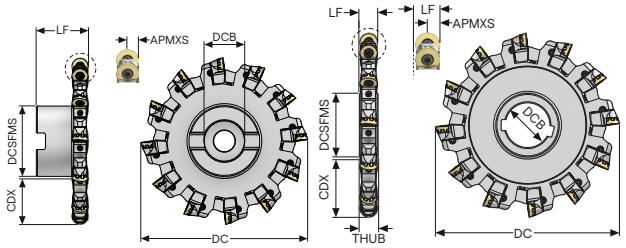
R335.25/335.25 - RP..1605/RP..2006 – In mm - Due tagli - Destro - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
—Per il programma inserti completo, vedere le pagine 879
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm		kg	
R335.25-100.1317.27-6R-R8	02993816	Manicotto	105,0	8,0	28,0	6	6	27,0	48,0	51,265	–	9200	1,0	RP..1605
R335.25-125.1317.32-8R-R8	02993819	Manicotto	130,0	8,0	35,5	8	8	32,0	58,0	51,265	–	8200	1,4	RP..1605
335.25-125.1317.40-8R-R8	02993834	Manicotto	130,0	8,0	36,1	8	8	40,0	55,0	16,52	17,0	8200	0,9	RP..1605
R335.25-160.1317.40-12R-R8	02993822	Manicotto	165,0	8,0	47,0	12	12	40,0	70,0	51,265	–	7200	2,3	RP..1605
335.25-160.1317.40-12R-R8	02993837	Manicotto	165,0	8,0	53,6	12	12	40,0	55,0	16,52	17,0	7200	1,5	RP..1605
R335.25-200.1317.40-14R-R8	02993825	Manicotto	205,0	8,0	57,0	14	14	40,0	90,0	51,265	–	6500	3,5	RP..1605
335.25-200.1317.50-14R-R8	02993840	Manicotto	205,0	8,0	66,6	14	14	50,0	69,0	16,52	17,0	6500	2,4	RP..1605
R335.25-250.1317XL.60-16R-R8	02993828	Manicotto	255,0	8,0	62,0	16	16	60,0	130,0	51,265	–	5800	6,0	RP..1605
335.25-250.1317XL.50-16R-R8	02993843	Manicotto	255,0	8,0	91,6	16	16	50,0	69,0	16,52	17,0	5800	4,0	RP..1605
335.25-250.1721XL.50-16R-R10I	10296531	Manicotto	255,0	10,0	91,5	16	16	50,0	69,0	20,52	21,0	4600	4,2	RP..2006
R335.25-250.1721XL.60-16R-R10I	10296538	Manicotto	255,0	10,0	62,0	16	16	60,0	130,0	51,52	–	4600	6,0	RP..2006
R335.25-315.1317XL.60-20R-R8	02993831	Manicotto	320,0	8,0	94,5	20	20	60,0	130,0	51,265	–	5200	8,6	RP..1605
335.25-315.1317XL.50-20R-R8	02993846	Manicotto	320,0	8,0	124,1	20	20	50,0	69,0	16,52	17,0	5200	6,6	RP..1605
335.25-315.1721XL.50-20R-R10I	10296536	Manicotto	320,0	10,0	124,1	20	20	50,0	69,0	20,52	21,0	4100	7,3	RP..2006
R335.25-315.1721XL.60-20R-R10I	10296540	Manicotto	320,0	10,0	94,5	20	20	60,0	130,0	51,52	–	4100	9,1	RP..2006

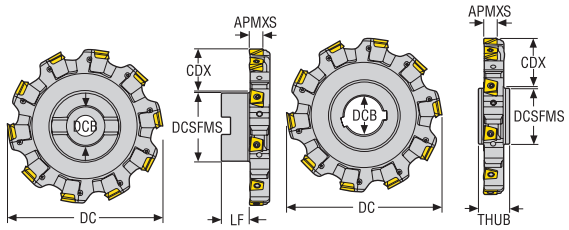
R335.25/335.25 - RP..1605/RP..2006 – Pollici-Due tagli - Destro - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
—Per il programma inserti completo, vedere le pagine 879
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911R-R8	02993952	Manicotto	4.197	0.315	1.138	6	6	1.000	1.880	2.050	–	9200	2.200	RP..1605
R335.25-05.00-0911R-R8	02993955	Manicotto	5.197	0.315	1.453	8	8	1.250	2.250	2.050	–	8200	3.310	RP..1605
335.25-05.00-0911R-R8	02993970	Manicotto	5.197	0.315	1.414	8	8	1.500	2.250	0.691	0.750	8200	2.200	RP..1605
R335.25-06.00-0911R-R8	02993958	Manicotto	6.197	0.315	1.703	10	10	1.500	2.750	2.050	–	7200	6.170	RP..1605
335.25-06.00-0911R-R8	02993973	Manicotto	6.197	0.315	1.914	10	10	1.500	2.250	0.691	0.750	7200	3.090	RP..1605
R335.25-08.00-0911R-R8	02993961	Manicotto	8.197	0.315	2.329	14	14	1.500	3.500	2.050	–	6500	8.380	RP..1605
335.25-08.00-0911R-R8	02993976	Manicotto	8.197	0.315	2.539	14	14	2.000	3.000	0.691	0.750	6500	5.730	RP..1605
R335.25-10.00-XL0911R-R8	02993964	Manicotto	10.197	0.315	2.519	16	16	2.500	5.120	2.050	–	5800	13.670	RP..1605
335.25-10.00-XL0911R-R8	02993979	Manicotto	10.197	0.315	3.539	16	16	2.000	3.000	0.691	0.750	5800	9.260	RP..1605
335.25-10.00-XL1113R-R10I	10296542	Manicotto	10.197	0.394	3.539	16	16	2.000	3.000	0.894	1.000	4600	9.920	RP..2006
R335.25-10.00-XL1113R-R10I	10296546	Manicotto	10.197	0.394	2.520	16	16	2.500	5.120	2.060	–	4600	13.670	RP..2006
R335.25-12.00-XL0911R-R8	02993967	Manicotto	12.197	0.315	3.519	20	20	2.500	5.120	2.050	–	5200	18.080	RP..1605
335.25-12.00-XL0911R-R8	02993982	Manicotto	12.197	0.315	4.579	20	20	2.000	3.000	0.691	0.750	5200	13.670	RP..1605
335.25-12.00-XL1113R-R10I	10296544	Manicotto	12.197	0.394	4.539	20	20	2.000	3.000	0.894	1.000	4100	14.990	RP..2006
R335.25-12.00-XL1113R-R10I	10296548	Manicotto	12.197	0.394	3.520	20	20	2.500	5.120	2.060	–	4100	18.740	RP..2006

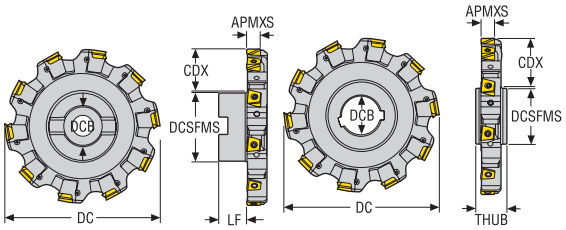
R335.25/335.25 - XNHQ09/12 – In mm - Due tagli – Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-512
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm		kg	
R335.25-100.1317.27-6L	02993784	Manicotto	100,0	8,5	24,8	6	6	27,0	48,0	50,0	–	9200	1,3	XNHQ09..
R335.25-100.1721.27-6L	02993738	Manicotto	100,0	11,0	24,8	6	6	27,0	48,0	50,0	–	7200	1,1	XNHQ12..
R335.25-125.1317.32-8L	02993787	Manicotto	125,0	8,5	32,3	8	8	32,0	58,0	50,0	–	8200	1,4	XNHQ09..
335.25-125.1317.40-8L	02993802	Manicotto	125,0	8,5	32,9	8	8	40,0	55,0	1,75	17,0	8200	0,9	XNHQ09..
R335.25-125.1721.32-8L	02993741	Manicotto	125,0	11,0	32,3	8	8	32,0	58,0	50,0	–	6500	1,9	XNHQ12..
335.25-125.1721.40-8L	02993762	Manicotto	125,0	11,0	32,9	8	8	40,0	55,0	2,0	21,0	6500	1,4	XNHQ12..
R335.25-160.1317.40-12L	02993790	Manicotto	160,0	8,5	43,8	12	12	40,0	70,0	50,0	–	7200	2,3	XNHQ09..
335.25-160.1317.40-12L	02993805	Manicotto	160,0	8,5	50,5	12	12	40,0	55,0	1,75	17,0	7200	1,5	XNHQ09..
R335.25-160.1721.40-10L	02993744	Manicotto	160,0	11,0	43,8	10	10	40,0	70,0	50,0	–	5700	2,8	XNHQ12..
335.25-160.1721.40-10L	02993765	Manicotto	160,0	11,0	50,5	10	10	40,0	55,0	2,0	21,0	5700	1,9	XNHQ12..
R335.25-200.1317.40-14L	02993793	Manicotto	200,0	8,5	54,0	14	14	40,0	90,0	50,0	–	6500	3,5	XNHQ09..
335.25-200.1317.50-14L	02993808	Manicotto	200,0	8,5	63,5	14	14	50,0	69,0	1,75	17,0	6500	3,1	XNHQ09..
R335.25-200.1721.40-12L	02993747	Manicotto	200,0	11,0	54,0	12	12	40,0	90,0	50,0	–	5100	4,5	XNHQ12..
335.25-200.1721.50-12L	02993768	Manicotto	200,0	11,0	63,5	12	12	50,0	69,0	2,0	21,0	5100	4,5	XNHQ12..
R335.25-250.1317XL.60-16L	02993796	Manicotto	250,0	8,5	59,0	16	16	60,0	130,0	50,0	–	5800	5,9	XNHQ09..
335.25-250.1317XL.50-16L	02993811	Manicotto	250,0	8,5	88,5	16	16	50,0	69,0	1,75	17,0	5800	5,1	XNHQ09..
R335.25-250.1721XL.60-16L	02993750	Manicotto	250,0	11,0	59,0	16	16	60,0	130,0	50,0	–	4600	6,8	XNHQ12..
335.25-250.1721XL.50-16L	02993771	Manicotto	250,0	11,0	88,5	16	16	50,0	69,0	2,0	21,0	4600	4,9	XNHQ12..
R335.25-315.1317XL.60-20L	02993799	Manicotto	315,0	8,5	91,5	20	20	60,0	130,0	50,0	–	5200	8,5	XNHQ09..
335.25-315.1317XL.50-20L	02993814	Manicotto	315,0	8,5	121,0	20	20	50,0	69,0	1,75	17,0	5200	6,5	XNHQ09..
R335.25-315.1721XL.60-20L	02993753	Manicotto	315,0	11,0	91,5	20	20	60,0	130,0	50,0	–	4100	10,0	XNHQ12..
335.25-315.1721XL.50-20L	02993774	Manicotto	315,0	11,0	121,0	20	20	50,0	69,0	2,0	21,0	4100	8,1	XNHQ12..

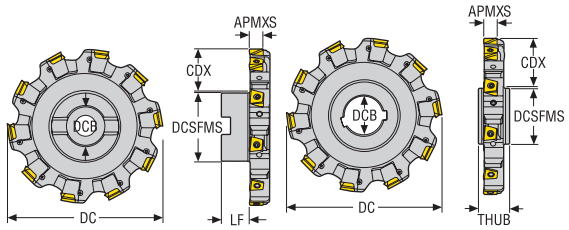
R335.25/335.25 - XNHQ/LNHQ14/17 – In mm - Due tagli – Versione sinistra a moduli



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
–Per il programma inserti completo, vedere le pagine 900
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			mm	mm	mm			mm	mm	mm	mm		kg		
R335.25-125.2126.32-8L	02814581	Manicotto	125,0	13,0	32,3	8	8	32,0	58,0	29,0	–	4900	1,7	XNHQ1407...	LNHQ1407...
335.25-125.2126.40-8L	02814602	Manicotto	125,0	13,0	32,7	8	8	40,0	55,0	5,5	32,0	4900	1,3	XNHQ1407...	LNHQ1407...
R335.25-160.2126.40-10L	02814585	Manicotto	160,0	13,0	43,8	10	10	40,0	70,0	29,0	–	4400	2,9	XNHQ1407...	LNHQ1407...
335.25-160.2126.40-10L	02814606	Manicotto	160,0	13,0	50,3	10	10	40,0	55,0	5,5	32,0	4400	2,3	XNHQ1407...	LNHQ1407...
R335.25-160.2632.40-10L	02827414	Manicotto	160,0	16,0	43,8	10	10	40,0	70,0	24,0	–	4600	3,4	XNHQ1707...	LNHQ1707...
335.25-160.2632.40-10L	02829068	Manicotto	160,0	16,0	50,3	10	10	40,0	55,0	3,0	32,0	4600	2,9	XNHQ1707...	LNHQ1707...
R335.25-200.2126.40-12L	02814589	Manicotto	200,0	13,0	54,0	12	12	40,0	90,0	29,0	–	3900	4,7	XNHQ1407...	LNHQ1407...
335.25-200.2126.50-12L	02814610	Manicotto	200,0	13,0	63,3	12	12	50,0	69,0	5,5	32,0	3900	3,9	XNHQ1407...	LNHQ1407...
R335.25-200.2632.40-12L	02827418	Manicotto	200,0	16,0	54,0	12	12	40,0	90,0	24,0	–	4100	5,4	XNHQ1707...	LNHQ1707...
335.25-200.2632.50-12L	02827444	Manicotto	200,0	16,0	63,3	12	12	50,0	69,0	3,0	32,0	4100	4,8	XNHQ1707...	LNHQ1707...
R335.25-250.2126XL.60-14L	02814593	Manicotto	250,0	13,0	59,0	14	14	60,0	130,0	29,0	–	3500	7,3	XNHQ1407...	LNHQ1407...
335.25-250.2126XL.50-14L	02814614	Manicotto	250,0	13,0	88,3	14	14	50,0	69,0	5,5	32,0	3500	6,0	XNHQ1407...	LNHQ1407...
R335.25-250.2632XL.60-14L	02827422	Manicotto	250,0	16,0	59,0	14	14	60,0	130,0	24,0	–	3700	8,4	XNHQ1707...	LNHQ1707...
335.25-250.2632XL.50-14L	02827448	Manicotto	250,0	16,0	88,3	14	14	50,0	69,0	3,0	32,0	3700	8,5	XNHQ1707...	LNHQ1707...
R335.25-315.2126XL.60-18L	02814598	Manicotto	315,0	13,0	91,5	18	18	60,0	130,0	29,0	–	3100	11,3	XNHQ1407...	LNHQ1407...
335.25-315.2126XL.60-18L	02814618	Manicotto	315,0	13,0	113,3	18	18	60,0	84,0	5,5	32,0	3100	10,0	XNHQ1407...	LNHQ1407...
R335.25-315.2632XL.60-18L	02827426	Manicotto	315,0	16,0	91,5	18	18	60,0	130,0	24,0	–	3300	13,4	XNHQ1707...	LNHQ1707...
335.25-315.2632XL.60-18L	02827452	Manicotto	315,0	16,0	113,3	18	18	60,0	84,0	3,0	32,0	3300	12,3	XNHQ1707...	LNHQ1707...

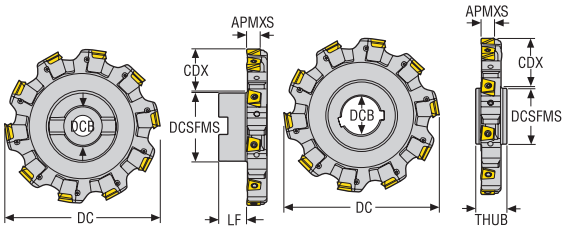
R335.25/335.25 - XNHQ09/12 – Pollici - Due tagli – Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 509-512
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911L	02993910	Manicotto	4.000	0.335	1.014	6	6	1.000	1.880	2.000	–	9200	2.200	XNHQ09
R335.25-04.00-1113L	02993853	Manicotto	4.000	0.433	1.014	6	6	1.000	1.880	2.000	–	7200	2.650	XNHQ12
R335.25-05.00-0911L	02993914	Manicotto	5.000	0.335	1.329	8	8	1.250	2.250	2.000	–	8200	3.310	XNHQ09
335.25-05.00-0911L	02993934	Manicotto	5.000	0.335	1.289	8	8	1.500	2.250	0.109	0.750	8200	2.200	XNHQ09
R335.25-05.00-1113L	02993857	Manicotto	5.000	0.433	1.329	8	8	1.250	2.250	2.000	–	6500	3.750	XNHQ12
335.25-05.00-1113L	02993884	Manicotto	5.000	0.433	1.289	8	8	1.500	2.250	0.165	1.000	6500	2.650	XNHQ12
R335.25-06.00-0911L	02993918	Manicotto	6.000	0.335	1.579	10	10	1.500	2.750	2.000	–	7200	6.170	XNHQ09
335.25-06.00-0911L	02993938	Manicotto	6.000	0.335	1.795	10	10	1.500	2.250	0.109	0.750	7200	4.410	XNHQ09
R335.25-06.00-1113L	02993861	Manicotto	6.000	0.433	1.579	10	10	1.500	2.750	2.000	–	5700	6.830	XNHQ12
335.25-06.00-1113L	02993888	Manicotto	6.000	0.433	1.795	10	10	1.500	2.250	0.165	1.000	5700	6.610	XNHQ12
R335.25-08.00-0911L	02993922	Manicotto	8.000	0.335	2.210	14	14	1.500	3.500	2.000	–	6500	8.380	XNHQ09
335.25-08.00-0911L	02993942	Manicotto	8.000	0.335	2.420	14	14	2.000	3.000	0.109	0.750	6500	5.950	XNHQ09
R335.25-08.00-1113L	02993865	Manicotto	8.000	0.433	2.210	12	12	1.500	3.500	2.000	–	5100	10.800	XNHQ12
335.25-08.00-1113L	02993892	Manicotto	8.000	0.433	2.420	12	12	2.000	3.000	0.165	1.000	5100	7.500	XNHQ12
R335.25-10.00-XL0911L	02993926	Manicotto	10.000	0.335	2.400	16	16	2.500	5.120	2.000	–	5800	13.450	XNHQ09
335.25-10.00-XL0911L	02993946	Manicotto	10.000	0.335	3.420	16	16	2.000	3.000	0.109	0.750	5800	9.040	XNHQ09
R335.25-10.00-XL1113L	02993869	Manicotto	10.000	0.433	2.400	16	16	2.500	5.120	2.000	–	4600	15.430	XNHQ12
335.25-10.00-XL1113L	02993896	Manicotto	10.000	0.433	3.420	16	16	2.000	3.000	0.165	1.000	4600	13.890	XNHQ12
R335.25-12.00-XL0911L	02993930	Manicotto	12.000	0.335	3.400	20	20	2.500	5.120	2.000	–	5200	17.860	XNHQ09
335.25-12.00-XL0911L	02993950	Manicotto	12.000	0.335	4.460	20	20	2.000	3.000	0.109	0.750	5200	13.450	XNHQ09
R335.25-12.00-XL1113L	02993873	Manicotto	12.000	0.433	3.400	20	20	2.500	5.120	2.000	–	4100	20.940	XNHQ12
335.25-12.00-XL1113L	02993900	Manicotto	12.000	0.433	4.420	20	20	2.000	3.000	0.165	1.000	4100	17.200	XNHQ12

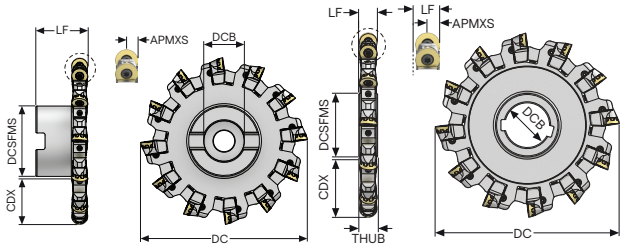
R335.25/335.25 - XNHQ/LNHQ14/17 – Pollici - Due tagli – Versione sinistra a moduli



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 513-516
–Per il programma inserti completo, vedere le pagine 900
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto: Prima scelta	Inserto: Scelta alternativa
			inch	inch	inch			inch	inch	inch	inch		lb		
R335.25-05.00-1316L	02814622	Manicotto	5.000	0.512	1.327	8	8	1.250	2.250	1.173	–	4900	3.970	XNHQ14	LNHQ14
335.25-05.00-1316L	02814642	Manicotto	5.000	0.512	1.291	8	8	1.500	2.250	0.212	1.250	4900	3.090	XNHQ14	LNHQ14
R335.25-06.00-1316L	02814626	Manicotto	6.000	0.512	1.579	10	10	1.500	2.750	1.173	–	4500	5.950	XNHQ14	LNHQ14
335.25-06.00-1316L	02814646	Manicotto	6.000	0.512	1.791	10	10	1.500	2.250	0.212	1.250	4500	4.850	XNHQ14	LNHQ14
R335.25-06.00-1620L	02827716	Manicotto	6.000	0.630	1.579	10	10	1.500	2.750	0.976	–	4700	6.830	XNHQ17	LNHQ17
335.25-06.00-1620L	02827739	Manicotto	6.000	0.630	1.791	10	10	1.500	2.250	0.113	1.250	4700	5.730	XNHQ17	LNHQ17
R335.25-08.00-1316L	02814630	Manicotto	8.000	0.512	2.209	12	12	1.500	3.500	1.173	–	3900	10.800	XNHQ14	LNHQ14
335.25-08.00-1316L	02814650	Manicotto	8.000	0.512	2.413	12	12	2.000	3.000	0.212	1.250	3900	9.040	XNHQ14	LNHQ14
R335.25-08.00-1620L	02827720	Manicotto	8.000	0.630	2.209	12	12	1.500	3.500	0.976	–	4100	12.570	XNHQ17	LNHQ17
335.25-08.00-1620L	02827743	Manicotto	8.000	0.630	2.413	12	12	2.000	3.000	0.113	1.250	4100	11.020	XNHQ17	LNHQ17
R335.25-10.00-XL1316L	02814634	Manicotto	10.000	0.512	2.402	14	14	2.500	5.118	1.173	–	3500	16.530	XNHQ14	LNHQ14
335.25-10.00-XL1316L	02814654	Manicotto	10.000	0.512	3.413	14	14	2.000	3.000	0.212	1.250	3500	13.890	XNHQ14	LNHQ14
R335.25-10.00-XL1620L	02827724	Manicotto	10.000	0.630	2.402	14	14	2.500	5.120	0.976	–	3600	18.740	XNHQ17	LNHQ17
335.25-10.00-XL1620L	02827747	Manicotto	10.000	0.630	3.413	14	14	2.000	3.000	0.113	1.250	3600	19.400	XNHQ17	LNHQ17
R335.25-12.00-XL1316L	02814638	Manicotto	12.000	0.512	3.402	18	18	2.500	5.118	1.173	–	3200	23.150	XNHQ14	LNHQ14
335.25-12.00-XL1316L	02814658	Manicotto	12.000	0.512	4.413	18	18	2.000	3.000	0.212	1.250	3200	20.720	XNHQ14	LNHQ14
R335.25-12.00-XL1620L	02827728	Manicotto	12.000	0.630	3.402	18	18	2.500	5.120	0.976	–	3300	27.340	XNHQ17	LNHQ17
335.25-12.00-XL1620L	02827751	Manicotto	12.000	0.630	4.413	18	18	2.000	3.000	0.113	1.250	3300	25.350	XNHQ17	LNHQ17

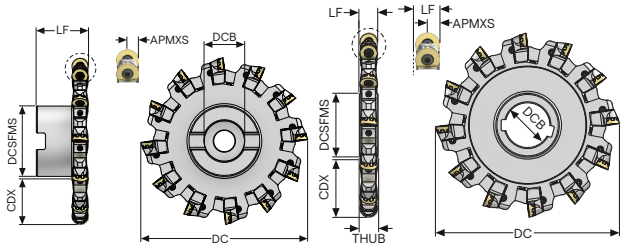
R335.25/335.25 - RP..1605/RP..2006 – In mm - Due tagli - Versione sinistra - Profilo sferico a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
—Per il programma inserti completo, vedere le pagine 879
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm		kg	
R335.25-100.1317.27-6L-R8	02993817	Manicotto	105,0	8,0	28,0	6	6	27,0	48,0	51,265	–	9200	1,2	RP..1605
R335.25-125.1317.32-8L-R8	02993820	Manicotto	130,0	8,0	35,5	8	8	32,0	58,0	51,265	–	8200	1,8	RP..1605
335.25-125.1317.40-8L-R8	02993835	Manicotto	130,0	8,0	36,1	8	8	40,0	55,0	0,48	17,0	8200	1,1	RP..1605
R335.25-160.1317.40-12L-R8	02993823	Manicotto	165,0	8,0	47,0	12	12	40,0	70,0	51,265	–	7200	2,3	RP..1605
335.25-160.1317.40-12L-R8	02993838	Manicotto	165,0	8,0	53,6	12	12	40,0	55,0	0,48	17,0	7200	1,5	RP..1605
R335.25-200.1317.40-14L-R8	02993826	Manicotto	205,0	8,0	57,0	14	14	40,0	90,0	51,265	–	6500	3,5	RP..1605
335.25-200.1317.50-14L-R8	02993841	Manicotto	205,0	8,0	66,6	14	14	50,0	69,0	0,48	17,0	6500	3,8	RP..1605
R335.25-250.1317XL.60-16L-R8	02993829	Manicotto	255,0	8,0	62,0	16	16	60,0	130,0	51,265	–	5800	6,1	RP..1605
335.25-250.1317XL.50-16L-R8	02993844	Manicotto	255,0	8,0	91,6	16	16	50,0	69,0	0,48	17,0	5800	5,3	RP..1605
335.25-250.1721XL.50-16L-R10I	10296534	Manicotto	255,0	10,0	91,5	16	16	50,0	69,0	0,48	21,0	4600	4,2	RP..2006
R335.25-250.1721XL.60-16L-R10I	10296537	Manicotto	255,0	10,0	62,0	16	16	60,0	130,0	31,48	–	4600	6,0	RP..2006
R335.25-315.1317XL.60-20L-R8	02993832	Manicotto	320,0	8,0	94,5	20	20	60,0	130,0	51,265	–	5200	8,6	RP..1605
335.25-315.1317XL.50-20L-R8	02993847	Manicotto	320,0	8,0	124,1	20	20	50,0	69,0	0,48	17,0	5200	6,5	RP..1605
335.25-315.1721XL.50-20L-R10I	10296535	Manicotto	320,0	10,0	124,1	20	20	50,0	69,0	0,48	21,0	4100	7,3	RP..2006
R335.25-315.1721XL.60-20L-R10I	10296539	Manicotto	320,0	10,0	94,5	20	20	60,0	130,0	31,48	–	4100	9,1	RP..2006

R335.25/335.25 - RP..1605/RP..2006 – Pollici - Due tagli - Versione sinistra - Profilo sferico a moduli



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 536-541
–Per il programma inserti completo, vedere le pagine 879
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	ZNP	DCB	DCSFMS	LF	THUB	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch		lb	
R335.25-04.00-0911L-R8	02993953	Manicotto	4.197	0.315	1.138	6	6	1.000	1.880	2.050	–	9200	2.200	RP..1605
R335.25-05.00-0911L-R8	02993956	Manicotto	5.197	0.315	1.453	8	8	1.250	2.250	2.050	–	8200	3.310	RP..1605
335.25-05.00-0911L-R8	02993971	Manicotto	5.197	0.315	1.414	8	8	1.500	2.250	0.059	0.750	8200	2.200	RP..1605
R335.25-06.00-0911L-R8	02993959	Manicotto	6.197	0.315	1.703	10	10	1.500	2.750	2.050	–	7200	5.070	RP..1605
335.25-06.00-0911L-R8	02993974	Manicotto	6.197	0.315	1.914	10	10	1.500	2.250	0.059	0.750	7200	3.090	RP..1605
R335.25-08.00-0911L-R8	02993962	Manicotto	8.197	0.315	2.329	14	14	1.500	3.500	2.050	–	6500	8.380	RP..1605
335.25-08.00-0911L-R8	02993977	Manicotto	8.197	0.315	2.539	14	14	2.000	3.000	0.059	0.750	6500	18.080	RP..1605
R335.25-10.00-XL0911L-R8	02993965	Manicotto	10.197	0.315	2.519	16	16	2.500	5.120	2.050	–	5800	13.670	RP..1605
335.25-10.00-XL0911L-R8	02993980	Manicotto	10.197	0.315	3.539	16	16	2.000	3.000	0.059	0.750	5800	9.260	RP..1605
335.25-10.00-XL1113L-R10I	10296541	Manicotto	10.197	0.394	3.539	16	16	2.000	3.000	0.106	1.000	4600	9.920	RP..2006
R335.25-10.00-XL1113L-R10I	10296545	Manicotto	10.197	0.394	2.520	16	16	2.500	5.120	1.271	–	4600	13.670	RP..2006
R335.25-12.00-XL0911L-R8	02993968	Manicotto	12.197	0.315	3.519	20	20	2.500	5.120	2.050	–	5200	18.080	RP..1605
335.25-12.00-XL0911L-R8	02993983	Manicotto	12.197	0.315	4.579	20	20	2.000	3.000	0.059	0.750	5200	13.670	RP..1605
335.25-12.00-XL1113L-R10I	10296543	Manicotto	12.197	0.394	4.539	20	20	2.000	3.000	0.106	1.000	4100	14.990	RP..2006
R335.25-12.00-XL1113L-R10I	10296547	Manicotto	12.197	0.394	3.520	20	20	2.500	5.120	1.271	–	4100	18.740	RP..2006

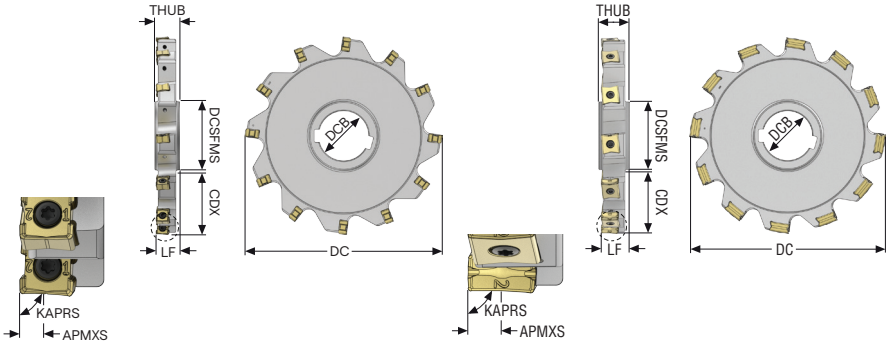


335.98 / 335.18 XN05 / 335.25 XN07

Sistema di spianatura a disco di sotto-squadri e frontali con inserti economici a 8 taglienti

- Sistema di spianatura a disco facile da usare, robusta e a taglio dolce dedicato a operazioni di spianatura sotto-squadri e frontali.
- Profondità di taglio fino a 5 mm con inserto XNXU05 e fino a 6,9 mm con inserti XNXH07
- Diametro gamma da 80 a 315 mm (4,0 - 12”)
- Larghezza di taglio fissa o regolabile con moduli intercambiabili
- Disponibile con attacco a manicotto e a flangia
- Raggi di punta inserto disponibili da 0,4 a 3,1 mm (0,016 - 0,122”)

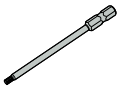
335.98 - XNXU05/XNHQ07 – In mm - Destro – Sede fissa



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
–Per il programma inserti completo, vedere le pagine 865-866
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	DCONMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm	mm			kg	
335.98-160-05-40-12R	10272547	Manicotto	160,0	5,0	50,5	12	40,0	54,0	40,0	19,0	20,0	90,0	5100	1,9	XNXU0505
335.98-160-07-40-12R	10266675	Manicotto	160,0	6,9	50,5	12	40,0	54,0	40,0	23,0	25,0	90,0	4400	2,2	XNHQ0707

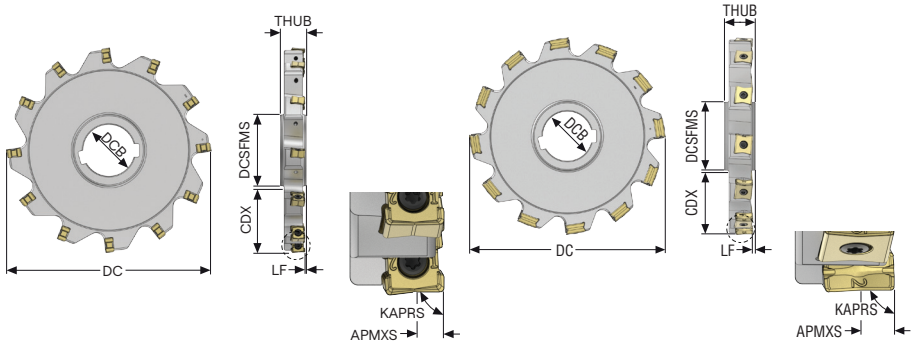
Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
335.98-05	1/4HEX-T10PX90	C03509-T10P
335.98-07	1/4HEX-T15PX50	C04013-T15P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.98-05	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30
335.98-07	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	–	T00T-15P50

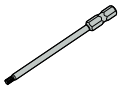
335.98 - XNXU05/XNHQ07 – In mm - Versione sinistra – Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 507-508
—Per il programma inserti completo, vedere le pagine 865-866
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm			kg	
335.98-160-05-40-12L	10272548	Manicotto	160,0	5,0	50,5	12	40,0	54,0	1,0	20,0	90,0	5100	1,8	XNXU0505
335.98-160-07-40-12L	10266676	Manicotto	160,0	6,9	50,5	12	40,0	54,0	2,0	25,0	90,0	4400	2,2	XNHQ0707

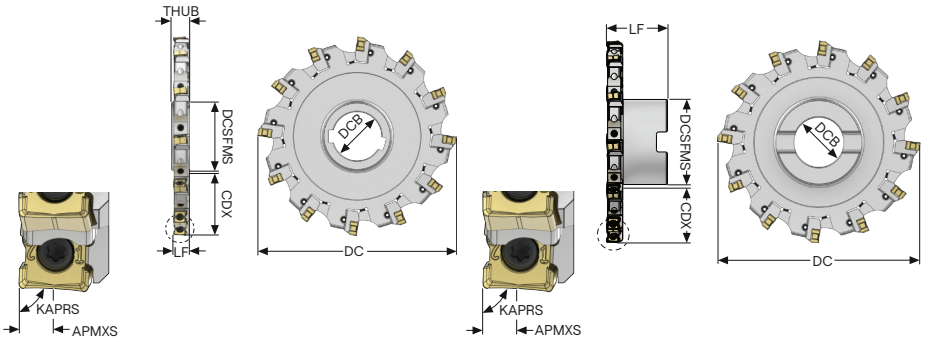
Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
335.98-05	1/4HEX-T10PX90	C03509-T10P
335.98-07	1/4HEX-T15PX50	C04013-T15P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.98-05	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30
335.98-07	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	–	T00T-15P50

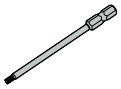
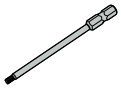
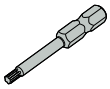
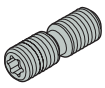
335.18 - XNXU05 – In mm - Due tagli – Versione destra a moduli



–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 517-518
–Per il programma inserti completo, vedere le pagine 903
–Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm			kg	
R335.18-080.1215.27-6R-XN05	10272481	Manicotto	84,86	5,0	14,8	6	27,0	48,0	50,0	–	90,0	10500	0,7	XNXU0505
335.18-100.1215.27-8R-XN05	10272475	Manicotto	104,85	5,0	27,7	8	27,0	41,0	13,5	15,0	90,0	9400	0,4	XNXU0505
R335.18-100.1215.27-8R-XN05	10272482	Manicotto	104,85	5,0	24,8	8	27,0	48,0	50,0	–	90,0	9400	0,9	XNXU0505
335.18-125.1215.40-10R-XN05	10272476	Manicotto	129,93	5,0	33,2	10	40,0	55,0	13,5	15,0	90,0	8400	0,7	XNXU0505
R335.18-125.1215.32-10R-XN05	10272483	Manicotto	129,93	5,0	32,3	10	32,0	58,0	50,0	–	90,0	8400	1,1	XNXU0505
335.18-160.1215.40-12R-XN05	10272477	Manicotto	165,0	5,0	50,5	12	40,0	55,0	13,5	15,0	90,0	7500	1,3	XNXU0505
R335.18-160.1215.40-12R-XN05	10272484	Manicotto	165,0	5,0	44,0	12	40,0	70,0	50,0	–	90,0	7500	1,9	XNXU0505
335.18-200.1215XL.50-14R-XN05	10272478	Manicotto	200,0	5,0	63,5	14	50,0	69,0	13,5	15,0	90,0	6700	1,7	XNXU0505
R335.18-200.1215XL.40-14R-XN05	10272485	Manicotto	200,0	5,0	53,5	14	40,0	90,0	50,0	–	90,0	6700	2,9	XNXU0505
335.18-250.1215XL.50-18R-XN05	10272479	Manicotto	250,0	5,0	88,5	18	50,0	69,0	13,5	15,0	90,0	6000	3,0	XNXU0505
R335.18-250.1215XL.40-18R-XN05	10272486	Manicotto	250,0	5,0	79,0	18	40,0	90,0	50,0	–	90,0	6000	4,2	XNXU0505
335.18-315.1215XL.50-24R-XN05	10272480	Manicotto	315,0	5,0	121,0	24	50,0	69,0	13,5	15,0	90,0	5300	5,1	XNXU0505

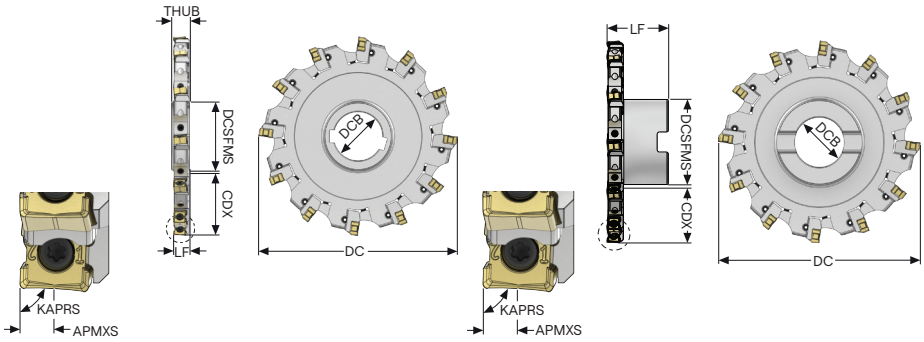
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Modulo	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
								
335.18-..	SH6005-T09P	R335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
335.18-XL	SH6005-T09P	R335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P
R335.18-080-160	SH6005-T09P	R335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
R335.18-200-250	SH6005-T09P	R335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.18/R335.18	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

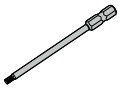
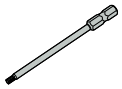
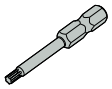
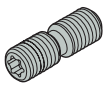
335.18 - XNXU05 – Pollici - Due tagli – Versione destra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 517–518
—Per il programma inserti completo, vedere le pagine 903
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500–506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch			lb	
R335.18-04.00-0809R-XN05	10272502	Manicotto	4.191	0.197	1.014	8	1.000	1.880	2.000	–	90,0	9400	1.980	XNXU0505
335.18-05.00-0809R-XN05	10272497	Manicotto	5.194	0.197	1.285	10	1.500	2.252	0.549	0.625	90,0	8400	1.760	XNXU0505
R335.18-05.00-0809R-XN05	10272503	Manicotto	5.194	0.197	1.329	10	1.250	2.250	2.000	–	90,0	8400	2.870	XNXU0505
335.18-06.00-0809R-XN05	10272498	Manicotto	6.197	0.197	1.790	12	1.500	2.252	0.549	0.625	90,0	7500	2.650	XNXU0505
R335.18-06.00-0809R-XN05	10272504	Manicotto	6.197	0.197	1.585	12	1.500	2.750	2.000	–	90,0	7500	3.750	XNXU0505
335.18-08.00-XL0809R-XN05	10272499	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.547	0.625	90,0	6700	4.190	XNXU0505
R335.18-08.00-XL0809R-XN05	10272505	Manicotto	8.000	0.197	2.224	14	1.500	3.500	2.000	–	90,0	6700	6.830	XNXU0505
335.18-10.00-XL0809R-XN05	10272500	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.547	0.625	90,0	6000	7.050	XNXU0505
R335.18-10.00-XL0809R-XN05	10272506	Manicotto	10.000	0.197	3.209	18	1.500	3.500	2.000	–	90,0	6000	9.700	XNXU0505
335.18-12.00-XL0809R-XN05	10272501	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.547	0.625	90,0	5300	10.580	XNXU0505

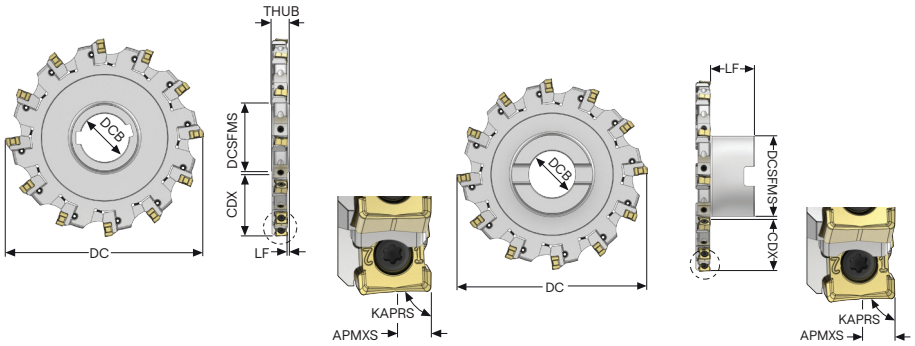
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Modulo	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
								
335.18/R335.18-..	SH6005-T09P	R335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
335.18/R335.18XL	SH6005-T09P	R335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.18/R335.18-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30
335.18/R335.18XL	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	–
335.18/R335.18XL	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

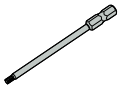
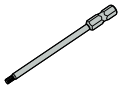
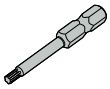
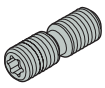
335.18 - XNXU05 – In mm - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 517-518
—Per il programma inserti completo, vedere le pagine 903
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm			kg	
R335.18-080.1215.27-6L-XN05	10272469	Manicotto	84,86	5,0	14,8	6	27,0	48,0	38,0	–	90,0	10500	0,7	XNXU0505
335.18-100.1215.27-8L-XN05	10272463	Manicotto	104,85	5,0	27,7	8	27,0	41,0	1,5	15,0	90,0	9400	0,4	XNXU0505
R335.18-100.1215.27-8L-XN05	10272470	Manicotto	104,85	5,0	24,8	8	27,0	48,0	38,0	–	90,0	9400	0,9	XNXU0505
335.18-125.1215.40-10L-XN05	10272464	Manicotto	129,93	5,0	33,2	10	40,0	55,0	1,5	15,0	90,0	8400	0,7	XNXU0505
R335.18-125.1215.32-10L-XN05	10272471	Manicotto	129,93	5,0	32,3	10	32,0	58,0	38,0	–	90,0	8400	1,1	XNXU0505
335.18-160.1215.40-12L-XN05	10272465	Manicotto	165,0	5,0	50,5	12	40,0	55,0	1,5	15,0	90,0	7500	1,3	XNXU0505
R335.18-160.1215.40-12L-XN05	10272472	Manicotto	165,0	5,0	44,0	12	40,0	70,0	38,0	–	90,0	7500	1,9	XNXU0505
335.18-200.1215XL.50-14L-XN05	10272466	Manicotto	200,0	5,0	63,5	14	50,0	69,0	1,5	15,0	90,0	6700	1,7	XNXU0505
R335.18-200.1215XL.40-14L-XN05	10272473	Manicotto	200,0	5,0	53,5	14	40,0	90,0	38,0	–	90,0	6700	2,9	XNXU0505
335.18-250.1215XL.50-18L-XN05	10272467	Manicotto	250,0	5,0	88,5	18	50,0	69,0	1,5	15,0	90,0	6000	3,0	XNXU0505
R335.18-250.1215XL.40-18L-XN05	10272474	Manicotto	250,0	5,0	79,0	18	40,0	90,0	38,0	–	90,0	6000	4,2	XNXU0505
335.18-315.1215XL.50-24L-XN05	10272468	Manicotto	315,0	5,0	121,0	24	50,0	69,0	1,5	15,0	90,0	5300	5,1	XNXU0505

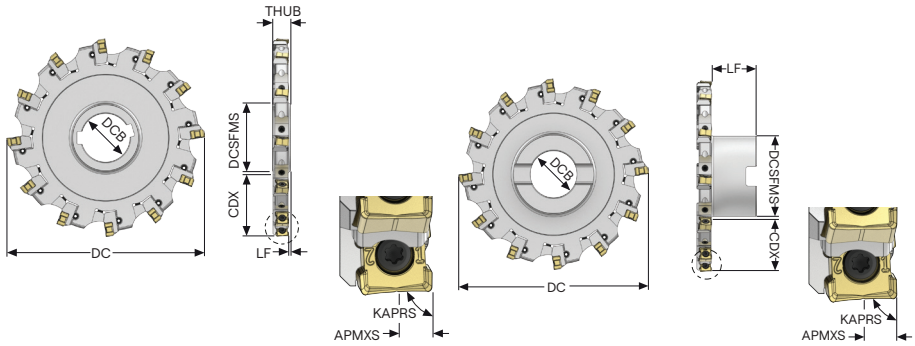
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Modulo	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
								
335.18-..	SH6005-T09P	L335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
335.18-XL	SH6005-T09P	L335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P
R335.18-080-160	SH6005-T09P	L335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
R335.18-200-250	SH6005-T09P	L335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.18/R335.18	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

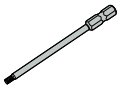
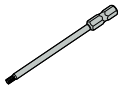
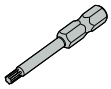
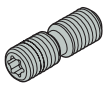
335.18 - XNXU05 – Pollici - Due tagli - Versione sinistra a moduli



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 517–518
—Per il programma inserti completo, vedere le pagine 903
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500–506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch			lb	
R335.18-04.00-0809L-XN05	10272492	Manicotto	4.191	0.197	1.014	8	1.000	1.880	1.528	–	90,0	9400	2.650	XNXU0505
335.18-05.00-0809L-XN05	10272487	Manicotto	5.194	0.197	1.285	10	1.500	2.252	0.076	0.625	90,0	8400	1.760	XNXU0505
R335.18-05.00-0809L-XN05	10272493	Manicotto	5.194	0.197	1.329	10	1.250	2.250	1.528	–	90,0	8400	2.870	XNXU0505
335.18-06.00-0809L-XN05	10272488	Manicotto	6.197	0.197	1.790	12	1.500	2.252	0.076	0.625	90,0	7500	2.650	XNXU0505
R335.18-06.00-0809L-XN05	10272494	Manicotto	6.197	0.197	1.585	12	1.500	2.750	1.528	–	90,0	7500	3.750	XNXU0505
335.18-08.00-XL0809L-XN05	10272489	Manicotto	8.000	0.197	2.421	14	2.000	3.000	0.078	0.625	90,0	6700	4.190	XNXU0505
R335.18-08.00-XL0809L-XN05	10272495	Manicotto	8.000	0.197	2.224	14	1.500	3.500	1.531	–	90,0	6700	6.830	XNXU0505
335.18-10.00-XL0809L-XN05	10272490	Manicotto	10.000	0.197	3.386	18	2.000	3.000	0.078	0.625	90,0	6000	7.050	XNXU0505
R335.18-10.00-XL0809L-XN05	10272496	Manicotto	10.000	0.197	3.209	18	1.500	3.500	1.531	–	90,0	6000	9.700	XNXU0505
335.18-12.00-XL0809L-XN05	10272491	Manicotto	12.000	0.197	4.390	22	2.000	3.000	0.078	0.625	90,0	5300	10.580	XNXU0505

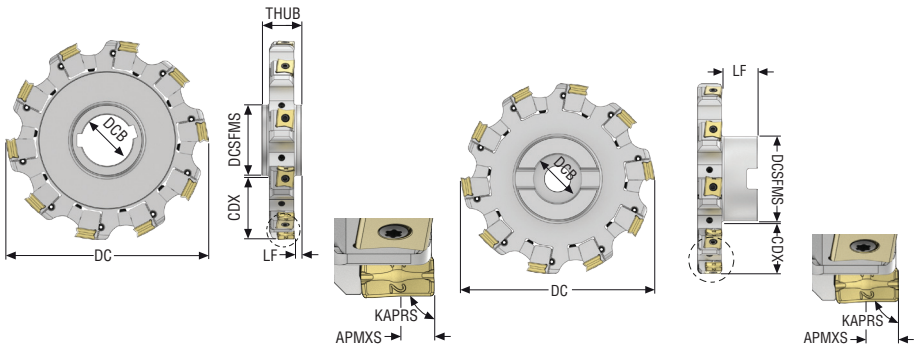
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Modulo	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
								
335.18/R335.18-..	SH6005-T09P	L335.18-1215-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-611	LD6018F-T20P
335.18/R335.18XL	SH6005-T09P	L335.18-1215XL-XN05	1/4HEX-T20PX90	1/4HEX-T10PX90	C03509-T10P	1/4HEX-T09PX50	335.18-XL611	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
335.18/R335.18	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

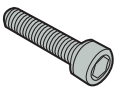
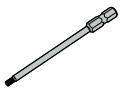
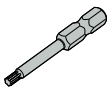
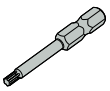
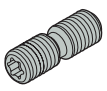
R335.25/335.25 - XNHQ07 – In mm - Due tagli - Versione sinistra a moduli



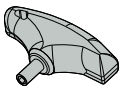
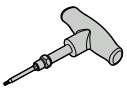
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 519-520
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm			kg	
335.25-125.2126.40-8L-XN07	10265808	Manicotto	125,0	6,9	32,7	8	40,0	55,0	5,5	32,0	90,0	4900	1,4	XNHQ0707
R335.25-125.2126.32-8L-XN07	10265813	Manicotto	125,0	6,9	32,3	8	32,0	58,0	29,0	–	90,0	4900	1,8	XNHQ0707
335.25-160.2126.40-10L-XN07	10265809	Manicotto	160,0	6,9	50,3	10	40,0	55,0	5,5	32,0	90,0	4400	2,4	XNHQ0707
R335.25-160.2126.40-10L-XN07	10265814	Manicotto	160,0	6,9	43,8	10	40,0	70,0	29,0	–	90,0	4400	3,0	XNHQ0707
335.25-200.2126.50-12L-XN07	10265810	Manicotto	200,0	6,9	63,3	12	50,0	69,0	5,5	32,0	90,0	3900	4,0	XNHQ0707
R335.25-200.2126.40-12L-XN07	10265815	Manicotto	200,0	6,9	54,0	12	40,0	90,0	29,0	–	90,0	3900	4,7	XNHQ0707
335.25-250.2126XL.50-14L-XN07	10265811	Manicotto	250,0	6,9	88,3	14	50,0	69,0	5,5	32,0	90,0	3500	6,0	XNHQ0707
R335.25-250.2126XL.60-14L-XN07	10265816	Manicotto	250,0	6,9	59,0	14	60,0	130,0	29,0	–	90,0	3500	7,4	XNHQ0707
335.25-315.2126XL.60-18L-XN07	10265812	Manicotto	315,0	6,9	113,3	18	60,0	84,0	5,5	32,0	90,0	3100	10,0	XNHQ0707
R335.25-315.2126XL.60-18L-XN07	10265817	Manicotto	315,0	6,9	91,5	18	60,0	130,0	29,0	–	90,0	3100	11,5	XNHQ0707

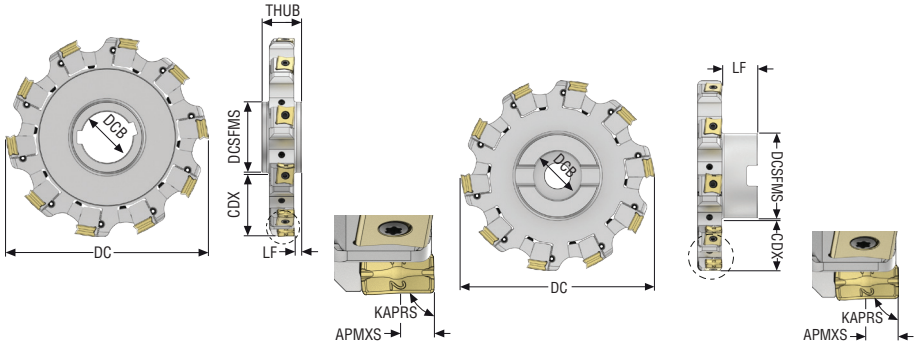
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Vite attacco	Modulo (L)	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
									
335.25	SH6005-T09P	–	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
335.25-XL	SH6005-T09P	–	L335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-125	SH6005-T09P	MC6S16X40	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-160	SH6005-T09P	MLC6S20X40	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-200	SH6005-T09P	–	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-250-315	SH6005-T09P	–	L335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
335.25/R335.25-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	T00T-15P50

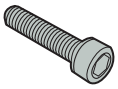
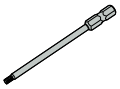
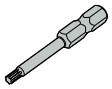
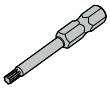
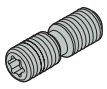
R335.25/335.25 - XNHQ07 – Pollici - Due tagli - Versione sinistra a moduli



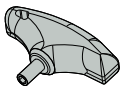
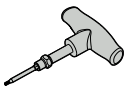
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 519–520
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500–506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch			lb	
335.25-05.00-1316L-XN07	10265828	Manicotto	5.000	0.272	1.291	8	1.500	2.250	0.212	1.250	90,0	4900	3.310	XNHQ0707
R335.25-05.00-1316L-XN07	10265833	Manicotto	5.000	0.272	1.327	8	1.250	2.250	1.173	–	90,0	4900	4.190	XNHQ0707
335.25-06.00-1316L-XN07	10265829	Manicotto	6.000	0.272	1.791	10	1.500	2.250	0.212	1.250	90,0	4500	4.850	XNHQ0707
R335.25-06.00-1316L-XN07	10265834	Manicotto	6.000	0.272	1.579	10	1.500	2.750	1.173	–	90,0	4500	6.170	XNHQ0707
335.25-08.00-1316L-XN07	10265830	Manicotto	8.000	0.272	2.413	12	2.000	3.000	0.212	1.250	90,0	3900	9.260	XNHQ0707
R335.25-08.00-1316L-XN07	10265835	Manicotto	8.000	0.272	2.209	12	1.500	3.500	1.173	–	90,0	3900	11.020	XNHQ0707
335.25-10.00-XL1316L-XN07	10265831	Manicotto	10.000	0.272	3.413	14	2.000	3.000	0.212	1.250	90,0	3500	14.110	XNHQ0707
R335.25-10.00-XL1316L-XN07	10265836	Manicotto	10.000	0.272	2.402	14	2.500	5.118	1.173	–	90,0	3500	16.760	XNHQ0707
335.25-12.00-XL1316L-XN07	10265832	Manicotto	12.000	0.272	4.413	18	2.000	3.000	0.212	1.250	90,0	3200	20.720	XNHQ0707
R335.25-12.00-XL1316L-XN07	10265837	Manicotto	12.000	0.272	3.402	18	2.500	5.118	1.173	–	90,0	3200	23.590	XNHQ0707

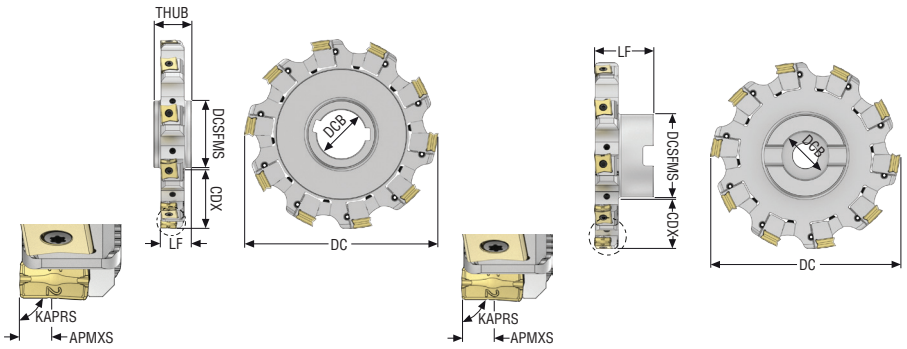
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Vite attacco	Modulo (L)	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
									
335.25-..	SH6005-T09P	–	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
335.25-XL	SH6005-T09P	–	L335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-05.00	SH6005-T09P	ULC6S5/8UNFX11/2	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-06.00	SH6005-T09P	ULC6S3/4UNFX11/2	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-08.00	SH6005-T09P	–	L335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-10.00	SH6005-T09P	–	L335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-12.00	SH6005-T09P	–	L335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
335.25/R335.25-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	T00T-15P50

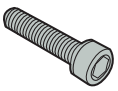
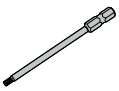
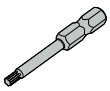
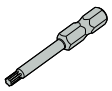
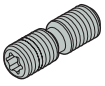
R335.25/335.25 - XNHQ07 – In mm – Due tagli – Versione destra a moduli



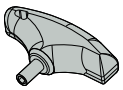
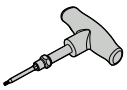
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 519-520
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm	mm	mm			kg	
335.25-125.2126.40-8R-XN07	10265818	Manicotto	125,0	6,9	32,7	8	40,0	55,0	26,5	32,0	90,0	4900	1,4	XNHQ0707
R335.25-125.2126.32-8R-XN07	10265823	Manicotto	125,0	6,9	32,3	8	32,0	58,0	50,0	–	90,0	4900	1,8	XNHQ0707
335.25-160.2126.40-10R-XN07	10265819	Manicotto	160,0	6,9	50,3	10	40,0	55,0	26,5	32,0	90,0	4400	2,4	XNHQ0707
R335.25-160.2126.40-10R-XN07	10265824	Manicotto	160,0	6,9	43,8	10	40,0	70,0	50,0	–	90,0	4400	3,0	XNHQ0707
335.25-200.2126.50-12R-XN07	10265820	Manicotto	200,0	6,9	63,3	12	50,0	69,0	26,5	32,0	90,0	3900	4,0	XNHQ0707
R335.25-200.2126.40-12R-XN07	10265825	Manicotto	200,0	6,9	54,0	12	40,0	90,0	50,0	–	90,0	3900	4,7	XNHQ0707
335.25-250.2126XL.50-14R-XN07	10265821	Manicotto	250,0	6,9	88,3	14	50,0	69,0	26,5	32,0	90,0	3500	6,0	XNHQ0707
R335.25-250.2126XL.60-14R-XN07	10265826	Manicotto	250,0	6,9	59,0	14	60,0	130,0	50,0	–	90,0	3500	7,4	XNHQ0707
335.25-315.2126XL.60-18R-XN07	10265822	Manicotto	315,0	6,9	113,3	18	60,0	84,0	26,5	32,0	90,0	3100	10,0	XNHQ0707
R335.25-315.2126XL.60-18R-XN07	10265827	Manicotto	315,0	6,9	91,5	18	60,0	130,0	50,0	–	90,0	3100	11,5	XNHQ0707

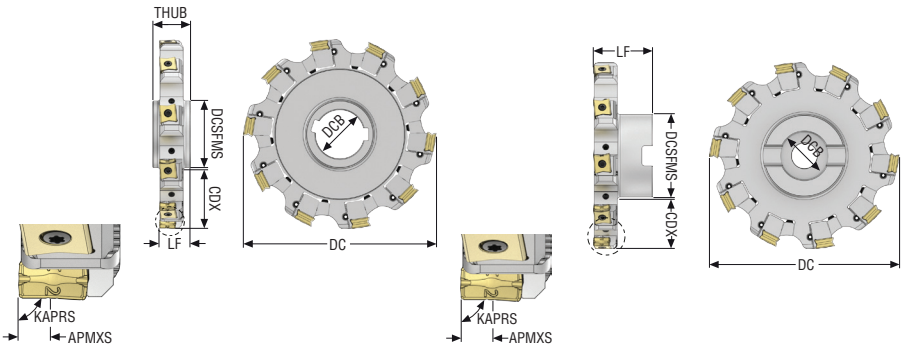
Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Vite attacco	Modulo (R)	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
									
335.25-..	SH6005-T09P	–	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
335.25-XL	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-125	SH6005-T09P	MC6S16X40	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-160	SH6005-T09P	MLC6S20X40	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-200	SH6005-T09P	–	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-250	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-315	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
335.25/R335.25-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	T00T-15P50

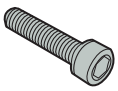
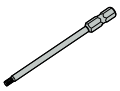
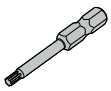
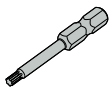
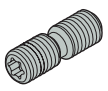
R335.25/335.25 - XNHQ07 – Pollici – Due tagli – Versione destra a moduli



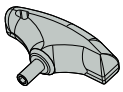
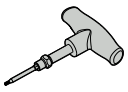
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 519–520
—Per il programma inserti completo, vedere le pagine 900
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500–506
—Per la spiegazione degli attributi ISO, vedere pag. 16

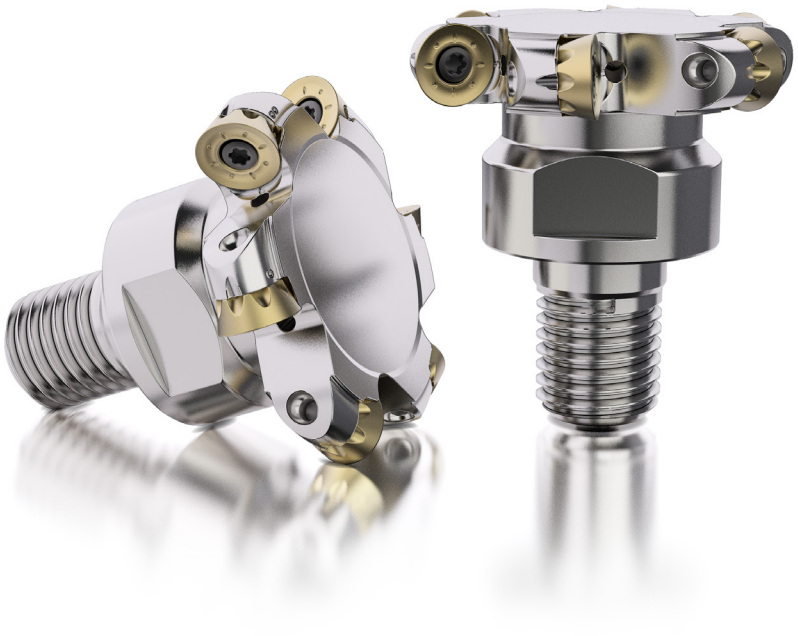
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	APMXS	CDX	ZEFP	DCB	DCSFMS	LF	THUB	KAPRS°	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch	inch	inch			lb	
335.25-05.00-1316R-XN07	10265838	Manicotto	5.000	0.272	1.291	8	1.500	2.250	1.038	1.250	90,0	4900	3.310	XNHQ0707
R335.25-05.00-1316R-XN07	10265843	Manicotto	5.000	0.272	1.327	8	1.250	2.250	2.000	–	90,0	4900	4.190	XNHQ0707
335.25-06.00-1316R-XN07	10265839	Manicotto	6.000	0.272	1.791	10	1.500	2.250	1.038	1.250	90,0	4500	4.850	XNHQ0707
R335.25-06.00-1316R-XN07	10265844	Manicotto	6.000	0.272	1.579	10	1.500	2.750	2.000	–	90,0	4500	6.170	XNHQ0707
335.25-08.00-1316R-XN07	10265840	Manicotto	8.000	0.272	2.413	12	2.000	3.000	1.038	1.250	90,0	3900	9.260	XNHQ0707
R335.25-08.00-1316R-XN07	10265845	Manicotto	8.000	0.272	2.209	12	1.500	3.500	2.000	–	90,0	3900	11.020	XNHQ0707
335.25-10.00-XL1316R-XN07	10265841	Manicotto	10.000	0.272	3.413	14	2.000	3.000	1.038	1.250	90,0	3500	14.110	XNHQ0707
R335.25-10.00-XL1316R-XN07	10265846	Manicotto	10.000	0.272	2.402	14	2.500	5.118	2.000	–	90,0	3500	16.760	XNHQ0707
335.25-12.00-XL1316R-XN07	10265842	Manicotto	12.000	0.272	4.413	18	2.000	3.000	1.038	1.250	90,0	3200	20.720	XNHQ0707
R335.25-12.00-XL1316R-XN07	10265847	Manicotto	12.000	0.272	3.402	18	2.500	5.118	2.000	–	90,0	3200	23.590	XNHQ0707

Parti di ricambio, comprese nella fornitura

Per fresa	Vite di regolazione	Vite attacco	Modulo (R)	Chiave per vite staffa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave di regolazione	Cuneo	Vite cuneo
									
335.25-..	SH6005-T09P	–	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
335.25-XL	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-05.00	SH6005-T09P	ULC6S5/8UNFX11/2	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-06.00	SH6005-T09P	ULC6S3/4UNFX11/2	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-08.00	SH6005-T09P	–	R335.25-2126-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-10.00	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P
R335.25-12.00	SH6005-T09P	–	R335.25-2126XL-XN07	1/4HEX-T20PX90	1/4HEX-T15PX50	C04013-T15P	1/4HEX-T09PX50	335.25-620	LD6018F-T20P

Accessori

Per	Chiave dinamometrica regolabile	Impugnatura	Chiave dinamometrica
			
335.25/R335.25-..	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	T00T-15P50

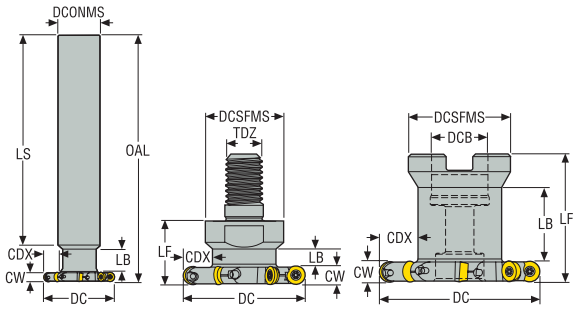


335.29

Sistema di frese a disco a taglio dolce con inserti tondi dedicata per scanalatura con profilo sferico o operazioni di profilatura 3D

- Larghezza di taglio 5-12 mm (0,236-0,394")
- Diametro della gamma di frese 25-80 mm (1,5-3,0")
- Disponibile con attacchi cilindrico, a manicotto e Combimaster con collegamento per adduzione refrigerante
- Soluzione conveniente fino a 6 taglienti per inserto

Cutter 335.29 - Inserto tondo – In mm - tre tagli - profilo sferico - Sede fissa



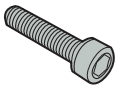
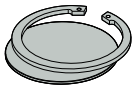
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 521-535
—Per il programma inserti completo, vedere le pagine 874, 877
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	DCB	DCSFMS	TDZ	DCONMS	LF	LS	OAL	LB	RPMX	Peso	Inserto
			mm	mm	mm		mm	mm		mm	mm	mm	mm	mm		kg	
R335.29-063.06.22-10N-R3A	02627922	Manicotto	63,0	6,0	15,0	10	22,0	40,0	–	–	50,0	–	–	30,6	13900	0,4	RD..06T1
R335.29-063.07.22-10N-R35A	02627950	Manicotto	63,0	7,0	15,0	10	22,0	40,0	–	–	50,0	–	–	29,6	22500	0,4	RD..0702
R335.29-063.08.22-8N-R4A	02661224	Manicotto	63,0	8,0	15,0	8	22,0	40,0	–	–	50,0	–	–	28,6	15600	0,4	RD..08..
R335.29I-063.10.22-6N-R5A	03278719	Manicotto	63,0	10,0	14,67	6	22,0	38,0	–	–	50,0	–	–	26,61	13500	0,4	RD..10T3
R335.29I-063.12.22-6N-R6A	02988078	Manicotto	63,0	12,0	15,0	6	22,0	40,0	–	–	50,0	–	–	24,6	10200	0,4	RP..1204
R335.29-080.08.27-10N-R4A	02627974	Manicotto	80,0	8,0	20,0	10	27,0	48,0	–	–	50,0	–	–	26,8	13700	0,6	RD..08..
R335.29I-080.10.27-8N-R5A	03278720	Manicotto	80,0	10,0	19,67	8	27,0	46,0	–	–	50,0	–	–	24,74	12000	0,6	RD..10T3
R335.29I-080.12.27-8N-R6A	02988079	Manicotto	80,0	12,0	20,0	4	27,0	48,0	–	–	50,0	–	–	22,7	10000	0,6	RP..1204
R335.29-1240.RE-06.6N-R3A	02661227	Combimaster	40,0	6,0	10,0	6	–	23,0	M12	–	28,0	–	–	10,0	17600	0,2	RD..06T1
R335.29-1240.RE-07.6N-R35A	02627979	Combimaster	40,0	7,0	10,0	6	–	23,0	M12	–	28,0	–	–	9,0	28200	0,2	RD..0702
R335.29-1240.RE-08.5N-R4A	02627978	Combimaster	40,0	8,0	10,0	5	–	23,0	M12	–	28,0	–	–	8,0	18800	0,2	RD..08..
R335.29-1650.RE-06.8N-R3A	02661228	Combimaster	50,0	6,0	12,5	8	–	30,0	M16	–	28,0	–	–	9,0	17300	0,3	RD..06T1
R335.29-1650.RE-07.7N-R35A	02627984	Combimaster	50,0	7,0	12,5	7	–	30,0	M16	–	28,0	–	–	8,0	25300	0,2	RD..0702
R335.29-1650.RE-08.6N-R4A	02661229	Combimaster	50,0	8,0	12,5	6	–	30,0	M16	–	28,0	–	–	7,0	17300	0,2	RD..08..
R335.29I-1650.RE-10.6N-R5A	03278721	Combimaster	50,0	10,0	12,34	3	–	30,0	M16	–	28,0	–	–	4,3	15800	0,3	RD..10T3
R335.29I-1650.RE-12.4N-R6A	02988077	Combimaster	50,0	12,0	12,5	2	–	30,0	M16	–	28,0	–	–	4,3	11200	0,2	RP..1204
R335.29-1225.0-05.4N-R25A	02628056	Cilindrico	25,0	5,0	6,9	4	–	–	–	12,0	–	94,0	110,0	10,0	44800	0,2	RD..0501
R335.29-1225.0-06.4N-R3A	02628045	Cilindrico	25,0	6,0	6,9	4	–	–	–	12,0	–	93,0	110,0	10,0	20600	0,2	RD..06T1
R335.29-1632.0-05.5N-R25A	02628063	Cilindrico	32,0	5,0	8,4	5	–	–	–	16,0	–	114,0	130,0	10,0	39600	0,3	RD..0501
R335.29-1632.0-06.5N-R3A	02628061	Cilindrico	32,0	6,0	8,4	5	–	–	–	16,0	–	113,0	130,0	10,0	18700	0,3	RD..06T1
R335.29-1632.0-07.5N-R35A	02628060	Cilindrico	32,0	7,0	8,4	5	–	–	–	16,0	–	112,0	130,0	10,0	31600	0,2	RD..0702
R335.29-1632.0-08.4N-R4A	02628058	Cilindrico	32,0	8,0	8,4	4	–	–	–	16,0	–	111,0	130,0	10,0	23300	0,3	RD..08..
R335.29-2040.0-05.6N-R25A	02628067	Cilindrico	40,0	5,0	10,4	6	–	–	–	20,0	–	124,0	140,0	10,0	35400	0,4	RD..0501
R335.29-2040.0-06.6N-R3A	02628066	Cilindrico	40,0	6,0	10,4	6	–	–	–	20,0	–	123,0	140,0	10,0	16300	0,4	RD..06T1
R335.29-2040.0-08.5N-R4A	02628064	Cilindrico	40,0	8,0	10,4	5	–	–	–	20,0	–	121,0	140,0	10,0	18800	0,4	RD..08..
R335.29-2550.0-05.8N-R25A	02628071	Cilindrico	50,0	5,0	12,9	8	–	–	–	25,0	–	134,0	150,0	10,0	31700	0,6	RD..0501
R335.29-2550.0-06.8N-R3A	02628069	Cilindrico	50,0	6,0	12,9	8	–	–	–	25,0	–	133,0	150,0	10,0	17300	0,6	RD..06T1
R335.29-2550.0-08.6N-R4A	02628068	Cilindrico	50,0	8,0	12,9	6	–	–	–	25,0	–	131,0	150,0	10,0	17300	0,6	RD..08..

Le frese a disco R335.29I offrono la possibilità di sostituzione - Vite di sostituzione SX2035-T05P inclusa nella fornitura

Nota: Tutte le frese sono dotate di canali per adduzione refrigerante, il tipo a manicotto viene fornito con un kit coperchio per ottenere una capacità di adduzione refrigerante centrale

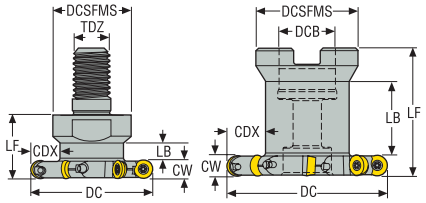
Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Chiave	Vite
							
R335.29 .REXXX-R35A/.0-XXX-R35A	–	–	H4B-T07P	C02545-T07P	DOUBLE-T	–	–
R335.29 .REXXX-R3A/.0-XXX-R3A	–	–	H4B-T07P	C02205-T07P	DOUBLE-T	–	–
R335.29 .REXXX-R4A/.0-XXX-R4A	–	–	H4B-T08P	C02506-T08P	DOUBLE-T	–	–
R335.29 .REXXX-R5A/.0-XXX-R5A	–	–	H4B-T09P	C03007-T09P	DOUBLE-T	–	–
R335.29 .REXXX-R5A/.0-XXX-R6A	–	–	H4B-T15P	C03509-T15P	DOUBLE-T	T05P-2	SX2035-T05P
R335.29 -R25A	–	–	H4B-T06P	C02053-T06P	DOUBLE-T	–	–
R335.29 R35A DCB=22	MC6S10X40	LUBRICATION_SET_19	H4B-T07P	C02545-T07P	DOUBLE-T	–	–
R335.29 R3A DCB=22	MC6S10X40	LUBRICATION_SET_19	H4B-T07P	C02205-T07P	DOUBLE-T	–	–
R335.29 R4A DCB=22	MC6S10X40	LUBRICATION_SET_19	H4B-T08P	C02506-T08P	DOUBLE-T	–	–
R335.29 R4A DCB=27	MC6S12X35	LUBRICATION_SET_29	H4B-T08P	C02506-T08P	DOUBLE-T	–	–
R335.29 R5A DCB=22	MC6S10X40	LUBRICATION_SET_19	H4B-T09P	C03007-T09P	DOUBLE-T	–	–
R335.29 R5A DCB=27	MC6S12X35	LUBRICATION_SET_29	H4B-T09P	C03007-T09P	DOUBLE-T	–	–
R335.29 R6A DCB=22	MC6S10X40	LUBRICATION_SET_19	H4B-T15P	C03509-T15P	DOUBLE-T	T05P-2	SX2035-T05P
R335.29 R6A DCB=27	MC6S12X35	LUBRICATION_SET_29	H4B-T15P	C03509-T15P	DOUBLE-T	T05P-2	SX2035-T05P

Accessori

Per	Coppia di serraggio inserto	Chiave dinamometrica
		
R335.29 .REXXX-R35A/.0-XXX-R35A	0.9NM	T00-07P09
R335.29 .REXXX-R3A/.0-XXX-R3A	0.9NM	T00-07P09
R335.29 .REXXX-R4A/.0-XXX-R4A	1.2NM	T00-08P12
R335.29 .REXXX-R5A/.0-XXX-R5A	2.0NM	T00-09P20
R335.29 .REXXX-R5A/.0-XXX-R6A	3.0NM	T00-15P30
R335.29 -R25A	0.5NM	T00-06P05
R335.29 R35A DCB=22	0.9NM	T00-07P09
R335.29 R3A DCB=22	0.9NM	T00-07P09
R335.29 R4A DCB=22	1.2NM	T00-08P12
R335.29 R4A DCB=27	1.2NM	T00-08P12
R335.29 R5A DCB=22	2.0NM	T00-09P20
R335.29 R5A DCB=27	2.0NM	T00-09P20
R335.29 R6A DCB=22	3.0NM	T00-15P30
R335.29 R6A DCB=27	3.0NM	T00-15P30

R335.29 - Inserto tondo – Pollici - tre tagli - profilo sferico - Sede fissa



—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 523-524, 527-532
—Per il programma inserti completo, vedere le pagine 874
—Per le parti di ricambio e le informazioni tecniche, vedere pagina 500-506
—Per la spiegazione degli attributi ISO, vedere pag. 16

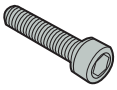
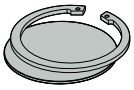
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	DCB	DCSFMS	TDZ	LF	LB	RPMX	Peso	Inserto
			inch	inch	inch		inch	inch		inch	inch		lb	
R335.29I-02.50-6N-R5A	03278722	Manicotto	2.500	0.394	0.587	6	0.750	1.501	–	1.998	1.075	13500	1.100	RD..10T3
R335.29I-03.00-8N-R5A	03278723	Manicotto	3.000	0.394	0.700	8	1.000	1.803	–	2.000	1.052	12000	1.320	RD..10T3
R335.29-1.50-12RE-6N-R3	02477694	Combimaster	1.500	0.236	0.297	6	–	0.906	M12	1.102	–	33700	0.440	RD..06T1
R335.29-2.00-16RE-8N-R3	02477702	Combimaster	2.000	0.236	0.409	8	–	1.181	M16	1.102	–	30200	0.660	RD..06T1
R335.29-2.00-16RE-6N-R4	02477709	Combimaster	2.000	0.315	0.409	6	–	1.181	M16	1.102	–	20200	0.660	RD..08

Le frese a disco R335.29I offrono la possibilità di sostituzione

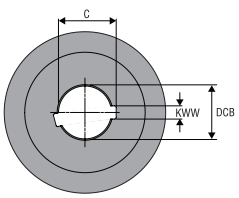
Nota: Tutte le frese sono dotate di canali per adduzione refrigerante, il tipo a manicotto viene fornito con un kit coperchio per ottenere una capacità di adduzione refrigerante centrale

Parti di ricambio, comprese nella fornitura

Accessori

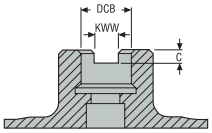
Per fresa	Vite attacco	Kit refrigerante	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
							
R335.29I -R5A DCB=0.750	UC6S3/8UNFX11/2	LUBRICATION_SET_19	H4B-T09P	C03007-T09P	DOUBLE-T	0.9NM	T00-07P09
R335.29I -R5A DCB=1.000	UC6S1/2UNFX1-1/2	LUBRICATION_SET_29	H4B-T09P	C03007-T09P	DOUBLE-T	1.2NM	T00-08P12
R335.29 RE- R3	–	–	H4B-T07P	C02205-T07P	DOUBLE-T	2.0NM	T00-09P20
R335.29 RE- R4	–	–	H4B-T08P	C02506-T08P	DOUBLE-T		

335.18, 335.25 e 335.98 – Chiavetta per fresa con foro di centraggio e attacco a manicotto



Dimensioni in mm		
DCB	KWW	C
22	6	24,15
27	7	29,9
40	10	43,6
50	12	53,6
60	14	64,3

Dimensioni in pollici		
DCB	KWW	C
1.00	*0.250*	*1.110*
1.25	*0.312*	*1.393*
1.50	*0.375*	*1.673*
2.00	*0.500*	*2.198*



Dimensioni in mm		
DCB	KWW	C
16	8,4	5,6
22	10,4	6,3
27	12,4	7
32	14,4	8
40	16,4	9

Dimensioni in pollici		
DCB	KWW	C
0.75	*0.32*	*0.19*
1.00	*0.38*	*0.22*
1.25	*0.51*	*0.28*
1.50	*0.63*	*0.38*

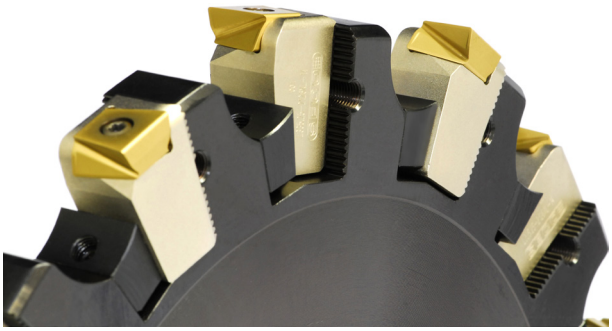
Vite di fissaggio frese a manicotto R335.18 / R335.25 (fornita con la fresa) - Misure in mm e in pollici

Per diametro fresa – mm	Fresa 335.18 regolabile Serie “0810”, “1012”, “1215” – mm	Fresa 335.25 - Regolabile - mm	Per diametro fresa – pollici	Fresa 335.25 - Regolabile - pollici
63	MC6S 10x40	-	*2,50*	-
80	MC6S 12x40	-	*3,00*	*MLC6S10X45*
100	MC6S 12x40	MC6S12X40	*4,00*	*UC6S1/2UNFX1-1/2*
125	-	MC6S16X40	*5,00*	*ULC6S5/8UNFX11/2*
160	-	MLC6S20X40	*6,00*	*ULC6S3/4UNFX1-1/2*

Nota: Per le frese a disco non menzionate nelle tabelle, utilizzare la vite di fissaggio a croce fornita con l’attacco a manicotto Seco Tooling System

Ordine di una fresa regolabile standard regolata ad una specifica larghezza:

Ordine di una fresa regolabile standard regolata ad una specifica larghezza:



Per ottenere la regolazione di una fresa registrabile, aggiungere “/ADJ” alla fine della descrizione e specificare il valore desiderato della larghezza; la tolleranza di regolazione è di +/- 0,03 mm (+/-0,001”). Se non specificato nell’ordine, la fresa standard è fornita con i moduli registrati alla minima larghezza di taglio.

Esempio di ordinazione: R335.25-200.1317.40-7N/ADJ, quindi specificare insieme all’ordine la larghezza, di qualsiasi valore all’interno della gamma supportata, ad esempio richiedere una larghezza di taglio di 15,50 mm. La fresa a disco sarà regolata su 15,50 +/- 0,03 mm (0,610” +/- 0,001”).

Il tempo di consegna è di circa 3 giorni per una fresa a disco regolabile.

(R)335.18 – Inserti LNK



LNK.05
Per larghezza 8-10, 0,312”-0,375”



LNK.06
Per larghezza 10- 12, 0,625”



LNK.08
Per larghezza 12- 15, 0, 500”-0,750”

LNK.06 e LNK.08 hanno la stessa dimensione, ma LNK.06 ha una lunghezza di taglio ridotta (6 mm, 0,250”) per diminuire le forze di taglio per larghezza = 10-12 mm, 0,394”-0,472”.
LNK.08 ha una lunghezza di taglio = 7,5 mm, 0,295” per larghezza 12-15 mm, 0,500”-0,750”.

Gli inserti LNK.06 e LNK.08 hanno la stessa dimensione, ma LNK.06 ha una ridotta lunghezza del tagliente (6 mm) per ridurre gli sforzi di taglio per larghezza = 10-12 mm.

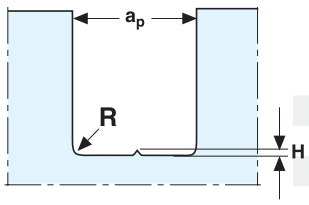
Possibilità raggio/Numero di taglienti

	Inserto	R	Versione a sedi fisse: CW =						Versione regolabile: CW =				R	Versione a sedi fisse: CW pollici =				Versione regolabile: CW pollici =			
			8	10	12	14	17	20	8	10	12	15		0,312/ 0,375	0,500	0,625	0,750	0,313	0,394	0,472	0,591
4 taglienti																					
	LNK.050404	0,4	x	x					x	x			0,016	x				x	x		
	LNK.050408	0,8	x	x					x	x			0,031	x				x	x		
	LNK.050416	1,6	x	x					x	x			0,063	x				x	x		
	LNK.050420	2,0	x	x					x	x			0,079	x				x	x		
	LNK.060504	0,4		x	x		x			x	x		0,016			x			x	x	
	LNK.060508	0,8		x	x		x			x	x		0,031			x			x	x	
	LNK.060516	1,6		x	x		x			x	x		0,063			x			x	x	
	LNK.080504	0,4		o	o	x	o	x		o	o	x	0,016		x	o	x		o	o	x
	LNK.080508	0,8		o	o	x	o	x		o	o	x	0,031		x	o	x		o	o	x
	LNK.080516	1,6		o	o	x	o	x		o	o	x	0,063		x	o	x		o	o	x
	LNK.080520	2,0		x	x	x	x	x		x	x	x	0,079		x	x	x		x	x	x
	LNK.080524	2,4		x	x	x	x	x		x	x	x	0,094		x	x	x		x	x	x
2 taglienti																					
	LNK.050424	2,4	x	x					x	x			0,094	x				x	x		
	LNK.060531	3,1		x	x		x			x	x		0,122			x			x	x	
	LNK.080531	3,1			o	x	o	x			o	x	0,122		x	o	x			o	x
1 tagliente (inserto sinistro e destro)																					
	LNK.050431...C*	3,1	x	x					x	x			0,122	x				x	x		
	LNK.050431*	3,1		x	x		x			x	x		0,157			x			x	x	
	LNK.060540	4,0		x	x	x	x	x		x	x	x	0,157		x	o	x			o	x
	LNK.080540	4,0			o	x	o	x			o	x									

*LNK.0504031...C è la prima scelta per CW = da 8 a 9 mm e LNK.0504031 è la prima scelta per CW= da 9 a 10 mm

x = Prima scelta o = Scelta alternativa

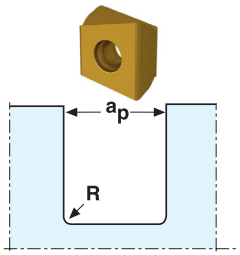
Larghezza e profilo generati con LNK.06/08 raggi R1,6/R2,0 e R2,4



a_p (mm)	H (mm) Raggio 1,6	H (mm) Raggi 2 e 2,4	a_p (pollici)	H (pollici) Raggio 0,063	H (pollici) Raggi 0,079 e 0,095
13,4	–	0	*0,518*	–	0
14	–	0,03	*0,551*	–	*0,001*
14,2	0	0,07	*0,559*	*0*	*0,003*
14,5	0,01	0,13	*0,570*	*0,0004*	*0,005*
15	0,1	0,3	*0,591*	*0,004*	*0,012*

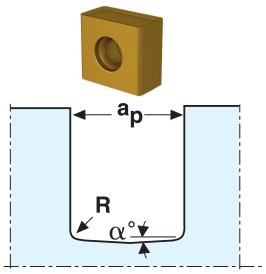
(R)335.25 – Inserti LNHQ/XNHQ

Larghezza e profilo generati dall'inserto XNHQ con fresa a sedi fisse a_p = 15/20/25 mm, a_p = 0,75", 1,00"



Raggio al vertice inserto	a_p = 15 mm	a_p = 20 mm	a_p = 25 mm	Raggio al vertice inserto	a_p = 0,75"	a_p = 1,00"
0,4	15	20	25	0,016	0,75	1,00
0,8	15	20	25	0,032	0,75	1,00
1,2	15	20	25	0,047	0,75	1,00
1,6	15	20	25	0,063	0,75	1,00
2	15	20	25	0,079	0,75	1,00
2,4	15	20	25	0,094	0,75	1,00
3,1	14,86	20	25	0,122	0,75	1,00
4	14,6	19,78	25	0,157	0,741	1,00
5	–	19,46	24,73	0,197	0,729	0,989
6	–	–	24,46	0,236	–	0,979

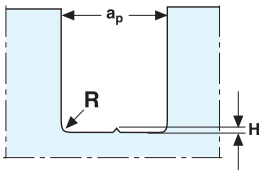
Larghezza e profilo generati dall'inserto LNHQ* con fresa a sedi fisse a_p = 25 mm, a_p = 1,00"



Raggio al vertice inserto mm	a_p mm generati	angolo α°	Raggio al vertice inserto pollici	a_p pollici generati	angolo α°
0,8	25,17	2	0,0315	1,007	2
3,1	25,02	2	0,122	1,001	2
4	24,92	2	0,157	0,997	2
5	24,78	2	0,197	0,992	2
6	24,64	2	0,236	0,986	2

* LNHQ è un inserto per sgrossatura in condizioni difficili (non genera una superficie di fondo piana).

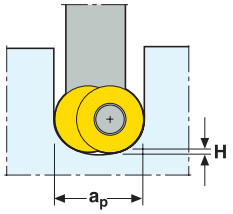
Larghezza e profilo generati da inserti XNHQ 14 e 17, raggi 5 e 6 mm, raggi 0,197" e 0,236" con fresa regolabile



Larghezza di taglio	a_p mm	H (mm)		Larghezza di taglio	a_p pollici	(H) pollici	
		Raggio 5	Raggio 6			Raggio 0,197"	Raggio 0,236"
21-26	25,5	0	0	0,83-1,02	1,004	0	0
21-26	25,8	0	0,01	0,83-1,02	1,016	0	0,0004
21-26	26,0	0,01	0,03	0,83-1,02	1,024	0,0004	0,0011
26-32	31,7	0	0	1,02-1,26	1,248	0	0
26-32	32,0	0	0,01	1,02-1,26	1,260	0	0,0004

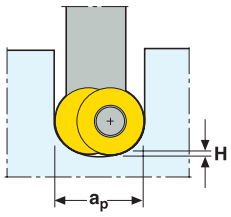
Profilo lavorato con fresa regolabile 335.18/335.25

Fresa 335.18/335.25 dotata di inserti rotondi mm/pollici



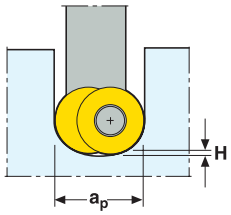
a_p min
a_p max

Tondo 8		Tondo 8		Tondo 10		Tondo 10	
a_p mm	Altezza profilo, H mm	a_p pollici	Altezza profilo, H pollici	a_p mm	Altezza profilo, H mm	a_p pollici	Altezza profilo, H pollici
8,03	0	0,316	0	10,03	0	0,406	0
8,50	0	0,335	0	10,50	0	0,413	0
9,00	0,03	0,354	0,001	11,00	0,025	0,433	0,001
9,50	0,07	0,374	0,003	11,50	0,060	0,453	0,002
10,00	0,13	0,394	0,005	12,00	0,100	0,472	0,004
Larghezza minima di regolazione consigliata = 8,03 mm		Larghezza minima di regolazione consigliata = 0,316”		Larghezza minima di regolazione consigliata = 10,03 mm		Larghezza minima di regolazione consigliata = 0,406”	



a_p min
a_p max

Tondo 12		Tondo 12		Tondo 16		Tondo 16	
a_p mm	Altezza profilo, H mm	a_p mm	Altezza profilo, H mm	a_p mm	Altezza profilo, H mm	a_p pollici	Altezza profilo, H pollici
12,03	0	0,474	0	16,03	0	0,631	0
12,50	0,01	0,492	0,0004	16,50	0	0,650	0
13,00	0,02	0,512	0,001	17,00	0,02	0,669	0,001
14,00	0,08	0,551	0,002			0,709	0,002
15,00	0,19	0,591	0,007			0,728	0,004
Larghezza minima di regolazione consigliata = 12,03 mm		Larghezza minima di regolazione consigliata = 0,474”		Larghezza minima di regolazione consigliata = 16,03 mm		Larghezza minima di regolazione consigliata = 0,631”	



a_p min
a_p max

Tondo 20		Tondo 20	
a_p mm	Altezza profilo, H mm	a_p mm	Altezza profilo, H mm
20,03	0	0,789	0,0000
20,5	0,01	0,807	0,0004
21	0,02	0,827	0,0008
Larghezza minima di regolazione consigliata = 20,03 mm		Larghezza minima di regolazione consigliata = 0,789”	

Parti di ricambio

(R)335.18 -LNK e inserto rotondo - Disegno regolabile - mm

(R)335.18-xxx-	Tipo di inserto	Vite inserto/Nm	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.18-...	Moduli L335.18-...
										
0810	LN.K05...	C02508-T08P/1,2	H4B-T08P	335.18-607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	...0810-05	...0810-05
0810XL	LN.K05...	C02508-T08P/1,2	H4B-T08P	335.18-XL607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	...0810XL-05	...0810XL-05
0810	RD..08..	C02506-T08P/1,2	H4B-T08P	335.18-607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	N335.18-08-R4	N335.18-08-R4
0810XL	RD..08..	C02506-T08P/1,2	H4B-T08P	335.18-XL607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	N335.18-08XL-R4	N335.18-08XL-R4
1012	LNK.06..	C73007-T09P/2,0	H4B-T09P	335.18-609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1012-06	...1012-06
1012XL	LNK.06..	C73007-T09P/2,0	H4B-T09P	335.18-XL609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1012XL-06	...1012XL-06
1012	RD..10T3	C03007-T09P/2,0	H4B-T09P	335.18-609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...10-R5I	...10-R5I
1012XL	RD..10T3	C03007-T09P/2,0	H4B-T09P	335.18-XL609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...10XL-R5I	...10XL-R5I
1215	LNK08..	C73007-T09P/2,0	H4B-T09P	335.18-611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1215-08	...1215-08
1215XL	LNK08..	C73007-T09P/2,0	H4B-T09P	335.18-XL611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1215XL-08	...1215XL-08
1215	RP..12..	C03508-T15P/3,0	H6B-T15PL	335.18-611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...12-R6	...12-R6
1215XL	RP..12..	C03508-T15P/3,0	H6B-T15PL	335.18-XL611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...12XL-R6	...12XL-R6

Chiavi dinamometriche e fisse, vedere pagina 931

(R)335.18 -LNK e inserto rotondo - Disegno regolabile - pollici

(R)335.18-xxx-	Tipo di inserto	Vite inserto/in-lb	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.18-...	Moduli L335.18-...
										
0506	LN.K05...	C02508-T08P 10,6	H4B-T08P	335.18-607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	...0810-05	...0810-05
XL0506	LN.K05...	C02508-T08P 10,6	H4B-T08P	335.18-XL607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	...0810XL-05	...0810XL-05
0506	RD..08..	C02508-T08P 10,6	H4B-T08P	335.18-607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	N335.18-08-R4	N335.18-08-R4
XL0506	RD..08..	C02508-T08P 10,6	H4B-T08P	335.18-XL607	LD5018F-T15P	H6B-T15PL	SH6004-T08P	H4B-T08P	N335.18-08XL-R4	N335.18-08XL-R4
0708	LNK.06..	C73007-T09P 17,7	H4B-T08P	335.18-609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1012-06	...1012-06
XL0708	LNK.06..	C73007-T09P 17,7	H4B-T09P	335.18-XL609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1012XL-06	...1012XL-06
0708	RD..10T3	C73007-T09P 17,7	H4B-T09P	335.18-609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...10-R5	...10-R5
XL0708	RD..10T3	C73007-T09P 17,7	H4B-T09P	335.18-XL609	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...10XL-R5	...10XL-R5
0809	LNK08..	C73007-T09P 17,7	H4B-T09P	335.18-611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1215-08	...1215-08
XL0809	LNK08..	C73007-T09P 17,7	H4B-T09P	335.18-XL611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...1215XL-08	...1215XL-08
0809	RP..12..	C03508-T15P 26,6	H4B-T09P	335.18-611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...12-R6	...12-R6
XL0809	RP..12..	C03508-T15P 26,6	H6B-T15PL	335.18-XL611	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...12XL-R6	...12XL-R6

Chiavi dinamometriche e fisse, vedere pagina 931

Parti di ricambio

Per frese regolabili (R)335.25 con inserti XNHQ09/12/14/17 e LNHQ14/17 in versione metrica

(R)335.25-xxx-	Tipo di inserto	Vite inserto/Nm	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.25-...	Moduli L335.25-...
									R335.25-...	L335.25-...
1317	XNHQ09	C03509-T10P/3	H4B-T10P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1317-09*	1317-09*
1317XL	XNHQ09	C03509-T10P/3	H4B-T10P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1317XL-09	1317XL-09
1721	XNHQ12	C03511-T10P/3	H4B-T10P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1721-12**	1721-12**
1721XL	XNHQ12	C03511-T10P/3	H4B-T10P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1721XL-12	1721XL-12
2126	XNHQ14 / LNHQ14	C04013-T15P/5	H4B-T15P	335.25-620	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2126-14***	2126-14***
2126XL	XNHQ14 / LNHQ14	C04013-T15P/5	H4B-T15P	335.25-620	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2126XL-14	2126XL-14
2632	XNHQ17 / LNHQ17	C05013-T20P/5	H6B-T20P	335.25-625	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2632-17****	2632-17****
2632XL	XNHQ17 / LNHQ17	C05013-T20P/5	H6B-T20P	335.25-625	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2632XL-17	2632XL-17

* Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1418 per generare larghezze di taglio da 14 a 17 mm; generano il diametro nominale “DC”
** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1924 per generare larghezze di taglio da 18,5 a 21 mm; generano il diametro nominale “DC”
*** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-2530 per generare larghezze di taglio da 24,3 a 26 mm; generano il diametro nominale “DC”
**** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-2530 per generare larghezze di taglio da 26 a 30,5 mm; generano il diametro nominale “DC”

Per frese a sedi regolabili (R)335.25 con inserti tondi diametro 16 e 20 mm - mm

(R)335.25-xxx-	Tipo di inserto	Vite inserto/Nm	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.25-...	Moduli L335.25-...
									R335.25-...	L335.25-...
1317	RP..1605	C05010-T20P / 5	H6B-T20P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...16-R8I-D5*	...16-R8I-D5*
1317XL	RP..1605	C05010-T20P / 5	H6B-T20P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...16XL-R8I-D5	...16XL-R8I-D5
1721XL	RP..2006	C05013-T20P / 5	H6B-T20P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...20XL-R10I-D5	...20XL-R10I-D5

*Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1418 per generare larghezze di taglio da 16 a 18,5 mm; generano il diametro nominale “DC” + 5 mm

Parti di ricambio

Parti di ricambio per le frese regolabili (R)335.25 con inserti XHNQ/12/14/17 e LNHQ14/17 - pollici

(R)335.25-xxx-	Tipo di inserto	Vite inserto/in-lb	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.25-...	Moduli L335.25-...
									R335.25-...	L335.25-...
0911	XNHQ09	C03509-T10P/26,5	H4B-T10P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1317-09*	1317-09*
XL0911	XNHQ09	C03509-T10P/26,5	H4B-T10P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1317XL-09	1317XL-09
1113	XNHQ12	C03511-T10P/26,5	H4B-T10P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1721-12**	1721-12**
XL1113	XNHQ12	C03511-T10P/26,5	H4B-T10P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	1721XL-12	1721XL-12
1316	XNHQ14 / LNHQ14	C04013-T15P/44	H4B-T15P	335.25-620	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2126-14***	2126-14***
XL1316	XNHQ14 / LNHQ14	C04013-T15P/44	H4B-T15P	335.25-620	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2126XL-14	2126XL-14
1620	XNHQ17 / LNHQ17	C05013-T20P/44	H6B-T20P	335.25-625	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2632-17****	2632-17****
XL1620	XNHQ17 / LNHQ17	C05013-T20P/44	H6B-T20P	335.25-625	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	2632XL-17	2632XL-17

* Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1418 per generare larghezze di taglio da 14 a 17 mm; generano il diametro nominale “DC”
** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1924 per generare larghezze di taglio da 18,5 a 21 mm; generano il diametro nominale “DC”
*** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-2530 per generare larghezze di taglio da 24,3 a 26 mm; generano il diametro nominale “DC”
**** Moduli compatibili con frese a disco regolabili serie x335.18-xxx-2530 per generare larghezze di taglio da 26 a 30,5 mm; generano il diametro nominale “DC”

Parti di ricambio per frese a sedi regolabili (R)335.25 con inserti tondi diametro 16 e 20 mm - pollici

(R)335.25-xxx-	Tipo di inserto	Vite inserto/in-lb	Chiave per vite inserto	Cuneo	Vite cuneo	Chiave per vite cuneo	Vite di regolazione	Chiave per vite di regolazione	Moduli R335.25-...	Moduli L335.25-...
									R335.25-...	L335.25-...
0911	RP..1605	C05010-T20P/44,3	H6B-T20P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...16-R8I-D5*	...16-R8I-D5*
XL0911	RP..1605	C05010-T20P/44,3	H6B-T20P	335.25-612	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...16XL-R8I-D5	...16XL-R8I-D5
XL1113	RP..2006	C05010-T20P/44,3	H6B-T20P	335.25-616	LD6018F-T20P	H6B-T20PL	SH6005-T09P	H4B-T09P	...20XL-R10I-D5	...20XL-R10I-D5

*Moduli compatibili con frese a disco regolabili serie x335.18-xxx-1418 per generare larghezze di taglio da 16 a 18,5 mm; generano il diametro nominale “DC” + 5 mm

335.18-LNK – Selezione dell'inserto – In mm/ In pollici

SMG				f_z		
				30%	20%	10%
P1	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,12 *0.0048*	0,14 *0.0055*	0,19 *0.0075*
P2	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
P3	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,12 *0.0048*	0,14 *0.0055*	0,18 *0.0070*
P4	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,12 *0.0048*	0,13 *0.0050*	0,18 *0.0070*
P5	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
P6	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
P7	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
P8	LNKT05...-M06 MP3000	LNKT06...-M06 MP3000	*LNKT08...-M06 MP3000*	0,12 *0.0048*	0,14 *0.0055*	0,18 *0.0070*
P11	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
P12	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,075 *0.0030*	0,090 *0.0036*	0,12 *0.0048*
M1	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
M2	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
M3	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,090 *0.0036*	0,10 *0.0040*	0,14 *0.0055*
M4	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,080 *0.0032*	0,090 *0.0036*	0,12 *0.0048*
M5	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,080 *0.0032*	0,090 *0.0036*	0,12 *0.0048*
K1	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
K2	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
K3	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
K4	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
K5	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,10 *0.0040*	0,12 *0.0048*	0,16 *0.0065*
K6	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,11 *0.0044*	0,13 *0.0050*	0,17 *0.0065*
K7	LNKT05...-M06 MP3000	LNKT06...-M06 MK2050	*LNKT08...-M06 MK2050*	0,10 *0.0040*	0,12 *0.0048*	0,16 *0.0065*
N1	LNKT05...-E05 H25	LNKT06...-E05 H25	*LNKT08...-E05 H25*	0,14 *0.0055*	0,16 *0.0065*	0,22 *0.0085*
N2	LNKT05...-E05 H25	LNKT06...-E05 H25	*LNKT08...-E05 H25*	0,14 *0.0055*	0,16 *0.0065*	0,22 *0.0085*
N3	LNKT05...-E05 H25	LNKT06...-E05 H25	*LNKT08...-E05 H25*	0,14 *0.0055*	0,16 *0.0065*	0,22 *0.0085*
N11	LNKT05...-E05 H25	LNKT06...-E05 H25	*LNKT08...-E05 H25*	0,14 *0.0055*	0,16 *0.0065*	0,22 *0.0085*
S1	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,080 *0.0032*	0,090 *0.0036*	0,12 *0.0048*
S2	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,080 *0.0032*	0,090 *0.0036*	0,12 *0.0048*
S3	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,075 *0.0030*	0,085 *0.0034*	0,11 *0.0044*
S11	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,090 *0.0036*	0,10 *0.0040*	0,14 *0.0055*
S12	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,090 *0.0036*	0,10 *0.0040*	0,14 *0.0055*
S13	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,080 *0.0032*	0,090 *0.0036*	0,12 *0.0048*
H5	LNKT05...-M06 MP3000	LNKT06...-M06 MP3000	*LNKT08...-M06 MP3000*	0,075 *0.0030*	0,090 *0.0036*	0,12 *0.0048*
H8	LNKT05...-M06 MP3000	LNKT06...-M06 MP3000	*LNKT08...-M06 MP3000*	0,060 *0.0024*	0,070 *0.0028*	0,090 *0.0036*
H11	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,075 *0.0030*	0,090 *0.0036*	0,12 *0.0048*
H12	LNKT05...-M06 F40M	LNKT06...-M06 F40M	*LNKT08...-M06 F40M*	0,060 *0.0024*	0,070 *0.0028*	0,090 *0.0036*
H21	LNKT05...-M06 MP3000	LNKT06...-M06 MP3000	*LNKT08...-M06 MP3000*	0,060 *0.0024*	0,070 *0.0028*	0,090 *0.0036*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.18-LNK – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			F40M			H25			MK1501			MP2501			MP3501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	255	275	300	245	265	290	200	210	230	—	—	—	—	—	—	340	355	380	305	320	345
	840	*900*	*980*	*800*	*870*	*950*	*660*	*690*	*750*	—	—	—	—	—	—	*1125*	*1175*	*1250*	*1000*	*1050*	*1125*
P2	245	265	295	235	255	285	190	205	225	—	—	—	—	—	—	325	345	370	295	315	335
	800	*870*	*970*	*770*	*840*	*940*	*620*	*670*	*740*	—	—	—	—	—	—	*1075*	*1125*	*1225*	*970*	*1025*	*1100*
P3	215	230	255	205	220	245	165	175	195	—	—	—	—	—	—	285	300	325	255	270	290
	710	*750*	*840*	*670*	*720*	*800*	*540*	*570*	*640*	—	—	—	—	—	—	*940*	*980*	*1075*	*840*	*890*	*950*
P4	190	205	225	180	200	215	145	160	175	—	—	—	—	—	—	250	265	285	225	240	255
	620	*670*	*740*	*590*	*660*	*710*	*475*	*520*	*570*	—	—	—	—	—	—	*820*	*870*	*940*	*740*	*790*	*840*
P5	185	195	220	180	190	210	140	150	170	—	—	—	—	—	—	245	255	275	220	230	245
	610	*640*	*720*	*590*	*620*	*690*	*460*	*490*	*560*	—	—	—	—	—	—	*800*	*840*	*900*	*720*	*750*	*800*
P6	210	220	245	200	210	235	160	170	190	—	—	—	—	—	—	275	285	305	245	255	275
	690	*720*	*800*	*660*	*690*	*770*	*520*	*560*	*620*	—	—	—	—	—	—	*900*	*940*	*1000*	*800*	*840*	*900*
P7	195	210	230	190	200	225	150	160	180	—	—	—	—	—	—	260	270	290	235	245	260
	640	*690*	*750*	*620*	*660*	*740*	*490*	*520*	*590*	—	—	—	—	—	—	*850*	*890*	*950*	*770*	*800*	*850*
P8	180	195	215	175	185	205	140	150	165	—	—	—	—	—	—	240	250	270	215	225	245
	590	*640*	*710*	*570*	*610*	*670*	*460*	*490*	*540*	—	—	—	—	—	—	*790*	*820*	*890*	*710*	*740*	*800*
P11	190	200	225	185	195	215	145	155	175	—	—	—	—	—	—	250	260	280	225	235	255
	620	*660*	*740*	*610*	*640*	*710*	*475*	*510*	*570*	—	—	—	—	—	—	*820*	*850*	*920*	*740*	*770*	*840*
P12	125	130	145	120	125	140	95	100	110	—	—	—	—	—	—	155	160	170	140	145	155
	410	*425*	*475*	*395*	*410*	*460*	*310*	*330*	*360*	—	—	—	—	—	—	*510*	*520*	*560*	*460*	*475*	*510*
M1	—	—	—	175	190	210	150	165	180	—	—	—	—	—	—	180	195	215	165	180	200
	—	—	—	*570*	*620*	*690*	*490*	*540*	*590*	—	—	—	—	—	—	*590*	*640*	*710*	*540*	*590*	*660*
M2	—	—	—	150	160	175	130	135	150	—	—	—	—	—	—	150	160	180	140	150	165
	—	—	—	*490*	*520*	*570*	*425*	*445*	*490*	—	—	—	—	—	—	*490*	*520*	*590*	*460*	*490*	*540*
M3	—	—	—	120	130	140	105	110	120	—	—	—	—	—	—	120	130	140	115	120	135
	—	—	—	*395*	*425*	*460*	*345*	*360*	*395*	—	—	—	—	—	—	*395*	*425*	*460*	*375*	*395*	*445*
M4	—	—	—	90	100	110	80	85	95	—	—	—	—	—	—	95	100	110	85	95	105
	—	—	—	*295*	*330*	*360*	*260*	*280*	*310*	—	—	—	—	—	—	*310*	*330*	*360*	*280*	*310*	*345*
M5	—	—	—	75	80	90	65	70	80	—	—	—	—	—	—	80	85	90	70	80	85
	—	—	—	*245*	*260*	*295*	*215*	*230*	*260*	—	—	—	—	—	—	*260*	*280*	*295*	*230*	*260*	*280*
K1	265	290	315	155	170	190	150	165	180	—	—	—	400	455	550	330	350	375	295	315	340
	870	*950*	*1025*	*510*	*560*	*620*	*490*	*540*	*590*	—	—	—	*1300*	*1500*	*1800*	*1075*	*1150*	*1225*	*970*	*1025*	*1125*
K2	240	255	285	140	150	170	135	145	160	—	—	—	355	400	485	295	310	330	265	275	300
	790	*840*	*940*	*460*	*490*	*560*	*445*	*475*	*520*	—	—	—	*1175*	*1300*	*1600*	*970*	*1025*	*1075*	*870*	*900*	*980*
K3	205	215	240	120	130	140	115	120	135	—	—	—	245	265	305	250	260	280	225	235	250
	670	*710*	*790*	*395*	*425*	*460*	*375*	*395*	*445*	—	—	—	*800*	*870*	*1000*	*820*	*850*	*920*	*740*	*770*	*820*
K4	195	205	230	115	120	135	110	115	130	—	—	—	235	250	290	240	250	265	215	225	240
	640	*670*	*750*	*375*	*395*	*445*	*360*	*375*	*425*	—	—	—	*770*	*820*	*950*	*790*	*820*	*870*	*710*	*740*	*790*
K5	120	125	140	70	75	80	65	70	80	—	—	—	140	155	175	145	150	160	130	135	145
	395	*410*	*460*	*230*	*245*	*260*	*215*	*230*	*260*	—	—	—	*460*	*510*	*570*	*475*	*490*	*520*	*425*	*445*	*475*
K6	170	180	200	100	105	120	95	100	115	—	—	—	205	220	255	210	220	235	190	195	210
	560	*590*	*660*	*330*	*345*	*395*	*310*	*330*	*375*	—	—	—	*670*	*720*	*840*	*690*	*720*	*770*	*620*	*640*	*690*
K7	150	160	175	90	95	105	85	90	100	—	—	—	180	195	225	185	190	205	165	175	185
	490	*520*	*570*	*295*	*310*	*345*	*280*	*295*	*330*	—	—	—	*590*	*640*	*740*	*610*	*620*	*670*	*540*	*570*	*610*
N1	—	—	—	1400	1500	1675	1125	1200	1325	1150	1225	1350	—	—	—	—	—	—	—	—	—
	—	—	—	*4600*	*4925*	*5500*	*3700*	*3925*	*4350*	*3775*	*4025*	*4425*	—	—	—	—	—	—	—	—	—
N2	—	—	—	560	610	670	450	485	540	465	500	550	—	—	—	—	—	—	—	—	—
	—	—	—	*1825*	*2000*	*2200*	*1475*	*1600*	*1775*	*1525*	*1650*	*1800*	—	—	—	—	—	—	—	—	—
N3	—	—	—	375	405	450	300	325	360	310	330	365	—	—	—	—	—	—	—	—	—
	—	—	—	*1225*	*1325*	*1475*	*980*	*1075*	*1175*	*1025*	*1075*	*1200*	—	—	—	—	—	—	—	—	—
N11	—	—	—	430	465	510	345	370	410	355	380	415	—	—	—	—	—	—	—	—	—
	—	—	—	*1400*	*1525*	*1675*	*1125*	*1225*	*1350*	*1175*	*1250*	*1350*	—	—	—	—	—	—	—	—	—
S1	—	—	—	43	46	50	37	40	44	—	—	—	—	—	—	—	—	—	28	30	34
	—	—	—	*140*	*150*	*165*	*120*	*130*	*145*	—	—	—	—	—	—	—	—	—	*90*	*100*	*110*
S2	—	—	—	34	37	41	30	32	35	—	—	—	—	—	—	—	—	—	23	25	27
	—	—	—	*110*	*120*	*135*	*100*	*105*	*115*	—	—	—	—	—	—	—	—	—	*75*	*80*	*90*
S3	—	—	—	30	32	36	26	28	31	—	—	—	—	—	—	—	—	—	29	31	34
	—	—	—	*100*	*105*	*120*	*85*	*90*	*100*	—	—	—	—	—	—	—	—	—	*95*	*100*	*110*
S11	—	—	—	60	65	70	50	55	60	—	—	—	—	—	—	—	—	—	55	60	65
	—	—	—	*195*	*215*	*230*	*165*	*180*	*195*	—	—	—	—	—	—	—	—	—	*180*	*195*	*215*
S12	—	—	—	50	55	60	44	47	50	—	—	—	—	—	—	—	—	—	39	43	46
	—	—	—	*165*	*180*	*195*	*145*	*155*	*165*	—	—	—	—	—	—	—	—	—	*130*	*140*	*150*
S13	—	—	—	29	31	35	25	27	30	—	—	—	—	—	—	—	—	—	23	24	27
	—	—	—	*95*	*100*	*115*	*80*	*90*	*100*	—	—	—	—	—	—	—	—	—	*75*	*80*	*90*
H5	42	45	49	33	35	39	31	33	37	—	—	—	—	—	—	—	—	—	36	38	42
	140	*150*	*160*	*110*	*115*	*130*	*100*	*110*	*120*	—	—	—	—	—	—	—	—	—	*120*	*125*	*140*
H8	44	47	50	35	37	41	33	35	39	—	—	—	—	—	—	—	—	—	38	40	45
	145	*155*	*165*	*115*	*120*	*135*	*110*	*115*	*130*	—	—	—	—	—	—	—	—	—	*125*	*130*	*150*
H11	55	55	65	42	44	49	40	42	47	—	—	—	—	—	—	—	—	—	46	49	55
	180	*180*	*215*	*140*	*145*	*160*	*130*	*140*	*155*	—	—	—	—	—	—	—	—	—	*150*	*160*	*180*
H12	75	80	90	40	43	48	38	41	45	—	—	—	—	—	—	—	—	—	70	70	80
	245	*260*	*295*	*130*	*140*	*155*	*125*	*135*	*150*	—	—	—	—	—	—	—	—	—	*230*	*230*	*260*
H21	44	47	50	35	37	41	33	35	39	—	—	—	—	—	—	—	—	—	38	40	45
	145	*155*	*165*	*115*	*120*	*135*	*110*	*115*	*130*	—	—	—	—	—	—	—	—	—	*125*	*130*	*150*

335.25-XN09 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	XNHQ090508TN4-M08 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
P2	XNHQ090508TN4-M08 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
P3	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P4	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P5	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P6	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,19 0.0075
P7	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,19 0.0075
P8	XNHQ090508TN4-M08 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P11	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,19 0.0075
P12	XNHQ090508TN4-M08 F40M	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
M1	XNHQ090508TN4-M08 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
M2	XNHQ090508TN4-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M3	XNHQ090508TN4-M08 F40M	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
M4	XNHQ090508TN4-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
M5	XNHQ090508TN4-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
K1	XNHQ090508TN4-M08 MK2050	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
K2	XNHQ090508TN4-M08 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K3	XNHQ090508TN4-M08 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K4	XNHQ090508TN4-M08 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K5	XNHQ090508TN4-M08 MK2050	0,12 *0.0048*	0,13 0.0050	0,18 0.0070
K6	XNHQ090508TN4-M08 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K7	XNHQ090508TN4-M08 MK2050	0,12 *0.0048*	0,13 0.0050	0,18 0.0070
N1	XNHQ090508EN4-E07 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
N2	XNHQ090508EN4-E07 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
N3	XNHQ090508EN4-E07 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
N11	XNHQ090508EN4-E07 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
S1	XNHQ090508TN4-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S2	XNHQ090508TN4-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S3	XNHQ090508TN4-M08 F40M	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
S11	XNHQ090508TN4-M08 F40M	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
S12	XNHQ090508TN4-M08 F40M	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
S13	XNHQ090508TN4-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
H5	XNHQ090508TN4-M08 MP2501	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
H8	XNHQ090508TN4-M08 MP2501	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
H11	XNHQ090508TN4-M08 F40M	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
H12	XNHQ090508TN4-M08 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
H21	XNHQ090508TN4-M08 MP2501	0,065 *0.0026*	0,075 0.0030	0,10 0.0040

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-XN09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F40M			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	240 *790*	255 *840*	280 *920*	185 *610*	195 *640*	215 *710*	320 *1050*	335 *1100*	360 *1175*
P2	230 *750*	250 *820*	275 *900*	180 *590*	190 *620*	210 *690*	310 *1025*	325 *1075*	350 *1150*
P3	205 *670*	220 *720*	240 *790*	155 *510*	170 *560*	185 *610*	270 *890*	285 *940*	305 *1000*
P4	180 *590*	190 *620*	210 *690*	140 *460*	150 *490*	165 *540*	240 *790*	250 *820*	270 *890*
P5	170 *560*	185 *610*	205 *670*	130 *425*	140 *460*	155 *510*	230 *750*	240 *790*	260 *850*
P6	195 *640*	205 *670*	230 *750*	150 *490*	160 *520*	180 *590*	255 *840*	270 *890*	290 *950*
P7	180 *590*	195 *640*	220 *720*	140 *460*	150 *490*	170 *560*	240 *790*	255 *840*	275 *900*
P8	170 *560*	185 *610*	205 *670*	130 *425*	140 *460*	155 *510*	230 *750*	240 *790*	260 *850*
P11	175 *570*	190 *620*	210 *690*	135 *445*	145 *475*	165 *540*	235 *770*	245 *800*	270 *890*
P12	115 *375*	125 *410*	135 *445*	90 *295*	95 *310*	105 *345*	150 *490*	155 *510*	165 *540*
M1	— —	— —	— —	145 *475*	155 *510*	170 *560*	170 *560*	180 *590*	200 *660*
M2	— —	— —	— —	120 *395*	125 *410*	140 *460*	140 *460*	150 *490*	165 *540*
M3	— —	— —	— —	95 *310*	100 *330*	115 *375*	115 *375*	120 *395*	135 *445*
M4	— —	— —	— —	75 *245*	80 *260*	90 *295*	90 *295*	95 *310*	105 *345*
M5	— —	— —	— —	60 *195*	65 *215*	75 *245*	75 *245*	80 *260*	85 *280*
K1	250 *820*	270 *890*	295 *970*	140 *460*	150 *490*	165 *540*	315 *1025*	330 *1075*	355 *1175*
K2	220 *720*	235 *770*	260 *850*	125 *410*	135 *445*	150 *490*	275 *900*	290 *950*	310 *1025*
K3	190 *620*	200 *660*	220 *720*	105 *345*	115 *375*	125 *410*	235 *770*	245 *800*	265 *870*
K4	180 *590*	190 *620*	210 *690*	100 *330*	110 *360*	120 *395*	225 *740*	235 *770*	250 *820*
K5	110 *360*	120 *395*	130 *425*	60 *195*	65 *215*	75 *245*	135 *445*	145 *475*	155 *510*
K6	160 *520*	170 *560*	185 *610*	90 *295*	95 *310*	105 *345*	195 *640*	205 *670*	220 *720*
K7	140 *460*	150 *490*	165 *540*	80 *260*	85 *280*	95 *310*	175 *570*	185 *610*	195 *640*
N1	— —	— —	— —	1050 *3450*	1125 *3700*	1225 *4025*	— —	— —	— —
N2	— —	— —	— —	420 *1375*	455 *1500*	500 *1650*	— —	— —	— —
N3	— —	— —	— —	280 *920*	305 *1000*	330 *1075*	— —	— —	— —
N11	— —	— —	— —	320 *1050*	345 *1125*	380 *1250*	— —	— —	— —
S1	— —	— —	— —	35 *115*	37 *120*	41 *135*	— —	— —	— —
S2	— —	— —	— —	28 *90*	30 *100*	33 *110*	— —	— —	— —
S3	— —	— —	— —	24 *80*	26 *85*	29 *95*	— —	— —	— —
S11	— —	— —	— —	49 *160*	50 *165*	55 *180*	— —	— —	— —
S12	— —	— —	— —	41 *135*	43 *140*	48 *155*	— —	— —	— —
S13	— —	— —	— —	24 *80*	26 *85*	28 *90*	— —	— —	— —
H5	— —	— —	— —	30 *100*	31 *100*	35 *115*	— —	— —	— —
H8	— —	— —	— —	31 *100*	33 *110*	37 *120*	— —	— —	— —
H11	— —	— —	— —	38 *125*	40 *130*	44 *145*	— —	— —	— —
H12	— —	— —	— —	36 *120*	39 *130*	43 *140*	— —	— —	— —
H21	— —	— —	— —	31 *100*	33 *110*	37 *120*	— —	— —	— —

335.25-XN12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	XNHQ120608TN4-M10 F40M	0,17 *0.0065*	0,19 0.0075	0,26 0.010
P2	XNHQ120608TN4-M10 F40M	0,17 *0.0065*	0,20 0.0080	0,26 0.010
P3	XNHQ120608TN4-M10 F40M	0,16 *0.0065*	0,19 0.0075	0,25 0.010
P4	XNHQ120608TN4-M10 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
P5	XNHQ120608TN4-M10 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
P6	XNHQ120608TN4-M10 F40M	0,15 *0.0060*	0,18 0.0070	0,24 0.0095
P7	XNHQ120608TN4-M10 F40M	0,15 *0.0060*	0,18 0.0070	0,24 0.0095
P8	XNHQ120608TN4-M10 MP2501	0,16 *0.0065*	0,19 0.0075	0,25 0.010
P11	XNHQ120608TN4-M10 F40M	0,15 *0.0060*	0,18 0.0070	0,24 0.0095
P12	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
M1	XNHQ120608TN4-M10 F40M	0,17 *0.0065*	0,20 0.0080	0,26 0.010
M2	XNHQ120608TN4-M10 F40M	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
M3	XNHQ120608TN4-M10 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
M4	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
M5	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
K1	XNHQ120608TN4-M10 MK2050	0,17 *0.0065*	0,20 0.0080	0,26 0.010
K2	XNHQ120608TN4-M10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K3	XNHQ120608TN4-M10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K4	XNHQ120608TN4-M10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K5	XNHQ120608TN4-M10 MK2050	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
K6	XNHQ120608TN4-M10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K7	XNHQ120608TN4-M10 MK2050	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
N1	XNHQ120608EN4-E09 F40M	0,20 *0.0080*	0,22 0.0085	0,30 0.012
N2	XNHQ120608EN4-E09 F40M	0,20 *0.0080*	0,22 0.0085	0,30 0.012
N3	XNHQ120608EN4-E09 F40M	0,20 *0.0080*	0,22 0.0085	0,30 0.012
N11	XNHQ120608EN4-E09 F40M	0,20 *0.0080*	0,22 0.0085	0,30 0.012
S1	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
S2	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
S3	XNHQ120608TN4-M10 F40M	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
S11	XNHQ120608TN4-M10 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
S12	XNHQ120608TN4-M10 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
S13	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
H5	XNHQ120608TN4-M10 MP2501	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
H8	XNHQ120608TN4-M10 MP2501	0,080 *0.0032*	0,095 0.0038	0,12 0.0048
H11	XNHQ120608TN4-M10 F40M	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
H12	XNHQ120608TN4-M10 F40M	0,080 *0.0032*	0,095 0.0038	0,12 0.0048
H21	XNHQ120608TN4-M10 MP2501	0,080 *0.0032*	0,095 0.0038	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-XN12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F40M			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	230 *750*	250 *820*	275 *900*	175 *570*	190 *620*	210 *690*	310 *1025*	330 *1075*	350 *1150*
P2	225 *740*	240 *790*	265 *870*	170 *560*	185 *610*	205 *670*	300 *980*	315 *1025*	345 *1125*
P3	195 *640*	210 *690*	230 *750*	150 *490*	160 *520*	180 *590*	265 *870*	275 *900*	300 *980*
P4	175 *570*	185 *610*	205 *670*	135 *445*	145 *475*	160 *520*	230 *750*	245 *800*	265 *870*
P5	165 *540*	175 *570*	195 *640*	125 *410*	135 *445*	150 *490*	220 *720*	235 *770*	255 *840*
P6	190 *620*	200 *660*	220 *720*	145 *475*	155 *510*	170 *560*	255 *840*	265 *870*	285 *940*
P7	180 *590*	190 *620*	210 *690*	135 *445*	145 *475*	160 *520*	240 *790*	250 *820*	270 *890*
P8	165 *540*	175 *570*	195 *640*	125 *410*	135 *445*	150 *490*	220 *720*	230 *750*	250 *820*
P11	175 *570*	185 *610*	200 *660*	135 *445*	140 *460*	155 *510*	230 *750*	240 *790*	260 *850*
P12	110 *360*	120 *395*	135 *445*	85 *280*	90 *295*	100 *330*	145 *475*	155 *510*	165 *540*
M1	— —	— —	— —	140 *460*	150 *490*	165 *540*	165 *540*	175 *570*	195 *640*
M2	— —	— —	— —	115 *375*	125 *410*	135 *445*	135 *445*	145 *475*	160 *520*
M3	— —	— —	— —	95 *310*	100 *330*	110 *360*	110 *360*	120 *395*	130 *425*
M4	— —	— —	— —	70 *230*	75 *245*	85 *280*	85 *280*	90 *295*	100 *330*
M5	— —	— —	— —	60 *195*	65 *215*	70 *230*	70 *230*	75 *245*	85 *280*
K1	240 *790*	255 *840*	285 *940*	135 *445*	145 *475*	160 *520*	305 *1000*	320 *1050*	345 *1125*
K2	215 *710*	230 *750*	255 *840*	120 *395*	130 *425*	145 *475*	270 *890*	285 *940*	305 *1000*
K3	180 *590*	195 *640*	215 *710*	100 *330*	110 *360*	120 *395*	225 *740*	240 *790*	260 *850*
K4	170 *560*	185 *610*	205 *670*	95 *310*	105 *345*	115 *375*	215 *710*	230 *750*	245 *800*
K5	105 *345*	115 *375*	125 *410*	60 *195*	65 *215*	70 *230*	135 *445*	140 *460*	150 *490*
K6	150 *490*	165 *540*	180 *590*	85 *280*	90 *295*	100 *330*	190 *620*	200 *660*	220 *720*
K7	135 *445*	145 *475*	160 *520*	75 *245*	80 *260*	90 *295*	170 *560*	180 *590*	190 *620*
N1	— —	— —	— —	1000 *3275*	1075 *3525*	1175 *3850*	— —	— —	— —
N2	— —	— —	— —	405 *1325*	435 *1425*	480 *1575*	— —	— —	— —
N3	— —	— —	— —	270 *890*	290 *950*	320 *1050*	— —	— —	— —
N11	— —	— —	— —	305 *1000*	330 *1075*	365 *1200*	— —	— —	— —
S1	— —	— —	— —	34 *110*	36 *120*	40 *130*	— —	— —	— —
S2	— —	— —	— —	27 *90*	29 *95*	32 *105*	— —	— —	— —
S3	— —	— —	— —	24 *80*	25 *80*	28 *90*	— —	— —	— —
S11	— —	— —	— —	48 *155*	50 *165*	55 *180*	— —	— —	— —
S12	— —	— —	— —	40 *130*	43 *140*	47 *155*	— —	— —	— —
S13	— —	— —	— —	23 *75*	24 *80*	27 *90*	— —	— —	— —
H5	— —	— —	— —	28 *90*	31 *100*	34 *110*	— —	— —	— —
H8	— —	— —	— —	31 *100*	32 *105*	36 *120*	— —	— —	— —
H11	— —	— —	— —	36 *120*	39 *130*	43 *140*	— —	— —	— —
H12	— —	— —	— —	36 *120*	38 *125*	42 *140*	— —	— —	— —
H21	— —	— —	— —	31 *100*	32 *105*	36 *120*	— —	— —	— —

335.25-XN14/XN17 – Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			30%	20%	10%
P1	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,22 *0.0085*	0,30 *0.012*
P2	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
P3	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,19 *0.0075*	0,22 *0.0085*	0,30 *0.012*
P4	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,19 *0.0075*	0,22 *0.0085*	0,28 *0.011*
P5	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
P6	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P7	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P8	XNHQ140708TN4-M11 MP2501	XNHQ170708TN4-M13 MP2501	0,19 *0.0075*	0,22 *0.0085*	0,30 *0.012*
P11	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P12	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
M1	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
M2	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
M3	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
M4	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
M5	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
K1	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
K2	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K3	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K4	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K5	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,17 *0.0065*	0,19 *0.0075*	0,25 *0.010*
K6	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K7	XNHQ140708TN4-M11 MK2050	XNHQ170708TN4-M13 MK2050	0,17 *0.0065*	0,19 *0.0075*	0,25 *0.010*
N1	XNHQ140708EN4-E10 H25	XNHQ170708EN4-E12 F40M	0,24 *0.0095*	0,28 *0.011*	0,36 *0.014*
N2	XNHQ140708EN4-E10 H25	XNHQ170708EN4-E12 F40M	0,24 *0.0095*	0,28 *0.011*	0,36 *0.014*
N3	XNHQ140708EN4-E10 H25	XNHQ170708EN4-E12 F40M	0,24 *0.0095*	0,28 *0.011*	0,36 *0.014*
N11	XNHQ140708EN4-E10 H25	XNHQ170708EN4-E12 F40M	0,24 *0.0095*	0,28 *0.011*	0,36 *0.014*
S1	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
S2	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
S3	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,12 *0.0048*	0,14 *0.0055*	0,18 *0.0070*
S11	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
S12	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
S13	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
H5	XNHQ140708TN4-M11 MP2501	XNHQ170708TN4-M13 MP2501	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
H8	XNHQ140708TN4-M11 MP2501	XNHQ170708TN4-M13 MP2501	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*
H11	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
H12	XNHQ140708TN4-M11 F40M	XNHQ170708TN4-M13 F40M	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*
H21	XNHQ140708TN4-M11 MP2501	XNHQ170708TN4-M13 MP2501	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-XN14/XN17 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F40M			H25			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	225 *740*	245 *800*	265 *870*	170 *560*	185 *610*	205 *670*	— —	— —	— —	300 *980*	320 *1050*	345 *1125*
P2	220 *720*	230 *750*	255 *840*	165 *540*	175 *570*	195 *640*	— —	— —	— —	290 *950*	305 *1000*	330 *1075*
P3	190 *620*	205 *670*	225 *740*	145 *475*	155 *510*	170 *560*	— —	— —	— —	255 *840*	270 *890*	290 *950*
P4	165 *540*	180 *590*	200 *660*	130 *425*	140 *460*	155 *510*	— —	— —	— —	225 *740*	235 *770*	260 *850*
P5	165 *540*	170 *560*	190 *620*	125 *410*	130 *425*	150 *490*	— —	— —	— —	220 *720*	225 *740*	250 *820*
P6	180 *590*	195 *640*	215 *710*	140 *460*	150 *490*	165 *540*	— —	— —	— —	245 *800*	260 *850*	280 *920*
P7	170 *560*	185 *610*	205 *670*	130 *425*	145 *475*	155 *510*	— —	— —	— —	230 *750*	245 *800*	265 *870*
P8	160 *520*	170 *560*	190 *620*	125 *410*	130 *425*	145 *475*	— —	— —	— —	215 *710*	225 *740*	245 *800*
P11	165 *540*	180 *590*	200 *660*	130 *425*	140 *460*	150 *490*	— —	— —	— —	225 *740*	240 *790*	255 *840*
P12	110 *360*	120 *395*	130 *425*	85 *280*	90 *295*	100 *330*	— —	— —	— —	145 *475*	155 *510*	165 *540*
M1	— —	— —	— —	135 *445*	145 *475*	160 *520*	— —	— —	— —	160 *520*	170 *560*	185 *610*
M2	— —	— —	— —	115 *375*	120 *395*	135 *445*	— —	— —	— —	135 *445*	140 *460*	155 *510*
M3	— —	— —	— —	90 *295*	95 *310*	110 *360*	— —	— —	— —	105 *345*	115 *375*	130 *425*
M4	— —	— —	— —	70 *230*	75 *245*	85 *280*	— —	— —	— —	85 *280*	90 *295*	100 *330*
M5	— —	— —	— —	60 *195*	65 *215*	70 *230*	— —	— —	— —	70 *230*	75 *245*	80 *260*
K1	235 *770*	250 *820*	275 *900*	135 *445*	140 *460*	155 *510*	— —	— —	— —	295 *970*	305 *1000*	335 *1100*
K2	210 *690*	220 *720*	250 *820*	120 *395*	125 *410*	140 *460*	— —	— —	— —	265 *870*	275 *900*	300 *980*
K3	180 *590*	185 *610*	210 *690*	100 *330*	105 *345*	120 *395*	— —	— —	— —	225 *740*	230 *750*	255 *840*
K4	170 *560*	180 *590*	200 *660*	95 *310*	100 *330*	115 *375*	— —	— —	— —	215 *710*	220 *720*	240 *790*
K5	105 *345*	110 *360*	125 *410*	60 *195*	65 *215*	70 *230*	— —	— —	— —	130 *425*	135 *445*	150 *490*
K6	150 *490*	155 *510*	175 *570*	85 *280*	90 *295*	100 *330*	— —	— —	— —	190 *620*	195 *640*	215 *710*
K7	130 *425*	140 *460*	160 *520*	75 *245*	80 *260*	90 *295*	— —	— —	— —	165 *540*	175 *570*	190 *620*
N1	— —	— —	— —	970 *3175*	1025 *3375*	1150 *3775*	980 *3225*	1050 *3450*	1175 *3850*	— —	— —	— —
N2	— —	— —	— —	390 *1275*	420 *1375*	465 *1525*	395 *1300*	420 *1375*	470 *1550*	— —	— —	— —
N3	— —	— —	— —	260 *850*	280 *920*	310 *1025*	265 *870*	280 *920*	315 *1025*	— —	— —	— —
N11	— —	— —	— —	295 *970*	320 *1050*	355 *1175*	300 *980*	320 *1050*	360 *1175*	— —	— —	— —
S1	— —	— —	— —	33 *110*	35 *115*	39 *130*	— —	— —	— —	— —	— —	— —
S2	— —	— —	— —	27 *90*	28 *90*	31 *100*	— —	— —	— —	— —	— —	— —
S3	— —	— —	— —	23 *75*	25 *80*	28 *90*	— —	— —	— —	— —	— —	— —
S11	— —	— —	— —	46 *150*	49 *160*	55 *180*	— —	— —	— —	— —	— —	— —
S12	— —	— —	— —	38 *125*	41 *135*	46 *150*	— —	— —	— —	— —	— —	— —
S13	— —	— —	— —	22 *70*	24 *80*	27 *90*	— —	— —	— —	— —	— —	— —
H5	— —	— —	— —	28 *90*	30 *100*	33 *110*	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	30 *100*	32 *105*	35 *115*	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	35 *115*	38 *125*	42 *140*	— —	— —	— —	— —	— —	— —
H12	— —	— —	— —	35 *115*	37 *120*	41 *135*	— —	— —	— —	— —	— —	— —
H21	— —	— —	— —	30 *100*	32 *105*	35 *115*	— —	— —	— —	— —	— —	— —

335.25-LN14/LN17 – Selezione dell'inserto – In mm/ In pollici

SMG			f_z		
			30%	20%	10%
P1	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,22 *0.0085*	0,30 *0.012*
P2	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
P3	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,19 *0.0075*	0,22 *0.0085*	0,30 *0.012*
P4	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,19 *0.0075*	0,22 *0.0085*	0,28 *0.011*
P5	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
P6	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P7	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P8	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,19 *0.0075*	0,22 *0.0085*	0,30 *0.012*
P11	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,20 *0.0080*	0,28 *0.011*
P12	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
M1	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
M2	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
M3	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
M4	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
M5	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
K1	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,20 *0.0080*	0,24 *0.0095*	0,32 *0.013*
K2	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K3	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K4	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K5	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,17 *0.0065*	0,19 *0.0075*	0,25 *0.010*
K6	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,18 *0.0070*	0,22 *0.0085*	0,28 *0.011*
K7	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,17 *0.0065*	0,19 *0.0075*	0,25 *0.010*
S1	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
S2	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
S3	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,12 *0.0048*	0,14 *0.0055*	0,18 *0.0070*
S11	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
S12	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,15 *0.0060*	0,17 *0.0065*	0,22 *0.0085*
S13	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,15 *0.0060*	0,20 *0.0080*
H5	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
H8	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*
H11	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,13 *0.0050*	0,14 *0.0055*	0,19 *0.0075*
H12	LNHQ140708TN4-M11 F40M	LNHQ170708TN4-M13 F40M	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*
H21	LNHQ140708TN4-M11 MP2501	LNHQ170708TN4-M13 F40M	0,095 *0.0038*	0,11 *0.0044*	0,15 *0.0060*

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-LN14/LN17 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MP2501		
	30%	20%	10%	30%	20%	10%
P1	170 *560*	185 *610*	205 *670*	300 *980*	320 *1050*	345 *1125*
P2	165 *540*	175 *570*	195 *640*	290 *950*	305 *1000*	330 *1075*
P3	145 *475*	155 *510*	170 *560*	255 *840*	270 *890*	290 *950*
P4	130 *425*	140 *460*	155 *510*	225 *740*	235 *770*	260 *850*
P5	125 *410*	130 *425*	150 *490*	220 *720*	225 *740*	250 *820*
P6	140 *460*	150 *490*	165 *540*	245 *800*	260 *850*	280 *920*
P7	130 *425*	145 *475*	155 *510*	230 *750*	245 *800*	265 *870*
P8	125 *410*	130 *425*	145 *475*	215 *710*	225 *740*	245 *800*
P11	130 *425*	140 *460*	150 *490*	225 *740*	240 *790*	255 *840*
P12	85 *280*	90 *295*	100 *330*	145 *475*	155 *510*	165 *540*
M1	135 *445*	145 *475*	160 *520*	160 *520*	170 *560*	185 *610*
M2	115 *375*	120 *395*	135 *445*	135 *445*	140 *460*	155 *510*
M3	90 *295*	95 *310*	110 *360*	105 *345*	115 *375*	130 *425*
M4	70 *230*	75 *245*	85 *280*	85 *280*	90 *295*	100 *330*
M5	60 *195*	65 *215*	70 *230*	70 *230*	75 *245*	80 *260*
K1	135 *445*	140 *460*	155 *510*	295 *970*	305 *1000*	335 *1100*
K2	120 *395*	125 *410*	140 *460*	265 *870*	275 *900*	300 *980*
K3	100 *330*	105 *345*	120 *395*	225 *740*	230 *750*	255 *840*
K4	95 *310*	100 *330*	115 *375*	215 *710*	220 *720*	240 *790*
K5	60 *195*	65 *215*	70 *230*	130 *425*	135 *445*	150 *490*
K6	85 *280*	90 *295*	100 *330*	190 *620*	195 *640*	215 *710*
K7	75 *245*	80 *260*	90 *295*	165 *540*	175 *570*	190 *620*
N1	970 *3175*	1025 *3375*	1150 *3775*	— —	— —	— —
N2	390 *1275*	420 *1375*	465 *1525*	— —	— —	— —
N3	260 *850*	280 *920*	310 *1025*	— —	— —	— —
N11	295 *970*	320 *1050*	355 *1175*	— —	— —	— —
S1	33 *110*	35 *115*	39 *130*	— —	— —	— —
S2	27 *90*	28 *90*	31 *100*	— —	— —	— —
S3	23 *75*	25 *80*	28 *90*	— —	— —	— —
S11	46 *150*	49 *160*	55 *180*	— —	— —	— —
S12	38 *125*	41 *135*	46 *150*	— —	— —	— —
S13	22 *70*	24 *80*	27 *90*	— —	— —	— —
H5	28 *90*	30 *100*	33 *110*	— —	— —	— —
H8	30 *100*	32 *105*	35 *115*	— —	— —	— —
H11	35 *115*	38 *125*	42 *140*	— —	— —	— —
H12	35 *115*	37 *120*	41 *135*	— —	— —	— —
H21	30 *100*	32 *105*	35 *115*	— —	— —	— —

335.25-XN09 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	XNXU050508TN8-M07 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
P2	XNXU050508TN8-M07 F40M	0,15 *0.0060*	0,17 0.0065	0,22 0.0085
P3	XNXU050508TN8-M07 MP2501	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
P4	XNXU050508TN8-M07 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P5	XNXU050508TN8-M07 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P6	XNXU050508TN8-M07 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P7	XNXU050508TN8-M07 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P8	XNXU050508TN8-M07 MP2501	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
P11	XNXU050508TN8-M07 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P12	XNXU050508TN8-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
M1	XNXU050508TN8-M07 F40M	0,15 *0.0060*	0,17 0.0065	0,22 0.0085
M2	XNXU050508TN8-M07 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M3	XNXU050508TN8-M07 F40M	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
M4	XNXU050508TN8-M07 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
M5	XNXU050508TN8-M07 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
K1	XNXU050516TN8-M07 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K2	XNXU050508TN8-M07 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K3	XNXU050508TN8-M07 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K4	XNXU050508TN8-M07 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K5	XNXU050508TN8-M07 MK2050	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
K6	XNXU050508TN8-M07 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K7	XNXU050508TN8-M07 MK2050	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
S1	XNXU050508TN8-M07 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
S2	XNXU050508TN8-M07 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
S3	XNXU050508TN8-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S11	XNXU050508TN8-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
S12	XNXU050508TN8-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
S13	XNXU050508TN8-M07 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
H5	XNXU050516TN8-M07 MK2050	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
H8	XNXU050508TN8-M07 MK2050	0,070 *0.0028*	0,080 0.0032	0,11 0.0044
H11	XNXU050508TN8-M07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
H12	XNXU050508TN8-M07 F40M	0,070 *0.0028*	0,080 0.0032	0,11 0.0044
H21	XNXU050508TN8-M07 MK2050	0,070 *0.0028*	0,080 0.0032	0,11 0.0044

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-XN09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F40M			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	325 *1075*	345 *1125*	380 *1250*	250 *820*	265 *870*	295 *970*	435 *1425*	455 *1500*	485 *1600*
P2	310 *1025*	335 *1100*	370 *1225*	240 *790*	255 *840*	285 *940*	415 *1350*	435 *1425*	475 *1550*
P3	270 *890*	290 *950*	320 *1050*	210 *690*	225 *740*	245 *800*	360 *1175*	380 *1250*	405 *1325*
P4	245 *800*	260 *850*	290 *950*	190 *620*	200 *660*	220 *720*	325 *1075*	340 *1125*	365 *1200*
P5	235 *770*	250 *820*	275 *900*	180 *590*	190 *620*	210 *690*	310 *1025*	325 *1075*	350 *1150*
P6	260 *850*	280 *920*	310 *1025*	200 *660*	215 *710*	240 *790*	345 *1125*	365 *1200*	390 *1275*
P7	245 *800*	265 *870*	290 *950*	190 *620*	205 *670*	225 *740*	330 *1075*	345 *1125*	370 *1225*
P8	230 *750*	245 *800*	270 *890*	175 *570*	190 *620*	205 *670*	305 *1000*	320 *1050*	340 *1125*
P11	240 *790*	255 *840*	285 *940*	185 *610*	195 *640*	220 *720*	320 *1050*	335 *1100*	360 *1175*
P12	155 *510*	165 *540*	180 *590*	120 *395*	130 *425*	140 *460*	200 *660*	210 *690*	220 *720*
M1	— —	— —	— —	190 *620*	205 *670*	230 *750*	225 *740*	245 *800*	270 *890*
M2	— —	— —	— —	160 *520*	170 *560*	190 *620*	190 *620*	205 *670*	225 *740*
M3	— —	— —	— —	130 *425*	140 *460*	155 *510*	150 *490*	165 *540*	180 *590*
M4	— —	— —	— —	100 *330*	105 *345*	120 *395*	120 *395*	125 *410*	140 *460*
M5	— —	— —	— —	85 *280*	90 *295*	100 *330*	100 *330*	105 *345*	115 *375*
K1	335 *1100*	360 *1175*	400 *1300*	190 *620*	205 *670*	225 *740*	420 *1375*	440 *1450*	475 *1550*
K2	300 *980*	320 *1050*	355 *1175*	170 *560*	180 *590*	200 *660*	375 *1225*	390 *1275*	420 *1375*
K3	255 *840*	270 *890*	300 *980*	145 *475*	155 *510*	170 *560*	315 *1025*	330 *1075*	355 *1175*
K4	245 *800*	260 *850*	290 *950*	135 *445*	145 *475*	160 *520*	300 *980*	315 *1025*	340 *1125*
K5	150 *490*	155 *510*	175 *570*	85 *280*	90 *295*	100 *330*	185 *610*	190 *620*	205 *670*
K6	215 *710*	230 *750*	255 *840*	120 *395*	130 *425*	145 *475*	265 *870*	280 *920*	300 *980*
K7	190 *620*	200 *660*	225 *740*	105 *345*	115 *375*	125 *410*	235 *770*	245 *800*	265 *870*
N1	— —	— —	— —	1425 *4675*	1500 *4925*	1675 *5500*	— —	— —	— —
N2	— —	— —	— —	570 *1875*	600 *1975*	680 *2225*	— —	— —	— —
N3	— —	— —	— —	385 *1275*	400 *1300*	450 *1475*	— —	— —	— —
N11	— —	— —	— —	435 *1425*	460 *1500*	520 *1700*	— —	— —	— —
S1	— —	— —	— —	47 *155*	50 *165*	55 *180*	— —	— —	— —
S2	— —	— —	— —	38 *125*	40 *130*	45 *150*	— —	— —	— —
S3	— —	— —	— —	33 *110*	35 *115*	39 *130*	— —	— —	— —
S11	— —	— —	— —	65 *215*	70 *230*	80 *260*	— —	— —	— —
S12	— —	— —	— —	45 *150*	49 *160*	55 *180*	— —	— —	— —
S13	— —	— —	— —	26 *85*	28 *90*	31 *100*	— —	— —	— —
H5	55 *180*	55 *180*	60 *195*	40 *130*	43 *140*	46 *150*	— —	— —	— —
H8	55 *180*	60 *195*	65 *215*	42 *140*	45 *150*	50 *165*	— —	— —	— —
H11	65 *215*	75 *245*	80 *260*	50 *165*	55 *180*	60 *195*	— —	— —	— —
H12	100 *330*	105 *345*	115 *375*	75 *245*	80 *260*	90 *295*	— —	— —	— —
H21	55 *180*	60 *195*	65 *215*	42 *140*	45 *150*	50 *165*	— —	— —	— —

335.25-XN09 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	XNHQ070708TN8-M11 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
P2	XNHQ070708TN8-M11 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
P3	XNHQ070708TN8-M11 MP2501	0,20 *0.0080*	0,22 0.0085	0,30 0.012
P4	XNHQ070708TN8-M11 MP2501	0,19 *0.0075*	0,22 0.0085	0,30 0.012
P5	XNHQ070708TN8-M11 MP2501	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P6	XNHQ070708TN8-M11 MP2501	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P7	XNHQ070708TN8-M11 MP2501	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P8	XNHQ070708TN8-M11 MP2501	0,20 *0.0080*	0,22 0.0085	0,30 0.012
P11	XNHQ070708TN8-M11 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P12	XNHQ070708TN8-M11 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M1	XNHQ070708TN8-M11 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
M2	XNHQ070708TN8-M11 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
M3	XNHQ070708TN8-M11 F40M	0,15 *0.0060*	0,17 0.0065	0,24 0.0095
M4	XNHQ070708TN8-M11 F40M	0,14 *0.0055*	0,16 0.0065	0,20 0.0080
M5	XNHQ070708TN8-M11 F40M	0,14 *0.0055*	0,16 0.0065	0,20 0.0080
K1	XNHQ070708TN8-M11 MK2050	0,20 *0.0080*	0,24 0.0095	0,32 0.013
K2	XNHQ070708TN8-M11 MK2050	0,19 *0.0075*	0,22 0.0085	0,28 0.011
K3	XNHQ070708TN8-M11 MK2050	0,19 *0.0075*	0,22 0.0085	0,28 0.011
K4	XNHQ070708TN8-M11 MK2050	0,19 *0.0075*	0,22 0.0085	0,28 0.011
K5	XNHQ070708TN8-M11 MK2050	0,17 *0.0065*	0,19 0.0075	0,26 0.010
K6	XNHQ070708TN8-M11 MK2050	0,19 *0.0075*	0,22 0.0085	0,28 0.011
K7	XNHQ070708TN8-M11 MK2050	0,17 *0.0065*	0,19 0.0075	0,26 0.010
S1	XNHQ070708TN8-M11 F40M	0,14 *0.0055*	0,16 0.0065	0,20 0.0080
S2	XNHQ070708TN8-M11 F40M	0,14 *0.0055*	0,16 0.0065	0,20 0.0080
S3	XNHQ070708TN8-M11 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
S11	XNHQ070708TN8-M11 F40M	0,15 *0.0060*	0,18 0.0070	0,24 0.0095
S12	XNHQ070708TN8-M11 F40M	0,15 *0.0060*	0,18 0.0070	0,24 0.0095
S13	XNHQ070708TN8-M11 F40M	0,14 *0.0055*	0,16 0.0065	0,20 0.0080
H5	XNHQ070708TN8-M11 MK2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
H8	XNHQ070708TN8-M11 MK2050	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
H11	XNHQ070708TN8-M11 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
H12	XNHQ070708TN8-M11 F40M	0,10 *0.0040*	0,11 0.0044	0,15 0.0060
H21	XNHQ070708TN8-M11 MK2050	0,10 *0.0040*	0,11 0.0044	0,15 0.0060

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25-XN09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			F40M			MP2501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	300 *980*	315 *1025*	350 *1150*	230 *750*	245 *800*	270 *890*	405 *1325*	420 *1375*	455 *1500*
P2	290 *950*	310 *1025*	340 *1125*	225 *740*	235 *770*	265 *870*	390 *1275*	410 *1350*	440 *1450*
P3	250 *820*	270 *890*	300 *980*	195 *640*	210 *690*	230 *750*	335 *1100*	360 *1175*	385 *1275*
P4	225 *740*	240 *790*	265 *870*	175 *570*	185 *610*	205 *670*	300 *980*	320 *1050*	340 *1125*
P5	215 *710*	230 *750*	255 *840*	165 *540*	175 *570*	200 *660*	290 *950*	305 *1000*	330 *1075*
P6	240 *790*	255 *840*	290 *950*	185 *610*	200 *660*	220 *720*	325 *1075*	340 *1125*	370 *1225*
P7	225 *740*	245 *800*	275 *900*	175 *570*	185 *610*	210 *690*	305 *1000*	320 *1050*	350 *1150*
P8	210 *690*	230 *750*	250 *820*	160 *520*	175 *570*	195 *640*	285 *940*	305 *1000*	325 *1075*
P11	220 *720*	235 *770*	265 *870*	170 *560*	180 *590*	205 *670*	295 *970*	310 *1025*	340 *1125*
P12	145 *475*	155 *510*	170 *560*	110 *360*	120 *395*	130 *425*	195 *640*	200 *660*	215 *710*
M1	— —	— —	— —	180 *590*	190 *620*	210 *690*	215 *710*	225 *740*	250 *820*
M2	— —	— —	— —	150 *490*	160 *520*	180 *590*	175 *570*	185 *610*	210 *690*
M3	— —	— —	— —	120 *395*	130 *425*	145 *475*	145 *475*	155 *510*	170 *560*
M4	— —	— —	— —	95 *310*	100 *330*	110 *360*	110 *360*	120 *395*	130 *425*
M5	— —	— —	— —	80 *260*	85 *280*	95 *310*	95 *310*	100 *330*	110 *360*
K1	315 *1025*	335 *1100*	370 *1225*	180 *590*	190 *620*	210 *690*	395 *1300*	410 *1350*	445 *1450*
K2	275 *900*	295 *970*	335 *1100*	155 *510*	165 *540*	190 *620*	350 *1150*	365 *1200*	400 *1300*
K3	235 *770*	250 *820*	280 *920*	130 *425*	140 *460*	160 *520*	295 *970*	310 *1025*	340 *1125*
K4	225 *740*	240 *790*	270 *890*	125 *410*	135 *445*	150 *490*	280 *920*	295 *970*	325 *1075*
K5	140 *460*	150 *490*	165 *540*	80 *260*	85 *280*	90 *295*	175 *570*	185 *610*	195 *640*
K6	195 *640*	210 *690*	235 *770*	110 *360*	120 *395*	135 *445*	250 *820*	260 *850*	285 *940*
K7	175 *570*	190 *620*	210 *690*	100 *330*	105 *345*	120 *395*	220 *720*	235 *770*	250 *820*
N1	— —	— —	— —	1300 *4275*	1400 *4600*	1550 *5075*	— —	— —	— —
N2	— —	— —	— —	520 *1700*	560 *1825*	620 *2025*	— —	— —	— —
N3	— —	— —	— —	350 *1150*	375 *1225*	415 *1350*	— —	— —	— —
N11	— —	— —	— —	400 *1300*	430 *1400*	475 *1550*	— —	— —	— —
S1	— —	— —	— —	44 *145*	47 *155*	50 *165*	— —	— —	— —
S2	— —	— —	— —	36 *120*	38 *125*	42 *140*	— —	— —	— —
S3	— —	— —	— —	31 *100*	33 *110*	37 *120*	— —	— —	— —
S11	— —	— —	— —	60 *195*	65 *215*	75 *245*	— —	— —	— —
S12	— —	— —	— —	42 *140*	45 *150*	50 *165*	— —	— —	— —
S13	— —	— —	— —	25 *80*	26 *85*	29 *95*	— —	— —	— —
H5	50 *165*	55 *180*	60 *195*	37 *120*	39 *130*	44 *145*	— —	— —	— —
H8	55 *180*	55 *180*	65 *215*	40 *130*	43 *140*	47 *155*	— —	— —	— —
H11	65 *215*	65 *215*	75 *245*	47 *155*	50 *165*	55 *180*	— —	— —	— —
H12	90 *295*	100 *330*	110 *360*	70 *230*	75 *245*	85 *280*	— —	— —	— —
H21	55 *180*	55 *180*	65 *215*	40 *130*	43 *140*	47 *155*	— —	— —	— —

335.29 Tondo 5 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		25%	10%	5%
P1	RDHW0501M0-MD01 F40M	0,055 *0.0022*	0,080 0.0032	0,11 0.0044
P2	RDHW0501M0-MD01 F40M	0,055 *0.0022*	0,080 0.0032	0,11 0.0044
P3	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
P4	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
P5	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
P6	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,070 0.0028	0,10 0.0040
P7	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,070 0.0028	0,10 0.0040
P8	RDHW0501M0-MD01 MP3000	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
P11	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,070 0.0028	0,10 0.0040
P12	RDHW0501M0-MD01 F40M	0,034 *0.0013*	0,050 0.0020	0,070 0.0028
M1	RDHW0501M0-MD01 F40M	0,055 *0.0022*	0,080 0.0032	0,11 0.0044
M2	RDHW0501M0-MD01 F40M	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
M3	RDHW0501M0-MD01 F40M	0,040 *0.0016*	0,060 0.0024	0,080 0.0032
M4	RDHW0501M0-MD01 F40M	0,036 *0.0014*	0,050 0.0020	0,070 0.0028
M5	RDHW0501M0-MD01 F40M	0,036 *0.0014*	0,050 0.0020	0,070 0.0028
K1	RDHW0501M0-MD01 MP3000	0,055 *0.0022*	0,080 0.0032	0,11 0.0044
K2	RDHW0501M0-MD01 MP3000	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
K3	RDHW0501M0-MD01 MP3000	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
K4	RDHW0501M0-MD01 MP3000	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
K5	RDHW0501M0-MD01 MP3000	0,046 *0.0018*	0,065 0.0026	0,090 0.0036
K6	RDHW0501M0-MD01 MP3000	0,050 *0.0020*	0,075 0.0030	0,10 0.0040
K7	RDHW0501M0-MD01 MP3000	0,046 *0.0018*	0,065 0.0026	0,090 0.0036
N1	RDHW0501M0-MD01 MP3000	0,070 *0.0028*	0,10 0.0040	0,14 0.0055
N2	RDHW0501M0-MD01 MP3000	0,070 *0.0028*	0,10 0.0040	0,14 0.0055
N3	RDHW0501M0-MD01 MP3000	0,070 *0.0028*	0,10 0.0040	0,14 0.0055
N11	RDHW0501M0-MD01 MP3000	0,070 *0.0028*	0,10 0.0040	0,14 0.0055
S1	RDHW0501M0-MD01 F40M	0,036 *0.0014*	0,050 0.0020	0,070 0.0028
S2	RDHW0501M0-MD01 F40M	0,036 *0.0014*	0,050 0.0020	0,070 0.0028
S3	RDHW0501M0-MD01 F40M	0,032 *0.0013*	0,048 0.0019	0,065 0.0026
S11	RDHW0501M0-MD01 F40M	0,040 *0.0016*	0,060 0.0024	0,080 0.0032
S12	RDHW0501M0-MD01 F40M	0,040 *0.0016*	0,060 0.0024	0,080 0.0032
S13	RDHW0501M0-MD01 F40M	0,036 *0.0014*	0,050 0.0020	0,070 0.0028
H5	RDHW0501M0-MD01 MP3000	0,034 *0.0013*	0,050 0.0020	0,070 0.0028
H8	RDHW0501M0-MD01 MP3000	0,026 *0.0010*	0,038 0.0015	0,050 0.0020
H11	RDHW0501M0-MD01 MP3000	0,034 *0.0013*	0,050 0.0020	0,070 0.0028
H12	RDHW0501M0-MD01 MP3000	0,026 *0.0010*	0,038 0.0015	0,050 0.0020
H21	RDHW0501M0-MD01 MP3000	0,026 *0.0010*	0,038 0.0015	0,050 0.0020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.29 Tondo 5 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP3000			F40M		
	25%	10%	5%	25%	10%	5%
P1	325 *1075*	365 *1200*	400 *1300*	260 *850*	295 *970*	320 *1050*
P2	315 *1025*	360 *1175*	390 *1275*	250 *820*	285 *940*	310 *1025*
P3	275 *900*	310 *1025*	340 *1125*	220 *720*	250 *820*	270 *890*
P4	240 *790*	275 *900*	300 *980*	195 *640*	220 *720*	240 *790*
P5	230 *750*	260 *850*	285 *940*	185 *610*	210 *690*	225 *740*
P6	260 *850*	295 *970*	320 *1050*	205 *670*	235 *770*	255 *840*
P7	245 *800*	280 *920*	300 *980*	195 *640*	225 *740*	240 *790*
P8	230 *750*	260 *850*	285 *940*	185 *610*	210 *690*	225 *740*
P11	235 *770*	270 *890*	295 *970*	190 *620*	215 *710*	235 *770*
P12	145 *475*	165 *540*	180 *590*	120 *395*	135 *445*	145 *475*
M1	235 *770*	270 *890*	290 *950*	200 *660*	230 *750*	250 *820*
M2	195 *640*	220 *720*	240 *790*	165 *540*	190 *620*	205 *670*
M3	150 *490*	170 *560*	185 *610*	130 *425*	150 *490*	160 *520*
M4	115 *375*	130 *425*	140 *460*	100 *330*	115 *375*	120 *395*
M5	95 *310*	110 *360*	120 *395*	80 *260*	95 *310*	100 *330*
K1	210 *690*	240 *790*	260 *850*	200 *660*	225 *740*	245 *800*
K2	185 *610*	210 *690*	225 *740*	175 *570*	200 *660*	215 *710*
K3	155 *510*	175 *570*	190 *620*	150 *490*	170 *560*	185 *610*
K4	150 *490*	170 *560*	185 *610*	140 *460*	160 *520*	175 *570*
K5	90 *295*	100 *330*	110 *360*	85 *280*	95 *310*	105 *345*
K6	130 *425*	150 *490*	160 *520*	125 *410*	140 *460*	155 *510*
K7	115 *375*	130 *425*	140 *460*	110 *360*	125 *410*	135 *445*
N1	1900 *6225*	2175 *7125*	2350 *7700*	1525 *5000*	1725 *5650*	1875 *6150*
N2	760 *2500*	870 *2850*	950 *3125*	610 *2000*	700 *2300*	760 *2500*
N3	510 *1675*	580 *1900*	630 *2075*	410 *1350*	465 *1525*	500 *1650*
N11	580 *1900*	670 *2200*	720 *2350*	465 *1525*	530 *1750*	580 *1900*
S1	55 *180*	60 *195*	65 *215*	46 *150*	55 *180*	55 *180*
S2	43 *140*	49 *160*	55 *180*	37 *120*	42 *140*	46 *150*
S3	38 *125*	43 *140*	46 *150*	32 *105*	37 *120*	40 *130*
S11	75 *245*	85 *280*	95 *310*	65 *215*	75 *245*	80 *260*
S12	65 *215*	75 *245*	80 *260*	55 *180*	65 *215*	70 *230*
S13	37 *120*	42 *140*	45 *150*	32 *105*	36 *120*	39 *130*
H5	41 *135*	47 *155*	50 *165*	39 *130*	44 *145*	48 *155*
H8	42 *140*	48 *155*	50 *165*	40 *130*	45 *150*	49 *160*
H11	50 *165*	60 *195*	65 *215*	50 *165*	55 *180*	60 *195*
H12	49 *160*	55 *180*	60 *195*	47 *155*	55 *180*	55 *180*
H21	42 *140*	48 *155*	50 *165*	40 *130*	45 *150*	49 *160*

335.29 Tondo 6 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		20%	10%	5%
P1	RDHW06T1M0-MD02 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
P2	RDHW06T1M0-MD02 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
P3	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
P4	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
P5	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
P6	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,070 0.0028	0,10 0.0040
P7	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,070 0.0028	0,10 0.0040
P8	RDHW06T1M0-MD02 MP3000	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
P11	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,070 0.0028	0,10 0.0040
P12	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
M1	RDHW06T1M0-MD02 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
M2	RDHW06T1M0-MD02 F40M	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
M3	RDHW06T1M0-MD02 F40M	0,044 *0.0017*	0,060 0.0024	0,080 0.0032
M4	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
M5	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
K1	RDHW06T1M0-MD02 MK2050	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
K2	RDHW06T1M0-MD02 MK2050	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
K3	RDHW06T1M0-MD02 MK2050	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
K4	RDHW06T1M0-MD02 MK2050	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
K5	RDHW06T1M0-MD02 MK2050	0,050 *0.0020*	0,065 0.0026	0,090 0.0036
K6	RDHW06T1M0-MD02 MK2050	0,055 *0.0022*	0,075 0.0030	0,10 0.0040
K7	RDHW06T1M0-MD02 MK2050	0,050 *0.0020*	0,065 0.0026	0,090 0.0036
N1	RDHT06T1M0-E02 H25	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
N2	RDHT06T1M0-E02 H25	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
N3	RDHT06T1M0-E02 H25	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
N11	RDHT06T1M0-E02 H25	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
S1	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
S2	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
S3	RDHW06T1M0-MD02 F40M	0,036 *0.0014*	0,048 0.0019	0,065 0.0026
S11	RDHW06T1M0-MD02 F40M	0,044 *0.0017*	0,060 0.0024	0,080 0.0032
S12	RDHW06T1M0-MD02 F40M	0,044 *0.0017*	0,060 0.0024	0,080 0.0032
S13	RDHW06T1M0-MD02 F40M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
H5	RDHW06T1M0-MD02 F15M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
H8	RDHW06T1M0-MD02 F15M	0,028 *0.0011*	0,038 0.0015	0,050 0.0020
H11	RDHW06T1M0-MD02 F15M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
H12	RDHW06T1M0-MD02 F15M	0,028 *0.0011*	0,038 0.0015	0,050 0.0020
H21	RDHW06T1M0-MD02 F15M	0,028 *0.0011*	0,038 0.0015	0,050 0.0020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.29 Tondo 6 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			MK2050			F30M			MP3000			F40M			H25		
	20%	10%	5%	20%	10%	5%	20%	10%	5%	20%	10%	5%	20%	10%	5%	20%	10%	5%
P1	305 *1000*	340 *1125*	365 *1200*	330 *1075*	365 *1200*	395 *1300*	270 *890*	295 *970*	320 *1050*	320 *1050*	350 *1150*	380 *1250*	255 *840*	280 *920*	305 *1000*	— —	— —	— —
P2	300 *980*	330 *1075*	355 *1175*	325 *1075*	355 *1175*	385 *1275*	260 *850*	290 *950*	310 *1025*	310 *1025*	345 *1125*	370 *1225*	250 *820*	275 *900*	295 *970*	— —	— —	— —
P3	260 *850*	285 *940*	310 *1025*	280 *920*	310 *1025*	335 *1100*	230 *750*	250 *820*	270 *890*	270 *890*	300 *980*	325 *1075*	215 *710*	240 *790*	260 *850*	— —	— —	— —
P4	230 *750*	250 *820*	275 *900*	250 *820*	275 *900*	295 *970*	200 *660*	220 *720*	240 *790*	240 *790*	260 *850*	285 *940*	190 *620*	210 *690*	230 *750*	— —	— —	— —
P5	220 *720*	240 *790*	260 *850*	235 *770*	260 *850*	285 *940*	190 *620*	210 *690*	230 *750*	230 *750*	250 *820*	275 *900*	180 *590*	200 *660*	220 *720*	— —	— —	— —
P6	245 *800*	275 *900*	295 *970*	265 *870*	295 *970*	320 *1050*	215 *710*	240 *790*	255 *840*	255 *840*	285 *940*	305 *1000*	205 *670*	225 *740*	245 *800*	— —	— —	— —
P7	230 *750*	255 *840*	275 *900*	250 *820*	280 *920*	300 *980*	205 *670*	225 *740*	245 *800*	240 *790*	270 *890*	290 *950*	195 *640*	215 *710*	230 *750*	— —	— —	— —
P8	220 *720*	240 *790*	260 *850*	235 *770*	260 *850*	285 *940*	190 *620*	210 *690*	230 *750*	230 *750*	250 *820*	275 *900*	180 *590*	200 *660*	220 *720*	— —	— —	— —
P11	225 *740*	250 *820*	270 *890*	245 *800*	270 *890*	290 *950*	195 *640*	220 *720*	235 *770*	235 *770*	260 *850*	280 *920*	190 *620*	210 *690*	225 *740*	— —	— —	— —
M1	— —	— —	— —	— —	— —	— —	210 *690*	230 *750*	250 *820*	235 *770*	255 *840*	280 *920*	200 *660*	220 *720*	240 *790*	— —	— —	— —
M2	— —	— —	— —	— —	— —	— —	170 *560*	190 *620*	205 *670*	190 *620*	210 *690*	230 *750*	165 *540*	180 *590*	195 *640*	— —	— —	— —
M3	— —	— —	— —	— —	— —	— —	135 *445*	150 *490*	160 *520*	150 *490*	165 *540*	180 *590*	130 *425*	140 *460*	155 *510*	— —	— —	— —
M4	— —	— —	— —	— —	— —	— —	105 *345*	115 *375*	125 *410*	115 *375*	125 *410*	135 *445*	100 *330*	110 *360*	115 *375*	— —	— —	— —
M5	— —	— —	— —	— —	— —	— —	85 *280*	95 *310*	105 *345*	95 *310*	105 *345*	115 *375*	80 *260*	90 *295*	100 *330*	— —	— —	— —
K1	235 *770*	260 *850*	285 *940*	350 *1150*	385 *1275*	415 *1350*	205 *670*	230 *750*	245 *800*	205 *670*	230 *750*	245 *800*	195 *640*	215 *710*	235 *770*	— —	— —	— —
K2	210 *690*	230 *750*	250 *820*	305 *1000*	335 *1100*	365 *1200*	180 *590*	200 *660*	215 *710*	180 *590*	200 *660*	215 *710*	175 *570*	190 *620*	205 *670*	— —	— —	— —
K3	175 *570*	195 *640*	210 *690*	260 *850*	285 *940*	310 *1025*	155 *510*	170 *560*	185 *610*	155 *510*	170 *560*	185 *610*	145 *475*	160 *520*	175 *570*	— —	— —	— —
K4	170 *560*	185 *610*	200 *660*	250 *820*	270 *890*	295 *970*	145 *475*	160 *520*	175 *570*	145 *475*	160 *520*	175 *570*	140 *460*	155 *510*	165 *540*	— —	— —	— —
K5	100 *330*	110 *360*	120 *395*	150 *490*	165 *540*	180 *590*	90 *295*	100 *330*	105 *345*	90 *295*	100 *330*	105 *345*	85 *280*	95 *310*	100 *330*	— —	— —	— —
K6	150 *490*	160 *520*	175 *570*	220 *720*	240 *790*	260 *850*	130 *425*	140 *460*	155 *510*	130 *425*	140 *460*	155 *510*	125 *410*	135 *445*	145 *475*	— —	— —	— —
K7	130 *425*	145 *475*	155 *510*	190 *620*	210 *690*	230 *750*	115 *375*	125 *410*	135 *445*	115 *375*	125 *410*	135 *445*	110 *360*	120 *395*	130 *425*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	1575 *5175*	1750 *5750*	1875 *6150*	1875 *6150*	2075 *6800*	2250 *7375*	1500 *4925*	1650 *5425*	1800 *5900*	1725 *5650*	1900 *6225*	2050 *6725*
N2	— —	— —	— —	— —	— —	— —	640 *2100*	700 *2300*	760 *2500*	760 *2500*	840 *2750*	910 *2975*	610 *2000*	670 *2200*	730 *2400*	700 *2300*	770 *2525*	830 *2725*
N3	— —	— —	— —	— —	— —	— —	425 *1400*	470 *1550*	510 *1675*	510 *1675*	560 *1825*	600 *1975*	405 *1325*	445 *1450*	485 *1600*	465 *1525*	510 *1675*	560 *1825*
N11	— —	— —	— —	— —	— —	— —	485 *1600*	540 *1775*	580 *1900*	580 *1900*	640 *2100*	690 *2275*	465 *1525*	510 *1675*	550 *1800*	530 *1750*	580 *1900*	630 *2075*
S1	— —	— —	— —	— —	— —	— —	48 *155*	55 *180*	55 *180*	55 *180*	60 *195*	65 *215*	46 *150*	50 *165*	55 *180*	— —	— —	— —
S2	— —	— —	— —	— —	— —	— —	39 *130*	43 *140*	46 *150*	43 *140*	47 *155*	50 *165*	37 *120*	41 *135*	44 *145*	— —	— —	— —
S3	— —	— —	— —	— —	— —	— —	34 *110*	37 *120*	40 *130*	37 *120*	41 *135*	44 *145*	32 *105*	35 *115*	38 *125*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	75 *245*	85 *280*	90 *295*	65 *215*	70 *230*	80 *260*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	48 *155*	55 *180*	55 *180*	65 *215*	70 *230*	75 *245*	55 *180*	60 *195*	65 *215*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	27 *90*	30 *100*	33 *110*	36 *120*	40 *130*	43 *140*	31 *100*	35 *115*	37 *120*	— —	— —	— —
H5	46 *150*	50 *165*	55 *180*	— —	— —	— —	40 *130*	45 *150*	48 *155*	40 *130*	45 *150*	48 *155*	39 *130*	43 *140*	46 *150*	— —	— —	— —
H8	48 *155*	50 *165*	55 *180*	— —	— —	— —	42 *140*	46 *150*	50 *165*	42 *140*	46 *150*	50 *165*	40 *130*	44 *145*	47 *155*	— —	— —	— —
H11	60 *195*	65 *215*	70 *230*	— —	— —	— —	50 *165*	55 *180*	60 *195*	50 *165*	55 *180*	60 *195*	49 *160*	55 *180*	60 *195*	— —	— —	— —
H12	55 *180*	60 *195*	65 *215*	— —	— —	— —	49 *160*	55 *180*	60 *195*	49 *160*	55 *180*	60 *195*	46 *150*	50 *165*	55 *180*	— —	— —	— —
H21	48 *155*	50 *165*	55 *180*	— —	— —	— —	42 *140*	46 *150*	50 *165*	42 *140*	46 *150*	50 *165*	40 *130*	44 *145*	47 *155*	— —	— —	— —

335.29 Tondo 7 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		20%	10%	5%
P1	RDHW0702M0-MD03 F40M	0,080 *0.0032*	0,10 0.0040	0,14 0.0055
P2	RDHW0702M0-MD03 F40M	0,080 *0.0032*	0,11 0.0044	0,15 0.0060
P3	RDHW0702M0-MD03 F40M	0,075 *0.0030*	0,10 0.0040	0,14 0.0055
P4	RDHW0702M0-MD03 F40M	0,075 *0.0030*	0,10 0.0040	0,14 0.0055
P5	RDHW0702M0-MD03 F40M	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
P6	RDHW0702M0-MD03 F40M	0,070 *0.0028*	0,095 0.0038	0,13 0.0050
P7	RDHW0702M0-MD03 F40M	0,070 *0.0028*	0,095 0.0038	0,13 0.0050
P8	RDHW0702M0-MD03 MP3000	0,075 *0.0030*	0,10 0.0040	0,14 0.0055
P11	RDHW0702M0-MD03 F40M	0,070 *0.0028*	0,095 0.0038	0,13 0.0050
P12	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,065 0.0026	0,090 0.0036
M1	RDHW0702M0-MD03 F40M	0,080 *0.0032*	0,11 0.0044	0,15 0.0060
M2	RDHW0702M0-MD03 F40M	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
M3	RDHW0702M0-MD03 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
M4	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
M5	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
K1	RDHW0702M0-MD03 MP3000	0,080 *0.0032*	0,11 0.0044	0,15 0.0060
K2	RDHW0702M0-MD03 MP3000	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
K3	RDHW0702M0-MD03 MP3000	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
K4	RDHW0702M0-MD03 MP3000	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
K5	RDHW0702M0-MD03 MP3000	0,065 *0.0026*	0,085 0.0034	0,12 0.0048
K6	RDHW0702M0-MD03 MP3000	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
K7	RDHW0702M0-MD03 MP3000	0,065 *0.0026*	0,085 0.0034	0,12 0.0048
N1	RDHW0702M0-MD03 MP3000	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
N2	RDHW0702M0-MD03 MP3000	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
N3	RDHW0702M0-MD03 MP3000	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
N11	RDHW0702M0-MD03 MP3000	0,10 *0.0040*	0,14 0.0055	0,19 0.0075
S1	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
S2	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
S3	RDHW0702M0-MD03 F40M	0,048 *0.0019*	0,065 0.0026	0,085 0.0034
S11	RDHW0702M0-MD03 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
S12	RDHW0702M0-MD03 F40M	0,060 *0.0024*	0,080 0.0032	0,11 0.0044
S13	RDHW0702M0-MD03 F40M	0,050 *0.0020*	0,070 0.0028	0,095 0.0038
H5	RDHW0702M0T-MD04 F15M	0,050 *0.0020*	0,065 0.0026	0,090 0.0036
H8	RDHW0702M0T-MD04 F15M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
H11	RDHW0702M0T-MD04 F15M	0,050 *0.0020*	0,065 0.0026	0,090 0.0036
H12	RDHW0702M0T-MD04 F15M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028
H21	RDHW0702M0T-MD04 F15M	0,038 *0.0015*	0,050 0.0020	0,070 0.0028

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.29 Tondo 7 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			MP3000			F40M		
	20%	10%	5%	20%	10%	5%	20%	10%	5%
P1	295 *970*	325 *1075*	355 *1175*	305 *1000*	340 *1125*	370 *1225*	245 *800*	270 *890*	295 *970*
P2	285 *940*	315 *1025*	340 *1125*	295 *970*	325 *1075*	355 *1175*	235 *770*	260 *850*	285 *940*
P3	250 *820*	275 *900*	295 *970*	260 *850*	285 *940*	310 *1025*	205 *670*	230 *750*	245 *800*
P4	220 *720*	240 *790*	260 *850*	225 *740*	250 *820*	270 *890*	180 *590*	200 *660*	215 *710*
P5	210 *690*	230 *750*	250 *820*	215 *710*	240 *790*	260 *850*	175 *570*	195 *640*	210 *690*
P6	235 *770*	260 *850*	285 *940*	245 *800*	270 *890*	295 *970*	195 *640*	215 *710*	235 *770*
P7	225 *740*	245 *800*	265 *870*	235 *770*	255 *840*	280 *920*	185 *610*	205 *670*	220 *720*
P8	210 *690*	230 *750*	250 *820*	215 *710*	240 *790*	260 *850*	175 *570*	190 *620*	205 *670*
P11	215 *710*	240 *790*	260 *850*	225 *740*	250 *820*	270 *890*	180 *590*	200 *660*	215 *710*
P12	— —	— —	— —	140 *460*	155 *510*	170 *560*	110 *360*	125 *410*	135 *445*
M1	— —	— —	— —	220 *720*	245 *800*	265 *870*	190 *620*	210 *690*	230 *750*
M2	— —	— —	— —	180 *590*	200 *660*	220 *720*	155 *510*	175 *570*	190 *620*
M3	— —	— —	— —	145 *475*	160 *520*	170 *560*	125 *410*	135 *445*	150 *490*
M4	— —	— —	— —	110 *360*	120 *395*	130 *425*	95 *310*	105 *345*	115 *375*
M5	— —	— —	— —	90 *295*	100 *330*	110 *360*	80 *260*	85 *280*	95 *310*
K1	225 *740*	250 *820*	270 *890*	200 *660*	215 *710*	235 *770*	190 *620*	205 *670*	225 *740*
K2	200 *660*	220 *720*	240 *790*	175 *570*	195 *640*	210 *690*	165 *540*	185 *610*	200 *660*
K3	165 *540*	185 *610*	200 *660*	145 *475*	165 *540*	175 *570*	140 *460*	155 *510*	170 *560*
K4	160 *520*	180 *590*	195 *640*	140 *460*	155 *510*	170 *560*	135 *445*	150 *490*	160 *520*
K5	95 *310*	110 *360*	115 *375*	85 *280*	95 *310*	100 *330*	80 *260*	90 *295*	95 *310*
K6	140 *460*	155 *510*	170 *560*	125 *410*	135 *445*	150 *490*	115 *375*	130 *425*	140 *460*
K7	125 *410*	140 *460*	150 *490*	110 *360*	120 *395*	130 *425*	105 *345*	115 *375*	125 *410*
N1	— —	— —	— —	1775 *5825*	1950 *6400*	2125 *6975*	1425 *4675*	1550 *5075*	1700 *5575*
N2	— —	— —	— —	720 *2350*	790 *2600*	860 *2825*	580 *1900*	630 *2075*	690 *2275*
N3	— —	— —	— —	480 *1575*	530 *1750*	570 *1875*	385 *1275*	420 *1375*	460 *1500*
N11	— —	— —	— —	550 *1800*	600 *1975*	650 *2125*	440 *1450*	480 *1575*	520 *1700*
S1	— —	— —	— —	50 *165*	55 *180*	60 *195*	44 *145*	49 *160*	55 *180*
S2	— —	— —	— —	41 *135*	45 *150*	49 *160*	36 *120*	39 *130*	42 *140*
S3	— —	— —	— —	36 *120*	39 *130*	43 *140*	31 *100*	34 *110*	37 *120*
S11	— —	— —	— —	70 *230*	80 *260*	85 *280*	60 *195*	70 *230*	75 *245*
S12	— —	— —	— —	60 *195*	65 *215*	75 *245*	50 *165*	60 *195*	65 *215*
S13	— —	— —	— —	35 *115*	38 *125*	42 *140*	30 *100*	33 *110*	36 *120*
H5	45 *150*	49 *160*	55 *180*	39 *130*	43 *140*	47 *155*	37 *120*	41 *135*	45 *150*
H8	46 *150*	50 *165*	55 *180*	40 *130*	45 *150*	48 *155*	39 *130*	43 *140*	46 *150*
H11	55 *180*	65 *215*	70 *230*	50 *165*	55 *180*	60 *195*	47 *155*	50 *165*	55 *180*
H12	55 *180*	60 *195*	65 *215*	47 *155*	50 *165*	55 *180*	45 *150*	49 *160*	55 *180*
H21	46 *150*	50 *165*	55 *180*	40 *130*	45 *150*	48 *155*	39 *130*	43 *140*	46 *150*

335.18/29 Tondo 8 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	RDHW0803M0-MD03 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
P2	RDHW0803M0-MD03 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
P3	RDHW0803M0-MD03 F40M	0,065 *0.0026*	0,075 0.0030	0,095 0.0038
P4	RDKW0803M0T-MD05 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
P5	RDKW0803M0T-MD05 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
P6	RDKW0803M0T-MD05 F40M	0,075 *0.0030*	0,085 0.0034	0,12 0.0048
P7	RDKW0803M0T-MD05 F40M	0,075 *0.0030*	0,085 0.0034	0,12 0.0048
P8	RDKW0803M0T-MD05 MP2501	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
P11	RDKW0803M0T-MD05 F40M	0,075 *0.0030*	0,085 0.0034	0,12 0.0048
P12	RDKW0803M0T-MD05 F40M	0,050 *0.0020*	0,060 0.0024	0,080 0.0032
M1	RDHW0803M0-MD03 F40M	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
M2	RDHW0803M0-MD03 F40M	0,060 *0.0024*	0,070 0.0028	0,095 0.0038
M3	RDHW0803M0-MD03 F40M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030
M4	RDHW0803M0-MD03 F40M	0,042 *0.0017*	0,050 0.0020	0,065 0.0026
M5	RDHW0803M0-MD03 F40M	0,042 *0.0017*	0,050 0.0020	0,065 0.0026
K1	RDKW0803M0T-MD05 MK2050	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
K2	RDKW0803M0T-MD05 MK2050	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
K3	RDKW0803M0T-MD05 MK2050	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
K4	RDKW0803M0T-MD05 MK2050	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
K5	RDKW0803M0T-MD05 MK2050	0,070 *0.0028*	0,080 0.0032	0,11 0.0044
K6	RDKW0803M0T-MD05 MK2050	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
K7	RDKW0803M0T-MD05 MK2050	0,070 *0.0028*	0,080 0.0032	0,11 0.0044
N1	RDHT0803M0-E03 H25	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
N2	RDHT0803M0-E03 H25	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
N3	RDHT0803M0-E03 H25	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
N11	RDHT0803M0-E03 H25	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
S1	RDHW0803M0-MD03 F40M	0,042 *0.0017*	0,050 0.0020	0,065 0.0026
S2	RDHW0803M0-MD03 F40M	0,042 *0.0017*	0,050 0.0020	0,065 0.0026
S3	RDHW0803M0-MD03 F40M	0,040 *0.0016*	0,046 0.0018	0,060 0.0024
S11	RDHW0803M0-MD03 F40M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030
S12	RDHW0803M0-MD03 F40M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030
S13	RDHW0803M0-MD03 F40M	0,042 *0.0017*	0,050 0.0020	0,065 0.0026
H5	RDKW0803M0T-MD05 F15M	0,050 *0.0020*	0,060 0.0024	0,080 0.0032
H8	RDKW0803M0T-MD05 F15M	0,040 *0.0016*	0,046 0.0018	0,060 0.0024
H11	RDKW0803M0T-MD05 F15M	0,050 *0.0020*	0,060 0.0024	0,080 0.0032
H12	RDKW0803M0T-MD05 F15M	0,040 *0.0016*	0,046 0.0018	0,060 0.0024
H21	RDKW0803M0T-MD05 F15M	0,040 *0.0016*	0,046 0.0018	0,060 0.0024

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.18/29 Tondo 8 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			F15M			MK2050			F25M			F30M			MP3000			MS2050		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	360 *1175*	380 *1250*	425 *1400*	260 *850*	275 *900*	305 *1000*	280 *920*	300 *980*	330 *1075*	240 *790*	255 *840*	280 *920*	235 *770*	250 *820*	280 *920*	280 *920*	300 *980*	335 *1100*	— —	— —	— —
P2	350 *1150*	370 *1225*	410 *1350*	255 *840*	270 *890*	300 *980*	275 *900*	290 *950*	325 *1075*	230 *750*	245 *800*	275 *900*	230 *750*	245 *800*	270 *890*	275 *900*	290 *950*	320 *1050*	— —	— —	— —
P3	305 *1000*	325 *1075*	355 *1175*	220 *720*	235 *770*	255 *840*	240 *790*	255 *840*	280 *920*	200 *660*	215 *710*	235 *770*	200 *660*	215 *710*	235 *770*	240 *790*	255 *840*	280 *920*	— —	— —	— —
P4	270 *890*	285 *940*	315 *1025*	195 *640*	205 *670*	230 *750*	210 *690*	225 *740*	250 *820*	180 *590*	190 *620*	210 *690*	175 *570*	190 *620*	205 *670*	210 *690*	225 *740*	245 *800*	— —	— —	— —
P5	255 *840*	275 *900*	305 *1000*	185 *610*	200 *660*	220 *720*	200 *660*	215 *710*	240 *790*	170 *560*	180 *590*	200 *660*	170 *560*	180 *590*	200 *660*	200 *660*	215 *710*	240 *790*	— —	— —	— —
P6	290 *950*	310 *1025*	340 *1125*	210 *690*	225 *740*	245 *800*	225 *740*	240 *790*	265 *870*	190 *620*	205 *670*	225 *740*	190 *620*	205 *670*	225 *740*	225 *740*	245 *800*	265 *870*	— —	— —	— —
P7	270 *890*	290 *950*	320 *1050*	195 *640*	210 *690*	230 *750*	215 *710*	230 *750*	250 *820*	180 *590*	195 *640*	215 *710*	180 *590*	190 *620*	210 *690*	215 *710*	230 *750*	250 *820*	— —	— —	— —
P8	255 *840*	270 *890*	300 *980*	185 *610*	195 *640*	215 *710*	200 *660*	215 *710*	235 *770*	170 *560*	180 *590*	200 *660*	170 *560*	180 *590*	200 *660*	200 *660*	215 *710*	235 *770*	— —	— —	— —
P11	265 *870*	280 *920*	310 *1025*	190 *620*	205 *670*	225 *740*	205 *670*	220 *720*	245 *800*	175 *570*	185 *610*	205 *670*	175 *570*	185 *610*	205 *670*	205 *670*	225 *740*	245 *800*	— —	— —	— —
P12	165 *540*	180 *590*	195 *640*	— —	— —	— —	130 *425*	140 *460*	155 *510*	110 *360*	120 *395*	130 *425*	110 *360*	115 *375*	130 *425*	130 *425*	140 *460*	155 *510*	— —	— —	— —
M1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	185 *610*	200 *660*	215 *710*	205 *670*	220 *720*	240 *790*	— —	— —	— —
M2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	150 *490*	160 *520*	180 *590*	170 *560*	180 *590*	200 *660*	— —	— —	— —
M3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	120 *395*	130 *425*	140 *460*	135 *445*	140 *460*	155 *510*	— —	— —	— —
M4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	90 *295*	100 *330*	110 *360*	100 *330*	110 *360*	120 *395*	— —	— —	— —
M5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	85 *280*	90 *295*	100 *330*	— —	— —	— —
K1	375 *1225*	395 *1300*	430 *1400*	200 *660*	215 *710*	235 *770*	295 *970*	315 *1025*	350 *1150*	185 *610*	195 *640*	215 *710*	180 *590*	195 *640*	215 *710*	180 *590*	195 *640*	215 *710*	— —	— —	— —
K2	325 *1075*	345 *1125*	375 *1225*	175 *570*	190 *620*	210 *690*	260 *850*	280 *920*	305 *1000*	160 *520*	175 *570*	190 *620*	160 *520*	170 *560*	190 *620*	160 *520*	170 *560*	190 *620*	— —	— —	— —
K3	275 *900*	295 *970*	320 *1050*	150 *490*	160 *520*	175 *570*	220 *720*	235 *770*	260 *850*	135 *445*	145 *475*	160 *520*	135 *445*	145 *475*	160 *520*	135 *445*	145 *475*	160 *520*	— —	— —	— —
K4	265 *870*	280 *920*	305 *1000*	140 *460*	150 *490*	170 *560*	210 *690*	225 *740*	250 *820*	130 *425*	140 *460*	155 *510*	130 *425*	140 *460*	155 *510*	130 *425*	140 *460*	155 *510*	— —	— —	— —
K5	160 *520*	170 *560*	180 *590*	85 *280*	95 *310*	100 *330*	130 *425*	135 *445*	150 *490*	80 *260*	85 *280*	95 *310*	80 *260*	85 *280*	95 *310*	80 *260*	85 *280*	95 *310*	— —	— —	— —
K6	235 *770*	245 *800*	270 *890*	125 *410*	135 *445*	150 *490*	185 *610*	200 *660*	220 *720*	115 *375*	125 *410*	135 *445*	115 *375*	120 *395*	135 *445*	115 *375*	120 *395*	135 *445*	— —	— —	— —
K7	205 *670*	215 *710*	235 *770*	110 *360*	120 *395*	130 *425*	165 *540*	175 *570*	190 *620*	100 *330*	110 *360*	120 *395*	100 *330*	105 *345*	120 *395*	100 *330*	105 *345*	120 *395*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1375 *4500*	1475 *4850*	1625 *5325*	1625 *5325*	1750 *5750*	1925 *6325*	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	560 *1825*	600 *1975*	650 *2125*	660 *2175*	710 *2325*	780 *2550*	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	370 *1225*	395 *1300*	435 *1425*	440 *1450*	475 *1550*	520 *1700*	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	425 *1400*	455 *1500*	495 *1625*	500 *1650*	540 *1775*	590 *1925*	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	43 *140*	46 *150*	50 *165*	48 *155*	50 *165*	55 *180*	45 *150*	48 *155*	55 *180*
S2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	35 *115*	37 *120*	40 *130*	38 *125*	41 *135*	45 *150*	36 *120*	39 *130*	42 *140*
S3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	30 *100*	32 *105*	35 *115*	33 *110*	35 *115*	39 *130*	32 *105*	34 *110*	37 *120*
S11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	65 *215*	70 *230*	80 *260*	65 *215*	70 *230*	75 *245*
S12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	43 *140*	45 *150*	50 *165*	55 *180*	60 *195*	65 *215*	55 *180*	55 *180*	65 *215*
S13	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	25 *80*	26 *85*	29 *95*	32 *105*	35 *115*	38 *125*	31 *100*	33 *110*	36 *120*
H5	85 *280*	90 *295*	100 *330*	40 *130*	43 *140*	47 *155*	— —	— —	— —	— —	— —	— —	36 *120*	39 *130*	43 *140*	36 *120*	39 *130*	43 *140*	— —	— —	— —
H8	85 *280*	90 *295*	95 *310*	42 *140*	44 *145*	49 *160*	— —	— —	— —	— —	— —	— —	38 *125*	40 *130*	44 *145*	38 *125*	40 *130*	44 *145*	— —	— —	— —
H11	110 *360*	115 *375*	125 *410*	50 *165*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —	46 *150*	49 *160*	55 *180*	46 *150*	49 *160*	55 *180*	— —	— —	— —
H12	100 *330*	105 *345*	110 *360*	48 *155*	50 *165*	55 *180*	80 *260*	85 *280*	95 *310*	— —	— —	— —	44 *145*	46 *150*	50 *165*	44 *145*	46 *150*	50 *165*	— —	— —	— —
H21	85 *280*	90 *295*	95 *310*	42 *140*	44 *145*	49 *160*	— —	— —	— —	— —	— —	— —	38 *125*	40 *130*	44 *145*	38 *125*	40 *130*	44 *145*	— —	— —	— —

335.18/29 Tondo 8 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			H25			MP2501			MS2500			MP3501		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	225 *740*	240 *790*	270 *890*	— —	— —	— —	345 *1125*	355 *1175*	380 *1250*	315 *1025*	330 *1075*	370 *1225*	350 *1150*	360 *1175*	380 *1250*
P2	220 *720*	235 *770*	255 *840*	— —	— —	— —	335 *1100*	345 *1125*	370 *1225*	305 *1000*	325 *1075*	360 *1175*	340 *1125*	350 *1150*	370 *1225*
P3	190 *620*	205 *670*	225 *740*	— —	— —	— —	290 *950*	300 *980*	315 *1025*	265 *870*	280 *920*	310 *1025*	290 *950*	300 *980*	315 *1025*
P4	170 *560*	180 *590*	200 *660*	— —	— —	— —	255 *840*	265 *870*	280 *920*	235 *770*	245 *800*	275 *900*	255 *840*	265 *870*	275 *900*
P5	160 *520*	170 *560*	190 *620*	— —	— —	— —	240 *790*	250 *820*	265 *870*	225 *740*	240 *790*	265 *870*	245 *800*	250 *820*	265 *870*
P6	180 *590*	195 *640*	215 *710*	— —	— —	— —	270 *890*	280 *920*	300 *980*	250 *820*	270 *890*	295 *970*	275 *900*	280 *920*	295 *970*
P7	170 *560*	185 *610*	200 *660*	— —	— —	— —	255 *840*	265 *870*	280 *920*	235 *770*	255 *840*	280 *920*	260 *850*	265 *870*	275 *900*
P8	160 *520*	170 *560*	190 *620*	— —	— —	— —	240 *790*	250 *820*	265 *870*	225 *740*	235 *770*	260 *850*	245 *800*	250 *820*	265 *870*
P11	165 *540*	180 *590*	195 *640*	— —	— —	— —	250 *820*	260 *850*	275 *900*	230 *750*	245 *800*	270 *890*	250 *820*	260 *850*	270 *890*
P12	105 *345*	110 *360*	120 *395*	— —	— —	— —	145 *475*	150 *490*	155 *510*	145 *475*	155 *510*	170 *560*	135 *445*	140 *460*	145 *475*
M1	175 *570*	190 *620*	205 *670*	— —	— —	— —	200 *660*	215 *710*	235 *770*	220 *720*	230 *750*	255 *840*	235 *770*	250 *820*	275 *900*
M2	145 *475*	155 *510*	170 *560*	— —	— —	— —	165 *540*	175 *570*	195 *640*	180 *590*	190 *620*	210 *690*	190 *620*	205 *670*	225 *740*
M3	115 *375*	120 *395*	135 *445*	— —	— —	— —	130 *425*	140 *460*	155 *510*	140 *460*	150 *490*	165 *540*	150 *490*	160 *520*	175 *570*
M4	90 *295*	95 *310*	100 *330*	— —	— —	— —	100 *330*	105 *345*	120 *395*	110 *360*	115 *375*	125 *410*	115 *375*	125 *410*	135 *445*
M5	75 *245*	80 *260*	85 *280*	— —	— —	— —	85 *280*	90 *295*	100 *330*	90 *295*	95 *310*	105 *345*	95 *310*	100 *330*	115 *375*
K1	175 *570*	185 *610*	205 *670*	— —	— —	— —	335 *1100*	350 *1150*	370 *1225*	— —	— —	— —	— —	— —	— —
K2	150 *490*	160 *520*	180 *590*	— —	— —	— —	295 *970*	305 *1000*	320 *1050*	— —	— —	— —	— —	— —	— —
K3	130 *425*	135 *445*	155 *510*	— —	— —	— —	250 *820*	255 *840*	270 *890*	— —	— —	— —	— —	— —	— —
K4	125 *410*	130 *425*	145 *475*	— —	— —	— —	235 *770*	245 *800*	260 *850*	— —	— —	— —	— —	— —	— —
K5	75 *245*	80 *260*	90 *295*	— —	— —	— —	140 *460*	145 *475*	155 *510*	— —	— —	— —	— —	— —	— —
K6	110 *360*	115 *375*	130 *425*	— —	— —	— —	210 *690*	215 *710*	230 *750*	— —	— —	— —	— —	— —	— —
K7	95 *310*	100 *330*	115 *375*	— —	— —	— —	180 *590*	185 *610*	195 *640*	— —	— —	— —	— —	— —	— —
N1	1300 *4275*	1400 *4600*	1550 *5075*	1525 *5000*	1625 *5325*	1800 *5900*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	530 *1750*	570 *1875*	620 *2025*	620 *2025*	650 *2125*	720 *2350*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	355 *1175*	380 *1250*	415 *1350*	410 *1350*	435 *1425*	480 *1575*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	405 *1325*	435 *1425*	475 *1550*	470 *1550*	500 *1650*	550 *1800*	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	41 *135*	44 *145*	48 *155*	— —	— —	— —	— —	— —	— —	55 *180*	55 *180*	60 *195*	38 *125*	40 *130*	44 *145*
S2	33 *110*	35 *115*	39 *130*	— —	— —	— —	— —	— —	— —	43 *140*	45 *150*	50 *165*	30 *100*	32 *105*	36 *120*
S3	29 *95*	30 *100*	34 *110*	— —	— —	— —	— —	— —	— —	37 *120*	40 *130*	44 *145*	38 *125*	40 *130*	44 *145*
S11	60 *195*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	75 *245*	80 *260*	90 *295*
S12	49 *160*	50 *165*	55 *180*	— —	— —	— —	— —	— —	— —	65 *215*	65 *215*	75 *245*	55 *180*	55 *180*	60 *195*
S13	28 *90*	30 *100*	33 *110*	— —	— —	— —	— —	— —	— —	36 *120*	38 *125*	43 *140*	30 *100*	32 *105*	35 *115*
H5	34 *110*	37 *120*	41 *135*	— —	— —	— —	— —	— —	— —	— —	— —	— —	48 *155*	50 *165*	55 *180*
H8	36 *120*	38 *125*	42 *140*	— —	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	50 *165*	55 *180*
H11	44 *145*	47 *155*	50 *165*	— —	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*
H12	42 *140*	44 *145*	49 *160*	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	85 *280*	95 *310*	100 *330*
H21	36 *120*	38 *125*	42 *140*	— —	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	50 *165*	55 *180*

335.18/29 Tondo 10 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	RDKT10T3M0T-8-M05 F40M	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
P2	RDKT10T3M0T-8-M05 F40M	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
P3	RDKT10T3M0T-8-M05 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
P4	RDKT10T3M0T-8-M05 F40M	0,080 *0.0032*	0,090 0.0036	0,12 0.0048
P5	RDKT10T3M0T-8-M05 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
P6	RDKT10T3M0T-8-M05 F40M	0,075 *0.0030*	0,085 0.0034	0,12 0.0048
P7	RDKW10T3M0T-8-MD06 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
P8	RDKW10T3M0T-8-MD06 MP2501	0,095 *0.0038*	0,11 0.0044	0,15 0.0060
P11	RDKT10T3M0T-8-M07 F40M	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
P12	RDKT10T3M0T-8-M07 F40M	0,075 *0.0030*	0,085 0.0034	0,11 0.0044
M1	RDKT10T3M0T-8-M05 F40M	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
M2	RDKT10T3M0T-8-M05 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
M3	RDKT10T3M0T-8-M05 F40M	0,060 *0.0024*	0,070 0.0028	0,095 0.0038
M4	RDKT10T3M0T-8-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,080 0.0032
M5	RDKT10T3M0T-8-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,080 0.0032
K1	RDKW10T3M0T-8-MD06 MK2050	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
K2	RDKW10T3M0T-8-MD06 MK2050	0,090 *0.0036*	0,11 0.0044	0,14 0.0055
K3	RDKW10T3M0T-8-MD06 MK2050	0,090 *0.0036*	0,11 0.0044	0,14 0.0055
K4	RDKW10T3M0T-8-MD06 MK2050	0,090 *0.0036*	0,11 0.0044	0,14 0.0055
K5	RDKW10T3M0T-8-MD06 MK2050	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
K6	RDKW10T3M0T-8-MD06 MK2050	0,090 *0.0036*	0,11 0.0044	0,14 0.0055
K7	RDKW10T3M0T-8-MD06 MK2050	0,085 *0.0034*	0,095 0.0038	0,13 0.0050
N1	RDHT10T3M0-8-E04 H25	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
N2	RDHT10T3M0-8-E04 H25	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
N3	RDHT10T3M0-8-E04 H25	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
N11	RDHT10T3M0-8-E04 H25	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
S1	RDKT10T3M0T-8-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,080 0.0032
S2	RDKT10T3M0T-8-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,080 0.0032
S3	RDKT10T3M0T-8-M05 F40M	0,050 *0.0020*	0,055 0.0022	0,075 0.0030
S11	RDKT10T3M0T-8-M05 F40M	0,060 *0.0024*	0,070 0.0028	0,095 0.0038
S12	RDKT10T3M0T-8-M05 F40M	0,060 *0.0024*	0,070 0.0028	0,095 0.0038
S13	RDKT10T3M0T-8-M05 F40M	0,055 *0.0022*	0,060 0.0024	0,080 0.0032
H5	RDKW10T3M0T-8-MD06 F15M	0,065 *0.0026*	0,070 0.0028	0,095 0.0038
H8	RDKW10T3M0T-8-MD06 F15M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030
H11	RDKW10T3M0T-8-MD06 F15M	0,065 *0.0026*	0,070 0.0028	0,095 0.0038
H12	RDKW10T3M0T-8-MD06 F15M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030
H21	RDKW10T3M0T-8-MD06 F15M	0,048 *0.0019*	0,055 0.0022	0,075 0.0030

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.18/29 Tondo 10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			F15M			MK2050			MS2050			F40M			H25		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	350 *1150*	370 *1225*	410 *1350*	255 *840*	270 *890*	295 *970*	285 *940*	305 *1000*	340 *1125*	220 *720*	235 *770*	265 *870*	245 *800*	260 *850*	290 *950*	— —	— —	— —
P2	340 *1125*	360 *1175*	400 *1300*	245 *800*	260 *850*	290 *950*	280 *920*	295 *970*	325 *1075*	215 *710*	230 *750*	255 *840*	240 *790*	255 *840*	280 *920*	— —	— —	— —
P3	295 *970*	315 *1025*	345 *1125*	210 *690*	230 *750*	250 *820*	240 *790*	260 *850*	285 *940*	190 *620*	205 *670*	220 *720*	210 *690*	220 *720*	240 *790*	— —	— —	— —
P4	260 *850*	280 *920*	305 *1000*	190 *620*	200 *660*	220 *720*	215 *710*	230 *750*	255 *840*	165 *540*	180 *590*	195 *640*	185 *610*	195 *640*	215 *710*	— —	— —	— —
P5	250 *820*	265 *870*	290 *950*	180 *590*	190 *620*	210 *690*	205 *670*	220 *720*	240 *790*	160 *520*	170 *560*	190 *620*	175 *570*	185 *610*	205 *670*	— —	— —	— —
P6	280 *920*	300 *980*	330 *1075*	205 *670*	215 *710*	240 *790*	230 *750*	245 *800*	270 *890*	180 *590*	190 *620*	215 *710*	195 *640*	210 *690*	230 *750*	— —	— —	— —
P7	265 *870*	280 *920*	315 *1025*	190 *620*	205 *670*	225 *740*	215 *710*	230 *750*	255 *840*	170 *560*	180 *590*	200 *660*	185 *610*	200 *660*	220 *720*	— —	— —	— —
P8	245 *800*	265 *870*	290 *950*	180 *590*	190 *620*	210 *690*	200 *660*	220 *720*	240 *790*	160 *520*	170 *560*	185 *610*	175 *570*	185 *610*	205 *670*	— —	— —	— —
P11	255 *840*	275 *900*	305 *1000*	185 *610*	200 *660*	220 *720*	210 *690*	225 *740*	250 *820*	165 *540*	175 *570*	195 *640*	180 *590*	190 *620*	210 *690*	— —	— —	— —
P12	165 *540*	175 *570*	190 *620*	— —	— —	— —	135 *445*	145 *475*	155 *510*	105 *345*	115 *375*	125 *410*	115 *375*	120 *395*	135 *445*	— —	— —	— —
M1	— —	— —	— —	— —	— —	— —	— —	— —	— —	175 *570*	185 *610*	205 *670*	190 *620*	205 *670*	225 *740*	— —	— —	— —
M2	— —	— —	— —	— —	— —	— —	— —	— —	— —	145 *475*	155 *510*	170 *560*	155 *510*	170 *560*	185 *610*	— —	— —	— —
M3	— —	— —	— —	— —	— —	— —	— —	— —	— —	115 *375*	125 *410*	135 *445*	125 *410*	130 *425*	145 *475*	— —	— —	— —
M4	— —	— —	— —	— —	— —	— —	— —	— —	— —	90 *295*	95 *310*	105 *345*	95 *310*	100 *330*	110 *360*	— —	— —	— —
M5	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	80 *260*	85 *280*	95 *310*	— —	— —	— —
K1	365 *1200*	385 *1275*	420 *1375*	195 *640*	205 *670*	230 *750*	300 *980*	320 *1050*	350 *1150*	— —	— —	— —	190 *620*	200 *660*	220 *720*	— —	— —	— —
K2	320 *1050*	340 *1125*	370 *1225*	170 *560*	185 *610*	200 *660*	265 *870*	280 *920*	310 *1025*	— —	— —	— —	165 *540*	175 *570*	195 *640*	— —	— —	— —
K3	270 *890*	285 *940*	315 *1025*	145 *475*	155 *510*	170 *560*	225 *740*	240 *790*	265 *870*	— —	— —	— —	140 *460*	150 *490*	165 *540*	— —	— —	— —
K4	260 *850*	275 *900*	300 *980*	140 *460*	145 *475*	160 *520*	215 *710*	225 *740*	250 *820*	— —	— —	— —	135 *445*	145 *475*	160 *520*	— —	— —	— —
K5	155 *510*	165 *540*	180 *590*	85 *280*	90 *295*	100 *330*	130 *425*	140 *460*	155 *510*	— —	— —	— —	80 *260*	85 *280*	95 *310*	— —	— —	— —
K6	230 *750*	240 *790*	265 *870*	120 *395*	130 *425*	145 *475*	190 *620*	200 *660*	220 *720*	— —	— —	— —	120 *395*	125 *410*	140 *460*	— —	— —	— —
K7	200 *660*	210 *690*	230 *750*	110 *360*	115 *375*	125 *410*	165 *540*	180 *590*	195 *640*	— —	— —	— —	105 *345*	110 *360*	120 *395*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1425 *4675*	1500 *4925*	1675 *5500*	1450 *4750*	1550 *5075*	1700 *5575*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	570 *1875*	610 *2000*	670 *2200*	580 *1900*	620 *2025*	680 *2225*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	380 *1250*	405 *1325*	450 *1475*	390 *1275*	415 *1350*	455 *1500*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	435 *1425*	460 *1500*	510 *1675*	445 *1450*	475 *1550*	520 *1700*
S1	— —	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	49 *160*	45 *150*	47 *155*	50 *165*	— —	— —	— —
S2	— —	— —	— —	— —	— —	— —	— —	— —	— —	34 *110*	36 *120*	40 *130*	36 *120*	38 *125*	42 *140*	— —	— —	— —
S3	— —	— —	— —	— —	— —	— —	— —	— —	— —	30 *100*	32 *105*	35 *115*	32 *105*	33 *110*	37 *120*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	65 *215*	65 *215*	75 *245*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	60 *195*	55 *180*	55 *180*	65 *215*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	— —	— —	— —	29 *95*	31 *100*	34 *110*	31 *100*	32 *105*	36 *120*	— —	— —	— —
H5	85 *280*	90 *295*	100 *330*	39 *130*	42 *140*	46 *150*	46 *150*	49 *160*	55 *180*	— —	— —	— —	38 *125*	40 *130*	44 *145*	— —	— —	— —
H8	85 *280*	90 *295*	100 *330*	41 *135*	44 *145*	48 *155*	48 *155*	50 *165*	55 *180*	— —	— —	— —	39 *130*	42 *140*	46 *150*	— —	— —	— —
H11	110 *360*	115 *375*	125 *410*	50 *165*	55 *180*	60 *195*	60 *195*	65 *215*	70 *230*	— —	— —	— —	48 *155*	50 *165*	55 *180*	— —	— —	— —
H12	100 *330*	105 *345*	115 *375*	47 *155*	50 *165*	55 *180*	85 *280*	90 *295*	100 *330*	— —	— —	— —	45 *150*	48 *155*	55 *180*	— —	— —	— —
H21	85 *280*	90 *295*	100 *330*	41 *135*	44 *145*	48 *155*	48 *155*	50 *165*	55 *180*	— —	— —	— —	39 *130*	42 *140*	46 *150*	— —	— —	— —

335.18/29 Tondo 10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	345 *1125*	360 *1175*	385 *1275*	365 *1200*	380 *1250*	410 *1350*	355 *1175*	375 *1225*	415 *1350*	350 *1150*	365 *1200*	385 *1275*	200 *660*	210 *690*	235 *770*
P2	335 *1100*	350 *1150*	370 *1225*	355 *1175*	370 *1225*	395 *1300*	345 *1125*	365 *1200*	405 *1325*	340 *1125*	355 *1175*	375 *1225*	195 *640*	205 *670*	230 *750*
P3	290 *950*	300 *980*	320 *1050*	305 *1000*	320 *1050*	340 *1125*	300 *980*	315 *1025*	350 *1150*	295 *970*	305 *1000*	325 *1075*	170 *560*	180 *590*	195 *640*
P4	255 *840*	265 *870*	285 *940*	270 *890*	285 *940*	300 *980*	265 *870*	280 *920*	310 *1025*	260 *850*	270 *890*	285 *940*	150 *490*	155 *510*	175 *570*
P5	245 *800*	255 *840*	270 *890*	260 *850*	270 *890*	290 *950*	250 *820*	270 *890*	295 *970*	245 *800*	255 *840*	270 *890*	140 *460*	150 *490*	165 *540*
P6	275 *900*	285 *940*	305 *1000*	290 *950*	305 *1000*	325 *1075*	280 *920*	300 *980*	335 *1100*	275 *900*	285 *940*	305 *1000*	160 *520*	170 *560*	190 *620*
P7	260 *850*	270 *890*	285 *940*	275 *900*	285 *940*	305 *1000*	265 *870*	285 *940*	315 *1025*	260 *850*	270 *890*	285 *940*	150 *490*	160 *520*	175 *570*
P8	245 *800*	255 *840*	270 *890*	260 *850*	270 *890*	285 *940*	250 *820*	265 *870*	290 *950*	245 *800*	255 *840*	270 *890*	140 *460*	150 *490*	165 *540*
P11	250 *820*	260 *850*	280 *920*	270 *890*	280 *920*	295 *970*	260 *850*	275 *900*	305 *1000*	255 *840*	265 *870*	280 *920*	145 *475*	155 *510*	170 *560*
P12	150 *490*	155 *510*	160 *520*	160 *520*	165 *540*	175 *570*	165 *540*	175 *570*	195 *640*	145 *475*	150 *490*	160 *520*	90 *295*	100 *330*	110 *360*
M1	— —	— —	— —	205 *670*	215 *710*	240 *790*	245 *800*	260 *850*	290 *950*	210 *690*	225 *740*	250 *820*	165 *540*	175 *570*	195 *640*
M2	— —	— —	— —	170 *560*	180 *590*	195 *640*	200 *660*	215 *710*	235 *770*	175 *570*	185 *610*	205 *670*	135 *445*	145 *475*	160 *520*
M3	— —	— —	— —	135 *445*	145 *475*	155 *510*	160 *520*	170 *560*	190 *620*	135 *445*	145 *475*	160 *520*	105 *345*	115 *375*	125 *410*
M4	— —	— —	— —	100 *330*	110 *360*	120 *395*	125 *410*	130 *425*	145 *475*	105 *345*	110 *360*	125 *410*	85 *280*	90 *295*	95 *310*
M5	— —	— —	— —	85 *280*	90 *295*	100 *330*	100 *330*	110 *360*	120 *395*	90 *295*	95 *310*	105 *345*	70 *230*	75 *245*	80 *260*
K1	340 *1125*	355 *1175*	375 *1225*	360 *1175*	375 *1225*	400 *1300*	270 *890*	290 *950*	320 *1050*	345 *1125*	355 *1175*	380 *1250*	— —	— —	— —
K2	295 *970*	305 *1000*	325 *1075*	315 *1025*	325 *1075*	350 *1150*	240 *790*	255 *840*	280 *920*	300 *980*	310 *1025*	330 *1075*	— —	— —	— —
K3	250 *820*	260 *850*	275 *900*	265 *870*	275 *900*	295 *970*	200 *660*	215 *710*	240 *790*	250 *820*	260 *850*	275 *900*	— —	— —	— —
K4	240 *790*	250 *820*	265 *870*	255 *840*	265 *870*	280 *920*	195 *640*	205 *670*	230 *750*	240 *790*	250 *820*	265 *870*	— —	— —	— —
K5	145 *475*	150 *490*	155 *510*	150 *490*	160 *520*	170 *560*	120 *395*	125 *410*	140 *460*	145 *475*	150 *490*	155 *510*	— —	— —	— —
K6	210 *690*	220 *720*	230 *750*	225 *740*	235 *770*	250 *820*	170 *560*	180 *590*	200 *660*	210 *690*	220 *720*	235 *770*	— —	— —	— —
K7	185 *610*	190 *620*	200 *660*	195 *640*	205 *670*	215 *710*	150 *490*	160 *520*	175 *570*	185 *610*	190 *620*	200 *660*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	34 *110*	37 *120*	40 *130*	25 *80*	27 *90*	30 *100*
S2	— —	— —	— —	— —	— —	— —	48 *155*	50 *165*	55 *180*	28 *90*	29 *95*	33 *110*	20 *65*	22 *70*	24 *80*
S3	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	49 *160*	35 *115*	37 *120*	40 *130*	18 *60*	19 *60*	21 *70*
S11	— —	— —	— —	— —	— —	— —	85 *280*	90 *295*	100 *330*	70 *230*	75 *245*	80 *260*	36 *120*	38 *125*	42 *140*
S12	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	85 *280*	48 *155*	50 *165*	55 *180*	33 *110*	35 *115*	39 *130*
S13	— —	— —	— —	— —	— —	— —	41 *135*	43 *140*	48 *155*	28 *90*	29 *95*	32 *105*	19 *60*	20 *65*	22 *70*
H5	49 *160*	50 *165*	55 *180*	— —	— —	— —	49 *160*	50 *165*	60 *195*	43 *140*	46 *150*	50 *165*	— —	— —	— —
H8	50 *165*	55 *180*	60 *195*	— —	— —	— —	50 *165*	55 *180*	60 *195*	45 *150*	48 *155*	55 *180*	— —	— —	— —
H11	60 *195*	65 *215*	75 *245*	— —	— —	— —	60 *195*	65 *215*	75 *245*	55 *180*	60 *195*	65 *215*	— —	— —	— —
H12	60 *195*	65 *215*	70 *230*	— —	— —	— —	60 *195*	65 *215*	70 *230*	80 *260*	85 *280*	95 *310*	— —	— —	— —
H21	50 *165*	55 *180*	60 *195*	— —	— —	— —	50 *165*	55 *180*	60 *195*	45 *150*	48 *155*	55 *180*	— —	— —	— —

335.18/29 Tondo 12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	RPHT1204M0T-6-ME07 F40M	0,12 *0.0048*	0,14 0.0055	0,18 0.0070
P2	RPHT1204M0T-6-ME07 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
P3	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P4	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P5	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,15 0.0060	0,19 0.0075
P6	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
P7	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
P8	RPHT1204M0T-6-M08 MP2501	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
P11	RPHT1204M0T-6-M08 F40M	0,13 *0.0050*	0,14 0.0055	0,19 0.0075
P12	RPHT1204M0T-6-M08 F40M	0,085 *0.0034*	0,10 0.0040	0,13 0.0050
M1	RPHT1204M0T-6-ME07 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
M2	RPHT1204M0T-6-ME07 F40M	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
M3	RPHT1204M0T-6-M08 F40M	0,10 *0.0040*	0,12 0.0048	0,16 0.0065
M4	RPHT1204M0T-6-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
M5	RPHT1204M0T-6-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
K1	RPKW1204M0T-6-MD10 MK2050	0,17 *0.0065*	0,20 0.0080	0,26 0.010
K2	RPKW1204M0T-6-MD10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K3	RPKW1204M0T-6-MD10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K4	RPKW1204M0T-6-MD10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K5	RPKW1204M0T-6-MD10 MK2050	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
K6	RPKW1204M0T-6-MD10 MK2050	0,16 *0.0065*	0,18 0.0070	0,24 0.0095
K7	RPKW1204M0T-6-MD10 MK2050	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
N1	RPHT1204M0-6-E05 H25	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
N2	RPHT1204M0-6-E05 H25	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
N3	RPHT1204M0-6-E05 H25	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
N11	RPHT1204M0-6-E05 H25	0,11 *0.0044*	0,13 0.0050	0,17 0.0065
S1	RPHT1204M0T-6-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S2	RPHT1204M0T-6-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S3	RPHT1204M0T-6-M08 F40M	0,080 *0.0032*	0,095 0.0038	0,13 0.0050
S11	RPHT1204M0T-6-ME07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S12	RPHT1204M0T-6-ME07 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
S13	RPHT1204M0T-6-M08 F40M	0,090 *0.0036*	0,10 0.0040	0,14 0.0055
H5	RPKW1204M0T-6-MD10 MH1051	0,11 *0.0044*	0,12 0.0048	0,16 0.0065
H8	RPKW1204M0T-6-MD10 MH1051	0,080 *0.0032*	0,095 0.0038	0,13 0.0050
H11	RPHT1204M0T-6-M13 MP3501	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
H12	RPHT1204M0T-4-M08 MP3501	0,065 *0.0026*	0,075 0.0030	0,10 0.0040
H21	RPKW1204M0T-6-MD10 MH1051	0,080 *0.0032*	0,095 0.0038	0,13 0.0050

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.18/29 Tondo 12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			H25		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	360 *1175*	380 *1250*	425 *1400*	240 *790*	255 *840*	285 *940*	270 *890*	285 *940*	320 *1050*	240 *790*	255 *840*	290 *950*	220 *720*	235 *770*	260 *850*	— —	— —	— —
P2	350 *1150*	370 *1225*	410 *1350*	235 *770*	250 *820*	275 *900*	265 *870*	280 *920*	310 *1025*	235 *770*	250 *820*	275 *900*	210 *690*	225 *740*	250 *820*	— —	— —	— —
P3	305 *1000*	320 *1050*	355 *1175*	200 *660*	220 *720*	240 *790*	230 *750*	245 *800*	265 *870*	205 *670*	220 *720*	240 *790*	185 *610*	200 *660*	220 *720*	— —	— —	— —
P4	270 *890*	285 *940*	315 *1025*	180 *590*	190 *620*	210 *690*	200 *660*	215 *710*	240 *790*	180 *590*	190 *620*	215 *710*	165 *540*	175 *570*	195 *640*	— —	— —	— —
P5	255 *840*	275 *900*	300 *980*	170 *560*	185 *610*	205 *670*	195 *640*	205 *670*	230 *750*	170 *560*	185 *610*	205 *670*	155 *510*	165 *540*	185 *610*	— —	— —	— —
P6	285 *940*	305 *1000*	340 *1125*	195 *640*	210 *690*	230 *750*	215 *710*	230 *750*	255 *840*	195 *640*	210 *690*	230 *750*	175 *570*	190 *620*	210 *690*	— —	— —	— —
P7	270 *890*	290 *950*	320 *1050*	180 *590*	200 *660*	220 *720*	205 *670*	220 *720*	240 *790*	180 *590*	200 *660*	220 *720*	165 *540*	180 *590*	200 *660*	— —	— —	— —
P8	255 *840*	270 *890*	300 *980*	170 *560*	185 *610*	200 *660*	195 *640*	205 *670*	225 *740*	170 *560*	185 *610*	205 *670*	155 *510*	165 *540*	185 *610*	— —	— —	— —
P11	265 *870*	280 *920*	310 *1025*	175 *570*	195 *640*	210 *690*	200 *660*	210 *690*	235 *770*	175 *570*	190 *620*	210 *690*	160 *520*	175 *570*	190 *620*	— —	— —	— —
P12	165 *540*	180 *590*	195 *640*	115 *375*	125 *410*	135 *445*	125 *410*	135 *445*	150 *490*	115 *375*	120 *395*	135 *445*	105 *345*	110 *360*	125 *410*	— —	— —	— —
M1	— —	— —	— —	— —	— —	— —	195 *640*	210 *690*	230 *750*	190 *620*	200 *660*	220 *720*	170 *560*	185 *610*	200 *660*	— —	— —	— —
M2	— —	— —	— —	— —	— —	— —	160 *520*	175 *570*	190 *620*	155 *510*	165 *540*	185 *610*	140 *460*	150 *490*	170 *560*	— —	— —	— —
M3	— —	— —	— —	— —	— —	— —	130 *425*	135 *445*	150 *490*	125 *410*	130 *425*	145 *475*	115 *375*	120 *395*	135 *445*	— —	— —	— —
M4	— —	— —	— —	— —	— —	— —	100 *330*	105 *345*	115 *375*	95 *310*	105 *345*	115 *375*	85 *280*	95 *310*	100 *330*	— —	— —	— —
M5	— —	— —	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	80 *260*	85 *280*	95 *310*	75 *245*	80 *260*	85 *280*	— —	— —	— —
K1	375 *1225*	395 *1300*	430 *1400*	250 *820*	270 *890*	295 *970*	175 *570*	185 *610*	205 *670*	— —	— —	— —	170 *560*	180 *590*	200 *660*	— —	— —	— —
K2	325 *1075*	345 *1125*	375 *1225*	220 *720*	235 *770*	265 *870*	155 *510*	165 *540*	180 *590*	— —	— —	— —	150 *490*	160 *520*	175 *570*	— —	— —	— —
K3	275 *900*	290 *950*	320 *1050*	190 *620*	200 *660*	225 *740*	130 *425*	140 *460*	155 *510*	— —	— —	— —	125 *410*	135 *445*	150 *490*	— —	— —	— —
K4	265 *870*	280 *920*	305 *1000*	180 *590*	190 *620*	215 *710*	125 *410*	135 *445*	145 *475*	— —	— —	— —	120 *395*	130 *425*	145 *475*	— —	— —	— —
K5	160 *520*	170 *560*	180 *590*	110 *360*	120 *395*	130 *425*	75 *245*	80 *260*	90 *295*	— —	— —	— —	75 *245*	80 *260*	85 *280*	— —	— —	— —
K6	230 *750*	245 *800*	270 *890*	160 *520*	170 *560*	190 *620*	110 *360*	115 *375*	130 *425*	— —	— —	— —	105 *345*	115 *375*	125 *410*	— —	— —	— —
K7	205 *670*	215 *710*	235 *770*	140 *460*	150 *490*	170 *560*	95 *310*	105 *345*	115 *375*	— —	— —	— —	95 *310*	100 *330*	110 *360*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	1575 *5175*	1650 *5425*	1850 *6075*	— —	— —	— —	1250 *4100*	1350 *4425*	1475 *4850*	1375 *4500*	1450 *4750*	1625 *5325*
N2	— —	— —	— —	— —	— —	— —	630 *2075*	670 *2200*	740 *2425*	— —	— —	— —	500 *1650*	540 *1775*	600 *1975*	560 *1825*	590 *1925*	650 *2125*
N3	— —	— —	— —	— —	— —	— —	420 *1375*	445 *1450*	495 *1625*	— —	— —	— —	335 *1100*	365 *1200*	395 *1300*	370 *1225*	395 *1300*	435 *1425*
N11	— —	— —	— —	— —	— —	— —	480 *1575*	510 *1675*	570 *1875*	— —	— —	— —	385 *1275*	415 *1350*	455 *1500*	425 *1400*	450 *1475*	500 *1650*
S1	— —	— —	— —	— —	— —	— —	46 *150*	49 *160*	55 *180*	45 *150*	48 *155*	55 *180*	41 *135*	44 *145*	48 *155*	— —	— —	— —
S2	— —	— —	— —	— —	— —	— —	37 *120*	39 *130*	43 *140*	36 *120*	39 *130*	42 *140*	33 *110*	35 *115*	38 *125*	— —	— —	— —
S3	— —	— —	— —	— —	— —	— —	32 *105*	34 *110*	38 *125*	32 *105*	34 *110*	37 *120*	29 *95*	31 *100*	34 *110*	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	65 *215*	65 *215*	75 *245*	55 *180*	60 *195*	65 *215*	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	55 *180*	55 *180*	60 *195*	48 *155*	50 *165*	55 *180*	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	31 *100*	33 *110*	37 *120*	31 *100*	33 *110*	36 *120*	28 *90*	30 *100*	33 *110*	— —	— —	— —
H5	85 *280*	90 *295*	95 *310*	40 *130*	42 *140*	47 *155*	35 *115*	37 *120*	41 *135*	— —	— —	— —	35 *115*	37 *120*	41 *135*	— —	— —	— —
H8	85 *280*	90 *295*	95 *310*	43 *140*	46 *150*	50 *165*	36 *120*	39 *130*	42 *140*	— —	— —	— —	36 *120*	39 *130*	43 *140*	— —	— —	— —
H11	110 *360*	115 *375*	125 *410*	50 *165*	55 *180*	60 *195*	44 *145*	48 *155*	55 *180*	— —	— —	— —	44 *145*	47 *155*	50 *165*	— —	— —	— —
H12	100 *330*	105 *345*	110 *360*	75 *245*	80 *260*	85 *280*	42 *140*	45 *150*	49 *160*	— —	— —	— —	42 *140*	45 *150*	50 *165*	— —	— —	— —
H21	85 *280*	90 *295*	95 *310*	43 *140*	46 *150*	50 *165*	36 *120*	39 *130*	42 *140*	— —	— —	— —	36 *120*	39 *130*	43 *140*	— —	— —	— —

335.18/29 Tondo 12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	325 *1075*	345 *1125*	370 *1225*	370 *1225*	385 *1275*	415 *1350*	315 *1025*	335 *1100*	375 *1225*	335 *1100*	350 *1150*	375 *1225*	175 *570*	190 *620*	210 *690*
P2	320 *1050*	335 *1100*	360 *1175*	360 *1175*	375 *1225*	400 *1300*	305 *1000*	325 *1075*	360 *1175*	325 *1075*	340 *1125*	360 *1175*	170 *560*	185 *610*	200 *660*
P3	275 *900*	295 *970*	315 *1025*	315 *1025*	325 *1075*	350 *1150*	270 *890*	285 *940*	315 *1025*	280 *920*	295 *970*	315 *1025*	150 *490*	160 *520*	180 *590*
P4	245 *800*	260 *850*	275 *900*	275 *900*	285 *940*	305 *1000*	235 *770*	250 *820*	280 *920*	250 *820*	260 *850*	275 *900*	135 *445*	140 *460*	155 *510*
P5	235 *770*	245 *800*	270 *890*	265 *870*	275 *900*	295 *970*	225 *740*	240 *790*	270 *890*	235 *770*	250 *820*	265 *870*	125 *410*	135 *445*	150 *490*
P6	265 *870*	280 *920*	300 *980*	295 *970*	310 *1025*	330 *1075*	255 *840*	275 *900*	300 *980*	265 *870*	280 *920*	300 *980*	140 *460*	155 *510*	170 *560*
P7	250 *820*	265 *870*	285 *940*	280 *920*	295 *970*	310 *1025*	240 *790*	260 *850*	285 *940*	250 *820*	265 *870*	280 *920*	135 *445*	145 *475*	160 *520*
P8	235 *770*	245 *800*	265 *870*	265 *870*	275 *900*	295 *970*	225 *740*	240 *790*	265 *870*	235 *770*	250 *820*	265 *870*	125 *410*	135 *445*	150 *490*
P11	240 *790*	260 *850*	275 *900*	270 *890*	285 *940*	305 *1000*	230 *750*	250 *820*	275 *900*	245 *800*	255 *840*	275 *900*	130 *425*	140 *460*	155 *510*
P12	155 *510*	160 *520*	175 *570*	165 *540*	170 *560*	180 *590*	150 *490*	160 *520*	175 *570*	150 *490*	155 *510*	165 *540*	85 *280*	90 *295*	100 *330*
M1	— —	— —	— —	200 *660*	215 *710*	235 *770*	220 *720*	235 *770*	255 *840*	190 *620*	200 *660*	220 *720*	150 *490*	160 *520*	175 *570*
M2	— —	— —	— —	165 *540*	175 *570*	200 *660*	180 *590*	190 *620*	215 *710*	155 *510*	165 *540*	185 *610*	120 *395*	130 *425*	145 *475*
M3	— —	— —	— —	135 *445*	140 *460*	155 *510*	145 *475*	155 *510*	170 *560*	125 *410*	130 *425*	145 *475*	100 *330*	105 *345*	115 *375*
M4	— —	— —	— —	105 *345*	110 *360*	120 *395*	110 *360*	120 *395*	130 *425*	95 *310*	105 *345*	115 *375*	75 *245*	80 *260*	90 *295*
M5	— —	— —	— —	85 *280*	90 *295*	100 *330*	95 *310*	100 *330*	110 *360*	80 *260*	85 *280*	95 *310*	65 *215*	65 *215*	75 *245*
K1	320 *1050*	340 *1125*	365 *1200*	365 *1200*	380 *1250*	405 *1325*	240 *790*	260 *850*	285 *940*	330 *1075*	345 *1125*	365 *1200*	— —	— —	— —
K2	285 *940*	300 *980*	325 *1075*	320 *1050*	330 *1075*	355 *1175*	215 *710*	230 *750*	255 *840*	285 *940*	300 *980*	320 *1050*	— —	— —	— —
K3	240 *790*	250 *820*	275 *900*	270 *890*	280 *920*	300 *980*	180 *590*	195 *640*	215 *710*	245 *800*	255 *840*	270 *890*	— —	— —	— —
K4	230 *750*	240 *790*	260 *850*	255 *840*	270 *890*	290 *950*	175 *570*	185 *610*	205 *670*	230 *750*	240 *790*	260 *850*	— —	— —	— —
K5	140 *460*	145 *475*	160 *520*	155 *510*	160 *520*	175 *570*	105 *345*	115 *375*	125 *410*	140 *460*	145 *475*	155 *510*	— —	— —	— —
K6	200 *660*	210 *690*	230 *750*	225 *740*	235 *770*	255 *840*	150 *490*	160 *520*	180 *590*	205 *670*	215 *710*	230 *750*	— —	— —	— —
K7	180 *590*	190 *620*	205 *670*	200 *660*	205 *670*	220 *720*	135 *445*	145 *475*	160 *520*	180 *590*	185 *610*	200 *660*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	31 *100*	34 *110*	37 *120*	23 *75*	25 *80*	27 *90*
S2	— —	— —	— —	— —	— —	— —	44 *145*	47 *155*	50 *165*	25 *80*	27 *90*	30 *100*	19 *60*	20 *65*	22 *70*
S3	— —	— —	— —	— —	— —	— —	39 *130*	41 *135*	45 *150*	32 *105*	34 *110*	37 *120*	16 *50*	17 *55*	19 *60*
S11	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	65 *215*	65 *215*	75 *245*	32 *105*	34 *110*	38 *125*
S12	— —	— —	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	44 *145*	46 *150*	50 *165*	30 *100*	32 *105*	35 *115*
S13	— —	— —	— —	— —	— —	— —	37 *120*	40 *130*	44 *145*	25 *80*	27 *90*	30 *100*	17 *55*	19 *60*	20 *65*
H5	44 *145*	47 *155*	50 *165*	— —	— —	— —	45 *150*	48 *155*	55 *180*	40 *130*	42 *140*	47 *155*	— —	— —	— —
H8	48 *155*	50 *165*	55 *180*	— —	— —	— —	47 *155*	50 *165*	55 *180*	42 *140*	44 *145*	49 *160*	— —	— —	— —
H11	55 *180*	60 *195*	65 *215*	— —	— —	— —	55 *180*	60 *195*	65 *215*	50 *165*	55 *180*	60 *195*	— —	— —	— —
H12	55 *180*	60 *195*	65 *215*	— —	— —	— —	55 *180*	60 *195*	65 *215*	75 *245*	80 *260*	90 *295*	— —	— —	— —
H21	48 *155*	50 *165*	55 *180*	— —	— —	— —	47 *155*	50 *165*	55 *180*	42 *140*	44 *145*	49 *160*	— —	— —	— —

335.25 Tondo 16 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	RPHT1605M0T-8-ME11 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P2	RPHT1605M0T-8-ME11 F40M	0,19 *0.0075*	0,22 0.0085	0,30 0.012
P3	RPHT1605M0T-8-ME11 F40M	0,18 *0.0070*	0,20 0.0080	0,28 0.011
P4	RPHT1605M0T-8-M12 F40M	0,19 *0.0075*	0,22 0.0085	0,30 0.012
P5	RPHT1605M0T-8-M12 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P6	RPHT1605M0T-8-M12 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P7	RPHT1605M0T-8-M12 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P8	RPKT1605M0T-8-M12 MP2501	0,20 *0.0080*	0,22 0.0085	0,30 0.012
P11	RPHT1605M0T-8-M12 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P12	RPHT1605M0T-8-M12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M1	RPHT1605M0T-8-ME11 F40M	0,19 *0.0075*	0,22 0.0085	0,30 0.012
M2	RPHT1605M0T-8-ME11 F40M	0,17 *0.0065*	0,20 0.0080	0,26 0.010
M3	RPHT1605M0T-8-M12 F40M	0,15 *0.0060*	0,17 0.0065	0,24 0.0095
M4	RPHT1605M0T-8-M12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M5	RPHT1605M0T-8-M12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K1	RPKT1605M0T-8-M18 MK2050	0,32 *0.013*	0,36 0.014	0,48 0.019
K2	RPKT1605M0T-8-M18 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
K3	RPKT1605M0T-8-M18 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
K4	RPKT1605M0T-8-M18 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
K5	RPKT1605M0T-8-M18 MK2050	0,25 *0.010*	0,30 0.012	0,38 0.015
K6	RPKT1605M0T-8-M18 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
K7	RPKT1605M0T-8-M18 MK2050	0,25 *0.010*	0,30 0.012	0,38 0.015
N1	RPHT1605M0T-8-ME11 F40M	0,24 *0.0095*	0,28 0.011	0,36 0.014
N2	RPHT1605M0T-8-ME11 F40M	0,24 *0.0095*	0,28 0.011	0,36 0.014
N3	RPHT1605M0T-8-ME11 F40M	0,24 *0.0095*	0,28 0.011	0,36 0.014
N11	RPHT1605M0T-8-ME11 F40M	0,24 *0.0095*	0,28 0.011	0,36 0.014
S1	RPHT1605M0T-8-M12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
S2	RPHT1605M0T-8-M12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
S3	RPHT1605M0T-8-M12 F40M	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
S11	RPHT1605M0T-8-ME11 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
S12	RPHT1605M0T-8-ME11 F40M	0,14 *0.0055*	0,16 0.0065	0,22 0.0085
H5	RPKW1605M0T-8-MD20 F15M	0,22 *0.0085*	0,24 0.0095	0,32 0.013
H8	RPKW1605M0T-8-MD20 F15M	0,16 *0.0065*	0,19 0.0075	0,25 0.010
H11	RPKW1605M0T-8-MD20 F15M	0,22 *0.0085*	0,24 0.0095	0,32 0.013
H12	RPKW1605M0T-8-MD20 F15M	0,16 *0.0065*	0,19 0.0075	0,25 0.010
H21	RPKW1605M0T-8-MD20 F15M	0,16 *0.0065*	0,19 0.0075	0,25 0.010

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25 Tondo 16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			MK2050			MP3000			MS2050			F40M		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	170 *560*	180 *590*	205 *670*	215 *710*	230 *750*	255 *840*	205 *670*	220 *720*	245 *800*	215 *710*	230 *750*	260 *850*	185 *610*	195 *640*	220 *720*
P2	165 *540*	175 *570*	195 *640*	205 *670*	220 *720*	245 *800*	200 *660*	215 *710*	235 *770*	210 *690*	225 *740*	250 *820*	180 *590*	190 *620*	210 *690*
P3	145 *475*	155 *510*	170 *560*	180 *590*	195 *640*	215 *710*	175 *570*	185 *610*	205 *670*	185 *610*	200 *660*	215 *710*	155 *510*	170 *560*	185 *610*
P4	130 *425*	135 *445*	150 *490*	160 *520*	170 *560*	190 *620*	155 *510*	165 *540*	185 *610*	160 *520*	175 *570*	190 *620*	140 *460*	150 *490*	165 *540*
P5	125 *410*	130 *425*	145 *475*	155 *510*	165 *540*	185 *610*	150 *490*	160 *520*	175 *570*	155 *510*	165 *540*	185 *610*	135 *445*	140 *460*	155 *510*
P6	140 *460*	150 *490*	165 *540*	175 *570*	185 *610*	205 *670*	165 *540*	180 *590*	195 *640*	175 *570*	185 *610*	210 *690*	150 *490*	160 *520*	180 *590*
P7	130 *425*	140 *460*	155 *510*	165 *540*	175 *570*	195 *640*	160 *520*	170 *560*	185 *610*	165 *540*	175 *570*	195 *640*	140 *460*	150 *490*	170 *560*
P8	125 *410*	130 *425*	145 *475*	150 *490*	165 *540*	180 *590*	145 *475*	155 *510*	175 *570*	155 *510*	165 *540*	180 *590*	130 *425*	140 *460*	155 *510*
P11	125 *410*	135 *445*	150 *490*	160 *520*	170 *560*	190 *620*	155 *510*	165 *540*	180 *590*	160 *520*	170 *560*	190 *620*	135 *445*	145 *475*	165 *540*
P12	— —	— —	— —	105 *345*	110 *360*	125 *410*	100 *330*	110 *360*	120 *395*	105 *345*	110 *360*	125 *410*	90 *295*	95 *310*	105 *345*
M1	— —	— —	— —	— —	— —	— —	150 *490*	160 *520*	175 *570*	170 *560*	180 *590*	200 *660*	145 *475*	155 *510*	170 *560*
M2	— —	— —	— —	— —	— —	— —	125 *410*	135 *445*	145 *475*	140 *460*	150 *490*	165 *540*	120 *395*	130 *425*	140 *460*
M3	— —	— —	— —	— —	— —	— —	100 *330*	110 *360*	120 *395*	115 *375*	120 *395*	135 *445*	95 *310*	105 *345*	115 *375*
M4	— —	— —	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	90 *295*	95 *310*	105 *345*	75 *245*	80 *260*	90 *295*
M5	— —	— —	— —	— —	— —	— —	65 *215*	70 *230*	80 *260*	75 *245*	80 *260*	85 *280*	65 *215*	65 *215*	75 *245*
K1	130 *425*	140 *460*	155 *510*	220 *720*	240 *790*	265 *870*	130 *425*	140 *460*	155 *510*	— —	— —	— —	145 *475*	150 *490*	170 *560*
K2	115 *375*	125 *410*	140 *460*	200 *660*	215 *710*	235 *770*	120 *395*	125 *410*	140 *460*	— —	— —	— —	125 *410*	135 *445*	150 *490*
K3	100 *330*	105 *345*	120 *395*	170 *560*	180 *590*	200 *660*	100 *330*	110 *360*	120 *395*	— —	— —	— —	105 *345*	115 *375*	125 *410*
K4	95 *310*	100 *330*	115 *375*	160 *520*	175 *570*	190 *620*	95 *310*	105 *345*	115 *375*	— —	— —	— —	100 *330*	110 *360*	120 *395*
K5	60 *195*	65 *215*	70 *230*	100 *330*	105 *345*	115 *375*	60 *195*	60 *195*	70 *230*	— —	— —	— —	60 *195*	65 *215*	75 *245*
K6	85 *280*	90 *295*	100 *330*	140 *460*	155 *510*	170 *560*	85 *280*	90 *295*	100 *330*	— —	— —	— —	90 *295*	95 *310*	105 *345*
K7	75 *245*	80 *260*	90 *295*	125 *410*	135 *445*	150 *490*	75 *245*	80 *260*	90 *295*	— —	— —	— —	80 *260*	85 *280*	95 *310*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1050 *3450*	1125 *3700*	1250 *4100*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	425 *1400*	455 *1500*	510 *1675*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	285 *940*	305 *1000*	335 *1100*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	325 *1075*	345 *1125*	385 *1275*
S1	— —	— —	— —	— —	— —	— —	37 *120*	40 *130*	43 *140*	41 *135*	44 *145*	48 *155*	35 *115*	37 *120*	41 *135*
S2	— —	— —	— —	— —	— —	— —	29 *95*	32 *105*	35 *115*	33 *110*	35 *115*	39 *130*	28 *90*	30 *100*	33 *110*
S3	— —	— —	— —	— —	— —	— —	26 *85*	27 *90*	31 *100*	29 *95*	31 *100*	34 *110*	25 *80*	26 *85*	29 *95*
S11	— —	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	49 *160*	55 *180*	55 *180*
S12	— —	— —	— —	— —	— —	— —	— —	— —	— —	48 *155*	50 *165*	55 *180*	41 *135*	44 *145*	48 *155*
S13	— —	— —	— —	— —	— —	— —	— —	— —	— —	28 *90*	30 *100*	33 *110*	24 *80*	26 *85*	28 *90*
H5	28 *90*	30 *100*	33 *110*	— —	— —	— —	28 *90*	30 *100*	33 *110*	— —	— —	— —	29 *95*	31 *100*	35 *115*
H8	30 *100*	32 *105*	35 *115*	— —	— —	— —	30 *100*	32 *105*	36 *120*	— —	— —	— —	31 *100*	34 *110*	37 *120*
H11	35 *115*	38 *125*	42 *140*	— —	— —	— —	36 *120*	38 *125*	42 *140*	— —	— —	— —	38 *125*	40 *130*	44 *145*
H12	35 *115*	37 *120*	41 *135*	— —	— —	— —	35 *115*	37 *120*	42 *140*	— —	— —	— —	36 *120*	39 *130*	43 *140*
H21	30 *100*	32 *105*	35 *115*	— —	— —	— —	30 *100*	32 *105*	36 *120*	— —	— —	— —	31 *100*	34 *110*	37 *120*

335.25 Tondo 16 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	295 *970*	310 *1025*	335 *1100*	325 *1075*	335 *1100*	360 *1175*	285 *940*	305 *1000*	340 *1125*	305 *1000*	320 *1050*	350 *1150*	160 *520*	170 *560*	190 *620*
P2	280 *920*	300 *980*	325 *1075*	315 *1025*	330 *1075*	355 *1175*	275 *900*	295 *970*	325 *1075*	300 *980*	315 *1025*	335 *1100*	155 *510*	165 *540*	180 *590*
P3	245 *800*	260 *850*	280 *920*	270 *890*	285 *940*	310 *1025*	240 *790*	260 *850*	285 *940*	260 *850*	275 *900*	295 *970*	135 *445*	145 *475*	160 *520*
P4	220 *720*	230 *750*	250 *820*	240 *790*	255 *840*	270 *890*	210 *690*	230 *750*	250 *820*	230 *750*	240 *790*	260 *850*	120 *395*	130 *425*	140 *460*
P5	210 *690*	225 *740*	240 *790*	230 *750*	240 *790*	260 *850*	205 *670*	220 *720*	245 *800*	220 *720*	230 *750*	250 *820*	115 *375*	125 *410*	135 *445*
P6	240 *790*	250 *820*	270 *890*	260 *850*	270 *890*	295 *970*	230 *750*	245 *800*	275 *900*	250 *820*	260 *850*	280 *920*	130 *425*	140 *460*	155 *510*
P7	225 *740*	240 *790*	255 *840*	245 *800*	255 *840*	280 *920*	220 *720*	230 *750*	260 *850*	235 *770*	245 *800*	265 *870*	125 *410*	130 *425*	145 *475*
P8	210 *690*	220 *720*	235 *770*	230 *750*	240 *790*	260 *850*	200 *660*	220 *720*	240 *790*	220 *720*	230 *750*	245 *800*	115 *375*	125 *410*	135 *445*
P11	220 *720*	230 *750*	245 *800*	235 *770*	250 *820*	270 *890*	210 *690*	225 *740*	250 *820*	230 *750*	240 *790*	255 *840*	120 *395*	125 *410*	140 *460*
P12	140 *460*	150 *490*	160 *520*	150 *490*	155 *510*	165 *540*	135 *445*	145 *475*	160 *520*	140 *460*	150 *490*	160 *520*	75 *245*	80 *260*	90 *295*
M1	— —	— —	— —	170 *560*	180 *590*	200 *660*	200 *660*	210 *690*	230 *750*	170 *560*	180 *590*	200 *660*	135 *445*	140 *460*	155 *510*
M2	— —	— —	— —	140 *460*	150 *490*	165 *540*	165 *540*	175 *570*	195 *640*	140 *460*	150 *490*	165 *540*	110 *360*	120 *395*	130 *425*
M3	— —	— —	— —	115 *375*	125 *410*	135 *445*	130 *425*	140 *460*	155 *510*	115 *375*	120 *395*	135 *445*	90 *295*	95 *310*	105 *345*
M4	— —	— —	— —	90 *295*	95 *310*	105 *345*	100 *330*	110 *360*	120 *395*	90 *295*	95 *310*	105 *345*	70 *230*	75 *245*	80 *260*
M5	— —	— —	— —	75 *245*	80 *260*	85 *280*	85 *280*	90 *295*	100 *330*	75 *245*	80 *260*	85 *280*	55 *180*	60 *195*	65 *215*
K1	285 *940*	300 *980*	325 *1075*	320 *1050*	330 *1075*	355 *1175*	220 *720*	235 *770*	255 *840*	300 *980*	315 *1025*	340 *1125*	— —	— —	— —
K2	255 *840*	270 *890*	290 *950*	280 *920*	290 *950*	315 *1025*	195 *640*	205 *670*	230 *750*	270 *890*	280 *920*	300 *980*	— —	— —	— —
K3	215 *710*	230 *750*	245 *800*	235 *770*	245 *800*	265 *870*	165 *540*	175 *570*	195 *640*	225 *740*	235 *770*	255 *840*	— —	— —	— —
K4	205 *670*	220 *720*	235 *770*	225 *740*	235 *770*	255 *840*	160 *520*	165 *540*	185 *610*	215 *710*	225 *740*	245 *800*	— —	— —	— —
K5	125 *410*	135 *445*	145 *475*	135 *445*	145 *475*	155 *510*	95 *310*	100 *330*	115 *375*	130 *425*	135 *445*	145 *475*	— —	— —	— —
K6	185 *610*	195 *640*	205 *670*	200 *660*	210 *690*	225 *740*	140 *460*	150 *490*	165 *540*	190 *620*	200 *660*	215 *710*	— —	— —	— —
K7	160 *520*	170 *560*	185 *610*	175 *570*	185 *610*	195 *640*	120 *395*	130 *425*	145 *475*	165 *540*	175 *570*	190 *620*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	29 *95*	31 *100*	34 *110*	21 *70*	22 *70*	25 *80*
S2	— —	— —	— —	— —	— —	— —	40 *130*	43 *140*	47 *155*	23 *75*	25 *80*	27 *90*	17 *55*	18 *60*	20 *65*
S3	— —	— —	— —	— —	— —	— —	35 *115*	38 *125*	42 *140*	29 *95*	31 *100*	34 *110*	15 *49*	16 *50*	18 *60*
S11	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	80 *260*	55 *180*	60 *195*	65 *215*	29 *95*	31 *100*	34 *110*
S12	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	40 *130*	42 *140*	46 *150*	27 *90*	29 *95*	32 *105*
S13	— —	— —	— —	— —	— —	— —	34 *110*	36 *120*	40 *130*	23 *75*	25 *80*	27 *90*	16 *50*	17 *55*	19 *60*
H5	40 *130*	43 *140*	47 *155*	— —	— —	— —	41 *135*	43 *140*	48 *155*	36 *120*	38 *125*	43 *140*	— —	— —	— —
H8	42 *140*	46 *150*	50 *165*	— —	— —	— —	43 *140*	47 *155*	50 *165*	38 *125*	41 *135*	45 *150*	— —	— —	— —
H11	50 *165*	55 *180*	60 *195*	— —	— —	— —	50 *165*	55 *180*	60 *195*	46 *150*	49 *160*	55 *180*	— —	— —	— —
H12	49 *160*	55 *180*	60 *195*	— —	— —	— —	50 *165*	55 *180*	60 *195*	70 *230*	75 *245*	80 *260*	— —	— —	— —
H21	42 *140*	46 *150*	50 *165*	— —	— —	— —	43 *140*	47 *155*	50 *165*	38 *125*	41 *135*	45 *150*	— —	— —	— —

335.25 Tondo 20 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		30%	20%	10%
P1	RPKT2006M0T-8-ME12 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
P2	RPKT2006M0T-8-ME12 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
P3	RPKT2006M0T-8-ME12 F40M	0,20 *0.0080*	0,22 0.0085	0,30 0.012
P4	RPKT2006M0T-8-ME12 F40M	0,19 *0.0075*	0,22 0.0085	0,30 0.012
P5	RPKT2006M0T-8-M15 F40M	0,24 *0.0095*	0,28 0.011	0,36 0.014
P6	RPKT2006M0T-8-M15 F40M	0,24 *0.0095*	0,26 0.010	0,36 0.014
P7	RPKT2006M0T-8-M15 F40M	0,24 *0.0095*	0,26 0.010	0,36 0.014
P8	RPKT2006M0T-8-M15 MP2501	0,25 *0.010*	0,28 0.011	0,38 0.015
P11	RPKT2006M0T-8-ME12 F40M	0,19 *0.0075*	0,22 0.0085	0,28 0.011
P12	RPKT2006M0T-8-ME12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M1	RPKT2006M0T-8-ME12 F40M	0,20 *0.0080*	0,24 0.0095	0,32 0.013
M2	RPKT2006M0T-8-ME12 F40M	0,19 *0.0075*	0,22 0.0085	0,30 0.012
M3	RPKT2006M0T-8-ME12 F40M	0,15 *0.0060*	0,17 0.0065	0,24 0.0095
M4	RPKT2006M0T-8-ME12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
M5	RPKT2006M0T-8-ME12 F40M	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
K1	RPKT2006M0T-8-M20 MK2050	0,34 *0.013*	0,40 0.016	0,55 0.022
K2	RPKT2006M0T-8-M20 MK2050	0,32 *0.013*	0,36 0.014	0,48 0.019
K3	RPKT2006M0T-8-M20 MK2050	0,32 *0.013*	0,36 0.014	0,48 0.019
K4	RPKT2006M0T-8-M20 MK2050	0,32 *0.013*	0,36 0.014	0,48 0.019
K5	RPKT2006M0T-8-M20 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
K6	RPKT2006M0T-8-M20 MK2050	0,32 *0.013*	0,36 0.014	0,48 0.019
K7	RPKT2006M0T-8-M20 MK2050	0,28 *0.011*	0,32 0.013	0,44 0.017
N1	RPKW2006M0-8-MD10 MP3000	0,22 *0.0085*	0,25 0.010	0,34 0.013
N2	RPKW2006M0-8-MD10 MP3000	0,22 *0.0085*	0,25 0.010	0,34 0.013
N3	RPKW2006M0-8-MD10 MP3000	0,22 *0.0085*	0,25 0.010	0,34 0.013
N11	RPKW2006M0-8-MD10 MP3000	0,22 *0.0085*	0,25 0.010	0,34 0.013
S1	RPKT2006M0T-8-ME12 MS2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
S2	RPKT2006M0T-8-ME12 MS2050	0,13 *0.0050*	0,15 0.0060	0,20 0.0080
S3	RPKT2006M0T-8-ME12 MS2050	0,12 *0.0048*	0,14 0.0055	0,19 0.0075
S11	RPHT2006M0T-8-M13 MS2050	0,16 *0.0065*	0,19 0.0075	0,25 0.010
S12	RPHT2006M0T-8-M13 MS2050	0,16 *0.0065*	0,19 0.0075	0,25 0.010
S13	RPHT2006M0T-8-M13 MS2050	0,14 *0.0055*	0,17 0.0065	0,22 0.0085
H5	RPKW2006M0T-8-MD22 F15M	0,24 *0.0095*	0,28 0.011	0,36 0.014
H8	RPKW2006M0T-8-MD22 F15M	0,18 *0.0070*	0,20 0.0080	0,28 0.011
H11	RPKW2006M0T-8-MD22 F15M	0,24 *0.0095*	0,28 0.011	0,36 0.014
H12	RPKW2006M0T-8-MD22 F15M	0,18 *0.0070*	0,20 0.0080	0,28 0.011
H21	RPKW2006M0T-8-MD22 F15M	0,18 *0.0070*	0,20 0.0080	0,28 0.011

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.25 Tondo 20 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			MK2050			MP3000			MS2050			F40M			MP2050		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	165 *540*	175 *570*	195 *640*	205 *670*	220 *720*	250 *820*	215 *710*	230 *750*	255 *840*	200 *660*	210 *690*	235 *770*	190 *620*	205 *670*	225 *740*	235 *770*	250 *820*	280 *920*
P2	160 *520*	170 *560*	190 *620*	200 *660*	215 *710*	235 *770*	210 *690*	225 *740*	250 *820*	195 *640*	205 *670*	230 *750*	185 *610*	195 *640*	220 *720*	230 *750*	245 *800*	270 *890*
P3	140 *460*	150 *490*	165 *540*	175 *570*	185 *610*	210 *690*	185 *610*	195 *640*	215 *710*	165 *540*	180 *590*	200 *660*	160 *520*	175 *570*	190 *620*	195 *640*	210 *690*	235 *770*
P4	125 *410*	135 *445*	145 *475*	155 *510*	165 *540*	185 *610*	160 *520*	170 *560*	190 *620*	145 *475*	160 *520*	175 *570*	145 *475*	155 *510*	170 *560*	175 *570*	190 *620*	210 *690*
P5	120 *395*	125 *410*	140 *460*	150 *490*	160 *520*	175 *570*	155 *510*	165 *540*	185 *610*	145 *475*	155 *510*	170 *560*	135 *445*	145 *475*	160 *520*	170 *560*	180 *590*	200 *660*
P6	135 *445*	145 *475*	155 *510*	165 *540*	180 *590*	200 *660*	175 *570*	185 *610*	205 *670*	160 *520*	170 *560*	190 *620*	155 *510*	165 *540*	185 *610*	190 *620*	200 *660*	225 *740*
P7	125 *410*	135 *445*	150 *490*	155 *510*	170 *560*	185 *610*	165 *540*	175 *570*	195 *640*	155 *510*	160 *520*	180 *590*	145 *475*	155 *510*	175 *570*	180 *590*	190 *620*	210 *690*
P8	115 *375*	125 *410*	140 *460*	150 *490*	155 *510*	175 *570*	155 *510*	165 *540*	180 *590*	140 *460*	150 *490*	170 *560*	135 *445*	145 *475*	160 *520*	165 *540*	180 *590*	200 *660*
P11	125 *410*	130 *425*	145 *475*	150 *490*	165 *540*	180 *590*	160 *520*	170 *560*	190 *620*	150 *490*	155 *510*	175 *570*	140 *460*	150 *490*	170 *560*	175 *570*	185 *610*	205 *670*
P12	— —	— —	— —	100 *330*	110 *360*	120 *395*	100 *330*	110 *360*	120 *395*	95 *310*	105 *345*	115 *375*	90 *295*	100 *330*	110 *360*	115 *375*	120 *395*	135 *445*
M1	— —	— —	— —	— —	— —	— —	155 *510*	165 *540*	185 *610*	155 *510*	165 *540*	185 *610*	150 *490*	160 *520*	175 *570*	165 *540*	175 *570*	195 *640*
M2	— —	— —	— —	— —	— —	— —	130 *425*	140 *460*	155 *510*	130 *425*	135 *445*	150 *490*	125 *410*	130 *425*	145 *475*	135 *445*	145 *475*	160 *520*
M3	— —	— —	— —	— —	— —	— —	105 *345*	110 *360*	125 *410*	105 *345*	110 *360*	125 *410*	100 *330*	105 *345*	115 *375*	110 *360*	115 *375*	130 *425*
M4	— —	— —	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	80 *260*	85 *280*	95 *310*	75 *245*	85 *280*	90 *295*	85 *280*	90 *295*	100 *330*
M5	— —	— —	— —	— —	— —	— —	65 *215*	70 *230*	80 *260*	70 *230*	70 *230*	80 *260*	65 *215*	70 *230*	75 *245*	70 *230*	75 *245*	85 *280*
K1	125 *410*	135 *445*	150 *490*	215 *710*	230 *750*	255 *840*	140 *460*	150 *490*	165 *540*	— —	— —	— —	150 *490*	155 *510*	175 *570*	— —	— —	— —
K2	115 *375*	120 *395*	135 *445*	190 *620*	205 *670*	230 *750*	125 *410*	130 *425*	145 *475*	— —	— —	— —	130 *425*	140 *460*	155 *510*	— —	— —	— —
K3	95 *310*	100 *330*	110 *360*	160 *520*	175 *570*	195 *640*	105 *345*	110 *360*	125 *410*	— —	— —	— —	110 *360*	115 *375*	130 *425*	— —	— —	— —
K4	90 *295*	95 *310*	105 *345*	155 *510*	165 *540*	185 *610*	100 *330*	105 *345*	120 *395*	— —	— —	— —	105 *345*	110 *360*	125 *410*	— —	— —	— —
K5	55 *180*	60 *195*	65 *215*	95 *310*	105 *345*	115 *375*	60 *195*	65 *215*	70 *230*	— —	— —	— —	65 *215*	70 *230*	75 *245*	— —	— —	— —
K6	80 *260*	85 *280*	95 *310*	135 *445*	145 *475*	160 *520*	85 *280*	95 *310*	105 *345*	— —	— —	— —	90 *295*	100 *330*	110 *360*	— —	— —	— —
K7	70 *230*	75 *245*	85 *280*	120 *395*	130 *425*	145 *475*	80 *260*	85 *280*	90 *295*	— —	— —	— —	80 *260*	85 *280*	95 *310*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	1225 *4025*	1325 *4350*	1450 *4750*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	495 *1625*	530 *1750*	590 *1925*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	330 *1075*	355 *1175*	390 *1275*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	380 *1250*	405 *1325*	445 *1450*	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	38 *125*	40 *130*	44 *145*	38 *125*	40 *130*	45 *150*	36 *120*	39 *130*	43 *140*	42 *140*	44 *145*	49 *160*
S2	— —	— —	— —	— —	— —	— —	30 *100*	32 *105*	36 *120*	31 *100*	32 *105*	36 *120*	29 *95*	31 *100*	34 *110*	34 *110*	35 *115*	39 *130*
S3	— —	— —	— —	— —	— —	— —	27 *90*	28 *90*	31 *100*	27 *90*	29 *95*	32 *105*	26 *85*	27 *90*	30 *100*	29 *95*	31 *100*	35 *115*
S11	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	55 *180*	55 *180*	60 *195*	50 *165*	55 *180*	60 *195*	60 *195*	60 *195*	70 *230*
S12	— —	— —	— —	— —	— —	— —	44 *145*	47 *155*	50 *165*	45 *150*	47 *155*	50 *165*	42 *140*	45 *150*	50 *165*	40 *130*	43 *140*	47 *155*
S13	— —	— —	— —	— —	— —	— —	26 *85*	27 *90*	30 *100*	26 *85*	27 *90*	30 *100*	25 *80*	26 *85*	29 *95*	23 *75*	25 *80*	27 *90*
H5	27 *90*	29 *95*	32 *105*	34 *110*	37 *120*	41 *135*	29 *95*	31 *100*	34 *110*	— —	— —	— —	30 *100*	32 *105*	36 *120*	— —	— —	— —
H8	29 *95*	31 *100*	34 *110*	37 *120*	40 *130*	44 *145*	30 *100*	32 *105*	35 *115*	— —	— —	— —	32 *105*	35 *115*	38 *125*	— —	— —	— —
H11	34 *110*	36 *120*	41 *135*	44 *145*	47 *155*	55 *180*	36 *120*	39 *130*	43 *140*	— —	— —	— —	39 *130*	41 *135*	46 *150*	43 *140*	46 *150*	50 *165*
H12	34 *110*	36 *120*	40 *130*	65 *215*	70 *230*	75 *245*	35 *115*	38 *125*	41 *135*	— —	— —	— —	37 *120*	40 *130*	44 *145*	70 *230*	75 *245*	85 *280*
H21	29 *95*	31 *100*	34 *110*	37 *120*	40 *130*	44 *145*	30 *100*	32 *105*	35 *115*	— —	— —	— —	32 *105*	35 *115*	38 *125*	36 *120*	39 *130*	43 *140*

335.25 Tondo 20 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			T25M			MM4500		
	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%	30%	20%	10%
P1	280 *920*	295 *970*	325 *1075*	300 *980*	315 *1025*	340 *1125*	230 *750*	240 *790*	275 *900*	300 *980*	310 *1025*	335 *1100*	210 *690*	225 *740*	245 *800*	145 *475*	155 *510*	175 *570*
P2	275 *900*	290 *950*	310 *1025*	290 *950*	310 *1025*	330 *1075*	220 *720*	235 *770*	260 *850*	290 *950*	305 *1000*	325 *1075*	205 *670*	215 *710*	240 *790*	145 *475*	150 *490*	170 *560*
P3	240 *790*	250 *820*	275 *900*	255 *840*	270 *890*	290 *950*	195 *640*	205 *670*	230 *750*	250 *820*	265 *870*	285 *940*	175 *570*	190 *620*	210 *690*	125 *410*	130 *425*	150 *490*
P4	210 *690*	220 *720*	240 *790*	225 *740*	240 *790*	255 *840*	170 *560*	180 *590*	200 *660*	225 *740*	235 *770*	250 *820*	160 *520*	170 *560*	185 *610*	110 *360*	120 *395*	130 *425*
P5	200 *660*	215 *710*	235 *770*	215 *710*	225 *740*	245 *800*	165 *540*	175 *570*	195 *640*	215 *710*	225 *740*	240 *790*	150 *490*	160 *520*	175 *570*	105 *345*	110 *360*	125 *410*
P6	225 *740*	240 *790*	260 *850*	245 *800*	260 *850*	275 *900*	185 *610*	200 *660*	220 *720*	240 *790*	250 *820*	275 *900*	170 *560*	180 *590*	200 *660*	120 *395*	125 *410*	140 *460*
P7	215 *710*	230 *750*	245 *800*	230 *750*	245 *800*	260 *850*	175 *570*	185 *610*	205 *670*	225 *740*	235 *770*	255 *840*	160 *520*	170 *560*	190 *620*	115 *375*	120 *395*	130 *425*
P8	200 *660*	210 *690*	230 *750*	215 *710*	225 *740*	245 *800*	165 *540*	175 *570*	195 *640*	210 *690*	225 *740*	240 *790*	150 *490*	160 *520*	175 *570*	105 *345*	110 *360*	125 *410*
P11	210 *690*	220 *720*	240 *790*	225 *740*	240 *790*	255 *840*	170 *560*	180 *590*	200 *660*	220 *720*	230 *750*	250 *820*	155 *510*	165 *540*	185 *610*	110 *360*	115 *375*	130 *425*
P12	135 *445*	145 *475*	155 *510*	145 *475*	150 *490*	160 *520*	110 *360*	120 *395*	135 *445*	140 *460*	145 *475*	155 *510*	100 *330*	105 *345*	120 *395*	70 *230*	75 *245*	85 *280*
M1	— —	— —	— —	160 *520*	170 *560*	190 *620*	160 *520*	170 *560*	185 *610*	165 *540*	175 *570*	195 *640*	165 *540*	175 *570*	195 *640*	125 *410*	130 *425*	145 *475*
M2	— —	— —	— —	130 *425*	140 *460*	155 *510*	130 *425*	140 *460*	155 *510*	135 *445*	145 *475*	160 *520*	135 *445*	145 *475*	160 *520*	100 *330*	110 *360*	120 *395*
M3	— —	— —	— —	105 *345*	115 *375*	125 *410*	105 *345*	115 *375*	130 *425*	110 *360*	120 *395*	130 *425*	110 *360*	120 *395*	130 *425*	80 *260*	85 *280*	95 *310*
M4	— —	— —	— —	85 *280*	90 *295*	100 *330*	85 *280*	90 *295*	100 *330*	85 *280*	90 *295*	100 *330*	85 *280*	90 *295*	100 *330*	65 *215*	65 *215*	75 *245*
M5	— —	— —	— —	70 *230*	75 *245*	80 *260*	70 *230*	75 *245*	80 *260*	70 *230*	75 *245*	85 *280*	70 *230*	75 *245*	85 *280*	55 *180*	55 *180*	60 *195*
K1	275 *900*	290 *950*	310 *1025*	295 *970*	310 *1025*	335 *1100*	175 *570*	185 *610*	205 *670*	295 *970*	305 *1000*	330 *1075*	165 *540*	170 *560*	190 *620*	— —	— —	— —
K2	245 *800*	260 *850*	280 *920*	260 *850*	275 *900*	300 *980*	155 *510*	165 *540*	185 *610*	260 *850*	270 *890*	290 *950*	145 *475*	150 *490*	170 *560*	— —	— —	— —
K3	205 *670*	220 *720*	240 *790*	220 *720*	230 *750*	255 *840*	130 *425*	140 *460*	155 *510*	220 *720*	230 *750*	245 *800*	120 *395*	130 *425*	140 *460*	— —	— —	— —
K4	200 *660*	210 *690*	230 *750*	210 *690*	220 *720*	240 *790*	125 *410*	135 *445*	150 *490*	210 *690*	220 *720*	235 *770*	115 *375*	125 *410*	135 *445*	— —	— —	— —
K5	125 *410*	130 *425*	140 *460*	130 *425*	135 *445*	145 *475*	80 *260*	85 *280*	90 *295*	125 *410*	135 *445*	145 *475*	70 *230*	75 *245*	85 *280*	— —	— —	— —
K6	175 *570*	185 *610*	200 *660*	185 *610*	195 *640*	210 *690*	110 *360*	120 *395*	130 *425*	185 *610*	190 *620*	205 *670*	100 *330*	110 *360*	120 *395*	— —	— —	— —
K7	155 *510*	165 *540*	180 *590*	165 *540*	175 *570*	190 *620*	100 *330*	105 *345*	115 *375*	165 *540*	170 *560*	185 *610*	90 *295*	95 *310*	105 *345*	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	41 *135*	44 *145*	48 *155*	28 *90*	30 *100*	33 *110*	— —	— —	— —	20 *65*	21 *70*	23 *75*
S2	— —	— —	— —	— —	— —	— —	33 *110*	35 *115*	39 *130*	22 *70*	24 *80*	26 *85*	— —	— —	— —	16 *50*	17 *55*	18 *60*
S3	— —	— —	— —	— —	— —	— —	29 *95*	31 *100*	34 *110*	28 *90*	30 *100*	33 *110*	— —	— —	— —	14 *46*	15 *49*	16 *50*
S11	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	55 *180*	60 *195*	65 *215*	— —	— —	— —	27 *90*	29 *95*	32 *105*
S12	— —	— —	— —	— —	— —	— —	48 *155*	50 *165*	55 *180*	38 *125*	41 *135*	45 *150*	— —	— —	— —	25 *80*	27 *90*	30 *100*
S13	— —	— —	— —	— —	— —	— —	28 *90*	30 *100*	33 *110*	22 *70*	24 *80*	26 *85*	— —	— —	— —	15 *49*	15 *49*	17 *55*
H5	38 *125*	41 *135*	46 *150*	— —	— —	— —	33 *110*	36 *120*	40 *130*	35 *115*	37 *120*	41 *135*	— —	— —	— —	— —	— —	— —
H8	41 *135*	44 *145*	49 *160*	— —	— —	— —	36 *120*	38 *125*	43 *140*	37 *120*	40 *130*	44 *145*	— —	— —	— —	— —	— —	— —
H11	49 *160*	50 *165*	60 *195*	— —	— —	— —	42 *140*	45 *150*	50 *165*	44 *145*	47 *155*	50 *165*	— —	— —	— —	— —	— —	— —
H12	48 *155*	50 *165*	55 *180*	— —	— —	— —	42 *140*	45 *150*	50 *165*	65 *215*	70 *230*	80 *260*	— —	— —	— —	— —	— —	— —
H21	41 *135*	44 *145*	49 *160*	— —	— —	— —	36 *120*	38 *125*	43 *140*	37 *120*	40 *130*	44 *145*	— —	— —	— —	— —	— —	— —

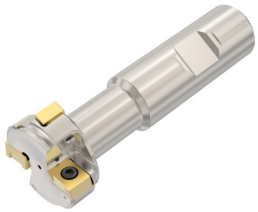


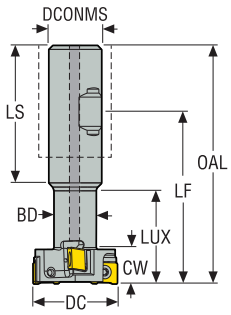
335.16

Frese a disco a taglio dolce e affidabile, per scanalatura a T

- Larghezza di taglio 10,91-21 mm (0,387-0,823")
- Diametro gamma fresa 25-50 mm (0,969-1,844")
- Collegamento Weldon, con adduzione refrigerante interna per una rimozione del truciolo affidabile
- Soluzione conveniente con 4 taglienti per inserto

R335.16 – In mm





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 545-550
—Per il programma inserti completo, vedere le pagine 866, 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCONMS	LF	LS	LUX	OAL	BD	RPMX	Peso	Inserto
			mm	mm	mm			mm	mm	mm	mm	mm	mm		kg	
R335.16-1625.3-11.2NA	02980627	Weldon	25,0	10,91	5,87	2	4	16,0	56,0	49,0	28,4	80,0	12,0	24500	0,2	SPMX07..
R335.16-2032.3-14.2NA	02980628	Weldon	32,0	13,91	7,44	2	4	20,0	65,0	52,0	35,4	90,0	16,0	17600	0,2	LNK.08..
R335.16-2540.3-18.2NA	02980629	Weldon	40,0	17,91	9,23	2	5	25,0	73,0	58,0	43,7	105,0	20,0	14600	0,4	LNK.08..
R335.16-3250.3-21.2NA	02980630	Weldon	50,0	21,0	11,18	2	6	32,0	84,0	61,0	55,2	120,0	26,0	9800	0,8	LNK.08..

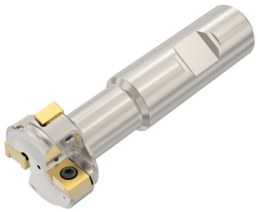
Parti di ricambio, comprese nella fornitura

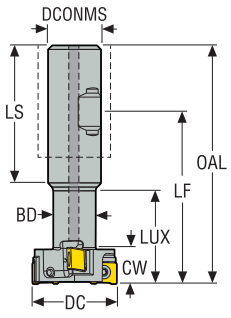
Accessori

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
					
ø 25	H4B-T07P	C02506-T07P	DOUBLE-T	1.2NM	T00-07P12
ø 32-50	1/4HEX-T09PX50	C73009-T09P	–	2.0NM	T00-09P20

Per ottenere i migliori risultati, si consiglia di lasciare un margine di scorte durante la lavorazione del passaggio dello stelo per cave a T H = min 20% di CW sul fondo della cava a T. H = 0,2 x CW
Chiavi dinamometriche e fisse, vedere pagina 931

R335.16 – Pollici





—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 545-550
—Per il programma inserti completo, vedere le pagine 866, 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	CW	CDX	ZEFP	ZNP	DCONMS	LF	LS	LUX	OAL	BD	RPMX	Peso	Inserto
			inch	inch	inch			inch	inch	inch	inch	inch	inch		lb	
R335.16-00.97-3-0.39-2NA	02980638	Weldon	0.969	0.387	0.232	2	4	0.750	2.528	2.307	1.063	3.543	0.453	24500	0.440	SPMX06..
R335.16-01.25-3-0.48-2NA	02980639	Weldon	1.249	0.477	0.275	2	4	1.000	2.796	2.539	1.256	3.937	0.656	17600	0.880	LNK.08..
R335.16-01.47-3-0.63-2NA	02980640	Weldon	1.469	0.626	0.330	2	5	1.000	3.190	2.539	1.633	4.331	0.748	14600	0.880	LNK.08..
R335.16-01.84-3-0.83-2NA	02980641	Weldon	1.844	0.823	0.389	2	6	1.250	3.978	2.697	2.264	5.118	1.000	9800	1.760	LNK.08..

Parti di ricambio, comprese nella fornitura

Accessori

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)	Coppia di serraggio inserto	Chiave dinamometrica
					
ø 0.97	H4B-T07P	C02205-T07P	DOUBLE-T	0.9NM	T00-07P09
ø 1.25-1.84	1/4HEX-T09PX50	C73009-T09P	–	2.0NM	T00-09P20

Per ottenere i migliori risultati, si consiglia di lasciare un margine di scorte durante la lavorazione del passaggio dello stelo per cave a T H = min 20% di CW sul fondo della cava a T. H = 0,2 x CW
Chiavi dinamometriche e fisse, vedere pagina 931

335.16 - SP06 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	20%	10%
P1	SPMX060204-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
P2	SPMX060204-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
P3	SPMX060204-75 F40M	0,070 *0.0028*	0,085 0.0034	0,11 0.0044
P4	SPMX060204-75 F40M	0,065 *0.0026*	0,085 0.0034	0,11 0.0044
P5	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
P6	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
P7	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
P8	SPMX060204-75 F40M	0,070 *0.0028*	0,085 0.0034	0,11 0.0044
P11	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
P12	SPMX060204-75 F40M	0,044 *0.0017*	0,055 0.0022	0,075 0.0030
M1	SPMX060204-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
M2	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
M3	SPMX060204-75 F40M	0,050 *0.0020*	0,065 0.0026	0,085 0.0034
M4	SPMX060204-75 F40M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
M5	SPMX060204-75 F40M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
K1	SPMX060204-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
K2	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
K3	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
K4	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
K5	SPMX060204-75 F40M	0,060 *0.0024*	0,075 0.0030	0,10 0.0040
K6	SPMX060204-75 F40M	0,065 *0.0026*	0,080 0.0032	0,11 0.0044
K7	SPMX060204-75 F40M	0,060 *0.0024*	0,075 0.0030	0,10 0.0040
N1	SPMX060204-75 F40M	0,090 *0.0036*	0,11 0.0044	0,15 0.0060
N2	SPMX060204-75 F40M	0,090 *0.0036*	0,11 0.0044	0,15 0.0060
N3	SPMX060204-75 F40M	0,090 *0.0036*	0,11 0.0044	0,15 0.0060
N11	SPMX060204-75 F40M	0,090 *0.0036*	0,11 0.0044	0,15 0.0060
S1	SPMX060204-75 F40M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
S2	SPMX060204-75 F40M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
S3	SPMX060204-75 F40M	0,042 *0.0017*	0,055 0.0022	0,070 0.0028
S11	SPMX060204-75 F40M	0,050 *0.0020*	0,065 0.0026	0,085 0.0034
S12	SPMX060204-75 F40M	0,050 *0.0020*	0,065 0.0026	0,085 0.0034
S13	SPMX060204-75 F40M	0,046 *0.0018*	0,055 0.0022	0,075 0.0030
H5	SPMX060204-75 F40M	0,044 *0.0017*	0,055 0.0022	0,075 0.0030
H8	SPMX060204-75 F40M	0,034 *0.0013*	0,042 0.0017	0,055 0.0022
H11	SPMX060204-75 F40M	0,044 *0.0017*	0,055 0.0022	0,075 0.0030
H12	SPMX060204-75 F40M	0,034 *0.0013*	0,042 0.0017	0,055 0.0022
H21	SPMX060204-75 F40M	0,034 *0.0013*	0,042 0.0017	0,055 0.0022

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.16 - SP06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			T25M		
	100%	20%	10%	100%	20%	10%
P1	190 *620*	270 *890*	295 *970*	210 *690*	295 *970*	325 *1075*
P2	185 *610*	260 *850*	290 *950*	205 *670*	290 *950*	320 *1050*
P3	160 *520*	230 *750*	255 *840*	175 *570*	250 *820*	280 *920*
P4	145 *475*	200 *660*	225 *740*	160 *520*	220 *720*	245 *800*
P5	140 *460*	195 *640*	215 *710*	150 *490*	215 *710*	235 *770*
P6	155 *510*	220 *720*	240 *790*	170 *560*	240 *790*	265 *870*
P7	145 *475*	205 *670*	225 *740*	160 *520*	225 *740*	250 *820*
P8	135 *445*	190 *620*	215 *710*	150 *490*	210 *690*	235 *770*
P11	140 *460*	200 *660*	220 *720*	155 *510*	220 *720*	240 *790*
P12	90 *295*	125 *410*	140 *460*	100 *330*	140 *460*	155 *510*
M1	150 *490*	210 *690*	235 *770*	165 *540*	230 *750*	255 *840*
M2	125 *410*	175 *570*	190 *620*	135 *445*	190 *620*	210 *690*
M3	100 *330*	140 *460*	155 *510*	110 *360*	155 *510*	170 *560*
M4	75 *245*	105 *345*	120 *395*	85 *280*	120 *395*	130 *425*
M5	65 *215*	90 *295*	100 *330*	70 *230*	100 *330*	110 *360*
K1	150 *490*	205 *670*	230 *750*	165 *540*	230 *750*	250 *820*
K2	130 *425*	185 *610*	200 *660*	145 *475*	205 *670*	225 *740*
K3	110 *360*	155 *510*	170 *560*	120 *395*	170 *560*	190 *620*
K4	105 *345*	150 *490*	165 *540*	115 *375*	165 *540*	180 *590*
K5	65 *215*	90 *295*	100 *330*	70 *230*	100 *330*	110 *360*
K6	95 *310*	130 *425*	145 *475*	100 *330*	145 *475*	160 *520*
K7	80 *260*	115 *375*	125 *410*	90 *295*	125 *410*	140 *460*
N1	1100 *3600*	1575 *5175*	1725 *5650*	— —	— —	— —
N2	445 *1450*	630 *2075*	700 *2300*	— —	— —	— —
N3	295 *970*	420 *1375*	465 *1525*	— —	— —	— —
N11	340 *1125*	480 *1575*	530 *1750*	— —	— —	— —
S1	36 *120*	50 *165*	55 *180*	— —	— —	— —
S2	29 *95*	40 *130*	44 *145*	— —	— —	— —
S3	25 *80*	35 *115*	39 *130*	— —	— —	— —
S11	50 *165*	70 *230*	80 *260*	— —	— —	— —
S12	42 *140*	60 *195*	65 *215*	— —	— —	— —
S13	24 *80*	34 *110*	38 *125*	— —	— —	— —
H5	30 *100*	42 *140*	46 *150*	— —	— —	— —
H8	32 *105*	44 *145*	49 *160*	— —	— —	— —
H11	38 *125*	55 *180*	60 *195*	— —	— —	— —
H12	37 *120*	50 *165*	55 *180*	— —	— —	— —
H21	32 *105*	44 *145*	49 *160*	— —	— —	— —

335.16 - SP07 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	20%	10%
P1	SPMX070304-75 F40M	0,085 *0.0034*	0,11 0.0044	0,14 0.0055
P2	SPMX070304-75 F40M	0,085 *0.0034*	0,11 0.0044	0,14 0.0055
P3	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,14 0.0055
P4	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
P5	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
P6	SPMX070304-75 F40M	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
P7	SPMX070304-75 F40M	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
P8	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,14 0.0055
P11	SPMX070304-75 F40M	0,075 *0.0030*	0,095 0.0038	0,13 0.0050
P12	SPMX070304-75 F40M	0,055 *0.0022*	0,065 0.0026	0,090 0.0036
M1	SPMX070304-75 F40M	0,085 *0.0034*	0,11 0.0044	0,14 0.0055
M2	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
M3	SPMX070304-75 F40M	0,060 *0.0024*	0,080 0.0032	0,10 0.0040
M4	SPMX070304-75 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
M5	SPMX070304-75 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
K1	SPMX070304-75 F40M	0,085 *0.0034*	0,11 0.0044	0,14 0.0055
K2	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
K3	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
K4	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
K5	SPMX070304-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
K6	SPMX070304-75 F40M	0,080 *0.0032*	0,10 0.0040	0,13 0.0050
K7	SPMX070304-75 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
N1	SPMX070304-75 F40M	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
N2	SPMX070304-75 F40M	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
N3	SPMX070304-75 F40M	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
N11	SPMX070304-75 F40M	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
S1	SPMX070304-75 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
S2	SPMX070304-75 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
S3	SPMX070304-75 F40M	0,050 *0.0020*	0,065 0.0026	0,085 0.0034
S11	SPMX070304-75 F40M	0,060 *0.0024*	0,080 0.0032	0,10 0.0040
S12	SPMX070304-75 F40M	0,060 *0.0024*	0,080 0.0032	0,10 0.0040
S13	SPMX070304-75 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
H5	SPMX070304-75 F40M	0,055 *0.0022*	0,065 0.0026	0,090 0.0036
H8	SPMX070304-75 F40M	0,040 *0.0016*	0,050 0.0020	0,070 0.0028
H11	SPMX070304-75 F40M	0,055 *0.0022*	0,065 0.0026	0,090 0.0036
H12	SPMX070304-75 F40M	0,040 *0.0016*	0,050 0.0020	0,070 0.0028
H21	SPMX070304-75 F40M	0,040 *0.0016*	0,050 0.0020	0,070 0.0028

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.16 - SP07 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			T25M		
	100%	20%	10%	100%	20%	10%
P1	175 *570*	250 *820*	275 *900*	195 *640*	275 *900*	305 *1000*
P2	170 *560*	240 *790*	270 *890*	190 *620*	265 *870*	295 *970*
P3	150 *490*	210 *690*	230 *750*	165 *540*	235 *770*	255 *840*
P4	130 *425*	185 *610*	210 *690*	145 *475*	205 *670*	230 *750*
P5	125 *410*	180 *590*	200 *660*	140 *460*	195 *640*	220 *720*
P6	145 *475*	205 *670*	225 *740*	160 *520*	225 *740*	245 *800*
P7	135 *445*	190 *620*	210 *690*	150 *490*	210 *690*	230 *750*
P8	125 *410*	180 *590*	195 *640*	140 *460*	195 *640*	215 *710*
P11	130 *425*	185 *610*	205 *670*	145 *475*	205 *670*	225 *740*
P12	85 *280*	120 *395*	130 *425*	90 *295*	130 *425*	145 *475*
M1	140 *460*	195 *640*	215 *710*	155 *510*	215 *710*	240 *790*
M2	115 *375*	160 *520*	180 *590*	125 *410*	175 *570*	195 *640*
M3	95 *310*	130 *425*	145 *475*	100 *330*	140 *460*	160 *520*
M4	70 *230*	100 *330*	110 *360*	80 *260*	110 *360*	120 *395*
M5	60 *195*	85 *280*	90 *295*	65 *215*	90 *295*	100 *330*
K1	135 *445*	190 *620*	215 *710*	150 *490*	210 *690*	235 *770*
K2	120 *395*	170 *560*	190 *620*	130 *425*	185 *610*	205 *670*
K3	100 *330*	145 *475*	160 *520*	110 *360*	160 *520*	175 *570*
K4	95 *310*	135 *445*	150 *490*	105 *345*	150 *490*	165 *540*
K5	60 *195*	85 *280*	90 *295*	65 *215*	90 *295*	100 *330*
K6	85 *280*	120 *395*	135 *445*	95 *310*	135 *445*	145 *475*
K7	75 *245*	105 *345*	120 *395*	85 *280*	115 *375*	130 *425*
N1	1000 *3275*	1425 *4675*	1600 *5250*	— —	— —	— —
N2	405 *1325*	570 *1875*	640 *2100*	— —	— —	— —
N3	270 *890*	385 *1275*	430 *1400*	— —	— —	— —
N11	310 *1025*	440 *1450*	490 *1600*	— —	— —	— —
S1	33 *110*	46 *150*	50 *165*	— —	— —	— —
S2	27 *90*	37 *120*	41 *135*	— —	— —	— —
S3	23 *75*	33 *110*	36 *120*	— —	— —	— —
S11	47 *155*	65 *215*	75 *245*	— —	— —	— —
S12	39 *130*	55 *180*	60 *195*	— —	— —	— —
S13	23 *75*	32 *105*	35 *115*	— —	— —	— —
H5	28 *90*	39 *130*	43 *140*	— —	— —	— —
H8	30 *100*	41 *135*	45 *150*	— —	— —	— —
H11	35 *115*	50 *165*	55 *180*	— —	— —	— —
H12	34 *110*	48 *155*	55 *180*	— —	— —	— —
H21	30 *100*	41 *135*	45 *150*	— —	— —	— —

335.16 -LNK – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	20%	10%
P1	LNKT080508PPTN-M06 F40M	0,11 *0.0044*	0,14 0.0055	0,19 0.0075
P2	LNKT080508PPTN-M06 F40M	0,11 *0.0044*	0,14 0.0055	0,19 0.0075
P3	LNKT080508PPTN-M06 F40M	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
P4	LNKT080508PPTN-M06 F40M	0,11 *0.0044*	0,13 0.0050	0,18 0.0070
P5	LNKT080508PPTN-M06 F40M	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
P6	LNKT080508PPTN-M06 F40M	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
P7	LNKT080508PPTN-M06 F40M	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
P8	LNKT080508PPTN-M06 MP3000	0,11 *0.0044*	0,14 0.0055	0,18 0.0070
P11	LNKT080508PPTN-M06 F40M	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
P12	LNKT080508PPTN-M06 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
M1	LNKT080508PPTN-M06 F40M	0,11 *0.0044*	0,14 0.0055	0,19 0.0075
M2	LNKT080508PPTN-M06 F40M	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
M3	LNKT080508PPTN-M06 F40M	0,085 *0.0034*	0,10 0.0040	0,14 0.0055
M4	LNKT080508PPTN-M06 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
M5	LNKT080508PPTN-M06 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
K1	LNKT080508PPTN-M06 MK2050	0,11 *0.0044*	0,14 0.0055	0,19 0.0075
K2	LNKT080508PPTN-M06 MK2050	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
K3	LNKT080508PPTN-M06 MK2050	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
K4	LNKT080508PPTN-M06 MK2050	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
K5	LNKT080508PPTN-M06 MK2050	0,095 *0.0038*	0,12 0.0048	0,16 0.0065
K6	LNKT080508PPTN-M06 MK2050	0,10 *0.0040*	0,13 0.0050	0,17 0.0065
K7	LNKT080508PPTN-M06 MK2050	0,095 *0.0038*	0,12 0.0048	0,16 0.0065
N1	LNKT080508PPN-E05 H25	0,13 *0.0050*	0,16 0.0065	0,22 0.0085
N2	LNKT080508PPN-E05 H25	0,13 *0.0050*	0,16 0.0065	0,22 0.0085
N3	LNKT080508PPN-E05 H25	0,13 *0.0050*	0,16 0.0065	0,22 0.0085
N11	LNKT080508PPN-E05 H25	0,13 *0.0050*	0,16 0.0065	0,22 0.0085
S1	LNKT080508PPTN-M06 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
S2	LNKT080508PPTN-M06 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
S3	LNKT080508PPTN-M06 F40M	0,070 *0.0028*	0,085 0.0034	0,11 0.0044
S11	LNKT080508PPTN-M06 F40M	0,085 *0.0034*	0,10 0.0040	0,14 0.0055
S12	LNKT080508PPTN-M06 F40M	0,085 *0.0034*	0,10 0.0040	0,14 0.0055
S13	LNKT080508PPTN-M06 F40M	0,075 *0.0030*	0,090 0.0036	0,12 0.0048
H5	LNKT080508PPTN-M06 MP3000	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
H8	LNKT080508PPTN-M06 MP3000	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
H11	LNKT080508PPTN-M06 F40M	0,070 *0.0028*	0,090 0.0036	0,12 0.0048
H12	LNKT080508PPTN-M06 F40M	0,055 *0.0022*	0,070 0.0028	0,090 0.0036
H21	LNKT080508PPTN-M06 MP3000	0,055 *0.0022*	0,070 0.0028	0,090 0.0036

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

335.16 -LNK – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			F40M			H25			MK1501			MP2501			MP3501		
	100%	20%	10%	100%	20%	10%	100%	20%	10%	100%	20%	10%	100%	20%	10%	100%	20%	10%	100%	20%	10%
P1	200	280	310	190	270	300	155	215	240	—	—	—	—	—	—	285	370	395	260	330	355
	660	*920*	*1025*	*620*	*890*	*980*	*510*	*710*	*790*	—	—	—	—	—	—	*940*	*1225*	*1300*	*850*	*1075*	*1175*
P2	195	275	300	185	265	290	150	210	230	—	—	—	—	—	—	280	360	385	250	320	345
	640	*900*	*980*	*610*	*870*	*950*	*490*	*690*	*750*	—	—	—	—	—	—	*920*	*1175*	*1275*	*820*	*1050*	*1125*
P3	165	235	265	160	225	255	130	180	205	—	—	—	—	—	—	240	310	335	215	275	300
	540	*770*	*870*	*520*	*740*	*840*	*425*	*590*	*670*	—	—	—	—	—	—	*790*	*1025*	*1100*	*710*	*900*	*980*
P4	145	210	230	140	205	225	115	165	180	—	—	—	—	—	—	210	275	295	190	250	265
	475	*690*	*750*	*460*	*670*	*740*	*375*	*540*	*590*	—	—	—	—	—	—	*690*	*900*	*970*	*620*	*820*	*870*
P5	145	200	225	140	195	215	110	155	175	—	—	—	—	—	—	205	260	280	185	235	255
	475	*660*	*740*	*460*	*640*	*710*	*360*	*510*	*570*	—	—	—	—	—	—	*670*	*850*	*920*	*610*	*770*	*840*
P6	160	225	250	155	220	245	125	175	195	—	—	—	—	—	—	230	295	315	210	265	285
	520	*740*	*820*	*510*	*720*	*800*	*410*	*570*	*640*	—	—	—	—	—	—	*750*	*970*	*1025*	*690*	*870*	*940*
P7	155	215	240	145	205	230	115	165	185	—	—	—	—	—	—	220	280	300	195	250	270
	510	*710*	*790*	*475*	*670*	*750*	*375*	*540*	*610*	—	—	—	—	—	—	*720*	*920*	*980*	*640*	*820*	*890*
P8	140	200	220	135	190	215	110	150	170	—	—	—	—	—	—	200	260	280	180	235	250
	460	*660*	*720*	*445*	*620*	*710*	*360*	*490*	*560*	—	—	—	—	—	—	*660*	*850*	*920*	*590*	*770*	*820*
P11	150	210	230	145	200	220	115	160	180	—	—	—	—	—	—	215	270	290	190	245	260
	490	*690*	*750*	*475*	*660*	*720*	*375*	*520*	*590*	—	—	—	—	—	—	*710*	*890*	*950*	*620*	*800*	*850*
P12	95	135	150	90	130	140	75	105	115	—	—	—	—	—	—	135	165	180	120	150	160
	310	*445*	*490*	*295*	*425*	*460*	*245*	*345*	*375*	—	—	—	—	—	—	*445*	*540*	*590*	*395*	*490*	*520*
M1	—	—	—	140	195	215	120	170	185	—	—	—	—	—	—	140	200	220	130	185	205
	—	—	—	*460*	*640*	*710*	*395*	*560*	*610*	—	—	—	—	—	—	*460*	*660*	*720*	*425*	*610*	*670*
M2	—	—	—	115	160	180	100	140	155	—	—	—	—	—	—	120	165	185	110	155	170
	—	—	—	*375*	*520*	*590*	*330*	*460*	*510*	—	—	—	—	—	—	*395*	*540*	*610*	*360*	*510*	*560*
M3	—	—	—	90	130	145	80	115	125	—	—	—	—	—	—	95	135	145	85	125	135
	—	—	—	*295*	*425*	*475*	*260*	*375*	*410*	—	—	—	—	—	—	*310*	*445*	*475*	*280*	*410*	*445*
M4	—	—	—	70	100	110	60	85	95	—	—	—	—	—	—	70	105	115	65	95	105
	—	—	—	*230*	*330*	*360*	*195*	*280*	*310*	—	—	—	—	—	—	*230*	*345*	*375*	*215*	*310*	*345*
M5	—	—	—	60	85	95	50	75	80	—	—	—	—	—	—	60	85	95	55	80	90
	—	—	—	*195*	*280*	*310*	*165*	*245*	*260*	—	—	—	—	—	—	*195*	*280*	*310*	*180*	*260*	*295*
K1	210	295	325	125	175	195	120	165	185	—	—	—	245	470	570	280	360	385	255	325	350
	690	*970*	*1075*	*410*	*570*	*640*	*395*	*540*	*610*	—	—	—	*800*	*1550*	*1875*	*920*	*1175*	*1275*	*840*	*1075*	*1150*
K2	185	260	290	110	155	170	105	150	165	—	—	—	215	410	500	250	315	340	225	285	310
	610	*850*	*950*	*360*	*510*	*560*	*345*	*490*	*540*	—	—	—	*710*	*1350*	*1650*	*820*	*1025*	*1125*	*740*	*940*	*1025*
K3	160	220	245	95	130	145	90	125	140	—	—	—	175	270	310	210	270	290	190	240	260
	520	*720*	*800*	*310*	*425*	*475*	*295*	*410*	*460*	—	—	—	*570*	*890*	*1025*	*690*	*890*	*950*	*620*	*790*	*850*
K4	150	210	235	90	125	140	85	120	135	—	—	—	165	260	295	200	255	275	180	230	250
	490	*690*	*770*	*295*	*410*	*460*	*280*	*395*	*445*	—	—	—	*540*	*850*	*970*	*660*	*840*	*900*	*590*	*750*	*820*
K5	90	130	140	55	75	85	50	70	80	—	—	—	100	155	180	120	155	165	110	140	150
	295	*425*	*460*	*180*	*245*	*280*	*165*	*230*	*260*	—	—	—	*330*	*510*	*590*	*395*	*510*	*540*	*360*	*460*	*490*
K6	135	185	205	80	110	125	75	105	115	—	—	—	145	230	260	180	225	245	160	205	220
	445	*610*	*670*	*260*	*360*	*410*	*245*	*345*	*375*	—	—	—	*475*	*750*	*850*	*590*	*740*	*800*	*520*	*670*	*720*
K7	115	165	180	70	95	110	65	95	100	—	—	—	130	200	230	155	200	210	140	180	190
	375	*540*	*590*	*230*	*310*	*360*	*215*	*310*	*330*	—	—	—	*425*	*660*	*750*	*510*	*660*	*690*	*460*	*590*	*620*
N1	—	—	—	1075	1550	1700	860	1225	1375	900	1275	1400	—	—	—	—	—	—	—	—	—
	—	—	—	*3525*	*5075*	*5575*	*2825*	*4025*	*4500*	*2950*	*4175*	*4600*	—	—	—	—	—	—	—	—	—
N2	—	—	—	430	620	690	345	500	550	365	520	570	—	—	—	—	—	—	—	—	—
	—	—	—	*1400*	*2025*	*2275*	*1125*	*1650*	*1800*	*1200*	*1700*	*1875*	—	—	—	—	—	—	—	—	—
N3	—	—	—	290	415	460	230	330	370	240	345	380	—	—	—	—	—	—	—	—	—
	—	—	—	*950*	*1350*	*1500*	*750*	*1075*	*1225*	*790*	*1125*	*1250*	—	—	—	—	—	—	—	—	—
N11	—	—	—	330	475	530	265	380	420	275	395	435	—	—	—	—	—	—	—	—	—
	—	—	—	*1075*	*1550*	*1750*	*870*	*1250*	*1375*	*900*	*1300*	*1425*	—	—	—	—	—	—	—	—	—
S1	—	—	—	33	47	50	29	41	45	—	—	—	—	—	—	—	—	—	22	31	35
	—	—	—	*110*	*155*	*165*	*95*	*135*	*150*	—	—	—	—	—	—	—	—	—	*70*	*100*	*115*
S2	—	—	—	27	38	42	23	33	36	—	—	—	—	—	—	—	—	—	18	25	28
	—	—	—	*90*	*125*	*140*	*75*	*110*	*120*	—	—	—	—	—	—	—	—	—	*60*	*80*	*90*
S3	—	—	—	23	33	37	20	29	32	—	—	—	—	—	—	—	—	—	22	31	35
	—	—	—	*75*	*110*	*120*	*65*	*95*	*105*	—	—	—	—	—	—	—	—	—	*70*	*100*	*115*
S11	—	—	—	46	65	75	40	55	65	—	—	—	—	—	—	—	—	—	44	65	70
	—	—	—	*150*	*215*	*245*	*130*	*180*	*215*	—	—	—	—	—	—	—	—	—	*145*	*215*	*230*
S12	—	—	—	39	55	60	34	48	55	—	—	—	—	—	—	—	—	—	31	44	48
	—	—	—	*130*	*180*	*195*	*110*	*155*	*180*	—	—	—	—	—	—	—	—	—	*100*	*145*	*155*
S13	—	—	—	23	32	36	20	28	31	—	—	—	—	—	—	—	—	—	18	25	28
	—	—	—	*75*	*105*	*120*	*65*	*90*	*100*	—	—	—	—	—	—	—	—	—	*60*	*80*	*90*
H5	33	46	50	26	36	40	24	34	38	—	—	—	—	—	—	—	—	—	28	39	43
	110	*150*	*165*	*85*	*120*	*130*	*80*	*110*	*125*	—	—	—	—	—	—	—	—	—	*90*	*130*	*140*
H8	35	48	55	27	38	42	26	36	40	—	—	—	—	—	—	—	—	—	30	41	46
	115	*155*	*180*	*90*	*125*	*140*	*85*	*120*	*130*	—	—	—	—	—	—	—	—	—	*100*	*135*	*150*
H11	42	60	65	33	46	50	31	44	48	—	—	—	—	—	—	—	—	—	36	50	55
	140	*195*	*215*	*110*	*150*	*165*	*100*	*145*	*155*	—	—	—	—	—	—	—	—	—	*120*	*165*	*180*
H12	60	85	95	31	44	49	30	42	47	—	—	—	—	—	—	—	—	—	55	75	85
	195	*280*	*310*	*100*	*145*	*160*	*100*	*140*	*155*	—	—	—	—	—	—	—	—	—	*180*	*245*	*280*
H21	35	48	55	27	38	42	26	36	40	—	—	—	—	—	—	—	—	—	30	41	46
	115	*155*	*180*	*90*	*125*	*140*	*85*	*120*	*130*	—	—	—	—	—	—	—	—	—	*100*	*135*	*150*

Chiavi di codifica in mm e in pollici

R	217	.	21	-	12	25	.	RE	-	LP06	.	4	A
1	2		3		4	5		6		7		8	9

R	217	.	21	-	01.00	0	-	LP06	.	3	A
1	2		3		5	6		7		8	9

1.

R = Rotazione destra
Cx = Seco-Capto

2.

217 = Attacco a stelo
220 = Attacco a manicotto

3.

Tipo di fresa

4. (Non per la designazione in pollici)

Diametro di connessione

5.

Diametro fresa

6.

Tipo di stelo
.RE per Combimaster
.0 per cilindrico
.3 per Weldon
.3S per Seco Weldon

7.

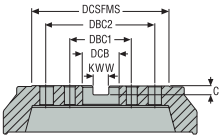
Tipo e dimensione inserto

8.

Num. di denti

9.

A = Adduzione interna refrigerante
E = Stelo in metallo duro



Dimensioni in mm

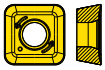
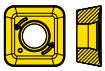
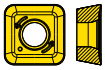
DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

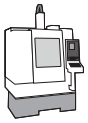
Inserto	a_p max	Capacità di lavorare materiali									
		P	M	K	N	S	H				
SPKT10 	1,1	■	■	■	□	■	◩	■	◩	■	■
SPKT14 	1,8	■	■	■	□	■	◩	◩	■	■	■
SPKT18 	2,5	■	■	■	□	■	◩	□	■	■	■

1a scelta ■

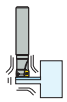
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

Capacità di effettuare lavorazioni di entrata in rampa 

Capacità di effettuare lavorazioni di penetrazione assiale 

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti																									Vedere pagina
			12	14	16	18	20	25	27	32	35	40	42	50	52	63	66	80	84	88	100	108	125	153	160	188	228	
SPKT10	4									3	3	4	4	5	5	6												561
											4	5	5	6	6	7												
SPKT14	4											3		4	4	5	5	6	6		8		9					566
														5	5	6	6	7										
SPKT18	4															5	5	5			7		8	6	10	8	10	571
																		6										

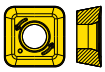
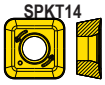
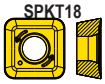
x — x indica il numero di denti (prima scelta)

x — x indica il numero di denti

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Selezione – Pollici

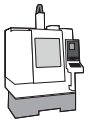
Inserto	a_p max	Capacità di lavorare materiali									
		P	M	K	N	S	H				
SPKT10 	0.043	■	■	■	□	■	◩	■	◩	■	■
SPKT14 	0.071	■	■	■	□	■	◩	◩	■	■	■
SPKT18 	0.098	■	■	■	□	■	◩	□	■	■	■

1a scelta ■

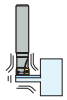
Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia 

Macchina robusta e stabile con connessione rigida 

Non consigliata -

Capacità di lavorare in condizioni instabili 

Capacità di effettuare lavorazioni di entrata in rampa 

Capacità di effettuare lavorazioni di penetrazione assiale 

Selezione – Pollici

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici)/numero di denti													Vedere pagina
			0.50	0.625	0.75	1.00	1.25	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	
SPKT10	4						3	4	5	6						561
									6	7						
SPKT14	4								4	5	6		8			566
									5	6	7					
SPKT18	4									5	5		7	8	10	571
											6					

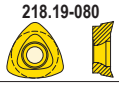
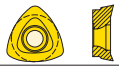
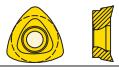
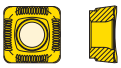
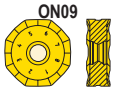
x — x indica il numero di denti (prima scelta)

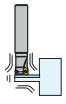
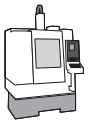
x — x indica il numero di denti

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Selezione – In mm

Inserto	a_p max	Capacità di lavorare materiali									
		P	M	K	N	S	H				
LP05 	0,65	■	■	■	□	■	■	■	□	■	■
LP06 	0,8	■	■	■	■	■	■	■	□	■	■
LP09 	1,8	■	■	■	□	■	□	■	■	■	■
LO06 	0,9	■	◩	■	–	■	■	■	◩	◩	◩
218.19-080 	0,6	■	◩	■	■	◩	■	■	◩	■	■
218.19-100 	0,7	■	◩	■	■	◩	■	■	◩	■	■
218.19-125 	1,0	■	◩	■	■	◩	■	◩	■	■	■
218.19-160 	1,8	■	◩	■	■	◩	□	-	■	■	■
218.21-230 	1,8	■	■	■	-	◩	◩	-	■	□	■
SCET 	1,5	■	■	■	-	■	-	-	■	□	■
ON09 	2,0	■	-	■	-	-	-	-	■	-	-

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia 	Capacità di lavorare in condizioni instabili 
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida 	Capacità di effettuare lavorazioni di entrata in rampa 
Scelta possibile	□	Non consigliata -	Capacità di effettuare lavorazioni di penetrazione assiale 

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti																									Vedere pagina
			12	14	16	18	20	25	27	32	35	40	42	50	52	63	66	80	84	88	100	108	125	133	160	168	208	
LP05	2				2		3																					584
			2	2	3	3	4																					
LP06	2										4																	591
							2	3	3	4	5	6																
					2	2	3	4		5	6	7																
LP09	2									3				5														598
								2		4	4	4	4	6	5	6	6	7										
												5	5	7	7	8	8	9	7		10							
LO06	4											5																606
							2	3	3	4	5	6																
								4		5	6	7	7	8	8	9												
218.19-080	3				2																							
218.19-100	3							2																				
							2	3																				
218.19-125	3									2																		626
								2		3	3	4																
218.19-160	3													3		4												
														4	4	5	5	6	6		7							
										2		3		5	5	6	6	7			9							
218.21-230	6													4		5		6	6		7		9		10			614
												3	3	5	5	6	6	7	8		9							
SCET	4															4	4	5	5		5							620
														4	4	5		6	6		7		6		7			
														5	5	6	6	7			8							
ON09	16																	6			7		8		10			644

x — x indica il número de dentes (prima escolha)

x — x indica o número de dentes

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

Selezione – Pollici

Inserto	a_p max	Capacità di lavorare materiali									
		P	M	K	N	S	H				
LP05	0.020	■	■	■	□	■	■	■	□	■	■
LP06	0.031	■	■	■	■	■	■	■	□	■	■
LP09	0.071	■	■	■	□	■	□	■	■	■	■
LO06	0.031	■	◩	■	–	■	■	■	◩	◩	◩
218.19-080	0.025	■	◩	■	■	◩	■	■	◩	■	■
218.19-100	0.028	■	◩	■	■	◩	■	■	◩	■	■
218.19-125	0.039	■	◩	■	■	◩	■	◩	■	■	■
218.19-160	0.071	■	◩	■	■	◩	□	-	■	■	■
218.21-230	0.071	■	■	■	-	◩	◩	-	■	□	■
SCET	0.059	■	■	■	-	■	-	-	■	□	■
ON09	0.079	■	-	■	-	-	-	-	■	-	-

1a scelta ■

Scelta alternativa ◩

Scelta possibile □

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

Non consigliata -

Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

Selezione – Pollici

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici)/numero di denti													Vedere pagina
			0.50	0.625	0.75	1.00	1.25	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	
LP05	2			2	3											584
			2	3	4											
LP06	2				2	3	4	6								591
				2	3	4	5	7								
LP09	2						4	5	6	6	6	8	9			598
									7	8	8		10			
LO06	4					3	4	5								606
						4	5	6	8	9						
218.19-080	3			2												626
218.19-100	3				2	3										
218.19-125	3					2	3	4								
218.19-160	3						2	3	3	5	6		7			
									4	6	7		9			
									5							
218.21-230	6							3	4	5	5		7			614
									5	6	6	8	9			
SCET	4									4	5		5			620
									4	6	6		8			
									5	6						
ON09	16										6		7	8	10	644

x — x indica il numero di denti (prima scelta)

x — x indica il numero di denti

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

Scelta base

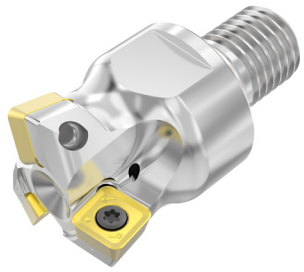


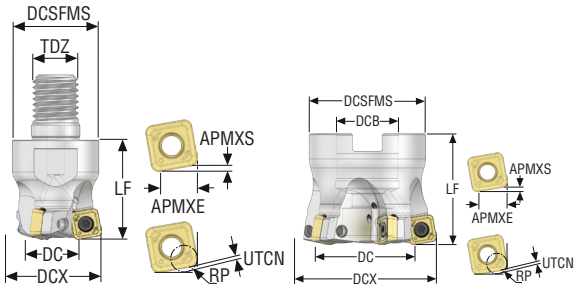
HIGH FEED SP

Per i materiali impegnativi ISO P, M e S, Seco High Feed SP è dotato di una combinazione di geometrie di taglio e qualità dell'inserto dedicate, nonché di angoli di imbocco ottimizzati che si combinano per aumentare l'asportazione, ottimizzare la rimozione del truciolo e prolungare la durata utensile. Estremamente versatile, un unico utensile High Feed SP ottimizza le operazioni di copiatura, entrata in rampa, lavorazione tasche, spianatura e penetrazione assiale per ridurre ulteriormente il magazzino utensili. Progettati per una maggiore facilità d'uso, gli utensili di fresatura forniscono la massima semplicità nella sostituzione dell'inserto che evita errori dell'operatore, tempi di fermo macchina imprevisti e parti scartate.

- 3 dimensioni dell'inserto, con IC = 10, 14 e 18 mm
- 30 articoli in versione metrica, da Ø32 a Ø160 mm
- 19 articoli in versione in pollici, da Ø01,25 a Ø06,00
- Passo standard e passo stretto
- Comprovati inserti SPKT con una gamma di qualità Seco premium ottimizzate per i materiali più impegnativi.

R217/220.21-SP10 – In mm



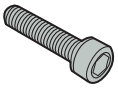
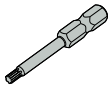


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 563-565
—Per il programma inserti completo, vedere le pagine 896
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0050-SP10.5A	10097563	Manicotto	33,7	50,0	5	1,1	7,0	22,0	41,0	–	22,0	40,0	2,8	0,9	–	1,9	17300	0,3	SPKT10T317
R220.21-0050-SP10.6A	10097564	Manicotto	33,7	50,0	6	1,1	7,0	22,0	41,0	–	22,0	40,0	2,8	0,9	–	1,9	17300	0,4	SPKT10T317
R220.21-0052-SP10.5A	10097565	Manicotto	35,7	52,0	5	1,1	7,0	22,0	49,0	–	22,0	40,0	2,8	0,9	–	1,8	17000	0,4	SPKT10T317
R220.21-0052-SP10.6A	10097566	Manicotto	35,7	52,0	6	1,1	7,0	22,0	49,0	–	22,0	40,0	2,8	0,9	–	1,8	17000	0,4	SPKT10T317
R220.21-0063-SP10.6A	10097567	Manicotto	46,7	63,0	6	1,1	7,0	22,0	49,0	–	22,0	40,0	2,8	0,9	–	1,3	15800	0,5	SPKT10T317
R220.21-0063-SP10.7A	10097568	Manicotto	46,7	63,0	7	1,1	7,0	22,0	49,0	–	22,0	40,0	2,8	0,9	–	1,3	15800	0,6	SPKT10T317
R217.21-1632.RE-SP10.3A	10097555	Combimaster	15,7	32,0	3	1,1	7,0	–	30,0	M16	–	35,0	2,83	0,9	57,75	4,3	21600	0,2	SPKT10T317
R217.21-1635.RE-SP10.3A	10097557	Combimaster	18,7	35,0	3	1,1	7,0	–	30,0	M16	–	35,0	2,8	0,9	57,75	3,5	20700	0,2	SPKT10T317
R217.21-1635.RE-SP10.4A	10097558	Combimaster	18,7	35,0	4	1,1	7,0	–	30,0	M16	–	35,0	2,8	0,9	57,75	3,5	20700	0,3	SPKT10T317
R217.21-2040.RE-SP10.4A	10097559	Combimaster	23,7	40,0	4	1,1	7,0	–	36,5	M20	–	40,0	2,79	0,9	67,0	2,7	19300	0,4	SPKT10T317
R217.21-2040.RE-SP10.5A	10097560	Combimaster	23,7	40,0	5	1,1	7,0	–	36,5	M20	–	40,0	2,79	0,9	67,0	2,7	19300	0,4	SPKT10T317
R217.21-2042.RE-SP10.4A	10097561	Combimaster	25,7	42,0	4	1,1	7,0	–	36,5	M20	–	40,0	2,8	0,9	67,0	2,5	18800	0,4	SPKT10T317
R217.21-2042.RE-SP10.5A	10097562	Combimaster	25,7	42,0	5	1,1	7,0	–	36,5	M20	–	40,0	2,8	0,9	67,0	2,5	18800	0,4	SPKT10T317

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

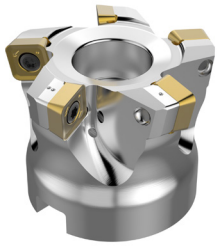
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T10PX50	C03508-T10P
R217.21-2040-2042-4A	–	1/4HEX-T10PX50	C03509-T10P
R220.21-0050-0052-6A	220.17-692	1/4HEX-T10PX50	C03508-T10P
R220.21-0050-0063	220.17-692	1/4HEX-T10PX50	C03509-T10P

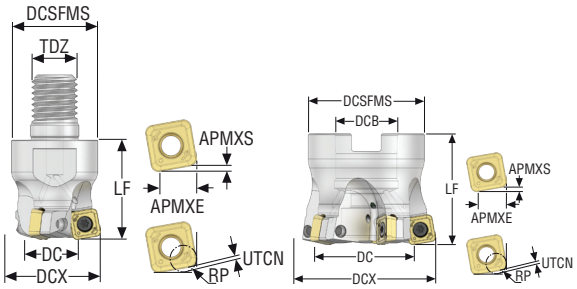
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-SP10 – Pollici



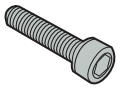
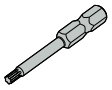


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 563-565
—Per il programma inserti completo, vedere le pagine 896
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch		inch	inch	inch	inch	inch			lb	
R220.21-02.00-SP10.5A	10128666	Manicotto	1.358	2.000	5	0.043	0.276	0.750	1.789	–	0.750	1.500	0.110	0.035	–	1,9	17300	0.880	SPKT10T317
R220.21-02.00-SP10.6A	10097573	Manicotto	1.358	2.000	6	0.043	0.276	0.750	1.789	–	0.750	1.500	0.110	0.035	–	1,9	17300	0.880	SPKT10T317
R220.21-02.50-SP10.6A	10128667	Manicotto	1.858	2.500	6	0.043	0.276	0.750	1.789	–	0.750	1.500	0.110	0.035	–	1,3	15800	1.100	SPKT10T317
R220.21-02.50-SP10.7A	10097574	Manicotto	1.858	2.500	7	0.043	0.276	0.750	1.789	–	0.750	1.500	0.110	0.035	–	1,3	15800	1.320	SPKT10T317
R217.21-01.25.16RE-SP10.3A	10097569	Combimaster	0.606	1.250	3	0.043	0.276	–	1.181	M16	–	1.378	0.111	0.035	2.274	5,6	21600	0.440	SPKT10T317
R217.21-01.50.20RE-SP10.4A	10097571	Combimaster	0.858	1.500	4	0.043	0.276	–	1.437	M20	–	1.575	0.110	0.035	2.638	3,0	19300	0.880	SPKT10T317

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T10PX50	C03508-T10P
R220.21-02.00	UC6S3/8UNFX1-1/4	1/4HEX-T10PX50	C03508-T10P
R220.21-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T10PX50	C03509-T10P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP10 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SPKT10T317TN-ME08 MP3501	1,1 *0.044*	0,36 0.014	0,36 0.014	0,44 0.017
P2	SPKT10T317TN-ME08 MP3501	1,1 *0.044*	0,36 0.014	0,36 0.014	0,46 0.018
P3	SPKT10T317TN-ME08 MP2501	1,1 *0.044*	0,34 0.013	0,34 0.013	0,42 0.017
P4	SPKT10T317TN-M10 MP2501	1,1 *0.044*	0,75 0.030	0,42 0.017	0,55 0.022
P5	SPKT10T317TN-M10 MP2501	1,1 *0.044*	0,75 0.030	0,42 0.017	0,50 0.020
P6	SPKT10T317TN-M10 MP2501	1,1 *0.044*	0,75 0.030	0,40 0.016	0,50 0.020
P7	SPKT10T317TN-M10 MP2501	1,1 *0.044*	0,75 0.030	0,40 0.016	0,50 0.020
P8	SPKT10T317TN-M10 MP2501	1,1 *0.044*	0,75 0.030	0,44 0.017	0,55 0.022
P11	SPKT10T317TN-ME08 MP3501	1,1 *0.044*	0,32 0.013	0,32 0.013	0,40 0.016
P12	SPKT10T317TN-M10 MP2501	0,85 *0.034*	0,50 0.020	0,28 0.011	0,36 0.014
M1	SPKT10T317TN-ME08 MS2050	1,1 *0.044*	0,36 0.014	0,36 0.014	0,46 0.018
M2	SPKT10T317TN-ME08 MS2050	1,1 *0.044*	0,34 0.013	0,34 0.013	0,42 0.017
M3	SPKT10T317TN-ME08 MS2050	0,85 *0.034*	0,26 0.010	0,26 0.010	0,34 0.013
M4	SPKT10T317TN-ME08 MP3501	0,85 *0.034*	0,24 0.0095	0,24 0.0095	0,28 0.011
M5	SPKT10T317TN-ME08 MP3501	0,85 *0.034*	0,24 0.0095	0,24 0.0095	0,28 0.011
K1	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,55 0.022	0,55 0.022	0,70 0.028
K2	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,50 0.020	0,50 0.020	0,60 0.024
K3	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,50 0.020	0,50 0.020	0,60 0.024
K4	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,50 0.020	0,50 0.020	0,60 0.024
K5	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,44 0.017	0,44 0.017	0,55 0.022
K6	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,50 0.020	0,50 0.020	0,60 0.024
K7	SPKT10T317TN-MD12 MK2050	1,1 *0.044*	0,44 0.017	0,44 0.017	0,55 0.022
S1	SPKT10T317TN-ME08 MP3501	0,85 *0.034*	0,24 0.0095	0,24 0.0095	0,28 0.011
S2	SPKT10T317TN-ME08 MP3501	0,85 *0.034*	0,24 0.0095	0,24 0.0095	0,28 0.011
S3	SPKT10T317TN-ME08 MP3501	0,85 *0.034*	0,22 0.0085	0,22 0.0085	0,26 0.010
S11	SPKT10T317TN-ME08 MS2050	0,85 *0.034*	0,26 0.010	0,26 0.010	0,34 0.013
S12	SPKT10T317TN-ME08 MS2050	0,85 *0.034*	0,26 0.010	0,26 0.010	0,34 0.013
S13	SPKT10T317TN-ME08 MS2050	0,85 *0.034*	0,24 0.0095	0,24 0.0095	0,28 0.011
H5	SPKT10T317TN-MD12 MH1051	0,85 *0.034*	0,34 0.013	0,34 0.013	0,42 0.017
H8	SPKT10T317TN-MD12 MH1051	0,85 *0.034*	0,26 0.010	0,26 0.010	0,32 0.013
H11	SPKT10T317TN-MD12 MP1501	0,85 *0.034*	0,34 0.013	0,34 0.013	0,42 0.017
H12	SPKT10T317TN-MD12 MP1501	0,85 *0.034*	0,26 0.010	0,26 0.010	0,32 0.013

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-SP10 – Parametri di taglio v_c = (m/min)/(sf/min)

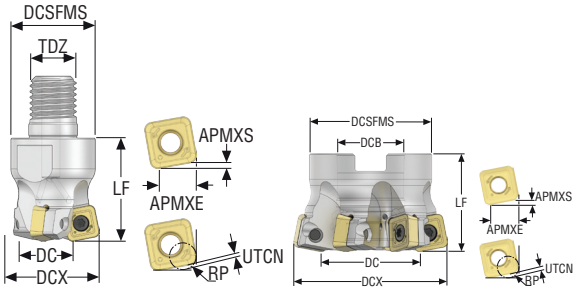
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	285	325	390	290	330	405	320	360	420	280	310	355	365	420	520	335	390	465
	—	—	—	*940*	*1075*	*1275*	*950*	*1075*	*1325*	*1050*	*1175*	*1375*	*920*	*1025*	*1175*	*1200*	*1375*	*1700*	*1100*	*1275*	*1525*
P2	—	—	—	270	315	370	275	315	380	310	350	410	275	300	345	355	410	510	330	380	455
	—	—	—	*890*	*1025*	*1225*	*900*	*1025*	*1250*	*1025*	*1150*	*1350*	*900*	*980*	*1125*	*1175*	*1350*	*1675*	*1075*	*1250*	*1500*
P3	—	—	—	235	275	330	245	275	340	275	305	355	235	260	305	305	350	445	290	335	390
	—	—	—	*770*	*900*	*1075*	*800*	*900*	*1125*	*900*	*1000*	*1175*	*770*	*850*	*1000*	*1000*	*1150*	*1450*	*950*	*1100*	*1275*
P4	—	—	—	210	245	290	220	250	300	240	270	315	215	240	280	280	320	395	255	295	350
	—	—	—	*690*	*800*	*950*	*720*	*820*	*980*	*790*	*890*	*1025*	*710*	*790*	*920*	*920*	*1050*	*1300*	*840*	*970*	*1150*
P5	380	435	530	200	235	275	210	240	285	230	260	305	205	220	255	270	305	375	240	280	335
	1250	*1425*	*1750*	*660*	*770*	*900*	*690*	*790*	*940*	*750*	*850*	*1000*	*670*	*720*	*840*	*890*	*1000*	*1225*	*790*	*920*	*1100*
P6	425	490	620	225	260	320	235	270	335	255	290	340	230	250	290	300	345	430	270	315	375
	1400	*1600*	*2025*	*740*	*850*	*1050*	*770*	*890*	*1100*	*840*	*950*	*1125*	*750*	*820*	*950*	*980*	*1125*	*1400*	*890*	*1025*	*1225*
P7	405	460	590	215	245	300	225	255	315	245	275	320	215	235	275	285	325	405	255	295	355
	1325	*1500*	*1925*	*710*	*800*	*980*	*740*	*840*	*1025*	*800*	*900*	*1050*	*710*	*770*	*900*	*940*	*1075*	*1325*	*840*	*970*	*1175*
P8	370	420	530	200	230	275	205	235	285	230	260	295	200	215	255	255	295	375	240	280	330
	1225	*1375*	*1750*	*660*	*750*	*900*	*670*	*770*	*940*	*750*	*850*	*970*	*660*	*710*	*840*	*840*	*970*	*1225*	*790*	*920*	*1075*
P11	390	445	570	210	240	290	215	245	305	235	265	310	210	230	265	260	325	445	250	290	345
	1275	*1450*	*1875*	*690*	*790*	*950*	*710*	*800*	*1000*	*770*	*870*	*1025*	*690*	*750*	*870*	*850*	*1075*	*1450*	*820*	*950*	*1125*
P12	280	315	390	135	155	190	150	170	200	155	170	200	140	150	175	180	225	290	160	185	220
	920	*1025*	*1275*	*445*	*510*	*620*	*490*	*560*	*660*	*510*	*560*	*660*	*460*	*490*	*570*	*590*	*740*	*950*	*520*	*610*	*720*
M1	—	—	—	—	—	—	195	225	270	225	260	310	190	220	260	290	365	495	235	270	325
	—	—	—	—	—	—	*640*	*740*	*890*	*740*	*850*	*1025*	*620*	*720*	*850*	*950*	*1200*	*1625*	*770*	*890*	*1075*
M2	—	—	—	—	—	—	165	190	220	185	215	255	155	180	215	245	310	410	195	225	265
	—	—	—	—	—	—	*540*	*620*	*720*	*610*	*710*	*840*	*510*	*590*	*710*	*800*	*1025*	*1350*	*640*	*740*	*870*
M3	—	—	—	—	—	—	130	150	180	145	170	205	125	145	175	205	260	340	155	180	215
	—	—	—	—	—	—	*425*	*490*	*590*	*475*	*560*	*670*	*410*	*475*	*570*	*670*	*850*	*1125*	*510*	*590*	*710*
M4	—	—	—	—	—	—	100	115	140	115	130	160	100	115	135	165	205	265	120	140	165
	—	—	—	—	—	—	*330*	*375*	*460*	*375*	*425*	*520*	*330*	*375*	*445*	*540*	*670*	*870*	*395*	*460*	*540*
M5	—	—	—	—	—	—	85	95	115	95	110	130	80	95	115	135	170	220	100	115	135
	—	—	—	—	—	—	*280*	*310*	*375*	*310*	*360*	*425*	*260*	*310*	*375*	*445*	*560*	*720*	*330*	*375*	*445*
K1	500	570	710	295	340	400	205	240	285	—	—	—	185	215	255	—	—	—	—	—	—
	1650	*1875*	*2325*	*970*	*1125*	*1300*	*670*	*790*	*940*	—	—	—	*610*	*710*	*840*	—	—	—	—	—	—
K2	460	530	640	260	300	355	185	215	250	—	—	—	165	190	225	—	—	—	—	—	—
	1500	*1750*	*2100*	*850*	*980*	*1175*	*610*	*710*	*820*	—	—	—	*540*	*620*	*740*	—	—	—	—	—	—
K3	390	445	540	220	255	300	155	180	215	—	—	—	140	160	190	—	—	—	—	—	—
	1275	*1450*	*1775*	*720*	*840*	*980*	*510*	*590*	*710*	—	—	—	*460*	*520*	*620*	—	—	—	—	—	—
K4	370	425	520	210	245	290	150	170	205	—	—	—	135	155	180	—	—	—	—	—	—
	1225	*1400*	*1700*	*690*	*800*	*950*	*490*	*560*	*670*	—	—	—	*445*	*510*	*590*	—	—	—	—	—	—
K5	235	270	330	130	150	180	90	105	125	—	—	—	80	95	110	—	—	—	—	—	—
	770	*890*	*1075*	*425*	*490*	*590*	*295*	*345*	*410*	—	—	—	*260*	*310*	*360*	—	—	—	—	—	—
K6	330	375	455	185	215	255	130	150	180	—	—	—	115	135	160	—	—	—	—	—	—
	1075	*1225*	*1500*	*610*	*710*	*840*	*425*	*490*	*590*	—	—	—	*375*	*445*	*520*	—	—	—	—	—	—
K7	300	345	420	165	190	230	120	135	160	—	—	—	105	120	145	—	—	—	—	—	—
	980	*1125*	*1375*	*540*	*620*	*750*	*395*	*445*	*520*	—	—	—	*345*	*395*	*475*	—	—	—	—	—	—
S1	—	—	—	—	—	—	47	55	65	55	60	75	46	55	65	55	65	75	60	65	80
	—	—	—	—	—	—	*155*	*180*	*215*	*180*	*195*	*245*	*150*	*180*	*215*	*180*	*215*	*245*	*195*	*215*	*260*
S2	—	—	—	—	—	—	38	43	55	43	49	60	37	43	50	44	50	60	47	55	65
	—	—	—	—	—	—	*125*	*140*	*180*	*140*	*160*	*195*	*120*	*140*	*165*	*145*	*165*	*195*	*155*	*180*	*215*
S3	—	—	—	—	—	—	33	38	46	38	44	50	32	37	45	39	45	55	41	48	55
	—	—	—	—	—	—	*110*	*125*	*150*	*125*	*145*	*165*	*105*	*120*	*150*	*130*	*150*	*180*	*135*	*155*	*180*
S11	—	—	—	—	—	—	65	75	90	75	85	105	65	75	90	75	90	105	80	95	115
	—	—	—	—	—	—	*215*	*245*	*295*	*245*	*280*	*345*	*215*	*245*	*295*	*245*	*295*	*345*	*260*	*310*	*375*
S12	—	—	—	—	—	—	46	55	65	50	60	70	44	50	60	55	60	75	55	65	80
	—	—	—	—	—	—	*150*	*180*	*215*	*165*	*195*	*230*	*145*	*165*	*195*	*180*	*195*	*245*	*180*	*215*	*260*
S13	—	—	—	—	—	—	26	30	37	30	35	41	26	30	36	31	36	43	33	38	45
	—	—	—	—	—	—	*85*	*100*	*120*	*100*	*115*	*135*	*85*	*100*	*120*	*100*	*120*	*140*	*110*	*125*	*150*
H5	140	160	200	—	—	—	41	47	55	—	—	—	38	44	55	—	—	—	—	—	—
	460	*520*	*660*	—	—	—	*135*	*155*	*180*	—	—	—	*125*	*145*	*180*	—	—	—	—	—	—
H8	155	180	215	—	—	—	43	50	60	—	—	—	41	47	55	—	—	—	—	—	—
	510	*590*	*710*	—	—	—	*140*	*165*	*195*	—	—	—	*135*	*155*	*180*	—	—	—	—	—	—
H11	180	205	255	—	—	—	50	60	70	—	—	—	49	55	70	115	145	190	60	70	85
	590	*670*	*840*	—	—	—	*165*	*195*	*230*	—	—	—	*160*	*180*	*230*	*375*	*475*	*620*	*195*	*230*	*280*
H12	185	210	250	85	100	120	85	95	115	—	—	—	75	85	100	110	140	175	100	115	140
	610	*690*	*820*	*280*	*330*	*395*	*280*	*310*	*375*	—	—	—	*245*	*280*	*330*	*360*	*460*	*570*	*330*	*375*	*460*

R220.21-SP10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	415 *1350*	460 *1500*	530 *1750*	455 *1500*	500 *1650*	570 *1875*	435 *1425*	480 *1575*	560 *1825*	435 *1425*	480 *1575*	550 *1800*	260 *850*	290 *950*	340 *1125*
P2	395 *1300*	440 *1450*	510 *1675*	440 *1450*	490 *1600*	560 *1825*	420 *1375*	470 *1550*	540 *1775*	425 *1400*	470 *1550*	540 *1775*	250 *820*	285 *940*	335 *1100*
P3	345 *1125*	385 *1275*	445 *1450*	380 *1250*	420 *1375*	490 *1600*	360 *1175*	405 *1325*	470 *1550*	375 *1225*	410 *1350*	465 *1525*	215 *710*	245 *800*	290 *950*
P4	310 *1025*	345 *1125*	390 *1275*	340 *1125*	375 *1225*	430 *1400*	325 *1075*	360 *1175*	415 *1350*	330 *1075*	365 *1200*	415 *1350*	210 *690*	235 *770*	275 *900*
P5	295 *970*	330 *1075*	375 *1225*	325 *1075*	360 *1175*	410 *1350*	310 *1025*	345 *1125*	395 *1300*	315 *1025*	345 *1125*	395 *1300*	185 *610*	210 *690*	245 *800*
P6	335 *1100*	370 *1225*	430 *1400*	365 *1200*	405 *1325*	465 *1525*	350 *1150*	390 *1275*	450 *1475*	350 *1150*	390 *1275*	445 *1450*	210 *690*	235 *770*	275 *900*
P7	315 *1025*	350 *1150*	405 *1325*	345 *1125*	380 *1250*	440 *1450*	330 *1075*	365 *1200*	425 *1400*	330 *1075*	365 *1200*	420 *1375*	195 *640*	220 *720*	260 *850*
P8	290 *950*	325 *1075*	375 *1225*	320 *1050*	355 *1175*	410 *1350*	305 *1000*	340 *1125*	395 *1300*	315 *1025*	345 *1125*	390 *1275*	180 *590*	205 *670*	245 *800*
P11	305 *1000*	340 *1125*	395 *1300*	335 *1100*	370 *1225*	430 *1400*	320 *1050*	355 *1175*	415 *1350*	325 *1075*	355 *1175*	405 *1325*	190 *620*	215 *710*	255 *840*
P12	195 *640*	220 *720*	250 *820*	215 *710*	235 *770*	270 *890*	205 *670*	225 *740*	260 *850*	205 *670*	225 *740*	255 *840*	120 *395*	135 *445*	155 *510*
M1	— —	— —	— —	225 *740*	260 *850*	310 *1025*	245 *800*	280 *920*	335 *1100*	225 *740*	260 *850*	310 *1025*	165 *540*	190 *620*	225 *740*
M2	— —	— —	— —	185 *610*	215 *710*	250 *820*	200 *660*	230 *750*	275 *900*	185 *610*	215 *710*	255 *840*	135 *445*	155 *510*	185 *610*
M3	— —	— —	— —	145 *475*	170 *560*	205 *670*	160 *520*	185 *610*	225 *740*	145 *475*	170 *560*	205 *670*	110 *360*	125 *410*	150 *490*
M4	— —	— —	— —	115 *375*	135 *445*	160 *520*	125 *410*	145 *475*	175 *570*	115 *375*	130 *425*	160 *520*	85 *280*	100 *330*	115 *375*
M5	— —	— —	— —	95 *310*	110 *360*	135 *445*	105 *345*	120 *395*	145 *475*	95 *310*	110 *360*	130 *425*	70 *230*	80 *260*	95 *310*
K1	400 *1300*	445 *1450*	510 *1675*	445 *1450*	490 *1600*	560 *1825*	270 *890*	310 *1025*	370 *1225*	430 *1400*	475 *1550*	540 *1775*	— —	— —	— —
K2	360 *1175*	395 *1300*	455 *1500*	395 *1300*	435 *1425*	495 *1625*	235 *770*	275 *900*	325 *1075*	380 *1250*	420 *1375*	475 *1550*	— —	— —	— —
K3	305 *1000*	335 *1100*	385 *1275*	330 *1075*	370 *1225*	420 *1375*	200 *660*	230 *750*	275 *900*	320 *1050*	355 *1175*	405 *1325*	— —	— —	— —
K4	290 *950*	320 *1050*	365 *1200*	315 *1025*	350 *1150*	400 *1300*	190 *620*	220 *720*	260 *850*	305 *1000*	340 *1125*	385 *1275*	— —	— —	— —
K5	180 *590*	195 *640*	225 *740*	195 *640*	215 *710*	245 *800*	120 *395*	135 *445*	160 *520*	185 *610*	205 *670*	235 *770*	— —	— —	— —
K6	255 *840*	280 *920*	320 *1050*	280 *920*	310 *1025*	355 *1175*	170 *560*	195 *640*	230 *750*	270 *890*	300 *980*	340 *1125*	— —	— —	— —
K7	230 *750*	255 *840*	290 *950*	250 *820*	280 *920*	315 *1025*	150 *490*	175 *570*	205 *670*	240 *790*	265 *870*	300 *980*	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	60 *195*	70 *230*	85 *280*	55 *180*	60 *195*	75 *245*	26 *85*	30 *100*	36 *120*
S2	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	70 *230*	43 *140*	49 *160*	60 *195*	21 *70*	24 *80*	29 *95*
S3	— —	— —	— —	— —	— —	— —	43 *140*	50 *165*	60 *195*	38 *125*	44 *145*	50 *165*	18 *60*	21 *70*	25 *80*
S11	— —	— —	— —	— —	— —	— —	85 *280*	95 *310*	120 *395*	75 *245*	85 *280*	105 *345*	36 *120*	41 *135*	50 *165*
S12	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	80 *260*	50 *165*	60 *195*	70 *230*	33 *110*	38 *125*	46 *150*
S13	— —	— —	— —	— —	— —	— —	34 *110*	40 *130*	48 *155*	30 *100*	35 *115*	41 *135*	19 *60*	22 *70*	27 *90*
H5	50 *165*	60 *195*	70 *230*	— —	— —	— —	50 *165*	60 *195*	70 *230*	47 *155*	55 *180*	65 *215*	— —	— —	— —
H8	55 *180*	65 *215*	75 *245*	— —	— —	— —	55 *180*	60 *195*	75 *245*	50 *165*	55 *180*	70 *230*	— —	— —	— —
H11	65 *215*	75 *245*	90 *295*	— —	— —	— —	65 *215*	75 *245*	90 *295*	60 *195*	70 *230*	85 *280*	— —	— —	— —
H12	100 *330*	115 *375*	135 *445*	— —	— —	— —	105 *345*	120 *395*	145 *475*	90 *295*	105 *345*	125 *410*	— —	— —	— —

R217/220.21-SP14 – In mm



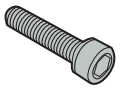
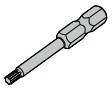


–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 568-570
–Per il programma inserti completo, vedere le pagine 896
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0050-SP14.4A	10068147	Manicotto	27,1	50,0	4	1,8	10,0	22,0	41,0	–	22,0	40,0	4,02	1,4	–	3,5	10700	0,3	SPKT140523
R220.21-0050-SP14.5A	10068148	Manicotto	27,1	50,0	5	1,8	10,0	22,0	41,0	–	22,0	40,0	4,04	1,4	–	1,8	10700	0,3	SPKT140523
R220.21-0052-SP14.4A	10068149	Manicotto	29,1	52,0	4	1,8	10,0	22,0	49,0	–	22,0	40,0	4,02	1,4	–	3,2	10500	0,4	SPKT140523
R220.21-0052-SP14.5A	10101535	Manicotto	29,1	52,0	5	1,8	10,0	22,0	49,0	–	22,0	40,0	4,02	1,4	–	3,2	10500	0,4	SPKT140523
R220.21-0063-SP14.5A	10068150	Manicotto	40,1	63,0	5	1,8	10,0	27,0	49,0	–	27,0	50,0	4,01	1,4	–	2,3	9600	0,5	SPKT140523
R220.21-0063-SP14.6A	10068151	Manicotto	40,1	63,0	6	1,8	10,0	27,0	49,0	–	27,0	50,0	4,01	1,4	–	2,3	9600	0,6	SPKT140523
R220.21-0066-SP14.5A	10068152	Manicotto	43,0	66,0	5	1,8	10,0	27,0	61,0	–	27,0	50,0	4,02	1,4	–	2,1	9400	0,8	SPKT140523
R220.21-0066-SP14.6A	10101540	Manicotto	43,0	66,0	6	1,8	10,0	27,0	61,0	–	27,0	50,0	4,02	1,4	–	2,1	9400	0,8	SPKT140523
R220.21-0080-SP14.6A	10068154	Manicotto	57,0	80,0	6	1,8	10,0	27,0	61,0	–	27,0	50,0	4,01	1,41	–	1,6	8500	1,0	SPKT140523
R220.21-0080-SP14.7A	10068155	Manicotto	57,0	80,0	7	1,8	10,0	27,0	61,0	–	27,0	50,0	4,01	1,4	–	1,6	8500	1,1	SPKT140523
R220.21-0084-SP14.6A	10068156	Manicotto	61,0	84,0	6	1,8	10,0	32,0	79,0	–	32,0	50,0	4,01	1,4	–	1,5	8300	1,3	SPKT140523
R220.21-0100-SP14.8A	10068157	Manicotto	77,0	100,0	8	1,8	10,0	32,0	79,0	–	32,0	50,0	4,01	1,4	–	1,2	7600	1,7	SPKT140523
R220.21-0125-SP14.9A	10132522	Manicotto	102,0	125,0	9	1,8	10,0	40,0	90,0	–	40,0	63,0	4,0	1,4	–	0,9	6800	3,1	SPKT140523
R217.21-2040.RE-SP14.3A	10135958	Combimaster	17,0	40,0	3	1,8	10,0	–	36,5	M20	–	45,0	4,06	1,4	72,0	2,9	11900	0,4	SPKT140523

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T20PX50	C45011-T20P
R220.21-0050-0052	220.17-692M	1/4HEX-T20PX50	C45011-T20P
R220.21-0063	MC6S12X40	1/4HEX-T20PX50	C45011-T20P
R220.21-0066	MC6S12X40	1/4HEX-T20PX50	C45011-T20P
R220.21-0080	MC6S12X40	1/4HEX-T20PX50	C45011-T20P
R220.21-0084-0100	MLC6S16X35	1/4HEX-T20PX50	C45011-T20P
R220.21-0084-0100	MLC6S16X35	1/4HEX-T20PX90	C45011-T20P
R220.21-0125	MC6S20X50	1/4HEX-T20PX90	C45011-T20P

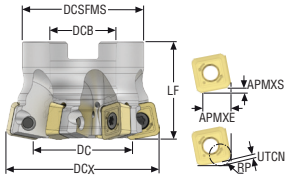
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP14 – Pollici

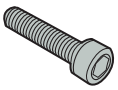
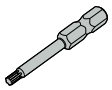




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 568-570
—Per il programma inserti completo, vedere le pagine 896
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R220.21-02.00-SP14.4A	10068158	Manicotto	1.098	2.000	4	0.071	0.394	0.750	1.789	0.750	1.500	0.158	0.056	3,3	10700	0.880	SPKT140523
R220.21-02.00-SP14.5A	10068159	Manicotto	1.098	2.000	5	0.071	0.394	0.750	1.789	0.750	1.500	0.158	0.056	3,3	10700	0.880	SPKT140523
R220.21-02.50-SP14.5A	10068160	Manicotto	1.594	2.500	5	0.071	0.394	0.750	1.789	0.750	1.500	0.158	0.056	2,2	9600	1.100	SPKT140523
R220.21-02.50-SP14.6A	10068161	Manicotto	1.594	2.500	6	0.071	0.394	0.750	1.789	0.750	1.500	0.158	0.056	2,2	9600	1.100	SPKT140523
R220.21-03.00-SP14.6A	10068162	Manicotto	2.094	3.000	6	0.071	0.394	1.000	2.289	1.000	2.000	0.158	0.056	1,7	8500	1.980	SPKT140523
R220.21-03.00-SP14.7A	10068163	Manicotto	2.094	3.000	7	0.071	0.394	1.000	2.289	1.000	2.000	0.158	0.056	1,7	8500	2.200	SPKT140523
R220.21-04.00-SP14.8A	10068164	Manicotto	3.094	4.000	8	0.071	0.394	1.500	3.539	1.500	2.000	0.158	0.055	1,2	7600	4.190	SPKT140523

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-02.00-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T20PX50	C45011-T20P
R220.21-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C45011-T20P
R220.21-04.00	ULC6S3/4UNFX11/2	1/4HEX-T20PX90	C45011-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP14 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SPKT140523TN-ME10 MP3501	1,8 *0.070*	0,75 0.030	0,75 0.030	0,90 0.036
P2	SPKT140523TN-ME10 MP3501	1,8 *0.070*	0,75 0.030	0,75 0.030	0,90 0.036
P3	SPKT140523TN-ME10 MP2501	1,8 *0.070*	0,70 0.028	0,70 0.028	0,85 0.034
P4	SPKT140523TN-M14 MP2501	1,8 *0.070*	1,0 0.040	1,0 0.040	1,2 0.048
P5	SPKT140523TN-M14 MP2501	1,8 *0.070*	0,95 0.038	0,95 0.038	1,2 0.048
P6	SPKT140523TN-M14 MP2501	1,8 *0.070*	0,95 0.038	0,95 0.038	1,1 0.044
P7	SPKT140523TN-M14 MP2501	1,8 *0.070*	0,95 0.038	0,95 0.038	1,1 0.044
P8	SPKT140523TN-M14 MP2501	1,8 *0.070*	1,0 0.040	1,0 0.040	1,2 0.048
P11	SPKT140523TN-ME10 MP3501	1,8 *0.070*	0,70 0.028	0,70 0.028	0,80 0.032
P12	SPKT140523TN-M14 MP2501	1,4 *0.055*	0,65 0.026	0,65 0.026	0,75 0.030
M1	SPKT140523TN-ME10 MS2050	1,8 *0.070*	0,75 0.030	0,75 0.030	0,90 0.036
M2	SPKT140523TN-ME10 MS2050	1,8 *0.070*	0,70 0.028	0,70 0.028	0,80 0.032
M3	SPKT140523TN-ME10 MS2050	1,4 *0.055*	0,55 0.022	0,55 0.022	0,65 0.026
M4	SPKT140523TN-ME10 MP3501	1,4 *0.055*	0,48 0.019	0,48 0.019	0,55 0.022
M5	SPKT140523TN-ME10 MP3501	1,4 *0.055*	0,48 0.019	0,48 0.019	0,55 0.022
K1	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,2 0.048	1,2 0.048	1,5 0.060
K2	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,1 0.044	1,1 0.044	1,3 0.050
K3	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,1 0.044	1,1 0.044	1,3 0.050
K4	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,1 0.044	1,1 0.044	1,3 0.050
K5	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,0 0.040	1,0 0.040	1,2 0.048
K6	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,1 0.044	1,1 0.044	1,3 0.050
K7	SPKT140523TN-MD16 MK2050	1,8 *0.070*	1,0 0.040	1,0 0.040	1,2 0.048
S1	SPKT140523TN-ME10 MP3501	1,4 *0.055*	0,48 0.019	0,48 0.019	0,55 0.022
S2	SPKT140523TN-ME10 MP3501	1,4 *0.055*	0,48 0.019	0,48 0.019	0,55 0.022
S3	SPKT140523TN-ME10 MP3501	1,4 *0.055*	0,44 0.017	0,44 0.017	0,50 0.020
S11	SPKT140523TN-ME10 MS2050	1,4 *0.055*	0,55 0.022	0,55 0.022	0,65 0.026
S12	SPKT140523TN-ME10 MS2050	1,4 *0.055*	0,55 0.022	0,55 0.022	0,65 0.026
S13	SPKT140523TN-ME10 MS2050	1,4 *0.055*	0,48 0.019	0,48 0.019	0,55 0.022
H5	SPKT140523TN-MD16 MH1051	1,4 *0.055*	0,75 0.030	0,75 0.030	0,90 0.036
H8	SPKT140523TN-MD16 MH1051	1,4 *0.055*	0,55 0.022	0,55 0.022	0,65 0.026
H11	SPKT140523TN-MD16 MP1501	1,4 *0.055*	0,75 0.030	0,75 0.030	0,90 0.036
H12	SPKT140523TN-MD16 MP1501	1,4 *0.055*	0,55 0.022	0,55 0.022	0,65 0.026

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

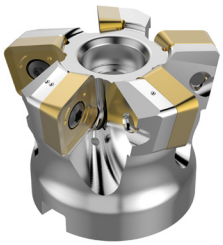
R220.21-SP14 – Parametri di taglio v_c = (m/min)/(sf/min)

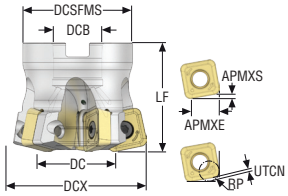
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	260	305	365	245	285	360	300	340	400	240	265	315	265	320	430	320	375	445
	—	—	—	*850*	*1000*	*1200*	*800*	*940*	*1175*	*980*	*1125*	*1300*	*790*	*870*	*1025*	*870*	*1050*	*1400*	*1050*	*1225*	*1450*
P2	—	—	—	255	295	350	240	280	340	290	330	390	235	260	305	260	315	420	315	365	435
	—	—	—	*840*	*970*	*1150*	*790*	*920*	*1125*	*950*	*1075*	*1275*	*770*	*850*	*1000*	*850*	*1025*	*1375*	*1025*	*1200*	*1425*
P3	—	—	—	220	255	305	205	240	300	255	295	345	210	235	270	245	290	380	275	320	380
	—	—	—	*720*	*840*	*1000*	*670*	*790*	*980*	*840*	*970*	*1125*	*690*	*770*	*890*	*800*	*950*	*1250*	*900*	*1050*	*1250*
P4	—	—	—	195	230	270	190	220	265	225	260	300	190	215	255	215	255	335	240	280	335
	—	—	—	*640*	*750*	*890*	*620*	*720*	*870*	*740*	*850*	*980*	*620*	*710*	*840*	*710*	*840*	*1100*	*790*	*920*	*1100*
P5	325	375	475	190	220	265	185	210	265	215	245	290	175	195	230	205	245	320	230	270	320
	1075	*1225*	*1550*	*620*	*720*	*870*	*610*	*690*	*870*	*710*	*800*	*950*	*570*	*640*	*750*	*670*	*800*	*1050*	*750*	*890*	*1050*
P6	365	420	530	210	245	295	205	240	295	240	275	325	205	225	255	240	285	360	260	305	360
	1200	*1375*	*1750*	*690*	*800*	*970*	*670*	*790*	*970*	*790*	*900*	*1075*	*670*	*740*	*840*	*790*	*940*	*1175*	*850*	*1000*	*1175*
P7	345	400	500	200	235	280	195	225	280	230	260	305	190	210	240	225	270	340	245	285	340
	1125	*1300*	*1650*	*660*	*770*	*920*	*640*	*740*	*920*	*750*	*850*	*1000*	*620*	*690*	*790*	*740*	*890*	*1125*	*800*	*940*	*1125*
P8	305	355	455	185	215	260	175	200	255	215	245	290	175	195	230	205	245	320	230	270	320
	1000	*1175*	*1500*	*610*	*710*	*850*	*570*	*660*	*840*	*710*	*800*	*950*	*570*	*640*	*750*	*670*	*800*	*1050*	*750*	*890*	*1050*
P11	335	385	490	195	225	270	190	220	270	220	255	295	185	205	235	205	265	360	240	280	330
	1100	*1275*	*1600*	*640*	*740*	*890*	*620*	*720*	*890*	*720*	*840*	*970*	*610*	*670*	*770*	*670*	*870*	*1175*	*790*	*920*	*1075*
P12	245	280	345	125	145	175	135	150	185	145	165	195	125	140	160	155	200	270	155	180	215
	800	*920*	*1125*	*410*	*475*	*570*	*445*	*490*	*610*	*475*	*540*	*640*	*410*	*460*	*520*	*510*	*660*	*890*	*510*	*590*	*710*
M1	—	—	—	—	—	—	180	210	250	215	250	295	170	200	240	215	275	395	225	260	310
	—	—	—	—	—	—	*590*	*690*	*820*	*710*	*820*	*970*	*560*	*660*	*790*	*710*	*900*	*1300*	*740*	*850*	*1025*
M2	—	—	—	—	—	—	150	175	210	175	205	245	140	165	200	190	240	340	185	215	255
	—	—	—	—	—	—	*490*	*570*	*690*	*570*	*670*	*800*	*460*	*540*	*660*	*620*	*790*	*1125*	*610*	*710*	*840*
M3	—	—	—	—	—	—	120	140	170	140	165	200	115	135	160	170	215	300	150	175	210
	—	—	—	—	—	—	*395*	*460*	*560*	*460*	*540*	*660*	*375*	*445*	*520*	*560*	*710*	*980*	*490*	*570*	*690*
M4	—	—	—	—	—	—	95	110	130	110	130	150	90	105	125	140	175	245	115	135	160
	—	—	—	—	—	—	*310*	*360*	*425*	*360*	*425*	*490*	*295*	*345*	*410*	*460*	*570*	*800*	*375*	*445*	*520*
M5	—	—	—	—	—	—	80	90	110	90	105	125	75	85	105	115	145	205	95	110	135
	—	—	—	—	—	—	*260*	*295*	*360*	*295*	*345*	*410*	*245*	*280*	*345*	*375*	*475*	*670*	*310*	*360*	*445*
K1	425	495	610	275	320	375	195	225	265	—	—	—	170	195	235	—	—	—	—	—	—
	1400	*1625*	*2000*	*900*	*1050*	*1225*	*640*	*740*	*870*	—	—	—	*560*	*640*	*770*	—	—	—	—	—	—
K2	390	455	580	245	285	340	170	200	240	—	—	—	150	175	210	—	—	—	—	—	—
	1275	*1500*	*1900*	*800*	*940*	*1125*	*560*	*660*	*790*	—	—	—	*490*	*570*	*690*	—	—	—	—	—	—
K3	330	385	485	205	240	290	145	170	205	—	—	—	125	150	175	—	—	—	—	—	—
	1075	*1275*	*1600*	*670*	*790*	*950*	*475*	*560*	*670*	—	—	—	*410*	*490*	*570*	—	—	—	—	—	—
K4	315	365	465	195	230	275	140	160	195	—	—	—	120	140	170	—	—	—	—	—	—
	1025	*1200*	*1525*	*640*	*750*	*900*	*460*	*520*	*640*	—	—	—	*395*	*460*	*560*	—	—	—	—	—	—
K5	200	230	290	120	140	170	85	100	120	—	—	—	75	85	105	—	—	—	—	—	—
	660	*750*	*950*	*395*	*460*	*560*	*280*	*330*	*395*	—	—	—	*245*	*280*	*345*	—	—	—	—	—	—
K6	280	325	410	175	200	240	120	145	170	—	—	—	105	125	150	—	—	—	—	—	—
	920	*1075*	*1350*	*570*	*660*	*790*	*395*	*475*	*560*	—	—	—	*345*	*410*	*490*	—	—	—	—	—	—
K7	255	295	370	155	180	215	110	125	150	—	—	—	95	110	130	—	—	—	—	—	—
	840	*970*	*1225*	*510*	*590*	*710*	*360*	*410*	*490*	—	—	—	*310*	*360*	*425*	—	—	—	—	—	—
S1	—	—	—	—	—	—	44	50	60	50	60	70	42	49	60	50	60	70	55	65	80
	—	—	—	—	—	—	*145*	*165*	*195*	*165*	*195*	*230*	*140*	*160*	*195*	*165*	*195*	*230*	*180*	*215*	*260*
S2	—	—	—	—	—	—	35	41	49	41	48	55	33	39	48	40	47	60	45	55	65
	—	—	—	—	—	—	*115*	*135*	*160*	*135*	*155*	*180*	*110*	*130*	*155*	*130*	*155*	*195*	*150*	*180*	*215*
S3	—	—	—	—	—	—	31	36	44	36	42	50	29	34	42	35	42	50	39	46	55
	—	—	—	—	—	—	*100*	*120*	*145*	*120*	*140*	*165*	*95*	*110*	*140*	*115*	*140*	*165*	*130*	*150*	*180*
S11	—	—	—	—	—	—	60	70	85	70	85	100	60	65	80	70	80	100	80	90	110
	—	—	—	—	—	—	*195*	*230*	*280*	*230*	*280*	*330*	*195*	*215*	*260*	*230*	*260*	*330*	*260*	*295*	*360*
S12	—	—	—	—	—	—	42	49	60	49	60	70	40	47	55	48	55	70	55	65	75
	—	—	—	—	—	—	*140*	*160*	*195*	*160*	*195*	*230*	*130*	*155*	*180*	*155*	*180*	*230*	*180*	*215*	*245*
S13	—	—	—	—	—	—	25	29	35	29	34	40	23	27	33	28	33	40	31	37	44
	—	—	—	—	—	—	*80*	*95*	*115*	*95*	*110*	*130*	*75*	*90*	*110*	*90*	*110*	*130*	*100*	*120*	*145*
H5	125	145	180	—	—	—	38	44	55	—	—	—	36	42	50	—	—	—	—	—	—
	410	*475*	*590*	—	—	—	*125*	*145*	*180*	—	—	—	*120*	*140*	*165*	—	—	—	—	—	—
H8	140	160	200	—	—	—	40	47	55	—	—	—	38	45	55	—	—	—	—	—	—
	460	*520*	*660*	—	—	—	*130*	*155*	*180*	—	—	—	*125*	*150*	*180*	—	—	—	—	—	—
H11	160	180	225	—	—	—	48	55	65	—	—	—	45	55	65	100	130	175	60	70	85
	520	*590*	*740*	—	—	—	*155*	*180*	*215*	—	—	—	*150*	*180*	*215*	*330*	*425*	*570*	*195*	*230*	*280*
H12	160	185	230	80	95	115	75	90	110	—	—	—	70	80	95	105	135	175	100	115	135
	520	*610*	*750*	*260*	*310*	*375*	*245*	*295*	*360*	—	—	—	*230*	*260*	*310*	*345*	*445*	*570*	*330*	*375*	*445*

R220.21-SP14 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	375 *1225*	420 *1375*	495 *1625*	400 *1300*	445 *1450*	520 *1700*	380 *1250*	430 *1400*	510 *1675*	415 *1350*	465 *1525*	530 *1750*	225 *740*	255 *840*	310 *1025*
P2	365 *1200*	410 *1350*	470 *1550*	390 *1275*	435 *1425*	510 *1675*	370 *1225*	420 *1375*	495 *1625*	405 *1325*	450 *1475*	520 *1700*	215 *710*	250 *820*	300 *980*
P3	315 *1025*	350 *1150*	415 *1350*	345 *1125*	390 *1275*	450 *1475*	330 *1075*	375 *1225*	435 *1425*	355 *1175*	395 *1300*	455 *1500*	195 *640*	225 *740*	265 *870*
P4	285 *940*	320 *1050*	365 *1200*	305 *1000*	340 *1125*	400 *1300*	290 *950*	330 *1075*	385 *1275*	315 *1025*	350 *1150*	400 *1300*	185 *610*	215 *710*	255 *840*
P5	275 *900*	305 *1000*	355 *1175*	290 *950*	325 *1075*	380 *1250*	280 *920*	315 *1025*	365 *1200*	300 *980*	335 *1100*	380 *1250*	165 *540*	190 *620*	225 *740*
P6	305 *1000*	345 *1125*	400 *1300*	335 *1100*	375 *1225*	425 *1400*	320 *1050*	360 *1175*	410 *1350*	335 *1100*	375 *1225*	430 *1400*	190 *620*	215 *710*	250 *820*
P7	290 *950*	325 *1075*	380 *1250*	315 *1025*	350 *1150*	400 *1300*	300 *980*	340 *1125*	390 *1275*	315 *1025*	355 *1175*	405 *1325*	180 *590*	205 *670*	240 *790*
P8	265 *870*	295 *970*	350 *1150*	290 *950*	325 *1075*	380 *1250*	280 *920*	315 *1025*	365 *1200*	300 *980*	335 *1100*	380 *1250*	165 *540*	190 *620*	225 *740*
P11	280 *920*	315 *1025*	370 *1225*	305 *1000*	340 *1125*	390 *1275*	290 *950*	330 *1075*	380 *1250*	305 *1000*	345 *1125*	390 *1275*	175 *570*	200 *660*	230 *750*
P12	185 *610*	205 *670*	240 *790*	200 *660*	225 *740*	260 *850*	190 *620*	215 *710*	250 *820*	195 *640*	220 *720*	255 *840*	115 *375*	130 *425*	155 *510*
M1	— —	— —	— —	200 *660*	235 *770*	280 *920*	220 *720*	255 *840*	305 *1000*	215 *710*	250 *820*	295 *970*	145 *475*	170 *560*	205 *670*
M2	— —	— —	— —	170 *560*	195 *640*	235 *770*	180 *590*	210 *690*	255 *840*	175 *570*	205 *670*	245 *800*	125 *410*	145 *475*	170 *560*
M3	— —	— —	— —	135 *445*	155 *510*	190 *620*	145 *475*	170 *560*	205 *670*	140 *460*	165 *540*	200 *660*	100 *330*	115 *375*	140 *460*
M4	— —	— —	— —	105 *345*	125 *410*	150 *490*	115 *375*	135 *445*	160 *520*	110 *360*	130 *425*	150 *490*	75 *245*	90 *295*	110 *360*
M5	— —	— —	— —	85 *280*	100 *330*	125 *410*	95 *310*	110 *360*	135 *445*	90 *295*	105 *345*	125 *410*	65 *215*	75 *245*	90 *295*
K1	370 *1225*	415 *1350*	475 *1550*	390 *1275*	440 *1450*	520 *1700*	240 *790*	280 *920*	340 *1125*	405 *1325*	455 *1500*	520 *1700*	— —	— —	— —
K2	330 *1075*	370 *1225*	430 *1400*	355 *1175*	395 *1300*	460 *1500*	215 *710*	250 *820*	300 *980*	360 *1175*	405 *1325*	460 *1500*	— —	— —	— —
K3	280 *920*	315 *1025*	365 *1200*	300 *980*	335 *1100*	390 *1275*	185 *610*	215 *710*	255 *840*	305 *1000*	340 *1125*	390 *1275*	— —	— —	— —
K4	265 *870*	300 *980*	350 *1150*	285 *940*	320 *1050*	370 *1225*	175 *570*	205 *670*	245 *800*	290 *950*	325 *1075*	370 *1225*	— —	— —	— —
K5	165 *540*	185 *610*	215 *710*	175 *570*	195 *640*	225 *740*	105 *345*	125 *410*	150 *490*	175 *570*	200 *660*	230 *750*	— —	— —	— —
K6	235 *770*	265 *870*	310 *1025*	250 *820*	280 *920*	325 *1075*	155 *510*	180 *590*	215 *710*	255 *840*	285 *940*	330 *1075*	— —	— —	— —
K7	210 *690*	235 *770*	275 *900*	225 *740*	250 *820*	290 *950*	135 *445*	160 *520*	190 *620*	225 *740*	255 *840*	290 *950*	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	80 *260*	50 *165*	60 *195*	70 *230*	23 *75*	27 *90*	33 *110*
S2	— —	— —	— —	— —	— —	— —	45 *150*	50 *165*	65 *215*	41 *135*	48 *155*	55 *180*	19 *60*	22 *70*	27 *90*
S3	— —	— —	— —	— —	— —	— —	39 *130*	46 *150*	55 *180*	36 *120*	42 *140*	50 *165*	17 *55*	19 *60*	24 *80*
S11	— —	— —	— —	— —	— —	— —	75 *245*	90 *295*	110 *360*	70 *230*	85 *280*	100 *330*	33 *110*	38 *125*	46 *150*
S12	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	49 *160*	60 *195*	70 *230*	30 *100*	35 *115*	43 *140*
S13	— —	— —	— —	— —	— —	— —	31 *100*	37 *120*	45 *150*	29 *95*	34 *110*	40 *130*	18 *60*	21 *70*	25 *80*
H5	48 *155*	55 *180*	65 *215*	— —	— —	— —	46 *150*	55 *180*	65 *215*	45 *150*	55 *180*	65 *215*	— —	— —	— —
H8	50 *165*	60 *195*	70 *230*	— —	— —	— —	50 *165*	60 *195*	70 *230*	48 *155*	55 *180*	65 *215*	— —	— —	— —
H11	60 *195*	70 *230*	85 *280*	— —	— —	— —	60 *195*	70 *230*	80 *260*	55 *180*	65 *215*	80 *260*	— —	— —	— —
H12	90 *295*	105 *345*	130 *425*	— —	— —	— —	100 *330*	115 *375*	140 *460*	85 *280*	100 *330*	120 *395*	— —	— —	— —

R220.21-SP18 – In mm

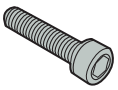
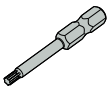
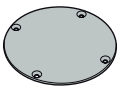




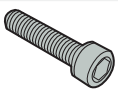
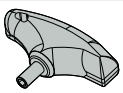
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 574–576
—Per il programma inserti completo, vedere le pagine 896
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R220.21-0063-SP18.5A	10097579	Manicotto	33,7	63,0	5	2,5	14,0	22,0	49,0	22,0	50,0	5,41	1,9	2,4	5800	0,6	SPKT180630
R220.21-0066-SP18.5A	10097580	Manicotto	36,7	66,0	5	2,5	14,0	27,0	61,0	27,0	55,0	5,4	1,9	3,4	5700	0,8	SPKT180630
R220.21-0080-SP18.5A	10097581	Manicotto	50,7	80,0	5	2,5	14,0	27,0	61,0	27,0	50,0	5,4	1,9	2,4	5100	1,0	SPKT180630
R220.21-0080-SP18.6A	10097582	Manicotto	50,7	80,0	6	2,5	14,0	27,0	61,0	27,0	50,0	5,4	1,9	2,4	5100	1,0	SPKT180630
R220.21-0100-SP18.7A	10097583	Manicotto	70,7	100,0	7	2,5	14,0	32,0	79,0	32,0	50,0	5,39	1,9	1,7	4500	1,6	SPKT180630
R220.21-0125-SP18.8A	10097584	Manicotto	95,6	125,0	8	2,5	14,0	40,0	90,0	40,0	63,0	5,39	1,9	1,2	4000	3,1	SPKT180630
R220.21-8160-SP18.10A	10097585	Manicotto	130,6	160,0	10	2,5	14,0	40,0	90,0	40,0	63,0	5,39	1,9	0,9	3600	3,9	SPKT180630

Parti di ricambio, comprese nella fornitura

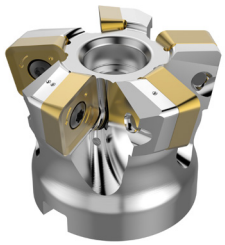
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R220.21-0063	MLC6S10X45	1/4HEX-T20PX50	C05013-T20P	–	–
R220.21-0066	MLC6S12X50	1/4HEX-T20PX50	C05013-T20P	–	–
R220.21-0080	MC6S12X40	1/4HEX-T20PX50	C05013-T20P	–	–
R220.21-0100	MLC6S16X35	1/4HEX-T20PX90	C05013-T20P	–	–
R220.21-0125	MC6S20X50	1/4HEX-T20PX90	C05013-T20P	–	–
R220.21-8160	–	1/4HEX-T20PX90	C05013-T20P	SC160-53	MF6S4X10

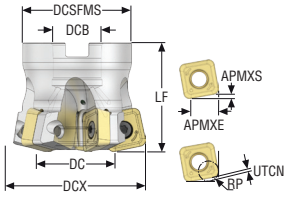
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.21-0063-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.21-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP18 – Pollici

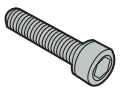
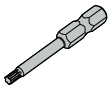




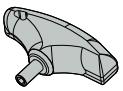
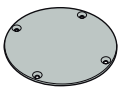
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 574-576
–Per il programma inserti completo, vedere le pagine 896
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R220.21-02.50-SP18.5A	10097586	Manicotto	1.346	2.500	5	0.098	0.551	0.750	1.789	0.750	2.000	0.213	0.075	3,7	5800	1.320	SPKT180630
R220.21-03.00-SP18.5A	10128670	Manicotto	1.846	3.000	5	0.098	0.551	1.000	2.289	1.000	2.000	0.213	0.075	2,6	5100	1.760	SPKT180630
R220.21-03.00-SP18.6A	10097587	Manicotto	1.846	3.000	6	0.098	0.551	1.000	2.289	1.000	2.000	0.213	0.075	2,6	5100	1.980	SPKT180630
R220.21-04.00-SP18.7A	10097588	Manicotto	2.846	4.000	7	0.098	0.551	1.500	3.539	1.500	2.000	0.212	0.075	1,7	4500	3.750	SPKT180630
R220.21-05.00-SP18.8A	10097589	Manicotto	3.843	5.000	8	0.098	0.551	1.500	3.539	1.500	2.500	0.212	0.075	1,2	4000	6.610	SPKT180630
R220.21-06.00-SP18.10A	10097590	Manicotto	4.843	6.000	10	0.098	0.551	2.000	4.909	2.000	2.500	0.212	0.075	1,0	3700	8.600	SPKT180630

Parti di ricambio, comprese nella fornitura

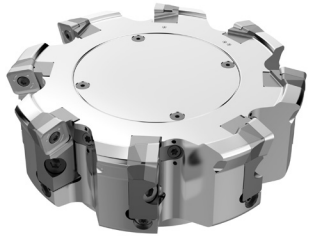
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-02.50	UC6S3/8UNFX11/2	1/4HEX-T20PX50	C05013-T20P
R220.21-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C05013-T20P
R220.21-04.00	ULC6S3/4UNFX11/2	1/4HEX-T20PX90	C05013-T20P
R220.21-05.00	UC6S3/4UNFX2	1/4HEX-T20PX90	C05013-T20P
R220.21-06.00	–	1/4HEX-T20PX90	C05013-T20P

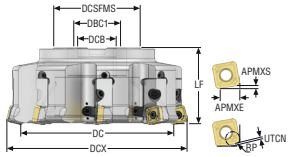
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coperchio	Vite coperchio	Chiave dinamometrica
						
R220.21-02.50-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	–	–	T00-20P50
R220.21-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	SC-160-90	MF6S4X10	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP18CA – In mm

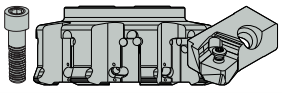
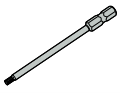
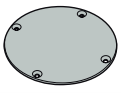
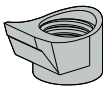




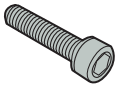
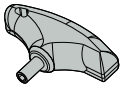
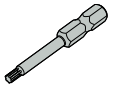
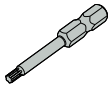
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 577–582
—Per il programma inserti completo, vedere le pagine 896
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R220.21-0153-SP18HF-6CA	10135928	Manicotto	123,8	153,0	6	2,9	14,0	40,0	90,0	40,0	80,0	5,79	2,1	0,8	3700	6,1	SPKT180630
R220.21-0153-SP18MF-6CA	10135931	Manicotto	124,5	153,0	6	4,1	14,0	40,0	90,0	40,0	80,0	6,99	2,6	0,7	3700	6,1	SPKT180630
R220.21-8188-SP18HF-8CA	10135929	Manicotto	158,8	188,0	8	2,9	14,0	40,0	90,0	40,0	80,0	5,79	2,1	0,6	3300	0,0	SPKT180630
R220.21-8188-SP18MF-8CA	10135932	Manicotto	159,5	188,0	8	4,1	14,0	40,0	90,0	40,0	80,0	6,99	2,6	0,5	3300	8,2	SPKT180630
R220.21-8228-SP18HF-10CA	10135930	Manicotto	198,7	228,0	10	2,9	14,0	60,0	130,0	60,0	80,0	5,79	2,1	0,5	3000	11,3	SPKT180630
R220.21-8228-SP18MF-10CA	10135933	Manicotto	199,5	228,0	10	4,1	14,0	60,0	130,0	60,0	80,0	6,99	2,6	0,4	3000	0,0	SPKT180630

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Corpo base	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Cuneo di bloccaggio	Vite cuneo
											
R220.21-0153HF	AU1114T-T15P	MC6S20X70	B-R220.21/29I-0153-6CA	SP18HF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	–	–	CW0810	LD8020-T25P
R220.21-0153MF	AU1114T-T15P	MC6S20X70	B-R220.21/29I-0153-6CA	SP18MF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	–	–	CW0810	LD8020-T25P
R220.21-8188HF	AU1114T-T15P	–	B-R220.21/29I-8188-8CA	SP18HF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10	CW0810	LD8020-T25P
R220.21-8188MF	AU1114T-T15P	–	B-R220.21/29I-8188-8CA	SP18MF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10	CW0810	LD8020-T25P
R220.21-8228HF	AU1114T-T15P	–	B-R220.21/29I-8228-10CA	SP18HF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8020-T25P
R220.21-8228MF	AU1114T-T15P	–	B-R220.21/29I-8228-10CA	SP18MF-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	CW0810	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Chiave di regolazione	Chiave per vite cuneo
					
R220.21-0153	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	1/4HEX-T15PX50	1/4HEX-T25PX50
R220.21-8188	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	1/4HEX-T15PX50	1/4HEX-T25PX50
R220.21-8228	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	1/4HEX-T-HANDLE	1/4HEX-T15PX50	1/4HEX-T25PX50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SP18 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SPKT180630TN-ME10 MP3501	2,5 *0.10*	0,70 0.028	0,70 0.028	0,80 0.032
P2	SPKT180630TN-ME10 MP3501	2,5 *0.10*	0,70 0.028	0,70 0.028	0,85 0.034
P3	SPKT180630TN-ME10 MP2501	2,5 *0.10*	0,70 0.028	0,70 0.028	0,80 0.032
P4	SPKT180630TN-M14 MP2501	2,5 *0.10*	0,95 0.038	0,95 0.038	1,1 0.044
P5	SPKT180630TN-M14 MP2501	2,5 *0.10*	0,90 0.036	0,90 0.036	1,1 0.044
P6	SPKT180630TN-M14 MP2501	2,5 *0.10*	0,90 0.036	0,90 0.036	1,1 0.044
P7	SPKT180630TN-M14 MP2501	2,5 *0.10*	0,90 0.036	0,90 0.036	1,1 0.044
P8	SPKT180630TN-M14 MP2501	2,5 *0.10*	0,95 0.038	0,95 0.038	1,1 0.044
P11	SPKT180630TN-ME10 MP3501	2,5 *0.10*	0,65 0.026	0,65 0.026	0,75 0.030
P12	SPKT180630TN-M14 MP2501	2,0 *0.075*	0,60 0.024	0,60 0.024	0,70 0.028
M1	SPKT180630TN-ME10 MS2050	2,5 *0.10*	0,70 0.028	0,70 0.028	0,85 0.034
M2	SPKT180630TN-ME10 MS2050	2,5 *0.10*	0,65 0.026	0,65 0.026	0,75 0.030
M3	SPKT180630TN-ME10 MS2050	2,0 *0.075*	0,50 0.020	0,50 0.020	0,60 0.024
M4	SPKT180630TN-ME10 MP3501	2,0 *0.075*	0,46 0.018	0,46 0.018	0,55 0.022
M5	SPKT180630TN-ME10 MP3501	2,0 *0.075*	0,46 0.018	0,46 0.018	0,55 0.022
K1	SPKT180630TN-MD16 MK2050	2,5 *0.10*	1,2 0.048	1,2 0.048	1,3 0.050
K2	SPKT180630TN-MD16 MK2050	2,5 *0.10*	1,0 0.040	1,0 0.040	1,2 0.048
K3	SPKT180630TN-MD16 MK2050	2,5 *0.10*	1,0 0.040	1,0 0.040	1,2 0.048
K4	SPKT180630TN-MD16 MK2050	2,5 *0.10*	1,0 0.040	1,0 0.040	1,2 0.048
K5	SPKT180630TN-MD16 MK2050	2,5 *0.10*	0,95 0.038	0,95 0.038	1,1 0.044
K6	SPKT180630TN-MD16 MK2050	2,5 *0.10*	1,0 0.040	1,0 0.040	1,2 0.048
K7	SPKT180630TN-MD16 MK2050	2,5 *0.10*	0,95 0.038	0,95 0.038	1,1 0.044
S1	SPKT180630TN-ME10 MP3501	2,0 *0.075*	0,46 0.018	0,46 0.018	0,55 0.022
S2	SPKT180630TN-ME10 MP3501	2,0 *0.075*	0,46 0.018	0,46 0.018	0,55 0.022
S3	SPKT180630TN-ME10 MP3501	2,0 *0.075*	0,42 0.017	0,42 0.017	0,48 0.019
S11	SPKT180630TN-ME10 MS2050	2,0 *0.075*	0,50 0.020	0,50 0.020	0,60 0.024
S12	SPKT180630TN-ME10 MS2050	2,0 *0.075*	0,50 0.020	0,50 0.020	0,60 0.024
S13	SPKT180630TN-ME10 MS2050	2,0 *0.075*	0,46 0.018	0,46 0.018	0,55 0.022
H5	SPKT180630TN-MD16 MH1051	2,0 *0.075*	0,70 0.028	0,70 0.028	0,80 0.032
H8	SPKT180630TN-MD16 MH1051	2,0 *0.075*	0,55 0.022	0,55 0.022	0,65 0.026
H11	SPKT180630TN-MD16 MP1501	2,0 *0.075*	0,70 0.028	0,70 0.028	0,80 0.032
H12	SPKT180630TN-MD16 MP1501	2,0 *0.075*	0,55 0.022	0,55 0.022	0,65 0.026

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-SP18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	250	285	340	235	265	335	245	275	335	235	255	300	265	310	415
	—	—	—	*820*	*940*	*1125*	*770*	*870*	*1100*	*800*	*900*	*1100*	*770*	*840*	*980*	*870*	*1025*	*1350*
P2	—	—	—	240	275	330	230	260	325	235	265	315	225	240	285	250	285	380
	—	—	—	*790*	*900*	*1075*	*750*	*850*	*1075*	*770*	*870*	*1025*	*740*	*790*	*940*	*820*	*940*	*1250*
P3	—	—	—	210	240	295	195	225	290	205	230	280	195	215	255	225	260	350
	—	—	—	*690*	*790*	*970*	*640*	*740*	*950*	*670*	*750*	*920*	*640*	*710*	*840*	*740*	*850*	*1150*
P4	—	—	—	190	215	260	185	210	255	185	210	245	185	205	235	205	240	305
	—	—	—	*620*	*710*	*850*	*610*	*690*	*840*	*610*	*690*	*800*	*610*	*670*	*770*	*670*	*790*	*1000*
P5	310	350	440	180	205	245	175	200	245	175	200	245	170	185	220	195	225	310
	1025	*1150*	*1450*	*590*	*670*	*800*	*570*	*660*	*800*	*570*	*660*	*800*	*560*	*610*	*720*	*640*	*740*	*1025*
P6	350	395	495	200	230	275	195	220	275	200	225	275	190	205	250	220	255	350
	1150	*1300*	*1625*	*660*	*750*	*900*	*640*	*720*	*900*	*660*	*740*	*900*	*620*	*670*	*820*	*720*	*840*	*1150*
P7	330	370	465	190	220	260	185	210	260	190	210	260	180	195	235	210	240	330
	1075	*1225*	*1525*	*620*	*720*	*850*	*610*	*690*	*850*	*620*	*690*	*850*	*590*	*640*	*770*	*690*	*790*	*1075*
P8	290	330	440	175	200	245	165	185	245	175	195	235	165	180	215	190	215	295
	950	*1075*	*1450*	*570*	*660*	*800*	*540*	*610*	*800*	*570*	*640*	*770*	*540*	*590*	*710*	*620*	*710*	*970*
P11	320	360	455	185	210	255	180	205	250	180	205	250	175	190	230	190	235	350
	1050	*1175*	*1500*	*610*	*690*	*840*	*590*	*670*	*820*	*590*	*670*	*820*	*570*	*620*	*750*	*620*	*770*	*1150*
P12	230	260	330	120	135	170	125	140	175	125	140	165	120	130	150	150	180	250
	750	*850*	*1075*	*395*	*445*	*560*	*410*	*460*	*570*	*410*	*460*	*540*	*395*	*425*	*490*	*490*	*590*	*820*
M1	—	—	—	—	—	—	175	200	240	180	205	245	160	185	220	205	250	360
	—	—	—	—	—	—	*570*	*660*	*790*	*590*	*670*	*800*	*520*	*610*	*720*	*670*	*820*	*1175*
M2	—	—	—	—	—	—	145	165	200	150	170	210	135	155	190	180	225	330
	—	—	—	—	—	—	*475*	*540*	*660*	*490*	*560*	*690*	*445*	*510*	*620*	*590*	*740*	*1075*
M3	—	—	—	—	—	—	115	130	160	120	140	165	110	125	150	165	205	280
	—	—	—	—	—	—	*375*	*425*	*520*	*395*	*460*	*540*	*360*	*410*	*490*	*540*	*670*	*920*
M4	—	—	—	—	—	—	90	105	125	95	105	130	85	95	120	130	160	225
	—	—	—	—	—	—	*295*	*345*	*410*	*310*	*345*	*425*	*280*	*310*	*395*	*425*	*520*	*740*
M5	—	—	—	—	—	—	75	85	105	75	90	110	70	80	100	110	135	185
	—	—	—	—	—	—	*245*	*280*	*345*	*245*	*295*	*360*	*230*	*260*	*330*	*360*	*445*	*610*
K1	405	460	590	260	300	360	185	210	255	—	—	—	160	185	220	—	—	—
	1325	*1500*	*1925*	*850*	*980*	*1175*	*610*	*690*	*840*	—	—	—	*520*	*610*	*720*	—	—	—
K2	375	425	530	235	265	320	165	190	225	—	—	—	145	165	200	—	—	—
	1225	*1400*	*1750*	*770*	*870*	*1050*	*540*	*620*	*740*	—	—	—	*475*	*540*	*660*	—	—	—
K3	320	360	450	195	225	270	140	160	190	—	—	—	120	140	170	—	—	—
	1050	*1175*	*1475*	*640*	*740*	*890*	*460*	*520*	*620*	—	—	—	*395*	*460*	*560*	—	—	—
K4	305	345	430	190	215	255	135	150	180	—	—	—	115	130	160	—	—	—
	1000	*1125*	*1400*	*620*	*710*	*840*	*445*	*490*	*590*	—	—	—	*375*	*425*	*520*	—	—	—
K5	195	220	270	115	135	155	80	95	110	—	—	—	70	80	100	—	—	—
	640	*720*	*890*	*375*	*445*	*510*	*260*	*310*	*360*	—	—	—	*230*	*260*	*330*	—	—	—
K6	265	300	380	165	190	225	115	135	160	—	—	—	100	115	140	—	—	—
	870	*980*	*1250*	*540*	*620*	*740*	*375*	*445*	*520*	—	—	—	*330*	*375*	*460*	—	—	—
K7	245	280	345	150	170	200	105	120	140	—	—	—	90	105	125	—	—	—
	800	*920*	*1125*	*490*	*560*	*660*	*345*	*395*	*460*	—	—	—	*295*	*345*	*410*	—	—	—
S1	—	—	—	—	—	—	43	48	60	43	49	60	39	45	55	48	55	65
	—	—	—	—	—	—	*140*	*155*	*195*	*140*	*160*	*195*	*130*	*150*	*180*	*155*	*180*	*215*
S2	—	—	—	—	—	—	34	39	47	35	40	49	32	36	44	38	44	55
	—	—	—	—	—	—	*110*	*130*	*155*	*115*	*130*	*160*	*105*	*120*	*145*	*125*	*145*	*180*
S3	—	—	—	—	—	—	30	34	41	31	35	43	28	32	39	34	38	47
	—	—	—	—	—	—	*100*	*110*	*135*	*100*	*115*	*140*	*90*	*105*	*130*	*110*	*125*	*155*
S11	—	—	—	—	—	—	60	65	80	60	70	85	55	65	75	65	75	90
	—	—	—	—	—	—	*195*	*215*	*260*	*195*	*230*	*280*	*180*	*215*	*245*	*215*	*245*	*295*
S12	—	—	—	—	—	—	40	46	55	42	48	60	39	44	55	46	55	65
	—	—	—	—	—	—	*130*	*150*	*180*	*140*	*155*	*195*	*130*	*145*	*180*	*150*	*180*	*215*
S13	—	—	—	—	—	—	24	27	33	24	28	34	22	25	31	27	30	37
	—	—	—	—	—	—	*80*	*90*	*110*	*80*	*90*	*110*	*70*	*80*	*100*	*90*	*100*	*120*
H5	120	130	170	—	—	—	36	41	50	—	—	—	34	39	47	—	—	—
	395	*425*	*560*	—	—	—	*120*	*135*	*165*	—	—	—	*110*	*130*	*155*	—	—	—
H8	135	150	190	—	—	—	39	44	55	—	—	—	36	41	50	—	—	—
	445	*490*	*620*	—	—	—	*130*	*145*	*180*	—	—	—	*120*	*135*	*165*	—	—	—
H11	150	170	215	—	—	—	46	50	65	—	—	—	43	49	60	95	120	165
	490	*560*	*710*	—	—	—	*150*	*165*	*215*	—	—	—	*140*	*160*	*195*	*310*	*395*	*540*
H12	155	175	225	75	90	110	75	85	105	—	—	—	65	75	90	100	125	160
	510	*570*	*740*	*245*	*295*	*360*	*245*	*280*	*345*	—	—	—	*215*	*245*	*295*	*330*	*410*	*520*

R220.21-SP18 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050			MP1501			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	275 *900*	310 *1025*	375 *1225*	360 *1175*	395 *1300*	465 *1525*	385 *1275*	425 *1400*	500 *1650*	370 *1225*	410 *1350*	485 *1600*	395 *1300*	435 *1425*	510 *1675*
P2	260 *850*	300 *980*	355 *1175*	350 *1150*	385 *1275*	450 *1475*	370 *1225*	405 *1325*	475 *1550*	355 *1175*	390 *1275*	460 *1500*	385 *1275*	420 *1375*	495 *1625*
P3	230 *750*	260 *850*	315 *1025*	300 *980*	330 *1075*	400 *1300*	325 *1075*	355 *1175*	420 *1375*	310 *1025*	345 *1125*	405 *1325*	340 *1125*	370 *1225*	425 *1400*
P4	205 *670*	235 *770*	280 *920*	275 *900*	300 *980*	350 *1150*	290 *950*	320 *1050*	370 *1225*	280 *920*	310 *1025*	360 *1175*	300 *980*	325 *1075*	380 *1250*
P5	195 *640*	225 *740*	275 *900*	260 *850*	290 *950*	335 *1100*	280 *920*	305 *1000*	365 *1200*	265 *870*	295 *970*	355 *1175*	285 *940*	310 *1025*	365 *1200*
P6	220 *720*	250 *820*	305 *1000*	295 *970*	325 *1075*	375 *1225*	310 *1025*	345 *1125*	410 *1350*	300 *980*	330 *1075*	395 *1300*	320 *1050*	350 *1150*	405 *1325*
P7	205 *670*	235 *770*	290 *950*	275 *900*	305 *1000*	355 *1175*	295 *970*	325 *1075*	385 *1275*	280 *920*	310 *1025*	375 *1225*	300 *980*	330 *1075*	385 *1275*
P8	190 *620*	220 *720*	265 *870*	250 *820*	280 *920*	335 *1100*	275 *900*	300 *980*	355 *1175*	260 *850*	290 *950*	340 *1125*	285 *940*	310 *1025*	355 *1175*
P11	200 *660*	230 *750*	280 *920*	270 *890*	295 *970*	345 *1125*	285 *940*	315 *1025*	375 *1225*	275 *900*	305 *1000*	365 *1200*	290 *950*	320 *1050*	375 *1225*
P12	130 *425*	150 *490*	185 *610*	175 *570*	195 *640*	230 *750*	190 *620*	210 *690*	245 *800*	180 *590*	200 *660*	235 *770*	190 *620*	205 *670*	240 *790*
M1	185 *610*	215 *710*	255 *840*	— —	— —	— —	190 *620*	220 *720*	260 *850*	210 *690*	240 *790*	285 *940*	205 *670*	235 *770*	280 *920*
M2	155 *510*	180 *590*	220 *720*	— —	— —	— —	160 *520*	185 *610*	225 *740*	175 *570*	200 *660*	245 *800*	170 *560*	195 *640*	230 *750*
M3	125 *410*	145 *475*	175 *570*	— —	— —	— —	130 *425*	150 *490*	180 *590*	140 *460*	160 *520*	195 *640*	135 *445*	155 *510*	185 *610*
M4	95 *310*	110 *360*	135 *445*	— —	— —	— —	100 *330*	115 *375*	140 *460*	110 *360*	125 *410*	150 *490*	105 *345*	120 *395*	145 *475*
M5	80 *260*	90 *295*	115 *375*	— —	— —	— —	85 *280*	95 *310*	115 *375*	90 *295*	100 *330*	125 *410*	85 *280*	100 *330*	120 *395*
K1	— —	— —	— —	350 *1150*	385 *1275*	455 *1500*	375 *1225*	410 *1350*	480 *1575*	230 *750*	265 *870*	315 *1025*	385 *1275*	425 *1400*	495 *1625*
K2	— —	— —	— —	315 *1025*	350 *1150*	405 *1325*	335 *1100*	370 *1225*	440 *1450*	205 *670*	235 *770*	290 *950*	345 *1125*	380 *1250*	440 *1450*
K3	— —	— —	— —	265 *870*	295 *970*	345 *1125*	285 *940*	315 *1025*	375 *1225*	175 *570*	200 *660*	245 *800*	290 *950*	320 *1050*	370 *1225*
K4	— —	— —	— —	255 *840*	280 *920*	325 *1075*	270 *890*	300 *980*	355 *1175*	165 *540*	190 *620*	235 *770*	275 *900*	305 *1000*	355 *1175*
K5	— —	— —	— —	160 *520*	175 *570*	200 *660*	170 *560*	185 *610*	215 *710*	105 *345*	120 *395*	140 *460*	170 *560*	185 *610*	220 *720*
K6	— —	— —	— —	225 *740*	250 *820*	290 *950*	240 *790*	265 *870*	315 *1025*	145 *475*	170 *560*	205 *670*	245 *800*	270 *890*	310 *1025*
K7	— —	— —	— —	200 *660*	225 *740*	255 *840*	215 *710*	240 *790*	275 *900*	130 *425*	150 *490*	180 *590*	215 *710*	240 *790*	280 *920*
S1	48 *155*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	75 *245*	49 *160*	55 *180*	70 *230*
S2	38 *125*	44 *145*	55 *180*	— —	— —	— —	— —	— —	— —	43 *140*	48 *155*	60 *195*	39 *130*	45 *150*	55 *180*
S3	34 *110*	38 *125*	47 *155*	— —	— —	— —	— —	— —	— —	37 *120*	43 *140*	50 *165*	35 *115*	39 *130*	48 *155*
S11	65 *215*	75 *245*	90 *295*	— —	— —	— —	— —	— —	— —	75 *245*	85 *280*	105 *345*	70 *230*	80 *260*	95 *310*
S12	46 *150*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	50 *165*	60 *195*	70 *230*	48 *155*	55 *180*	65 *215*
S13	27 *90*	30 *100*	37 *120*	— —	— —	— —	— —	— —	— —	30 *100*	34 *110*	41 *135*	27 *90*	31 *100*	39 *130*
H5	— —	— —	— —	46 *150*	50 *165*	65 *215*	— —	— —	— —	44 *145*	50 *165*	60 *195*	43 *140*	49 *160*	60 *195*
H8	— —	— —	— —	49 *160*	55 *180*	70 *230*	— —	— —	— —	47 *155*	55 *180*	65 *215*	46 *150*	50 *165*	65 *215*
H11	50 *165*	55 *180*	70 *230*	60 *195*	65 *215*	80 *260*	— —	— —	— —	55 *180*	65 *215*	80 *260*	55 *180*	65 *215*	75 *245*
H12	85 *280*	95 *310*	115 *375*	90 *295*	100 *330*	125 *410*	— —	— —	— —	95 *310*	105 *345*	130 *425*	85 *280*	95 *310*	115 *375*

R220.21-SP18HF-CA – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SPKT180630TN-ME10 MP3501	3,0 *0.11*	0,60 0.024	0,60 0.024	0,65 0.026
P2	SPKT180630TN-ME10 MP3501	3,0 *0.11*	0,60 0.024	0,60 0.024	0,65 0.026
P3	SPKT180630TN-ME10 MP2501	3,0 *0.11*	0,55 0.022	0,55 0.022	0,65 0.026
P4	SPKT180630TN-M14 MP2501	3,0 *0.11*	0,80 0.032	0,80 0.032	0,85 0.034
P5	SPKT180630TN-M14 MP2501	3,0 *0.11*	0,75 0.030	0,75 0.030	0,85 0.034
P6	SPKT180630TN-M14 MP2501	3,0 *0.11*	0,75 0.030	0,75 0.030	0,85 0.034
P7	SPKT180630TN-M14 MP2501	3,0 *0.11*	0,75 0.030	0,75 0.030	0,85 0.034
P8	SPKT180630TN-M14 MP2501	3,0 *0.11*	0,80 0.032	0,80 0.032	0,90 0.036
P11	SPKT180630TN-ME10 MP3501	3,0 *0.11*	0,55 0.022	0,55 0.022	0,60 0.024
P12	SPKT180630TN-M14 MP2501	2,5 *0.090*	0,50 0.020	0,50 0.020	0,60 0.024
M1	SPKT180630TN-ME10 MS2050	3,0 *0.11*	0,60 0.024	0,60 0.024	0,65 0.026
M2	SPKT180630TN-ME10 MS2050	3,0 *0.11*	0,55 0.022	0,55 0.022	0,60 0.024
M3	SPKT180630TN-ME10 MS2050	2,5 *0.090*	0,44 0.017	0,44 0.017	0,48 0.019
M4	SPKT180630TN-ME10 MP3501	2,5 *0.090*	0,38 0.015	0,38 0.015	0,42 0.017
M5	SPKT180630TN-ME10 MP3501	2,5 *0.090*	0,38 0.015	0,38 0.015	0,42 0.017
K1	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,95 0.038	0,95 0.038	1,1 0.044
K2	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,90 0.036	0,90 0.036	1,0 0.040
K3	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,90 0.036	0,90 0.036	1,0 0.040
K4	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,90 0.036	0,90 0.036	1,0 0.040
K5	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,80 0.032	0,80 0.032	0,90 0.036
K6	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,90 0.036	0,90 0.036	1,0 0.040
K7	SPKT180630TN-MD16 MK2050	3,0 *0.11*	0,80 0.032	0,80 0.032	0,90 0.036
S1	SPKT180630TN-ME10 MP3501	2,5 *0.090*	0,38 0.015	0,38 0.015	0,42 0.017
S2	SPKT180630TN-ME10 MP3501	2,5 *0.090*	0,38 0.015	0,38 0.015	0,42 0.017
S3	SPKT180630TN-ME10 MP3501	2,5 *0.090*	0,36 0.014	0,36 0.014	0,40 0.016
S11	SPKT180630TN-ME10 MS2050	2,5 *0.090*	0,44 0.017	0,44 0.017	0,48 0.019
S12	SPKT180630TN-ME10 MS2050	2,5 *0.090*	0,44 0.017	0,44 0.017	0,48 0.019
S13	SPKT180630TN-ME10 MS2050	2,5 *0.090*	0,38 0.015	0,38 0.015	0,42 0.017
H5	SPKT180630TN-MD16 MH1051	2,5 *0.090*	0,60 0.024	0,60 0.024	0,65 0.026
H8	SPKT180630TN-MD16 MH1051	2,5 *0.090*	0,46 0.018	0,46 0.018	0,50 0.020
H11	SPKT180630TN-MD16 MP1501	2,5 *0.090*	0,60 0.024	0,60 0.024	0,65 0.026
H12	SPKT180630TN-MD16 MP1501	2,5 *0.090*	0,46 0.018	0,46 0.018	0,50 0.020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-SP18HF-CA – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	230	250	305	215	235	295	260	285	345	210	225	270	235	260	360
	—	—	—	*750*	*820*	*1000*	*710*	*770*	*970*	*850*	*940*	*1125*	*690*	*740*	*890*	*770*	*850*	*1175*
P2	—	—	—	220	245	295	210	225	285	255	275	330	205	215	260	230	250	350
	—	—	—	*720*	*800*	*970*	*690*	*740*	*940*	*840*	*900*	*1075*	*670*	*710*	*850*	*750*	*820*	*1150*
P3	—	—	—	195	215	265	185	200	260	220	240	290	180	190	230	210	230	315
	—	—	—	*640*	*710*	*870*	*610*	*660*	*850*	*720*	*790*	*950*	*590*	*620*	*750*	*690*	*750*	*1025*
P4	—	—	—	170	190	230	165	180	230	200	215	255	165	180	215	185	200	275
	—	—	—	*560*	*620*	*750*	*540*	*590*	*750*	*660*	*710*	*840*	*540*	*590*	*710*	*610*	*660*	*900*
P5	275	300	390	165	180	220	155	170	220	190	205	250	160	165	200	185	205	275
	900	*980*	*1275*	*540*	*590*	*720*	*510*	*560*	*720*	*620*	*670*	*820*	*520*	*540*	*660*	*610*	*670*	*900*
P6	310	335	440	185	205	250	175	190	245	215	230	280	175	185	220	210	225	310
	1025	*1100*	*1450*	*610*	*670*	*820*	*570*	*620*	*800*	*710*	*750*	*920*	*570*	*610*	*720*	*690*	*740*	*1025*
P7	295	315	415	175	190	235	165	180	230	200	220	265	165	175	210	195	215	290
	970	*1025*	*1350*	*570*	*620*	*770*	*540*	*590*	*750*	*660*	*720*	*870*	*540*	*570*	*690*	*640*	*710*	*950*
P8	275	300	390	165	180	220	155	170	220	185	200	245	155	160	195	175	190	265
	900	*980*	*1275*	*540*	*590*	*720*	*510*	*560*	*720*	*610*	*660*	*800*	*510*	*520*	*640*	*570*	*620*	*870*
P11	285	310	405	170	185	230	160	175	225	195	210	255	160	170	205	180	210	305
	940	*1025*	*1325*	*560*	*610*	*750*	*520*	*570*	*740*	*640*	*690*	*840*	*520*	*560*	*670*	*590*	*690*	*1000*
P12	215	230	300	110	125	150	120	130	160	130	140	165	110	115	135	135	155	220
	710	*750*	*980*	*360*	*410*	*490*	*395*	*425*	*520*	*425*	*460*	*540*	*360*	*375*	*445*	*445*	*510*	*720*
M1	—	—	—	—	—	—	160	175	215	185	210	250	150	165	205	190	215	325
	—	—	—	—	—	—	*520*	*570*	*710*	*610*	*690*	*820*	*490*	*540*	*670*	*620*	*710*	*1075*
M2	—	—	—	—	—	—	130	145	180	155	170	210	125	140	170	170	195	290
	—	—	—	—	—	—	*425*	*475*	*590*	*510*	*560*	*690*	*410*	*460*	*560*	*560*	*640*	*950*
M3	—	—	—	—	—	—	110	120	145	125	140	170	100	115	135	155	180	250
	—	—	—	—	—	—	*360*	*395*	*475*	*410*	*460*	*560*	*330*	*375*	*445*	*510*	*590*	*820*
M4	—	—	—	—	—	—	85	95	110	95	110	130	80	85	105	120	145	205
	—	—	—	—	—	—	*280*	*310*	*360*	*310*	*360*	*425*	*260*	*280*	*345*	*395*	*475*	*670*
M5	—	—	—	—	—	—	70	80	95	80	90	110	65	75	90	100	120	170
	—	—	—	—	—	—	*230*	*260*	*310*	*260*	*295*	*360*	*215*	*245*	*295*	*330*	*395*	*560*
K1	375	400	520	240	265	320	170	185	225	—	—	—	145	165	200	—	—	—
	1225	*1300*	*1700*	*790*	*870*	*1050*	*560*	*610*	*740*	—	—	—	*475*	*540*	*660*	—	—	—
K2	335	360	475	210	235	285	150	165	200	—	—	—	135	145	180	—	—	—
	1100	*1175*	*1550*	*690*	*770*	*940*	*490*	*540*	*660*	—	—	—	*445*	*475*	*590*	—	—	—
K3	285	305	400	180	200	240	125	140	170	—	—	—	110	125	150	—	—	—
	940	*1000*	*1300*	*590*	*660*	*790*	*410*	*460*	*560*	—	—	—	*360*	*410*	*490*	—	—	—
K4	270	290	385	170	190	230	120	135	165	—	—	—	105	120	145	—	—	—
	890	*950*	*1275*	*560*	*620*	*750*	*395*	*445*	*540*	—	—	—	*345*	*395*	*475*	—	—	—
K5	175	190	245	105	115	140	75	80	100	—	—	—	65	70	85	—	—	—
	570	*620*	*800*	*345*	*375*	*460*	*245*	*260*	*330*	—	—	—	*215*	*230*	*280*	—	—	—
K6	240	255	340	150	165	205	105	115	145	—	—	—	95	105	125	—	—	—
	790	*840*	*1125*	*490*	*540*	*670*	*345*	*375*	*475*	—	—	—	*310*	*345*	*410*	—	—	—
K7	220	240	310	135	150	180	95	105	130	—	—	—	85	95	110	—	—	—
	720	*790*	*1025*	*445*	*490*	*590*	*310*	*345*	*425*	—	—	—	*280*	*310*	*360*	—	—	—
S1	—	—	—	—	—	—	40	44	50	45	50	60	37	41	50	44	49	60
	—	—	—	—	—	—	*130*	*145*	*165*	*150*	*165*	*195*	*120*	*135*	*165*	*145*	*160*	*195*
S2	—	—	—	—	—	—	32	35	42	36	41	49	30	33	40	36	40	48
	—	—	—	—	—	—	*105*	*115*	*140*	*120*	*135*	*160*	*100*	*110*	*130*	*120*	*130*	*155*
S3	—	—	—	—	—	—	27	30	37	32	36	43	26	29	35	32	35	43
	—	—	—	—	—	—	*90*	*100*	*120*	*105*	*120*	*140*	*85*	*95*	*115*	*105*	*115*	*140*
S11	—	—	—	—	—	—	55	60	75	65	70	85	50	55	70	60	70	85
	—	—	—	—	—	—	*180*	*195*	*245*	*215*	*230*	*280*	*165*	*180*	*230*	*195*	*230*	*280*
S12	—	—	—	—	—	—	38	42	50	44	49	60	36	40	48	43	48	60
	—	—	—	—	—	—	*125*	*140*	*165*	*145*	*160*	*195*	*120*	*130*	*155*	*140*	*155*	*195*
S13	—	—	—	—	—	—	22	25	30	25	29	34	21	23	28	25	28	34
	—	—	—	—	—	—	*70*	*80*	*100*	*80*	*95*	*110*	*70*	*75*	*90*	*80*	*90*	*110*
H5	110	120	155	—	—	—	34	37	45	—	—	—	31	34	42	—	—	—
	360	*395*	*510*	—	—	—	*110*	*120*	*150*	—	—	—	*100*	*110*	*140*	—	—	—
H8	125	135	170	—	—	—	36	40	49	—	—	—	34	37	45	—	—	—
	410	*445*	*560*	—	—	—	*120*	*130*	*160*	—	—	—	*110*	*120*	*150*	—	—	—
H11	140	150	195	—	—	—	43	47	60	—	—	—	39	44	55	85	100	145
	460	*490*	*640*	—	—	—	*140*	*155*	*195*	—	—	—	*130*	*145*	*180*	*280*	*330*	*475*
H12	145	160	200	70	80	95	70	75	95	—	—	—	60	65	80	90	110	145
	475	*520*	*660*	*230*	*260*	*310*	*230*	*245*	*310*	—	—	—	*195*	*215*	*260*	*295*	*360*	*475*

R220.21-SP18HF-CA – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050			MP1501			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	250 *820*	275 *900*	335 *1100*	330 *1075*	350 *1150*	415 *1350*	350 *1150*	375 *1225*	445 *1450*	335 *1100*	360 *1175*	430 *1400*	365 *1200*	390 *1275*	460 *1500*
P2	240 *790*	265 *870*	325 *1075*	320 *1050*	340 *1125*	405 *1325*	340 *1125*	365 *1200*	435 *1425*	325 *1075*	350 *1150*	420 *1375*	355 *1175*	380 *1250*	440 *1450*
P3	210 *690*	235 *770*	285 *940*	280 *920*	300 *980*	360 *1175*	300 *980*	320 *1050*	380 *1250*	290 *950*	310 *1025*	370 *1225*	305 *1000*	325 *1075*	385 *1275*
P4	185 *610*	205 *670*	250 *820*	245 *800*	265 *870*	315 *1025*	265 *870*	285 *940*	335 *1100*	255 *840*	270 *890*	325 *1075*	275 *900*	295 *970*	340 *1125*
P5	180 *590*	200 *660*	245 *800*	235 *770*	250 *820*	300 *980*	260 *850*	275 *900*	325 *1075*	250 *820*	265 *870*	315 *1025*	265 *870*	280 *920*	330 *1075*
P6	205 *670*	225 *740*	275 *900*	265 *870*	285 *940*	340 *1125*	290 *950*	310 *1025*	365 *1200*	280 *920*	300 *980*	355 *1175*	295 *970*	315 *1025*	370 *1225*
P7	190 *620*	215 *710*	260 *850*	250 *820*	265 *870*	320 *1050*	275 *900*	295 *970*	345 *1125*	260 *850*	280 *920*	335 *1100*	280 *920*	300 *980*	350 *1150*
P8	180 *590*	195 *640*	240 *790*	235 *770*	250 *820*	300 *980*	255 *840*	270 *890*	320 *1050*	240 *790*	260 *850*	310 *1025*	255 *840*	275 *900*	325 *1075*
P11	185 *610*	205 *670*	250 *820*	245 *800*	260 *850*	310 *1025*	265 *870*	285 *940*	335 *1100*	255 *840*	275 *900*	325 *1075*	270 *890*	290 *950*	340 *1125*
P12	120 *395*	135 *445*	165 *540*	165 *540*	175 *570*	205 *670*	175 *570*	185 *610*	220 *720*	165 *540*	180 *590*	210 *690*	175 *570*	190 *620*	215 *710*
M1	175 *570*	190 *620*	235 *770*	— —	— —	— —	175 *570*	195 *640*	240 *790*	190 *620*	215 *710*	260 *850*	190 *620*	210 *690*	250 *820*
M2	145 *475*	160 *520*	195 *640*	— —	— —	— —	150 *490*	165 *540*	200 *660*	160 *520*	180 *590*	215 *710*	155 *510*	170 *560*	210 *690*
M3	120 *395*	130 *425*	155 *510*	— —	— —	— —	120 *395*	135 *445*	160 *520*	130 *425*	145 *475*	175 *570*	125 *410*	140 *460*	170 *560*
M4	90 *295*	100 *330*	125 *410*	— —	— —	— —	95 *310*	105 *345*	125 *410*	100 *330*	110 *360*	135 *445*	95 *310*	110 *360*	130 *425*
M5	75 *245*	85 *280*	105 *345*	— —	— —	— —	75 *245*	85 *280*	105 *345*	85 *280*	95 *310*	115 *375*	80 *260*	90 *295*	110 *360*
K1	— —	— —	— —	325 *1075*	345 *1125*	405 *1325*	345 *1125*	365 *1200*	440 *1450*	210 *690*	235 *770*	285 *940*	355 *1175*	380 *1250*	445 *1450*
K2	— —	— —	— —	285 *940*	305 *1000*	365 *1200*	315 *1025*	335 *1100*	395 *1300*	190 *620*	210 *690*	255 *840*	320 *1050*	340 *1125*	400 *1300*
K3	— —	— —	— —	240 *790*	260 *850*	310 *1025*	265 *870*	285 *940*	335 *1100*	160 *520*	180 *590*	220 *720*	270 *890*	290 *950*	340 *1125*
K4	— —	— —	— —	230 *750*	245 *800*	295 *970*	255 *840*	270 *890*	320 *1050*	155 *510*	170 *560*	210 *690*	255 *840*	275 *900*	325 *1075*
K5	— —	— —	— —	145 *475*	155 *510*	180 *590*	155 *510*	165 *540*	195 *640*	95 *310*	105 *345*	125 *410*	155 *510*	170 *560*	195 *640*
K6	— —	— —	— —	205 *670*	215 *710*	260 *850*	225 *740*	240 *790*	280 *920*	135 *445*	150 *490*	185 *610*	225 *740*	240 *790*	285 *940*
K7	— —	— —	— —	185 *610*	195 *640*	230 *750*	200 *660*	210 *690*	250 *820*	120 *395*	135 *445*	160 *520*	200 *660*	215 *710*	250 *820*
S1	44 *145*	49 *160*	60 *195*	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	65 *215*	45 *150*	50 *165*	60 *195*
S2	36 *120*	40 *130*	48 *155*	— —	— —	— —	— —	— —	— —	40 *130*	44 *145*	55 *180*	36 *120*	41 *135*	49 *160*
S3	32 *105*	35 *115*	43 *140*	— —	— —	— —	— —	— —	— —	35 *115*	39 *130*	48 *155*	32 *105*	36 *120*	43 *140*
S11	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	95 *310*	65 *215*	70 *230*	85 *280*
S12	43 *140*	48 *155*	60 *195*	— —	— —	— —	— —	— —	— —	48 *155*	55 *180*	65 *215*	44 *145*	49 *160*	60 *195*
S13	25 *80*	28 *90*	34 *110*	— —	— —	— —	— —	— —	— —	28 *90*	31 *100*	38 *125*	25 *80*	29 *95*	34 *110*
H5	— —	— —	— —	43 *140*	47 *155*	60 *195*	— —	— —	— —	40 *130*	44 *145*	55 *180*	40 *130*	45 *150*	55 *180*
H8	— —	— —	— —	46 *150*	50 *165*	60 *195*	— —	— —	— —	44 *145*	49 *160*	60 *195*	42 *140*	48 *155*	60 *195*
H11	46 *150*	50 *165*	60 *195*	55 *180*	60 *195*	75 *245*	— —	— —	— —	50 *165*	55 *180*	70 *230*	50 *165*	55 *180*	70 *230*
H12	80 *260*	85 *280*	105 *345*	85 *280*	90 *295*	110 *360*	— —	— —	— —	85 *280*	95 *310*	120 *395*	75 *245*	85 *280*	105 *345*

R220.21-SP18MF-CA – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SPKT180630TN-ME10 MP3501	4,0 *0.16*	0,44 0.017	0,44 0.017	0,48 0.019
P2	SPKT180630TN-ME10 MP3501	4,0 *0.16*	0,44 0.017	0,44 0.017	0,50 0.020
P3	SPKT180630TN-ME10 MP2501	4,0 *0.16*	0,42 0.017	0,42 0.017	0,46 0.018
P4	SPKT180630TN-M14 MP2501	4,0 *0.16*	0,55 0.022	0,55 0.022	0,65 0.026
P5	SPKT180630TN-M14 MP2501	4,0 *0.16*	0,55 0.022	0,55 0.022	0,65 0.026
P6	SPKT180630TN-M14 MP2501	4,0 *0.16*	0,55 0.022	0,55 0.022	0,60 0.024
P7	SPKT180630TN-M14 MP2501	4,0 *0.16*	0,55 0.022	0,55 0.022	0,60 0.024
P8	SPKT180630TN-M14 MP2501	4,0 *0.16*	0,60 0.024	0,60 0.024	0,65 0.026
P11	SPKT180630TN-ME10 MP3501	4,0 *0.16*	0,40 0.016	0,40 0.016	0,44 0.017
P12	SPKT180630TN-M14 MP2501	3,0 *0.12*	0,38 0.015	0,38 0.015	0,42 0.017
M1	SPKT180630TN-ME10 MS2050	4,0 *0.16*	0,44 0.017	0,44 0.017	0,50 0.020
M2	SPKT180630TN-ME10 MS2050	4,0 *0.16*	0,40 0.016	0,40 0.016	0,44 0.017
M3	SPKT180630TN-ME10 MS2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,36 0.014
M4	SPKT180630TN-ME10 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,32 0.013
M5	SPKT180630TN-ME10 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,32 0.013
K1	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,70 0.028	0,70 0.028	0,80 0.032
K2	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,65 0.026	0,65 0.026	0,70 0.028
K3	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,65 0.026	0,65 0.026	0,70 0.028
K4	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,65 0.026	0,65 0.026	0,70 0.028
K5	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,65 0.026
K6	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,65 0.026	0,65 0.026	0,70 0.028
K7	SPKT180630TN-MD16 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,65 0.026
S1	SPKT180630TN-ME10 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,32 0.013
S2	SPKT180630TN-ME10 MP3501	3,0 *0.12*	0,28 0.011	0,28 0.011	0,32 0.013
S3	SPKT180630TN-ME10 MP3501	3,0 *0.12*	0,26 0.010	0,26 0.010	0,28 0.011
S11	SPKT180630TN-ME10 MS2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,36 0.014
S12	SPKT180630TN-ME10 MS2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,36 0.014
S13	SPKT180630TN-ME10 MS2050	3,0 *0.12*	0,28 0.011	0,28 0.011	0,32 0.013
H5	SPKT180630TN-MD16 MH1051	3,0 *0.12*	0,44 0.017	0,44 0.017	0,48 0.019
H8	SPKT180630TN-MD16 MH1051	3,0 *0.12*	0,34 0.013	0,34 0.013	0,38 0.015
H11	SPKT180630TN-MD16 MP1501	3,0 *0.12*	0,44 0.017	0,44 0.017	0,48 0.019
H12	SPKT180630TN-MD16 MP1501	3,0 *0.12*	0,34 0.013	0,34 0.013	0,38 0.015

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-SP18MF-CA – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	225	250	305	210	225	300	260	285	340	210	220	270	235	260	370
	—	—	—	*740*	*820*	*1000*	*690*	*740*	*980*	*850*	*940*	*1125*	*690*	*720*	*890*	*770*	*850*	*1225*
P2	—	—	—	220	240	295	205	220	280	250	270	330	205	215	255	230	250	340
	—	—	—	*720*	*790*	*970*	*670*	*720*	*920*	*820*	*890*	*1075*	*670*	*710*	*840*	*750*	*820*	*1125*
P3	—	—	—	190	215	255	185	200	250	220	240	290	175	185	225	200	215	310
	—	—	—	*620*	*710*	*840*	*610*	*660*	*820*	*720*	*790*	*950*	*570*	*610*	*740*	*660*	*710*	*1025*
P4	—	—	—	170	185	230	160	175	230	195	215	255	170	180	215	190	205	270
	—	—	—	*560*	*610*	*750*	*520*	*570*	*750*	*640*	*710*	*840*	*560*	*590*	*710*	*620*	*670*	*890*
P5	275	295	395	160	180	220	155	165	220	185	205	245	155	165	195	180	195	275
	900	*970*	*1300*	*520*	*590*	*720*	*510*	*540*	*720*	*610*	*670*	*800*	*510*	*540*	*640*	*590*	*640*	*900*
P6	305	330	440	180	200	250	175	190	245	210	230	275	175	185	220	205	220	305
	1000	*1075*	*1450*	*590*	*660*	*820*	*570*	*620*	*800*	*690*	*750*	*900*	*570*	*610*	*720*	*670*	*720*	*1000*
P7	290	310	415	170	190	235	165	175	230	200	215	260	165	175	210	190	210	290
	950	*1025*	*1350*	*560*	*620*	*770*	*540*	*570*	*750*	*660*	*710*	*850*	*540*	*570*	*690*	*620*	*690*	*950*
P8	275	295	375	160	180	215	155	165	210	185	200	245	150	155	190	165	180	260
	900	*970*	*1225*	*520*	*590*	*710*	*510*	*540*	*690*	*610*	*660*	*800*	*490*	*510*	*620*	*540*	*590*	*850*
P11	280	300	405	165	185	225	160	170	225	195	210	255	160	170	205	175	200	305
	920	*980*	*1325*	*540*	*610*	*740*	*520*	*560*	*740*	*640*	*690*	*840*	*520*	*560*	*670*	*570*	*660*	*1000*
P12	210	225	290	110	125	150	115	125	155	125	140	165	110	115	135	135	160	220
	690	*740*	*950*	*360*	*410*	*490*	*375*	*410*	*510*	*410*	*460*	*540*	*360*	*375*	*445*	*445*	*520*	*720*
M1	—	—	—	—	—	—	155	175	210	185	205	250	150	165	200	190	215	315
	—	—	—	—	—	—	*510*	*570*	*690*	*610*	*670*	*820*	*490*	*540*	*660*	*620*	*710*	*1025*
M2	—	—	—	—	—	—	130	145	175	155	170	205	125	135	170	165	190	290
	—	—	—	—	—	—	*425*	*475*	*570*	*510*	*560*	*670*	*410*	*445*	*560*	*540*	*620*	*950*
M3	—	—	—	—	—	—	105	120	145	125	140	165	100	110	135	150	175	245
	—	—	—	—	—	—	*345*	*395*	*475*	*410*	*460*	*540*	*330*	*360*	*445*	*490*	*570*	*800*
M4	—	—	—	—	—	—	85	95	110	95	105	130	80	85	105	120	140	200
	—	—	—	—	—	—	*280*	*310*	*360*	*310*	*345*	*425*	*260*	*280*	*345*	*395*	*460*	*660*
M5	—	—	—	—	—	—	70	75	95	80	90	110	65	70	90	100	115	165
	—	—	—	—	—	—	*230*	*245*	*310*	*260*	*295*	*360*	*215*	*230*	*295*	*330*	*375*	*540*
K1	360	390	510	235	260	315	165	185	225	—	—	—	145	165	195	—	—	—
	1175	*1275*	*1675*	*770*	*850*	*1025*	*540*	*610*	*740*	—	—	—	*475*	*540*	*640*	—	—	—
K2	330	355	475	210	230	285	150	165	200	—	—	—	130	145	180	—	—	—
	1075	*1175*	*1550*	*690*	*750*	*940*	*490*	*540*	*660*	—	—	—	*425*	*475*	*590*	—	—	—
K3	280	300	405	175	195	240	125	140	170	—	—	—	110	125	150	—	—	—
	920	*980*	*1325*	*570*	*640*	*790*	*410*	*460*	*560*	—	—	—	*360*	*410*	*490*	—	—	—
K4	265	285	385	170	185	230	120	130	165	—	—	—	105	115	145	—	—	—
	870	*940*	*1275*	*560*	*610*	*750*	*395*	*425*	*540*	—	—	—	*345*	*375*	*475*	—	—	—
K5	175	190	240	105	115	140	75	85	100	—	—	—	65	70	90	—	—	—
	570	*620*	*790*	*345*	*375*	*460*	*245*	*280*	*330*	—	—	—	*215*	*230*	*295*	—	—	—
K6	235	255	340	150	165	205	105	115	145	—	—	—	95	105	125	—	—	—
	770	*840*	*1125*	*490*	*540*	*670*	*345*	*375*	*475*	—	—	—	*310*	*345*	*410*	—	—	—
K7	225	245	305	135	150	180	95	105	125	—	—	—	85	90	110	—	—	—
	740	*800*	*1000*	*445*	*490*	*590*	*310*	*345*	*410*	—	—	—	*280*	*295*	*360*	—	—	—
S1	—	—	—	—	—	—	39	43	50	45	50	60	36	40	49	44	49	60
	—	—	—	—	—	—	*130*	*140*	*165*	*150*	*165*	*195*	*120*	*130*	*160*	*145*	*160*	*195*
S2	—	—	—	—	—	—	31	35	42	36	40	49	29	32	40	35	39	48
	—	—	—	—	—	—	*100*	*115*	*140*	*120*	*130*	*160*	*95*	*105*	*130*	*115*	*130*	*155*
S3	—	—	—	—	—	—	27	30	37	32	35	43	26	29	35	31	35	42
	—	—	—	—	—	—	*90*	*100*	*120*	*105*	*115*	*140*	*85*	*95*	*115*	*100*	*115*	*140*
S11	—	—	—	—	—	—	55	60	75	65	70	85	50	55	70	60	70	85
	—	—	—	—	—	—	*180*	*195*	*245*	*215*	*230*	*280*	*165*	*180*	*230*	*195*	*230*	*280*
S12	—	—	—	—	—	—	38	42	50	43	48	60	35	39	47	43	47	55
	—	—	—	—	—	—	*125*	*140*	*165*	*140*	*155*	*195*	*115*	*130*	*155*	*140*	*155*	*180*
S13	—	—	—	—	—	—	22	24	29	25	28	34	20	23	28	25	27	33
	—	—	—	—	—	—	*70*	*80*	*95*	*80*	*90*	*110*	*65*	*75*	*90*	*80*	*90*	*110*
H5	110	115	150	—	—	—	33	37	45	—	—	—	31	34	42	—	—	—
	360	*375*	*490*	—	—	—	*110*	*120*	*150*	—	—	—	*100*	*110*	*140*	—	—	—
H8	125	135	170	—	—	—	36	39	48	—	—	—	33	37	45	—	—	—
	410	*445*	*560*	—	—	—	*120*	*130*	*155*	—	—	—	*110*	*120*	*150*	—	—	—
H11	135	150	190	—	—	—	42	47	55	—	—	—	40	44	55	90	105	145
	445	*490*	*620*	—	—	—	*140*	*155*	*180*	—	—	—	*130*	*145*	*180*	*295*	*345*	*475*
H12	145	155	195	70	80	95	70	75	95	—	—	—	60	65	80	90	105	145
	475	*510*	*640*	*230*	*260*	*310*	*230*	*245*	*310*	—	—	—	*195*	*215*	*260*	*295*	*345*	*475*

R220.21-SP18MF-CA – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050			MP1501			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	245 *800*	275 *900*	335 *1100*	320 *1050*	345 *1125*	420 *1375*	350 *1150*	375 *1225*	450 *1475*	335 *1100*	360 *1175*	435 *1425*	365 *1200*	390 *1275*	455 *1500*
P2	240 *790*	265 *870*	320 *1050*	315 *1025*	335 *1100*	400 *1300*	340 *1125*	365 *1200*	430 *1400*	325 *1075*	350 *1150*	415 *1350*	350 *1150*	370 *1225*	440 *1450*
P3	205 *670*	230 *750*	280 *920*	280 *920*	295 *970*	350 *1150*	295 *970*	310 *1025*	380 *1250*	280 *920*	300 *980*	365 *1200*	305 *1000*	325 *1075*	385 *1275*
P4	185 *610*	205 *670*	250 *820*	245 *800*	260 *850*	315 *1025*	265 *870*	285 *940*	335 *1100*	255 *840*	275 *900*	320 *1050*	270 *890*	290 *950*	340 *1125*
P5	180 *590*	200 *660*	245 *800*	235 *770*	250 *820*	300 *980*	255 *840*	270 *890*	325 *1075*	245 *800*	260 *850*	315 *1025*	260 *850*	280 *920*	325 *1075*
P6	200 *660*	220 *720*	275 *900*	260 *850*	280 *920*	340 *1125*	285 *940*	305 *1000*	365 *1200*	275 *900*	295 *970*	355 *1175*	290 *950*	310 *1025*	365 *1200*
P7	190 *620*	210 *690*	255 *840*	250 *820*	265 *870*	320 *1050*	270 *890*	290 *950*	345 *1125*	260 *850*	275 *900*	335 *1100*	275 *900*	295 *970*	345 *1125*
P8	175 *570*	190 *620*	235 *770*	235 *770*	250 *820*	295 *970*	245 *800*	265 *870*	320 *1050*	235 *770*	250 *820*	305 *1000*	255 *840*	275 *900*	325 *1075*
P11	185 *610*	205 *670*	250 *820*	240 *790*	255 *840*	310 *1025*	265 *870*	280 *920*	335 *1100*	250 *820*	270 *890*	325 *1075*	270 *890*	285 *940*	335 *1100*
P12	120 *395*	135 *445*	165 *540*	160 *520*	175 *570*	205 *670*	175 *570*	185 *610*	220 *720*	165 *540*	180 *590*	210 *690*	175 *570*	185 *610*	215 *710*
M1	170 *560*	190 *620*	230 *750*	— —	— —	— —	175 *570*	195 *640*	235 *770*	190 *620*	210 *690*	255 *840*	185 *610*	205 *670*	250 *820*
M2	145 *475*	160 *520*	195 *640*	— —	— —	— —	145 *475*	160 *520*	200 *660*	160 *520*	175 *570*	215 *710*	155 *510*	170 *560*	205 *670*
M3	115 *375*	130 *425*	155 *510*	— —	— —	— —	120 *395*	130 *425*	160 *520*	130 *425*	145 *475*	175 *570*	125 *410*	140 *460*	165 *540*
M4	90 *295*	100 *330*	120 *395*	— —	— —	— —	90 *295*	100 *330*	125 *410*	100 *330*	110 *360*	135 *445*	95 *310*	105 *345*	130 *425*
M5	75 *245*	85 *280*	100 *330*	— —	— —	— —	75 *245*	85 *280*	105 *345*	85 *280*	90 *295*	115 *375*	80 *260*	90 *295*	110 *360*
K1	— —	— —	— —	315 *1025*	335 *1100*	400 *1300*	345 *1125*	365 *1200*	430 *1400*	210 *690*	235 *770*	280 *920*	350 *1150*	375 *1225*	445 *1450*
K2	— —	— —	— —	285 *940*	300 *980*	365 *1200*	310 *1025*	330 *1075*	395 *1300*	190 *620*	210 *690*	255 *840*	315 *1025*	335 *1100*	395 *1300*
K3	— —	— —	— —	240 *790*	255 *840*	310 *1025*	260 *850*	280 *920*	335 *1100*	160 *520*	175 *570*	215 *710*	265 *870*	285 *940*	335 *1100*
K4	— —	— —	— —	230 *750*	245 *800*	295 *970*	250 *820*	265 *870*	320 *1050*	150 *490*	170 *560*	205 *670*	255 *840*	270 *890*	320 *1050*
K5	— —	— —	— —	145 *475*	155 *510*	180 *590*	155 *510*	165 *540*	195 *640*	95 *310*	105 *345*	125 *410*	155 *510*	165 *540*	195 *640*
K6	— —	— —	— —	200 *660*	215 *710*	260 *850*	220 *720*	235 *770*	280 *920*	135 *445*	150 *490*	180 *590*	225 *740*	240 *790*	280 *920*
K7	— —	— —	— —	185 *610*	200 *660*	230 *750*	195 *640*	210 *690*	250 *820*	120 *395*	130 *425*	160 *520*	200 *660*	215 *710*	250 *820*
S1	44 *145*	49 *160*	60 *195*	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	65 *215*	45 *150*	50 *165*	60 *195*
S2	35 *115*	39 *130*	48 *155*	— —	— —	— —	— —	— —	— —	39 *130*	44 *145*	55 *180*	36 *120*	40 *130*	49 *160*
S3	31 *100*	35 *115*	42 *140*	— —	— —	— —	— —	— —	— —	35 *115*	39 *130*	47 *155*	32 *105*	35 *115*	43 *140*
S11	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	90 *295*	65 *215*	70 *230*	85 *280*
S12	43 *140*	47 *155*	55 *180*	— —	— —	— —	— —	— —	— —	47 *155*	50 *165*	65 *215*	43 *140*	48 *155*	60 *195*
S13	25 *80*	27 *90*	33 *110*	— —	— —	— —	— —	— —	— —	27 *90*	30 *100*	37 *120*	25 *80*	28 *90*	34 *110*
H5	— —	— —	— —	42 *140*	47 *155*	55 *180*	— —	— —	— —	40 *130*	45 *150*	55 *180*	40 *130*	44 *145*	55 *180*
H8	— —	— —	— —	45 *150*	50 *165*	60 *195*	— —	— —	— —	43 *140*	48 *155*	60 *195*	43 *140*	48 *155*	60 *195*
H11	46 *150*	50 *165*	60 *195*	55 *180*	60 *195*	75 *245*	— —	— —	— —	50 *165*	55 *180*	70 *230*	50 *165*	55 *180*	70 *230*
H12	75 *245*	85 *280*	105 *345*	80 *260*	90 *295*	110 *360*	— —	— —	— —	85 *280*	95 *310*	115 *375*	75 *245*	85 *280*	105 *345*

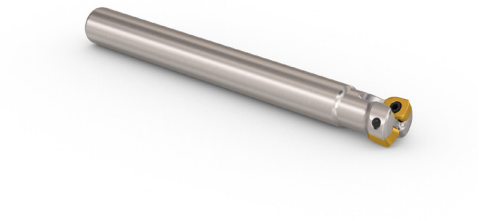


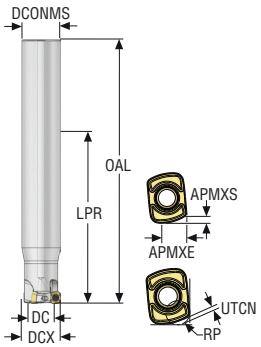
R217/220.21 HIGH FEED 2

High Feed 2 per inserti LP05/06/09, 2 taglienti, inserti positivi monolaterali.
Gli inserti sono dotati di geometrie moderne che garantiscono le forze di taglio più basse possibili in tutti i materiali. Queste forze ridotte garantiscono una maggiore durata dell'utensile.

- Gamma di frese 12-100 mm (4-5")
- Profondità di taglio massime per tipo di inserto: LP05/0,65 mm, LP06/0,8 mm, LP09/1,8 mm
- Prima scelta per materiali ISO M e S in macchine di piccole e medie dimensioni
- Eccellente soluzione per penetrazione assiale

R217.21-LP05 – In mm

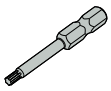




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 588-590
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.21-1012.0-LP05.2A	02952509	Cilindrico	5,4	12,0	2	0,65	3,5	10,0	1,5	0,32	60,0	60,0	100,0	3,9	45000	0,1	LP..05T210
R217.21-1214.0-LP05.2A	02881032	Cilindrico	7,4	14,0	2	0,65	3,5	12,0	1,5	0,32	75,0	75,0	120,0	3,5	42000	0,1	LP..05T210
R217.21-1416.0-LP05.2A	02881033	Cilindrico	9,4	16,0	2	0,65	3,5	14,0	1,5	0,32	105,0	105,0	150,0	3,0	39000	0,3	LP..05T210
R217.21-1618.0-LP05.3A	02881034	Cilindrico	11,4	18,0	3	0,65	3,5	16,0	1,5	0,32	112,0	112,0	160,0	2,2	37000	0,3	LP..05T210
R217.21-1820.0-LP05.3A	02881035	Cilindrico	13,4	20,0	3	0,65	3,5	18,0	1,5	0,32	110,0	112,0	160,0	1,9	35000	0,4	LP..05T210

Parti di ricambio, comprese nella fornitura

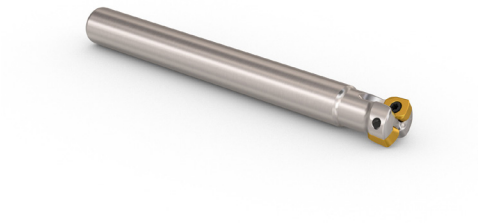
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-1012	1/4HEX-T06PX50	C02005-T06P
R217.21-1214-1820	1/4HEX-T06PX50	C02053-T06P

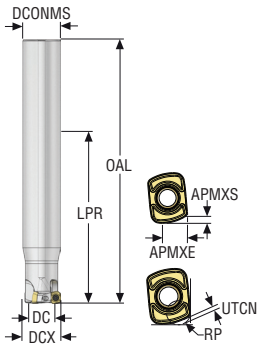
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LP05 – Pollici

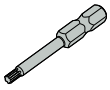




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 588-590
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R217.21-0.500.0-LP05.2A	02881043	Cilindrico	0.240	0.500	2	0.026	0.138	0.500	0.059	0.013	0.609	3.228	5.000	5,4	45000	0.440	LP..05T210
R217.21-0.625.0-LP05.2A	02881044	Cilindrico	0.362	0.625	2	0.026	0.138	0.625	0.059	0.013	0.979	4.016	6.000	3,0	39000	0.440	LP..05T210

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-0.500	1/4HEX-T06PX50	C02005-T06P
R217.21-0.625-0.750	1/4HEX-T06PX50	C02053-T06P

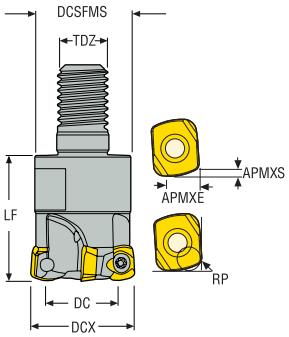
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-0.500	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05
R217.21-0.625-0.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LP05 – In mm



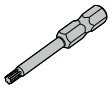


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 588-590
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCSFMS	TDZ	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm	mm			kg	
R217.21-0612.RE-LP05.2A	02952506	Combimaster	5,4	12,0	2	0,65	3,5	11,0	M6	18,0	1,5	0,32	31,5	3,9	45000	0,1	LP..05T210
R217.21-0812.RE-LP05.2A	02952507	Combimaster	5,4	12,0	2	0,65	3,5	13,5	M8	20,0	1,5	0,32	37,75	3,9	45000	0,1	LP..05T210
R217.21-0614.RE-LP05.2A	02881029	Combimaster	7,4	14,0	2	0,65	3,5	11,0	M6	18,0	1,5	0,32	31,5	3,5	42000	0,1	LP..05T210
R217.21-0814.RE-LP05.2A	02952508	Combimaster	7,4	14,0	2	0,65	3,5	13,5	M8	20,0	1,5	0,32	37,75	3,5	42000	0,1	LP..05T210
R217.21-0816.RE-LP05.3A	02881030	Combimaster	9,4	16,0	3	0,65	3,5	13,5	M8	20,0	1,5	0,32	37,75	3,0	39000	0,1	LP..05T210
R217.21-1020.RE-LP05.4A	02881031	Combimaster	13,4	20,0	4	0,65	3,5	18,5	M10	23,0	1,5	0,32	41,75	1,9	35000	0,1	LP..05T210

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-.. Ø12	1/4HEX-T06PX50	C02005-T06P
R217.21-.. Ø14-20	1/4HEX-T06PX50	C02053-T06P

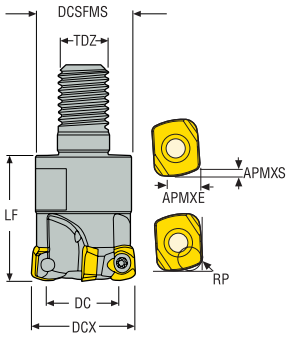
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LP05 – Pollici



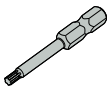


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 588-590
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCSFMS	TDZ	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch		inch	inch	inch	inch			lb	
R217.21-0.50006RELP05.2A	02881039	Combimaster	0.240	0.500	2	0.026	0.138	0.433	M6	0.709	0.059	0.013	1.240	3,9	45000	0.220	LP..05T210
R217.21-0.62508RELP05.3A	02881040	Combimaster	0.362	0.625	3	0.026	0.138	0.531	M8	0.787	0.059	0.013	1.486	3,0	39000	0.220	LP..05T210

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-0.500-00.625	1/4HEX-T06PX50	C02005-T06P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LP05 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	LPHT05T210TR-ME04 MP3501	0,60 *0.024*	0,44 0.017	0,44 0.017	0,55 0.022
P2	LPHT05T210TR-ME04 MP3501	0,60 *0.024*	0,44 0.017	0,44 0.017	0,55 0.022
P3	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,55 0.022	0,55 0.022	0,65 0.026
P4	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
P5	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
P6	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,60 0.024
P7	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,60 0.024
P8	LPKT05T210TR-M05 MP2501	0,60 *0.024*	0,55 0.022	0,55 0.022	0,65 0.026
P11	LPHT05T210TR-ME04 MP3501	0,60 *0.024*	0,40 0.016	0,40 0.016	0,48 0.020
P12	LPKT05T210TR-M05 MP2501	0,46 *0.018*	0,40 0.016	0,40 0.016	0,48 0.019
M1	LPHT05T210TR-ME04 MS2050	0,60 *0.024*	0,44 0.017	0,44 0.017	0,55 0.022
M2	LPHT05T210TR-ME04 MS2050	0,60 *0.024*	0,40 0.016	0,40 0.016	0,50 0.020
M3	LPHT05T210TR-ME04 MS2050	0,46 *0.018*	0,38 0.015	0,38 0.015	0,46 0.018
M4	LPHT05T210TR-ME04 MP3501	0,36 *0.014*	0,34 0.013	0,34 0.013	0,42 0.017
M5	LPHT05T210TR-ME04 MP3501	0,36 *0.014*	0,34 0.013	0,34 0.013	0,42 0.017
K1	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,55 0.022	0,55 0.022	0,70 0.028
K2	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
K3	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
K4	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
K5	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,46 0.018	0,46 0.018	0,55 0.022
K6	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,50 0.020	0,50 0.020	0,65 0.026
K7	LPKW05T210TR-MD05 MP2501	0,60 *0.024*	0,46 0.018	0,46 0.018	0,55 0.022
S1	LPHT05T210TR-ME04 MP3501	0,36 *0.014*	0,34 0.013	0,34 0.013	0,42 0.017
S2	LPHT05T210TR-ME04 MP3501	0,36 *0.014*	0,34 0.013	0,34 0.013	0,42 0.017
S3	LPHT05T210TR-ME04 MP3501	0,36 *0.014*	0,32 0.013	0,32 0.013	0,38 0.015
S11	LPHT05T210TR-ME04 MS2050	0,40 *0.016*	0,40 0.016	0,40 0.016	0,48 0.019
S12	LPHT05T210TR-ME04 MS2050	0,40 *0.016*	0,40 0.016	0,40 0.016	0,48 0.019
S13	LPHT05T210TR-ME04 MS2050	0,36 *0.014*	0,34 0.013	0,34 0.013	0,42 0.017
H5	LPKW05T210TR-MD05 MH1051	0,36 *0.014*	0,36 0.014	0,36 0.014	0,44 0.017
H8	LPKW05T210TR-MD05 MH1051	0,32 *0.013*	0,28 0.011	0,28 0.011	0,34 0.013
H11	LPKW05T210TR-MD05 MP3000	0,36 *0.014*	0,36 0.014	0,36 0.014	0,44 0.017
H12	LPKW05T210TR-MD05 MP3000	0,32 *0.013*	0,28 0.011	0,28 0.011	0,34 0.013

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.21-LP05 – Parametri di taglio v_c = (m/min)/(sf/min)

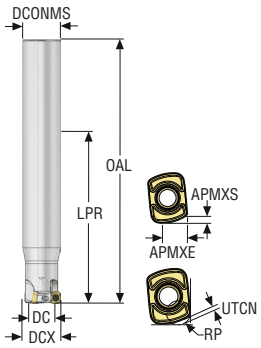
SMG	MH1051			MP3000			MS2050			F40M			MP2051		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	325	380	445	340	390	450	295	330	375	400	470	550
	—	—	—	*1075*	*1250*	*1450*	*1125*	*1275*	*1475*	*970*	*1075*	*1225*	*1300*	*1550*	*1800*
P2	—	—	—	315	370	430	330	380	435	290	325	365	390	460	540
	—	—	—	*1025*	*1225*	*1400*	*1075*	*1250*	*1425*	*950*	*1075*	*1200*	*1275*	*1500*	*1775*
P3	—	—	—	275	320	380	290	330	385	250	280	320	335	395	475
	—	—	—	*900*	*1050*	*1250*	*950*	*1075*	*1275*	*820*	*920*	*1050*	*1100*	*1300*	*1550*
P4	—	—	—	250	290	335	255	290	340	230	260	295	310	360	420
	—	—	—	*820*	*950*	*1100*	*840*	*950*	*1125*	*750*	*850*	*970*	*1025*	*1175*	*1375*
P5	445	520	610	235	275	320	245	280	320	215	240	270	295	345	400
	1450	*1700*	*2000*	*770*	*900*	*1050*	*800*	*920*	*1050*	*710*	*790*	*890*	*970*	*1125*	*1300*
P6	500	590	700	265	310	365	275	315	360	240	270	310	330	390	455
	1650	*1925*	*2300*	*870*	*1025*	*1200*	*900*	*1025*	*1175*	*790*	*890*	*1025*	*1075*	*1275*	*1500*
P7	470	550	660	250	295	345	260	300	340	230	255	290	315	365	430
	1550	*1800*	*2175*	*820*	*970*	*1125*	*850*	*980*	*1125*	*750*	*840*	*950*	*1025*	*1200*	*1400*
P8	425	500	610	230	270	320	240	280	320	210	235	270	280	330	400
	1400	*1650*	*2000*	*750*	*890*	*1050*	*790*	*920*	*1050*	*690*	*770*	*890*	*920*	*1075*	*1300*
P11	455	540	650	245	285	335	250	290	330	220	250	280	280	370	480
	1500	*1775*	*2125*	*800*	*940*	*1100*	*820*	*950*	*1075*	*720*	*820*	*920*	*920*	*1225*	*1575*
P12	305	360	420	160	185	210	160	185	210	145	160	180	185	240	295
	1000	*1175*	*1375*	*520*	*610*	*690*	*520*	*610*	*690*	*475*	*520*	*590*	*610*	*790*	*970*
M1	—	—	—	210	250	290	240	280	330	200	235	275	320	420	530
	—	—	—	*690*	*820*	*950*	*790*	*920*	*1075*	*660*	*770*	*900*	*1050*	*1375*	*1750*
M2	—	—	—	175	210	240	195	235	270	165	195	225	270	350	445
	—	—	—	*570*	*690*	*790*	*640*	*770*	*890*	*540*	*640*	*740*	*890*	*1150*	*1450*
M3	—	—	—	140	165	195	160	185	215	130	155	185	220	285	360
	—	—	—	*460*	*540*	*640*	*520*	*610*	*710*	*425*	*510*	*610*	*720*	*940*	*1175*
M4	—	—	—	110	130	150	120	140	165	100	120	140	170	220	270
	—	—	—	*360*	*425*	*490*	*395*	*460*	*540*	*330*	*395*	*460*	*560*	*720*	*890*
M5	—	—	—	90	105	125	100	120	140	85	100	115	140	180	225
	—	—	—	*295*	*345*	*410*	*330*	*395*	*460*	*280*	*330*	*375*	*460*	*590*	*740*
K1	590	700	830	225	265	310	—	—	—	195	230	270	—	—	—
	1925	*2300*	*2725*	*740*	*870*	*1025*	—	—	—	*640*	*750*	*890*	—	—	—
K2	540	630	740	200	235	275	—	—	—	170	205	235	—	—	—
	1775	*2075*	*2425*	*660*	*770*	*900*	—	—	—	*560*	*670*	*770*	—	—	—
K3	455	530	620	170	200	230	—	—	—	145	175	200	—	—	—
	1500	*1750*	*2025*	*560*	*660*	*750*	—	—	—	*475*	*570*	*660*	—	—	—
K4	435	510	600	160	190	220	—	—	—	140	165	190	—	—	—
	1425	*1675*	*1975*	*520*	*620*	*720*	—	—	—	*460*	*540*	*620*	—	—	—
K5	265	315	375	100	115	135	—	—	—	85	100	120	—	—	—
	870	*1025*	*1225*	*330*	*375*	*445*	—	—	—	*280*	*330*	*395*	—	—	—
K6	380	450	520	140	170	195	—	—	—	125	145	170	—	—	—
	1250	*1475*	*1700*	*460*	*560*	*640*	—	—	—	*410*	*475*	*560*	—	—	—
K7	340	400	480	125	150	175	—	—	—	110	130	150	—	—	—
	1125	*1300*	*1575*	*410*	*490*	*570*	—	—	—	*360*	*425*	*490*	—	—	—
S1	—	—	—	50	60	70	55	65	80	48	55	65	60	65	80
	—	—	—	*165*	*195*	*230*	*180*	*215*	*260*	*155*	*180*	*215*	*195*	*215*	*260*
S2	—	—	—	41	48	55	46	55	65	39	45	55	46	55	65
	—	—	—	*135*	*155*	*180*	*150*	*180*	*215*	*130*	*150*	*180*	*150*	*180*	*215*
S3	—	—	—	36	42	50	40	47	55	34	39	46	40	47	55
	—	—	—	*120*	*140*	*165*	*130*	*155*	*180*	*110*	*130*	*150*	*130*	*155*	*180*
S11	—	—	—	70	85	100	80	95	110	65	80	90	80	95	110
	—	—	—	*230*	*280*	*330*	*260*	*310*	*360*	*215*	*260*	*295*	*260*	*310*	*360*
S12	—	—	—	49	60	70	55	65	75	46	55	65	55	65	75
	—	—	—	*160*	*195*	*230*	*180*	*215*	*245*	*150*	*180*	*215*	*180*	*215*	*245*
S13	—	—	—	29	34	39	32	37	44	27	31	37	32	38	44
	—	—	—	*95*	*110*	*130*	*105*	*120*	*145*	*90*	*100*	*120*	*105*	*125*	*145*
H5	165	190	225	45	50	60	—	—	—	41	48	55	—	—	—
	540	*620*	*740*	*150*	*165*	*195*	—	—	—	*135*	*155*	*180*	—	—	—
H8	180	205	230	48	55	65	—	—	—	45	50	60	—	—	—
	590	*670*	*750*	*155*	*180*	*215*	—	—	—	*150*	*165*	*195*	—	—	—
H11	210	245	285	55	65	80	—	—	—	55	60	75	120	155	185
	690	*800*	*940*	*180*	*215*	*260*	—	—	—	*180*	*195*	*245*	*395*	*510*	*610*
H12	205	235	270	90	105	125	—	—	—	80	95	110	105	135	160
	670	*770*	*890*	*295*	*345*	*410*	—	—	—	*260*	*310*	*360*	*345*	*445*	*520*

R217.21-LP05 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	325 *1075*	385 *1275*	450 *1475*	470 *1550*	530 *1750*	600 *1975*	450 *1475*	510 *1675*	580 *1900*	460 *1500*	520 *1700*	580 *1900*
P2	320 *1050*	375 *1225*	440 *1450*	460 *1500*	520 *1700*	580 *1900*	440 *1450*	500 *1650*	560 *1825*	450 *1475*	510 *1675*	570 *1875*
P3	275 *900*	325 *1075*	385 *1275*	395 *1300*	445 *1450*	510 *1675*	375 *1225*	430 *1400*	490 *1600*	390 *1275*	440 *1450*	495 *1625*
P4	245 *800*	290 *950*	340 *1125*	355 *1175*	400 *1300*	445 *1450*	340 *1125*	385 *1275*	430 *1400*	345 *1125*	385 *1275*	435 *1425*
P5	235 *770*	280 *920*	325 *1075*	340 *1125*	385 *1275*	425 *1400*	325 *1075*	370 *1225*	410 *1350*	330 *1075*	375 *1225*	415 *1350*
P6	265 *870*	315 *1025*	370 *1225*	380 *1250*	430 *1400*	485 *1600*	365 *1200*	415 *1350*	470 *1550*	370 *1225*	420 *1375*	465 *1525*
P7	250 *820*	295 *970*	350 *1150*	360 *1175*	405 *1325*	460 *1500*	345 *1125*	390 *1275*	440 *1450*	350 *1150*	395 *1300*	440 *1450*
P8	230 *750*	270 *890*	325 *1075*	330 *1075*	375 *1225*	425 *1400*	315 *1025*	360 *1175*	410 *1350*	330 *1075*	370 *1225*	415 *1350*
P11	240 *790*	285 *940*	340 *1125*	350 *1150*	395 *1300*	445 *1450*	335 *1100*	380 *1250*	430 *1400*	340 *1125*	385 *1275*	425 *1400*
P12	155 *510*	185 *610*	215 *710*	220 *720*	245 *800*	275 *900*	210 *690*	240 *790*	265 *870*	210 *690*	235 *770*	260 *850*
M1	230 *750*	270 *890*	315 *1025*	235 *770*	275 *900*	320 *1050*	255 *840*	300 *980*	350 *1150*	240 *790*	280 *920*	330 *1075*
M2	190 *620*	225 *740*	260 *850*	195 *640*	230 *750*	265 *870*	210 *690*	250 *820*	285 *940*	195 *640*	235 *770*	270 *890*
M3	150 *490*	180 *590*	210 *690*	155 *510*	185 *610*	215 *710*	170 *560*	200 *660*	235 *770*	160 *520*	185 *610*	215 *710*
M4	120 *395*	135 *445*	160 *520*	120 *395*	140 *460*	165 *540*	130 *425*	155 *510*	180 *590*	120 *395*	140 *460*	165 *540*
M5	100 *330*	115 *375*	135 *445*	100 *330*	115 *375*	140 *460*	110 *360*	125 *410*	150 *490*	100 *330*	120 *395*	140 *460*
K1	— —	— —	— —	465 *1525*	520 *1700*	580 *1900*	280 *920*	330 *1075*	385 *1275*	455 *1500*	510 *1675*	570 *1875*
K2	— —	— —	— —	410 *1350*	465 *1525*	510 *1675*	250 *820*	295 *970*	340 *1125*	400 *1300*	450 *1475*	500 *1650*
K3	— —	— —	— —	345 *1125*	390 *1275*	435 *1425*	210 *690*	250 *820*	290 *950*	340 *1125*	380 *1250*	425 *1400*
K4	— —	— —	— —	330 *1075*	375 *1225*	415 *1350*	200 *660*	240 *790*	275 *900*	325 *1075*	365 *1200*	405 *1325*
K5	— —	— —	— —	200 *660*	225 *740*	255 *840*	120 *395*	145 *475*	170 *560*	195 *640*	220 *720*	245 *800*
K6	— —	— —	— —	290 *950*	330 *1075*	365 *1200*	175 *570*	210 *690*	240 *790*	285 *940*	320 *1050*	355 *1175*
K7	— —	— —	— —	255 *840*	290 *950*	325 *1075*	155 *510*	185 *610*	220 *720*	250 *820*	280 *920*	315 *1025*
S1	60 *195*	65 *215*	80 *260*	— —	— —	— —	65 *215*	75 *245*	85 *280*	55 *180*	65 *215*	80 *260*
S2	46 *150*	55 *180*	65 *215*	— —	— —	— —	50 *165*	60 *195*	70 *230*	46 *150*	55 *180*	65 *215*
S3	40 *130*	47 *155*	55 *180*	— —	— —	— —	45 *150*	50 *165*	60 *195*	40 *130*	47 *155*	55 *180*
S11	80 *260*	95 *310*	110 *360*	— —	— —	— —	90 *295*	105 *345*	125 *410*	80 *260*	95 *310*	110 *360*
S12	55 *180*	65 *215*	75 *245*	— —	— —	— —	60 *195*	70 *230*	85 *280*	55 *180*	65 *215*	75 *245*
S13	32 *105*	38 *125*	44 *145*	— —	— —	— —	36 *120*	42 *140*	49 *160*	32 *105*	37 *120*	44 *145*
H5	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	50 *165*	60 *195*	70 *230*
H8	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	80 *260*	55 *180*	65 *215*	75 *245*
H11	60 *195*	70 *230*	85 *280*	— —	— —	— —	70 *230*	80 *260*	95 *310*	65 *215*	75 *245*	90 *295*
H12	105 *345*	120 *395*	140 *460*	— —	— —	— —	115 *375*	135 *445*	155 *510*	100 *330*	115 *375*	135 *445*

R217.21-LP06 – In mm

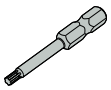




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 595-597
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.21-1416.0-LP06.2A	02789713	Cilindrico	7,5	16,0	2	0,8	4,5	14,0	1,8	0,45	102,0	102,0	150,0	5,0	39000	0,3	LP..060310
R217.21-1618.0-LP06.2A	02789715	Cilindrico	9,5	18,0	2	0,8	4,5	16,0	1,8	0,45	112,0	112,0	160,0	3,5	37000	0,3	LP..060310
R217.21-1820.0-LP06.2A	02789717	Cilindrico	11,6	20,0	2	0,8	4,5	18,0	1,8	0,45	110,0	110,0	160,0	3,0	35000	0,4	LP..060310
R217.21-2525.0-LP06.3A	02789720	Cilindrico	16,5	25,0	3	0,8	4,5	25,0	1,8	0,45	40,0	124,0	180,0	2,0	30000	0,7	LP..060310
R217.21-2527.0-LP06.3A	02789722	Cilindrico	18,5	27,0	3	0,8	4,5	25,0	1,8	0,45	194,0	194,0	250,0	1,5	30000	0,9	LP..060310
R217.21-3232.0-LP06.4A	02789725	Cilindrico	23,5	32,0	4	0,8	4,5	32,0	1,8	0,45	40,0	140,0	200,0	1,5	27000	1,3	LP..060310
R217.21-3235.0-LP06.4A	02789729	Cilindrico	26,5	35,0	4	0,8	4,5	32,0	1,8	0,45	190,0	190,0	250,0	1,2	26000	1,5	LP..060310

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-1416-1820	1/4HEX-T08PX50	C02555-T08P
R217.21-2525-3235	1/4HEX-T08PX50	C02506-T08P

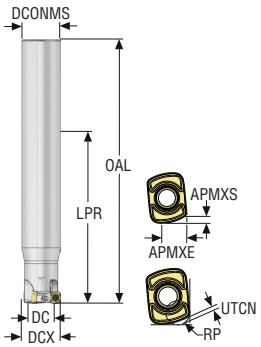
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LP06 – Pollici

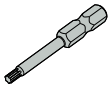




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 595-597
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R217.21-00.625.0-LP06.2A	02789777	Cilindrico	0.290	0.625	2	0.030	0.177	0.625	0.071	0.018	4.016	4.000	6.000	5,0	39000	0.660	LP..060310
R217.21-0.75.0-LP06.2A	02789778	Cilindrico	0.410	0.750	2	0.030	0.177	0.750	0.071	0.018	4.331	4.400	6.500	3,0	35000	0.660	LP..060310
R217.21-1.25.0-LP06.4A	02789785	Cilindrico	0.659	1.250	4	0.030	0.177	1.250	0.071	0.018	5.512	5.500	8.000	1,5	27000	2.650	LP..060310
R217.21-1.00.0-LP06.3A	02789782	Cilindrico	0.660	1.000	3	0.030	0.177	1.000	0.071	0.018	5.217	4.800	7.000	2,0	30000	1.540	LP..060310

Parti di ricambio, comprese nella fornitura

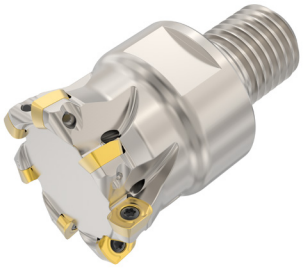
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-0.625-0.750	1/4HEX-T08PX50	C02555-T08P
R217.21-1.00-1.50	1/4HEX-T08PX50	C02506-T08P

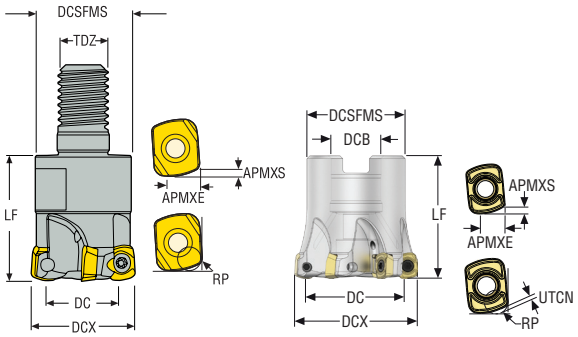
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP06 – In mm



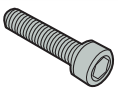
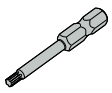


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 595–597
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0035-LP06.6A	02789734	Manicotto	26,5	35,0	6	0,8	4,5	16,0	32,0	–	16,0	35,0	1,8	0,45	–	1,29	26000	0,2	LP..060310
R220.21-0040-LP06.6A	02892228	Manicotto	31,5	40,0	6	0,8	4,5	16,0	32,0	–	16,0	40,0	1,8	0,45	–	0,9	24000	0,3	LP..060310
R217.21-0816.RE-LP06.2A	02789697	Combimaster	7,5	16,0	2	0,8	4,5	–	13,5	M8	–	20,0	1,8	0,45	37,75	5,0	39000	0,1	LP..060310
R217.21-1020.RE-LP06.2A	02789700	Combimaster	11,5	20,0	2	0,8	4,5	–	18,5	M10	–	28,0	1,8	0,45	46,75	3,0	35000	0,1	LP..060310
R217.21-1020.RE-LP06.3A	02789701	Combimaster	11,5	20,0	3	0,8	4,5	–	18,5	M10	–	28,0	1,8	0,45	46,75	3,0	35000	0,1	LP..060310
R217.21-1225.RE-LP06.3A	02789702	Combimaster	16,5	25,0	3	0,8	4,5	–	23,0	M12	–	30,0	1,8	0,45	51,75	2,0	30000	0,2	LP..060310
R217.21-1225.RE-LP06.4A	02789705	Combimaster	16,5	25,0	4	0,8	4,5	–	23,0	M12	–	30,0	1,8	0,45	51,75	2,0	30000	0,2	LP..060310
R217.21-1632.RE-LP06.5A	02789708	Combimaster	23,5	32,0	5	0,8	4,5	–	30,0	M16	–	35,0	1,8	0,45	57,75	1,5	27000	0,3	LP..060310
R217.21-1635.RE-LP06.5A	02789711	Combimaster	26,5	35,0	5	0,8	4,5	–	30,0	M16	–	35,0	1,8	0,45	57,75	1,5	26000	0,3	LP..060310
R217.21-2040.RE-LP06.7A	02928084	Combimaster	31,5	40,0	7	0,8	4,5	–	36,5	M20	–	40,0	1,8	0,45	67,0	0,9	24000	0,4	LP..060310

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

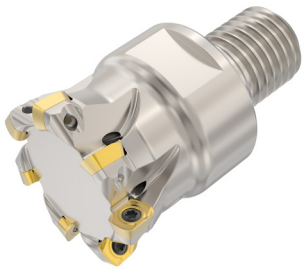
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-0816-1020	–	1/4HEX-T08PX50	C02555-T08P
R217.21-1225-2040	–	1/4HEX-T08PX50	C02506-T08P
R220.21-..	220.17-689	1/4HEX-T08PX50	C02506-T08P

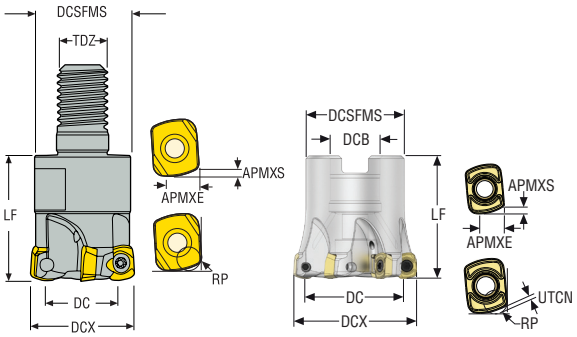
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP06 – Pollici



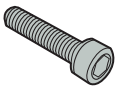
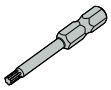


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 595-597
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch		inch	inch	inch	inch	inch			lb	
R220.21-1.50-LP06-6A	02892229	Manicotto	1.165	1.500	6	0.031	0.177	0.500	1.260	–	0.500	1.500	0.071	0.018	–	1,0	25000	0.440	LP..060310
R217.21-0.62508RELP06.2A	02789772	Combimaster	0.290	0.625	2	0.031	0.177	–	0.531	M8	–	0.787	0.071	0.018	1.486	5,0	39000	0.040	LP..060310
R217.21-0.7510RELP06.3A	02789773	Combimaster	0.409	0.750	3	0.031	0.177	–	0.728	M10	–	1.102	0.071	0.018	1.841	3,0	35000	0.220	LP..060310
R217.21-1.0012RELP06.3A	02789774	Combimaster	0.660	1.000	3	0.031	0.177	–	0.906	M12	–	1.181	0.071	0.018	2.037	2,0	30000	0.440	LP..060310
R217.21-1.0012RELP06.4A	02789775	Combimaster	0.660	1.000	4	0.031	0.177	–	0.906	M12	–	1.181	0.071	0.018	2.037	2,0	30000	0.440	LP..060310
R217.21-1.2516RELP06.5A	02789776	Combimaster	0.909	1.250	5	0.031	0.177	–	1.181	M16	–	1.378	0.071	0.018	2.274	1,2	27000	0.660	LP..060310
R217.21-01.50-20RE-LP06.7A	02928069	Combimaster	1.181	1.500	7	0.031	0.177	–	1.437	M20	–	1.575	0.071	0.018	2.638	0,9	24000	0.880	LP..060310

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-0.625-0.750	–	1/4HEX-T08PX50	C02555-T08P
R217.21-1.00-1.50	–	1/4HEX-T08PX50	C02506-T08P
R220.21-..	UC6S1/4UNFX1	1/4HEX-T08PX50	C02506-T08P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	LPHT060310TR-M06 MP3501	0,70 *0.028*	0,70 0.028	0,70 0.028	0,85 0.034
P2	LPHT060310TR-M06 MP3501	0,70 *0.028*	0,70 0.028	0,70 0.028	0,85 0.034
P3	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
P4	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
P5	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
P6	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,75 0.030
P7	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,75 0.030
P8	LPHT060310TR-M06 MP2501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
P11	LPHT060310TR-M06 MP3501	0,70 *0.028*	0,65 0.026	0,65 0.026	0,75 0.030
P12	LPHT060310TR-M06 MP2501	0,60 *0.024*	0,46 0.018	0,46 0.018	0,55 0.022
M1	LPHT060310TR-ME05 MS2050	0,70 *0.028*	0,60 0.024	0,60 0.024	0,70 0.028
M2	LPHT060310TR-ME05 MS2050	0,70 *0.028*	0,55 0.022	0,55 0.022	0,65 0.026
M3	LPHT060310TR-ME05 MS2050	0,60 *0.024*	0,44 0.017	0,44 0.017	0,55 0.022
M4	LPHT060310TR-M06 MP3501	0,44 *0.017*	0,50 0.020	0,50 0.020	0,60 0.024
M5	LPHT060310TR-M06 MP3501	0,44 *0.017*	0,50 0.020	0,50 0.020	0,60 0.024
K1	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,70 0.028	0,70 0.028	0,85 0.034
K2	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
K3	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
K4	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
K5	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,55 0.022	0,55 0.022	0,70 0.028
K6	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,65 0.026	0,65 0.026	0,80 0.032
K7	LPHW060310TR-D06 MP3000	0,70 *0.028*	0,55 0.022	0,55 0.022	0,70 0.028
N1	LPHT060310ER-E05 H25	0,70 *0.028*	0,75 0.030	0,75 0.030	0,90 0.036
N2	LPHT060310ER-E05 H25	0,70 *0.028*	0,75 0.030	0,75 0.030	0,90 0.036
N3	LPHT060310ER-E05 H25	0,70 *0.028*	0,75 0.030	0,75 0.030	0,90 0.036
N11	LPHT060310ER-E05 H25	0,70 *0.028*	0,75 0.030	0,75 0.030	0,90 0.036
S1	LPHT060310TR-M06 MP3501	0,44 *0.017*	0,50 0.020	0,50 0.020	0,60 0.024
S2	LPHT060310TR-M06 MP3501	0,44 *0.017*	0,50 0.020	0,50 0.020	0,60 0.024
S3	LPHT060310TR-M06 MP3501	0,44 *0.017*	0,48 0.019	0,48 0.019	0,60 0.024
S11	LPHT060310TR-ME05 MS2050	0,50 *0.020*	0,50 0.020	0,50 0.020	0,60 0.024
S12	LPHT060310TR-ME05 MS2050	0,50 *0.020*	0,50 0.020	0,50 0.020	0,60 0.024
S13	LPHT060310TR-ME05 MS2050	0,44 *0.017*	0,44 0.017	0,44 0.017	0,50 0.020
H5	LPHW060310TR-D06 MH1051	0,44 *0.017*	0,44 0.017	0,44 0.017	0,50 0.020
H8	LPHW060310TR-D06 MH1051	0,40 *0.016*	0,34 0.013	0,34 0.013	0,40 0.016
H11	LPHW060310TR-D06 MP3000	0,44 *0.017*	0,44 0.017	0,44 0.017	0,50 0.020
H12	LPHW060310TR-D06 MP3000	0,40 *0.016*	0,34 0.013	0,34 0.013	0,40 0.016

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-LP06 – Parametri di taglio v_c = (m/min)/(sf/min)

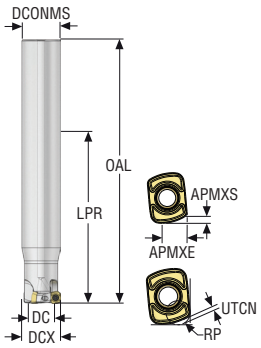
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	295	335	405	350	395	470	270	305	365	260	285	335	335	385	485	295	335	405
	—	—	—	*970*	*1100*	*1325*	*1150*	*1300*	*1550*	*890*	*1000*	*1200*	*850*	*940*	*1100*	*1100*	*1275*	*1600*	*970*	*1100*	*1325*
P2	—	—	—	285	330	395	330	375	450	265	295	355	255	275	325	325	375	475	285	325	395
	—	—	—	*940*	*1075*	*1300*	*1075*	*1225*	*1475*	*870*	*970*	*1175*	*840*	*900*	*1075*	*1075*	*1225*	*1550*	*940*	*1075*	*1300*
P3	—	—	—	250	290	345	295	330	395	235	260	310	225	245	285	295	335	420	250	285	345
	—	—	—	*820*	*950*	*1125*	*970*	*1075*	*1300*	*770*	*850*	*1025*	*740*	*800*	*940*	*970*	*1100*	*1375*	*820*	*940*	*1125*
P4	—	—	—	220	255	305	260	290	350	205	230	275	200	225	265	260	295	370	220	255	305
	—	—	—	*720*	*840*	*1000*	*850*	*950*	*1150*	*670*	*750*	*900*	*660*	*740*	*870*	*850*	*970*	*1225*	*720*	*840*	*1000*
P5	380	430	530	210	240	290	245	280	340	195	220	260	190	205	240	250	280	350	210	240	290
	1250	*1400*	*1750*	*690*	*790*	*950*	*800*	*920*	*1125*	*640*	*720*	*850*	*620*	*670*	*790*	*820*	*920*	*1150*	*690*	*790*	*950*
P6	425	485	600	235	270	325	285	325	380	220	245	295	215	230	270	280	315	395	235	270	325
	1400	*1600*	*1975*	*770*	*890*	*1075*	*940*	*1075*	*1250*	*720*	*800*	*970*	*710*	*750*	*890*	*920*	*1025*	*1300*	*770*	*890*	*1075*
P7	400	455	560	225	255	305	270	305	360	210	235	275	200	220	255	260	300	375	225	255	305
	1300	*1500*	*1825*	*740*	*840*	*1000*	*890*	*1000*	*1175*	*690*	*770*	*900*	*660*	*720*	*840*	*850*	*980*	*1225*	*740*	*840*	*1000*
P8	380	430	530	210	240	290	245	280	330	195	220	260	190	205	240	250	280	350	210	240	290
	1250	*1400*	*1750*	*690*	*790*	*950*	*800*	*920*	*1075*	*640*	*720*	*850*	*620*	*670*	*790*	*820*	*920*	*1150*	*690*	*790*	*950*
P11	390	445	550	215	250	300	260	295	350	200	225	270	195	210	245	240	295	405	215	250	300
	1275	*1450*	*1800*	*710*	*820*	*980*	*850*	*970*	*1150*	*660*	*740*	*890*	*640*	*690*	*800*	*790*	*970*	*1325*	*710*	*820*	*980*
P12	275	310	380	145	165	195	170	190	220	135	150	180	130	145	165	170	210	270	145	165	195
	900	*1025*	*1250*	*475*	*540*	*640*	*560*	*620*	*720*	*445*	*490*	*590*	*425*	*475*	*540*	*560*	*690*	*890*	*475*	*540*	*640*
M1	—	—	—	—	—	—	220	255	305	195	225	270	175	205	245	270	335	460	205	235	280
	—	—	—	—	—	—	*720*	*840*	*1000*	*640*	*740*	*890*	*570*	*670*	*800*	*890*	*1100*	*1500*	*670*	*770*	*920*
M2	—	—	—	—	—	—	185	210	255	160	185	220	145	170	200	225	280	385	170	195	230
	—	—	—	—	—	—	*610*	*690*	*840*	*520*	*610*	*720*	*475*	*560*	*660*	*740*	*920*	*1275*	*560*	*640*	*750*
M3	—	—	—	—	—	—	150	170	205	130	150	180	120	135	165	195	245	320	135	155	190
	—	—	—	—	—	—	*490*	*560*	*670*	*425*	*490*	*590*	*395*	*445*	*540*	*640*	*800*	*1050*	*445*	*510*	*620*
M4	—	—	—	—	—	—	115	130	160	100	115	140	95	105	125	155	190	245	105	120	145
	—	—	—	—	—	—	*375*	*425*	*520*	*330*	*375*	*460*	*310*	*345*	*410*	*510*	*620*	*800*	*345*	*395*	*475*
M5	—	—	—	—	—	—	100	110	130	85	95	115	75	85	105	130	155	205	90	100	120
	—	—	—	—	—	—	*330*	*360*	*425*	*280*	*310*	*375*	*245*	*280*	*345*	*425*	*510*	*670*	*295*	*330*	*395*
K1	510	580	720	310	355	425	235	270	320	—	—	—	175	200	240	—	—	—	—	—	—
	1675	*1900*	*2350*	*1025*	*1175*	*1400*	*770*	*890*	*1050*	—	—	—	*570*	*660*	*790*	—	—	—	—	—	—
K2	460	520	640	275	315	375	210	240	290	—	—	—	155	175	210	—	—	—	—	—	—
	1500	*1700*	*2100*	*900*	*1025*	*1225*	*690*	*790*	*950*	—	—	—	*510*	*570*	*690*	—	—	—	—	—	—
K3	390	440	540	230	265	315	175	200	245	—	—	—	130	150	180	—	—	—	—	—	—
	1275	*1450*	*1775*	*750*	*870*	*1025*	*570*	*660*	*800*	—	—	—	*425*	*490*	*590*	—	—	—	—	—	—
K4	370	420	520	220	255	305	170	195	235	—	—	—	125	145	170	—	—	—	—	—	—
	1225	*1375*	*1700*	*720*	*840*	*1000*	*560*	*640*	*770*	—	—	—	*410*	*475*	*560*	—	—	—	—	—	—
K5	240	270	330	135	155	185	105	120	140	—	—	—	75	90	105	—	—	—	—	—	—
	790	*890*	*1075*	*445*	*510*	*610*	*345*	*395*	*460*	—	—	—	*245*	*295*	*345*	—	—	—	—	—	—
K6	325	370	460	195	225	265	150	170	205	—	—	—	110	125	150	—	—	—	—	—	—
	1075	*1225*	*1500*	*640*	*740*	*870*	*490*	*560*	*670*	—	—	—	*360*	*410*	*490*	—	—	—	—	—	—
K7	305	345	420	175	200	240	135	155	180	—	—	—	100	115	135	—	—	—	—	—	—
	1000	*1125*	*1375*	*570*	*660*	*790*	*445*	*510*	*590*	—	—	—	*330*	*375*	*445*	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1275	1475	1775	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*4175*	*4850*	*5825*	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	520	590	720	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1700*	*1925*	*2350*	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	345	395	480	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1300*	*1575*	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	395	455	550	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1300*	*1500*	*1800*	—	—	—	—	—	—
S1	—	—	—	—	—	—	55	60	75	48	55	65	43	49	60	50	60	70	50	60	70
	—	—	—	—	—	—	*180*	*195*	*245*	*155*	*180*	*215*	*140*	*160*	*195*	*165*	*195*	*230*	*165*	*195*	*230*
S2	—	—	—	—	—	—	44	50	60	38	43	50	35	39	47	42	47	55	42	47	55
	—	—	—	—	—	—	*145*	*165*	*195*	*125*	*140*	*165*	*115*	*130*	*155*	*140*	*155*	*180*	*140*	*155*	*180*
S3	—	—	—	—	—	—	38	44	50	34	38	46	31	35	42	37	42	50	37	42	50
	—	—	—	—	—	—	*125*	*145*	*165*	*110*	*125*	*150*	*100*	*115*	*140*	*120*	*140*	*165*	*120*	*140*	*165*
S11	—	—	—	—	—	—	—	—	—	65	75	90	60	70	85	75	85	100	75	85	100
	—	—	—	—	—	—	—	—	—	*215*	*245*	*295*	*195*	*230*	*280*	*245*	*280*	*330*	*245*	*280*	*330*
S12	—	—	—	—	—	—	—	—	—	46	55	65	42	48	55	50	60	70	50	60	70
	—	—	—	—	—	—	—	—	—	*150*	*180*	*215*	*140*	*155*	*180*	*165*	*195*	*230*	*165*	*195*	*230*
S13	—	—	—	—	—	—	—	—	—	27	30	36	24	27	33	29	33	40	29	33	40
	—	—	—	—	—	—	—	—	—	*90*	*100*	*120*	*80*	*90*	*110*	*95*	*110*	*130*	*95*	*110*	*130*
H5	150	170	205	50	60	70	48	55	65	—	—	—	38	44	50	—	—	—	—	—	—
	490	*560*	*670*	*165*	*195*	*230*	*155*	*180*	*215*	—	—	—	*125*	*145*	*165*	—	—	—	—	—	—
H8	165	185	215	55	65	75	50	60	70	—	—	—	41	47	55	—	—	—	—	—	—
	540	*610*	*710*	*180*	*215*	*245*	*165*	*195*	*230*	—	—	—	*135*	*155*	*180*	—	—	—	—	—	—
H11	195	215	260	65	75	90	60	70	80	—	—	—	49	55	65	115	145	175	55	65	75
	640	*710*	*850*	*215*	*245*	*295*	*195*	*230*	*260*	—	—	—	*160*	*180*	*215*	*375*	*475*	*570*	*180*	*215*	*245*
H12	190	215	250	95	110	130	100	115	130	—	—	—	75	85	100	105	130	155	95	110	125
	620	*710*	*820*	*310*	*360*	*425*	*330*	*375*	*425*	—	—	—	*245*	*280*	*330*	*345*	*425*	*510*	*310*	*360*	*410*

R217/220.21-LP06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H25			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	420	465	540	405	445	520	380	415	485	265	300	345
	—	—	—	*1375*	*1525*	*1775*	*1325*	*1450*	*1700*	*1250*	*1350*	*1600*	*870*	*980*	*1125*
P2	—	—	—	410	450	520	395	435	510	370	405	470	255	285	330
	—	—	—	*1350*	*1475*	*1700*	*1300*	*1425*	*1675*	*1225*	*1325*	*1550*	*840*	*940*	*1075*
P3	—	—	—	360	400	460	345	380	445	325	355	410	225	250	290
	—	—	—	*1175*	*1300*	*1500*	*1125*	*1250*	*1450*	*1075*	*1175*	*1350*	*740*	*820*	*950*
P4	—	—	—	320	350	405	305	335	390	285	315	365	210	240	275
	—	—	—	*1050*	*1150*	*1325*	*1000*	*1100*	*1275*	*940*	*1025*	*1200*	*690*	*790*	*900*
P5	—	—	—	305	335	385	290	320	370	270	300	345	185	210	245
	—	—	—	*1000*	*1100*	*1275*	*950*	*1050*	*1225*	*890*	*980*	*1125*	*610*	*690*	*800*
P6	—	—	—	340	375	435	325	360	420	305	335	390	215	240	275
	—	—	—	*1125*	*1225*	*1425*	*1075*	*1175*	*1375*	*1000*	*1100*	*1275*	*710*	*790*	*900*
P7	—	—	—	320	355	410	305	340	395	290	315	365	205	230	260
	—	—	—	*1050*	*1175*	*1350*	*1000*	*1125*	*1300*	*950*	*1025*	*1200*	*670*	*750*	*850*
P8	—	—	—	305	335	385	290	320	370	270	300	345	185	210	245
	—	—	—	*1000*	*1100*	*1275*	*950*	*1050*	*1225*	*890*	*980*	*1125*	*610*	*690*	*800*
P11	—	—	—	315	345	395	300	330	385	280	310	355	195	220	255
	—	—	—	*1025*	*1125*	*1300*	*980*	*1075*	*1275*	*920*	*1025*	*1175*	*640*	*720*	*840*
P12	—	—	—	205	225	255	195	215	245	185	200	230	120	135	155
	—	—	—	*670*	*740*	*840*	*640*	*710*	*800*	*610*	*660*	*750*	*395*	*445*	*510*
M1	—	—	—	210	240	290	225	260	315	195	225	270	165	190	225
	—	—	—	*690*	*790*	*950*	*740*	*850*	*1025*	*640*	*740*	*890*	*540*	*620*	*740*
M2	—	—	—	170	200	235	185	215	255	160	185	220	135	155	190
	—	—	—	*560*	*660*	*770*	*610*	*710*	*840*	*520*	*610*	*720*	*445*	*510*	*620*
M3	—	—	—	140	160	195	150	175	210	130	150	180	110	125	150
	—	—	—	*460*	*520*	*640*	*490*	*570*	*690*	*425*	*490*	*590*	*360*	*410*	*490*
M4	—	—	—	110	125	150	120	135	160	100	115	140	85	100	115
	—	—	—	*360*	*410*	*490*	*395*	*445*	*520*	*330*	*375*	*460*	*280*	*330*	*375*
M5	—	—	—	90	100	125	100	110	135	85	95	115	75	80	100
	—	—	—	*295*	*330*	*410*	*330*	*360*	*445*	*280*	*310*	*375*	*245*	*260*	*330*
K1	—	—	—	415	455	530	250	290	345	370	410	475	—	—	—
	—	—	—	*1350*	*1500*	*1750*	*820*	*950*	*1125*	*1225*	*1350*	*1550*	—	—	—
K2	—	—	—	365	405	465	220	255	305	330	360	420	—	—	—
	—	—	—	*1200*	*1325*	*1525*	*720*	*840*	*1000*	*1075*	*1175*	*1375*	—	—	—
K3	—	—	—	310	340	395	190	215	260	280	305	355	—	—	—
	—	—	—	*1025*	*1125*	*1300*	*620*	*710*	*850*	*920*	*1000*	*1175*	—	—	—
K4	—	—	—	295	325	375	180	205	245	265	290	340	—	—	—
	—	—	—	*970*	*1075*	*1225*	*590*	*670*	*800*	*870*	*950*	*1125*	—	—	—
K5	—	—	—	185	205	230	110	130	150	165	180	210	—	—	—
	—	—	—	*610*	*670*	*750*	*360*	*425*	*490*	*540*	*590*	*690*	—	—	—
K6	—	—	—	260	290	330	160	180	215	235	260	300	—	—	—
	—	—	—	*850*	*950*	*1075*	*520*	*590*	*710*	*770*	*850*	*980*	—	—	—
K7	—	—	—	235	260	295	145	165	195	210	235	265	—	—	—
	—	—	—	*770*	*850*	*970*	*475*	*540*	*640*	*690*	*770*	*870*	—	—	—
N1	1325	1525	1825	—	—	—	—	—	—	—	—	—	—	—	—
	4350	*5000*	*6000*	—	—	—	—	—	—	—	—	—	—	—	—
N2	540	620	740	—	—	—	—	—	—	—	—	—	—	—	—
	1775	*2025*	*2425*	—	—	—	—	—	—	—	—	—	—	—	—
N3	360	410	495	—	—	—	—	—	—	—	—	—	—	—	—
	1175	*1350*	*1625*	—	—	—	—	—	—	—	—	—	—	—	—
N11	410	470	570	—	—	—	—	—	—	—	—	—	—	—	—
	1350	*1550*	*1875*	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	60	65	80	48	55	65	27	30	36
	—	—	—	—	—	—	*195*	*215*	*260*	*155*	*180*	*215*	*90*	*100*	*120*
S2	—	—	—	—	—	—	47	55	65	38	43	50	21	24	29
	—	—	—	—	—	—	*155*	*180*	*215*	*125*	*140*	*165*	*70*	*80*	*95*
S3	—	—	—	—	—	—	41	47	55	34	38	46	19	21	25
	—	—	—	—	—	—	*135*	*155*	*180*	*110*	*125*	*150*	*60*	*70*	*80*
S11	—	—	—	—	—	—	80	95	110	65	75	90	37	42	50
	—	—	—	—	—	—	*260*	*310*	*360*	*215*	*245*	*295*	*120*	*140*	*165*
S12	—	—	—	—	—	—	55	65	75	46	55	65	34	39	47
	—	—	—	—	—	—	*180*	*215*	*245*	*150*	*180*	*215*	*110*	*130*	*155*
S13	—	—	—	—	—	—	33	37	44	27	30	36	20	23	27
	—	—	—	—	—	—	*110*	*120*	*145*	*90*	*100*	*120*	*65*	*75*	*90*
H5	—	—	—	—	—	—	50	55	70	44	50	60	—	—	—
	—	—	—	—	—	—	*165*	*180*	*230*	*145*	*165*	*195*	—	—	—
H8	—	—	—	—	—	—	55	60	70	47	55	65	—	—	—
	—	—	—	—	—	—	*180*	*195*	*230*	*155*	*180*	*215*	—	—	—
H11	—	—	—	—	—	—	65	70	85	55	65	75	—	—	—
	—	—	—	—	—	—	*215*	*230*	*280*	*180*	*215*	*245*	—	—	—
H12	—	—	—	—	—	—	105	120	140	85	95	115	—	—	—
	—	—	—	—	—	—	*345*	*395*	*460*	*280*	*310*	*375*	—	—	—

R217.21-LP09 – Pollici

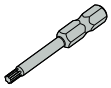




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 602-604
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R217.21-01.25-0-LP09-4A	03212900	Cilindrico	0.744	1.250	4	0.071	0.287	1.250	0.137	0.028	1.870	5.719	8.000	4,9	31200	2.430	LP..09T420
R217.21-01.50-0-LP09-5A	03212901	Cilindrico	0.992	1.500	5	0.071	0.287	1.500	0.137	0.028	1.870	5.313	8.000	3,4	28500	3.530	LP..09T420

Parti di ricambio, comprese nella fornitura

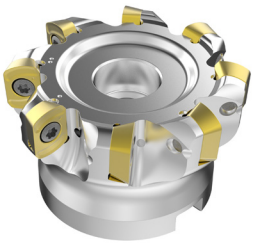
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-..	1/4HEX-T15PX50	C04009-T15P

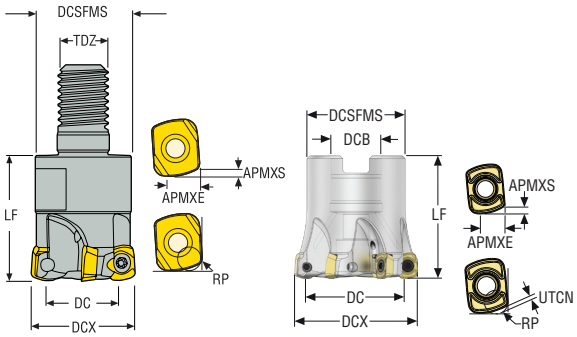
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP09 – In mm

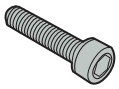
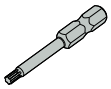




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 602-604
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0040-LP09.4A	03212889	Manicotto	27,5	40,0	4	1,8	7,3	16,0	32,0	–	16,0	40,0	3,46	0,7	–	3,2	27800	0,3	LP..09T420
R220.21-0050-LP09.5A	03212890	Manicotto	37,0	50,0	5	1,8	7,3	22,0	40,0	–	22,0	40,0	3,45	0,7	–	2,2	24800	0,3	LP..09T420
R220.21-0050-LP09.6A	03212891	Manicotto	37,0	50,0	6	1,8	7,3	22,0	40,0	–	22,0	40,0	3,45	0,7	–	2,2	24800	0,3	LP..09T420
R220.21-0050-LP09.7A	03212892	Manicotto	37,1	50,0	7	1,8	7,3	22,0	40,0	–	22,0	40,0	3,47	0,7	–	2,2	24800	0,3	LP..09T420
R220.21-0052-LP09.5A	03252422	Manicotto	39,0	51,98	5	1,8	7,3	22,0	49,0	–	22,0	40,0	3,45	0,7	–	2,1	24400	0,5	LP..09T420
R220.21-0052-LP09.7A	03212893	Manicotto	39,1	51,98	7	1,8	7,3	22,0	48,0	–	22,0	40,0	3,47	0,7	–	2,1	24400	0,4	LP..09T420
R220.21-0063-LP09.6A	03212894	Manicotto	50,0	63,0	6	1,8	7,3	22,0	48,0	–	22,0	40,0	3,45	0,7	–	2,7	22100	0,5	LP..09T420
R220.21-0063-LP09.6A-27	03317247	Manicotto	50,0	63,0	6	1,8	7,3	27,0	61,0	–	27,0	50,0	3,45	0,7	–	2,7	22100	0,8	LP..09T420
R220.21-0063-LP09.8A	03212895	Manicotto	50,1	63,0	8	1,8	7,3	22,0	48,0	–	22,0	40,0	3,47	0,7	–	1,6	22100	0,5	LP..09T420
R220.21-0063-LP09.8A-27	03317248	Manicotto	50,1	63,0	8	1,8	7,3	27,0	61,0	–	27,0	50,0	3,47	0,7	–	1,6	22100	0,8	LP..09T420
R220.21-0066-LP09.6A	03252423	Manicotto	53,1	66,0	6	1,8	7,3	27,0	61,0	–	27,0	50,0	3,47	0,7	–	1,5	21600	0,8	LP..09T420
R220.21-0066-LP09.8A	03212896	Manicotto	53,1	66,0	8	1,8	7,3	27,0	60,0	–	27,0	50,0	3,47	0,7	–	1,5	21600	0,8	LP..09T420
R220.21-0080-LP09.7A	03212897	Manicotto	67,0	80,0	7	1,8	7,3	27,0	60,0	–	27,0	50,0	3,45	0,7	–	1,1	19600	1,0	LP..09T420
R220.21-0080-LP09.9A	03212898	Manicotto	67,0	80,0	9	1,8	7,3	27,0	60,0	–	27,0	50,0	3,45	0,7	–	1,1	19600	1,0	LP..09T420
R220.21-0084-LP09.7A	03252424	Manicotto	71,0	84,0	7	1,8	7,3	32,0	79,0	–	32,0	50,0	3,44	0,7	–	1,1	18600	1,4	LP..09T420
R220.21-0100-LP09.10A	03212899	Manicotto	87,0	100,0	10	1,8	7,3	32,0	78,0	–	32,0	50,0	3,44	0,7	–	0,8	17600	1,7	LP..09T420
R217.21-1225.RE-LP09.2A	03212883	Combimaster	12,0	25,0	2	1,8	7,3	–	23,0	M12	–	35,0	3,49	0,7	56,75	8,8	35200	0,2	LP..09T420
R217.21-1632.RE-LP09.3A	03212884	Combimaster	19,1	32,0	3	1,8	7,3	–	30,0	M16	–	35,0	3,45	0,7	57,75	4,8	31100	0,2	LP..09T420
R217.21-1632.RE-LP09.4A	03212885	Combimaster	19,1	32,0	4	1,8	7,3	–	30,0	M16	–	35,0	3,47	0,7	57,75	4,8	31100	0,3	LP..09T420
R217.21-1635.RE-LP09.4A	03212886	Combimaster	22,1	35,0	4	1,8	7,3	–	30,0	M16	–	35,0	3,47	0,7	57,75	4,0	29700	0,2	LP..09T420
R217.21-2040.RE-LP09.5A	03212887	Combimaster	27,0	40,0	5	1,8	7,3	–	36,5	M20	–	40,0	3,48	0,7	67,0	3,2	27800	0,4	LP..09T420
R217.21-2042.RE-LP09.5A	03212888	Combimaster	28,9	42,0	5	1,8	7,3	–	36,5	M20	–	40,0	3,48	0,7	67,0	2,9	27100	0,4	LP..09T420

Parti di ricambio, comprese nella fornitura

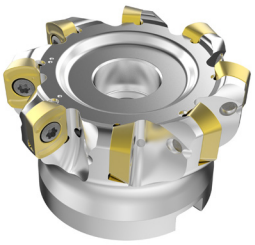
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T15PX50	C04009-T15P
R220.21-0040	MC6S8X30	1/4HEX-T15PX50	C04009-T15P
R220.21-0050-0063	220.17-692	1/4HEX-T15PX50	C04009-T15P
R220.21-0063-6A	220.17-692	1/4HEX-T15PX50	C04011-T15P
R220.21-0063-6A-27	MC6S12X40	1/4HEX-T15PX50	C04011-T15P
R220.21-0063-8A-27	MC6S12X40	1/4HEX-T15PX50	C04009-T15P
R220.21-0066	MC6S12X35	1/4HEX-T15PX50	C04009-T15P
R220.21-0080	MC6S12X35	1/4HEX-T15PX50	C04011-T15P
R220.21-0084	MLC6S16X35	1/4HEX-T15PX50	C04009-T15P
R220.21-0100	MLC6S16X35	1/4HEX-T15PX90	C04011-T15P

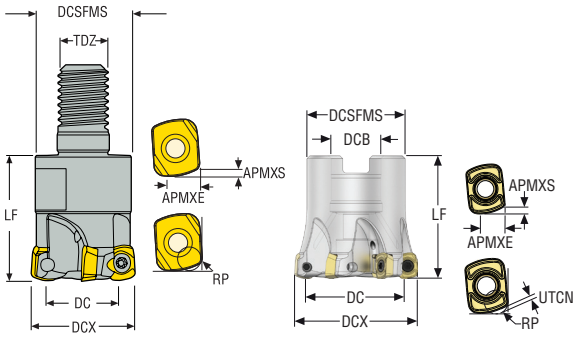
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP09 – Pollici

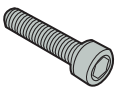
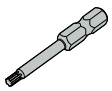




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 602-604
—Per il programma inserti completo, vedere le pagine 868
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch		inch	inch	inch	inch	inch			lb	
R220.21-02.00-LP09-6A	03212903	Manicotto	1.488	2.000	6	0.071	0.287	0.750	1.750	–	0.750	1.500	0.136	0.028	–	2,2	24600	0.880	LP..09T420
R220.21-02.00-LP09-7A	03212904	Manicotto	1.492	2.000	7	0.071	0.287	0.750	1.750	–	0.750	1.500	0.137	0.028	–	2,2	24600	0.880	LP..09T420
R220.21-02.50-LP09-6A	03212905	Manicotto	1.988	2.500	6	0.071	0.287	0.750	1.750	–	0.750	1.500	0.136	0.028	–	1,6	22000	1.320	LP..09T420
R220.21-03.00-LP09-6A	03212907	Manicotto	2.488	3.000	6	0.071	0.287	1.000	2.250	–	1.000	2.000	0.136	0.028	–	1,2	19600	2.200	LP..09T420
R220.21-03.00-LP09-8A	03212908	Manicotto	2.488	3.000	8	0.071	0.287	1.000	2.250	–	1.000	2.000	0.136	0.028	–	1,2	20100	2.200	LP..09T420
R217.21-01.25-16RE-LP09-4A	03212902	Combimaster	0.744	1.250	4	0.071	0.287	–	1.181	M16	–	1.378	0.137	0.028	2.274	4,9	31100	0.660	LP..09T420

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T15PX50	C04009-T15P
R220.21-02.00-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T15PX50	C04009-T15P
R220.21-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C04011-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LP09 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	LPKT09T420TR-M13 MP3501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P2	LPKT09T420TR-M13 MP3501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P3	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,3 0.050
P4	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
P5	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
P6	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
P7	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
P8	LPKT09T420TR-M13 MP2501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,3 0.050
P11	LPKT09T420TR-M13 MP3501	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
P12	LPKT09T420TR-M13 MP2501	1,3 *0.050*	0,75 0.030	0,75 0.030	0,90 0.036
M1	LPKT09T420TR-ME08 MS2050	1,6 *0.065*	0,70 0.028	0,70 0.028	0,80 0.032
M2	LPKT09T420TR-ME08 MS2050	1,6 *0.065*	0,60 0.024	0,60 0.024	0,75 0.030
M3	LPKT09T420TR-ME08 MS2050	1,3 *0.050*	0,55 0.022	0,55 0.022	0,65 0.026
M4	LPKT09T420TR-M13 MP3501	0,95 *0.038*	0,90 0.036	0,90 0.036	1,1 0.044
M5	LPKT09T420TR-M13 MP3501	0,95 *0.038*	0,90 0.036	0,90 0.036	1,1 0.044
K1	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,3 0.050	1,3 0.050	1,5 0.060
K2	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K3	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K4	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K5	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,0 0.040	1,0 0.040	1,3 0.050
K6	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K7	LPKW09T420TR-D15 MK2050	1,6 *0.065*	1,0 0.040	1,0 0.040	1,3 0.050
N1	LPHT09T420R-E08 H25	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
N2	LPHT09T420R-E08 H25	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
N3	LPHT09T420R-E08 H25	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
N11	LPHT09T420R-E08 H25	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
S1	LPKT09T420TR-M13 MP3501	0,95 *0.038*	0,90 0.036	0,90 0.036	1,1 0.044
S2	LPKT09T420TR-M13 MP3501	0,95 *0.038*	0,90 0.036	0,90 0.036	1,1 0.044
S3	LPKT09T420TR-M13 MP3501	0,95 *0.038*	0,85 0.034	0,85 0.034	1,0 0.040
S11	LPKT09T420TR-ME08 MS2050	1,1 *0.044*	0,60 0.024	0,60 0.024	0,70 0.028
S12	LPKT09T420TR-ME08 MS2050	1,1 *0.044*	0,60 0.024	0,60 0.024	0,70 0.028
S13	LPKT09T420TR-ME08 MS2050	0,95 *0.038*	0,55 0.022	0,55 0.022	0,65 0.026
H5	LPKW09T420TR-D15 MH1051	1,0 *0.040*	0,85 0.034	0,85 0.034	1,0 0.040
H8	LPKW09T420TR-D15 MH1051	0,90 *0.036*	0,70 0.028	0,70 0.028	0,80 0.032
H11	LPKW09T420TR-D15 MP3000	1,0 *0.040*	0,85 0.034	0,85 0.034	1,0 0.040
H12	LPKW09T420TR-D15 MP3000	0,90 *0.036*	0,70 0.028	0,70 0.028	0,80 0.032

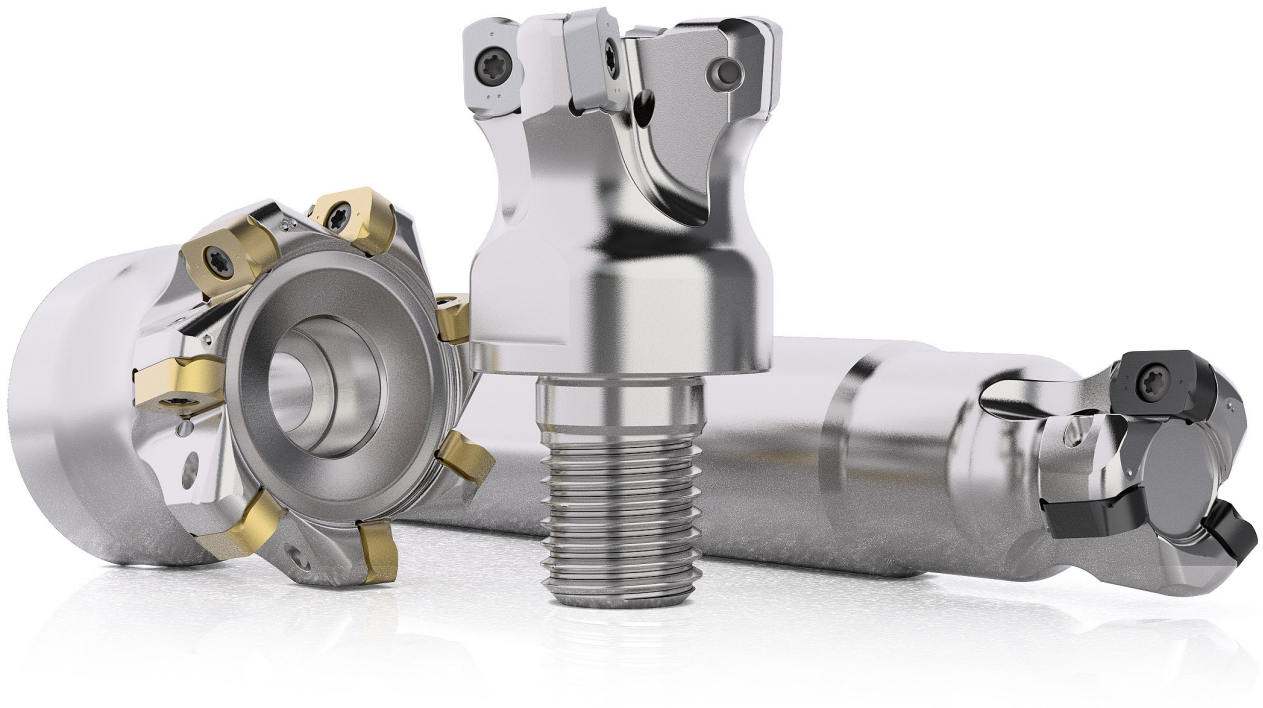
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-LP09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			F40M			MS2050			MP2051			MP2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	215	250	295	180	205	255	190	210	250	260	300	355	165	205	295	235	275	330
	—	—	—	*710*	*820*	*970*	*590*	*670*	*840*	*620*	*690*	*820*	*850*	*980*	*1175*	*540*	*670*	*970*	*770*	*900*	*1075*
P2	—	—	—	200	235	285	165	190	250	185	205	245	245	285	345	160	200	285	230	265	320
	—	—	—	*660*	*770*	*940*	*540*	*620*	*820*	*610*	*670*	*800*	*800*	*940*	*1125*	*520*	*660*	*940*	*750*	*870*	*1050*
P3	—	—	—	180	210	245	150	175	215	165	185	210	220	250	305	155	190	245	205	235	275
	—	—	—	*590*	*690*	*800*	*490*	*570*	*710*	*540*	*610*	*690*	*720*	*820*	*1000*	*510*	*620*	*800*	*670*	*770*	*900*
P4	—	—	—	155	185	220	130	155	195	155	175	205	195	220	265	135	170	235	180	210	250
	—	—	—	*510*	*610*	*720*	*425*	*510*	*640*	*510*	*570*	*670*	*640*	*720*	*870*	*445*	*560*	*770*	*590*	*690*	*820*
P5	215	250	330	150	175	210	125	145	190	140	155	180	190	220	255	130	160	225	170	200	240
	710	*820*	*1075*	*490*	*570*	*690*	*410*	*475*	*620*	*460*	*510*	*590*	*620*	*720*	*840*	*425*	*520*	*740*	*560*	*660*	*790*
P6	255	300	370	175	200	235	150	175	210	155	175	205	215	245	285	145	180	250	190	225	270
	840	*980*	*1225*	*570*	*660*	*770*	*490*	*570*	*690*	*510*	*570*	*670*	*710*	*800*	*940*	*475*	*590*	*820*	*620*	*740*	*890*
P7	245	280	345	165	190	225	140	165	200	145	165	195	200	230	270	140	170	235	180	210	255
	800	*920*	*1125*	*540*	*620*	*740*	*460*	*540*	*660*	*475*	*540*	*640*	*660*	*750*	*890*	*460*	*560*	*770*	*590*	*690*	*840*
P8	215	250	310	150	175	205	125	145	180	140	155	175	185	210	255	130	160	205	170	200	230
	710	*820*	*1025*	*490*	*570*	*670*	*410*	*475*	*590*	*460*	*510*	*570*	*610*	*690*	*840*	*425*	*520*	*670*	*560*	*660*	*750*
P11	235	275	340	160	185	220	135	160	195	145	160	190	195	225	260	125	160	240	175	205	245
	770	*900*	*1125*	*520*	*610*	*720*	*445*	*520*	*640*	*475*	*520*	*620*	*640*	*740*	*850*	*410*	*520*	*790*	*570*	*670*	*800*
P12	180	200	260	105	120	145	100	115	145	100	110	130	130	150	175	110	135	195	120	135	165
	590	*660*	*850*	*345*	*395*	*475*	*330*	*375*	*475*	*330*	*360*	*425*	*425*	*490*	*570*	*360*	*445*	*640*	*395*	*445*	*540*
M1	—	—	—	—	—	—	—	—	—	140	165	200	190	220	265	130	170	255	165	190	230
	—	—	—	—	—	—	—	—	—	*460*	*540*	*660*	*620*	*720*	*870*	*425*	*560*	*840*	*540*	*620*	*750*
M2	—	—	—	—	—	—	—	—	—	120	140	165	160	185	220	120	150	225	135	160	190
	—	—	—	—	—	—	—	—	—	*395*	*460*	*540*	*520*	*610*	*720*	*395*	*490*	*740*	*445*	*520*	*620*
M3	—	—	—	—	—	—	—	—	—	95	115	135	130	145	180	115	145	210	110	130	155
	—	—	—	—	—	—	—	—	—	*310*	*375*	*445*	*425*	*475*	*590*	*375*	*475*	*690*	*360*	*425*	*510*
M4	—	—	—	—	—	—	—	—	—	75	90	105	100	115	140	100	125	175	90	100	120
	—	—	—	—	—	—	—	—	—	*245*	*295*	*345*	*330*	*375*	*460*	*330*	*410*	*570*	*295*	*330*	*395*
M5	—	—	—	—	—	—	—	—	—	65	75	90	85	95	115	85	100	145	75	85	100
	—	—	—	—	—	—	—	—	—	*215*	*245*	*295*	*280*	*310*	*375*	*280*	*330*	*475*	*245*	*280*	*330*
K1	280	330	435	215	255	310	155	180	220	140	165	195	—	—	—	—	—	—	—	—	—
	920	*1075*	*1425*	*710*	*840*	*1025*	*510*	*590*	*720*	*460*	*540*	*640*	—	—	—	—	—	—	—	—	—
K2	260	300	395	195	225	275	135	160	195	125	145	175	—	—	—	—	—	—	—	—	—
	850	*980*	*1300*	*640*	*740*	*900*	*445*	*520*	*640*	*410*	*475*	*570*	—	—	—	—	—	—	—	—	—
K3	220	255	335	165	190	230	115	135	165	105	125	150	—	—	—	—	—	—	—	—	—
	720	*840*	*1100*	*540*	*620*	*750*	*375*	*445*	*540*	*345*	*410*	*490*	—	—	—	—	—	—	—	—	—
K4	210	245	320	155	180	220	110	130	155	100	120	140	—	—	—	—	—	—	—	—	—
	690	*800*	*1050*	*510*	*590*	*720*	*360*	*425*	*510*	*330*	*395*	*460*	—	—	—	—	—	—	—	—	—
K5	145	165	200	100	115	135	70	80	95	60	75	85	—	—	—	—	—	—	—	—	—
	475	*540*	*660*	*330*	*375*	*445*	*230*	*260*	*310*	*195*	*245*	*280*	—	—	—	—	—	—	—	—	—
K6	185	215	280	140	160	195	95	115	135	90	105	125	—	—	—	—	—	—	—	—	—
	610	*710*	*920*	*460*	*520*	*640*	*310*	*375*	*445*	*295*	*345*	*410*	—	—	—	—	—	—	—	—	—
K7	185	215	255	125	150	170	90	105	120	80	95	110	—	—	—	—	—	—	—	—	—
	610	*710*	*840*	*410*	*490*	*560*	*295*	*345*	*395*	*260*	*310*	*360*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	1025	1175	1425	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	*3375*	*3850*	*4675*	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	410	480	570	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	*1350*	*1575*	*1875*	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	275	320	380	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	*900*	*1050*	*1250*	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	315	365	435	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	*1025*	*1200*	*1425*	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	36	41	49	47	55	65	43	49	60	43	49	60
	—	—	—	—	—	—	—	—	—	*120*	*135*	*160*	*155*	*180*	*215*	*140*	*160*	*195*	*140*	*160*	*195*
S2	—	—	—	—	—	—	—	—	—	29	33	40	38	44	50	35	40	48	35	40	48
	—	—	—	—	—	—	—	—	—	*95*	*110*	*130*	*125*	*145*	*165*	*115*	*130*	*155*	*115*	*130*	*155*
S3	—	—	—	—	—	—	—	—	—	25	29	35	33	38	46	30	35	42	30	35	42
	—	—	—	—	—	—	—	—	—	*80*	*95*	*115*	*110*	*125*	*150*	*100*	*115*	*140*	*100*	*115*	*140*
S11	—	—	—	—	—	—	—	—	—	49	55	70	65	75	90	60	70	85	60	70	85
	—	—	—	—	—	—	—	—	—	*160*	*180*	*230*	*215*	*245*	*295*	*195*	*230*	*280*	*195*	*230*	*280*
S12	—	—	—	—	—	—	—	—	—	34	39	48	45	50	60	41	47	55	41	47	55
	—	—	—	—	—	—	—	—	—	*110*	*130*	*155*	*150*	*165*	*195*	*135*	*155*	*180*	*135*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	20	23	28	26	31	36	24	28	33	24	28	33
	—	—	—	—	—	—	—	—	—	*65*	*75*	*90*	*85*	*100*	*120*	*80*	*90*	*110*	*80*	*90*	*110*
H5	100	115	145	38	43	50	33	38	45	31	36	43	—	—	—	—	—	—	—	—	—
	330	*375*	*475*	*125*	*140*	*165*	*110*	*125*	*150*	*100*	*120*	*140*	—	—	—	—	—	—	—	—	—
H8	115	130	160	—	—	—	35	41	49	34	39	46	—	—	—	—	—	—	—	—	—
	375	*425*	*520*	—	—	—	*115*	*135*	*160*	*110*	*130*	*150*	—	—	—	—	—	—	—	—	—
H11	130	145	185	—	—	—	42	48	60	40	46	55	—	—	—	80	100	140	47	55	65
	425	*475*	*610*	—	—	—	*140*	*155*	*195*	*130*	*150*	*180*	—	—	—	*260*	*330*	*460*	*155*	*180*	*215*
H12	135	150	190	70	80	95	70	80	95	60	70	85	—	—	—	90	110	145	80	90	110
	445	*490*	*620*	*230*	*260*	*310*	*230*	*260*	*310*	*195*	*230*	*280*	—	—	—	*295*	*360*	*475*	*260*	*295*	*360*

R217/220.21-LP09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H25			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	330	370	440	320	355	425	305	345	415	280	315	375	230	265	315
	—	—	—	*1075*	*1225*	*1450*	*1050*	*1175*	*1400*	*1000*	*1125*	*1350*	*920*	*1025*	*1225*	*750*	*870*	*1025*
P2	—	—	—	320	360	430	310	345	415	295	335	400	270	305	365	220	250	305
	—	—	—	*1050*	*1175*	*1400*	*1025*	*1125*	*1350*	*970*	*1100*	*1300*	*890*	*1000*	*1200*	*720*	*820*	*1000*
P3	—	—	—	290	325	370	280	310	355	265	300	345	245	275	315	195	220	270
	—	—	—	*950*	*1075*	*1225*	*920*	*1025*	*1175*	*870*	*980*	*1125*	*800*	*900*	*1025*	*640*	*720*	*890*
P4	—	—	—	255	285	335	245	275	325	235	265	315	215	240	290	185	210	255
	—	—	—	*840*	*940*	*1100*	*800*	*900*	*1075*	*770*	*870*	*1025*	*710*	*790*	*950*	*610*	*690*	*840*
P5	—	—	—	245	270	320	235	260	310	225	255	300	205	230	275	170	195	225
	—	—	—	*800*	*890*	*1050*	*770*	*850*	*1025*	*740*	*840*	*980*	*670*	*750*	*900*	*560*	*640*	*740*
P6	—	—	—	270	305	360	265	295	350	250	285	340	230	260	310	190	215	255
	—	—	—	*890*	*1000*	*1175*	*870*	*970*	*1150*	*820*	*940*	*1125*	*750*	*850*	*1025*	*620*	*710*	*840*
P7	—	—	—	255	290	340	250	280	330	235	270	320	220	245	290	180	205	240
	—	—	—	*840*	*950*	*1125*	*820*	*920*	*1075*	*770*	*890*	*1050*	*720*	*800*	*950*	*590*	*670*	*790*
P8	—	—	—	245	270	310	235	260	300	225	255	290	205	230	265	165	185	225
	—	—	—	*800*	*890*	*1025*	*770*	*850*	*980*	*740*	*840*	*950*	*670*	*750*	*870*	*540*	*610*	*740*
P11	—	—	—	250	280	330	240	270	320	230	260	310	210	240	285	175	200	230
	—	—	—	*820*	*920*	*1075*	*790*	*890*	*1050*	*750*	*850*	*1025*	*690*	*790*	*940*	*570*	*660*	*750*
P12	—	—	—	170	190	220	170	185	215	160	175	210	150	165	195	115	130	155
	—	—	—	*560*	*620*	*720*	*560*	*610*	*710*	*520*	*570*	*690*	*490*	*540*	*640*	*375*	*425*	*510*
M1	—	—	—	—	—	—	170	195	235	180	210	255	155	180	220	145	170	210
	—	—	—	—	—	—	*560*	*640*	*770*	*590*	*690*	*840*	*510*	*590*	*720*	*475*	*560*	*690*
M2	—	—	—	—	—	—	140	165	195	150	175	210	130	150	180	125	145	170
	—	—	—	—	—	—	*460*	*540*	*640*	*490*	*570*	*690*	*425*	*490*	*590*	*410*	*475*	*560*
M3	—	—	—	—	—	—	115	135	160	125	145	175	105	125	150	100	115	140
	—	—	—	—	—	—	*375*	*445*	*520*	*410*	*475*	*570*	*345*	*410*	*490*	*330*	*375*	*460*
M4	—	—	—	—	—	—	90	105	125	100	110	135	85	95	115	80	90	110
	—	—	—	—	—	—	*295*	*345*	*410*	*330*	*360*	*445*	*280*	*310*	*375*	*260*	*295*	*360*
M5	—	—	—	—	—	—	75	85	105	80	95	110	70	80	95	65	75	90
	—	—	—	—	—	—	*245*	*280*	*345*	*260*	*310*	*360*	*230*	*260*	*310*	*215*	*245*	*295*
K1	—	—	—	325	365	435	310	350	420	200	235	285	275	310	370	—	—	—
	—	—	—	*1075*	*1200*	*1425*	*1025*	*1150*	*1375*	*660*	*770*	*940*	*900*	*1025*	*1225*	—	—	—
K2	—	—	—	295	330	390	285	315	375	180	210	250	250	280	330	—	—	—
	—	—	—	*970*	*1075*	*1275*	*940*	*1025*	*1225*	*590*	*690*	*820*	*820*	*920*	*1075*	—	—	—
K3	—	—	—	250	280	330	240	270	320	150	180	215	210	235	280	—	—	—
	—	—	—	*820*	*920*	*1075*	*790*	*890*	*1050*	*490*	*590*	*710*	*690*	*770*	*920*	—	—	—
K4	—	—	—	235	265	315	230	255	305	145	170	205	200	225	270	—	—	—
	—	—	—	*770*	*870*	*1025*	*750*	*840*	*1000*	*475*	*560*	*670*	*660*	*740*	*890*	—	—	—
K5	—	—	—	145	165	195	145	160	185	90	105	125	125	140	165	—	—	—
	—	—	—	*475*	*540*	*640*	*475*	*520*	*610*	*295*	*345*	*410*	*410*	*460*	*540*	—	—	—
K6	—	—	—	210	235	275	200	225	265	130	150	180	175	200	235	—	—	—
	—	—	—	*690*	*770*	*900*	*660*	*740*	*870*	*425*	*490*	*590*	*570*	*660*	*770*	—	—	—
K7	—	—	—	190	210	245	185	205	240	115	135	160	160	180	210	—	—	—
	—	—	—	*620*	*690*	*800*	*610*	*670*	*790*	*375*	*445*	*520*	*520*	*590*	*690*	—	—	—
N1	1225	1425	1725	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	4025	*4675*	*5650*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	495	580	690	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1625	*1900*	*2275*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	330	385	460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1075	*1275*	*1500*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	375	440	530	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1225	*1450*	*1750*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	48	55	65	39	45	55	24	28	33
	—	—	—	—	—	—	—	—	—	*155*	*180*	*215*	*130*	*150*	*180*	*80*	*90*	*110*
S2	—	—	—	—	—	—	—	—	—	39	44	55	32	36	44	19	23	27
	—	—	—	—	—	—	—	—	—	*130*	*145*	*180*	*105*	*120*	*145*	*60*	*75*	*90*
S3	—	—	—	—	—	—	—	—	—	34	39	47	28	32	38	17	20	24
	—	—	—	—	—	—	—	—	—	*110*	*130*	*155*	*90*	*105*	*125*	*55*	*65*	*80*
S11	—	—	—	—	—	—	—	—	—	65	75	90	55	60	75	33	39	46
	—	—	—	—	—	—	—	—	—	*215*	*245*	*295*	*180*	*195*	*245*	*110*	*130*	*150*
S12	—	—	—	—	—	—	—	—	—	46	55	65	38	43	50	31	36	42
	—	—	—	—	—	—	—	—	—	*150*	*180*	*215*	*125*	*140*	*165*	*100*	*120*	*140*
S13	—	—	—	—	—	—	—	—	—	27	31	37	22	25	30	18	21	25
	—	—	—	—	—	—	—	—	—	*90*	*100*	*120*	*70*	*80*	*100*	*60*	*70*	*80*
H5	—	—	—	47	55	65	—	—	—	41	47	55	36	42	49	—	—	—
	—	—	—	*155*	*180*	*215*	—	—	—	*135*	*155*	*180*	*120*	*140*	*160*	—	—	—
H8	—	—	—	50	60	70	—	—	—	44	50	60	39	45	55	—	—	—
	—	—	—	*165*	*195*	*230*	—	—	—	*145*	*165*	*195*	*130*	*150*	*180*	—	—	—
H11	—	—	—	60	70	80	—	—	—	50	60	70	46	55	65	—	—	—
	—	—	—	*195*	*230*	*260*	—	—	—	*165*	*195*	*230*	*150*	*180*	*215*	—	—	—
H12	—	—	—	90	105	125	—	—	—	90	100	120	70	80	95	—	—	—
	—	—	—	*295*	*345*	*410*	—	—	—	*295*	*330*	*395*	*230*	*260*	*310*	—	—	—



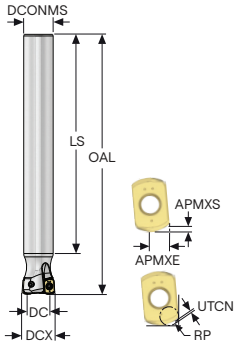
R217/220.21 HIGH FEED 4

High Feed 4 per inserti LO06, 4 taglienti, inserti positivi bilaterali.
Gli inserti sono robusti e affidabili per le applicazioni con esigenze ridotte di entrata in rampa. Un'ampia selezione di inserti e geometrie consente di trovare facilmente la combinazione giusta per la propria applicazione.

- Gamma di frese 20-63 mm (1-2,5")
- Profondità di taglio massima 0,9 mm
- Prima scelta per materiali ISO P & K in macchine di piccole e medie dimensioni

R217.21-LO06 – In mm

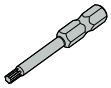




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 610-612
—Per il programma inserti completo, vedere le pagine 862
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.21-1820.0-LO06.2A	02952673	Cilindrico	13,3	20,0	2	0,9	2,5	18,0	1,8	0,38	110,0	110,0	160,0	1,0	23400	0,4	LOH.060310
R217.21-2525.0-LO06.3A	02828469	Cilindrico	18,3	25,0	3	0,9	2,5	25,0	1,8	0,38	39,5	124,0	180,0	0,8	20900	0,7	LOH.060310
R217.21-2527.0-LO06.3A	02828470	Cilindrico	20,3	27,0	3	0,9	2,5	25,0	1,8	0,38	140,0	140,0	200,0	0,7	20100	0,8	LOH.060310
R217.21-3232.0-LO06.4A	02828474	Cilindrico	25,3	32,0	4	0,9	2,5	32,0	1,8	0,38	39,5	140,0	200,0	0,5	18500	1,2	LOH.060310

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-..	1/4HEX-T08PX50	C02508-T08P

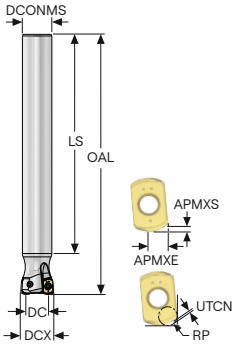
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-LO06 – Pollici

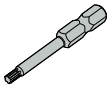




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 610-612
—Per il programma inserti completo, vedere le pagine 862
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R217.21-1.00.0-LO06.3A	02842018	Cilindrico	0.736	1.000	3	0.035	0.098	1.000	0.071	0.015	1.480	4.882	7.000	0,7	20700	1.540	LOH.060310
R217.21-1.25.0-LO06.4A	02842021	Cilindrico	0.984	1.250	4	0.035	0.098	1.250	0.071	0.015	1.480	5.512	8.000	0,5	18600	2.650	LOH.060310

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21..	1/4HEX-T08PX50	C02508-T08P

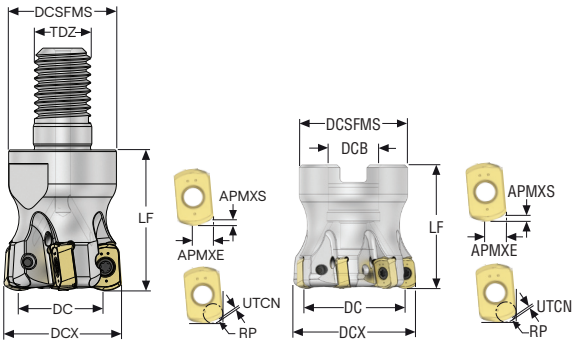
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LO06 – In mm



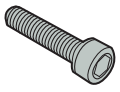
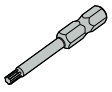


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 610-612
—Per il programma inserti completo, vedere le pagine 862
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0035-LO06.6A	02952739	Manicotto	28,3	35,0	6	0,9	2,5	16,0	32,0	–	16,0	35,0	1,8	0,38	–	0,5	17700	0,2	LOH.060310
R220.21-0040-LO06.7A	02927090	Manicotto	33,3	40,0	7	0,9	2,5	16,0	35,0	–	16,0	40,0	1,8	0,38	–	0,4	16500	0,3	LOH.060310
R220.21-0042-LO06.7A	02828477	Manicotto	35,3	42,0	7	0,9	2,5	16,0	35,0	–	16,0	40,0	1,8	0,38	–	0,4	16100	0,3	LOH.060310
R220.21-0050-LO06.8A	02927091	Manicotto	43,3	50,0	8	0,9	2,5	22,0	42,0	–	22,0	40,0	1,8	0,38	–	0,3	14800	0,4	LOH.060310
R220.21-0052-LO06.8A	02952735	Manicotto	45,3	52,0	8	0,9	2,5	22,0	42,0	–	22,0	40,0	1,8	0,38	–	0,3	14500	0,4	LOH.060310
R220.21-0063-LO06.9A	02952736	Manicotto	56,3	63,0	9	0,9	2,5	22,0	47,0	–	22,0	40,0	1,8	0,38	–	0,25	13100	0,6	LOH.060310
R217.21-1020.RE-LO06.2A	03020137	Combimaster	13,3	20,0	2	0,9	2,5	–	18,5	M10	–	28,0	1,8	0,38	46,75	1,0	23400	0,1	LOH.060310
R217.21-1225.RE-LO06.3A	03020140	Combimaster	18,3	25,0	3	0,9	2,5	–	23,0	M12	–	30,0	1,8	0,38	51,75	0,8	20900	0,2	LOH.060310
R217.21-1225.RE-LO06.4A	02828468	Combimaster	18,3	25,0	4	0,9	2,5	–	23,0	M12	–	30,0	1,8	0,38	51,75	0,8	20900	0,2	LOH.060310
R217.21-1632.RE-LO06.4A	02927092	Combimaster	25,3	32,0	4	0,9	2,5	–	30,0	M16	–	35,0	1,8	0,38	57,75	0,5	18500	0,2	LOH.060310
R217.21-1632.RE-LO06.5A	02828471	Combimaster	25,3	32,0	5	0,9	2,5	–	30,0	M16	–	35,0	1,8	0,38	57,75	0,5	18500	0,3	LOH.060310
R217.21-1635.RE-LO06.5A	02828472	Combimaster	28,3	35,0	5	0,9	2,5	–	30,0	M16	–	35,0	1,8	0,38	57,75	0,5	17700	0,3	LOH.060310
R217.21-2040.RE-LO06.6A	02991177	Combimaster	33,0	40,0	6	0,9	2,5	–	36,5	M20	–	40,0	1,8	0,38	67,0	0,4	16500	0,4	LOH.060310
R217.21-1640.RE-LO06.5A	02828478	Combimaster	33,3	40,0	5	0,9	2,5	–	30,0	M16	–	35,0	1,8	0,38	57,75	0,4	16500	0,3	LOH.060310

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T08PX50	C02508-T08P
R220.21- Ø35	TCEI0825	1/4HEX-T08PX50	C02508-T08P
R220.21- Ø40-42	220.17-689	1/4HEX-T08PX50	C02508-T08P
R220.21- Ø50-63	220.17-692	1/4HEX-T08PX50	C02508-T08P

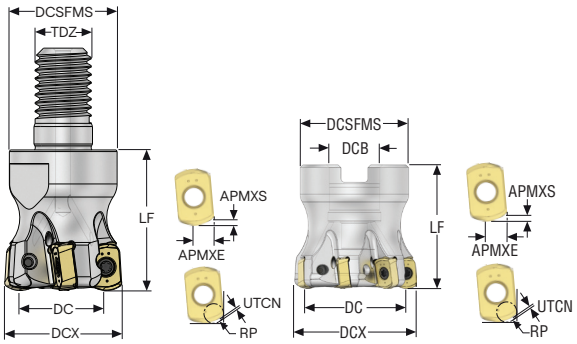
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LO06 – Pollici



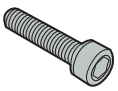
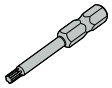


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 610–612
—Per il programma inserti completo, vedere le pagine 862
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch		inch	inch	inch	inch	inch			lb	
R220.21-2.00-LO06.8A	02952697	Manicotto	1.736	2.000	8	0.035	0.098	0.750	1.654	–	0.750	1.500	0.071	0.015	–	0,3	14700	0.880	LOH.060310
R217.21-1.0012RELO06.4A	02842017	Combimaster	0.736	1.000	4	0.035	0.098	–	0.906	M12	–	1.181	0.071	0.015	2.037	0,7	20700	0.440	LOH.060310
R217.21-1.5016RELO06.5A	02952695	Combimaster	1.236	1.500	5	0.035	0.098	–	1.181	M16	–	1.378	0.071	0.015	2.274	0,4	16900	0.440	LOH.060310
R217.21-01.50-20RE-LO06.6A	03002406	Combimaster	1.299	1.500	6	0.035	0.098	–	1.437	M20	–	1.575	0.071	0.015	2.638	0,4	16900	0.660	LOH.060310

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-..	–	1/4HEX-T08PX50	C02508-T08P
R220.21-2.00-2.50	UC6S3/8UNFX1	1/4HEX-T08PX50	C02508-T08P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-LO06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	LOHT060310TR-M07 MP3501	0,80 *0.032*	0,60 0.024	0,60 0.024	0,70 0.028
P2	LOHT060310TR-M07 MP3501	0,80 *0.032*	0,60 0.024	0,60 0.024	0,70 0.028
P3	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,60 0.024	0,60 0.024	0,65 0.026
P4	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
P5	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
P6	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
P7	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
P8	LOHT060310TR-M07 MP2501	0,80 *0.032*	0,60 0.024	0,60 0.024	0,65 0.026
P11	LOHT060310TR-M07 MP3501	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
P12	LOHT060310TR-M07 MP2501	0,65 *0.026*	0,42 0.017	0,42 0.017	0,48 0.019
M1	LOHT060310TR-ME06 MS2050	0,80 *0.032*	0,55 0.022	0,55 0.022	0,60 0.024
M2	LOHT060310TR-ME06 MS2050	0,80 *0.032*	0,48 0.019	0,48 0.019	0,55 0.022
M3	LOHT060310TR-ME06 MS2050	0,65 *0.026*	0,44 0.017	0,44 0.017	0,48 0.019
M4	LOHT060310TR-ME06 MP3501	0,48 *0.019*	0,44 0.017	0,44 0.017	0,50 0.020
M5	LOHT060310TR-ME06 MP3501	0,48 *0.019*	0,44 0.017	0,44 0.017	0,50 0.020
K1	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,60 0.024	0,60 0.024	0,70 0.028
K2	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
K3	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
K4	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
K5	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,50 0.020	0,50 0.020	0,55 0.022
K6	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,55 0.022	0,55 0.022	0,65 0.026
K7	LOHT060310TR-MD07 MK2050	0,80 *0.032*	0,50 0.020	0,50 0.020	0,55 0.022
S1	LOHT060310TR-ME06 MP3501	0,48 *0.019*	0,44 0.017	0,44 0.017	0,50 0.020
S2	LOHT060310TR-ME06 MP3501	0,48 *0.019*	0,44 0.017	0,44 0.017	0,50 0.020
S3	LOHT060310TR-ME06 MP3501	0,48 *0.019*	0,42 0.017	0,42 0.017	0,46 0.018
S11	LOHT060310TR-ME06 MS2050	0,55 *0.022*	0,46 0.018	0,46 0.018	0,55 0.022
S12	LOHT060310TR-ME06 MS2050	0,55 *0.022*	0,46 0.018	0,46 0.018	0,55 0.022
S13	LOHT060310TR-ME06 MS2050	0,48 *0.019*	0,44 0.017	0,44 0.017	0,50 0.020
H5	LOHW060310TR-D07 MH1051	0,50 *0.020*	0,42 0.017	0,42 0.017	0,48 0.019
H8	LOHW060310TR-D07 MH1051	0,44 *0.017*	0,36 0.014	0,36 0.014	0,40 0.016
H11	LOHT060310TR-MD07 MP1501	0,50 *0.020*	0,42 0.017	0,42 0.017	0,48 0.019
H12	LOHT060310TR-MD07 MP1501	0,44 *0.017*	0,36 0.014	0,36 0.014	0,40 0.016

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-LO06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	250	280	335	255	285	345	270	300	365	240	255	300	300	335	430
	—	—	—	*820*	*920*	*1100*	*840*	*940*	*1125*	*890*	*980*	*1200*	*790*	*840*	*980*	*980*	*1100*	*1400*
P2	—	—	—	240	270	325	250	275	335	265	290	355	235	250	290	290	325	415
	—	—	—	*790*	*890*	*1075*	*820*	*900*	*1100*	*870*	*950*	*1175*	*770*	*820*	*950*	*950*	*1075*	*1350*
P3	—	—	—	205	235	285	215	235	300	235	260	305	200	215	260	250	280	375
	—	—	—	*670*	*770*	*940*	*710*	*770*	*980*	*770*	*850*	*1000*	*660*	*710*	*850*	*820*	*920*	*1225*
P4	—	—	—	185	205	250	190	210	260	205	230	275	180	200	240	220	245	330
	—	—	—	*610*	*670*	*820*	*620*	*690*	*850*	*670*	*750*	*900*	*590*	*660*	*790*	*720*	*800*	*1075*
P5	320	355	440	180	200	240	185	205	250	200	220	260	175	185	215	225	250	315
	1050	*1175*	*1450*	*590*	*660*	*790*	*610*	*670*	*820*	*660*	*720*	*850*	*570*	*610*	*710*	*740*	*820*	*1025*
P6	360	400	495	200	225	270	210	235	280	225	250	295	195	210	245	250	280	350
	1175	*1300*	*1625*	*660*	*740*	*890*	*690*	*770*	*920*	*740*	*820*	*970*	*640*	*690*	*800*	*820*	*920*	*1150*
P7	340	380	465	190	215	255	200	220	265	210	235	280	185	200	230	235	265	330
	1125	*1250*	*1525*	*620*	*710*	*840*	*660*	*720*	*870*	*690*	*770*	*920*	*610*	*660*	*750*	*770*	*870*	*1075*
P8	310	340	440	175	195	240	180	200	250	195	220	255	170	180	215	210	235	315
	1025	*1125*	*1450*	*570*	*640*	*790*	*590*	*660*	*820*	*640*	*720*	*840*	*560*	*590*	*710*	*690*	*770*	*1025*
P11	330	365	450	185	205	245	195	215	260	205	225	270	180	195	225	215	260	355
	1075	*1200*	*1475*	*610*	*670*	*800*	*640*	*710*	*850*	*670*	*740*	*890*	*590*	*640*	*740*	*710*	*850*	*1175*
P12	235	255	310	120	135	160	130	145	170	135	150	175	120	130	150	155	185	245
	770	*840*	*1025*	*395*	*445*	*520*	*425*	*475*	*560*	*445*	*490*	*570*	*395*	*425*	*490*	*510*	*610*	*800*
M1	—	—	—	—	—	—	175	195	235	195	220	265	165	185	220	240	285	400
	—	—	—	—	—	—	*570*	*640*	*770*	*640*	*720*	*870*	*540*	*610*	*720*	*790*	*940*	*1300*
M2	—	—	—	—	—	—	145	160	195	165	185	220	135	155	185	205	245	335
	—	—	—	—	—	—	*475*	*520*	*640*	*540*	*610*	*720*	*445*	*510*	*610*	*670*	*800*	*1100*
M3	—	—	—	—	—	—	115	130	155	130	150	175	110	125	145	175	210	280
	—	—	—	—	—	—	*375*	*425*	*510*	*425*	*490*	*570*	*360*	*410*	*475*	*570*	*690*	*920*
M4	—	—	—	—	—	—	90	100	120	105	115	140	85	95	115	140	170	225
	—	—	—	—	—	—	*295*	*330*	*395*	*345*	*375*	*460*	*280*	*310*	*375*	*460*	*560*	*740*
M5	—	—	—	—	—	—	75	85	100	85	95	115	70	80	95	120	140	185
	—	—	—	—	—	—	*245*	*280*	*330*	*280*	*310*	*375*	*230*	*260*	*310*	*395*	*460*	*610*
K1	430	475	590	260	295	350	185	205	245	—	—	—	160	180	220	—	—	—
	1400	*1550*	*1925*	*850*	*970*	*1150*	*610*	*670*	*800*	—	—	—	*520*	*590*	*720*	—	—	—
K2	390	430	530	230	260	310	165	185	220	—	—	—	145	160	195	—	—	—
	1275	*1400*	*1750*	*750*	*850*	*1025*	*540*	*610*	*720*	—	—	—	*475*	*520*	*640*	—	—	—
K3	330	365	450	195	220	260	140	155	185	—	—	—	120	135	165	—	—	—
	1075	*1200*	*1475*	*640*	*720*	*850*	*460*	*510*	*610*	—	—	—	*395*	*445*	*540*	—	—	—
K4	315	350	430	185	210	250	130	150	175	—	—	—	115	130	155	—	—	—
	1025	*1150*	*1400*	*610*	*690*	*820*	*425*	*490*	*570*	—	—	—	*375*	*425*	*510*	—	—	—
K5	195	220	265	115	130	150	80	90	110	—	—	—	70	80	95	—	—	—
	640	*720*	*870*	*375*	*425*	*490*	*260*	*295*	*360*	—	—	—	*230*	*260*	*310*	—	—	—
K6	275	305	380	165	185	220	115	130	155	—	—	—	100	115	135	—	—	—
	900	*1000*	*1250*	*540*	*610*	*720*	*375*	*425*	*510*	—	—	—	*330*	*375*	*445*	—	—	—
K7	250	280	340	145	165	195	105	115	140	—	—	—	90	100	120	—	—	—
	820	*920*	*1125*	*475*	*540*	*640*	*345*	*375*	*460*	—	—	—	*295*	*330*	*395*	—	—	—
S1	—	—	—	—	—	—	42	47	55	48	55	65	40	45	55	48	55	65
	—	—	—	—	—	—	*140*	*155*	*180*	*155*	*180*	*215*	*130*	*150*	*180*	*155*	*180*	*215*
S2	—	—	—	—	—	—	34	38	45	39	43	50	32	36	43	39	43	50
	—	—	—	—	—	—	*110*	*125*	*150*	*130*	*140*	*165*	*105*	*120*	*140*	*130*	*140*	*165*
S3	—	—	—	—	—	—	30	33	40	34	38	45	28	32	38	34	38	46
	—	—	—	—	—	—	*100*	*110*	*130*	*110*	*125*	*150*	*90*	*105*	*125*	*110*	*125*	*150*
S11	—	—	—	—	—	—	60	65	80	65	75	90	55	65	75	65	75	90
	—	—	—	—	—	—	*195*	*215*	*260*	*215*	*245*	*295*	*180*	*215*	*245*	*215*	*245*	*295*
S12	—	—	—	—	—	—	41	46	55	46	50	60	38	44	50	46	55	65
	—	—	—	—	—	—	*135*	*150*	*180*	*150*	*165*	*195*	*125*	*145*	*165*	*150*	*180*	*215*
S13	—	—	—	—	—	—	24	26	32	27	30	36	23	25	30	27	30	36
	—	—	—	—	—	—	*80*	*85*	*105*	*90*	*100*	*120*	*75*	*80*	*100*	*90*	*100*	*120*
H5	125	140	170	—	—	—	37	42	50	—	—	—	35	39	47	—	—	—
	410	*460*	*560*	—	—	—	*120*	*140*	*165*	—	—	—	*115*	*130*	*155*	—	—	—
H8	140	150	180	—	—	—	40	44	55	—	—	—	37	42	50	—	—	—
	460	*490*	*590*	—	—	—	*130*	*145*	*180*	—	—	—	*120*	*140*	*165*	—	—	—
H11	160	180	215	—	—	—	47	55	65	—	—	—	45	50	60	105	130	165
	520	*590*	*710*	—	—	—	*155*	*180*	*215*	—	—	—	*150*	*165*	*195*	*345*	*425*	*540*
H12	160	175	210	80	90	105	75	85	100	—	—	—	65	75	90	100	125	155
	520	*570*	*690*	*260*	*295*	*345*	*245*	*280*	*330*	—	—	—	*215*	*245*	*295*	*330*	*410*	*510*

R217/220.21-LO06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050			MP2501			MS2500			MP2501			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	270 *890*	305 *1000*	365 *1200*	390 *1275*	425 *1400*	490 *1600*	375 *1225*	405 *1325*	475 *1550*	390 *1275*	425 *1400*	490 *1600*	350 *1150*	380 *1250*	440 *1450*
P2	265 *870*	300 *980*	355 *1175*	380 *1250*	410 *1350*	480 *1575*	365 *1200*	395 *1300*	460 *1500*	380 *1250*	410 *1350*	480 *1575*	340 *1125*	370 *1225*	430 *1400*
P3	230 *750*	255 *840*	315 *1025*	325 *1075*	355 *1175*	420 *1375*	315 *1025*	340 *1125*	405 *1325*	325 *1075*	355 *1175*	420 *1375*	290 *950*	315 *1025*	375 *1225*
P4	200 *660*	225 *740*	275 *900*	290 *950*	310 *1025*	370 *1225*	275 *900*	300 *980*	355 *1175*	290 *950*	310 *1025*	370 *1225*	255 *840*	280 *920*	330 *1075*
P5	195 *640*	220 *720*	265 *870*	285 *940*	305 *1000*	355 *1175*	270 *890*	295 *970*	340 *1125*	285 *940*	305 *1000*	355 *1175*	255 *840*	275 *900*	315 *1025*
P6	220 *720*	250 *820*	295 *970*	315 *1025*	345 *1125*	395 *1300*	305 *1000*	330 *1075*	385 *1275*	315 *1025*	345 *1125*	395 *1300*	285 *940*	305 *1000*	355 *1175*
P7	210 *690*	235 *770*	280 *920*	300 *980*	325 *1075*	375 *1225*	285 *940*	310 *1025*	360 *1175*	300 *980*	325 *1075*	375 *1225*	270 *890*	290 *950*	335 *1100*
P8	190 *620*	215 *710*	265 *870*	275 *900*	300 *980*	355 *1175*	265 *870*	285 *940*	340 *1125*	275 *900*	300 *980*	355 *1175*	245 *800*	265 *870*	315 *1025*
P11	200 *660*	225 *740*	270 *890*	290 *950*	315 *1025*	365 *1200*	280 *920*	305 *1000*	350 *1150*	290 *950*	315 *1025*	365 *1200*	260 *850*	280 *920*	325 *1075*
P12	130 *425*	145 *475*	175 *570*	190 *620*	205 *670*	235 *770*	180 *590*	195 *640*	225 *740*	190 *620*	205 *670*	235 *770*	170 *560*	185 *610*	210 *690*
M1	190 *620*	215 *710*	255 *840*	195 *640*	220 *720*	260 *850*	210 *690*	235 *770*	285 *940*	195 *640*	220 *720*	260 *850*	180 *590*	205 *670*	245 *800*
M2	155 *510*	175 *570*	210 *690*	160 *520*	180 *590*	215 *710*	175 *570*	195 *640*	235 *770*	160 *520*	180 *590*	215 *710*	150 *490*	170 *560*	200 *660*
M3	125 *410*	140 *460*	170 *560*	130 *425*	145 *475*	175 *570*	140 *460*	160 *520*	190 *620*	130 *425*	145 *475*	175 *570*	120 *395*	135 *445*	160 *520*
M4	100 *330*	110 *360*	130 *425*	100 *330*	115 *375*	135 *445*	110 *360*	125 *410*	145 *475*	100 *330*	115 *375*	135 *445*	95 *310*	105 *345*	125 *410*
M5	85 *280*	90 *295*	110 *360*	85 *280*	95 *310*	115 *375*	90 *295*	100 *330*	125 *410*	85 *280*	95 *310*	115 *375*	80 *260*	90 *295*	105 *345*
K1	— —	— —	— —	385 *1275*	415 *1350*	485 *1600*	235 *770*	260 *850*	315 *1025*	385 *1275*	415 *1350*	485 *1600*	345 *1125*	370 *1225*	430 *1400*
K2	— —	— —	— —	340 *1125*	370 *1225*	425 *1400*	205 *670*	235 *770*	280 *920*	340 *1125*	370 *1225*	425 *1400*	305 *1000*	330 *1075*	385 *1275*
K3	— —	— —	— —	290 *950*	315 *1025*	360 *1175*	175 *570*	195 *640*	235 *770*	290 *950*	315 *1025*	360 *1175*	260 *850*	280 *920*	325 *1075*
K4	— —	— —	— —	275 *900*	300 *980*	345 *1125*	165 *540*	190 *620*	225 *740*	275 *900*	300 *980*	345 *1125*	245 *800*	265 *870*	310 *1025*
K5	— —	— —	— —	170 *560*	185 *610*	210 *690*	100 *330*	115 *375*	135 *445*	170 *560*	185 *610*	210 *690*	150 *490*	165 *540*	190 *620*
K6	— —	— —	— —	245 *800*	265 *870*	305 *1000*	145 *475*	165 *540*	200 *660*	245 *800*	265 *870*	305 *1000*	220 *720*	235 *770*	270 *890*
K7	— —	— —	— —	215 *710*	235 *770*	270 *890*	130 *425*	145 *475*	175 *570*	215 *710*	235 *770*	270 *890*	195 *640*	210 *690*	240 *790*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	48 *155*	55 *180*	65 *215*	— —	— —	— —	55 *180*	60 *195*	70 *230*	— —	— —	— —	44 *145*	49 *160*	60 *195*
S2	39 *130*	43 *140*	50 *165*	— —	— —	— —	43 *140*	48 *155*	60 *195*	— —	— —	— —	36 *120*	40 *130*	47 *155*
S3	34 *110*	38 *125*	46 *150*	— —	— —	— —	38 *125*	43 *140*	50 *165*	— —	— —	— —	31 *100*	35 *115*	42 *140*
S11	65 *215*	75 *245*	90 *295*	— —	— —	— —	75 *245*	85 *280*	100 *330*	— —	— —	— —	60 *195*	70 *230*	80 *260*
S12	46 *150*	55 *180*	65 *215*	— —	— —	— —	50 *165*	60 *195*	70 *230*	— —	— —	— —	42 *140*	48 *155*	55 *180*
S13	27 *90*	30 *100*	36 *120*	— —	— —	— —	30 *100*	34 *110*	40 *130*	— —	— —	— —	25 *80*	28 *90*	33 *110*
H5	— —	— —	— —	— —	— —	— —	46 *150*	50 *165*	60 *195*	— —	— —	— —	40 *130*	45 *150*	55 *180*
H8	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	65 *215*	— —	— —	— —	43 *140*	48 *155*	55 *180*
H11	50 *165*	60 *195*	70 *230*	— —	— —	— —	60 *195*	65 *215*	80 *260*	— —	— —	— —	50 *165*	60 *195*	70 *230*
H12	85 *280*	95 *310*	115 *375*	— —	— —	— —	95 *310*	110 *360*	130 *425*	— —	— —	— —	75 *245*	85 *280*	100 *330*



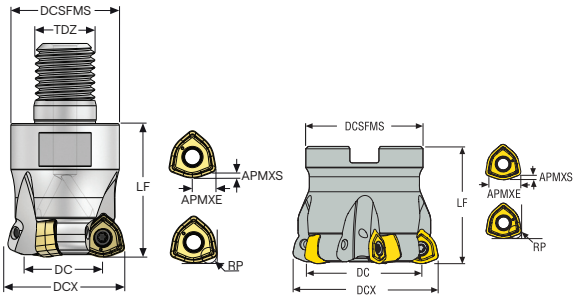
R217/220.21 HIGH FEED 6

HighFeed 6 per tipi di inserti 218.21, 6 taglienti, inserti bilaterali.
Questa famiglia è composta da corpi fresa a manicotto con sedi fisse e inserti negativi molto resistenti con sei taglienti.

- Gamma di frese 40-160 mm (1,5-6")
- Profondità di taglio massima 1,8 mm
- Prima scelta per materiali ISO P & K per macchine di medie dimensioni

R217/220.21-R230 – In mm

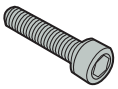
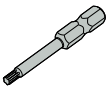
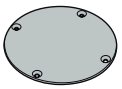




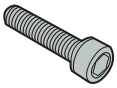
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 616-618
—Per il programma inserti completo, vedere le pagine 918
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0050-R230.4A	02826551	Manicotto	35,6	50,0	4	1,8	10,0	22,0	42,0	–	22,0	40,0	3,32	0,83	–	0,9	12100	0,4	218.21-230
R220.21-0050-R230.5A	02826550	Manicotto	35,6	50,0	5	1,8	10,0	22,0	42,0	–	22,0	40,0	3,32	0,83	–	0,9	12100	0,4	218.21-230
R220.21-0052-R230.5A	02826552	Manicotto	37,6	52,0	5	1,8	10,0	22,0	42,0	–	22,0	40,0	3,32	0,83	–	0,9	11900	0,4	218.21-230
R220.21-0063-R230.5A	02826553	Manicotto	48,3	63,0	5	1,8	10,0	27,0	50,0	–	27,0	50,0	3,32	0,83	–	0,6	10800	0,6	218.21-230
R220.21-0063-R230.6A	02826554	Manicotto	48,3	63,0	6	1,8	10,0	27,0	50,0	–	27,0	50,0	3,32	0,83	–	0,6	10800	0,6	218.21-230
R220.21-0066-R230.6A	02826555	Manicotto	51,3	66,0	6	1,8	10,0	27,0	62,0	–	27,0	50,0	3,32	0,83	–	0,6	10600	0,9	218.21-230
R220.21-0080-R230.6A	02826556	Manicotto	65,6	80,0	6	1,8	10,0	27,0	62,0	–	27,0	50,0	3,32	0,87	–	0,4	9600	1,1	218.21-230
R220.21-0080-R230.7A	02826557	Manicotto	65,6	80,0	7	1,8	10,0	27,0	62,0	–	27,0	50,0	3,32	0,87	–	0,4	9600	1,1	218.21-230
R220.21-0084-R230.8A	02826558	Manicotto	69,6	84,0	8	1,8	10,0	32,0	77,0	–	32,0	50,0	3,32	0,87	–	0,4	9400	1,4	218.21-230
R220.21-0100-R230.7A	02950391	Manicotto	85,6	100,0	7	1,8	10,0	32,0	77,0	–	32,0	50,0	3,3	0,89	–	0,3	8600	1,6	218.21-230
R220.21-0100-R230.9A	02826559	Manicotto	85,6	100,0	9	1,8	10,0	32,0	77,0	–	32,0	50,0	3,32	0,89	–	0,3	8600	1,6	218.21-230
R220.21-0125-R230.9A	02826560	Manicotto	110,2	125,0	9	1,8	10,0	40,0	90,0	–	40,0	63,0	3,32	0,88	–	0,2	7700	2,9	218.21-230
R220.21-8160-R230.10A	02826561	Manicotto	145,2	160,0	10	1,8	10,0	40,0	90,0	–	40,0	63,0	3,32	0,89	–	0,1	6800	4,0	218.21-230
R217.21-2040.RE-R230.3A	03136708	Combimaster	25,6	40,0	3	1,8	10,0	–	36,5	M20	–	45,0	3,32	0,88	72,0	1,4	12100	0,4	218.21-230

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio
					
R217.21-2040	–	1/4HEX-T15PX50	C04011-T15P	–	–
R220.21-0050	220.17-692	1/4HEX-T15PX50	C04011-T15P	–	–
R220.21-0063-0066	MC6S12X35	1/4HEX-T15PX50	C04011-T15P	–	–
R220.21-0080	MC6S12X35	1/4HEX-T15PX50	C04011-T15P	–	–
R220.21-0084-0100	MLC6S16X35	1/4HEX-T15PX50	C04011-T15P	–	–
R220.21-0084-0100	MLC6S16X35	1/4HEX-T15PX90	C04011-T15P	–	–
R220.21-0125	MLC6S20X40	1/4HEX-T15PX90	C04011-T15P	–	–
R220.21-8160	–	1/4HEX-T15PX90	C04011-T15P	SC160-53	MF6S4X10

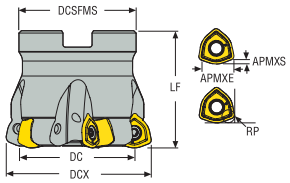
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.21-2040-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R220.21-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-R230 – Pollici

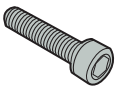
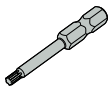




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 616-618
—Per il programma inserti completo, vedere le pagine 918
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R220.21-02.00-R230.4A	02842027	Manicotto	1.421	2.000	4	0.071	0.394	0.750	1.654	0.750	1.575	0.131	0.033	0,9	12100	0.660	218.21-230
R220.21-02.00-R230.5A	02842026	Manicotto	1.421	2.000	5	0.071	0.394	0.750	1.654	0.750	1.575	0.131	0.033	0,9	12100	0.880	218.21-230
R220.21-02.50-R230.5A	02842028	Manicotto	1.921	2.500	5	0.071	0.394	0.750	1.850	0.750	1.575	0.131	0.035	0,6	9600	1.100	218.21-230
R220.21-02.50-R230.6A	02842029	Manicotto	1.921	2.500	6	0.071	0.394	0.750	1.850	0.750	1.575	0.131	0.035	0,6	9600	1.100	218.21-230
R220.21-03.00-R230.5A	02842030	Manicotto	2.429	2.996	5	0.071	0.394	1.000	2.441	1.000	1.969	0.131	0.034	0,5	9800	1.980	218.21-230
R220.21-03.00-R230.6A	02842031	Manicotto	2.429	2.996	6	0.071	0.394	1.000	2.441	1.000	1.969	0.131	0.034	0,5	9800	2.200	218.21-230
R220.21-04.00-R230.7A	03067226	Manicotto	3.433	4.000	7	0.071	0.394	1.500	3.543	1.500	1.969	0.130	0.035	0,3	8500	3.970	218.21-230

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-02.00-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P
R220.21-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P
R220.21-04.00	ULC6S3/4UNFX11/2	1/4HEX-T15PX90	C04011-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.21-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21-R230 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	218.21-230TR-06-M15 MP3501	1,6 *0.065*	1,3 0.050	1,3 0.050	1,5 0.060
P2	218.21-230TR-06-M15 MP3501	1,6 *0.065*	1,3 0.050	1,3 0.050	1,5 0.060
P3	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P4	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P5	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P6	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P7	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P8	218.21-230TR-06-M15 MP2501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P11	218.21-230TR-06-M15 MP3501	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
P12	218.21-230TR-06-M15 MP2501	1,3 *0.050*	0,85 0.034	0,85 0.034	0,95 0.038
M1	218.21-230TR-06-ME13 MS2050	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
M2	218.21-230TR-06-ME13 MS2050	1,6 *0.065*	1,0 0.040	1,0 0.040	1,2 0.048
M3	218.21-230TR-06-ME13 MS2050	1,3 *0.050*	0,85 0.034	0,85 0.034	1,0 0.040
M4	218.21-230TR-06-M15 MP3501	0,95 *0.038*	1,0 0.040	1,0 0.040	1,1 0.044
M5	218.21-230TR-06-M15 MP3501	0,95 *0.038*	1,0 0.040	1,0 0.040	1,1 0.044
K1	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,5 0.060	1,5 0.060	1,7 0.065
K2	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,4 0.055	1,4 0.055	1,6 0.065
K3	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,4 0.055	1,4 0.055	1,6 0.065
K4	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,4 0.055	1,4 0.055	1,6 0.065
K5	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K6	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,4 0.055	1,4 0.055	1,6 0.065
K7	218.21-230TR-06-MD17 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
S1	218.21-230TR-06-M15 MP3501	0,95 *0.038*	1,0 0.040	1,0 0.040	1,1 0.044
S2	218.21-230TR-06-M15 MP3501	0,95 *0.038*	1,0 0.040	1,0 0.040	1,1 0.044
S3	218.21-230TR-06-M15 MP3501	0,95 *0.038*	0,90 0.036	0,90 0.036	1,0 0.040
S11	218.21-230TR-06-ME13 MS2050	1,1 *0.044*	0,95 0.038	0,95 0.038	1,1 0.044
S12	218.21-230TR-06-ME13 MS2050	1,1 *0.044*	0,95 0.038	0,95 0.038	1,1 0.044
S13	218.21-230TR-06-ME13 MS2050	0,95 *0.038*	0,85 0.034	0,85 0.034	0,95 0.038
H5	218.21-230TR-06-MD17 MP3000	1,0 *0.040*	0,95 0.038	0,95 0.038	1,1 0.044
H8	218.21-230TR-06-MD17 MP3000	0,90 *0.036*	0,75 0.030	0,75 0.030	0,85 0.034
H11	218.21-230TR-06-MD17 MP1501	1,0 *0.040*	0,95 0.038	0,95 0.038	1,1 0.044
H12	218.21-230TR-06-MD17 MP1501	0,90 *0.036*	0,75 0.030	0,75 0.030	0,85 0.034

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-R230 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	190 *620*	215 *710*	260 *850*	150 *490*	165 *540*	220 *720*	200 *660*	225 *740*	270 *890*	165 *540*	180 *590*	220 *720*	215 *710*	240 *790*	295 *970*
P2	185 *610*	210 *690*	255 *840*	145 *475*	160 *520*	215 *710*	195 *640*	215 *710*	265 *870*	160 *520*	175 *570*	215 *710*	205 *670*	235 *770*	285 *940*
P3	160 *520*	185 *610*	225 *740*	130 *425*	145 *475*	190 *620*	165 *540*	185 *610*	235 *770*	145 *475*	155 *510*	190 *620*	185 *610*	210 *690*	250 *820*
P4	140 *460*	160 *520*	195 *640*	115 *375*	130 *425*	170 *560*	155 *510*	170 *560*	205 *670*	135 *445*	150 *490*	180 *590*	160 *520*	185 *610*	220 *720*
P5	140 *460*	160 *520*	190 *620*	115 *375*	130 *425*	160 *520*	145 *475*	165 *540*	200 *660*	120 *395*	130 *425*	160 *520*	155 *510*	175 *570*	210 *690*
P6	155 *510*	180 *590*	215 *710*	130 *425*	145 *475*	190 *620*	165 *540*	185 *610*	220 *720*	135 *445*	150 *490*	180 *590*	175 *570*	195 *640*	240 *790*
P7	150 *490*	170 *560*	205 *670*	125 *410*	140 *460*	180 *590*	155 *510*	175 *570*	210 *690*	130 *425*	140 *460*	170 *560*	165 *540*	185 *610*	225 *740*
P8	135 *445*	155 *510*	190 *620*	110 *360*	125 *410*	160 *520*	140 *460*	155 *510*	200 *660*	120 *395*	130 *425*	160 *520*	155 *510*	175 *570*	210 *690*
P11	145 *475*	165 *540*	200 *660*	120 *395*	135 *445*	175 *570*	150 *490*	170 *560*	205 *670*	125 *410*	135 *445*	165 *540*	160 *520*	180 *590*	220 *720*
P12	95 *310*	110 *360*	130 *425*	90 *295*	100 *330*	125 *410*	105 *345*	115 *375*	140 *460*	90 *295*	95 *310*	115 *375*	105 *345*	120 *395*	145 *475*
M1	— —	— —	— —	130 *425*	150 *490*	185 *610*	155 *510*	175 *570*	210 *690*	130 *425*	145 *475*	180 *590*	150 *490*	170 *560*	205 *670*
M2	— —	— —	— —	110 *360*	125 *410*	150 *490*	130 *425*	145 *475*	175 *570*	105 *345*	120 *395*	145 *475*	125 *410*	140 *460*	170 *560*
M3	— —	— —	— —	90 *295*	105 *345*	125 *410*	105 *345*	120 *395*	145 *475*	90 *295*	100 *330*	120 *395*	100 *330*	115 *375*	140 *460*
M4	— —	— —	— —	70 *230*	80 *260*	100 *330*	80 *260*	90 *295*	110 *360*	70 *230*	75 *245*	95 *310*	80 *260*	90 *295*	110 *360*
M5	— —	— —	— —	60 *195*	65 *215*	80 *260*	70 *230*	75 *245*	95 *310*	55 *180*	65 *215*	80 *260*	65 *215*	75 *245*	90 *295*
K1	200 *660*	225 *740*	275 *900*	140 *460*	160 *520*	195 *640*	— —	— —	— —	125 *410*	145 *475*	175 *570*	— —	— —	— —
K2	180 *590*	205 *670*	245 *800*	125 *410*	145 *475*	170 *560*	— —	— —	— —	115 *375*	130 *425*	155 *510*	— —	— —	— —
K3	155 *510*	175 *570*	205 *670*	110 *360*	120 *395*	145 *475*	— —	— —	— —	95 *310*	110 *360*	130 *425*	— —	— —	— —
K4	145 *475*	165 *540*	195 *640*	105 *345*	115 *375*	140 *460*	— —	— —	— —	90 *295*	105 *345*	125 *410*	— —	— —	— —
K5	90 *295*	100 *330*	120 *395*	65 *215*	70 *230*	85 *280*	— —	— —	— —	55 *180*	65 *215*	80 *260*	— —	— —	— —
K6	130 *425*	145 *475*	175 *570*	90 *295*	105 *345*	120 *395*	— —	— —	— —	80 *260*	90 *295*	110 *360*	— —	— —	— —
K7	115 *375*	130 *425*	155 *510*	80 *260*	90 *295*	110 *360*	— —	— —	— —	70 *230*	80 *260*	100 *330*	— —	— —	— —
S1	— —	— —	— —	33 *110*	37 *120*	46 *150*	38 *125*	43 *140*	50 *165*	32 *105*	36 *120*	44 *145*	38 *125*	43 *140*	55 *180*
S2	— —	— —	— —	27 *90*	30 *100*	37 *120*	31 *100*	35 *115*	42 *140*	26 *85*	29 *95*	35 *115*	31 *100*	35 *115*	43 *140*
S3	— —	— —	— —	24 *80*	26 *85*	33 *110*	27 *90*	30 *100*	37 *120*	23 *75*	26 *85*	31 *100*	28 *90*	31 *100*	37 *120*
S11	— —	— —	— —	46 *150*	50 *165*	65 *215*	55 *180*	60 *195*	70 *230*	44 *145*	50 *165*	60 *195*	55 *180*	60 *195*	75 *245*
S12	— —	— —	— —	32 *105*	36 *120*	44 *145*	37 *120*	41 *135*	50 *165*	30 *100*	35 *115*	43 *140*	37 *120*	42 *140*	50 *165*
S13	— —	— —	— —	19 *60*	21 *70*	26 *85*	21 *70*	24 *80*	29 *95*	18 *60*	20 *65*	25 *80*	22 *70*	24 *80*	30 *100*
H5	— —	— —	— —	30 *100*	34 *110*	40 *130*	— —	— —	— —	29 *95*	32 *105*	38 *125*	— —	— —	— —
H8	— —	— —	— —	32 *105*	36 *120*	44 *145*	— —	— —	— —	31 *100*	35 *115*	42 *140*	— —	— —	— —
H11	— —	— —	— —	38 *125*	43 *140*	50 *165*	— —	— —	— —	36 *120*	41 *135*	49 *160*	43 *140*	48 *155*	55 *180*
H12	65 *215*	70 *230*	90 *295*	60 *195*	70 *230*	85 *280*	— —	— —	— —	55 *180*	60 *195*	75 *245*	70 *230*	80 *260*	100 *330*

R217/220.21-R230 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	255 *840*	280 *920*	345 *1125*	285 *940*	310 *1025*	375 *1225*	270 *890*	300 *980*	365 *1200*	250 *820*	270 *890*	330 *1075*	170 *560*	190 *620*	235 *770*
P2	250 *820*	275 *900*	335 *1100*	275 *900*	300 *980*	365 *1200*	265 *870*	290 *950*	355 *1175*	240 *790*	265 *870*	320 *1050*	165 *540*	185 *610*	230 *750*
P3	220 *720*	245 *800*	295 *970*	245 *800*	270 *890*	325 *1075*	235 *770*	260 *850*	315 *1025*	215 *710*	235 *770*	285 *940*	145 *475*	160 *520*	205 *670*
P4	195 *640*	215 *710*	260 *850*	220 *720*	240 *790*	285 *940*	210 *690*	230 *750*	275 *900*	190 *620*	210 *690*	250 *820*	145 *475*	160 *520*	195 *640*
P5	195 *640*	210 *690*	250 *820*	210 *690*	225 *740*	275 *900*	200 *660*	220 *720*	265 *870*	180 *590*	200 *660*	240 *790*	125 *410*	140 *460*	170 *560*
P6	215 *710*	240 *790*	285 *940*	235 *770*	255 *840*	305 *1000*	225 *740*	245 *800*	295 *970*	205 *670*	225 *740*	270 *890*	145 *475*	160 *520*	195 *640*
P7	205 *670*	225 *740*	270 *890*	220 *720*	240 *790*	290 *950*	210 *690*	230 *750*	280 *920*	195 *640*	210 *690*	255 *840*	135 *445*	150 *490*	185 *610*
P8	185 *610*	205 *670*	250 *820*	210 *690*	225 *740*	275 *900*	200 *660*	220 *720*	265 *870*	180 *590*	200 *660*	240 *790*	120 *395*	135 *445*	170 *560*
P11	200 *660*	220 *720*	265 *870*	215 *710*	235 *770*	280 *920*	205 *670*	225 *740*	270 *890*	190 *620*	205 *670*	250 *820*	130 *425*	145 *475*	175 *570*
P12	140 *460*	150 *490*	175 *570*	150 *490*	165 *540*	195 *640*	145 *475*	155 *510*	190 *620*	135 *445*	145 *475*	175 *570*	90 *295*	100 *330*	125 *410*
M1	— —	— —	— —	150 *490*	175 *570*	210 *690*	165 *540*	185 *610*	230 *750*	140 *460*	160 *520*	195 *640*	120 *395*	140 *460*	165 *540*
M2	— —	— —	— —	125 *410*	145 *475*	175 *570*	135 *445*	155 *510*	190 *620*	120 *395*	135 *445*	160 *520*	100 *330*	115 *375*	135 *445*
M3	— —	— —	— —	105 *345*	115 *375*	145 *475*	115 *375*	125 *410*	155 *510*	95 *310*	110 *360*	135 *445*	80 *260*	95 *310*	115 *375*
M4	— —	— —	— —	80 *260*	90 *295*	110 *360*	90 *295*	100 *330*	120 *395*	75 *245*	85 *280*	105 *345*	65 *215*	70 *230*	90 *295*
M5	— —	— —	— —	65 *215*	75 *245*	95 *310*	75 *245*	80 *260*	100 *330*	65 *215*	70 *230*	85 *280*	55 *180*	60 *195*	75 *245*
K1	250 *820*	275 *900*	340 *1125*	280 *920*	305 *1000*	370 *1225*	180 *590*	205 *670*	250 *820*	245 *800*	265 *870*	325 *1075*	— —	— —	— —
K2	235 *770*	255 *840*	300 *980*	250 *820*	275 *900*	330 *1075*	165 *540*	185 *610*	225 *740*	220 *720*	240 *790*	290 *950*	— —	— —	— —
K3	200 *660*	215 *710*	255 *840*	215 *710*	230 *750*	280 *920*	140 *460*	155 *510*	190 *620*	185 *610*	205 *670*	245 *800*	— —	— —	— —
K4	190 *620*	205 *670*	245 *800*	205 *670*	220 *720*	265 *870*	130 *425*	150 *490*	180 *590*	180 *590*	195 *640*	235 *770*	— —	— —	— —
K5	115 *375*	130 *425*	155 *510*	125 *410*	140 *460*	170 *560*	80 *260*	90 *295*	115 *375*	110 *360*	120 *395*	150 *490*	— —	— —	— —
K6	165 *540*	180 *590*	215 *710*	180 *590*	195 *640*	235 *770*	115 *375*	130 *425*	160 *520*	155 *510*	170 *560*	205 *670*	— —	— —	— —
K7	150 *490*	165 *540*	195 *640*	160 *520*	175 *570*	215 *710*	105 *345*	115 *375*	145 *475*	140 *460*	155 *510*	190 *620*	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	43 *140*	48 *155*	60 *195*	35 *115*	40 *130*	48 *155*	20 *65*	22 *70*	27 *90*
S2	— —	— —	— —	— —	— —	— —	34 *110*	39 *130*	48 *155*	28 *90*	32 *105*	39 *130*	16 *50*	18 *60*	22 *70*
S3	— —	— —	— —	— —	— —	— —	31 *100*	35 *115*	42 *140*	25 *80*	28 *90*	34 *110*	14 *46*	16 *50*	19 *60*
S11	— —	— —	— —	— —	— —	— —	60 *195*	70 *230*	85 *280*	48 *155*	55 *180*	70 *230*	27 *90*	31 *100*	37 *120*
S12	— —	— —	— —	— —	— —	— —	41 *135*	47 *155*	55 *180*	33 *110*	39 *130*	47 *155*	25 *80*	28 *90*	34 *110*
S13	— —	— —	— —	— —	— —	— —	24 *80*	27 *90*	33 *110*	20 *65*	22 *70*	27 *90*	15 *49*	17 *55*	20 *65*
H5	38 *125*	43 *140*	50 *165*	— —	— —	— —	37 *120*	42 *140*	50 *165*	33 *110*	37 *120*	44 *145*	— —	— —	— —
H8	41 *135*	46 *150*	55 *180*	— —	— —	— —	40 *130*	45 *150*	55 *180*	35 *115*	40 *130*	48 *155*	— —	— —	— —
H11	48 *155*	55 *180*	65 *215*	— —	— —	— —	47 *155*	55 *180*	65 *215*	42 *140*	47 *155*	55 *180*	— —	— —	— —
H12	75 *245*	80 *260*	100 *330*	— —	— —	— —	80 *260*	90 *295*	110 *360*	65 *215*	70 *230*	85 *280*	— —	— —	— —



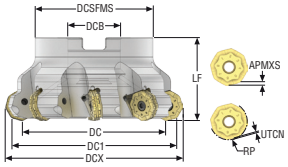
R220.21 (ON09) HIGH FEED

Frese con inserto octomill ad elevato avanzamento. Gli inserti ON09 sono dotati di 16 taglienti, il che li rende la scelta più conveniente per le applicazioni di spianatura utilizzando una strategia ad elevato avanzamento.
I perni HSS posizionano saldamente gli inserti nelle sedi fisse della fresa e riducono il tempo necessario per la sostituzione.

– Gamma di frese 80-160 mm (3-6”)
– Profondità di taglio massima 2 mm (0,078”)
– Solo applicazioni di spianatura

R220.21-ON09 – In mm

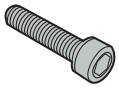
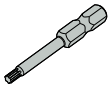




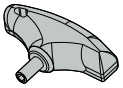
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 622-623
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	LF	RP	UTCN	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm		kg	
R220.21-0080-ON09-6A	02848781	Manicotto	65,35	89,9	6	2,0	7,0	27,0	62,0	50,0	10,28	0,85	4400	1,0	ON..09
R220.21-0100-ON09-7A	02848782	Manicotto	85,35	109,9	7	2,0	7,0	32,0	77,0	50,0	10,28	0,85	3900	1,5	ON..09
R220.21-0125-ON09-8A	02848783	Manicotto	110,35	134,9	8	2,0	7,0	40,0	90,0	63,0	10,28	0,85	3500	2,9	ON..09
R220.21-8160-ON09-10	02848784	Manicotto	145,35	169,9	10	2,0	7,0	40,0	90,0	63,0	10,28	0,85	3100	4,2	ON..09

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-0080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P
R220.21-0100-0125	–	1/4HEX-T20PX90	C05013-T20P
R220.21-8160	–	1/4HEX-T20PX90	C05013-T20P

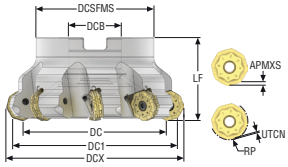
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.21-0080-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.21-0080-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5803216	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.21-0080-0125	1/4HEX-T-HANDLE-5.0-14.0NM	5804020	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.21-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-ON09 – Pollici

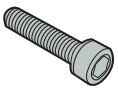
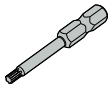




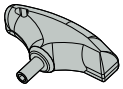
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 622-623
—Per il programma inserti completo, vedere le pagine 872
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	LF	RP	UTCN	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch		lb	
R220.21-03.00-ON09-6A	02848785	Manicotto	2.423	3.389	6	0.079	0.276	1.000	2.441	1.969	0.405	0.033	4400	1.980	ON..09
R220.21-06.00-ON09-10	02848788	Manicotto	5.423	6.389	10	0.079	0.276	2.000	4.331	2.480	0.405	0.033	3200	8.380	ON..09

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C05013-T20P
R220.21-06.00	–	1/4HEX-T20PX90	C05013-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.21-03.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R220.21-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-ON09 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z	
			70%	30%
P1	ONMU090512TN-ME16 MP3501	2,0 *0.080*	0,75 0.030	0,85 0.034
P2	ONMU090512TN-ME16 MP3501	2,0 *0.080*	0,75 0.030	0,85 0.034
P3	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,80 0.032
P4	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,80 0.032
P5	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,80 0.032
P6	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,75 0.030
P7	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,75 0.030
P8	ONMU090512TN-ME16 MP2501	2,0 *0.080*	0,70 0.028	0,80 0.032
P11	ONMU090512TN-ME16 MP3501	2,0 *0.080*	0,70 0.028	0,75 0.030
P12	ONMU090512TN-ME16 MP3501	1,6 *0.060*	0,46 0.018	0,50 0.020
M1	ONMU090512TN-ME16 MS2050	2,0 *0.080*	0,75 0.030	0,85 0.034
M2	ONMU090512TN-ME16 MS2050	2,0 *0.080*	0,70 0.028	0,80 0.032
M3	ONMU090512TN-ME16 MS2050	1,6 *0.060*	0,55 0.022	0,60 0.024
M4	ONMU090512TN-ME16 MP3501	1,6 *0.060*	0,48 0.019	0,55 0.022
M5	ONMU090512TN-ME16 MP3501	1,6 *0.060*	0,48 0.019	0,55 0.022
K1	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,4 0.055	1,6 0.065
K2	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,3 0.050	1,4 0.055
K3	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,3 0.050	1,4 0.055
K4	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,3 0.050	1,4 0.055
K5	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,1 0.044	1,3 0.050
K6	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,3 0.050	1,4 0.055
K7	ONMU090512TN-M30 MK1501	2,0 *0.080*	1,1 0.044	1,3 0.050
S1	ONMU090512TN-ME16 MP2051	1,6 *0.060*	0,48 0.019	0,55 0.022
S2	ONMU090512TN-ME16 MP2051	1,6 *0.060*	0,48 0.019	0,55 0.022
S3	ONMU090512TN-ME16 MP2051	1,6 *0.060*	0,44 0.017	0,50 0.020
S11	ONMU090512TN-ME16 MS2050	1,6 *0.060*	0,55 0.022	0,60 0.024
S12	ONMU090512TN-ME16 MS2050	1,6 *0.060*	0,55 0.022	0,60 0.024
S13	ONMU090512TN-ME16 MS2050	1,6 *0.060*	0,48 0.019	0,55 0.022
H5	ONMU090512TN-M30 MP1501	1,6 *0.060*	0,85 0.034	0,95 0.038
H8	ONMU090512TN-M30 MP1501	1,6 *0.060*	0,65 0.026	0,75 0.030

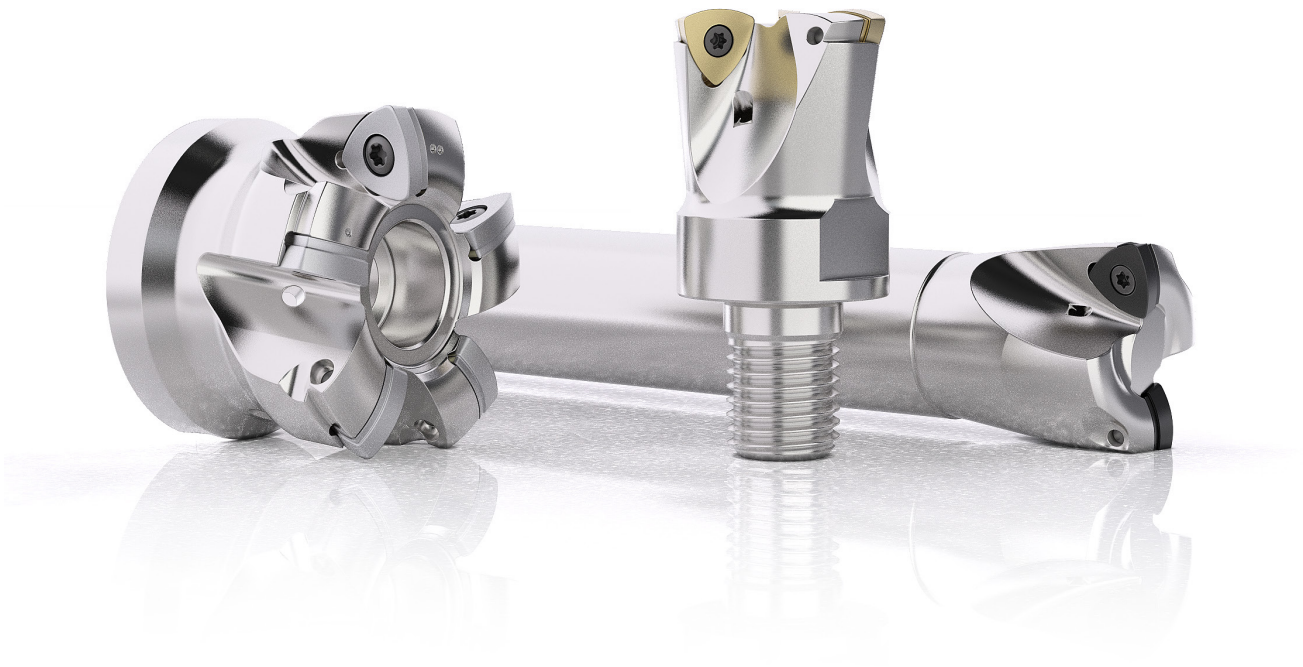
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-ON09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M			MP2051			MP2050			MK1501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	270 *890*	305 *1000*	370 *1225*	265 *870*	290 *950*	370 *1225*	245 *800*	270 *890*	325 *1075*	230 *750*	245 *800*	295 *970*	260 *850*	290 *950*	400 *1300*	270 *890*	305 *1000*	370 *1225*	— —	—	—
P2	265 *870*	295 *970*	360 *1175*	255 *840*	285 *940*	360 *1175*	235 *770*	260 *850*	320 *1050*	225 *740*	240 *790*	290 *950*	250 *820*	280 *920*	390 *1275*	265 *870*	295 *970*	360 *1175*	— —	—	—
P3	230 *750*	260 *850*	315 *1025*	230 *750*	255 *840*	320 *1050*	210 *690*	230 *750*	280 *920*	200 *660*	215 *710*	255 *840*	230 *750*	255 *840*	350 *1150*	230 *750*	260 *850*	315 *1025*	— —	—	—
P4	205 *670*	230 *750*	280 *920*	200 *660*	225 *740*	280 *920*	185 *610*	205 *670*	245 *800*	180 *590*	200 *660*	235 *770*	200 *660*	225 *740*	310 *1025*	205 *670*	230 *750*	280 *920*	— —	—	—
P5	195 *640*	220 *720*	270 *890*	200 *660*	220 *720*	275 *900*	175 *570*	195 *640*	240 *790*	175 *570*	185 *610*	220 *720*	195 *640*	215 *710*	305 *1000*	195 *640*	220 *720*	270 *890*	— —	—	—
P6	225 *740*	250 *820*	305 *1000*	225 *740*	250 *820*	310 *1025*	205 *670*	225 *740*	270 *890*	195 *640*	210 *690*	245 *800*	230 *750*	260 *850*	345 *1125*	225 *740*	250 *820*	305 *1000*	— —	—	—
P7	210 *690*	240 *790*	285 *940*	215 *710*	235 *770*	290 *950*	190 *620*	210 *690*	255 *840*	185 *610*	195 *640*	230 *750*	220 *720*	245 *800*	325 *1075*	210 *690*	240 *790*	285 *940*	— —	—	—
P8	195 *640*	220 *720*	265 *870*	195 *640*	215 *710*	270 *890*	175 *570*	195 *640*	235 *770*	170 *560*	180 *590*	215 *710*	195 *640*	215 *710*	295 *970*	195 *640*	220 *720*	265 *870*	— —	—	—
P11	205 *670*	230 *750*	280 *920*	205 *670*	230 *750*	285 *940*	185 *610*	205 *670*	250 *820*	180 *590*	190 *620*	225 *740*	200 *660*	235 *770*	340 *1125*	205 *670*	230 *750*	280 *920*	— —	—	—
P12	135 *445*	150 *490*	185 *610*	140 *460*	155 *510*	195 *640*	125 *410*	135 *445*	165 *540*	120 *395*	130 *425*	155 *510*	150 *490*	180 *590*	250 *820*	135 *445*	150 *490*	185 *610*	— —	—	—
M1	— —	—	—	190 *620*	215 *710*	260 *850*	180 *590*	205 *670*	245 *800*	165 *540*	185 *610*	225 *740*	205 *670*	245 *800*	365 *1200*	190 *620*	210 *690*	260 *850*	— —	—	—
M2	— —	—	—	160 *520*	180 *590*	215 *710*	150 *490*	165 *540*	205 *670*	140 *460*	155 *510*	185 *610*	175 *570*	210 *690*	325 *1075*	155 *510*	175 *570*	215 *710*	— —	—	—
M3	— —	—	—	125 *410*	145 *475*	175 *570*	120 *395*	135 *445*	165 *540*	110 *360*	125 *410*	150 *490*	165 *540*	195 *640*	280 *920*	125 *410*	140 *460*	175 *570*	— —	—	—
M4	— —	—	—	100 *330*	110 *360*	135 *445*	95 *310*	105 *345*	130 *425*	85 *280*	95 *310*	115 *375*	135 *445*	160 *520*	220 *720*	100 *330*	110 *360*	135 *445*	— —	—	—
M5	— —	—	—	85 *280*	95 *310*	115 *375*	80 *260*	90 *295*	105 *345*	70 *230*	80 *260*	95 *310*	110 *360*	135 *445*	185 *610*	80 *260*	95 *310*	110 *360*	— —	—	—
K1	285 *940*	320 *1050*	390 *1275*	200 *660*	225 *740*	275 *900*	— —	—	—	160 *520*	180 *590*	220 *720*	—	—	—	—	—	—	305 *1000*	415 *1350*	580 *1900*
K2	250 *820*	285 *940*	350 *1150*	180 *590*	205 *670*	245 *800*	— —	—	—	145 *475*	165 *540*	200 *660*	—	—	—	—	—	—	270 *890*	365 *1200*	510 *1675*
K3	215 *710*	240 *790*	295 *970*	155 *510*	175 *570*	210 *690*	— —	—	—	125 *410*	140 *460*	165 *540*	—	—	—	—	—	—	195 *640*	235 *770*	305 *1000*
K4	205 *670*	230 *750*	285 *940*	145 *475*	165 *540*	200 *660*	— —	—	—	120 *395*	130 *425*	160 *520*	—	—	—	—	—	—	185 *610*	220 *720*	290 *950*
K5	125 *410*	145 *475*	170 *560*	90 *295*	100 *330*	120 *395*	— —	—	—	70 *230*	80 *260*	95 *310*	—	—	—	—	—	—	115 *375*	140 *460*	175 *570*
K6	180 *590*	200 *660*	250 *820*	130 *425*	145 *475*	175 *570*	— —	—	—	105 *345*	115 *375*	140 *460*	—	—	—	—	—	—	160 *520*	195 *640*	255 *840*
K7	165 *540*	185 *610*	220 *720*	115 *375*	130 *425*	155 *510*	— —	—	—	90 *295*	105 *345*	125 *410*	—	—	—	—	—	—	150 *490*	180 *590*	225 *740*

R220.21-ON09 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	395 *1300*	425 *1400*	510 *1675*	385 *1275*	415 *1350*	495 *1625*	365 *1200*	400 *1300*	475 *1550*	340 *1125*	365 *1200*	440 *1450*	235 *770*	260 *850*	315 *1025*
P2	385 *1275*	415 *1350*	490 *1600*	375 *1225*	405 *1325*	480 *1575*	355 *1175*	390 *1275*	465 *1525*	330 *1075*	360 *1175*	430 *1400*	230 *750*	255 *840*	305 *1000*
P3	340 *1125*	365 *1200*	430 *1400*	330 *1075*	355 *1175*	420 *1375*	315 *1025*	345 *1125*	405 *1325*	295 *970*	315 *1025*	375 *1225*	205 *670*	225 *740*	265 *870*
P4	300 *980*	325 *1075*	380 *1250*	290 *950*	315 *1025*	370 *1225*	275 *900*	300 *980*	360 *1175*	260 *850*	280 *920*	330 *1075*	195 *640*	215 *710*	255 *840*
P5	285 *940*	310 *1025*	370 *1225*	275 *900*	300 *980*	360 *1175*	265 *870*	290 *950*	350 *1150*	245 *800*	265 *870*	325 *1075*	175 *570*	195 *640*	225 *740*
P6	325 *1075*	355 *1175*	415 *1350*	320 *1050*	345 *1125*	405 *1325*	305 *1000*	335 *1100*	390 *1275*	285 *940*	310 *1025*	365 *1200*	195 *640*	215 *710*	255 *840*
P7	310 *1025*	335 *1100*	390 *1275*	300 *980*	325 *1075*	385 *1275*	290 *950*	315 *1025*	370 *1225*	270 *890*	290 *950*	345 *1125*	185 *610*	205 *670*	240 *790*
P8	285 *940*	310 *1025*	365 *1200*	275 *900*	300 *980*	355 *1175*	265 *870*	290 *950*	340 *1125*	245 *800*	265 *870*	315 *1025*	170 *560*	190 *620*	220 *720*
P11	300 *980*	325 *1075*	380 *1250*	295 *970*	315 *1025*	375 *1225*	280 *920*	305 *1000*	360 *1175*	260 *850*	280 *920*	335 *1100*	180 *590*	200 *660*	235 *770*
P12	195 *640*	210 *690*	250 *820*	190 *620*	210 *690*	245 *800*	185 *610*	200 *660*	235 *770*	170 *560*	185 *610*	220 *720*	115 *375*	125 *410*	145 *475*
M1	— —	— —	— —	195 *640*	215 *710*	265 *870*	210 *690*	235 *770*	285 *940*	180 *590*	205 *670*	245 *800*	150 *490*	170 *560*	205 *670*
M2	— —	— —	— —	160 *520*	180 *590*	220 *720*	175 *570*	195 *640*	240 *790*	150 *490*	165 *540*	205 *670*	125 *410*	145 *475*	170 *560*
M3	— —	— —	— —	130 *425*	145 *475*	180 *590*	140 *460*	160 *520*	195 *640*	120 *395*	135 *445*	165 *540*	100 *330*	115 *375*	140 *460*
M4	— —	— —	— —	100 *330*	115 *375*	140 *460*	110 *360*	125 *410*	150 *490*	95 *310*	105 *345*	130 *425*	80 *260*	90 *295*	110 *360*
M5	— —	— —	— —	85 *280*	95 *310*	115 *375*	90 *295*	105 *345*	125 *410*	80 *260*	90 *295*	105 *345*	65 *215*	75 *245*	90 *295*
K1	385 *1275*	420 *1375*	495 *1625*	375 *1225*	405 *1325*	485 *1600*	230 *750*	260 *850*	315 *1025*	335 *1100*	360 *1175*	430 *1400*	— —	— —	— —
K2	345 *1125*	370 *1225*	445 *1450*	335 *1100*	360 *1175*	440 *1450*	205 *670*	230 *750*	285 *940*	300 *980*	320 *1050*	390 *1275*	— —	— —	— —
K3	290 *950*	315 *1025*	380 *1250*	285 *940*	305 *1000*	370 *1225*	175 *570*	195 *640*	240 *790*	250 *820*	270 *890*	330 *1075*	— —	— —	— —
K4	275 *900*	300 *980*	360 *1175*	270 *890*	295 *970*	355 *1175*	165 *540*	185 *610*	230 *750*	240 *790*	260 *850*	315 *1025*	— —	— —	— —
K5	175 *570*	190 *620*	220 *720*	170 *560*	185 *610*	215 *710*	105 *345*	115 *375*	140 *460*	150 *490*	165 *540*	190 *620*	— —	— —	— —
K6	245 *800*	265 *870*	320 *1050*	240 *790*	260 *850*	310 *1025*	145 *475*	165 *540*	205 *670*	210 *690*	230 *750*	280 *920*	— —	— —	— —
K7	225 *740*	240 *790*	280 *920*	220 *720*	235 *770*	275 *900*	130 *425*	150 *490*	180 *590*	195 *640*	210 *690*	245 *800*	— —	— —	— —



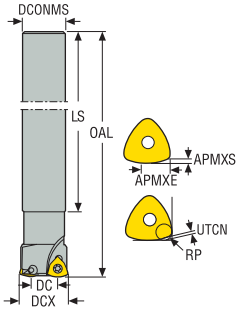
R217/220.21 HIGH FEED

Frese per elevato avanzamento per impiego generico, 3 taglienti, inserti monolaterali.
La gamma di inserti 218.19 comprende un'ampia scelta di geometrie e qualità per molti materiali diversi.

- Gamma di frese 16-100 mm (0,625-4")
- Adatte anche alle sporgenze lunghe e/o condizioni instabili
- Macchine CNC di dimensioni medio-piccole con giri/min elevati e avanzamenti elevati
- Adatte anche le macchine con giri/min e avanzamenti inferiori

R217.21 – In mm

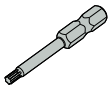




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 632-642
—Per il programma inserti completo, vedere le pagine 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R217.21-1416.0-R080.2A	02554443	Cilindrico	9,25	16,0	2	0,63	5,0	14,0	1,0	0,39	105,0	105,0	150,0	6,1	53400	0,2	218.19-080
R217.21-1820.0-R100.2A	02554439	Cilindrico	11,4	20,0	2	0,74	7,0	18,0	1,47	0,45	110,0	110,0	160,0	5,7	32600	0,3	218.19-100
R217.21-2025.0-R100.2A	02616308	Cilindrico	16,46	25,0	2	0,74	7,0	20,0	1,47	0,45	120,0	120,0	170,0	3,48	29100	0,5	218.19-100
R217.21-2525.0-R100.3A	02616320	Cilindrico	16,46	25,0	3	0,74	7,0	25,0	1,47	0,45	114,0	114,0	170,0	3,48	29100	0,6	218.19-100
R217.21-2532.0-R125.2A	02616323	Cilindrico	21,16	32,0	2	1,0	9,0	25,0	1,74	0,61	140,0	140,0	195,0	3,67	19700	0,7	218.19-125
R217.21-3232.0-R125.3A	02616325	Cilindrico	21,16	32,0	3	1,0	9,0	32,0	1,74	0,61	39,5	135,0	195,0	3,67	19700	1,2	218.19-125

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-R080	1/4HEX-T07PX50	C02205-T07P
R217.21-R100	1/4HEX-T08PX50	C02506-T08P
R217.21-R125	1/4HEX-T09PX50	C03007-T09P

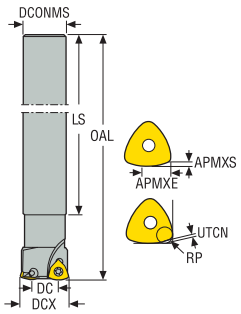
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-R080	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R217.21-R100	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R217.21-R125	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21 – Pollici

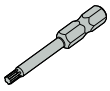




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 632-642
—Per il programma inserti completo, vedere le pagine 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCONMS	RP	UTCN	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch	inch			lb	
R217.21-0.750-0-R100.2HA	02548132	Cilindrico	0.357	0.750	2	0.043	0.276	0.750	0.071	0.024	1.250	4.000	6.500	4,5	32600	0.880	218.19-100
R217.21-0.750-0-R100.2A	02559353	Cilindrico	0.410	0.750	2	0.029	0.276	0.750	0.058	0.018	4.531	4.531	6.500	6,45	32600	0.880	218.19-100
R217.21-1.25-0-R160.2HA	02553730	Cilindrico	0.583	1.250	2	0.080	0.433	1.250	0.121	0.041	5.217	5.220	7.500	3,37	16200	2.200	218.19-160
R217.21-1.50-0-R160.3HA	02553733	Cilindrico	0.591	1.500	3	0.080	0.433	1.500	0.120	0.041	2.087	5.310	8.000	3,09	17600	3.530	218.19-160
R217.21-1.00-0-R100.3A	02559354	Cilindrico	0.660	1.000	3	0.029	0.276	1.000	0.058	0.018	4.795	4.795	7.000	3,38	29100	1.320	218.19-100
R217.21-1.25-0-R125.3A	02553726	Cilindrico	0.823	1.250	3	0.039	0.354	1.250	0.069	0.024	1.575	5.138	7.500	3,73	19700	2.430	218.19-125

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.21-R100	1/4HEX-T08PX50	C02506-T08P
R217.21-R125	1/4HEX-T09PX50	C03007-T09P
R217.21-R160	1/4HEX-T15PX50	C03510-T15P

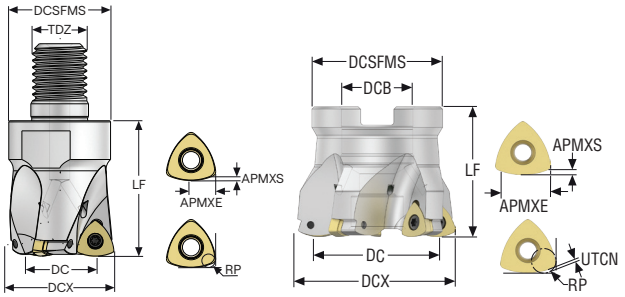
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-R100	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R217.21-R125	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R217.21-R160	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21 – In mm



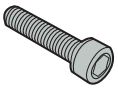
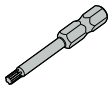


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 632-642
—Per il programma inserti completo, vedere le pagine 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCS-FMS	TDZ		LF	RP		OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm	mm	mm	mm			kg	
R220.21-0040-R125.4A	00030717	Manicotto	29,2	40,0	4	1,0	9,0	16,0	35,0	–	16,0	40,0	1,75	0,61	–	2,47	17600	0,2	218.19-125
R220.21-0042-R125.4A	00030720	Manicotto	31,2	42,0	4	1,0	9,0	16,0	35,0	–	16,0	40,0	1,75	0,61	–	2,28	17200	0,2	218.19-125
R220.21-0050-R160.5A	03136664	Manicotto	33,7	50,0	5	1,8	11,0	22,0	47,0	–	22,0	40,0	3,01	1,03	–	0,9	12900	0,3	218.19-160
R220.21-0050-R160.4A	00030723	Manicotto	34,17	50,0	4	1,8	11,0	22,0	47,0	–	22,0	40,0	2,85	0,97	–	1,47	12900	0,3	218.19-160
R220.21-0052-R160.5A	03136665	Manicotto	35,7	52,0	5	1,8	11,0	22,0	47,0	–	22,0	40,0	3,03	1,03	–	0,8	12700	0,4	218.19-160
R220.21-0052-R160.4A	02425827	Manicotto	36,19	52,0	4	1,8	11,0	22,0	47,0	–	22,0	40,0	2,85	0,97	–	1,38	12700	0,4	218.19-160
R220.21-0063-R160.4A	00030724	Manicotto	47,2	63,0	4	1,8	11,0	27,0	50,0	–	27,0	50,0	2,85	0,97	–	1,0	11500	0,6	218.19-160
R220.21-0063-R160.5A	00030726	Manicotto	47,2	63,0	5	1,8	11,0	27,0	50,0	–	27,0	50,0	2,85	0,97	–	1,0	11500	0,5	218.19-160
R220.21-0063-R160.6A	03136666	Manicotto	47,9	63,0	6	1,8	11,0	27,0	50,0	–	27,0	50,0	3,0	0,98	–	0,6	11500	0,6	218.19-160
R220.21-0066-R160.5A	02409011	Manicotto	50,21	66,0	5	1,8	11,0	27,0	50,0	–	27,0	50,0	2,85	0,97	–	0,95	11200	0,5	218.19-160
R220.21-0066-R160.6A	03136667	Manicotto	50,9	66,0	6	1,8	11,0	27,0	62,0	–	27,0	50,0	3,0	1,05	–	0,5	11200	0,8	218.19-160
R220.21-0080-R160.7A	03136668	Manicotto	63,6	80,0	7	1,8	11,0	27,0	62,0	–	27,0	50,0	3,0	1,04	–	0,4	10200	1,0	218.19-160
R220.21-0080-R160.6A	02530950	Manicotto	64,15	80,0	6	1,8	11,0	27,0	62,0	–	27,0	50,0	2,85	0,97	–	0,73	10200	0,9	218.19-160
R220.21-0084-R160.6A	02969095	Manicotto	68,0	84,0	6	1,8	11,0	32,0	77,0	–	32,0	50,0	2,85	0,97	–	0,7	10000	1,3	218.19-160
R220.21-0100-R160.9A	03136671	Manicotto	83,6	100,0	9	1,8	11,0	32,0	77,0	–	32,0	50,0	3,0	1,03	–	0,3	9700	1,8	218.19-160
R220.21-0100-R160.7A	02530946	Manicotto	84,13	100,0	7	1,8	11,0	32,0	77,0	–	32,0	50,0	2,85	0,97	–	0,54	9700	1,6	218.19-160
R217.21-0816.RE-R080.2	00030707	Combimaster	9,25	16,0	2	0,6	5,0	–	13,5	M8	–	23,0	1,0	0,39	40,75	6,1	53400	0,1	218.19-080
R217.21-1020.RE-R100.2HA	02546332	Combimaster	10,44	20,0	2	1,0	7,0	–	18,5	M10	–	28,0	1,7	0,55	46,75	4,32	32600	0,1	218.19-100
R217.21-1020.RE-R100.2A	00030708	Combimaster	11,45	20,0	2	0,7	7,0	–	18,5	M10	–	28,0	1,47	0,45	46,75	5,71	32600	0,1	218.19-100
R217.21-1225.RE-R125.2HA	02502370	Combimaster	12,36	25,0	2	1,5	9,0	–	23,0	M12	–	35,0	2,18	0,8	56,75	4,25	29100	0,1	218.19-125
R217.21-1632.RE-R160.2HA	02546333	Combimaster	16,09	32,0	2	1,8	11,0	–	30,0	M16	–	40,0	2,87	0,97	62,75	3,76	16200	0,2	218.19-160
R217.21-1225.RE-R100.3A	00030710	Combimaster	16,46	25,0	3	0,7	7,0	–	23,0	M12	–	35,0	1,47	0,45	56,75	3,48	29100	0,1	218.19-100
R217.21-1632.RE-R125.3A	00030714	Combimaster	21,21	32,0	3	1,0	9,0	–	30,0	M16	–	40,0	1,74	0,61	62,75	3,7	19700	0,2	218.19-125
R217.21-1640.RE-R160.3HA	02546335	Combimaster	23,99	40,0	3	1,8	11,0	–	30,0	M16	–	40,0	2,87	0,97	62,75	2,18	14500	0,3	218.19-160
R217.21-1635.RE-R125.3A	00030715	Combimaster	24,16	35,0	3	1,0	9,0	–	30,0	M16	–	40,0	1,74	0,61	62,75	3,1	18800	0,2	218.19-125
R217.21-1640.RE-R125.4A	00039503	Combimaster	29,25	40,0	4	1,0	9,0	–	30,0	M16	–	40,0	1,74	0,61	62,75	2,47	17600	0,3	218.19-125

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-R080	–	1/4HEX-T07PX50	C02205-T07P
R217.21-R100	–	1/4HEX-T08PX50	C02506-T08P
R217.21-R125	–	1/4HEX-T09PX50	C03007-T09P
R217.21-R160	–	1/4HEX-T15PX50	C03510-T15P
R220.21-0040-0042	220.17-689	1/4HEX-T09PX50	C03007-T09P
R220.21-0050-0052	220.17-692	1/4HEX-T15PX50	C03510-T15P
R220.21-0063	MC6S12X35	1/4HEX-T15PX50	C03510-T15P
R220.21-0080	MC6S12X35	1/4HEX-T15PX50	C03510-T15P
R220.21-0084	950E1645	1/4HEX-T15PX50	C03510-T15P
R220.21-0100	MC6S16X35	1/4HEX-T15PX90	C03510-T15P
R220.21-0100.9A	950E1645	1/4HEX-T15PX90	C03510-T15P

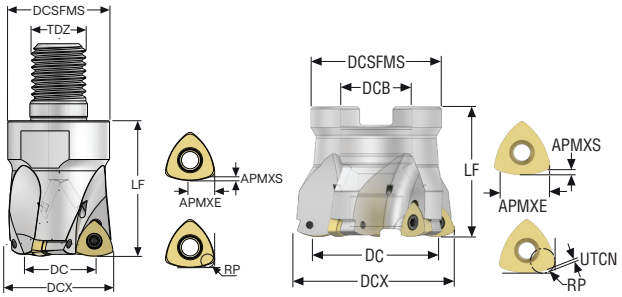
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-R080	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R217.21-R100	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R217.21-R125	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R217.21-R160	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30
R220.21-0040-0042	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R220.21-0050-0100	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.21 – Pollici



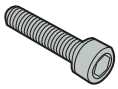
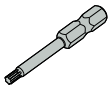


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 632-642
—Per il programma inserti completo, vedere le pagine 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	RP	UTCN	OAL	RMPX°	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch		inch	inch	inch	inch	inch			lb	
R220.21-1.50-R125.4A	00098850	Manicotto	1.002	1.500	4	0.060	0.354	0.500	1.378	–	0.500	1.600	0.087	0.032	–	1,69	17600	0.440	218.19-125
R220.21-02.00-R160.5A	02789050	Manicotto	1.327	2.000	5	0.079	0.433	0.750	1.850	–	0.750	1.600	0.119	0.041	–	1,17	12900	0.660	218.19-160
R220.21-02.00-R160.4A	00098952	Manicotto	1.346	2.000	4	0.079	0.433	0.750	1.850	–	0.750	1.600	0.119	0.041	–	1,17	12900	0.880	218.19-160
R220.21-02.50-R160.6A	02825654	Manicotto	1.827	2.500	6	0.079	0.433	0.750	2.350	–	0.750	2.000	0.119	0.041	–	0,83	11500	1.540	218.19-160
R220.21-02.50-R160.5A	00099029	Manicotto	1.843	2.500	5	0.079	0.433	0.750	2.350	–	0.750	2.000	0.119	0.041	–	0,83	11500	1.320	218.19-160
R220.21-03.00-R160.6A	02427189	Manicotto	2.280	3.000	6	0.098	0.433	1.000	2.441	–	1.000	2.000	0.138	0.047	–	0,39	10200	1.980	218.19-160
R220.21-03.00-R160.7A	02828389	Manicotto	2.348	3.000	7	0.079	0.433	1.000	2.441	–	1.000	2.000	0.119	0.041	–	0,39	10200	2.430	218.19-160
R220.21-04.00-R160.7A	02427191	Manicotto	3.286	4.000	7	0.098	0.433	1.500	3.543	–	1.500	2.000	0.138	0.047	–	0,27	9100	4.190	218.19-160
R220.21-04.00-R160.9A	02810684	Manicotto	3.348	4.000	9	0.083	0.433	1.500	3.543	–	1.500	2.000	0.119	0.041	–	0,27	9100	4.630	218.19-160
R217.21-0.75RE-R100.2HA	02548133	Combimaster	0.357	0.750	2	0.043	0.276	–	0.728	M10	–	1.100	0.071	0.024	1.838	4,5	32600	0.220	218.19-100
R217.21-0.7510RER100.2A	00098320	Combimaster	0.414	0.750	2	0.028	0.276	–	0.728	M10	–	1.100	0.058	0.017	1.838	6,45	32600	0.220	218.19-100
R217.21-1.25RE-R160.2HA	02548129	Combimaster	0.543	1.250	2	0.079	0.433	–	1.181	M16	–	1.600	0.121	0.041	2.496	3,37	16200	0.660	218.19-160
R217.21-1.0012RER100.3A	00098330	Combimaster	0.663	1.000	3	0.028	0.276	–	0.906	M12	–	1.400	0.058	0.018	2.256	3,38	29100	0.220	218.19-100
R217.21-1.50RE-R160.3HA	02548130	Combimaster	0.791	1.498	3	0.079	0.433	–	1.181	M16	–	1.600	0.121	0.041	2.496	1,96	14500	0.660	218.19-160
R217.21-1.2516RER125.3A	00098351	Combimaster	0.823	1.250	3	0.039	0.354	–	1.181	M16	–	1.600	0.069	0.024	2.496	3,73	19700	0.660	218.19-125
R217.21-1.5016RER125.4A	02435615	Combimaster	1.002	1.500	4	0.059	0.354	–	1.181	M16	–	1.600	0.086	0.031	2.496	1,69	17600	0.660	218.19-125

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.21-0.75/1.00/0.75HA	–	1/4HEX-T08PX50	C02506-T08P
R217.21-1.25/1.50/1.00HA	–	1/4HEX-T09PX50	C03007-T09P
R217.21-1.25HA/1.50HA	–	1/4HEX-T15PX50	C03510-T15P
R220.21-01.50	UC6S1/4UNFX1	1/4HEX-T09PX50	C03007-T09P
R220.21-02.00	UC6S3/8UNFX1	1/4HEX-T15PX50	C03510-T15P
R220.21-02.00.5A	UC6S3/8UNFX1	1/4HEX-T15PX50	C03508-T15P
R220.21-02.50	UC6S3/8UNFX11/2	1/4HEX-T15PX50	C03510-T15P
R220.21-02.50.5A	UC6S3/8UNFX11/2	1/4HEX-T15PX50	C03508-T15P
R220.21-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C03510-T15P
R220.21-03.00.7A	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	–
R220.21-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T15PX50	C03510-T15P
R220.21-04.00.9A	UC6S3/4UNFX1-1/4	1/4HEX-T15PX90	C03508-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.21-0.75 / 1.00 / 0.75HA	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R217.21-1.25-1.50	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R217.21-1.25HA-1.50HA	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30
R220.21-01.50	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R220.21-02.00-04.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.21-080 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	218.19-080T-M04 MP2501	0,55 *0.022*	0,50 0.020	0,50 0.020	0,65 0.026
P2	218.19-080T-M04 MP2501	0,55 *0.022*	0,50 0.020	0,50 0.020	0,65 0.026
P3	218.19-080T-M04 MP2501	0,55 *0.022*	0,48 0.019	0,48 0.019	0,60 0.026
P4	218.19-080T-M04 MP2501	0,55 *0.022*	0,48 0.019	0,48 0.019	0,60 0.024
P5	218.19-080T-M04 MP2501	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
P6	218.19-080T-M04 MP2501	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
P7	218.19-080T-M04 MP2501	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
P8	218.19-080T-M04 MP2501	0,55 *0.022*	0,48 0.019	0,48 0.019	0,60 0.026
P11	218.19-080T-M04 F40M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
P12	218.19-080T-M04 MP2501	0,44 *0.017*	0,34 0.013	0,34 0.013	0,42 0.017
M1	218.19-080T-M04 F40M	0,55 *0.022*	0,50 0.020	0,50 0.020	0,65 0.026
M2	218.19-080T-M04 F40M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
M3	218.19-080T-M04 F40M	0,44 *0.017*	0,40 0.016	0,40 0.016	0,50 0.020
M4	218.19-080T-M04 F40M	0,32 *0.013*	0,34 0.013	0,34 0.013	0,42 0.017
M5	218.19-080T-M04 F40M	0,32 *0.013*	0,34 0.013	0,34 0.013	0,42 0.017
K1	218.19-080T-MD04 F15M	0,55 *0.022*	0,50 0.020	0,50 0.020	0,65 0.026
K2	218.19-080T-MD04 F15M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
K3	218.19-080T-MD04 F15M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
K4	218.19-080T-MD04 F15M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
K5	218.19-080T-MD04 F15M	0,55 *0.022*	0,42 0.017	0,42 0.017	0,55 0.022
K6	218.19-080T-MD04 F15M	0,55 *0.022*	0,46 0.018	0,46 0.018	0,60 0.024
K7	218.19-080T-MD04 F15M	0,55 *0.022*	0,42 0.017	0,42 0.017	0,55 0.022
S1	218.19-080T-M04 F40M	0,32 *0.013*	0,34 0.013	0,34 0.013	0,42 0.017
S2	218.19-080T-M04 F40M	0,32 *0.013*	0,34 0.013	0,34 0.013	0,42 0.017
S3	218.19-080T-M04 F40M	0,32 *0.013*	0,32 0.013	0,32 0.013	0,40 0.016
S11	218.19-080T-M04 F40M	0,38 *0.015*	0,40 0.016	0,40 0.016	0,50 0.020
S12	218.19-080T-M04 F40M	0,38 *0.015*	0,40 0.016	0,40 0.016	0,50 0.020
S13	218.19-080T-M04 F40M	0,32 *0.013*	0,34 0.013	0,34 0.013	0,42 0.017
H5	218.19-080T-MD04 F15M	0,34 *0.013*	0,30 0.012	0,30 0.012	0,36 0.014
H8	218.19-080T-MD04 F15M	0,30 *0.012*	0,22 0.0085	0,22 0.0085	0,28 0.011
H11	218.19-080T-MD04 F15M	0,34 *0.013*	0,30 0.012	0,30 0.012	0,36 0.014
H12	218.19-080T-MD04 F15M	0,30 *0.012*	0,22 0.0085	0,22 0.0085	0,28 0.011

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.21-080 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M			F30M			F40M			MP2501			MS2500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	310 *1025*	380 *1250*	440 *1450*	285 *940*	350 *1150*	405 *1325*	270 *890*	330 *1075*	385 *1275*	510 *1675*	580 *1900*	640 *2100*	375 *1225*	455 *1500*	520 *1700*
P2	305 *1000*	360 *1175*	420 *1375*	280 *920*	330 *1075*	385 *1275*	265 *870*	315 *1025*	365 *1200*	490 *1600*	560 *1825*	620 *2025*	365 *1200*	430 *1400*	500 *1650*
P3	260 *850*	315 *1025*	365 *1200*	240 *790*	290 *950*	335 *1100*	230 *750*	280 *920*	320 *1050*	425 *1400*	485 *1600*	540 *1775*	310 *1025*	380 *1250*	440 *1450*
P4	230 *750*	280 *920*	325 *1075*	215 *710*	260 *850*	295 *970*	205 *670*	245 *800*	285 *940*	375 *1225*	430 *1400*	475 *1550*	280 *920*	340 *1125*	385 *1275*
P5	220 *720*	270 *890*	315 *1025*	205 *670*	250 *820*	290 *950*	195 *640*	235 *770*	275 *900*	360 *1175*	410 *1350*	455 *1500*	265 *870*	325 *1075*	375 *1225*
P6	250 *820*	300 *980*	350 *1150*	230 *750*	280 *920*	325 *1075*	215 *710*	265 *870*	310 *1025*	405 *1325*	460 *1500*	510 *1675*	300 *980*	365 *1200*	425 *1400*
P7	235 *770*	285 *940*	335 *1100*	215 *710*	260 *850*	305 *1000*	205 *670*	250 *820*	290 *950*	380 *1250*	435 *1425*	485 *1600*	280 *920*	340 *1125*	400 *1300*
P8	220 *720*	265 *870*	310 *1025*	200 *660*	245 *800*	285 *940*	190 *620*	235 *770*	270 *890*	355 *1175*	410 *1350*	450 *1475*	265 *870*	320 *1050*	370 *1225*
P11	230 *750*	275 *900*	325 *1075*	210 *690*	255 *840*	295 *970*	200 *660*	245 *800*	285 *940*	370 *1225*	425 *1400*	470 *1550*	275 *900*	330 *1075*	390 *1275*
P12	— —	— —	— —	135 *445*	165 *540*	190 *620*	130 *425*	155 *510*	180 *590*	230 *750*	260 *850*	285 *940*	180 *590*	215 *710*	245 *800*
M1	— —	— —	— —	225 *740*	265 *870*	310 *1025*	215 *710*	255 *840*	295 *970*	250 *820*	300 *980*	350 *1150*	260 *850*	310 *1025*	360 *1175*
M2	— —	— —	— —	185 *610*	225 *740*	260 *850*	175 *570*	210 *690*	245 *800*	205 *670*	250 *820*	290 *950*	210 *690*	260 *850*	300 *980*
M3	— —	— —	— —	150 *490*	180 *590*	205 *670*	140 *460*	170 *560*	200 *660*	165 *540*	200 *660*	235 *770*	175 *570*	205 *670*	240 *790*
M4	— —	— —	— —	120 *395*	140 *460*	160 *520*	110 *360*	130 *425*	150 *490*	130 *425*	155 *510*	180 *590*	135 *445*	160 *520*	185 *610*
M5	— —	— —	— —	100 *330*	115 *375*	135 *445*	95 *310*	110 *360*	125 *410*	110 *360*	130 *425*	150 *490*	115 *375*	135 *445*	155 *510*
K1	240 *790*	285 *940*	330 *1075*	220 *720*	260 *850*	305 *1000*	210 *690*	250 *820*	290 *950*	495 *1625*	560 *1825*	620 *2025*	— —	— —	— —
K2	210 *690*	255 *840*	300 *980*	195 *640*	235 *770*	275 *900*	185 *610*	225 *740*	260 *850*	435 *1425*	500 *1650*	550 *1800*	— —	— —	— —
K3	180 *590*	215 *710*	250 *820*	165 *540*	200 *660*	230 *750*	155 *510*	190 *620*	220 *720*	365 *1200*	420 *1375*	465 *1525*	— —	— —	— —
K4	170 *560*	205 *670*	240 *790*	155 *510*	190 *620*	220 *720*	150 *490*	180 *590*	210 *690*	350 *1150*	400 *1300*	445 *1450*	— —	— —	— —
K5	105 *345*	125 *410*	145 *475*	95 *310*	115 *375*	135 *445*	90 *295*	110 *360*	130 *425*	215 *710*	245 *800*	270 *890*	— —	— —	— —
K6	150 *490*	180 *590*	210 *690*	135 *445*	165 *540*	195 *640*	130 *425*	160 *520*	185 *610*	310 *1025*	355 *1175*	395 *1300*	— —	— —	— —
K7	135 *445*	160 *520*	185 *610*	125 *410*	150 *490*	170 *560*	115 *375*	140 *460*	165 *540*	275 *900*	315 *1025*	345 *1125*	— —	— —	— —
N1	— —	— —	— —	1625 *5325*	2000 *6550*	2300 *7550*	1550 *5075*	1900 *6225*	2200 *7225*	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	660 *2175*	800 *2625*	930 *3050*	630 *2075*	770 *2525*	880 *2875*	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	440 *1450*	540 *1775*	620 *2025*	420 *1375*	510 *1675*	590 *1925*	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	500 *1650*	610 *2000*	710 *2325*	480 *1575*	580 *1900*	670 *2200*	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	50 *165*	60 *195*	70 *230*	— —	— —	— —	65 *215*	80 *260*	90 *295*
S2	— —	— —	— —	— —	— —	— —	42 *140*	50 *165*	55 *180*	— —	— —	— —	55 *180*	65 *215*	75 *245*
S3	— —	— —	— —	— —	— —	— —	37 *120*	44 *145*	50 *165*	— —	— —	— —	47 *155*	55 *180*	65 *215*
S11	— —	— —	— —	— —	— —	— —	75 *245*	85 *280*	100 *330*	— —	— —	— —	95 *310*	110 *360*	130 *425*
S12	— —	— —	— —	— —	— —	— —	50 *165*	60 *195*	70 *230*	— —	— —	— —	65 *215*	75 *245*	90 *295*
S13	— —	— —	— —	— —	— —	— —	29 *95*	35 *115*	40 *130*	— —	— —	— —	37 *120*	44 *145*	50 *165*
H5	50 *165*	60 *195*	70 *230*	48 *155*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	55 *180*	65 *215*	75 *245*	50 *165*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	65 *215*	80 *260*	90 *295*	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H12	100 *330*	115 *375*	135 *445*	90 *295*	110 *360*	125 *410*	— —	— —	— —	— —	— —	— —	120 *395*	140 *460*	160 *520*

R217.21-100 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	218.19-100T-M06 MP3501	0,65 *0.026*	0,80 0.032	0,80 0.032	1,0 0.040
P2	218.19-100T-M06 MP3501	0,65 *0.026*	0,80 0.032	0,80 0.032	1,1 0.044
P3	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,80 0.032	1,0 0.040
P4	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,75 0.030	1,0 0.040
P5	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,75 0.030	0,95 0.038
P6	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,75 0.030	0,95 0.038
P7	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,75 0.030	0,95 0.038
P8	218.19-100T-M06 MP2501	0,65 *0.026*	0,75 0.030	0,80 0.032	1,0 0.040
P11	218.19-100T-M06 MP3501	0,65 *0.026*	0,75 0.030	0,75 0.030	0,95 0.038
P12	218.19-100T-M06 MP2501	0,50 *0.020*	0,50 0.020	0,50 0.020	0,65 0.026
M1	218.19-100T-M06 MS2050	0,65 *0.026*	0,80 0.032	0,80 0.032	1,1 0.044
M2	218.19-100T-M06 MS2050	0,65 *0.026*	0,75 0.030	0,75 0.030	0,95 0.038
M3	218.19-100T-M06 MS2050	0,50 *0.020*	0,60 0.024	0,60 0.024	0,75 0.030
M4	218.19-100T-M06 MP3501	0,38 *0.015*	0,50 0.020	0,50 0.020	0,65 0.026
M5	218.19-100T-M06 MP3501	0,38 *0.015*	0,50 0.020	0,50 0.020	0,65 0.026
K1	218.19-100T-MD08 MP2501	0,65 *0.026*	1,1 0.044	1,1 0.044	1,4 0.055
K2	218.19-100T-MD08 MP2501	0,65 *0.026*	1,0 0.040	1,0 0.040	1,3 0.050
K3	218.19-100T-MD08 MP2501	0,65 *0.026*	1,0 0.040	1,0 0.040	1,3 0.050
K4	218.19-100T-MD08 MP2501	0,65 *0.026*	1,0 0.040	1,0 0.040	1,3 0.050
K5	218.19-100T-MD08 MP2501	0,65 *0.026*	0,90 0.036	0,90 0.036	1,2 0.048
K6	218.19-100T-MD08 MP2501	0,65 *0.026*	1,0 0.040	1,0 0.040	1,3 0.050
K7	218.19-100T-MD08 MP2501	0,65 *0.026*	0,90 0.036	0,90 0.036	1,2 0.048
S1	218.19-100T-M06 MS2500	0,38 *0.015*	0,50 0.020	0,50 0.020	0,65 0.026
S2	218.19-100T-M06 MS2500	0,38 *0.015*	0,50 0.020	0,50 0.020	0,65 0.026
S3	218.19-100T-M06 MS2500	0,38 *0.015*	0,48 0.019	0,48 0.019	0,60 0.024
S11	218.19-100T-M06 MS2050	0,44 *0.017*	0,60 0.024	0,60 0.024	0,75 0.030
S12	218.19-100T-M06 MS2050	0,44 *0.017*	0,60 0.024	0,60 0.024	0,75 0.030
S13	218.19-100T-M06 MS2050	0,38 *0.015*	0,50 0.020	0,50 0.020	0,65 0.026
H5	218.19-100T-MD08 MH1000	0,40 *0.016*	0,60 0.024	0,60 0.024	0,70 0.030
H8	218.19-100T-MD08 MH1000	0,34 *0.013*	0,44 0.017	0,44 0.017	0,55 0.022
H11	218.19-100T-M06 MP3000	0,40 *0.016*	0,44 0.017	0,44 0.017	0,55 0.022
H12	218.19-100T-M06 MP3000	0,34 *0.013*	0,34 0.013	0,34 0.013	0,40 0.017

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.21-100 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000			F15M			F25M			F30M			MP3000		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	245	290	345	225	265	320	250	295	345	295	350	410
	—	—	—	*800*	*950*	*1125*	*740*	*870*	*1050*	*820*	*970*	*1125*	*970*	*1150*	*1350*
P2	—	—	—	240	285	340	220	260	310	240	285	335	285	340	395
	—	—	—	*790*	*940*	*1125*	*720*	*850*	*1025*	*790*	*940*	*1100*	*940*	*1125*	*1300*
P3	—	—	—	210	250	290	195	230	265	210	250	290	250	295	345
	—	—	—	*690*	*820*	*950*	*640*	*750*	*870*	*690*	*820*	*950*	*820*	*970*	*1125*
P4	—	—	—	185	220	260	170	200	240	185	220	260	220	260	310
	—	—	—	*610*	*720*	*850*	*560*	*660*	*790*	*610*	*720*	*850*	*720*	*850*	*1025*
P5	215	255	300	180	210	250	165	195	230	175	210	250	210	250	295
	710	*840*	*980*	*590*	*690*	*820*	*540*	*640*	*750*	*570*	*690*	*820*	*690*	*820*	*970*
P6	245	290	340	205	240	280	185	220	255	200	235	280	235	280	330
	800	*950*	*1125*	*670*	*790*	*920*	*610*	*720*	*840*	*660*	*770*	*920*	*770*	*920*	*1075*
P7	230	275	320	190	225	265	175	205	245	190	220	265	225	265	315
	750	*900*	*1050*	*620*	*740*	*870*	*570*	*670*	*800*	*620*	*720*	*870*	*740*	*870*	*1025*
P8	215	255	295	180	210	245	165	195	225	175	210	245	210	250	290
	710	*840*	*970*	*590*	*690*	*800*	*540*	*640*	*740*	*570*	*690*	*800*	*690*	*820*	*950*
P11	225	265	310	185	220	255	170	200	235	185	215	255	215	255	305
	740	*870*	*1025*	*610*	*720*	*840*	*560*	*660*	*770*	*610*	*710*	*840*	*710*	*840*	*1000*
P12	150	175	205	—	—	—	115	130	155	125	145	165	145	170	195
	490	*570*	*670*	—	—	—	*375*	*425*	*510*	*410*	*475*	*540*	*475*	*560*	*640*
M1	—	—	—	—	—	—	—	—	—	195	230	270	215	255	295
	—	—	—	—	—	—	—	—	—	*640*	*750*	*890*	*710*	*840*	*970*
M2	—	—	—	—	—	—	—	—	—	160	190	225	175	210	245
	—	—	—	—	—	—	—	—	—	*520*	*620*	*740*	*570*	*690*	*800*
M3	—	—	—	—	—	—	—	—	—	135	155	180	145	170	200
	—	—	—	—	—	—	—	—	—	*445*	*510*	*590*	*475*	*560*	*660*
M4	—	—	—	—	—	—	—	—	—	105	120	140	115	135	155
	—	—	—	—	—	—	—	—	—	*345*	*395*	*460*	*375*	*445*	*510*
M5	—	—	—	—	—	—	—	—	—	90	100	115	95	110	130
	—	—	—	—	—	—	—	—	—	*295*	*330*	*375*	*310*	*360*	*425*
K1	230	270	325	190	225	265	175	205	245	190	225	265	225	270	315
	750	*890*	*1075*	*620*	*740*	*870*	*570*	*670*	*800*	*620*	*740*	*870*	*740*	*890*	*1025*
K2	205	240	285	170	200	235	155	185	215	170	200	235	200	235	280
	670	*790*	*940*	*560*	*660*	*770*	*510*	*610*	*710*	*560*	*660*	*770*	*660*	*770*	*920*
K3	175	205	240	145	170	200	130	155	185	145	170	200	170	200	235
	570	*670*	*790*	*475*	*560*	*660*	*425*	*510*	*610*	*475*	*560*	*660*	*560*	*660*	*770*
K4	165	195	230	135	160	190	125	150	175	135	160	190	160	190	225
	540	*640*	*750*	*445*	*520*	*620*	*410*	*490*	*570*	*445*	*520*	*620*	*520*	*620*	*740*
K5	100	120	140	85	100	115	75	90	105	85	100	115	100	120	140
	330	*395*	*460*	*280*	*330*	*375*	*245*	*295*	*345*	*280*	*330*	*375*	*330*	*395*	*460*
K6	145	170	205	120	140	170	110	130	155	120	140	170	145	170	200
	475	*560*	*670*	*395*	*460*	*560*	*360*	*425*	*510*	*395*	*460*	*560*	*475*	*560*	*660*
K7	130	155	180	105	125	150	100	115	135	110	125	150	130	150	180
	425	*510*	*590*	*345*	*410*	*490*	*330*	*375*	*445*	*360*	*410*	*490*	*425*	*490*	*590*
N1	—	—	—	—	—	—	—	—	—	1425	1675	1950	—	—	—
	—	—	—	—	—	—	—	—	—	*4675*	*5500*	*6400*	—	—	—
N2	—	—	—	—	—	—	—	—	—	570	680	790	—	—	—
	—	—	—	—	—	—	—	—	—	*1875*	*2225*	*2600*	—	—	—
N3	—	—	—	—	—	—	—	—	—	380	450	520	—	—	—
	—	—	—	—	—	—	—	—	—	*1250*	*1475*	*1700*	—	—	—
N11	—	—	—	—	—	—	—	—	—	435	520	600	—	—	—
	—	—	—	—	—	—	—	—	—	*1425*	*1700*	*1975*	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H5	55	60	75	44	50	60	—	—	—	43	50	60	48	55	65
	180	*195*	*245*	*145*	*165*	*195*	—	—	—	*140*	*165*	*195*	*155*	*180*	*215*
H8	55	65	75	47	55	65	—	—	—	46	55	60	50	60	70
	180	*215*	*245*	*155*	*180*	*215*	—	—	—	*150*	*180*	*195*	*165*	*195*	*230*
H11	65	80	95	55	65	75	—	—	—	55	65	75	60	70	85
	215	*260*	*310*	*180*	*215*	*245*	—	—	—	*180*	*215*	*245*	*195*	*230*	*280*
H12	100	120	140	85	100	115	—	—	—	85	95	110	100	115	135
	330	*395*	*460*	*280*	*330*	*375*	—	—	—	*280*	*310*	*360*	*330*	*375*	*445*

R217.21-100 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050			F40M			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	285 *940*	330 *1075*	380 *1250*	275 *900*	305 *1000*	345 *1125*	440 *1450*	495 *1625*	560 *1825*	420 *1375*	480 *1575*	540 *1775*	395 *1300*	445 *1450*	510 *1675*
P2	275 *900*	320 *1050*	370 *1225*	265 *870*	295 *970*	340 *1125*	430 *1400*	485 *1600*	550 *1800*	410 *1350*	465 *1525*	530 *1750*	385 *1275*	435 *1425*	490 *1600*
P3	245 *800*	280 *920*	325 *1075*	235 *770*	260 *850*	295 *970*	375 *1225*	425 *1400*	480 *1575*	360 *1175*	410 *1350*	460 *1500*	335 *1100*	380 *1250*	430 *1400*
P4	215 *710*	245 *800*	290 *950*	210 *690*	240 *790*	280 *920*	330 *1075*	375 *1225*	425 *1400*	315 *1025*	360 *1175*	410 *1350*	295 *970*	335 *1100*	385 *1275*
P5	205 *670*	235 *770*	275 *900*	195 *640*	220 *720*	255 *840*	315 *1025*	355 *1175*	405 *1325*	300 *980*	345 *1125*	395 *1300*	285 *940*	320 *1050*	365 *1200*
P6	230 *750*	265 *870*	310 *1025*	220 *720*	245 *800*	285 *940*	355 *1175*	400 *1300*	455 *1500*	340 *1125*	385 *1275*	440 *1450*	320 *1050*	360 *1175*	410 *1350*
P7	215 *710*	250 *820*	295 *970*	210 *690*	235 *770*	270 *890*	335 *1100*	380 *1250*	430 *1400*	320 *1050*	365 *1200*	415 *1350*	300 *980*	340 *1125*	385 *1275*
P8	205 *670*	235 *770*	270 *890*	195 *640*	220 *720*	250 *820*	315 *1025*	355 *1175*	400 *1300*	300 *980*	345 *1125*	390 *1275*	285 *940*	320 *1050*	360 *1175*
P11	210 *690*	245 *800*	285 *940*	205 *670*	225 *740*	260 *850*	325 *1075*	365 *1200*	420 *1375*	310 *1025*	355 *1175*	405 *1325*	290 *950*	330 *1075*	375 *1225*
P12	145 *475*	165 *540*	185 *610*	140 *460*	155 *510*	170 *560*	215 *710*	240 *790*	265 *870*	205 *670*	230 *750*	255 *840*	195 *640*	215 *710*	240 *790*
M1	205 *670*	240 *790*	280 *920*	185 *610*	220 *720*	255 *840*	220 *720*	260 *850*	300 *980*	235 *770*	280 *920*	330 *1075*	205 *670*	240 *790*	280 *920*
M2	165 *540*	200 *660*	235 *770*	150 *490*	180 *590*	215 *710*	180 *590*	210 *690*	250 *820*	195 *640*	230 *750*	270 *890*	165 *540*	200 *660*	235 *770*
M3	140 *460*	160 *520*	190 *620*	125 *410*	150 *490*	170 *560*	150 *490*	175 *570*	200 *660*	160 *520*	190 *620*	220 *720*	140 *460*	160 *520*	190 *620*
M4	110 *360*	125 *410*	145 *475*	100 *330*	115 *375*	135 *445*	120 *395*	135 *445*	160 *520*	130 *425*	145 *475*	170 *560*	110 *360*	125 *410*	145 *475*
M5	90 *295*	105 *345*	125 *410*	85 *280*	95 *310*	110 *360*	100 *330*	115 *375*	130 *425*	105 *345*	125 *410*	145 *475*	90 *295*	105 *345*	125 *410*
K1	— —	— —	— —	180 *590*	215 *710*	250 *820*	435 *1425*	490 *1600*	550 *1800*	260 *850*	310 *1025*	365 *1200*	390 *1275*	435 *1425*	495 *1625*
K2	— —	— —	— —	160 *520*	190 *620*	225 *740*	380 *1250*	430 *1400*	490 *1600*	230 *750*	275 *900*	325 *1075*	345 *1125*	385 *1275*	440 *1450*
K3	— —	— —	— —	135 *445*	160 *520*	190 *620*	325 *1075*	365 *1200*	415 *1350*	195 *640*	230 *750*	275 *900*	290 *950*	325 *1075*	375 *1225*
K4	— —	— —	— —	130 *425*	155 *510*	180 *590*	310 *1025*	350 *1150*	395 *1300*	185 *610*	220 *720*	260 *850*	275 *900*	310 *1025*	355 *1175*
K5	— —	— —	— —	80 *260*	95 *310*	110 *360*	190 *620*	215 *710*	240 *790*	115 *375*	135 *445*	160 *520*	170 *560*	195 *640*	220 *720*
K6	— —	— —	— —	115 *375*	135 *445*	160 *520*	270 *890*	305 *1000*	350 *1150*	165 *540*	195 *640*	230 *750*	245 *800*	275 *900*	315 *1025*
K7	— —	— —	— —	105 *345*	120 *395*	140 *460*	245 *800*	275 *900*	310 *1025*	150 *490*	175 *570*	205 *670*	220 *720*	245 *800*	280 *920*
N1	— —	— —	— —	1350 *4425*	1600 *5250*	1850 *6075*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	550 *1800*	640 *2100*	750 *2450*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	365 *1200*	430 *1400*	500 *1650*	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	415 *1350*	490 *1600*	570 *1875*	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	50 *165*	60 *195*	70 *230*	47 *155*	55 *180*	60 *195*	— —	— —	— —	65 *215*	70 *230*	85 *280*	50 *165*	60 *195*	70 *230*
S2	41 *135*	47 *155*	55 *180*	38 *125*	43 *140*	50 *165*	— —	— —	— —	50 *165*	60 *195*	65 *215*	41 *135*	47 *155*	55 *180*
S3	37 *120*	42 *140*	49 *160*	33 *110*	38 *125*	44 *145*	— —	— —	— —	44 *145*	50 *165*	60 *195*	37 *120*	42 *140*	49 *160*
S11	70 *230*	85 *280*	95 *310*	65 *215*	75 *245*	85 *280*	— —	— —	— —	85 *280*	100 *330*	115 *375*	70 *230*	85 *280*	95 *310*
S12	50 *165*	55 *180*	65 *215*	45 *150*	50 *165*	60 *195*	— —	— —	— —	60 *195*	70 *230*	80 *260*	50 *165*	55 *180*	65 *215*
S13	29 *95*	33 *110*	39 *130*	26 *85*	30 *100*	35 *115*	— —	— —	— —	35 *115*	40 *130*	47 *155*	29 *95*	33 *110*	39 *130*
H5	— —	— —	— —	41 *135*	48 *155*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	44 *145*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	50 *165*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	— —	— —	— —
H12	— —	— —	— —	80 *260*	90 *295*	105 *345*	— —	— —	— —	— —	— —	— —	— —	— —	— —

R217/220.21-125 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	218.19-125T-T3-M07 MP3501	0,90 *0.036*	0,90 0.036	0,90 0.036	1,1 0.044
P2	218.19-125T-T3-M07 MP3501	0,90 *0.036*	0,90 0.036	0,90 0.036	1,1 0.044
P3	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,85 0.034	0,85 0.034	1,0 0.040
P4	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,85 0.034	0,85 0.034	1,0 0.040
P5	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,80 0.032	0,80 0.032	1,0 0.040
P6	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,80 0.032	0,80 0.032	1,0 0.040
P7	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,80 0.032	0,80 0.032	1,0 0.040
P8	218.19-125T-T3-M07 MP2501	0,90 *0.036*	0,85 0.034	0,85 0.034	1,0 0.040
P11	218.19-125T-T3-M07 MP3501	0,90 *0.036*	0,80 0.032	0,80 0.032	1,0 0.040
P12	218.19-125T-T3-M07 MP2501	0,70 *0.028*	0,60 0.024	0,60 0.024	0,70 0.028
M1	218.19-125T-T3-M07 MS2050	0,90 *0.036*	0,90 0.036	0,90 0.036	1,1 0.044
M2	218.19-125T-T3-M07 MS2050	0,90 *0.036*	0,80 0.032	0,80 0.032	1,0 0.040
M3	218.19-125T-T3-M07 MS2050	0,70 *0.028*	0,70 0.028	0,70 0.028	0,85 0.034
M4	218.19-125T-T3-M07 MP3501	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
M5	218.19-125T-T3-M07 MP3501	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
K1	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	1,0 0.040	1,0 0.040	1,3 0.050
K2	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,95 0.038	0,95 0.038	1,1 0.048
K3	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,95 0.038	0,95 0.038	1,1 0.048
K4	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,95 0.038	0,95 0.038	1,1 0.048
K5	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,85 0.034	0,85 0.034	1,0 0.040
K6	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,95 0.038	0,95 0.038	1,1 0.048
K7	218.19-125T-T3-MD08 MP3000	0,90 *0.036*	0,85 0.034	0,85 0.034	1,0 0.040
S1	218.19-125T-T3-M07 MP3501	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
S2	218.19-125T-T3-M07 MP3501	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
S3	218.19-125T-T3-M07 MP3501	0,55 *0.022*	0,55 0.022	0,55 0.022	0,65 0.026
S11	218.19-125T-T3-M07 MS2050	0,65 *0.026*	0,70 0.028	0,70 0.028	0,85 0.034
S12	218.19-125T-T3-M07 MS2050	0,65 *0.026*	0,70 0.028	0,70 0.028	0,85 0.034
S13	218.19-125T-T3-M07 MS2050	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
H5	218.19-125T-T3-MD10 MH1000	0,55 *0.022*	0,75 0.030	0,75 0.030	0,85 0.034
H8	218.19-125T-T3-MD10 MH1000	0,50 *0.020*	0,55 0.022	0,55 0.022	0,65 0.026
H11	218.19-125T-T3-MD08 MP3000	0,55 *0.022*	0,60 0.024	0,60 0.024	0,70 0.028
H12	218.19-125T-T3-MD08 MP3000	0,50 *0.020*	0,44 0.017	0,44 0.017	0,55 0.022

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-125 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000			F15M			F25M			F30M			MP3000			MS2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	225	260	310	205	235	285	235	270	330	295	340	425	265	300	365
	—	—	—	*740*	*850*	*1025*	*670*	*770*	*940*	*770*	*890*	*1075*	*970*	*1125*	*1400*	*870*	*980*	*1200*
P2	—	—	—	215	250	305	200	230	280	230	265	310	290	330	395	260	295	345
	—	—	—	*710*	*820*	*1000*	*660*	*750*	*920*	*750*	*870*	*1025*	*950*	*1075*	*1300*	*850*	*970*	*1125*
P3	—	—	—	190	220	265	175	205	245	200	230	275	255	290	355	225	255	305
	—	—	—	*620*	*720*	*870*	*570*	*670*	*800*	*660*	*750*	*900*	*840*	*950*	*1175*	*740*	*840*	*1000*
P4	—	—	—	170	195	235	155	180	215	175	205	245	225	255	310	200	225	270
	—	—	—	*560*	*640*	*770*	*510*	*590*	*710*	*570*	*670*	*800*	*740*	*840*	*1025*	*660*	*740*	*890*
P5	195	225	270	160	185	225	150	170	205	170	200	235	220	250	305	195	220	260
	640	*740*	*890*	*520*	*610*	*740*	*490*	*560*	*670*	*560*	*660*	*770*	*720*	*820*	*1000*	*640*	*720*	*850*
P6	225	260	305	185	215	250	170	195	230	190	220	265	245	280	340	220	250	295
	740	*850*	*1000*	*610*	*710*	*820*	*560*	*640*	*750*	*620*	*720*	*870*	*800*	*920*	*1125*	*720*	*820*	*970*
P7	210	245	285	175	205	235	160	185	215	180	210	250	235	265	320	205	235	275
	690	*800*	*940*	*570*	*670*	*770*	*520*	*610*	*710*	*590*	*690*	*820*	*770*	*870*	*1050*	*670*	*770*	*900*
P8	195	225	270	160	185	225	150	170	205	170	195	230	215	245	300	190	215	255
	640	*740*	*890*	*520*	*610*	*740*	*490*	*560*	*670*	*560*	*640*	*750*	*710*	*800*	*980*	*620*	*710*	*840*
P11	205	240	280	170	195	230	155	180	210	175	205	240	225	260	315	200	225	270
	670	*790*	*920*	*560*	*640*	*750*	*510*	*590*	*690*	*570*	*670*	*790*	*740*	*850*	*1025*	*660*	*740*	*890*
P12	135	155	185	—	—	—	105	120	140	115	135	160	155	175	210	135	150	180
	445	*510*	*610*	—	—	—	*345*	*395*	*460*	*375*	*445*	*520*	*510*	*570*	*690*	*445*	*490*	*590*
M1	—	—	—	—	—	—	—	—	—	185	215	250	205	235	280	195	225	265
	—	—	—	—	—	—	—	—	—	*610*	*710*	*820*	*670*	*770*	*920*	*640*	*740*	*870*
M2	—	—	—	—	—	—	—	—	—	155	180	210	170	195	235	160	185	220
	—	—	—	—	—	—	—	—	—	*510*	*590*	*690*	*560*	*640*	*770*	*520*	*610*	*720*
M3	—	—	—	—	—	—	—	—	—	125	145	170	140	160	190	130	150	180
	—	—	—	—	—	—	—	—	—	*410*	*475*	*560*	*460*	*520*	*620*	*425*	*490*	*590*
M4	—	—	—	—	—	—	—	—	—	100	115	130	110	125	145	105	120	140
	—	—	—	—	—	—	—	—	—	*330*	*375*	*425*	*360*	*410*	*475*	*345*	*395*	*460*
M5	—	—	—	—	—	—	—	—	—	85	95	110	95	105	120	90	100	115
	—	—	—	—	—	—	—	—	—	*280*	*310*	*360*	*310*	*345*	*395*	*295*	*330*	*375*
K1	210	240	290	170	200	240	160	180	220	180	210	245	215	250	295	—	—	—
	690	*790*	*950*	*560*	*660*	*790*	*520*	*590*	*720*	*590*	*690*	*800*	*710*	*820*	*970*	—	—	—
K2	185	215	255	155	175	210	140	160	195	160	190	225	195	225	265	—	—	—
	610	*710*	*840*	*510*	*570*	*690*	*460*	*520*	*640*	*520*	*620*	*740*	*640*	*740*	*870*	—	—	—
K3	155	180	215	130	150	180	120	135	165	135	160	190	165	190	225	—	—	—
	510	*590*	*710*	*425*	*490*	*590*	*395*	*445*	*540*	*445*	*520*	*620*	*540*	*620*	*740*	—	—	—
K4	150	175	205	125	145	170	115	130	155	130	150	180	155	180	215	—	—	—
	490	*570*	*670*	*410*	*475*	*560*	*375*	*425*	*510*	*425*	*490*	*590*	*510*	*590*	*710*	—	—	—
K5	95	110	130	80	90	105	70	80	100	80	90	110	95	110	130	—	—	—
	310	*360*	*425*	*260*	*295*	*345*	*230*	*260*	*330*	*260*	*295*	*360*	*310*	*360*	*425*	—	—	—
K6	130	150	185	110	125	150	100	115	140	115	135	160	135	160	190	—	—	—
	425	*490*	*610*	*360*	*410*	*490*	*330*	*375*	*460*	*375*	*445*	*520*	*445*	*520*	*620*	—	—	—
K7	120	140	165	100	115	135	90	105	125	100	120	140	120	140	170	—	—	—
	395	*460*	*540*	*330*	*375*	*445*	*295*	*345*	*410*	*330*	*395*	*460*	*395*	*460*	*560*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	47	55	60	50	60	70	49	55	65
	—	—	—	—	—	—	—	—	—	*155*	*180*	*195*	*165*	*195*	*230*	*160*	*180*	*215*
S2	—	—	—	—	—	—	—	—	—	38	43	49	42	47	55	40	45	50
	—	—	—	—	—	—	—	—	—	*125*	*140*	*160*	*140*	*155*	*180*	*130*	*150*	*165*
S3	—	—	—	—	—	—	—	—	—	33	37	43	36	41	48	34	39	45
	—	—	—	—	—	—	—	—	—	*110*	*120*	*140*	*120*	*135*	*155*	*110*	*130*	*150*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	75	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*245*	*295*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	47	55	65
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*180*	*215*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	31	36
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*120*
H5	48	55	65	40	46	55	—	—	—	41	47	55	46	55	60	—	—	—
	155	*180*	*215*	*130*	*150*	*180*	—	—	—	*135*	*155*	*180*	*150*	*180*	*195*	—	—	—
H8	55	60	70	44	50	60	—	—	—	44	50	60	49	55	65	—	—	—
	180	*195*	*230*	*145*	*165*	*195*	—	—	—	*145*	*165*	*195*	*160*	*180*	*215*	—	—	—
H11	60	70	85	50	60	70	—	—	—	55	60	70	60	65	80	—	—	—
	195	*230*	*280*	*165*	*195*	*230*	—	—	—	*180*	*195*	*230*	*195*	*215*	*260*	—	—	—
H12	95	110	125	80	90	105	—	—	—	80	90	105	95	105	125	—	—	—
	310	*360*	*410*	*260*	*295*	*345*	—	—	—	*260*	*295*	*345*	*310*	*345*	*410*	—	—	—

R217/220.21-125 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	255 *840*	280 *920*	330 *1075*	350 *1150*	385 *1275*	455 *1500*	415 *1350*	460 *1500*	540 *1775*	395 *1300*	440 *1450*	520 *1700*	370 *1225*	410 *1350*	485 *1600*	235 *770*	265 *870*	325 *1075*
P2	245 *800*	270 *890*	310 *1025*	340 *1125*	375 *1225*	445 *1450*	405 *1325*	450 *1475*	510 *1675*	385 *1275*	430 *1400*	495 *1625*	360 *1175*	400 *1300*	460 *1500*	230 *750*	260 *850*	305 *1000*
P3	220 *720*	240 *790*	280 *920*	300 *980*	335 *1100*	390 *1275*	355 *1175*	395 *1300*	455 *1500*	340 *1125*	380 *1250*	440 *1450*	315 *1025*	350 *1150*	405 *1325*	200 *660*	230 *750*	270 *890*
P4	195 *640*	220 *720*	260 *850*	265 *870*	295 *970*	345 *1125*	310 *1025*	345 *1125*	400 *1300*	300 *980*	330 *1075*	385 *1275*	280 *920*	310 *1025*	360 *1175*	190 *620*	215 *710*	255 *840*
P5	185 *610*	205 *670*	240 *790*	250 *820*	280 *920*	330 *1075*	305 *1000*	335 *1100*	390 *1275*	290 *950*	325 *1075*	375 *1225*	270 *890*	300 *980*	345 *1125*	175 *570*	195 *640*	230 *750*
P6	210 *690*	230 *750*	265 *870*	290 *950*	325 *1075*	370 *1225*	340 *1125*	380 *1250*	435 *1425*	325 *1075*	365 *1200*	420 *1375*	305 *1000*	340 *1125*	390 *1275*	195 *640*	220 *720*	260 *850*
P7	200 *660*	220 *720*	250 *820*	275 *900*	305 *1000*	350 *1150*	320 *1050*	355 *1175*	410 *1350*	305 *1000*	345 *1125*	395 *1300*	285 *940*	320 *1050*	370 *1225*	185 *610*	205 *670*	245 *800*
P8	185 *610*	200 *660*	235 *770*	250 *820*	280 *920*	330 *1075*	295 *970*	330 *1075*	380 *1250*	285 *940*	315 *1025*	370 *1225*	265 *870*	295 *970*	340 *1125*	170 *560*	190 *620*	225 *740*
P11	195 *640*	210 *690*	245 *800*	270 *890*	300 *980*	340 *1125*	310 *1025*	345 *1125*	400 *1300*	300 *980*	335 *1100*	385 *1275*	280 *920*	310 *1025*	360 *1175*	180 *590*	200 *660*	235 *770*
P12	130 *425*	140 *460*	165 *540*	180 *590*	195 *640*	225 *740*	205 *670*	225 *740*	255 *840*	195 *640*	215 *710*	250 *820*	185 *610*	205 *670*	230 *750*	115 *375*	130 *425*	150 *490*
M1	175 *570*	205 *670*	240 *790*	— —	— —	— —	205 *670*	240 *790*	285 *940*	225 *740*	260 *850*	305 *1000*	195 *640*	225 *740*	265 *870*	150 *490*	175 *570*	205 *670*
M2	145 *475*	170 *560*	200 *660*	— —	— —	— —	175 *570*	200 *660*	240 *790*	185 *610*	215 *710*	260 *850*	160 *520*	185 *610*	220 *720*	125 *410*	145 *475*	175 *570*
M3	120 *395*	135 *445*	160 *520*	— —	— —	— —	140 *460*	160 *520*	190 *620*	155 *510*	175 *570*	205 *670*	130 *425*	150 *490*	180 *590*	105 *345*	120 *395*	140 *460*
M4	95 *310*	110 *360*	125 *410*	— —	— —	— —	115 *375*	130 *425*	150 *490*	125 *410*	140 *460*	160 *520*	105 *345*	120 *395*	140 *460*	85 *280*	95 *310*	110 *360*
M5	80 *260*	90 *295*	105 *345*	— —	— —	— —	95 *310*	105 *345*	125 *410*	105 *345*	115 *375*	135 *445*	90 *295*	100 *330*	115 *375*	70 *230*	80 *260*	90 *295*
K1	170 *560*	200 *660*	235 *770*	340 *1125*	380 *1250*	450 *1475*	405 *1325*	450 *1475*	520 *1700*	250 *820*	285 *940*	340 *1125*	365 *1200*	405 *1325*	465 *1525*	— —	— —	— —
K2	155 *510*	180 *590*	215 *710*	305 *1000*	340 *1125*	400 *1300*	365 *1200*	405 *1325*	470 *1550*	220 *720*	255 *840*	305 *1000*	330 *1075*	365 *1200*	420 *1375*	— —	— —	— —
K3	130 *425*	150 *490*	180 *590*	260 *850*	285 *940*	335 *1100*	310 *1025*	345 *1125*	395 *1300*	190 *620*	220 *720*	260 *850*	275 *900*	310 *1025*	355 *1175*	— —	— —	— —
K4	125 *410*	145 *475*	170 *560*	245 *800*	275 *900*	320 *1050*	295 *970*	330 *1075*	380 *1250*	180 *590*	210 *690*	245 *800*	265 *870*	295 *970*	340 *1125*	— —	— —	— —
K5	75 *245*	85 *280*	105 *345*	155 *510*	175 *570*	200 *660*	180 *590*	200 *660*	230 *750*	110 *360*	125 *410*	150 *490*	160 *520*	180 *590*	210 *690*	— —	— —	— —
K6	110 *360*	125 *410*	150 *490*	215 *710*	240 *790*	285 *940*	260 *850*	290 *950*	335 *1100*	160 *520*	185 *610*	220 *720*	235 *770*	260 *850*	300 *980*	— —	— —	— —
K7	95 *310*	110 *360*	135 *445*	200 *660*	220 *720*	255 *840*	230 *750*	255 *840*	295 *970*	140 *460*	160 *520*	195 *640*	205 *670*	230 *750*	265 *870*	— —	— —	— —
N1	1275 *4175*	1475 *4850*	1725 *5650*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	520 *1700*	600 *1975*	700 *2300*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	345 *1125*	400 *1300*	465 *1525*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	395 *1300*	455 *1500*	530 *1750*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	45 *150*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	60 *195*	70 *230*	80 *260*	49 *160*	55 *180*	65 *215*	25 *80*	29 *95*	33 *110*
S2	36 *120*	41 *135*	47 *155*	— —	— —	— —	— —	— —	— —	48 *155*	55 *180*	65 *215*	40 *130*	45 *150*	50 *165*	20 *65*	23 *75*	27 *90*
S3	31 *100*	35 *115*	41 *135*	— —	— —	— —	— —	— —	— —	42 *140*	47 *155*	55 *180*	34 *110*	39 *130*	45 *150*	18 *60*	20 *65*	23 *75*
S11	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —	— —	— —	80 *260*	95 *310*	110 *360*	65 *215*	75 *245*	90 *295*	35 *115*	39 *130*	47 *155*
S12	42 *140*	48 *155*	55 *180*	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	47 *155*	55 *180*	65 *215*	32 *105*	36 *120*	43 *140*
S13	25 *80*	28 *90*	33 *110*	— —	— —	— —	— —	— —	— —	34 *110*	38 *125*	44 *145*	28 *90*	31 *100*	36 *120*	19 *60*	21 *70*	25 *80*
H5	39 *130*	45 *150*	55 *180*	50 *165*	55 *180*	70 *230*	— —	— —	— —	50 *165*	60 *195*	70 *230*	45 *150*	50 *165*	60 *195*	— —	— —	— —
H8	42 *140*	48 *155*	55 *180*	55 *180*	60 *195*	70 *230*	— —	— —	— —	55 *180*	60 *195*	75 *245*	48 *155*	55 *180*	65 *215*	— —	— —	— —
H11	50 *165*	60 *195*	70 *230*	65 *215*	70 *230*	85 *280*	— —	— —	— —	65 *215*	75 *245*	90 *295*	60 *195*	65 *215*	80 *260*	— —	— —	— —
H12	75 *245*	85 *280*	100 *330*	95 *310*	110 *360*	130 *425*	— —	— —	— —	110 *360*	125 *410*	145 *475*	85 *280*	100 *330*	115 *375*	— —	— —	— —

R217/220.21-160 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	218.19-160T-04-M08 MP3501	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
P2	218.19-160T-04-M08 MP3501	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
P3	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P4	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P5	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P6	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P7	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P8	218.19-160T-04-M11 MP2501	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
P11	218.19-160T-04-M08 MP3501	1,6 *0.065*	0,75 0.030	0,75 0.030	0,95 0.038
P12	218.19-160T-04-M11 MP2501	1,3 *0.050*	0,85 0.034	0,85 0.034	1,0 0.040
M1	218.19-160T-04-M08 MS2050	1,6 *0.065*	0,85 0.034	0,85 0.034	1,0 0.040
M2	218.19-160T-04-M08 MS2050	1,6 *0.065*	0,80 0.032	0,80 0.032	0,95 0.038
M3	218.19-160T-04-M08 MS2050	1,3 *0.050*	0,70 0.028	0,70 0.028	0,85 0.034
M4	218.19-160T-04-M08 MP3501	0,95 *0.038*	0,70 0.028	0,70 0.028	0,80 0.032
M5	218.19-160T-04-M08 MP3501	0,95 *0.038*	0,70 0.028	0,70 0.028	0,80 0.032
K1	218.19-160T-04-MD11 MK2050	1,6 *0.065*	1,2 0.048	1,2 0.048	1,4 0.055
K2	218.19-160T-04-MD11 MK2050	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
K3	218.19-160T-04-MD11 MK2050	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
K4	218.19-160T-04-MD11 MK2050	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
K5	218.19-160T-04-MD11 MK2050	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.048
K6	218.19-160T-04-MD11 MK2050	1,6 *0.065*	1,1 0.044	1,1 0.044	1,3 0.050
K7	218.19-160T-04-MD11 MK2050	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.048
N1	218.19-160-04-E07 H25	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.044
N2	218.19-160-04-E07 H25	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.044
N3	218.19-160-04-E07 H25	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.044
N11	218.19-160-04-E07 H25	1,6 *0.065*	0,95 0.038	0,95 0.038	1,2 0.044
S1	218.19-160T-04-M08 MS2500	0,95 *0.038*	0,70 0.028	0,70 0.028	0,80 0.032
S2	218.19-160T-04-M08 MS2500	0,95 *0.038*	0,70 0.028	0,70 0.028	0,80 0.032
S3	218.19-160T-04-M08 MS2500	0,95 *0.038*	0,65 0.026	0,65 0.026	0,75 0.030
S11	218.19-160T-04-M08 MS2050	1,1 *0.044*	0,75 0.030	0,75 0.030	0,90 0.036
S12	218.19-160T-04-M08 MS2050	1,1 *0.044*	0,75 0.030	0,75 0.030	0,90 0.036
S13	218.19-160T-04-M08 MS2050	0,95 *0.038*	0,70 0.028	0,70 0.028	0,80 0.032
H5	218.19-160T-04-MD11 MH1000	1,0 *0.040*	0,80 0.032	0,80 0.032	0,95 0.038
H8	218.19-160T-04-MD11 MH1000	0,90 *0.036*	0,60 0.024	0,60 0.024	0,70 0.028
H11	218.19-160T-04-MD09 MP3000	1,0 *0.040*	0,65 0.026	0,65 0.026	0,75 0.030
H12	218.19-160T-04-MD09 MP3000	0,90 *0.036*	0,50 0.020	0,50 0.020	0,60 0.024

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.21-160 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000			F15M			MK2050			F25M			F30M			MP3000			MS2050		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	—	—	—	215	255	305	235	275	330	235	280	335	225	265	320	245	285	340	255	290	350
	—	—	—	*710*	*840*	*1000*	*770*	*900*	*1075*	*770*	*920*	*1100*	*740*	*870*	*1050*	*800*	*940*	*1125*	*840*	*950*	*1150*
P2	—	—	—	210	245	300	230	265	320	230	270	325	220	260	310	230	270	335	245	285	340
	—	—	—	*690*	*800*	*980*	*750*	*870*	*1050*	*750*	*890*	*1075*	*720*	*850*	*1025*	*750*	*890*	*1100*	*800*	*940*	*1125*
P3	—	—	—	185	220	255	200	235	275	205	240	280	195	225	265	210	245	300	215	250	295
	—	—	—	*610*	*720*	*840*	*660*	*770*	*900*	*670*	*790*	*920*	*640*	*740*	*870*	*690*	*800*	*980*	*710*	*820*	*970*
P4	—	—	—	165	190	230	180	210	250	180	210	250	170	200	240	185	215	265	190	220	265
	—	—	—	*540*	*620*	*750*	*590*	*690*	*820*	*590*	*690*	*820*	*560*	*660*	*790*	*610*	*710*	*870*	*620*	*720*	*870*
P5	190	220	265	155	185	220	170	200	240	170	200	240	165	190	230	175	205	250	185	210	250
	620	*720*	*870*	*510*	*610*	*720*	*560*	*660*	*790*	*560*	*660*	*790*	*540*	*620*	*750*	*570*	*670*	*820*	*610*	*690*	*820*
P6	210	250	300	175	205	245	190	225	270	190	225	270	185	215	255	200	230	280	205	235	280
	690	*820*	*980*	*570*	*670*	*800*	*620*	*740*	*890*	*620*	*740*	*890*	*610*	*710*	*840*	*660*	*750*	*920*	*670*	*770*	*920*
P7	200	235	280	165	195	235	180	210	255	180	210	255	170	200	240	190	220	265	195	225	265
	660	*770*	*920*	*540*	*640*	*770*	*590*	*690*	*840*	*590*	*690*	*840*	*560*	*660*	*790*	*620*	*720*	*870*	*640*	*740*	*870*
P8	190	220	260	155	185	215	170	200	235	170	200	235	165	190	225	175	205	250	185	210	245
	620	*720*	*850*	*510*	*610*	*710*	*560*	*660*	*770*	*560*	*660*	*770*	*540*	*620*	*740*	*570*	*670*	*820*	*610*	*690*	*800*
P11	195	230	275	160	190	225	175	205	245	175	205	245	165	195	235	180	210	260	190	215	260
	640	*750*	*900*	*520*	*620*	*740*	*570*	*670*	*800*	*570*	*670*	*800*	*540*	*640*	*770*	*590*	*690*	*850*	*620*	*710*	*850*
P12	130	150	180	—	—	—	115	135	165	115	135	160	110	130	155	130	150	180	130	150	175
	425	*490*	*590*	—	—	—	*375*	*445*	*540*	*375*	*445*	*520*	*360*	*425*	*510*	*425*	*490*	*590*	*425*	*490*	*570*
M1	—	—	—	—	—	—	—	—	—	—	—	—	180	210	250	175	205	245	185	220	260
	—	—	—	—	—	—	—	—	—	—	—	—	*590*	*690*	*820*	*570*	*670*	*800*	*610*	*720*	*850*
M2	—	—	—	—	—	—	—	—	—	—	—	—	145	170	205	145	170	200	155	180	215
	—	—	—	—	—	—	—	—	—	—	—	—	*475*	*560*	*670*	*475*	*560*	*660*	*510*	*590*	*710*
M3	—	—	—	—	—	—	—	—	—	—	—	—	120	140	165	120	140	165	125	145	175
	—	—	—	—	—	—	—	—	—	—	—	—	*395*	*460*	*540*	*395*	*460*	*540*	*410*	*475*	*570*
M4	—	—	—	—	—	—	—	—	—	—	—	—	95	110	130	95	105	130	100	115	135
	—	—	—	—	—	—	—	—	—	—	—	—	*310*	*360*	*425*	*310*	*345*	*425*	*330*	*375*	*445*
M5	—	—	—	—	—	—	—	—	—	—	—	—	80	90	110	75	90	105	80	95	115
	—	—	—	—	—	—	—	—	—	—	—	—	*260*	*295*	*360*	*245*	*295*	*345*	*260*	*310*	*375*
K1	200	235	285	165	195	235	245	290	350	185	215	260	175	205	245	185	215	260	—	—	—
	660	*770*	*940*	*540*	*640*	*770*	*800*	*950*	*1150*	*610*	*710*	*850*	*570*	*670*	*800*	*610*	*710*	*850*	—	—	—
K2	180	210	255	150	175	210	220	255	310	160	190	225	155	180	215	165	195	230	—	—	—
	590	*690*	*840*	*490*	*570*	*690*	*720*	*840*	*1025*	*520*	*620*	*740*	*510*	*590*	*710*	*540*	*640*	*750*	—	—	—
K3	150	180	215	125	145	175	185	215	260	135	160	190	130	155	185	140	165	195	—	—	—
	490	*590*	*710*	*410*	*475*	*570*	*610*	*710*	*850*	*445*	*520*	*620*	*425*	*510*	*610*	*460*	*540*	*640*	—	—	—
K4	145	170	205	120	140	170	175	210	250	130	155	185	125	145	175	135	155	185	—	—	—
	475	*560*	*670*	*395*	*460*	*560*	*570*	*690*	*820*	*425*	*510*	*610*	*410*	*475*	*570*	*445*	*510*	*610*	—	—	—
K5	90	105	125	75	85	105	110	125	150	80	95	115	75	90	105	80	95	115	—	—	—
	295	*345*	*410*	*245*	*280*	*345*	*360*	*410*	*490*	*260*	*310*	*375*	*245*	*295*	*345*	*260*	*310*	*375*	—	—	—
K6	130	150	180	105	125	150	155	185	220	115	135	160	110	130	155	115	140	165	—	—	—
	425	*490*	*590*	*345*	*410*	*490*	*510*	*610*	*720*	*375*	*445*	*520*	*360*	*425*	*510*	*375*	*460*	*540*	—	—	—
K7	115	135	160	95	110	130	140	165	195	105	120	145	100	115	135	105	125	150	—	—	—
	375	*445*	*520*	*310*	*360*	*425*	*460*	*540*	*640*	*345*	*395*	*475*	*330*	*375*	*445*	*345*	*410*	*490*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1375	1600	1900	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*4500*	*5250*	*6225*	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	550	650	770	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1800*	*2125*	*2525*	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	370	435	510	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1225*	*1425*	*1675*	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	420	495	580	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1375*	*1625*	*1900*	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	44	50	60	43	50	60	46	55	65
	—	—	—	—	—	—	—	—	—	—	—	—	*145*	*165*	*195*	*140*	*165*	*195*	*150*	*180*	*215*
S2	—	—	—	—	—	—	—	—	—	—	—	—	35	41	49	35	40	48	37	43	50
	—	—	—	—	—	—	—	—	—	—	—	—	*115*	*135*	*160*	*115*	*130*	*155*	*120*	*140*	*165*
S3	—	—	—	—	—	—	—	—	—	—	—	—	31	36	43	31	36	42	32	38	45
	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*120*	*140*	*100*	*120*	*140*	*105*	*125*	*150*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	70	85	65	75	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*195*	*230*	*280*	*215*	*245*	*295*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	48	60	44	50	60
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*155*	*195*	*145*	*165*	*195*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	28	34	26	30	36
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*90*	*110*	*85*	*100*	*120*
H5	45	50	60	37	43	50	—	—	—	40	46	55	38	44	50	39	45	55	—	—	—
	150	*165*	*195*	*120*	*140*	*165*	—	—	—	*130*	*150*	*180*	*125*	*145*	*165*	*130*	*150*	*180*	—	—	—
H8	48	55	65	40	46	55	—	—	—	43	50	60	41	48	55	42	48	55	—	—	—
	155	*180*	*215*	*130*	*150*	*180*	—	—	—	*140*	*165*	*195*	*135*	*155*	*180*	*140*	*155*	*180*	—	—	—
H11	55	65	80	48	55	65	—	—	—	50	60	70	48	55	65	49	55	65	—	—	—
	180	*215*	*260*	*155*	*180*	*215*	—	—	—	*165*	*195*	*230*	*155*	*180*	*215*	*160*	*180*	*215*	—	—	—
H12	85	100	120	70	85	100	80	90	105	75	90	105	75	85	100	80	95	110	—	—	—
	280	*330*	*395*	*230*	*280*	*330*	*260*	*295*	*345*	*245*	*295*	*345*	*245*	*280*	*330*	*260*	*310*	*360*	—	—	—

R217/220.21-160 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M			MP2050			MP1501			MP2501			MS2500			MP3501			MM4500		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	240 *790*	270 *890*	315 *1025*	280 *920*	330 *1075*	395 *1300*	370 *1225*	415 *1350*	495 *1625*	360 *1175*	405 *1325*	480 *1575*	380 *1250*	430 *1400*	510 *1675*	355 *1175*	400 *1300*	470 *1550*	225 *740*	260 *850*	310 *1025*
P2	235 *770*	260 *850*	310 *1025*	270 *890*	320 *1050*	385 *1275*	360 *1175*	405 *1325*	480 *1575*	350 *1150*	390 *1275*	470 *1550*	370 *1225*	420 *1375*	495 *1625*	345 *1125*	390 *1275*	455 *1500*	220 *720*	250 *820*	300 *980*
P3	210 *690*	230 *750*	265 *870*	240 *790*	280 *920*	330 *1075*	320 *1050*	360 *1175*	415 *1350*	310 *1025*	350 *1150*	405 *1325*	325 *1075*	370 *1225*	425 *1400*	305 *1000*	340 *1125*	390 *1275*	195 *640*	220 *720*	260 *850*
P4	190 *620*	215 *710*	255 *840*	210 *690*	245 *800*	295 *970*	285 *940*	320 *1050*	375 *1225*	275 *900*	310 *1025*	365 *1200*	285 *940*	325 *1075*	380 *1250*	270 *890*	300 *980*	350 *1150*	185 *610*	210 *690*	250 *820*
P5	175 *570*	195 *640*	225 *740*	200 *660*	235 *770*	280 *920*	270 *890*	305 *1000*	360 *1175*	260 *850*	295 *970*	350 *1150*	275 *900*	310 *1025*	360 *1175*	255 *840*	285 *940*	335 *1100*	160 *520*	185 *610*	220 *720*
P6	195 *640*	220 *720*	255 *840*	225 *740*	265 *870*	315 *1025*	305 *1000*	340 *1125*	400 *1300*	295 *970*	330 *1075*	390 *1275*	310 *1025*	350 *1150*	405 *1325*	285 *940*	320 *1050*	375 *1225*	180 *590*	210 *690*	250 *820*
P7	185 *610*	205 *670*	240 *790*	215 *710*	250 *820*	300 *980*	285 *940*	325 *1075*	380 *1250*	275 *900*	310 *1025*	370 *1225*	290 *950*	330 *1075*	385 *1275*	270 *890*	305 *1000*	355 *1175*	170 *560*	195 *640*	235 *770*
P8	175 *570*	195 *640*	225 *740*	200 *660*	235 *770*	275 *900*	270 *890*	305 *1000*	350 *1150*	260 *850*	295 *970*	340 *1125*	275 *900*	310 *1025*	355 *1175*	255 *840*	285 *940*	330 *1075*	160 *520*	185 *610*	220 *720*
P11	180 *590*	200 *660*	235 *770*	205 *670*	240 *790*	290 *950*	280 *920*	315 *1025*	370 *1225*	270 *890*	305 *1000*	360 *1175*	280 *920*	320 *1050*	375 *1225*	265 *870*	295 *970*	345 *1125*	165 *540*	190 *620*	230 *750*
P12	125 *410*	140 *460*	160 *520*	135 *445*	160 *520*	190 *620*	190 *620*	210 *690*	245 *800*	185 *610*	205 *670*	240 *790*	190 *620*	215 *710*	245 *800*	175 *570*	200 *660*	225 *740*	110 *360*	130 *425*	150 *490*
M1	170 *560*	200 *660*	240 *790*	195 *640*	230 *750*	275 *900*	— —	— —	— —	185 *610*	215 *710*	260 *850*	215 *710*	255 *840*	305 *1000*	185 *610*	220 *720*	260 *850*	145 *475*	170 *560*	205 *670*
M2	140 *460*	165 *540*	195 *640*	160 *520*	190 *620*	225 *740*	— —	— —	— —	155 *510*	180 *590*	215 *710*	180 *590*	210 *690*	250 *820*	155 *510*	180 *590*	215 *710*	120 *395*	140 *460*	170 *560*
M3	115 *375*	130 *425*	155 *510*	130 *425*	150 *490*	180 *590*	— —	— —	— —	125 *410*	145 *475*	175 *570*	145 *475*	170 *560*	200 *660*	125 *410*	145 *475*	175 *570*	100 *330*	115 *375*	135 *445*
M4	90 *295*	105 *345*	125 *410*	105 *345*	120 *395*	140 *460*	— —	— —	— —	100 *330*	115 *375*	140 *460*	115 *375*	130 *425*	160 *520*	100 *330*	115 *375*	135 *445*	75 *245*	90 *295*	105 *345*
M5	75 *245*	85 *280*	105 *345*	85 *280*	100 *330*	120 *395*	— —	— —	— —	80 *260*	95 *310*	115 *375*	95 *310*	110 *360*	130 *425*	80 *260*	95 *310*	115 *375*	65 *215*	75 *245*	90 *295*
K1	165 *540*	195 *640*	235 *770*	— —	— —	— —	365 *1200*	410 *1350*	485 *1600*	350 *1150*	395 *1300*	475 *1550*	240 *790*	280 *920*	335 *1100*	350 *1150*	390 *1275*	460 *1500*	— —	— —	— —
K2	145 *475*	170 *560*	205 *670*	— —	— —	— —	325 *1075*	370 *1225*	435 *1425*	315 *1025*	355 *1175*	420 *1375*	210 *690*	250 *820*	295 *970*	310 *1025*	345 *1125*	405 *1325*	— —	— —	— —
K3	125 *410*	145 *475*	175 *570*	— —	— —	— —	275 *900*	310 *1025*	365 *1200*	270 *890*	300 *980*	355 *1175*	180 *590*	210 *690*	250 *820*	260 *850*	295 *970*	345 *1125*	— —	— —	— —
K4	120 *395*	140 *460*	165 *540*	— —	— —	— —	265 *870*	295 *970*	350 *1150*	255 *840*	290 *950*	340 *1125*	170 *560*	200 *660*	240 *790*	250 *820*	280 *920*	325 *1075*	— —	— —	— —
K5	75 *245*	85 *280*	100 *330*	— —	— —	— —	165 *540*	185 *610*	215 *710*	160 *520*	180 *590*	210 *690*	105 *345*	125 *410*	145 *475*	155 *510*	175 *570*	200 *660*	— —	— —	— —
K6	105 *345*	125 *410*	145 *475*	— —	— —	— —	230 *750*	260 *850*	310 *1025*	225 *740*	255 *840*	300 *980*	150 *490*	175 *570*	210 *690*	220 *720*	245 *800*	290 *950*	— —	— —	— —
K7	95 *310*	110 *360*	130 *425*	— —	— —	— —	210 *690*	235 *770*	275 *900*	205 *670*	230 *750*	265 *870*	135 *445*	160 *520*	190 *620*	200 *660*	225 *740*	260 *850*	— —	— —	— —
N1	1225 *4025*	1425 *4675*	1700 *5575*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	490 *1600*	570 *1875*	690 *2275*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	325 *1075*	385 *1275*	460 *1500*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	375 *1225*	440 *1450*	530 *1750*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	42 *140*	48 *155*	60 *195*	50 *165*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	46 *150*	55 *180*	65 *215*	24 *80*	27 *90*	33 *110*
S2	33 *110*	39 *130*	46 *150*	40 *130*	47 *155*	55 *180*	— —	— —	— —	— —	— —	— —	45 *150*	50 *165*	60 *195*	37 *120*	43 *140*	50 *165*	19 *60*	22 *70*	26 *85*
S3	29 *95*	34 *110*	41 *135*	36 *120*	41 *135*	49 *160*	— —	— —	— —	— —	— —	— —	39 *130*	46 *150*	55 *180*	32 *105*	38 *125*	45 *150*	17 *55*	19 *60*	23 *75*
S11	60 *195*	65 *215*	80 *260*	70 *230*	80 *260*	95 *310*	— —	— —	— —	— —	— —	— —	75 *245*	90 *295*	105 *345*	65 *215*	75 *245*	90 *295*	33 *110*	38 *125*	45 *150*
S12	40 *130*	46 *150*	55 *180*	48 *155*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	75 *245*	44 *145*	50 *165*	60 *195*	30 *100*	35 *115*	42 *140*
S13	23 *75*	27 *90*	32 *105*	28 *90*	33 *110*	39 *130*	— —	— —	— —	— —	— —	— —	31 *100*	36 *120*	43 *140*	26 *85*	30 *100*	36 *120*	18 *60*	20 *65*	24 *80*
H5	36 *120*	42 *140*	50 *165*	— —	— —	— —	50 *165*	60 *195*	70 *230*	— —	— —	— —	47 *155*	55 *180*	65 *215*	42 *140*	48 *155*	55 *180*	— —	— —	— —
H8	39 *130*	45 *150*	55 *180*	— —	— —	— —	55 *180*	65 *215*	75 *245*	— —	— —	— —	50 *165*	60 *195*	70 *230*	45 *150*	50 *165*	60 *195*	— —	— —	— —
H11	46 *150*	55 *180*	65 *215*	55 *180*	60 *195*	75 *245*	65 *215*	75 *245*	90 *295*	— —	— —	— —	60 *195*	70 *230*	85 *280*	55 *180*	60 *195*	75 *245*	— —	— —	— —
H12	70 *230*	80 *260*	95 *310*	90 *295*	105 *345*	125 *410*	100 *330*	115 *375*	135 *445*	— —	— —	— —	100 *330*	115 *375*	135 *445*	80 *260*	95 *310*	110 *360*	— —	— —	— —

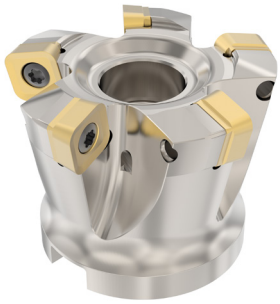


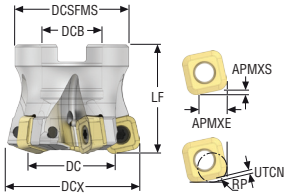
R220.21 (SC12) HIGH FEED

Frese ad elevato avanzamento per macchine a coppia elevata, per inserti SCET12, 4 taglienti, monolaterale. Questi corpi fresa con sedi fisse sono ottimizzati per macchine orizzontali resistenti.
SCET120630T è la nostra gamma di inserti da 6,35 mm di spessore con un raggio di punta di 3,0 mm.

- Gamma di frese 50-160 mm (2-4")
- Profondità di taglio massima 1,5 mm (0,059")
- Operazioni di sgrossatura pesanti
- Macchine grandi e potenti

R220.21-SC – In mm

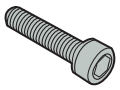
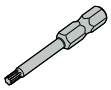




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 645-646
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DCB	DCSFMS	DCONMS	LF	RP	UTCN	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm	mm			kg	
R220.21-0050-SC12.4A	02600275	Manicotto	31,0	50,0	4	1,5	9,0	22,0	42,0	22,0	40,0	4,4	1,1	2,3	10700	0,3	SC.T1206
R220.21-0050-SC12.5A	03136672	Manicotto	31,0	50,0	5	1,5	9,0	22,0	42,0	22,0	40,0	4,4	1,1	2,1	10700	0,3	SC.T1206
R220.21-0052-SC12.4A	02585965	Manicotto	33,0	52,0	4	1,5	9,0	22,0	42,0	22,0	40,0	4,4	1,1	2,2	10500	0,3	SC.T1206
R220.21-0052-SC12.5A	03138188	Manicotto	33,0	52,0	5	1,5	9,0	22,0	47,0	22,0	40,0	4,5	1,1	2,0	10500	0,4	SC.T1206
R220.21-0063-SC12.5A	02682416	Manicotto	44,0	63,0	5	1,5	9,0	27,0	50,0	27,0	50,0	4,4	1,1	0,9	9600	0,6	SC.T1206
R220.21-0080-SC12.5A	02585971	Manicotto	61,0	80,0	5	1,5	9,0	27,0	62,0	27,0	50,0	4,4	1,1	0,8	8500	0,9	SC.T1206
R220.21-0080-SC12.6A	02682419	Manicotto	61,0	80,0	6	1,5	9,0	27,0	62,0	27,0	50,0	4,4	1,1	0,8	8500	1,0	SC.T1206
R220.21-0080-SC12.7A	03136674	Manicotto	61,1	80,0	7	1,5	9,0	27,0	62,0	27,0	50,0	4,4	1,2	0,8	8500	1,1	SC.T1206
R220.21-0100-SC12.5A	02585973	Manicotto	81,0	100,0	5	1,5	9,0	32,0	77,0	32,0	50,0	4,4	1,1	0,75	7600	1,6	SC.T1206
R220.21-0100-SC12.7A	02682422	Manicotto	81,0	100,0	7	1,5	9,0	32,0	77,0	32,0	50,0	4,4	1,1	0,75	7600	1,6	SC.T1206
R220.21-0125-SC12.6A	02585974	Manicotto	106,0	125,0	6	1,5	9,0	40,0	90,0	40,0	63,0	4,4	1,1	0,7	6800	2,5	SC.T1206
R220.21-8160-SC12.7	02585975	Manicotto	141,0	160,0	7	1,5	9,0	40,0	90,0	40,0	63,0	4,4	1,1	0,7	6000	3,6	SC.T1206

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.21-0050-0052	220.17-692M	1/4HEX-T20PX50	C45011-T20P
R220.21-0063-0066	MC6S12X35	1/4HEX-T20PX50	C45011-T20P
R220.21-0080	MC6S12X35	1/4HEX-T20PX50	C45011-T20P
R220.21-0100	MLC6S16X35	1/4HEX-T20PX90	C45011-T20P
R220.21-0125	–	1/4HEX-T20PX90	C45011-T20P
R220.21-8160	–	1/4HEX-T20PX90	C45011-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Chiave dinamometrica regolabile 2	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
						
R220.21-0050-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	–	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.21-0050-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	5804020	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.21-8160	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.21-SC12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z		
			100%	70%	30%
P1	SCET120630T-M14 MP3501	1,5 *0.060*	0,95 0.038	0,95 0.038	1,1 0.044
P2	SCET120630T-M14 MP3501	1,5 *0.060*	0,95 0.038	0,95 0.038	1,1 0.044
P3	SCET120630T-M14 MP2501	1,5 *0.060*	0,90 0.036	0,90 0.036	1,1 0.044
P4	SCET120630T-M14 MP2501	1,5 *0.060*	0,90 0.036	0,90 0.036	1,1 0.044
P5	SCET120630T-M14 MP2501	1,5 *0.060*	0,85 0.034	0,85 0.034	1,0 0.040
P6	SCET120630T-M14 MP2501	1,5 *0.060*	0,85 0.034	0,85 0.034	1,0 0.040
P7	SCET120630T-M14 MP2501	1,5 *0.060*	0,85 0.034	0,85 0.034	1,0 0.040
P8	SCET120630T-M14 MP2501	1,5 *0.060*	0,90 0.036	0,90 0.036	1,1 0.044
P11	SCET120630T-M14 MP3501	1,5 *0.060*	0,85 0.034	0,85 0.034	1,0 0.040
P12	SCET120630T-M14 MP2501	1,5 *0.060*	0,60 0.024	0,60 0.024	0,70 0.028
M1	SCET120630T-M14 MS2050	1,5 *0.060*	0,95 0.038	0,95 0.038	1,1 0.044
M2	SCET120630T-M14 MS2050	1,5 *0.060*	0,85 0.034	0,85 0.034	1,0 0.040
M3	SCET120630T-M14 MS2050	1,5 *0.060*	0,70 0.028	0,70 0.028	0,85 0.034
M4	SCET120630T-M14 MP3501	1,5 *0.060*	0,60 0.024	0,60 0.024	0,75 0.030
M5	SCET120630T-M14 MP3501	1,5 *0.060*	0,60 0.024	0,60 0.024	0,75 0.030
K1	SCET120630T-MD16 MP1501	1,5 *0.060*	1,1 0.044	1,1 0.044	1,3 0.050
K2	SCET120630T-MD16 MP1501	1,5 *0.060*	1,0 0.040	1,0 0.040	1,2 0.048
K3	SCET120630T-MD16 MP1501	1,5 *0.060*	1,0 0.040	1,0 0.040	1,2 0.048
K4	SCET120630T-MD16 MP1501	1,5 *0.060*	1,0 0.040	1,0 0.040	1,2 0.048
K5	SCET120630T-MD16 MP1501	1,5 *0.060*	0,90 0.036	0,90 0.036	1,1 0.044
K6	SCET120630T-MD16 MP1501	1,5 *0.060*	1,0 0.040	1,0 0.040	1,2 0.048
K7	SCET120630T-MD16 MP1501	1,5 *0.060*	0,90 0.036	0,90 0.036	1,1 0.044
S1	SCET120630T-M14 MS2500	1,5 *0.060*	0,60 0.024	0,60 0.024	0,75 0.030
S2	SCET120630T-M14 MS2500	1,5 *0.060*	0,60 0.024	0,60 0.024	0,75 0.030
S3	SCET120630T-M14 MS2500	1,5 *0.060*	0,55 0.022	0,55 0.022	0,70 0.028
S11	SCET120630T-M14 MS2050	1,5 *0.060*	0,70 0.028	0,70 0.028	0,85 0.034
S12	SCET120630T-M14 MS2050	1,5 *0.060*	0,70 0.028	0,70 0.028	0,85 0.034
S13	SCET120630T-M14 MS2050	1,5 *0.060*	0,60 0.024	0,60 0.024	0,75 0.030
H5	SCET120630T-MD16 MP3501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,80 0.032
H8	SCET120630T-MD16 MP3501	1,5 *0.060*	0,50 0.020	0,50 0.020	0,60 0.024
H11	SCET120630T-MD16 MP1501	1,5 *0.060*	0,70 0.028	0,70 0.028	0,80 0.032
H12	SCET120630T-MD16 MP1501	1,5 *0.060*	0,50 0.020	0,50 0.020	0,60 0.024

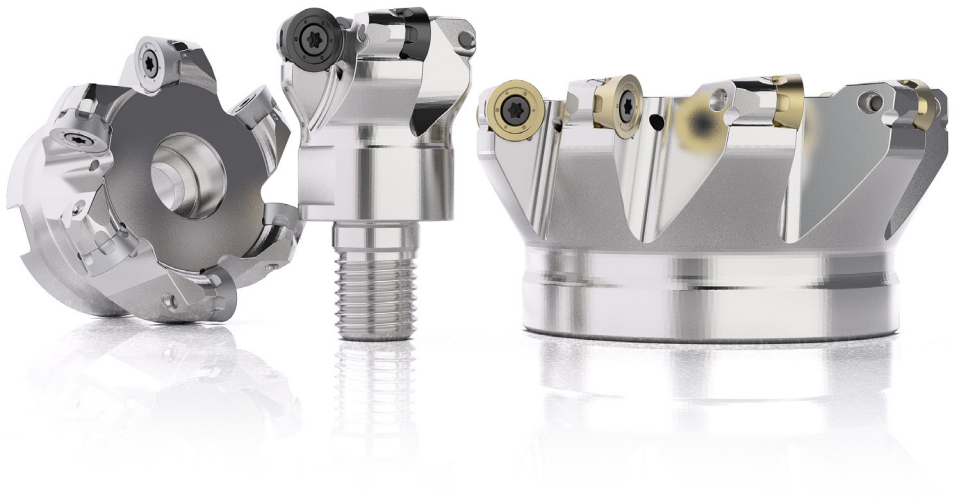
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R220.21-SC12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050			MP3000			MS2050			F40M		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	275 *900*	320 *1050*	390 *1275*	275 *900*	310 *1025*	395 *1300*	250 *820*	280 *920*	345 *1125*	240 *790*	260 *850*	315 *1025*
P2	265 *870*	305 *1000*	370 *1225*	260 *850*	295 *970*	370 *1225*	240 *790*	270 *890*	325 *1075*	230 *750*	245 *800*	295 *970*
P3	230 *750*	265 *870*	330 *1075*	230 *750*	260 *850*	330 *1075*	210 *690*	235 *770*	290 *950*	200 *660*	220 *720*	265 *870*
P4	210 *690*	240 *790*	290 *950*	210 *690*	235 *770*	290 *950*	190 *620*	210 *690*	255 *840*	185 *610*	205 *670*	245 *800*
P5	200 *660*	230 *750*	285 *940*	200 *660*	225 *740*	290 *950*	180 *590*	205 *670*	255 *840*	170 *560*	185 *610*	230 *750*
P6	225 *740*	255 *840*	320 *1050*	225 *740*	255 *840*	325 *1075*	200 *660*	225 *740*	285 *940*	195 *640*	210 *690*	255 *840*
P7	210 *690*	240 *790*	300 *980*	210 *690*	240 *790*	310 *1025*	190 *620*	215 *710*	270 *890*	180 *590*	200 *660*	245 *800*
P8	195 *640*	225 *740*	275 *900*	195 *640*	220 *720*	280 *920*	175 *570*	200 *660*	245 *800*	170 *560*	185 *610*	220 *720*
P11	205 *670*	235 *770*	290 *950*	205 *670*	230 *750*	300 *980*	185 *610*	210 *690*	260 *850*	175 *570*	195 *640*	235 *770*
P12	135 *445*	155 *510*	190 *620*	145 *475*	160 *520*	200 *660*	125 *410*	140 *460*	170 *560*	120 *395*	130 *425*	155 *510*
M1	— —	— —	— —	190 *620*	220 *720*	265 *870*	180 *590*	210 *690*	255 *840*	165 *540*	190 *620*	230 *750*
M2	— —	— —	— —	160 *520*	185 *610*	230 *750*	150 *490*	175 *570*	215 *710*	135 *445*	160 *520*	195 *640*
M3	— —	— —	— —	130 *425*	145 *475*	180 *590*	120 *395*	135 *445*	170 *560*	110 *360*	125 *410*	155 *510*
M4	— —	— —	— —	100 *330*	115 *375*	140 *460*	95 *310*	105 *345*	135 *445*	85 *280*	95 *310*	120 *395*
M5	— —	— —	— —	85 *280*	95 *310*	115 *375*	80 *260*	90 *295*	110 *360*	70 *230*	80 *260*	100 *330*
K1	285 *940*	330 *1075*	400 *1300*	200 *660*	230 *750*	285 *940*	— —	— —	— —	160 *520*	185 *610*	225 *740*
K2	255 *840*	295 *970*	365 *1200*	180 *590*	210 *690*	260 *850*	— —	— —	— —	145 *475*	165 *540*	205 *670*
K3	215 *710*	250 *820*	310 *1025*	155 *510*	175 *570*	220 *720*	— —	— —	— —	125 *410*	140 *460*	175 *570*
K4	205 *670*	240 *790*	295 *970*	145 *475*	170 *560*	210 *690*	— —	— —	— —	115 *375*	135 *445*	165 *540*
K5	130 *425*	145 *475*	180 *590*	90 *295*	105 *345*	125 *410*	— —	— —	— —	70 *230*	85 *280*	100 *330*
K6	185 *610*	210 *690*	260 *850*	130 *425*	150 *490*	185 *610*	— —	— —	— —	105 *345*	120 *395*	145 *475*
K7	165 *540*	190 *620*	230 *750*	115 *375*	135 *445*	160 *520*	— —	— —	— —	90 *295*	105 *345*	130 *425*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	1175 *3850*	1350 *4425*	1675 *5500*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	475 *1550*	550 *1800*	670 *2200*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	320 *1050*	365 *1200*	450 *1475*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	365 *1200*	415 *1350*	510 *1675*
S1	— —	— —	— —	46 *150*	55 *180*	65 *215*	44 *145*	50 *165*	60 *195*	40 *130*	45 *150*	55 *180*
S2	— —	— —	— —	37 *120*	42 *140*	55 *180*	35 *115*	40 *130*	50 *165*	32 *105*	37 *120*	45 *150*
S3	— —	— —	— —	33 *110*	37 *120*	46 *150*	31 *100*	36 *120*	44 *145*	28 *90*	32 *105*	40 *130*
S11	— —	— —	— —	— —	— —	— —	60 *195*	70 *230*	85 *280*	55 *180*	65 *215*	80 *260*
S12	— —	— —	— —	— —	— —	— —	42 *140*	48 *155*	60 *195*	38 *125*	44 *145*	55 *180*
S13	— —	— —	— —	— —	— —	— —	25 *80*	28 *90*	35 *115*	23 *75*	26 *85*	32 *105*
H5	46 *150*	50 *165*	65 *215*	40 *130*	46 *150*	55 *180*	— —	— —	— —	34 *110*	39 *130*	48 *155*
H8	49 *160*	55 *180*	70 *230*	43 *140*	49 *160*	60 *195*	— —	— —	— —	36 *120*	41 *135*	50 *165*
H11	60 *195*	65 *215*	80 *260*	50 *165*	60 *195*	70 *230*	— —	— —	— —	44 *145*	50 *165*	60 *195*
H12	85 *280*	95 *310*	120 *395*	80 *260*	95 *310*	115 *375*	— —	— —	— —	65 *215*	75 *245*	90 *295*
H21	49 *160*	55 *180*	70 *230*	43 *140*	49 *160*	60 *195*	— —	— —	— —	36 *120*	41 *135*	50 *165*

R220.21-SC12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501			MP2501			MS2500			MP3501		
	100%	70%	30%	100%	70%	30%	100%	70%	30%	100%	70%	30%
P1	385 *1275*	425 *1400*	500 *1650*	370 *1225*	410 *1350*	490 *1600*	375 *1225*	415 *1350*	500 *1650*	350 *1150*	385 *1275*	465 *1525*
P2	375 *1225*	410 *1350*	490 *1600*	365 *1200*	400 *1300*	480 *1575*	360 *1175*	400 *1300*	475 *1550*	335 *1100*	370 *1225*	440 *1450*
P3	320 *1050*	355 *1175*	435 *1425*	310 *1025*	345 *1125*	425 *1400*	315 *1025*	350 *1150*	420 *1375*	295 *970*	325 *1075*	390 *1275*
P4	295 *970*	325 *1075*	380 *1250*	285 *940*	315 *1025*	375 *1225*	285 *940*	315 *1025*	370 *1225*	265 *870*	290 *950*	345 *1125*
P5	280 *920*	310 *1025*	365 *1200*	270 *890*	300 *980*	355 *1175*	270 *890*	300 *980*	365 *1200*	250 *820*	275 *900*	340 *1125*
P6	315 *1025*	345 *1125*	410 *1350*	305 *1000*	335 *1100*	400 *1300*	305 *1000*	335 *1100*	410 *1350*	285 *940*	310 *1025*	380 *1250*
P7	295 *970*	325 *1075*	385 *1275*	290 *950*	315 *1025*	375 *1225*	285 *940*	315 *1025*	385 *1275*	265 *870*	295 *970*	360 *1175*
P8	270 *890*	300 *980*	365 *1200*	260 *850*	290 *950*	355 *1175*	265 *870*	295 *970*	355 *1175*	245 *800*	270 *890*	325 *1075*
P11	290 *950*	315 *1025*	375 *1225*	280 *920*	310 *1025*	365 *1200*	280 *920*	310 *1025*	375 *1225*	260 *850*	285 *940*	350 *1150*
P12	190 *620*	205 *670*	245 *800*	185 *610*	200 *660*	240 *790*	185 *610*	205 *670*	240 *790*	175 *570*	190 *620*	225 *740*
M1	— —	— —	— —	190 *620*	215 *710*	265 *870*	210 *690*	240 *790*	295 *970*	180 *590*	210 *690*	255 *840*
M2	— —	— —	— —	155 *510*	180 *590*	220 *720*	175 *570*	200 *660*	250 *820*	150 *490*	175 *570*	215 *710*
M3	— —	— —	— —	125 *410*	140 *460*	180 *590*	140 *460*	160 *520*	200 *660*	120 *395*	135 *445*	170 *560*
M4	— —	— —	— —	95 *310*	110 *360*	140 *460*	110 *360*	125 *410*	155 *510*	95 *310*	105 *345*	135 *445*
M5	— —	— —	— —	80 *260*	90 *295*	115 *375*	90 *295*	105 *345*	130 *425*	80 *260*	90 *295*	110 *360*
K1	375 *1225*	415 *1350*	495 *1625*	365 *1200*	405 *1325*	485 *1600*	235 *770*	270 *890*	325 *1075*	335 *1100*	370 *1225*	445 *1450*
K2	340 *1125*	375 *1225*	440 *1450*	330 *1075*	360 *1175*	430 *1400*	210 *690*	240 *790*	300 *980*	305 *1000*	335 *1100*	410 *1350*
K3	285 *940*	315 *1025*	375 *1225*	280 *920*	305 *1000*	365 *1200*	175 *570*	205 *670*	255 *840*	260 *850*	285 *940*	345 *1125*
K4	275 *900*	300 *980*	355 *1175*	265 *870*	295 *970*	350 *1150*	170 *560*	195 *640*	240 *790*	245 *800*	270 *890*	330 *1075*
K5	165 *540*	185 *610*	220 *720*	160 *520*	180 *590*	215 *710*	105 *345*	120 *395*	145 *475*	155 *510*	170 *560*	200 *660*
K6	240 *790*	265 *870*	315 *1025*	235 *770*	260 *850*	305 *1000*	150 *490*	170 *560*	210 *690*	215 *710*	240 *790*	290 *950*
K7	210 *690*	240 *790*	280 *920*	205 *670*	230 *750*	275 *900*	135 *445*	155 *510*	185 *610*	195 *640*	215 *710*	255 *840*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	75 *245*	44 *145*	50 *165*	60 *195*
S2	— —	— —	— —	— —	— —	— —	43 *140*	49 *160*	60 *195*	35 *115*	40 *130*	50 *165*
S3	— —	— —	— —	— —	— —	— —	38 *125*	43 *140*	55 *180*	31 *100*	36 *120*	44 *145*
S11	— —	— —	— —	— —	— —	— —	75 *245*	85 *280*	105 *345*	60 *195*	70 *230*	85 *280*
S12	— —	— —	— —	— —	— —	— —	50 *165*	60 *195*	75 *245*	42 *140*	48 *155*	60 *195*
S13	— —	— —	— —	— —	— —	— —	30 *100*	34 *110*	42 *140*	25 *80*	28 *90*	35 *115*
H5	49 *160*	55 *180*	70 *230*	— —	— —	— —	45 *150*	50 *165*	65 *215*	40 *130*	45 *150*	55 *180*
H8	50 *165*	60 *195*	75 *245*	— —	— —	— —	47 *155*	55 *180*	65 *215*	42 *140*	48 *155*	60 *195*
H11	65 *215*	70 *230*	90 *295*	— —	— —	— —	55 *180*	65 *215*	80 *260*	50 *165*	55 *180*	70 *230*
H12	95 *310*	105 *345*	135 *445*	— —	— —	— —	95 *310*	105 *345*	135 *445*	75 *245*	85 *280*	105 *345*
H21	50 *165*	60 *195*	75 *245*	— —	— —	— —	47 *155*	55 *180*	65 *215*	42 *140*	48 *155*	60 *195*

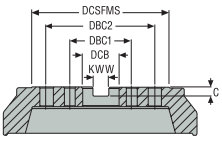


Chiavi di codifica in mm e in pollici

R	217	.	29	-	16	16	.	0	-	04	.	2	.	140	A
1	2		3		4	5		6		7		8		9	10

R	217	.	29I	-	01.00	-	0	-	06	.	2	A
1	2		3		4		6		7		8	9

1.	**2.**	**3.**
R = Rotazione destra Cx = Seco-Capto	217 = Attacco a stelo 220 = Attacco a manicotto	Tipo di fresa
4.	**5. (Non per la designazione in pollici)**	**6.**
Diametro stelo (diametro filettatura attacco Combimaster)	Diametro esterno/Frese a testa sferica = diametro di taglio	Tipo di stelo RE = Combimaster 0. = Cilindrico 3. = Weldon
7.	**8.**	**9.**
Massima profondità assiale di taglio	Num. di denti	Sporgenza dal mandrino (per lo stelo Combimaster)
10.		
A = Adduzione interna refrigerante E = Stelo in metallo duro		



Dimensioni in mm

DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (mm)				Numero di taglienti	Diametri (mm) disponibili e massima profondità di taglio (mm)								Vedere pagina
		P	M	K	N	S	H						12	16	20	25	30	32	40	50	
R218.20	218.20-060	■	■	■	◩	■	-	6,0	■	□	◩	2	10								718, 719
	218.20-080	■	■	■	◩	■	◩	8,0	■	◩	◩	2		14							
	218.20-100	■	■	■	◩	■	◩	10,0	■	■	◩	2			18						
	218.20-125	■	■	■	◩	■	◩	12,5	■	■	◩	2				22					
	218.20-150	■	■	■	◩	■	◩	15,0	◩	■	◩	2					27				
	218.20-160	■	■	■	◩	■	◩	16,0	◩	■	◩	2						28			
	218.20-200	■	■	■	◩	■	-	20,0	□	■	◩	2							35		
	218.20-250	■	■	■	◩	■	-	25,0	□	■	◩	2								44	
R218.20 tagliente lungo	218.20-150 / SPMT10	■	■	■	◩	■	◩	15,0	◩	■	◩	2/4					44				
	218.20-160 / SPMT10	■	■	■	◩	■	◩	16,0	◩	■	◩	2/4						54			
	218.20-200 / SC..12	■	■	■	◩	■	-	20,0	□	■	◩	2/4							60		
	218.20-250 / SC..12	■	■	■	◩	■	-	25,0	□	■	◩	2/4								70	

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida	
Scelta possibile	□	Capacità di lavorare in condizioni instabili	
Non consigliata	-		

x indica la massima profondità di taglio — x

Selezione – In mm

Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (mm)				Numero di taglienti	Diametri (mm) disponibili e massima profondità di taglio (mm)							Vedere pagina
		P	M	K	N	S	H						16	20	25	30	32	40	50	
R218.19	218.19-080/SPMX06	■	◩	■	◩	■	◩	8,0	■	◩	■	3/4	12 17							748
	218.19-100/SPMX07	■	◩	■	◩	■	◩	10,0	■	■	■	3/4		16 21						
	218.19-125/SPMX09	■	◩	■	◩	■	◩	16,0	■	■	■	3/4			26					
	218.19-160/SPMT10	■	◩	■	◩	■	◩	16,0	◩	■	■	3/4					31 38			
R218.19 HFA	218.19-125	■	■	■	◩	■	◩	12,5	■	■	■	3			12					750
	218.19-160	■	■	■	◩	■	◩	16,0	◩	■	■	3					16			
	218.19-200	■	■	■	◩	■	□	20,0	□	■	■	3						20		

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida	
Scelta possibile	□	Capacità di lavorare in condizioni instabili	
Non consigliata	-		

x indica la massima profondità di taglio: x

Selezione – Pollici

Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (pollici)				Numero di taglienti	Diametri disponibili (pollici) e profondità di taglio massima (pollici)							Vedere pagina
		P	M	K	N	S	H						0.50	0.63	0.75	1.00	1.25	1.50	2.00	
R218.20	218.20-0.250	■	■	■	◩	■	-	0.250	■	□	◩	2	0.433							718, 719
	218.20-080	■	■	■	◩	■	◩	0.315	■	◩	◩	2			0.669					
	218.20-0.375	■	■	■	◩	■	◩	0.375	■	■	◩	2					1.102			
	218.20-125	■	■	■	◩	■	◩	0.492	■	■	◩	2							1.732	
	218.20-160	■	■	■	◩	■	◩	0.630	◩	■	◩	2					2.126			
	218.20-0.750	■	■	■	◩	■	◩	0.750	◩	■	◩	2							2.756	
	218.20-250	■	■	■	◩	■	-		□	■	◩	2		0.551						
R218.20 tagliente lungo	218.20-125 / SPMT10	■	■	■	◩	■	◩	0.630	◩	■	◩	2/4				0.866				
	218.20-160 / SPMT10	■	■	■	◩	■	◩		◩	■	◩	2/4						1.339		
	218.20-0.750 / SC..12	■	■	■	◩	■	-	0.750	□	■	◩	2/4				1.772				
	218.20-250 / SC..12	■	■	■	◩	■	-	0.984	□	■	◩	2/4						2.362		

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida
Scelta possibile	□	Capacità di lavorare in condizioni instabili
Non consigliata	-	

x indica la massima profondità di taglio: x

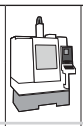
Selezione – Pollici

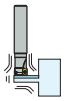
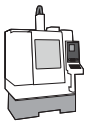
Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (pollici)				Numero di taglienti	Diametri disponibili (pollici) e profondità di taglio massima (pollici)							Vedere pagina
		P	M	K	N	S	H						0.50	0.63	0.75	1.00	1.25	1.50	2.00	
R218.19	218.19-100/SPMX07	■	◩	■	◩	■	◩	0.394	■	■	■	3/4			0.835					748
	218.19-125/SPMX09	■	◩	■	◩	■	◩	0.492	■	■	■	3/4				1.063				
R218.19 HFA	218.19-125	■	■	■	◩	■	◩		■	■	■	3								750
	218.19-160	■	■	■	◩	■	◩		◩	■	■	3								
	218.19-200	■	■	■	◩	■	□		□	■	■	3								

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida
Scelta possibile	□	Capacità di lavorare in condizioni instabili
Non consigliata	-	

x indica la massima profondità di taglio: x

Selezione – In mm

Inserto	a_p max	a_p racc.	Capacità di lavorare materiali									
			P	M	K	N	S	H				
Tondo 5 	2,5	1	■	◩	■	□	■	■	■	◩	■	□
Tondo 6 	3	1	■	■	■	■	◩	■	■	◩	■	□
Tondo 7 	3,5	1,5	■	◩	■	■	◩	■	■	◩	■	□
Tondo 8 	4	1,5	■	■	■	■	■	■	■	◩	■	◩
Tondo 10 	5	2	■	■	■	■	■	■	■	■	■	◩
Tondo 12 	6	3	■	■	■	■	■	■	□	■	■	◩
Tondo 16 	8	5	■	■	■	-	■	◩	-	■	■	◩
Tondo 20 	10	6	■	■	■	-	■	□	-	■	■	◩
Tondo 12 R217/220.28 	6	3	■	■	■	□	■	◩	□	■	□	◩

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia 		Capacità di lavorare in condizioni instabili 	
Scelta alternativa	□	Macchina robusta e stabile con connessione rigida 		Capacità di effettuare lavorazioni di entrata in rampa 	
Scelta possibile	◩	Non consigliata	-	Capacità di effettuare lavorazioni di penetrazione assiale 	

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – In mm

Inserto	Applicazione	Diametro fresa disponibile (mm)/numero di denti																													Vedere pagina
		10	12	15	16	20	25	27	32	35	40	42	44	50	52	63	66	80	84	92	100	112	125	137	153	160	188	200	228	250	
Tondo 5		2	3	4		5																									660
Tondo 6			2		3	4	5		6	7	8																				664
Tondo 7					3	4	5																								669
Tondo 8						2	3							5																	672
					2	3	4		5		6			7																	
Tondo 10											4			4		6															677
							2		4		5	5																			
					1	2	3	3	5	5	6	6		6	7	8															
Tondo 12										3	3		4	4	4	5		6	6			7		8							684
														5	5	6	6	7		7											
							2		3	4	4	5		6		7		8			9		11									
Tondo 16																4	5	5	5		6		6			7					693, 694
									2		3			4	4	5/6	6	7			8		10			10					
Tondo 20																4		5			5		6		6	7	8		10		702
											2			3		5	5	6			7		8					9		10	
Tondo 12														5	5	6	7	8			10										710
R217/220.28									3		4			6		8					12										

x	x indica il numero di denti (prima scelta)
x	x indica il numero di denti

Passo largo-risoluzione dei problemi per condizioni instabili e sporgenza lunga

Passo normale-scelta alternativa

Scelta base a passo stretto per la produttività

Selezione – Pollici

Inserto	a_p max	a_p racc.	Capacità di lavorare materiali									
			P	M	K	N	S	H				
Tondo 5	0.059	0.039	■	◩	■	□	■	■	■	◩	■	□
Tondo 6	0.118	0.04	■	■	■	■	◩	■	■	◩	■	□
Tondo 7	0.138	0.059	■	◩	■	■	◩	■	■	◩	■	□
Tondo 8	0.158	0.059	■	■	■	■	■	■	■	◩	■	◩
Tondo 10	0.197	0.079	■	■	■	■	■	■	■	■	■	◩
Tondo 12	0.236	0.118	■	■	■	■	■	■	□	■	■	◩
Tondo 16	0.315	0.197	■	■	■	-	■	◩	-	■	■	◩
Tondo 19	0.374	0.160	■	■	■	-	■	□	-	■	■	◩
Tondo 20	0.394	0.236	■	■	■	-	■	□	-	■	■	◩
Tondo 12 R217/220.28	0.236	0.118	■	■	■	□	■	◩	□	■	□	◩

1a scelta ■

Scelta alternativa □

Scelta possibile ◩

Macchina ad alta velocità con bassa potenza/coppia

Macchina robusta e stabile con connessione rigida

Non consigliata -

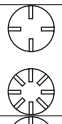
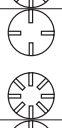
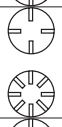
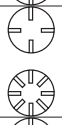
Capacità di lavorare in condizioni instabili

Capacità di effettuare lavorazioni di entrata in rampa

Capacità di effettuare lavorazioni di penetrazione assiale

a_p max = Massima profondità di taglio possibile
a_p racc. = Profondità di taglio consigliata per risultati ottimali

Selezione – Pollici

Inserto	Applicazione	Diametro fresa disponibile (pollici)/numero di denti										Vedere pagina
		0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	6.00	
Tondo 5												660
Tondo 6		4	5	6								664
Tondo 7												669
Tondo 8												672
Tondo 10			3	4	5	6						677
Tondo 12			2	3	4	(4/5)	(6/7)	(6/7)	(7/9)		8	684
Tondo 16						4	5	6	7			693, 694
Tondo 19							4	6	5 5	7 9		702 702
Tondo 20							4	5				702
Tondo 12												710
R217/220.28				3	4	(5/6)	7	8	(10/12)			

x — x indica il numero di denti (prima scelta)

x — x indica il numero di denti

 Passo largo-risoluzione dei problemi per condizioni instabili e sporgenza lunga

 Passo normale-scelta alternativa

 Scelta base a passo stretto per la produttività

Selezione – In mm

Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (mm)				Numero di taglienti	Diametri (mm) disponibili e massima profondità di taglio (mm)									Vedere pagina
		P	M	K	N	S	H						16									
R217/220.97	R217/220.97-XP08				■			0,4/0,8/ 1,6/2,0/ 2,4/3,1	■	■	■	2	2	2/3	3/4							768
	R217/220.97-XP12				■			0,4/0,8/ 2,0/2,4/ 3,1/4,0	■	■	■	2			2	2/3	3	4				772
	R217/220.97-VP22				■			0,5/0,8/ 1,6/2,0/ 2,4/3,1/ 4,0/4,8/6,3		■	■	2				2	2	2/3	3/4	4	5	776

1a scelta	■	Macchina ad alta velocità con bassa potenza/ coppia	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida	
Scelta possibile	□	Capacità di lavorare in condizioni instabili	
Non consigliata	-		

x indica la massima profondità di taglio: x

Selezione – Pollici

Fresa	Inserto	Capacità di lavorare materiali						Raggio di punta (pollici)				Numero di taglienti	Diametri disponibili (pollici) e profondità di taglio massima (pollici)									Vedere pagina
		P	M	K	N	S	H						0.63	0.08	1.00	1.25	1.50	2.00	2.50	3.00	4.00	
R217/220.97	R217/220.97-XP08				■			0.016/0.031/ 0.063/0.079/ 0.094/0.122	■	■	■	2	2	2	3							768
	R217/220.97-XP12				■			0.016/0.031/ 0.079/0.094/ 0.122/0.157	■	■	■	2				2	2	(2/3)	4	4	5	772
	R217/220.97-VP22				■			0.020/0.031/ 0.063/0.079/ 0.094/0.122/		■	■	2			2	3	3	(3/4)				776

1a scelta	■	Macchina ad alta velocità con bassa potenza/ coppia	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida	
Scelta possibile	□	Capacità di lavorare in condizioni instabili	
Non consigliata	-		

x indica la massima profondità di taglio: x



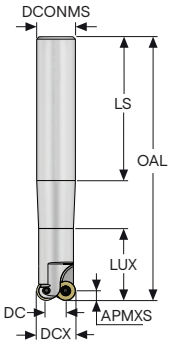
R217/220.29 FRESE CON INSERTI TONDI

La nostra gamma completa di frese con inserti tondi R217/220.29 è ideale per la semi-finitura e la sgrossatura in tutte le applicazioni di copiatura e i tutti materiali.

- Dimensione dell'inserto 05, gamma frese 10-20 mm
- Dimensione dell'inserto 06, gamma frese 12-40 mm (0,75-1,25")
- Dimensione dell'inserto 07, gamma frese 16-25 mm
- Dimensione dell'inserto 08, gamma frese 16-50 mm
- Dimensione dell'inserto 3/4, gamma frese (2,5-5")
- Dimensione dell'inserto 10, gamma frese 16-63 mm (1-2,0")
- Dimensione dell'inserto 12, gamma frese 25-137 mm (1-6")
- Dimensione dell'inserto 16, gamma frese 32-160 mm (2,0-4,0")
- Dimensione dell'inserto 20, gamma frese 25-250 mm (2-3")

R217.29-025 – In mm

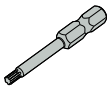




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 662-663
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29-1010.0-025.2.090E	02495669	Cilindrico	5,0	10,0	2	2,5	10,0	100,0	30,0	90,0	130,0	25,0	15,0	18,0	75000	0,2	RDHW0501

Parti di ricambio, comprese nella fornitura

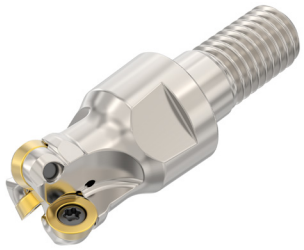
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29-..	1/4HEX-T06PX50	C02035-T06P

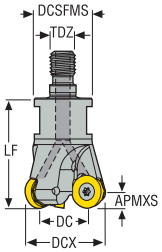
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29-025 – In mm



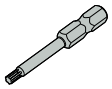


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 662-663
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm		mm	mm		mm	mm		kg	
R217.29-0612.RE-025.3A	02642920	Combimaster	7,0	12,0	3	2,5	11,0	M6	18,0	31,5	13,9	19,0	22,0	65000	0,1	RDHW0501
R217.29-0812.RE-025.3A	02495672	Combimaster	7,0	12,0	3	2,5	13,5	M8	20,0	37,75	13,9	19,0	22,0	65000	0,1	RDHW0501
R217.29-0815.RE-025.4A	02495675	Combimaster	10,0	15,0	4	2,5	13,5	M8	20,0	37,75	8,4	25,0	28,0	60000	0,1	RDHW0501
R217.29-1020.RE-025.5A	02643352	Combimaster	15,0	20,0	5	2,5	18,0	M10	23,0	41,75	5,0	35,0	38,0	50000	0,1	RDHW0501

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29-..	1/4HEX-T06PX50	C02035-T06P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29-025 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
P2	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
P3	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
P4	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
P5	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
P6	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P7	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P8	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
P11	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P12	RDHW0501M0-MD01 MP3000	0,80 *0.032*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
M1	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
M2	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
M3	RDHW0501M0-MD01 F40M	0,80 *0.032*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
M4	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
M5	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
K1	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
K2	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
K3	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
K4	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
K5	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,15 0.0060
K6	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
K7	RDHW0501M0-MD01 MP3000	1,0 *0.040*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,15 0.0060
N1	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N2	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N3	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N11	RDHW0501M0-MD01 F40M	1,0 *0.040*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
S1	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
S2	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
S3	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,075 0.0030	0,075 0.0030	0,085 0.0034	0,13 0.0050
S11	RDHW0501M0-MD01 F40M	0,70 *0.028*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,15 0.0060
S12	RDHW0501M0-MD01 F40M	0,70 *0.028*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,15 0.0060
S13	RDHW0501M0-MD01 F40M	0,60 *0.024*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
H5	RDHW0501M0-MD01 MP3000	0,80 *0.032*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
H8	RDHW0501M0-MD01 MP3000	0,70 *0.028*	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,10 0.0040
H11	RDHW0501M0-MD01 MP3000	0,80 *0.032*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
H12	RDHW0501M0-MD01 F40M	0,70 *0.028*	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,10 0.0040
H21	RDHW0501M0-MD01 MP3000	0,70 *0.028*	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,10 0.0040

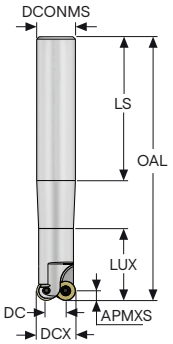
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.29-025 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP3000				F40M			
	100%	70%	30%	10%	100%	70%	30%	10%
P1	390 *1275*	440 *1450*	490 *1600*	550 *1800*	340 *1125*	370 *1225*	410 *1350*	445 *1450*
P2	380 *1250*	430 *1400*	475 *1550*	530 *1750*	335 *1100*	360 *1175*	400 *1300*	435 *1425*
P3	325 *1075*	370 *1225*	410 *1350*	455 *1500*	290 *950*	315 *1025*	345 *1125*	375 *1225*
P4	285 *940*	325 *1075*	360 *1175*	400 *1300*	255 *840*	280 *920*	315 *1025*	345 *1125*
P5	275 *900*	310 *1025*	345 *1125*	385 *1275*	245 *800*	265 *870*	290 *950*	315 *1025*
P6	310 *1025*	350 *1150*	385 *1275*	425 *1400*	275 *900*	300 *980*	325 *1075*	355 *1175*
P7	290 *950*	330 *1075*	365 *1200*	405 *1325*	260 *850*	280 *920*	310 *1025*	335 *1100*
P8	275 *900*	310 *1025*	345 *1125*	385 *1275*	240 *790*	265 *870*	290 *950*	315 *1025*
P11	285 *940*	320 *1050*	355 *1175*	390 *1275*	250 *820*	275 *900*	300 *980*	325 *1075*
P12	160 *520*	185 *610*	195 *640*	215 *710*	155 *510*	165 *540*	180 *590*	195 *640*
M1	260 *850*	300 *980*	355 *1175*	410 *1350*	225 *740*	260 *850*	305 *1000*	355 *1175*
M2	215 *710*	250 *820*	290 *950*	335 *1100*	185 *610*	215 *710*	250 *820*	290 *950*
M3	170 *560*	195 *640*	230 *750*	265 *870*	145 *475*	165 *540*	200 *660*	230 *750*
M4	130 *425*	150 *490*	175 *570*	205 *670*	110 *360*	125 *410*	150 *490*	175 *570*
M5	105 *345*	125 *410*	145 *475*	170 *560*	95 *310*	105 *345*	125 *410*	145 *475*
K1	275 *900*	320 *1050*	375 *1225*	435 *1425*	220 *720*	255 *840*	300 *980*	350 *1150*
K2	245 *800*	280 *920*	330 *1075*	385 *1275*	195 *640*	225 *740*	265 *870*	305 *1000*
K3	205 *670*	240 *790*	280 *920*	325 *1075*	165 *540*	190 *620*	225 *740*	260 *850*
K4	195 *640*	225 *740*	265 *870*	310 *1025*	160 *520*	180 *590*	215 *710*	245 *800*
K5	120 *395*	135 *445*	160 *520*	190 *620*	95 *310*	110 *360*	130 *425*	150 *490*
K6	175 *570*	200 *660*	235 *770*	270 *890*	140 *460*	160 *520*	190 *620*	220 *720*
K7	150 *490*	175 *570*	205 *670*	240 *790*	120 *395*	140 *460*	165 *540*	195 *640*
N1	2075 *6800*	2400 *7875*	2850 *9350*	3300 *10825*	1675 *5500*	1925 *6325*	2275 *7475*	2650 *8700*
N2	840 *2750*	970 *3175*	1150 *3775*	1325 *4350*	670 *2200*	780 *2550*	920 *3025*	1075 *3525*
N3	560 *1825*	650 *2125*	760 *2500*	890 *2925*	450 *1475*	520 *1700*	610 *2000*	710 *2325*
N11	640 *2100*	740 *2425*	870 *2850*	1025 *3375*	510 *1675*	590 *1925*	700 *2300*	810 *2650*
S1	60 *195*	70 *230*	80 *260*	95 *310*	50 *165*	60 *195*	70 *230*	80 *260*
S2	48 *155*	55 *180*	65 *215*	75 *245*	42 *140*	48 *155*	55 *180*	65 *215*
S3	42 *140*	48 *155*	55 *180*	65 *215*	36 *120*	42 *140*	49 *160*	60 *195*
S11	85 *280*	100 *330*	115 *375*	135 *445*	75 *245*	85 *280*	100 *330*	115 *375*
S12	60 *195*	70 *230*	80 *260*	95 *310*	50 *165*	60 *195*	70 *230*	80 *260*
S13	34 *110*	39 *130*	46 *150*	55 *180*	29 *95*	33 *110*	39 *130*	46 *150*
H5	50 *165*	60 *195*	70 *230*	80 *260*	44 *145*	50 *165*	60 *195*	70 *230*
H8	55 *180*	60 *195*	70 *230*	85 *280*	46 *150*	50 *165*	60 *195*	70 *230*
H11	65 *215*	75 *245*	90 *295*	105 *345*	55 *180*	65 *215*	75 *245*	90 *295*
H12	100 *330*	115 *375*	140 *460*	160 *520*	80 *260*	95 *310*	110 *360*	130 *425*

R217.29-03 – In mm

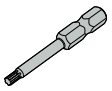




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 667-668
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29-1612.0-03.2.050	02427364	Cilindrico	6,0	12,0	2	3,0	16,0	60,0	20,0	50,0	110,0	25,0	18,0	22,0	32000	0,2	RD..06T1
R217.29-1212.0-03.2.070E	02427368	Cilindrico	6,0	12,0	2	3,0	12,0	80,0	50,0	70,0	130,0	25,0	18,0	22,0	32000	0,3	RD..06T1
R217.29-2016.0-03.3.070	02427371	Cilindrico	10,0	16,0	3	3,0	20,0	60,0	30,0	70,0	130,0	15,62	26,0	30,0	28800	0,3	RD..06T1
R217.29-1616.0-03.3.100E	02427379	Cilindrico	10,0	16,0	3	3,0	16,0	140,0	50,0	100,0	160,0	15,62	26,0	30,0	28800	0,5	RD..06T1
R217.29-1620.0-03.4.100E	02427381	Cilindrico	14,0	20,0	4	3,0	16,0	140,0	100,0	100,0	160,0	9,84	34,0	38,0	25600	0,5	RD..06T1

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29- ø12-16	1/4HEX-T07PX50	C02204-T07P
R217.29- ø20-32	1/4HEX-T07PX50	C02245-T07P

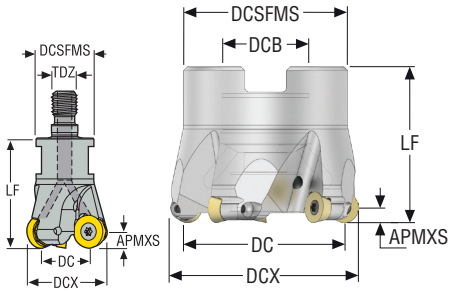
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-03 – In mm



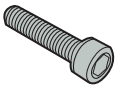
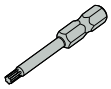


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 667-668
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.29-0040-03.8A	02427391	Manicotto	34,0	40,0	8	3,0	16,0	35,0	–	16,0	35,0	–	3,49	74,0	78,0	17600	0,3	RD..06T1
R217.29-0816.RE-03.3	02435540	Combimaster	10,0	16,0	3	3,0	–	13,5	M8	–	23,0	40,75	15,62	26,0	30,0	28800	0,1	RD..06T1
R217.29-1020.RE-03.4A	02427383	Combimaster	14,0	20,0	4	3,0	–	18,5	M10	–	28,0	46,75	9,84	34,0	38,0	25600	0,1	RD..06T1
R217.29-1225.RE-03.5A	02427386	Combimaster	19,0	25,0	5	3,0	–	23,0	M12	–	28,0	49,75	6,76	44,0	48,0	23200	0,2	RD..06T1
R217.29-1632.RE-03.6A	02427388	Combimaster	26,0	32,0	6	3,0	–	30,0	M16	–	28,0	50,75	4,7	58,0	62,0	20000	0,2	RD..06T1
R217.29-1635.RE-03.7A	02427389	Combimaster	29,0	35,0	7	3,0	–	30,0	M16	–	28,0	50,75	4,16	64,0	68,0	19200	0,2	RD..06T1

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.29- ø16	–	1/4HEX-T07PX50	C02204-T07P
R217.29- ø20-32	–	1/4HEX-T07PX50	C02245-T07P
R220.29-0040	220.17-689	1/4HEX-T07PX50	C02245-T07P

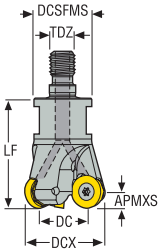
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29-03 – Pollici



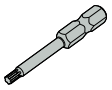


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 667-668
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch		inch	inch		inch	inch		lb	
R217.29-0.75-10RE-03.4A	00096942	Combimaster	0.514	0.750	4	0.118	0.728	M10	1.100	1.838	9,84	1.264	1.421	25600	0.220	RD..06T1
R217.29-1.00-12RE-03.5A	00096943	Combimaster	0.764	1.000	5	0.118	0.906	M12	1.100	1.956	6,76	1.764	1.921	23200	0.220	RD..06T1
R217.29-1.25-16RE-03.6A	00096944	Combimaster	1.014	1.250	6	0.118	1.181	M16	1.100	1.996	4,7	2.264	2.421	20000	0.440	RD..06T1

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29-00.750	1/4HEX-T07PX50	C02204-T07P
R217.29-01.00-01.25	1/4HEX-T07PX50	C02245-T07P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-00.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R217.29-01.00-01.25	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-03 – Selezione dell'inserto – In mm/ In pollici

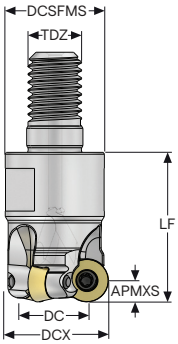
SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RDHT06T1M0-E02 F40M	1,2 *0.048*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
P2	RDHT06T1M0-E02 F40M	1,2 *0.048*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
P3	RDHT06T1M0-E02 F40M	1,2 *0.048*	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,11 0.0044
P4	RDHW06T1M0-MD02 F40M	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
P5	RDHW06T1M0-MD02 F40M	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
P6	RDHW06T1M0-MD02 MP3000	1,2 *0.048*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P7	RDHW06T1M0-MD02 MP3000	1,2 *0.048*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P8	RDHW06T1M0-MD02 MP3000	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
P11	RDHW06T1M0-MD02 MP3000	1,2 *0.048*	0,085 0.0034	0,085 0.0034	0,10 0.0040	0,16 0.0065
P12	RDHW06T1M0-MD02 MP3000	0,95 *0.038*	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,12 0.0048
M1	RDHT06T1M0-E02 F40M	1,2 *0.048*	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,12 0.0048
M2	RDHT06T1M0-E02 F40M	1,2 *0.048*	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,11 0.0044
M3	RDHT06T1M0-E02 F40M	0,95 *0.038*	0,050 0.0020	0,050 0.0020	0,060 0.0024	0,095 0.0040
M4	RDHT06T1M0-E02 F40M	0,70 *0.028*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,10 0.0040
M5	RDHT06T1M0-E02 F40M	0,70 *0.028*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,10 0.0040
K1	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
K2	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
K3	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
K4	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
K5	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
K6	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,17 0.0065
K7	RDHW06T1M0-MD02 MK2050	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
N1	RDHT06T1M0-E02 H25	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,16 0.0060
N2	RDHT06T1M0-E02 H25	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,16 0.0060
N3	RDHT06T1M0-E02 H25	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,16 0.0060
N11	RDHT06T1M0-E02 H25	1,2 *0.048*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,16 0.0060
S1	RDHW06T1M0-MD02 F40M	0,70 *0.028*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
S2	RDHW06T1M0-MD02 F40M	0,70 *0.028*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
S3	RDHW06T1M0-MD02 F40M	0,70 *0.028*	0,075 0.0030	0,075 0.0030	0,085 0.0034	0,14 0.0055
S11	RDHW06T1M0-MD02 F40M	0,85 *0.034*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
S12	RDHW06T1M0-MD02 F40M	0,85 *0.034*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
S13	RDHW06T1M0-MD02 F40M	0,70 *0.028*	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,15 0.0060
H5	RDHW06T1M0-MD02 F15M	0,95 *0.038*	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,12 0.0048
H8	RDHW06T1M0-MD02 F15M	0,85 *0.034*	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,10 0.0040
H11	RDHW06T1M0-MD02 F15M	0,95 *0.038*	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,12 0.0048
H12	RDHW06T1M0-MD02 F40M	0,85 *0.034*	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,10 0.0040

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29-03 – Parametri di taglio v_c = (m/min)/(sf/min)

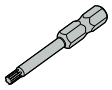
SMG	F15M				MK2050				F30M				MP3000				F40M				H25			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	330 *1075*	380 *1250*	445 *1450*	530 *1750*	360 *1175*	410 *1350*	485 *1600*	570 *1875*	290 *950*	330 *1075*	390 *1275*	460 *1500*	375 *1225*	425 *1400*	470 *1550*	530 *1750*	330 *1075*	355 *1175*	395 *1300*	435 *1425*	— —	— —	— —	— —
P2	325 *1075*	370 *1225*	435 *1425*	510 *1675*	350 *1150*	400 *1300*	470 *1550*	560 *1825*	285 *940*	320 *1050*	380 *1250*	450 *1475*	365 *1200*	415 *1350*	460 *1500*	510 *1675*	320 *1050*	345 *1125*	385 *1275*	420 *1375*	— —	— —	— —	— —
P3	280 *920*	320 *1050*	380 *1250*	440 *1450*	305 *1000*	345 *1125*	410 *1350*	480 *1575*	245 *800*	280 *920*	330 *1075*	385 *1275*	315 *1025*	355 *1175*	395 *1300*	440 *1450*	280 *920*	300 *980*	330 *1075*	360 *1175*	— —	— —	— —	— —
P4	250 *820*	280 *920*	335 *1100*	395 *1300*	270 *890*	305 *1000*	360 *1175*	425 *1400*	215 *710*	245 *800*	290 *950*	345 *1125*	280 *920*	315 *1025*	345 *1125*	385 *1275*	245 *800*	270 *890*	300 *980*	335 *1100*	— —	— —	— —	— —
P5	240 *790*	270 *890*	320 *1050*	375 *1225*	260 *850*	295 *970*	350 *1150*	405 *1325*	210 *690*	240 *790*	280 *920*	330 *1075*	265 *870*	300 *980*	330 *1075*	370 *1225*	235 *770*	255 *840*	280 *920*	305 *1000*	— —	— —	— —	— —
P6	270 *890*	305 *1000*	360 *1175*	420 *1375*	290 *950*	330 *1075*	390 *1275*	455 *1500*	235 *770*	265 *870*	315 *1025*	370 *1225*	300 *980*	335 *1100*	370 *1225*	415 *1350*	265 *870*	285 *940*	315 *1025*	345 *1125*	— —	— —	— —	— —
P7	255 *840*	290 *950*	340 *1125*	400 *1300*	275 *900*	310 *1025*	370 *1225*	430 *1400*	220 *720*	250 *820*	300 *980*	350 *1150*	280 *920*	315 *1025*	350 *1150*	390 *1275*	250 *820*	270 *890*	295 *970*	325 *1075*	— —	— —	— —	— —
P8	235 *770*	270 *890*	320 *1050*	370 *1225*	255 *840*	290 *950*	345 *1125*	400 *1300*	205 *670*	235 *770*	280 *920*	325 *1075*	265 *870*	300 *980*	330 *1075*	370 *1225*	235 *770*	255 *840*	280 *920*	305 *1000*	— —	— —	— —	— —
P11	245 *800*	280 *920*	330 *1075*	385 *1275*	265 *870*	305 *1000*	360 *1175*	420 *1375*	215 *710*	245 *800*	290 *950*	340 *1125*	275 *900*	310 *1025*	340 *1125*	380 *1250*	245 *800*	260 *850*	290 *950*	315 *1025*	— —	— —	— —	— —
P12	— —	— —	— —	— —	165 *540*	190 *620*	220 *720*	260 *850*	135 *445*	155 *510*	180 *590*	210 *690*	155 *510*	175 *570*	190 *620*	210 *690*	150 *490*	160 *520*	170 *560*	185 *610*	— —	— —	— —	— —
M1	— —	— —	— —	— —	— —	— —	— —	— —	230 *750*	260 *850*	305 *1000*	360 *1175*	250 *820*	285 *940*	340 *1125*	400 *1300*	215 *710*	245 *800*	295 *970*	345 *1125*	— —	— —	— —	— —
M2	— —	— —	— —	— —	— —	— —	— —	— —	190 *620*	215 *710*	255 *840*	295 *970*	210 *690*	235 *770*	280 *920*	325 *1075*	180 *590*	205 *670*	240 *790*	280 *920*	— —	— —	— —	— —
M3	— —	— —	— —	— —	— —	— —	— —	— —	150 *490*	170 *560*	200 *660*	230 *750*	165 *540*	185 *610*	220 *720*	255 *840*	140 *460*	160 *520*	190 *620*	220 *720*	— —	— —	— —	— —
M4	— —	— —	— —	— —	— —	— —	— —	— —	115 *375*	130 *425*	150 *490*	180 *590*	125 *410*	140 *460*	170 *560*	195 *640*	110 *360*	120 *395*	145 *475*	170 *560*	— —	— —	— —	— —
M5	— —	— —	— —	— —	— —	— —	— —	— —	95 *310*	105 *345*	125 *410*	150 *490*	105 *345*	120 *395*	140 *460*	165 *540*	90 *295*	100 *330*	120 *395*	140 *460*	— —	— —	— —	— —
K1	255 *840*	290 *950*	345 *1125*	405 *1325*	380 *1250*	430 *1400*	510 *1675*	600 *1975*	225 *740*	255 *840*	300 *980*	355 *1175*	265 *870*	305 *1000*	360 *1175*	425 *1400*	215 *710*	245 *800*	290 *950*	340 *1125*	— —	— —	— —	— —
K2	225 *740*	260 *850*	305 *1000*	355 *1175*	335 *1100*	380 *1250*	450 *1475*	530 *1750*	200 *660*	225 *740*	265 *870*	310 *1025*	235 *770*	270 *890*	320 *1050*	370 *1225*	190 *620*	215 *710*	255 *840*	295 *970*	— —	— —	— —	— —
K3	190 *620*	220 *720*	260 *850*	300 *980*	285 *940*	320 *1050*	380 *1250*	445 *1450*	170 *560*	190 *620*	225 *740*	265 *870*	200 *660*	230 *750*	270 *890*	315 *1025*	160 *520*	180 *590*	215 *710*	250 *820*	— —	— —	— —	— —
K4	185 *610*	210 *690*	245 *800*	290 *950*	270 *890*	310 *1025*	365 *1200*	425 *1400*	160 *520*	185 *610*	215 *710*	250 *820*	190 *620*	215 *710*	255 *840*	300 *980*	155 *510*	175 *570*	205 *670*	240 *790*	— —	— —	— —	— —
K5	110 *360*	125 *410*	150 *490*	175 *570*	165 *540*	185 *610*	220 *720*	255 *840*	95 *310*	110 *360*	130 *425*	150 *490*	115 *375*	130 *425*	155 *510*	180 *590*	90 *295*	105 *345*	125 *410*	145 *475*	— —	— —	— —	— —
K6	160 *520*	185 *610*	215 *710*	255 *840*	240 *790*	270 *890*	320 *1050*	375 *1225*	140 *460*	160 *520*	190 *620*	220 *720*	170 *560*	190 *620*	225 *740*	265 *870*	135 *445*	155 *510*	180 *590*	210 *690*	— —	— —	— —	— —
K7	140 *460*	160 *520*	190 *620*	225 *740*	210 *690*	235 *770*	280 *920*	330 *1075*	125 *410*	140 *460*	165 *540*	195 *640*	145 *475*	165 *540*	195 *640*	230 *750*	120 *395*	135 *445*	160 *520*	185 *610*	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	1700 *5575*	1925 *6325*	2275 *7475*	2675 *8775*	2025 *6650*	2300 *7550*	2725 *8950*	3200 *10500*	1625 *5325*	1825 *6000*	2175 *7125*	2550 *8375*	1875 *6150*	2150 *7050*	2525 *8275*	2975 *9750*
N2	— —	— —	— —	— —	— —	— —	— —	— —	680 *2225*	780 *2550*	920 *3025*	1075 *3525*	810 *2650*	930 *3050*	1100 *3600*	1300 *4275*	650 *2125*	740 *2425*	880 *2875*	1025 *3375*	760 *2500*	870 *2850*	1025 *3375*	1200 *3925*
N3	— —	— —	— —	— —	— —	— —	— —	— —	455 *1500*	520 *1700*	620 *2025*	720 *2350*	540 *1775*	620 *2025*	730 *2400*	860 *2825*	435 *1425*	495 *1625*	590 *1925*	690 *2275*	510 *1675*	580 *1900*	680 *2225*	800 *2625*
N11	— —	— —	— —	— —	— —	— —	— —	— —	520 *1700*	590 *1925*	700 *2300*	830 *2725*	620 *2025*	710 *2325*	840 *2750*	980 *3225*	495 *1625*	560 *1825*	670 *2200*	790 *2600*	580 *1900*	660 *2175*	780 *2550*	910 *2975*
S1	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	85 *280*	60 *195*	65 *215*	80 *260*	90 *295*	50 *165*	55 *180*	65 *215*	80 *260*	— —	— —	— —	— —
S2	— —	— —	— —	— —	— —	— —	— —	— —	43 *140*	48 *155*	55 *180*	65 *215*	47 *155*	55 *180*	65 *215*	75 *245*	41 *135*	46 *150*	55 *180*	65 *215*	— —	— —	— —	— —
S3	— —	— —	— —	— —	— —	— —	— —	— —	37 *120*	42 *140*	50 *165*	60 *195*	41 *135*	46 *150*	55 *180*	65 *215*	35 *115*	40 *130*	47 *155*	55 *180*	— —	— —	— —	— —
S11	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	85 *280*	100 *330*	115 *375*	80 *260*	95 *310*	110 *360*	130 *425*	70 *230*	80 *260*	95 *310*	110 *360*	— —	— —	— —	— —
S12	— —	— —	— —	— —	— —	— —	— —	— —	43 *140*	49 *160*	60 *195*	70 *230*	55 *180*	65 *215*	75 *245*	90 *295*	49 *160*	55 *180*	65 *215*	75 *245*	— —	— —	— —	— —
S13	— —	— —	— —	— —	— —	— —	— —	— —	25 *80*	28 *90*	33 *110*	39 *130*	33 *110*	37 *120*	44 *145*	50 *165*	28 *90*	32 *105*	38 *125*	44 *145*	— —	— —	— —	— —
H5	50 *165*	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —	45 *150*	50 *165*	60 *195*	70 *230*	50 *165*	55 *180*	65 *215*	80 *260*	43 *140*	49 *160*	55 *180*	65 *215*	— —	— —	— —	— —
H8	55 *180*	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —	46 *150*	55 *180*	60 *195*	70 *230*	50 *165*	60 *195*	70 *230*	80 *260*	44 *145*	50 *165*	60 *195*	70 *230*	— —	— —	— —	— —
H11	65 *215*	75 *245*	85 *280*	100 *330*	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	65 *215*	70 *230*	85 *280*	100 *330*	55 *180*	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —
H12	95 *310*	110 *360*	125 *410*	150 *490*	105 *345*	115 *375*	135 *445*	160 *520*	85 *280*	95 *310*	110 *360*	130 *425*	100 *330*	110 *360*	130 *425*	155 *510*	80 *260*	90 *295*	105 *345*	125 *410*	— —	— —	— —	— —





Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm		mm	mm		mm	mm		kg	
R217.29-0816.RE-035.3A	02643410	Combimaster	9,0	16,0	3	3,5	13,5	M8	20,0	37,75	17,8	25,0	30,0	48000	0,1	RDHW0702
R217.29-1020.RE-035.4A	02495678	Combimaster	13,0	20,0	4	3,5	18,5	M10	23,0	41,75	10,4	33,0	38,0	44000	0,1	RDHW0702
R217.29-1225.RE-035.5A	02643411	Combimaster	18,0	25,0	5	3,5	23,0	M12	28,0	49,75	6,9	43,0	48,0	35000	0,2	RDHW0702

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29-..	1/4HEX-T07PX50	C02545-T07P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

R217.29-035 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RDHW0702M0-MD03 F40M	1,4 *0.055*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,25 0.010
P2	RDHW0702M0-MD03 F40M	1,4 *0.055*	0,13 0.0050	0,13 0.0050	0,16 0.0065	0,25 0.010
P3	RDHW0702M0-MD03 F40M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,15 0.0060	0,24 0.0095
P4	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,24 0.0095
P5	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
P6	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
P7	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
P8	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,15 0.0060	0,24 0.0095
P11	RDHW0702M0-MD03 MP3000	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
P12	RDHW0702M0-MD03 MP3000	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
M1	RDHW0702M0-MD03 F40M	1,4 *0.055*	0,13 0.0050	0,13 0.0050	0,16 0.0065	0,25 0.010
M2	RDHW0702M0-MD03 F40M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
M3	RDHW0702M0-MD03 F40M	1,1 *0.044*	0,10 0.0040	0,10 0.0040	0,13 0.0050	0,20 0.0080
M4	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,20 0.0080
M5	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,20 0.0080
K1	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,13 0.0050	0,13 0.0050	0,16 0.0065	0,25 0.010
K2	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
K3	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
K4	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
K5	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
K6	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
K7	RDHW0702M0T-MD04 F15M	1,4 *0.055*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
S1	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,20 0.0080
S2	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,20 0.0080
S3	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,18 0.0070
S11	RDHW0702M0-MD03 F40M	1,0 *0.040*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
S12	RDHW0702M0-MD03 F40M	1,0 *0.040*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
S13	RDHW0702M0-MD03 F40M	0,85 *0.034*	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,20 0.0080
H5	RDHW0702M0T-MD04 F15M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
H8	RDHW0702M0T-MD04 F15M	1,0 *0.040*	0,070 0.0028	0,070 0.0028	0,085 0.0034	0,14 0.0055
H11	RDHW0702M0T-MD04 F15M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,17 0.0065
H12	RDHW0702M0T-MD04 F15M	1,0 *0.040*	0,070 0.0028	0,070 0.0028	0,085 0.0034	0,14 0.0055

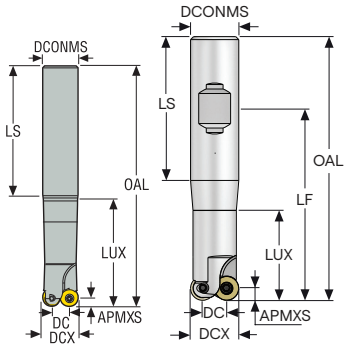
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.29-035 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M				MP3000				F40M			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	325 *1075*	380 *1250*	450 *1475*	520 *1700*	380 *1250*	440 *1450*	495 *1625*	560 *1825*	325 *1075*	360 *1175*	400 *1300*	435 *1425*
P2	315 *1025*	370 *1225*	440 *1450*	510 *1675*	370 *1225*	430 *1400*	485 *1600*	540 *1775*	315 *1025*	350 *1150*	390 *1275*	425 *1400*
P3	275 *900*	325 *1075*	385 *1275*	445 *1450*	320 *1050*	370 *1225*	415 *1350*	470 *1550*	275 *900*	305 *1000*	340 *1125*	370 *1225*
P4	240 *790*	285 *940*	340 *1125*	390 *1275*	285 *940*	330 *1075*	370 *1225*	410 *1350*	245 *800*	275 *900*	310 *1025*	340 *1125*
P5	230 *750*	275 *900*	320 *1050*	375 *1225*	270 *890*	315 *1025*	350 *1150*	395 *1300*	230 *750*	255 *840*	285 *940*	310 *1025*
P6	265 *870*	315 *1025*	360 *1175*	425 *1400*	305 *1000*	355 *1175*	395 *1300*	440 *1450*	265 *870*	295 *970*	320 *1050*	350 *1150*
P7	250 *820*	295 *970*	340 *1125*	400 *1300*	290 *950*	335 *1100*	370 *1225*	415 *1350*	250 *820*	275 *900*	300 *980*	330 *1075*
P8	230 *750*	275 *900*	320 *1050*	375 *1225*	270 *890*	315 *1025*	350 *1150*	395 *1300*	230 *750*	255 *840*	285 *940*	310 *1025*
P11	240 *790*	285 *940*	330 *1075*	390 *1275*	280 *920*	325 *1075*	360 *1175*	405 *1325*	245 *800*	270 *890*	295 *970*	320 *1050*
P12	— —	— —	— —	— —	165 *540*	190 *620*	210 *690*	230 *750*	150 *490*	165 *540*	180 *590*	195 *640*
M1	— —	— —	— —	— —	245 *800*	290 *950*	340 *1125*	395 *1300*	210 *690*	250 *820*	295 *970*	340 *1125*
M2	— —	— —	— —	— —	200 *660*	240 *790*	280 *920*	330 *1075*	175 *570*	205 *670*	240 *790*	285 *940*
M3	— —	— —	— —	— —	165 *540*	190 *620*	220 *720*	260 *850*	140 *460*	165 *540*	190 *620*	225 *740*
M4	— —	— —	— —	— —	125 *410*	145 *475*	170 *560*	200 *660*	110 *360*	125 *410*	145 *475*	170 *560*
M5	— —	— —	— —	— —	105 *345*	120 *395*	140 *460*	165 *540*	90 *295*	105 *345*	125 *410*	145 *475*
K1	250 *820*	295 *970*	350 *1150*	405 *1325*	260 *850*	305 *1000*	360 *1175*	420 *1375*	210 *690*	245 *800*	290 *950*	335 *1100*
K2	220 *720*	260 *850*	305 *1000*	360 *1175*	230 *750*	270 *890*	320 *1050*	370 *1225*	185 *610*	215 *710*	255 *840*	300 *980*
K3	185 *610*	220 *720*	260 *850*	305 *1000*	195 *640*	230 *750*	270 *890*	315 *1025*	155 *510*	185 *610*	215 *710*	250 *820*
K4	175 *570*	210 *690*	245 *800*	290 *950*	185 *610*	220 *720*	260 *850*	300 *980*	150 *490*	175 *570*	205 *670*	240 *790*
K5	110 *360*	130 *425*	150 *490*	175 *570*	115 *375*	135 *445*	155 *510*	180 *590*	90 *295*	110 *360*	125 *410*	145 *475*
K6	155 *510*	185 *610*	220 *720*	255 *840*	165 *540*	195 *640*	225 *740*	265 *870*	130 *425*	155 *510*	180 *590*	210 *690*
K7	140 *460*	165 *540*	190 *620*	225 *740*	145 *475*	175 *570*	200 *660*	230 *750*	115 *375*	140 *460*	160 *520*	185 *610*
S1	— —	— —	— —	— —	60 *195*	70 *230*	80 *260*	95 *310*	50 *165*	60 *195*	70 *230*	80 *260*
S2	— —	— —	— —	— —	47 *155*	55 *180*	65 *215*	75 *245*	40 *130*	47 *155*	55 *180*	65 *215*
S3	— —	— —	— —	— —	41 *135*	48 *155*	55 *180*	65 *215*	35 *115*	41 *135*	48 *155*	55 *180*
S11	— —	— —	— —	— —	80 *260*	95 *310*	115 *375*	130 *425*	70 *230*	85 *280*	95 *310*	115 *375*
S12	— —	— —	— —	— —	55 *180*	65 *215*	80 *260*	90 *295*	49 *160*	55 *180*	65 *215*	80 *260*
S13	— —	— —	— —	— —	33 *110*	38 *125*	45 *150*	50 *165*	28 *90*	33 *110*	39 *130*	45 *150*
H5	50 *165*	60 *195*	70 *230*	80 *260*	49 *160*	60 *195*	70 *230*	80 *260*	42 *140*	49 *160*	60 *195*	65 *215*
H8	55 *180*	60 *195*	75 *245*	85 *280*	50 *165*	60 *195*	70 *230*	80 *260*	44 *145*	50 *165*	60 *195*	70 *230*
H11	65 *215*	75 *245*	90 *295*	105 *345*	65 *215*	75 *245*	85 *280*	100 *330*	55 *180*	65 *215*	75 *245*	85 *280*
H12	95 *310*	110 *360*	130 *425*	150 *490*	100 *330*	115 *375*	135 *445*	155 *510*	80 *260*	95 *310*	110 *360*	125 *410*

R217.29-04 – In mm

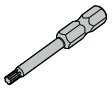




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 674-676
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29-1616.3-04.2.040	00040302	Weldon	8,0	16,0	2	4,0	16,0	64,0	48,0	38,0	40,0	88,0	25,0	24,0	30,0	36200	0,2	RD..0803
R217.29-1616.0-04.2.050	00040299	Cilindrico	8,0	16,0	2	4,0	16,0	–	60,0	50,0	50,0	110,0	25,0	24,0	30,0	36200	0,2	RD..0803
R217.29-1616.0-04.2.100E	00040300	Cilindrico	8,0	16,0	2	4,0	16,0	–	95,0	100,0	100,0	160,0	25,0	24,0	30,0	36200	0,5	RD..0803

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.69-..Ø16	1/4HEX-T08PX50	C02505-T08P

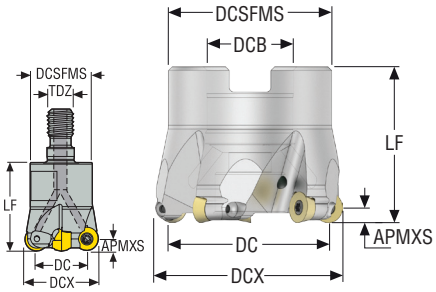
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-04 – In mm



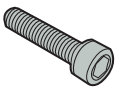
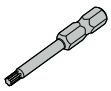


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 674–676
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.29-0050-04.5A	02410828	Manicotto	42,0	50,0	5	4,0	22,0	42,0	–	22,0	40,0	–	3,44	92,0	98,0	17300	0,3	RD..0803
R220.29-0050-04.7A	02410829	Manicotto	42,0	50,0	7	4,0	22,0	42,0	–	22,0	40,0	–	3,44	92,0	98,0	17300	0,4	RD..0803
R217.29-0816.RE-04.2	00047266	Combimaster	8,0	16,0	2	4,0	–	13,5	M8	–	23,0	40,75	25,0	24,0	30,0	36200	0,1	RD..0803
R217.29-1020.RE-04.2A	00040294	Combimaster	12,0	20,0	2	4,0	–	18,5	M10	–	28,0	46,75	16,43	32,0	38,0	32400	0,1	RD..0803
R217.29-1020.RE-04.3A	00040062	Combimaster	12,0	20,0	3	4,0	–	18,5	M10	–	28,0	46,75	16,43	32,0	38,0	32400	0,1	RD..0803
R217.29-1225.RE-04.3A	02410817	Combimaster	17,0	25,0	3	4,0	–	23,0	M12	–	30,0	51,75	10,01	42,0	48,0	29000	0,2	RD..0803
R217.29-1225.RE-04.4A	00040297	Combimaster	17,0	25,0	4	4,0	–	23,0	M12	–	30,0	51,75	10,01	42,0	48,0	29000	0,1	RD..0803
R217.29-1632.RE-04.5A	02410823	Combimaster	24,0	32,0	5	4,0	–	30,0	M16	–	40,0	62,75	6,51	56,0	62,0	26100	0,2	RD..0803
R217.29-1640.RE-04.6A	00040303	Combimaster	32,0	40,0	6	4,0	–	30,0	M16	–	40,0	62,75	4,66	72,0	78,0	23300	0,3	RD..0803

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.29-..Ø20-40	–	1/4HEX-T08PX50	C02506-T08P
R217.69-..Ø16	–	1/4HEX-T08PX50	C02505-T08P
R220.29-..0050	220.17-692	1/4HEX-T08PX50	C02506-T08P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-04 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
P2	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
P3	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,28 0.011
P4	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
P5	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
P6	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,14 0.0055	0,14 0.0055	0,16 0.0065	0,26 0.010
P7	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,14 0.0055	0,14 0.0055	0,16 0.0065	0,26 0.010
P8	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,28 0.011
P11	RDKW0803M0T-MD05 MP2501	1,6 *0.065*	0,14 0.0055	0,14 0.0055	0,16 0.0065	0,26 0.010
P12	RDKW0803M0T-MD05 MP2501	1,3 *0.050*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
M1	RDHT0803M0-E03 MP3501	1,6 *0.065*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,17 0.0065
M2	RDHT0803M0-E03 MP3501	1,6 *0.065*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
M3	RDHT0803M0-E03 MP3501	1,3 *0.050*	0,075 0.0030	0,075 0.0030	0,085 0.0034	0,13 0.0050
M4	RDHT0803M0-E03 MP3501	0,95 *0.038*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
M5	RDHT0803M0-E03 MP3501	0,95 *0.038*	0,080 0.0032	0,080 0.0032	0,090 0.0036	0,14 0.0055
K1	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
K2	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
K3	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
K4	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
K5	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,24 0.0095
K6	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,26 0.010
K7	RDKW0803M0T-MD05 MK2050	1,6 *0.065*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,24 0.0095
N1	RDHT0803M0-E03 H25	1,6 *0.065*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N2	RDHT0803M0-E03 H25	1,6 *0.065*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N3	RDHT0803M0-E03 H25	1,6 *0.065*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
N11	RDHT0803M0-E03 H25	1,6 *0.065*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
S1	RDHW0803M0-MD03 F40M	0,95 *0.038*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
S2	RDHW0803M0-MD03 F40M	0,95 *0.038*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
S3	RDHW0803M0-MD03 F40M	0,95 *0.038*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065
S11	RDHW0803M0-MD03 MS2050	1,1 *0.044*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
S12	RDHW0803M0-MD03 MS2050	1,1 *0.044*	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,20 0.0080
S13	RDHW0803M0-MD03 MS2050	0,95 *0.038*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
H5	RDKW0803M0T-MD05 MH1051	1,3 *0.050*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
H8	RDKW0803M0T-MD05 MH1051	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065
H11	RDKW0803M0T-MD05 F15M	1,3 *0.050*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
H12	RDKW0803M0T-MD05 F15M	1,1 *0.044*	0,090 0.0036	0,090 0.0036	0,10 0.0040	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29-04 – Parametri di taglio v_c = (m/min)/(sf/min)

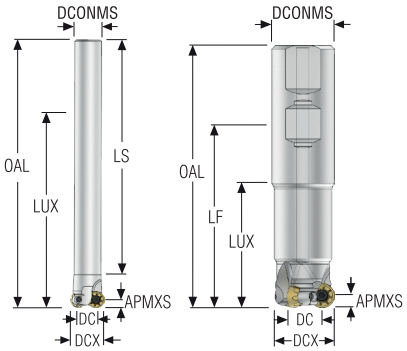
SMG	MH1051				F15M				MK2050				F25M				F30M				MP3000			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	—	—	—	—	300	340	410	485	325	370	440	520	275	310	375	440	275	310	375	440	370	415	475	540
	—	—	—	—	*980*	*1125*	*1350*	*1600*	*1075*	*1225*	*1450*	*1700*	*900*	*1025*	*1225*	*1450*	*900*	*1025*	*1225*	*1450*	*1225*	*1350*	*1550*	*1775*
P2	—	—	—	—	295	330	400	470	320	360	430	510	270	305	365	430	270	305	365	430	360	405	465	530
	—	—	—	—	*970*	*1075*	*1300*	*1550*	*1050*	*1175*	*1400*	*1675*	*890*	*1000*	*1200*	*1400*	*890*	*1000*	*1200*	*1400*	*1175*	*1325*	*1525*	*1750*
P3	—	—	—	—	255	290	345	405	280	315	375	440	235	265	320	370	235	265	320	375	315	350	400	450
	—	—	—	—	*840*	*950*	*1125*	*1325*	*920*	*1025*	*1225*	*1450*	*770*	*870*	*1050*	*1225*	*770*	*870*	*1050*	*1225*	*1025*	*1150*	*1300*	*1475*
P4	—	—	—	—	225	255	305	355	245	275	330	385	205	235	280	325	205	235	280	330	275	310	350	400
	—	—	—	—	*740*	*840*	*1000*	*1175*	*800*	*900*	*1075*	*1275*	*670*	*770*	*920*	*1075*	*670*	*770*	*920*	*1075*	*900*	*1025*	*1150*	*1300*
P5	500	560	670	780	215	245	290	345	235	265	315	375	195	225	265	320	200	225	265	315	265	295	335	380
	1650	*1825*	*2200*	*2550*	*710*	*800*	*950*	*1125*	*770*	*870*	*1025*	*1225*	*640*	*740*	*870*	*1050*	*660*	*740*	*870*	*1025*	*870*	*970*	*1100*	*1250*
P6	570	640	750	870	245	275	325	390	265	300	355	420	225	255	300	355	220	250	300	355	295	330	375	425
	1875	*2100*	*2450*	*2850*	*800*	*900*	*1075*	*1275*	*870*	*980*	*1175*	*1375*	*740*	*840*	*980*	*1175*	*720*	*820*	*980*	*1175*	*970*	*1075*	*1225*	*1400*
P7	540	600	710	830	230	260	310	365	250	285	335	400	215	240	285	335	210	235	285	335	280	315	355	400
	1775	*1975*	*2325*	*2725*	*750*	*850*	*1025*	*1200*	*820*	*940*	*1100*	*1300*	*710*	*790*	*940*	*1100*	*690*	*770*	*940*	*1100*	*920*	*1025*	*1175*	*1300*
P8	500	560	670	770	215	245	290	340	235	265	315	370	195	225	265	310	200	225	265	315	265	295	335	380
	1650	*1825*	*2200*	*2525*	*710*	*800*	*950*	*1125*	*770*	*870*	*1025*	*1225*	*640*	*740*	*870*	*1025*	*660*	*740*	*870*	*1025*	*870*	*970*	*1100*	*1250*
P11	520	580	690	800	225	255	300	355	245	275	325	385	205	235	275	325	205	230	275	325	270	305	345	390
	1700	*1900*	*2275*	*2625*	*740*	*840*	*980*	*1175*	*800*	*900*	*1075*	*1275*	*670*	*770*	*900*	*1075*	*670*	*750*	*900*	*1075*	*890*	*1000*	*1125*	*1275*
P12	330	370	430	490	—	—	—	—	155	175	210	245	130	150	175	205	130	145	175	205	165	185	200	225
	1075	*1225*	*1400*	*1600*	—	—	—	—	*510*	*570*	*690*	*800*	*425*	*490*	*570*	*670*	*425*	*475*	*570*	*670*	*540*	*610*	*660*	*740*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	215	245	295	345	240	270	325	380
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*710*	*800*	*970*	*1125*	*790*	*890*	*1075*	*1250*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	200	240	280	195	220	265	310
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*590*	*660*	*790*	*920*	*640*	*720*	*870*	*1025*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	145	160	190	225	160	180	210	250
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*475*	*520*	*620*	*740*	*520*	*590*	*690*	*820*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110	120	145	170	120	135	165	190
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*360*	*395*	*475*	*560*	*395*	*445*	*540*	*620*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90	100	125	145	100	115	135	160
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*295*	*330*	*410*	*475*	*330*	*375*	*445*	*520*
K1	680	760	920	1075	230	260	315	370	345	385	465	550	215	240	290	340	215	240	290	340	255	285	345	405
	2225	*2500*	*3025*	*3525*	*750*	*850*	*1025*	*1225*	*1125*	*1275*	*1525*	*1800*	*710*	*790*	*950*	*1125*	*710*	*790*	*950*	*1125*	*840*	*940*	*1125*	*1325*
K2	600	670	810	940	205	230	275	330	300	340	410	485	185	210	255	300	190	210	255	295	225	255	300	355
	1975	*2200*	*2650*	*3075*	*670*	*750*	*900*	*1075*	*980*	*1125*	*1350*	*1600*	*610*	*690*	*840*	*980*	*620*	*690*	*840*	*970*	*740*	*840*	*980*	*1175*
K3	510	570	680	800	175	195	235	280	255	290	345	410	160	180	215	255	160	180	215	250	190	215	255	300
	1675	*1875*	*2225*	*2625*	*570*	*640*	*770*	*920*	*840*	*950*	*1125*	*1350*	*520*	*590*	*710*	*840*	*520*	*590*	*710*	*820*	*620*	*710*	*840*	*980*
K4	490	540	650	760	165	185	225	265	245	275	330	390	150	170	205	245	150	170	205	240	180	205	245	285
	1600	*1775*	*2125*	*2500*	*540*	*610*	*740*	*870*	*800*	*900*	*1075*	*1275*	*490*	*560*	*670*	*800*	*490*	*560*	*670*	*790*	*590*	*670*	*800*	*940*
K5	300	335	400	455	100	115	135	160	150	170	200	235	95	105	125	145	95	105	125	145	110	125	150	175
	980	*1100*	*1300*	*1500*	*330*	*375*	*445*	*520*	*490*	*560*	*660*	*770*	*310*	*345*	*410*	*475*	*310*	*345*	*410*	*475*	*360*	*410*	*490*	*570*
K6	430	480	570	670	145	165	195	235	215	240	290	345	135	150	180	215	135	150	180	210	160	180	215	250
	1400	*1575*	*1875*	*2200*	*475*	*540*	*640*	*770*	*710*	*790*	*950*	*1125*	*445*	*490*	*590*	*710*	*445*	*490*	*590*	*690*	*520*	*590*	*710*	*820*
K7	385	430	510	580	130	145	175	205	190	215	260	300	120	135	160	190	120	135	160	185	145	160	190	225
	1275	*1400*	*1675*	*1900*	*425*	*475*	*570*	*670*	*620*	*710*	*850*	*980*	*395*	*445*	*520*	*620*	*395*	*445*	*520*	*610*	*475*	*520*	*620*	*740*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1600	1825	2150	2525	1925	2150	2550	3000
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*5250*	*6000*	*7050*	*8275*	*6325*	*7050*	*8375*	*9850*
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	650	730	870	1025	770	870	1025	1225
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*2125*	*2400*	*2850*	*3375*	*2525*	*2850*	*3375*	*4025*
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	435	490	580	680	520	580	690	810
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1425*	*1600*	*1900*	*2225*	*1700*	*1900*	*2275*	*2650*
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	495	560	660	780	590	670	790	930
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1625*	*1825*	*2175*	*2550*	*1925*	*2200*	*2600*	*3050*
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	55	70	80	55	65	75	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*230*	*260*	*180*	*215*	*245*	*295*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41	46	55	65	45	50	60	70
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*135*	*150*	*180*	*215*	*150*	*165*	*195*	*230*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36	40	48	55	40	45	55	60
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*155*	*180*	*130*	*150*	*180*	*195*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	80	95	115	80	90	105	125
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*260*	*310*	*375*	*260*	*295*	*345*	*410*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	47	55	65	55	60	75	85
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*155*	*180*	*215*	*180*	*195*	*245*	*280*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	27	32	37	32	36	43	50
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*80*	*90*	*105*	*120*	*105*	*120*	*140*	*165*
H5	170	190	220	250	47	55	65	75	—	—	—	—	—	—	—	—	43	49	60	70	48	55	65	75
	560	*620*	*720*	*820*	*155*	*180*	*215*	*245*	—	—	—	—	—	—	—	—	*140*	*160*	*195*	*230*	*155*	*180*	*215*	*245*
H8	175	195	225	250	50	55	65	80	—	—	—	—	—	—	—	—	45	50	60	70	50	55	65	80
	570	*640*	*740*	*820*	*165*	*180*	*215*	*260*	—	—	—	—	—	—	—	—	*150*	*165*	*195*	*230*	*165*	*180*	*215*	*260*
H11	215	240	280	320	60	70	80	95	—	—	—	—	—	—	—	—	55	60	75	85	60	70	80	95
	710	*790*	*920*	*1050*	*195*	*230*	*260*	*310*	—	—	—	—	—	—	—	—	*180*	*195*	*245*	*280*	*195*	*230*	*260*	*310*
H12	205	230	260	295	90	100	120	140	95	110	130	150	—	—	—	—	80	90	110	125	95	110	130	150
	670	*750*	*850*	*970*	*295*	*330*	*395*	*460*	*310*	*360*	*425*	*490*	—	—	—	—	*260*	*295*	*360*	*410*	*310*	*360*	*425*	*490*

R217/220.29-04 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050				F40M				H25				MS2500				MP3501			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	—	—	—	—	305	325	370	410	—	—	—	—	440	480	540	600	495	540	590	640
	—	—	—	—	*1000*	*1075*	*1225*	*1350*	—	—	—	—	*1450*	*1575*	*1775*	*1975*	*1625*	*1775*	*1925*	*2100*
P2	—	—	—	—	295	315	360	400	—	—	—	—	425	465	530	590	485	530	570	630
	—	—	—	—	*970*	*1025*	*1175*	*1300*	—	—	—	—	*1400*	*1525*	*1750*	*1925*	*1600*	*1750*	*1875*	*2075*
P3	—	—	—	—	260	275	315	345	—	—	—	—	370	405	455	500	415	455	490	540
	—	—	—	—	*850*	*900*	*1025*	*1125*	—	—	—	—	*1225*	*1325*	*1500*	*1650*	*1350*	*1500*	*1600*	*1775*
P4	—	—	—	—	230	250	285	320	—	—	—	—	325	355	400	445	365	400	430	470
	—	—	—	—	*750*	*820*	*940*	*1050*	—	—	—	—	*1075*	*1175*	*1300*	*1450*	*1200*	*1300*	*1400*	*1550*
P5	—	—	—	—	215	230	265	295	—	—	—	—	310	340	380	425	350	380	410	445
	—	—	—	—	*710*	*750*	*870*	*970*	—	—	—	—	*1025*	*1125*	*1250*	*1400*	*1150*	*1250*	*1350*	*1450*
P6	—	—	—	—	245	265	295	330	—	—	—	—	350	385	430	475	390	430	465	500
	—	—	—	—	*800*	*870*	*970*	*1075*	—	—	—	—	*1150*	*1275*	*1400*	*1550*	*1275*	*1400*	*1525*	*1650*
P7	—	—	—	—	235	250	280	310	—	—	—	—	330	365	405	450	370	405	435	475
	—	—	—	—	*770*	*820*	*920*	*1025*	—	—	—	—	*1075*	*1200*	*1325*	*1475*	*1225*	*1325*	*1425*	*1550*
P8	—	—	—	—	215	230	265	290	—	—	—	—	310	340	380	425	350	380	410	450
	—	—	—	—	*710*	*750*	*870*	*950*	—	—	—	—	*1025*	*1125*	*1250*	*1400*	*1150*	*1250*	*1350*	*1475*
P11	—	—	—	—	225	245	270	305	—	—	—	—	325	355	395	440	360	395	425	460
	—	—	—	—	*740*	*800*	*890*	*1000*	—	—	—	—	*1075*	*1175*	*1300*	*1450*	*1175*	*1300*	*1400*	*1500*
P12	—	—	—	—	140	155	170	185	—	—	—	—	195	215	235	255	210	225	240	260
	—	—	—	—	*460*	*510*	*560*	*610*	—	—	—	—	*640*	*710*	*770*	*840*	*690*	*740*	*790*	*850*
M1	—	—	—	—	195	220	265	315	—	—	—	—	250	285	340	405	280	315	370	435
	—	—	—	—	*640*	*720*	*870*	*1025*	—	—	—	—	*820*	*940*	*1125*	*1325*	*920*	*1025*	*1225*	*1425*
M2	—	—	—	—	160	180	220	260	—	—	—	—	205	235	280	335	230	260	305	360
	—	—	—	—	*520*	*590*	*720*	*850*	—	—	—	—	*670*	*770*	*920*	*1100*	*750*	*850*	*1000*	*1175*
M3	—	—	—	—	130	145	175	205	—	—	—	—	165	185	225	260	180	205	240	285
	—	—	—	—	*425*	*475*	*570*	*670*	—	—	—	—	*540*	*610*	*740*	*850*	*590*	*670*	*790*	*940*
M4	—	—	—	—	100	115	135	155	—	—	—	—	130	145	170	200	140	155	185	215
	—	—	—	—	*330*	*375*	*445*	*510*	—	—	—	—	*425*	*475*	*560*	*660*	*460*	*510*	*610*	*710*
M5	—	—	—	—	85	95	110	130	—	—	—	—	105	120	140	165	115	130	155	180
	—	—	—	—	*280*	*310*	*360*	*425*	—	—	—	—	*345*	*395*	*460*	*540*	*375*	*425*	*510*	*590*
K1	—	—	—	—	195	220	260	310	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*640*	*720*	*850*	*1025*	—	—	—	—	—	—	—	—	—	—	—	—
K2	—	—	—	—	170	190	230	275	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*560*	*620*	*750*	*900*	—	—	—	—	—	—	—	—	—	—	—	—
K3	—	—	—	—	145	165	195	230	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*475*	*540*	*640*	*750*	—	—	—	—	—	—	—	—	—	—	—	—
K4	—	—	—	—	140	155	185	220	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*460*	*510*	*610*	*720*	—	—	—	—	—	—	—	—	—	—	—	—
K5	—	—	—	—	85	95	115	135	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*280*	*310*	*375*	*445*	—	—	—	—	—	—	—	—	—	—	—	—
K6	—	—	—	—	120	135	165	195	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*395*	*445*	*540*	*640*	—	—	—	—	—	—	—	—	—	—	—	—
K7	—	—	—	—	110	120	145	170	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*360*	*395*	*475*	*560*	—	—	—	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	1450	1625	1975	2300	1775	2025	2400	2825	—	—	—	—	—	—	—	—
	—	—	—	—	*4750*	*5325*	*6475*	*7550*	*5825*	*6650*	*7875*	*9275*	—	—	—	—	—	—	—	—
N2	—	—	—	—	590	660	800	920	720	810	970	1150	—	—	—	—	—	—	—	—
	—	—	—	—	*1925*	*2175*	*2625*	*3025*	*2350*	*2650*	*3175*	*3775*	—	—	—	—	—	—	—	—
N3	—	—	—	—	390	440	530	620	480	540	650	760	—	—	—	—	—	—	—	—
	—	—	—	—	*1275*	*1450*	*1750*	*2025*	*1575*	*1775*	*2125*	*2500*	—	—	—	—	—	—	—	—
N11	—	—	—	—	445	500	610	700	550	620	740	870	—	—	—	—	—	—	—	—
	—	—	—	—	*1450*	*1650*	*2000*	*2300*	*1800*	*2025*	*2425*	*2850*	—	—	—	—	—	—	—	—
S1	55	60	70	85	47	55	60	75	—	—	—	—	65	70	85	100	65	75	85	100
	180	*195*	*230*	*280*	*155*	*180*	*195*	*245*	—	—	—	—	*215*	*230*	*280*	*330*	*215*	*245*	*280*	*330*
S2	43	48	60	65	38	42	50	60	—	—	—	—	50	55	65	80	50	60	70	80
	140	*155*	*195*	*215*	*125*	*140*	*165*	*195*	—	—	—	—	*165*	*180*	*215*	*260*	*165*	*195*	*230*	*260*
S3	38	42	50	60	33	37	44	50	—	—	—	—	44	50	60	70	45	50	60	70
	125	*140*	*165*	*195*	*110*	*120*	*145*	*165*	—	—	—	—	*145*	*165*	*195*	*230*	*150*	*165*	*195*	*230*
S11	75	85	100	120	65	75	90	105	—	—	—	—	90	100	120	140	90	105	120	145
	245	*280*	*330*	*395*	*215*	*245*	*295*	*345*	—	—	—	—	*295*	*330*	*395*	*460*	*295*	*345*	*395*	*475*
S12	50	60	70	85	45	50	60	70	—	—	—	—	60	70	80	95	65	70	85	100
	165	*195*	*230*	*280*	*150*	*165*	*195*	*230*	—	—	—	—	*195*	*230*	*260*	*310*	*215*	*230*	*280*	*330*
S13	30	34	40	47	26	30	35	41	—	—	—	—	35	40	47	55	36	41	48	55
	100	*110*	*130*	*155*	*85*	*100*	*115*	*135*	—	—	—	—	*115*	*130*	*155*	*180*	*120*	*135*	*155*	*180*
H5	—	—	—	—	39	45	55	60	—	—	—	—	—	—	—	—	55	65	75	90
	—	—	—	—	*130*	*150*	*180*	*195*	—	—	—	—	—	—	—	—	*180*	*215*	*245*	*295*
H8	—	—	—	—	42	47	55	65	—	—	—	—	—	—	—	—	60	65	80	90
	—	—	—	—	*140*	*155*	*180*	*215*	—	—	—	—	—	—	—	—	*195*	*215*	*260*	*295*
H11	—	—	—	—	50	55	70	80	—	—	—	—	—	—	—	—	75	80	95	115
	—	—	—	—	*165*	*180*	*230*	*260*	—	—	—	—	—	—	—	—	*245*	*260*	*310*	*375*
H12	—	—	—	—	75	85	100	115	—	—	—	—	105	120	145	170	105	120	140	165
	—	—	—	—	*245*	*280*	*330*	*375*	—	—	—	—	*345*	*395*	*475*	*560*	*345*	*395*	*460*	*540*

R217.29I-05 – In mm

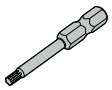




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 681-683
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29I-2520.3-05.2.070A	03278800	Weldon	10,0	20,0	2	5,0	25,0	94,0	55,5	70,0	70,0	125,5	25,0	30,0	38,0	27400	0,4	RD..10T3
R217.29I-2525.3-05.3.050A	03278801	Weldon	15,0	25,0	3	5,0	25,0	74,0	55,5	50,0	50,0	105,5	14,4	40,0	48,0	24400	0,4	RD..10T3
R217.29I-3232.3-05.4.060A	03278802	Weldon	22,0	32,0	4	5,0	32,0	84,0	59,5	60,0	60,0	119,5	8,7	54,0	62,0	21600	0,7	RD..10T3
R217.29I-2016.0-05.1.100A	03278796	Cilindrico	5,9	16,0	1	5,0	20,0	–	90,0	60,0	100,0	150,0	6,9	21,8	30,0	29900	0,4	RD..10T3
R217.29I-1620.0-05.2.112E	03278795	Cilindrico	10,0	20,0	2	5,0	16,0	–	140,0	112,0	112,0	160,0	25,0	30,0	38,0	27400	0,5	RD..10T3
R217.29I-2025.0-05.2.120A	03278797	Cilindrico	15,0	25,0	2	5,0	20,0	–	140,0	120,0	120,0	170,0	14,5	40,0	48,0	24400	0,4	RD..10T3
R217.29I-2525.0-05.3.124A	03278798	Cilindrico	15,0	25,0	3	5,0	25,0	–	130,0	50,1	124,0	180,0	13,8	40,0	48,0	24400	0,7	RD..10T3

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29I-2016-2520	1/4HEX-T09PX50	C03006-T09P
R217.29I-2025-3232	1/4HEX-T09PX50	C03007-T09P

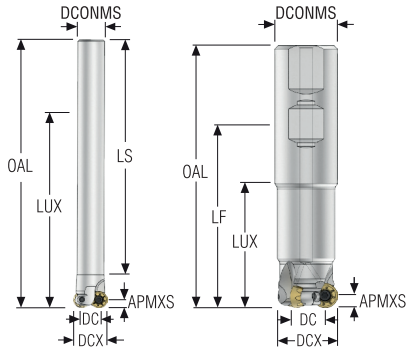
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29I-05 – Pollici

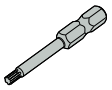




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 681-683
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.29I-01.00-3-05.3A	03278812	Weldon	0.608	1.000	3	0.197	1.000	4.139	2.280	3.000	3.000	5.280	13,8	1.610	1.921	24400	1.100	RD..10T3

Parti di ricambio, comprese nella fornitura

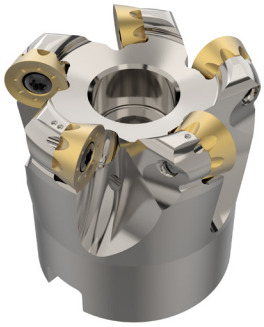
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.29I-..	1/4HEX-T09PX50	C03007-T09P

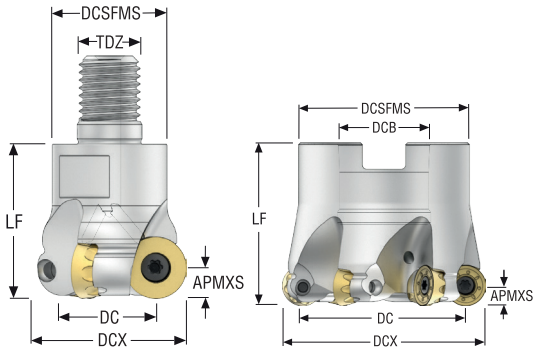
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-05 – In mm



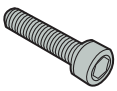
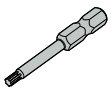


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 681–683
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.29I-0040-05.5A	03278803	Manicotto	30,0	40,0	5	5,0	16,0	33,0	–	16,0	40,0	–	7,3	70,0	78,0	19300	0,3	RD..10T3
R220.29I-0050-05.4A	03278804	Manicotto	40,0	50,0	4	5,0	22,0	41,0	–	22,0	40,0	–	4,3	90,0	98,0	17300	0,4	RD..10T3
R220.29I-0050-05.6A	03278805	Manicotto	40,0	50,0	6	5,0	22,0	41,0	–	22,0	40,0	–	4,3	90,0	98,0	17300	0,4	RD..10T3
R220.29I-0052-05.7A	03278806	Manicotto	42,1	52,0	7	5,0	22,0	41,0	–	22,0	40,0	–	4,3	94,2	102,0	17000	0,4	RD..10T3
R220.29I-0063-05.6A	03278807	Manicotto	53,0	63,0	6	5,0	22,0	49,0	–	22,0	40,0	–	3,1	116,0	124,0	15800	0,6	RD..10T3
R220.29I-0063-05.8A	03278808	Manicotto	53,0	63,0	8	5,0	22,0	49,0	–	22,0	40,0	–	3,9	116,0	124,0	15800	0,6	RD..10T3
R217.29I-1020.RE-05.2A	03278781	Combimaster	10,0	20,0	2	5,0	–	18,5	M10	–	28,0	46,75	25,0	30,0	38,0	27400	0,1	RD..10T3
R217.29I-1225.RE-05.3A	03278782	Combimaster	15,0	25,0	3	5,0	–	23,0	M12	–	30,0	51,75	13,8	40,0	48,0	24400	0,2	RD..10T3
R217.29I-1232.RE-05.4A	03278783	Combimaster	22,0	32,0	4	5,0	–	23,0	M12	–	30,0	51,75	8,0	54,0	62,0	21600	0,2	RD..10T3
R217.29I-1632.RE-05.4A	03278784	Combimaster	22,0	32,0	4	5,0	–	30,0	M16	–	40,0	62,75	8,8	54,0	62,0	21600	0,3	RD..10T3
R217.29I-1632.RE-05.5A	03278785	Combimaster	22,2	32,0	5	5,0	–	30,0	M16	–	40,0	62,75	4,1	54,4	62,0	21600	0,3	RD..10T3
R217.29I-1635.RE-05.5A	03278786	Combimaster	25,1	35,0	5	5,0	–	30,0	M16	–	40,0	62,75	7,5	60,2	68,0	15600	0,3	RD..10T3
R217.29I-1640.RE-05.4A	03278787	Combimaster	30,0	40,0	4	5,0	–	30,0	M16	–	40,0	62,75	5,5	70,0	78,0	19300	0,3	RD..10T3
R217.29I-1640.RE-05.5A	03278788	Combimaster	30,0	40,0	5	5,0	–	30,0	M16	–	40,0	62,75	5,5	70,0	78,0	19300	0,3	RD..10T3
R217.29I-2040.RE-05.6A	03278791	Combimaster	30,2	40,0	6	5,0	–	36,5	M20	–	40,0	67,0	5,9	70,4	78,0	19300	0,4	RD..10T3
R217.29I-1642.RE-05.5A	03278789	Combimaster	32,0	42,0	5	5,0	–	30,0	M16	–	40,0	62,75	5,6	74,0	82,0	18800	0,3	RD..10T3
R217.29I-1642.RE-05.6A	03278790	Combimaster	32,0	42,0	6	5,0	–	30,0	M16	–	40,0	62,75	6,0	74,0	82,0	18800	0,3	RD..10T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.29I-1020	–	1/4HEX-T09PX50	C03006-T09P
R217.29I-1225-2042	–	1/4HEX-T09PX50	C03007-T09P
R220.29I-0040	220.17-689	1/4HEX-T09PX50	C03007-T09P
R220.29I-0050-0063	220.17-692	1/4HEX-T09PX50	C03007-T09P

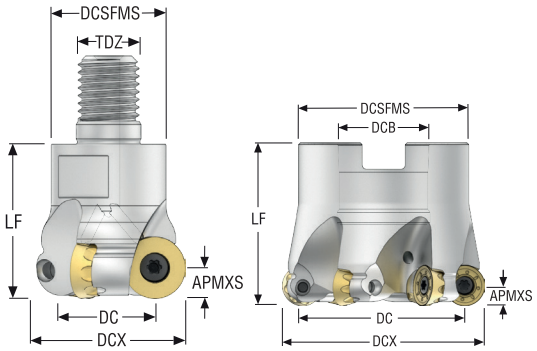
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-05 – Pollici



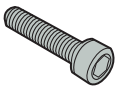
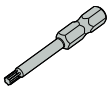


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 681-683
—Per il programma inserti completo, vedere le pagine 874
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch		inch	inch	inch		inch	inch		lb	
R220.29I-01.50-05.5A	03278813	Manicotto	1.106	1.500	5	0.197	0.500	1.339	–	0.500	1.500	–	6,5	2.606	2.921	14000	0.660	RD..10T3
R220.29I-02.00-05.6A	03278814	Manicotto	1.606	2.000	6	0.197	0.750	1.614	–	0.750	1.500	–	4,2	3.606	3.921	12500	0.880	RD..10T3
R217.29I-1.00-12RE-05.3A	03278809	Combimaster	0.608	1.000	3	0.197	–	0.906	M12	–	1.181	2.037	13,3	1.610	1.921	24400	0.440	RD..10T3
R217.29I-1.25-16RE-05.4A	03278810	Combimaster	0.856	1.250	4	0.197	–	1.181	M16	–	1.575	2.470	8,9	2.106	2.421	21600	0.440	RD..10T3
R217.29I-1.50-16RE-05.5A	03278811	Combimaster	1.106	1.500	5	0.197	–	1.181	M16	–	1.575	2.470	6,0	2.606	2.921	19300	0.660	RD..10T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.29I-..	–	1/4HEX-T09PX50	C03007-T09P
R220.29I-01.50	UC6S1/4UNFX1	1/4HEX-T09PX50	C03007-T09P
R220.29I-02.00	UC6S3/8UNFX1	1/4HEX-T09PX50	C03007-T09P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-05 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RDKT10T3M0T-6-M05 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
P2	RDKT10T3M0T-6-M05 MP2501	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,30 0.012
P3	RDKT10T3M0T-6-M05 MP2501	2,0 *0.080*	0,15 0.0060	0,15 0.0060	0,17 0.0065	0,28 0.011
P4	RDKT10T3M0T-8-M07 MP2501	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,38 0.015
P5	RDKT10T3M0T-8-M07 MP2501	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,38 0.014
P6	RDKT10T3M0T-8-M07 MP2501	2,0 *0.080*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
P7	RDKW10T3M0T-8-MD06 MP1501	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,20 0.0080	0,32 0.013
P8	RDKW10T3M0T-8-MD06 MP1501	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
P11	RDKW10T3M0T-8-MD06 MP1501	2,0 *0.080*	0,17 0.0065	0,17 0.0065	0,20 0.0080	0,32 0.013
P12	RDKW10T3M0T-8-MD06 MP1501	1,6 *0.065*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,24 0.0095
M1	RDHT10T3M0T-8-M11 MS2050	2,0 *0.080*	0,36 0.014	0,36 0.014	0,40 0.016	0,65 0.026
M2	RDHT10T3M0T-8-M11 MS2050	2,0 *0.080*	0,32 0.013	0,32 0.013	0,36 0.014	0,60 0.024
M3	RDHT10T3M0T-8-M11 MS2050	1,6 *0.065*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
M4	RDHT10T3M0T-8-M11 MS2050	1,2 *0.048*	0,30 0.012	0,30 0.012	0,34 0.013	0,50 0.020
M5	RDHT10T3M0T-8-M11 MS2050	1,2 *0.048*	0,30 0.012	0,30 0.012	0,34 0.013	0,50 0.020
K1	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,19 0.0075	0,19 0.0075	0,22 0.0085	0,34 0.013
K2	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
K3	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
K4	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
K5	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
K6	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
K7	RDKW10T3M0T-8-MD06 MK2050	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,18 0.0070	0,28 0.011
N1	RDHT10T3M0-8-E04 H25	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,19 0.0075	0,30 0.012
N2	RDHT10T3M0-8-E04 H25	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,19 0.0075	0,30 0.012
N3	RDHT10T3M0-8-E04 H25	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,19 0.0075	0,30 0.012
N11	RDHT10T3M0-8-E04 H25	2,0 *0.080*	0,16 0.0065	0,16 0.0065	0,19 0.0075	0,30 0.012
S1	RDKT10T3M0T-8-M07 MS2500	1,2 *0.048*	0,19 0.0075	0,19 0.0075	0,22 0.0085	0,34 0.013
S2	RDKT10T3M0T-8-M07 MS2500	1,2 *0.048*	0,19 0.0075	0,19 0.0075	0,22 0.0085	0,34 0.013
S3	RDKT10T3M0T-6-M05 MS2500	1,2 *0.048*	0,12 0.0048	0,12 0.0048	0,14 0.0055	0,22 0.0085
S11	RDHT10T3M0T-8-M11 MS2050	1,4 *0.055*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
S12	RDHT10T3M0T-8-M11 MS2050	1,4 *0.055*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
S13	RDHT10T3M0T-8-M11 MS2050	1,2 *0.048*	0,30 0.012	0,30 0.012	0,34 0.013	0,50 0.020
H5	RDKW10T3M0T-8-MD06 MH1051	1,6 *0.065*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,24 0.0095
H8	RDKW10T3M0T-8-MD06 MH1051	1,4 *0.055*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075
H11	RDHW10T3M0T-8-MD06 MH1000	1,6 *0.065*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,24 0.0095
H12	RDHW10T3M0T-8-MD06 MH1000	1,4 *0.055*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,19 0.0075

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29I-05 – Parametri di taglio v_c = (m/min)/(sf/min)

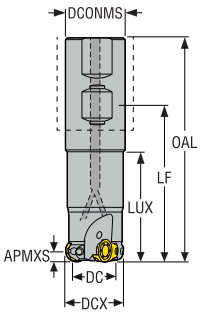
SMG	MH1051				F15M				MK2050				F25M				MP3000				MS2050				F40M				MP2051			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	—	—	—	—	290	325	395	460	310	355	425	500	265	300	360	425	345	385	455	520	345	385	445	510	335	365	415	460	475	520	580	630
	—	—	—	—	*950*	*1075*	*1300*	*1500*	*1025*	*1175*	*1400*	*1650*	*870*	*980*	*1175*	*1400*	*1125*	*1275*	*1500*	*1700*	*1125*	*1275*	*1450*	*1675*	*1100*	*1200*	*1350*	*1500*	*1550*	*1700*	*1900*	*2075*
P2	—	—	—	—	280	320	380	450	305	345	410	485	255	290	350	410	335	375	440	510	335	375	435	495	330	355	405	445	460	510	570	610
	—	—	—	—	*920*	*1050*	*1250*	*1475*	*1000*	*1125*	*1350*	*1600*	*840*	*950*	*1150*	*1350*	*1100*	*1225*	*1450*	*1675*	*1100*	*1225*	*1425*	*1625*	*1075*	*1175*	*1325*	*1450*	*1500*	*1675*	*1875*	*2000*
P3	—	—	—	—	245	280	330	390	265	300	360	425	225	255	305	360	290	325	380	440	295	325	375	430	285	310	350	390	400	440	485	520
	—	—	—	—	*800*	*920*	*1075*	*1275*	*870*	*980*	*1175*	*1400*	*740*	*840*	*1000*	*1175*	*950*	*1075*	*1250*	*1450*	*970*	*1075*	*1225*	*1400*	*940*	*1025*	*1150*	*1275*	*1300*	*1450*	*1600*	*1700*
P4	—	—	—	—	215	245	295	345	235	265	320	370	195	225	270	315	255	285	340	385	260	285	335	380	255	280	320	360	355	390	425	455
	—	—	—	—	*710*	*800*	*970*	*1125*	*770*	*870*	*1050*	*1225*	*640*	*740*	*890*	*1025*	*840*	*940*	*1125*	*1275*	*850*	*940*	*1100*	*1250*	*840*	*920*	*1050*	*1175*	*1175*	*1275*	*1400*	*1500*
P5	480	540	640	750	210	235	280	330	225	255	305	360	190	215	260	305	250	280	325	370	245	275	320	360	240	260	295	325	340	370	410	435
	1575	*1775*	*2100*	*2450*	*690*	*770*	*920*	*1075*	*740*	*840*	*1000*	*1175*	*620*	*710*	*850*	*1000*	*820*	*920*	*1075*	*1225*	*800*	*900*	*1050*	*1175*	*790*	*850*	*970*	*1075*	*1125*	*1225*	*1350*	*1425*
P6	540	600	720	840	235	265	315	370	255	290	340	405	215	245	290	340	280	310	365	415	280	310	360	405	275	295	330	370	385	420	460	490
	1775	*1975*	*2350*	*2750*	*770*	*870*	*1025*	*1225*	*840*	*950*	*1125*	*1325*	*710*	*800*	*950*	*1125*	*920*	*1025*	*1200*	*1350*	*920*	*1025*	*1175*	*1325*	*900*	*970*	*1075*	*1225*	*1275*	*1375*	*1500*	*1600*
P7	510	570	680	790	220	250	300	350	240	270	325	380	200	230	275	320	265	295	340	395	265	295	340	385	260	280	315	345	360	395	430	465
	1675	*1875*	*2225*	*2600*	*720*	*820*	*980*	*1150*	*790*	*890*	*1075*	*1250*	*660*	*750*	*900*	*1050*	*870*	*970*	*1125*	*1300*	*870*	*970*	*1125*	*1275*	*850*	*920*	*1025*	*1125*	*1175*	*1300*	*1400*	*1525*
P8	470	530	630	740	205	235	280	330	220	255	300	355	190	215	255	300	245	275	320	370	245	275	315	360	240	260	290	325	340	370	410	435
	1550	*1750*	*2075*	*2425*	*670*	*770*	*920*	*1075*	*720*	*840*	*980*	*1175*	*620*	*710*	*840*	*980*	*800*	*900*	*1050*	*1225*	*800*	*900*	*1025*	*1175*	*790*	*850*	*950*	*1075*	*1125*	*1225*	*1350*	*1425*
P11	495	550	660	770	215	245	290	340	230	265	315	370	195	225	265	310	255	285	335	380	260	285	330	375	250	270	305	335	310	390	470	580
	1625	*1800*	*2175*	*2525*	*710*	*800*	*950*	*1125*	*750*	*870*	*1025*	*1225*	*640*	*740*	*870*	*1025*	*840*	*940*	*1100*	*1250*	*850*	*940*	*1075*	*1225*	*820*	*890*	*1000*	*1100*	*1025*	*1275*	*1550*	*1900*
P12	320	360	420	485	—	—	—	—	150	170	200	235	125	145	170	200	160	180	205	230	160	180	205	230	160	170	190	205	175	220	250	305
	1050	*1175*	*1375*	*1600*	—	—	—	—	*490*	*560*	*660*	*770*	*410*	*475*	*560*	*660*	*520*	*590*	*670*	*750*	*520*	*590*	*670*	*750*	*520*	*560*	*620*	*670*	*570*	*720*	*820*	*1000*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	220	250	295	350	240	275	330	385	220	250	300	350	365	450	560	690
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*720*	*820*	*970*	*1150*	*790*	*900*	*1075*	*1275*	*720*	*820*	*980*	*1150*	*1200*	*1475*	*1825*	*2275*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	205	245	290	200	225	270	320	180	205	245	290	295	365	445	550
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*590*	*670*	*800*	*950*	*660*	*740*	*890*	*1050*	*590*	*670*	*800*	*950*	*970*	*1200*	*1450*	*1800*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	145	165	195	230	160	180	215	255	145	165	195	230	225	280	325	395
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*475*	*540*	*640*	*750*	*520*	*590*	*710*	*840*	*475*	*540*	*640*	*750*	*740*	*920*	*1075*	*1300*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110	125	150	175	125	140	165	195	110	125	150	175	165	205	235	280
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*360*	*410*	*490*	*570*	*410*	*460*	*540*	*640*	*360*	*410*	*490*	*570*	*540*	*670*	*770*	*920*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90	105	125	145	100	115	135	160	95	105	125	145	135	170	200	235
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*295*	*345*	*410*	*475*	*330*	*375*	*445*	*520*	*310*	*345*	*410*	*475*	*445*	*560*	*660*	*770*
K1	640	720	870	1025	220	250	300	355	325	370	445	530	205	230	275	325	230	265	315	370	—	—	—	—	215	245	295	345	—	—	—	—
	2100	*2350*	*2850*	*3375*	*720*	*820*	*980*	*1175*	*1075*	*1225*	*1450*	*1750*	*670*	*750*	*900*	*1075*	*750*	*870*	*1025*	*1225*	—	—	—	—	*710*	*800*	*970*	*1125*	—	—	—	—
K2	580	650	770	900	200	225	265	315	290	330	395	465	180	205	245	290	205	235	280	325	—	—	—	—	190	215	260	305	—	—	—	—
	1900	*2125*	*2525*	*2950*	*660*	*740*	*870*	*1025*	*950*	*1075*	*1300*	*1525*	*590*	*670*	*800*	*950*	*670*	*770*	*920*	*1075*	—	—	—	—	*620*	*710*	*850*	*1000*	—	—	—	—
K3	490	550	650	760	165	190	225	265	245	280	335	390	155	175	205	245	175	200	235	275	—	—	—	—	160	185	220	260	—	—	—	—
	1600	*1800*	*2125*	*2500*	*540*	*620*	*740*	*870*	*800*	*920*	*1100*	*1275*	*510*	*570*	*670*	*800*	*570*	*660*	*770*	*900*	—	—	—	—	*520*	*610*	*720*	*850*	—	—	—	—
K4	465	520	620	730	160	180	215	255	235	270	320	375	145	165	200	235	165	190	225	265	—	—	—	—	155	175	210	245	—	—	—	—
	1525	*1700*	*2025*	*2400*	*520*	*590*	*710*	*840*	*770*	*890*	*1050*	*1225*	*475*	*540*	*660*	*770*	*540*	*620*	*740*	*870*	—	—	—	—	*510*	*570*	*690*	*800*	—	—	—	—
K5	285	320	385	440	95	110	130	155	140	160	195	225	90	100	120	140	100	115	135	160	—	—	—	—	95	105	130	150	—	—	—	—
	940	*1050*	*1275*	*1450*	*310*	*360*	*425*	*510*	*460*	*520*	*640*	*740*	*295*	*330*	*395*	*460*	*330*	*375*	*445*	*520*	—	—	—	—	*310*	*345*	*425*	*490*	—	—	—	—
K6	410	460	550	640	140	160	190	225	205	235	280	330	130	145	175	205	145	165	200	235	—	—	—	—	135	155	185	215	—	—	—	—
	1350	*1500*	*1800*	*2100*	*460*	*520*	*620*	*740*	*670*	*770*	*920*	*1075*	*425*	*475*	*570*	*670*	*475*	*540*	*660*	*770*	—	—	—	—	*445*	*510*	*610*	*710*	—	—	—	—
K7	365	410	490	570	125	140	170	195	180	205	250	290	115	130	155	180	130	145	175	205	—	—	—	—	120	135	165	190	—	—	—	—
	1200	*1350*	*1600*	*1875*	*410*	*460*	*560*	*640*	*590*	*670*	*820*	*950*	*375*	*425*	*510*	*590*	*425*	*475*	*570*	*670*	—	—	—	—	*395*	*445*	*540*	*620*	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1725	1950	2350	2750	—	—	—	—	1625	1825	2225	2575	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*5650*	*6400*	*7700*	*9025*	—	—	—	—	*5325*	*6000*	*7300*	*8450*	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	700	790	950	1100	—	—	—	—	650	740	900	1050	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*2300*	*2600*	*3125*	*3600*	—	—	—	—	*2125*	*2425*	*2950*	*3450*	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	465	530	630	740	—	—	—	—	435	495	600	700	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1525*	*1750*	*2075*	*2425*	—	—	—	—	*1425*	*1625*	*1975*	*2300*	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	530	600	720	850	—	—	—	—	495	570	680	790	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1750*	*1975*	*2350*	*2800*	—	—	—	—	*1625*	*1875*	*2225*	*2600*	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	60	70	85	55	65	75	90	50	60	70	85	65	70	85	100
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*195*	*230*	*280*	*180*	*215*	*245*	*295*	*165*	*195*	*230*	*280*	*215*	*230*	*280*	*330*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	47	55	65	46	50	60	75	42	47	55	65	50	55	70	80
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*155*	*180*	*215*	*150*	*165*	*195*	*245*	*140*	*155*	*180*	*215*	*165*	*180*	*230*	*260*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36	41	49	60	40	46	55	65	37	42	49	60	44	50	60	70
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*135*	*160*	*195*	*130*	*150*	*180*	*215*	*120*	*140*	*160*	*195*	*145*	*165*	*195*	*230*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75	80	100	115	80	90	110	130	75	85	100	115	90	100	120	140
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*245*	*260*	*330*	*375*	*260*	*295*	*360*	*425*	*245*	*280*	*330*	*375*	*295*	*330*	*395*	*460*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	55	70	80	55	65	75	90	50	55	70	80	60	70	85	95
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*230*	*260*	*180*	*215*	*245*	*295*	*165*	*180*	*230*	*260*	*195*	*230*	*280*	*310*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29	33	39	46	32	36	43	50	29	33	39	46	35	40	47	55
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*95*	*110*	*130*	*150*	*105*	*120*	*140*	*165*	*95*	*110*	*130*	*150*	*115*	*130*	*155*	*180*
H5	165	185	215	250	46	50	60	75	—	—	—	—	—	—	—	—	44	50	60	70	—	—	—	—	44	50	60	70	—	—	—	—
	540	*610*	*710*	*820*	*150*	*165*	*195*	*245*	—	—	—	—	—	—	—	—	*145*	*165*	*195*	*230*	—	—	—	—	*145*	*165*	*195*	*230*	—	—	—	—
H8	170	190	220	250	48	55	65	75	—	—	—	—	—	—	—	—	47	55	65	75	—	—	—	—	46	50	60	75	—	—	—	—
	560	*620*	*720*	*820*	*155*	*180*	*215*	*245*	—	—	—	—	—	—	—	—	*155*	*180*	*215*	*245*	—	—	—	—	*150*	*165*	*195*	*245*	—	—	—	—
H11	210	235	275	315	60	65	80	90	—	—	—	—	—	—	—	—	55	65	75	90	—	—	—	—	55	65	75	90	115	145	165	200
	690	*770*	*900*	*1025*	*195*	*215*	*260*	*295*	—	—	—	—	—	—	—	—	*180*	*215*	*245*	*295*	—	—	—	—	*180*	*215*	*245*	*295*	*375*	*475*	*540*	*660*
H12	200	225	260	295	85	95	115	135	95	105	125	145	—	—	—	—	90	100	120	140	—	—	—	—	85	95	110	130	95	120	130	145
	660	*740*	*850*	*970*	*280*	*310*	*375*	*445*	*310*	*345*	*410*	*475*	—	—	—	—	*295*	*330*	*395*	*460*	—	—	—	—	*280*	*310*	*360*	*425*	*310*	*395*	*425*	*475*

R217/220.29I-05 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050				H25				MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	360 *1175*	410 *1350*	495 *1625*	580 *1900*	— —	— —	— —	— —	450 *1475*	490 *1600*	550 *1800*	610 *2000*	465 *1525*	510 *1675*	580 *1900*	650 *2125*	485 *1600*	540 *1775*	600 *1975*	670 *2200*	460 *1500*	500 *1650*	570 *1875*	620 *2025*	285 *940*	320 *1050*	355 *1175*	400 *1300*
P2	355 *1175*	400 *1300*	480 *1575*	560 *1825*	— —	— —	— —	— —	435 *1425*	475 *1550*	540 *1775*	600 *1975*	455 *1500*	495 *1625*	560 *1825*	620 *2025*	475 *1550*	520 *1700*	590 *1925*	650 *2125*	450 *1475*	490 *1600*	550 *1800*	610 *2000*	275 *900*	310 *1025*	345 *1125*	390 *1275*
P3	310 *1025*	350 *1150*	415 *1350*	495 *1625*	— —	— —	— —	— —	380 *1250*	415 *1350*	465 *1525*	520 *1700*	390 *1275*	425 *1400*	485 *1600*	540 *1775*	410 *1350*	455 *1500*	510 *1675*	560 *1825*	390 *1275*	425 *1400*	475 *1550*	520 *1700*	240 *790*	270 *890*	300 *980*	330 *1075*
P4	270 *890*	310 *1025*	370 *1225*	435 *1425*	— —	— —	— —	— —	335 *1100*	365 *1200*	410 *1350*	455 *1500*	350 *1150*	380 *1250*	430 *1400*	480 *1575*	365 *1200*	400 *1300*	450 *1475*	495 *1625*	345 *1125*	375 *1225*	420 *1375*	460 *1500*	225 *740*	255 *840*	285 *940*	315 *1025*
P5	260 *850*	295 *970*	355 *1175*	415 *1350*	— —	— —	— —	— —	320 *1050*	350 *1150*	395 *1300*	435 *1425*	335 *1100*	365 *1200*	415 *1350*	460 *1500*	345 *1125*	380 *1250*	425 *1400*	475 *1550*	325 *1075*	360 *1175*	400 *1300*	440 *1450*	200 *660*	225 *740*	250 *820*	280 *920*
P6	295 *970*	335 *1100*	395 *1300*	465 *1525*	— —	— —	— —	— —	360 *1175*	395 *1300*	440 *1450*	490 *1600*	375 *1225*	410 *1350*	465 *1525*	520 *1700*	390 *1275*	430 *1400*	480 *1575*	530 *1750*	370 *1225*	405 *1325*	450 *1475*	495 *1625*	225 *740*	255 *840*	280 *920*	315 *1025*
P7	280 *920*	315 *1025*	375 *1225*	440 *1450*	— —	— —	— —	— —	340 *1125*	370 *1225*	415 *1350*	460 *1500*	355 *1175*	385 *1275*	440 *1450*	485 *1600*	370 *1225*	405 *1325*	455 *1500*	500 *1650*	350 *1150*	380 *1250*	425 *1400*	470 *1550*	215 *710*	240 *790*	265 *870*	295 *970*
P8	260 *850*	295 *970*	350 *1150*	415 *1350*	— —	— —	— —	— —	320 *1050*	350 *1150*	390 *1275*	435 *1425*	325 *1075*	360 *1175*	410 *1350*	455 *1500*	345 *1125*	380 *1250*	425 *1400*	475 *1550*	325 *1075*	360 *1175*	400 *1300*	440 *1450*	200 *660*	225 *740*	250 *820*	280 *920*
P11	270 *890*	310 *1025*	365 *1200*	430 *1400*	— —	— —	— —	— —	330 *1075*	360 *1175*	405 *1325*	450 *1475*	345 *1125*	375 *1225*	430 *1400*	475 *1550*	360 *1175*	395 *1300*	440 *1450*	490 *1600*	340 *1125*	370 *1225*	410 *1350*	455 *1500*	205 *670*	230 *750*	255 *840*	285 *940*
P12	170 *560*	195 *640*	235 *770*	270 *890*	— —	— —	— —	— —	205 *670*	220 *720*	245 *800*	270 *890*	215 *710*	235 *770*	260 *850*	285 *940*	215 *710*	240 *790*	260 *850*	285 *940*	205 *670*	225 *740*	245 *800*	265 *870*	120 *395*	135 *445*	145 *475*	160 *520*
M1	255 *840*	290 *950*	345 *1125*	405 *1325*	— —	— —	— —	— —	— —	— —	— —	— —	230 *750*	265 *870*	310 *1025*	365 *1200*	280 *920*	320 *1050*	385 *1275*	450 *1475*	240 *790*	275 *900*	330 *1075*	385 *1275*	190 *620*	215 *710*	260 *850*	305 *1000*
M2	205 *670*	235 *770*	285 *940*	335 *1100*	— —	— —	— —	— —	— —	— —	— —	— —	190 *620*	220 *720*	265 *870*	305 *1000*	230 *750*	260 *850*	315 *1025*	370 *1225*	200 *660*	225 *740*	270 *890*	320 *1050*	155 *510*	175 *570*	210 *690*	250 *820*
M3	165 *540*	190 *620*	225 *740*	265 *870*	— —	— —	— —	— —	— —	— —	— —	— —	155 *510*	175 *570*	210 *690*	245 *800*	185 *610*	210 *690*	250 *820*	295 *970*	160 *520*	180 *590*	215 *710*	255 *840*	125 *410*	140 *460*	170 *560*	200 *660*
M4	130 *425*	145 *475*	170 *560*	205 *670*	— —	— —	— —	— —	— —	— —	— —	— —	120 *395*	135 *445*	160 *520*	190 *620*	145 *475*	160 *520*	190 *620*	225 *740*	125 *410*	140 *460*	165 *540*	195 *640*	95 *310*	110 *360*	130 *425*	155 *510*
M5	105 *345*	120 *395*	145 *475*	170 *560*	— —	— —	— —	— —	— —	— —	— —	— —	100 *330*	110 *360*	135 *445*	155 *510*	120 *395*	135 *445*	160 *520*	190 *620*	100 *330*	115 *375*	135 *445*	160 *520*	80 *260*	90 *295*	110 *360*	125 *410*
K1	— —	— —	— —	— —	— —	— —	— —	— —	440 *1450*	480 *1575*	540 *1775*	600 *1975*	455 *1500*	500 *1650*	560 *1825*	630 *2075*	310 *1025*	355 *1175*	425 *1400*	495 *1625*	450 *1475*	495 *1625*	560 *1825*	610 *2000*	— —	— —	— —	— —
K2	— —	— —	— —	— —	— —	— —	— —	— —	390 *1275*	425 *1400*	475 *1550*	530 *1750*	405 *1325*	440 *1450*	500 *1650*	560 *1825*	275 *900*	310 *1025*	375 *1225*	440 *1450*	395 *1300*	435 *1425*	485 *1600*	530 *1750*	— —	— —	— —	— —
K3	— —	— —	— —	— —	— —	— —	— —	— —	330 *1075*	360 *1175*	400 *1300*	445 *1450*	340 *1125*	375 *1225*	425 *1400*	470 *1550*	230 *750*	265 *870*	315 *1025*	370 *1225*	335 *1100*	365 *1200*	410 *1350*	450 *1475*	— —	— —	— —	— —
K4	— —	— —	— —	— —	— —	— —	— —	— —	315 *1025*	345 *1125*	385 *1275*	425 *1400*	325 *1075*	355 *1175*	405 *1325*	450 *1475*	220 *720*	250 *820*	300 *980*	355 *1175*	320 *1050*	350 *1150*	390 *1275*	430 *1400*	— —	— —	— —	— —
K5	— —	— —	— —	— —	— —	— —	— —	— —	190 *620*	205 *670*	230 *750*	255 *840*	200 *660*	215 *710*	245 *800*	270 *890*	135 *445*	155 *510*	185 *610*	215 *710*	195 *640*	210 *690*	235 *770*	255 *840*	— —	— —	— —	— —
K6	— —	— —	— —	— —	— —	— —	— —	— —	275 *900*	300 *980*	340 *1125*	375 *1225*	285 *940*	315 *1025*	360 *1175*	395 *1300*	195 *640*	220 *720*	265 *870*	310 *1025*	280 *920*	310 *1025*	345 *1125*	380 *1250*	— —	— —	— —	— —
K7	— —	— —	— —	— —	— —	— —	— —	— —	240 *790*	265 *870*	295 *970*	325 *1075*	255 *840*	275 *900*	310 *1025*	345 *1125*	175 *570*	200 *660*	235 *770*	275 *900*	245 *800*	270 *890*	300 *980*	330 *1075*	— —	— —	— —	— —
N1	— —	— —	— —	— —	1675 *5500*	1900 *6225*	2250 *7375*	2650 *8700*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	670 *2200*	760 *2500*	910 *2975*	1075 *3525*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	450 *1475*	510 *1675*	600 *1975*	720 *2350*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	510 *1675*	580 *1900*	690 *2275*	820 *2700*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	65 *215*	70 *230*	85 *280*	100 *330*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	70 *230*	80 *260*	95 *310*	110 *360*	55 *180*	65 *215*	75 *245*	90 *295*	29 *95*	33 *110*	39 *130*	47 *155*
S2	50 *165*	55 *180*	70 *230*	80 *260*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	46 *150*	50 *165*	60 *195*	75 *245*	24 *80*	27 *90*	32 *105*	38 *125*
S3	44 *145*	50 *165*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	65 *215*	80 *260*	40 *130*	46 *150*	55 *180*	65 *215*	21 *70*	24 *80*	28 *90*	33 *110*
S11	90 *295*	100 *330*	120 *395*	140 *460*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	100 *330*	110 *360*	135 *445*	155 *510*	80 *260*	90 *295*	110 *360*	130 *425*	41 *135*	47 *155*	55 *180*	65 *215*
S12	60 *195*	70 *230*	85 *280*	95 *310*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	90 *295*	110 *360*	55 *180*	65 *215*	75 *245*	90 *295*	38 *125*	43 *140*	50 *165*	60 *195*
S13	35 *115*	40 *130*	47 *155*	55 *180*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	39 *130*	44 *145*	55 *180*	60 *195*	32 *105*	36 *120*	43 *140*	50 *165*	22 *70*	25 *80*	30 *100*	35 *115*
H5	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	50 *165*	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	60 *195*	65 *215*	80 *260*	95 *310*	— —	— —	— —	— —	60 *195*	70 *230*	80 *260*	95 *310*	55 *180*	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —
H11	65 *215*	75 *245*	90 *295*	105 *345*	— —	— —	— —	— —	70 *230*	80 *260*	100 *330*	115 *375*	— —	— —	— —	— —	75 *245*	85 *280*	100 *330*	115 *375*	65 *215*	75 *245*	85 *280*	100 *330*	— —	— —	— —	— —
H12	105 *345*	120 *395*	145 *475*	170 *560*	— —	— —	— —	— —	105 *345*	120 *395*	145 *475*	170 *560*	— —	— —	— —	— —	120 *395*	135 *445*	160 *520*	190 *620*	95 *310*	110 *360*	130 *425*	150 *490*	— —	— —	— —	— —

R217.29I-06 – In mm



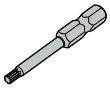
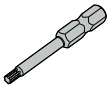


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 690–692
—Per il programma inserti completo, vedere le pagine 877
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29I-2525.3-06.2.050A	02949613	Weldon	13,0	25,0	2	6,0	25,0	74,0	46,0	21,6	50,5	106,0	13,0	38,0	48,0	17700	0,4	RP..1204
R217.29I-3232.3-06.3.060A	02949614	Weldon	20,0	32,0	3	6,0	32,0	84,0	60,0	26,6	60,5	120,0	7,0	52,0	62,0	15600	0,7	RP..1204
R217.29I-3240.3-06-055.4A	03024047	Weldon	28,0	40,0	4	6,0	32,0	79,0	60,0	55,0	55,0	115,0	8,0	68,0	78,0	14000	0,7	RP..1204
R217.29I-3240.3-06.4.075A	02949615	Weldon	28,0	40,0	4	6,0	32,0	99,0	60,0	72,0	75,5	135,0	8,0	68,0	78,0	14000	0,8	RP..1204

Possibilità di refrigerazione centrale rimuovendo la vite centrale

Parti di ricambio, comprese nella fornitura

Per fresa	Vite centrale	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite
					
R217.29I-.. Ø25	–	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P
R217.29I-.. Ø32-40	–	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R217.29I-.. Ø32-40-4A	SH3040	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P

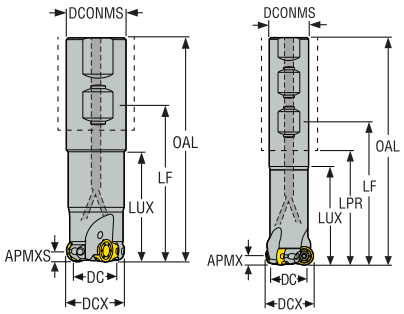
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29I-06 – Pollici



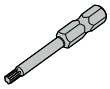
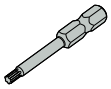


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 690-692
—Per il programma inserti completo, vedere le pagine 877
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.29I-01.00-3F-06.2A	02949640	Weldon	0.528	1.000	2	0.236	1.000	4.639	3.280	2.500	2.500	5.780	12,0	1.528	1.921	17700	1.100	RP..1204
R217.29I-01.00-0-06.2A	02949638	Cilindrico	0.528	1.000	2	0.236	1.000	–	4.008	2.480	4.295	6.500	12,0	1.528	1.921	17700	1.540	RP..1204

Possibilità di refrigerazione centrale rimuovendo la vite centrale

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite
				
R217.29I-..	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P

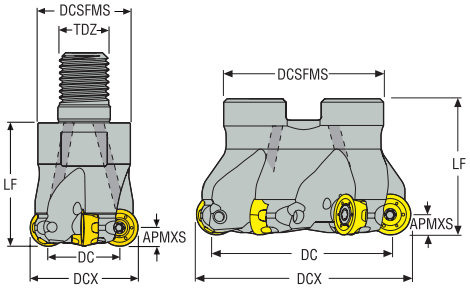
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.29I-01.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-06 – In mm

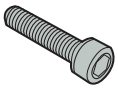
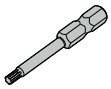
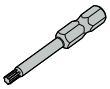




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 690-692
—Per il programma inserti completo, vedere le pagine 877
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.29I-0040-06.4A	02949616	Manicotto	28,0	40,0	4	6,0	16,0	35,0	–	16,0	40,0	–	8,0	68,0	78,0	14000	0,3	RP..1204
R220.29I-0044-06.4A	03002205	Manicotto	32,0	44,0	4	6,0	16,0	35,0	–	16,0	40,0	–	7,9	76,0	86,0	13300	0,3	RP..1204
R220.29I-0050-06.4A	02949617	Manicotto	38,0	50,0	4	6,0	22,0	42,0	–	22,0	40,0	–	5,5	88,0	98,0	12500	0,4	RP..1204
R220.29I-0050-06.5A	02949618	Manicotto	38,0	50,0	5	6,0	22,0	42,0	–	22,0	40,0	–	5,5	88,0	98,0	12500	0,4	RP..1204
R220.29I-0050-06.6A	03203202	Manicotto	38,0	50,0	6	6,0	22,0	42,0	–	22,0	40,0	–	5,0	88,0	98,0	12500	0,4	RP..1204
R220.29I-0052-06.4A	02949619	Manicotto	40,0	52,0	4	6,0	22,0	42,0	–	22,0	40,0	–	5,0	92,0	102,0	12300	0,4	RP..1204
R220.29I-0052-06.5A	02949620	Manicotto	40,0	52,0	5	6,0	22,0	42,0	–	22,0	40,0	–	5,0	92,0	102,0	12300	0,4	RP..1204
R220.29I-0063-06.5A	02949621	Manicotto	51,0	63,0	5	6,0	22,0	47,0	–	22,0	40,0	–	4,0	114,0	124,0	11200	0,5	RP..1204
R220.29I-0063-06.6A	02949622	Manicotto	51,0	63,0	6	6,0	22,0	47,0	–	22,0	40,0	–	4,0	114,0	124,0	11200	0,6	RP..1204
R220.29I-0063-06.7A	02949623	Manicotto	51,0	63,0	7	6,0	22,0	47,0	–	22,0	40,0	–	3,0	114,0	124,0	11200	0,5	RP..1204
R220.29I-0066-06.6A	02949624	Manicotto	54,0	66,0	6	6,0	27,0	50,0	–	27,0	50,0	–	3,5	120,0	130,0	10900	0,7	RP..1204
R220.29I-0080-06.6A	02949625	Manicotto	68,0	80,0	6	6,0	27,0	62,0	–	27,0	50,0	–	3,0	148,0	158,0	10000	1,1	RP..1204
R220.29I-0080-06.7A	02949626	Manicotto	68,0	80,0	7	6,0	27,0	62,0	–	27,0	50,0	–	3,0	148,0	158,0	10000	1,1	RP..1204
R220.29I-0080-06.8A	02949627	Manicotto	68,0	80,0	8	6,0	27,0	62,0	–	27,0	50,0	–	2,0	148,0	158,0	10000	1,1	RP..1204
R220.29I-0084-06.6A	02969096	Manicotto	72,0	84,0	6	6,0	32,0	77,0	–	32,0	50,0	–	2,5	156,0	166,0	9500	1,4	RP..1204
R220.29I-0092-06.7A	02949628	Manicotto	80,0	92,0	7	6,0	32,0	77,0	–	32,0	50,0	–	2,5	172,0	182,0	9200	1,5	RP..1204
R220.29I-0100-06.9A	02949629	Manicotto	88,0	100,0	9	6,0	32,0	77,0	–	32,0	50,0	–	2,0	188,0	198,0	8800	1,6	RP..1204
R220.29I-0112-06.7A	02949630	Manicotto	100,0	112,0	7	6,0	32,0	77,0	–	32,0	63,0	–	1,5	212,0	222,0	8400	1,9	RP..1204
R220.29I-0125-06.11A	02949631	Manicotto	113,0	125,0	11	6,0	40,0	90,0	–	40,0	63,0	–	1,5	238,0	248,0	8000	3,3	RP..1204
R220.29I-0137-06.8A	02949632	Manicotto	125,0	137,0	8	6,0	40,0	90,0	–	40,0	63,0	–	1,5	262,0	272,0	7600	4,0	RP..1204
R217.29I-1225.RE-06.2A	02949605	Combimaster	13,0	25,0	2	6,0	–	23,0	M12	–	35,0	56,75	13,0	38,0	48,0	17700	0,2	RP..1204
R217.29I-1632.RE-06.3A	02949607	Combimaster	20,0	32,0	3	6,0	–	30,0	M16	–	40,0	62,75	7,0	52,0	62,0	15600	0,3	RP..1204
R217.29I-1635.RE-06.3A	02949608	Combimaster	23,0	35,0	3	6,0	–	30,0	M16	–	40,0	62,75	10,0	58,0	68,0	15000	0,3	RP..1204
R217.29I-1635.RE-06.4A	02949609	Combimaster	23,0	35,0	4	6,0	–	30,0	M16	–	40,0	62,75	6,0	58,0	68,0	15000	0,3	RP..1204
R217.29I-1640.RE-06.4A	02949611	Combimaster	28,0	40,0	4	6,0	–	30,0	M16	–	40,0	62,75	8,0	68,0	78,0	14000	0,3	RP..1204
R217.29I-2040.RE06.4A	02928079	Combimaster	28,0	40,0	4	6,0	–	36,5	M20	–	45,0	72,0	8,0	68,0	78,0	14000	0,4	RP..1204
R217.29I-1642.RE-06.5A	02949612	Combimaster	30,0	42,0	5	6,0	–	30,0	M16	–	40,0	62,75	4,0	72,0	82,0	13600	0,3	RP..1204
R217.29I-2042.RE-06.5A	02991174	Combimaster	30,0	42,0	5	6,0	–	36,5	M20	–	45,0	72,0	4,2	72,0	82,0	13600	0,4	RP..1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite
					
R217.29I-25/35-4A/42	–	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P
R217.29I-32/35-3A/40	–	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø125-137	MC6S20X50	1/4HEX-T15PX90	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø40-44	220.17-689	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø50-52	220.17-692	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø50-6A	220.17-692	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø63	220.17-692	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø66-80	MC6S12X35	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø84-112	950E1645	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-.. Ø84-112	950E1645	1/4HEX-T15PX90	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P

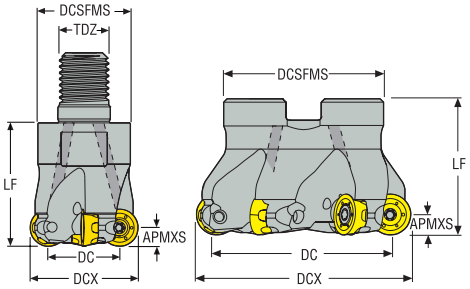
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-06 – Pollici

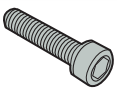
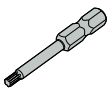
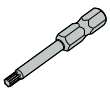




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 690–692
—Per il programma inserti completo, vedere le pagine 877
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch		inch	inch	inch		inch	inch		lb	
R220.29I-02.00-06.4A	02949642	Manicotto	1.528	2.000	4	0.236	0.750	1.654	–	0.750	1.500	–	6,5	3.528	3.921	12500	0.660	RP..1204
R220.29I-02.00-06.5A	02949643	Manicotto	1.528	2.000	5	0.236	0.750	1.654	–	0.750	1.500	–	6,5	3.528	3.921	12500	0.880	RP..1204
R220.29I-02.00-06.6A	03279243	Manicotto	1.535	2.000	6	0.236	0.750	1.654	–	0.750	1.500	–	5,0	3.535	3.921	12500	0.660	RP..1204
R220.29I-02.50-06.6A	02949644	Manicotto	2.028	2.500	6	0.236	0.750	1.850	–	0.750	1.500	–	4,6	4.528	4.921	11200	1.100	RP..1204
R220.29I-02.50-06.7A	02949645	Manicotto	2.028	2.500	7	0.236	0.750	1.850	–	0.750	1.500	–	4,6	4.528	4.921	11200	1.100	RP..1204
R220.29I-03.00-06.6A	02949647	Manicotto	2.528	3.000	6	0.236	1.000	2.441	–	1.000	2.000	–	3,0	5.528	5.921	10000	2.430	RP..1204
R220.29I-03.00-06.7A	02949648	Manicotto	2.528	3.000	7	0.236	1.000	2.441	–	1.000	2.000	–	3,0	5.528	5.921	10000	2.430	RP..1204
R220.29I-04.00-06.7A	02949649	Manicotto	3.528	4.000	7	0.236	1.500	3.543	–	1.500	2.000	–	2,0	7.528	7.921	8800	4.410	RP..1204
R220.29I-06.00-06.8	02949652	Manicotto	5.528	6.000	8	0.236	2.000	4.331	–	2.000	2.000	–	1,2	11.528	11.921	7600	6.830	RP..1204
R217.29I-01.00-12RE-06.2A	02949633	Combimaster	0.528	1.000	2	0.236	–	0.906	M12	–	1.378	2.234	12,0	1.528	1.921	17700	0.440	RP..1204
R217.29I-01.25-12RE-06.3A	02949635	Combimaster	0.778	1.250	3	0.236	–	0.906	M12	–	1.575	2.431	7,0	2.028	2.421	15600	0.440	RP..1204
R217.29I-01.25-16RE-06.3A	02949634	Combimaster	0.778	1.250	3	0.236	–	1.181	M16	–	1.575	2.470	7,0	2.028	2.421	15600	0.660	RP..1204
R217.29I-01.50-16RE-06.3A	02949636	Combimaster	1.028	1.500	3	0.236	–	1.181	M16	–	1.575	2.470	8,5	2.528	2.921	14000	0.660	RP..1204
R217.29I-01.50-16RE-06.4A	02949637	Combimaster	1.028	1.500	4	0.236	–	1.181	M16	–	1.575	2.470	8,5	2.528	2.921	14000	0.660	RP..1204
R217.29I-01.50-20RE-06.4A	03002402	Combimaster	1.028	1.500	4	0.236	–	1.437	M20	–	1.575	2.638	8,5	2.528	2.921	14000	0.660	RP..1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite
					
R217.29I-01.00	–	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P
R217.29I-01.25-01.50	–	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-02.00-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-02.00-6A	UC6S3/8UNFX1	1/4HEX-T15PX50	C03508-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-04.00	ULC6S3/4UNFX11/2	1/4HEX-T15PX90	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-06.00	–	1/4HEX-T15PX90	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P

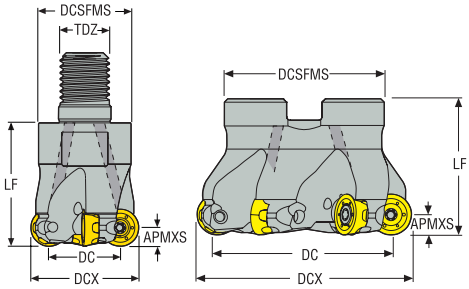
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.29-01.00-04.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.0NM	T00-15P30
R220.29I-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	58215080	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R220.29B-06 – For blade machining – In mm



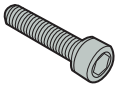
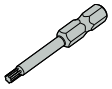
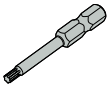


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 690-692
—Per il programma inserti completo, vedere le pagine 877
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm		mm	mm		kg	
R220.29B-0040-06.4A	03007485	Manicotto	28,0	40,0	4	6,0	16,0	35,0	16,0	40,0	5,0	68,0	78,0	14000	0,2	RP..1204
R220.29B-0050-06.5A	03007486	Manicotto	38,0	50,0	5	6,0	22,0	42,0	22,0	40,0	5,0	88,0	98,0	12500	0,3	RP..1204
R220.29B-0052-06.5A	03007487	Manicotto	38,0	52,0	5	6,0	22,0	42,0	22,0	40,0	5,0	90,0	102,0	12300	0,3	RP..1204
R220.29B-0063-06.6A	03074236	Manicotto	51,0	63,0	6	6,0	22,0	47,0	22,0	40,0	4,0	114,0	124,0	11200	0,5	RP..1204
R220.29B-0063-06.7A	03074237	Manicotto	51,0	63,0	7	6,0	22,0	47,0	22,0	40,0	4,0	114,0	124,0	11200	0,5	RP..1204

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite
					
R220.29-0040	220.17-689	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P
R220.29-0050-0063	220.17-692	1/4HEX-T15PX50	C03509-T15P	1/4HEX-T05PX50	SX2035-T05P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.29-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-06 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RPHT1204M0T-6-M08 MP2501	2,5 *0.10*	0,25 0.010	0,25 0.010	0,28 0.011	0,46 0.018
P2	RPHT1204M0T-6-M08 MP2501	2,5 *0.10*	0,25 0.010	0,25 0.010	0,30 0.012	0,46 0.018
P3	RPHT1204M0T-6-M08 MP2501	2,5 *0.10*	0,24 0.0095	0,24 0.0095	0,28 0.011	0,44 0.017
P4	RPKT1204M0T-6-M15 MP2501	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
P5	RPKT1204M0T-6-M15 MP2501	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
P6	RPKT1204M0T-6-M15 MP2501	2,5 *0.10*	0,42 0.017	0,42 0.017	0,50 0.020	0,80 0.032
P7	RPKT1204M0T-6-M15 MP2501	2,5 *0.10*	0,42 0.017	0,42 0.017	0,50 0.020	0,80 0.032
P8	RPHT1204M0T-6-M13 MS2500	2,5 *0.10*	0,38 0.015	0,38 0.015	0,46 0.018	0,70 0.028
P11	RPHT1204M0T-6-M13 MS2500	2,5 *0.10*	0,36 0.014	0,36 0.014	0,42 0.017	0,70 0.028
P12	RPHT1204M0T-4-M13 MS2500	1,9 *0.075*	0,28 0.011	0,28 0.011	0,34 0.013	0,55 0.022
M1	RPHT1204M0T-6-ME07 MS2050	2,5 *0.10*	0,22 0.0085	0,22 0.0085	0,26 0.010	0,40 0.016
M2	RPHT1204M0T-6-ME07 MS2050	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
M3	RPHT1204M0T-6-ME07 MS2050	1,9 *0.075*	0,18 0.0070	0,18 0.0070	0,22 0.0085	0,34 0.013
M4	RPHT1204M0T-6-M08 MP3501	1,4 *0.055*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,38 0.015
M5	RPHT1204M0T-6-M08 MP3501	1,4 *0.055*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,38 0.015
K1	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,48 0.019	0,48 0.019	0,55 0.022	0,90 0.036
K2	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
K3	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
K4	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
K5	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,38 0.015	0,38 0.015	0,46 0.018	0,70 0.028
K6	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
K7	RPKT1204M0T-6-M15 MK2050	2,5 *0.10*	0,38 0.015	0,38 0.015	0,46 0.018	0,70 0.028
N1	RPHT1204M0-6-E05 H25	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
N2	RPHT1204M0-6-E05 H25	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
N3	RPHT1204M0-6-E05 H25	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
N11	RPHT1204M0-6-E05 H25	2,5 *0.10*	0,20 0.0080	0,20 0.0080	0,24 0.0095	0,36 0.014
S1	RPHT1204M0T-6-M13 MS2500	1,4 *0.055*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
S2	RPHT1204M0T-6-M13 MS2500	1,4 *0.055*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
S3	RPHT1204M0T-6-M13 MS2500	1,4 *0.055*	0,32 0.013	0,32 0.013	0,36 0.014	0,60 0.024
S11	RPHT1204M0T-6-M13 MS2050	1,7 *0.065*	0,36 0.014	0,36 0.014	0,40 0.016	0,65 0.026
S12	RPHT1204M0T-6-M13 MS2050	1,7 *0.065*	0,36 0.014	0,36 0.014	0,40 0.016	0,65 0.026
S13	RPHT1204M0T-6-M13 MS2050	1,4 *0.055*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
H5	RPKW1204M0T-6-MD10 MH1051	1,9 *0.075*	0,22 0.0085	0,22 0.0085	0,26 0.010	0,40 0.016
H8	RPKW1204M0T-6-MD10 MH1051	1,7 *0.065*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
H11	RPKW1204M0T-6-MD10 MH1051	1,9 *0.075*	0,22 0.0085	0,22 0.0085	0,26 0.010	0,40 0.016
H12	RPHT1204M0T-6-M13 MP3501	1,7 *0.065*	0,24 0.0095	0,24 0.0095	0,26 0.010	0,42 0.017

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29-06 – Parametri di taglio v_c = (m/min)/(sf/min)

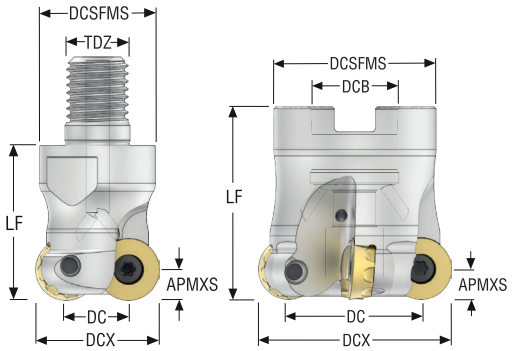
SMG	MH1051				MK2050				MP3000				MS2050				F40M				MP2051				MP2050			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	—	—	—	—	275	315	380	440	360	410	470	540	255	290	345	400	315	345	395	440	290	335	445	540	280	325	390	455
	—	—	—	—	*900*	*1025*	*1250*	*1450*	*1175*	*1350*	*1550*	*1775*	*840*	*950*	*1125*	*1300*	*1025*	*1125*	*1300*	*1450*	*950*	*1100*	*1450*	*1775*	*920*	*1075*	*1275*	*1500*
P2	—	—	—	—	265	300	360	430	350	395	455	520	250	280	340	390	310	335	385	430	280	325	430	520	275	315	380	445
	—	—	—	—	*870*	*980*	*1175*	*1400*	*1150*	*1300*	*1500*	*1700*	*820*	*920*	*1125*	*1275*	*1025*	*1100*	*1275*	*1400*	*920*	*1075*	*1400*	*1700*	*900*	*1025*	*1250*	*1450*
P3	—	—	—	—	230	265	315	375	305	345	395	450	220	245	295	345	275	295	340	375	255	290	385	470	240	275	330	395
	—	—	—	—	*750*	*870*	*1025*	*1225*	*1000*	*1125*	*1300*	*1475*	*720*	*800*	*970*	*1125*	*900*	*970*	*1125*	*1225*	*840*	*950*	*1275*	*1550*	*790*	*900*	*1075*	*1300*
P4	—	—	—	—	205	235	285	330	265	300	350	395	195	215	260	305	240	270	310	350	225	255	340	410	210	240	290	345
	—	—	—	—	*670*	*770*	*940*	*1075*	*870*	*980*	*1150*	*1300*	*640*	*710*	*850*	*1000*	*790*	*890*	*1025*	*1150*	*740*	*840*	*1125*	*1350*	*690*	*790*	*950*	*1125*
P5	390	440	540	640	200	225	270	320	260	290	335	380	185	205	255	290	230	250	285	315	215	245	330	395	200	230	285	330
	1275	*1450*	*1775*	*2100*	*660*	*740*	*890*	*1050*	*850*	*950*	*1100*	*1250*	*610*	*670*	*840*	*950*	*750*	*820*	*940*	*1025*	*710*	*800*	*1075*	*1300*	*660*	*750*	*940*	*1075*
P6	435	495	610	720	220	255	305	355	290	330	375	425	210	240	285	325	255	280	320	355	250	285	375	440	230	265	315	370
	1425	*1625*	*2000*	*2350*	*720*	*840*	*1000*	*1175*	*950*	*1075*	*1225*	*1400*	*690*	*790*	*940*	*1075*	*840*	*920*	*1050*	*1175*	*820*	*940*	*1225*	*1450*	*750*	*870*	*1025*	*1225*
P7	410	465	580	680	210	240	290	335	275	310	355	405	200	225	270	310	245	265	300	335	235	270	350	415	215	250	300	350
	1350	*1525*	*1900*	*2225*	*690*	*790*	*950*	*1100*	*900*	*1025*	*1175*	*1325*	*660*	*740*	*890*	*1025*	*800*	*870*	*980*	*1100*	*770*	*890*	*1150*	*1350*	*710*	*820*	*980*	*1150*
P8	375	425	530	630	195	220	265	315	255	290	330	380	185	205	250	290	230	250	285	315	215	245	320	395	200	230	280	330
	1225	*1400*	*1750*	*2075*	*640*	*720*	*870*	*1025*	*840*	*950*	*1075*	*1250*	*610*	*670*	*820*	*950*	*750*	*820*	*940*	*1025*	*710*	*800*	*1050*	*1300*	*660*	*750*	*920*	*1075*
P11	400	455	560	660	205	235	280	330	265	300	345	390	195	220	260	300	235	255	295	325	215	265	375	490	210	240	290	340
	1300	*1500*	*1825*	*2175*	*670*	*770*	*920*	*1075*	*870*	*980*	*1125*	*1275*	*640*	*720*	*850*	*980*	*770*	*840*	*970*	*1075*	*710*	*870*	*1225*	*1600*	*690*	*790*	*950*	*1125*
P12	280	315	380	445	135	150	185	215	165	185	205	230	130	145	175	195	155	165	190	205	160	200	265	335	140	160	190	220
	920	*1025*	*1250*	*1450*	*445*	*490*	*610*	*710*	*540*	*610*	*670*	*750*	*425*	*475*	*570*	*640*	*510*	*540*	*620*	*670*	*520*	*660*	*870*	*1100*	*460*	*520*	*620*	*720*
M1	—	—	—	—	—	—	—	—	225	260	310	365	190	215	260	305	210	240	285	335	230	285	415	540	195	225	270	320
	—	—	—	—	—	—	—	—	*740*	*850*	*1025*	*1200*	*620*	*710*	*850*	*1000*	*690*	*790*	*940*	*1100*	*750*	*940*	*1350*	*1775*	*640*	*740*	*890*	*1050*
M2	—	—	—	—	—	—	—	—	190	220	260	305	155	175	215	250	170	200	235	275	195	240	360	465	160	185	225	265
	—	—	—	—	—	—	—	—	*620*	*720*	*850*	*1000*	*510*	*570*	*710*	*820*	*560*	*660*	*770*	*900*	*640*	*790*	*1175*	*1525*	*520*	*610*	*740*	*870*
M3	—	—	—	—	—	—	—	—	150	175	205	240	125	145	175	205	140	160	190	220	180	220	300	395	130	150	180	215
	—	—	—	—	—	—	—	—	*490*	*570*	*670*	*790*	*410*	*475*	*570*	*670*	*460*	*520*	*620*	*720*	*590*	*720*	*980*	*1300*	*425*	*490*	*590*	*710*
M4	—	—	—	—	—	—	—	—	115	135	155	185	100	110	135	160	105	120	145	175	145	175	240	310	105	120	140	165
	—	—	—	—	—	—	—	—	*375*	*445*	*510*	*610*	*330*	*360*	*445*	*520*	*345*	*395*	*475*	*570*	*475*	*570*	*790*	*1025*	*345*	*395*	*460*	*540*
M5	—	—	—	—	—	—	—	—	95	110	130	155	80	95	115	135	90	100	120	145	120	150	200	260	85	100	120	140
	—	—	—	—	—	—	—	—	*310*	*360*	*425*	*510*	*260*	*310*	*375*	*445*	*295*	*330*	*395*	*475*	*395*	*490*	*660*	*850*	*280*	*330*	*395*	*460*
K1	510	570	720	860	285	325	390	465	240	275	330	385	—	—	—	—	205	235	280	330	—	—	—	—	—	—	—	—
	1675	*1875*	*2350*	*2825*	*940*	*1075*	*1275*	*1525*	*790*	*900*	*1075*	*1275*	—	—	—	—	*670*	*770*	*920*	*1075*	—	—	—	—	—	—	—	—
K2	470	530	660	770	255	295	350	410	215	250	295	345	—	—	—	—	180	210	250	290	—	—	—	—	—	—	—	—
	1550	*1750*	*2175*	*2525*	*840*	*970*	*1150*	*1350*	*710*	*820*	*970*	*1125*	—	—	—	—	*590*	*690*	*820*	*950*	—	—	—	—	—	—	—	—
K3	400	450	560	650	215	250	295	350	180	210	250	295	—	—	—	—	155	175	210	245	—	—	—	—	—	—	—	—
	1300	*1475*	*1825*	*2125*	*710*	*820*	*970*	*1150*	*590*	*690*	*820*	*970*	—	—	—	—	*510*	*570*	*690*	*800*	—	—	—	—	—	—	—	—
K4	380	430	530	630	205	235	285	330	175	200	235	280	—	—	—	—	145	170	200	235	—	—	—	—	—	—	—	—
	1250	*1400*	*1750*	*2075*	*670*	*770*	*940*	*1075*	*570*	*660*	*770*	*920*	—	—	—	—	*475*	*560*	*660*	*770*	—	—	—	—	—	—	—	—
K5	235	265	330	385	125	145	175	205	105	120	145	170	—	—	—	—	90	105	125	145	—	—	—	—	—	—	—	—
	770	*870*	*1075*	*1275*	*410*	*475*	*570*	*670*	*345*	*395*	*475*	*560*	—	—	—	—	*295*	*345*	*410*	*475*	—	—	—	—	—	—	—	—
K6	335	380	470	550	180	210	250	295	155	175	210	245	—	—	—	—	130	150	175	205	—	—	—	—	—	—	—	—
	1100	*1250*	*1550*	*1800*	*590*	*690*	*820*	*970*	*510*	*570*	*690*	*800*	—	—	—	—	*425*	*490*	*570*	*670*	—	—	—	—	—	—	—	—
K7	300	340	425	495	160	185	225	260	135	155	185	215	—	—	—	—	115	130	155	185	—	—	—	—	—	—	—	—
	980	*1125*	*1400*	*1625*	*520*	*610*	*740*	*850*	*445*	*510*	*610*	*710*	—	—	—	—	*375*	*425*	*510*	*610*	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	1800	2075	2475	2900	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*5900*	*6800*	*8125*	*9525*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	730	840	1000	1175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*2400*	*2750*	*3275*	*3850*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	485	560	660	780	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*1600*	*1825*	*2175*	*2550*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	560	640	760	890	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*1825*	*2100*	*2500*	*2925*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	55	60	75	85	46	50	65	75	50	55	70	80	50	60	70	80	50	60	70	80
	—	—	—	—	—	—	—	—	*180*	*195*	*245*	*280*	*150*	*165*	*215*	*245*	*165*	*180*	*230*	*260*	*165*	*195*	*230*	*260*	*165*	*195*	*230*	*260*
S2	—	—	—	—	—	—	—	—	44	50	60	70	37	42	50	60	40	46	55	65	41	46	55	65	41	46	55	65
	—	—	—	—	—	—	—	—	*145*	*165*	*195*	*230*	*120*	*140*	*165*	*195*	*130*	*150*	*180*	*215*	*135*	*150*	*180*	*215*	*135*	*150*	*180*	*215*
S3	—	—	—	—	—	—	—	—	38	44	50	60	33	37	45	50	35	40	48	55	36	41	49	55	36	41	49	55
	—	—	—	—	—	—	—	—	*125*	*145*	*165*	*195*	*110*	*120*	*150*	*165*	*115*	*130*	*155*	*180*	*120*	*135*	*160*	*180*	*120*	*135*	*160*	*180*
S11	—	—	—	—	—	—	—	—	75	85	105	120	65	75	90	105	70	80	95	110	70	80	95	115	70	80	95	115
	—	—	—	—	—	—	—	—	*245*	*280*	*345*	*395*	*215*	*245*	*295*	*345*	*230*	*260*	*310*	*360*	*230*	*260*	*310*	*375*	*230*	*260*	*310*	*375*
S12	—	—	—	—	—	—	—	—	55	60	70	85	44	50	60	70	49	55	65	80	49	55	65	80	49	55	65	80
	—	—	—	—	—	—	—	—	*180*	*195*	*230*	*280*	*145*	*165*	*195*	*230*	*160*	*180*	*215*	*260*	*160*	*180*	*215*	*260*	*160*	*180*	*215*	*260*
S13	—	—	—	—	—	—	—	—	31	35	41	48	26	30	36	42	28	32	38	45	28	32	39	46	28	32	39	46
	—	—	—	—	—	—	—	—	*100*	*115*	*135*	*155*	*85*	*100*	*120*	*140*	*90*	*105*	*125*	*150*	*90*	*105*	*130*	*150*	*90*	*105*	*130*	*150*
H5	140	160	195	230	—	—	—	—	46	55	65	75	—	—	—	—	42	48	60	70	—	—	—	—	—	—	—	—
	460	*520*	*640*	*750*	—	—	—	—	*150*	*180*	*215*	*245*	—	—	—	—	*140*	*155*	*195*	*230*	—	—	—	—	—	—	—	—
H8	155	175	210	240	—	—	—	—	49	55	65	75	—	—	—	—	45	50	60	70	—	—	—	—	—	—	—	—
	510	*570*	*690*	*790*	—	—	—	—	*160*	*180*	*215*	*245*	—	—	—	—	*150*	*165*	*195*	*230*	—	—	—	—	—	—	—	—
H11	180	205	250	290	—	—	—	—	60	70	80	95	—	—	—	—	55	60	75	85	105	130	175	220	55	60	75	85
	590	*670*	*820*	*950*	—	—	—	—	*195*	*230*	*260*	*310*	—	—	—	—	*180*	*195*	*245*	*280*	*345*	*425*	*570*	*720*	*180*	*195*	*245*	*280*
H12	180	205	240	280	85	95	115	135	95	105	125	145	—	—	—	—	80	90	110	130	105	130	170	210	90	100	120	140
	590	*670*	*790*	*920*	*280*	*310*	*375*	*445*	*310*	*345*	*410*	*475*	—	—	—	—	*260*	*295*	*360*	*425*	*345*	*425*	*560*	*690*	*295*	*330*	*395*	*460*

R217/220.29-06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H25				MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	—	—	—	—	390	430	500	570	380	420	495	560	385	425	500	570	360	395	465	530	265	300	350	400
	—	—	—	—	*1275*	*1400*	*1650*	*1875*	*1250*	*1375*	*1625*	*1825*	*1275*	*1400*	*1650*	*1875*	*1175*	*1300*	*1525*	*1750*	*870*	*980*	*1150*	*1300*
P2	—	—	—	—	380	420	490	550	370	405	480	540	375	415	490	560	350	385	450	510	260	290	340	385
	—	—	—	—	*1250*	*1375*	*1600*	*1800*	*1225*	*1325*	*1575*	*1775*	*1225*	*1350*	*1600*	*1825*	*1150*	*1275*	*1475*	*1675*	*850*	*950*	*1125*	*1275*
P3	—	—	—	—	330	365	430	485	325	355	420	475	330	365	430	490	305	335	395	450	225	255	295	335
	—	—	—	—	*1075*	*1200*	*1400*	*1600*	*1075*	*1175*	*1375*	*1550*	*1075*	*1200*	*1400*	*1600*	*1000*	*1100*	*1300*	*1475*	*740*	*840*	*970*	*1100*
P4	—	—	—	—	295	320	380	430	285	315	370	420	290	320	375	430	270	295	350	400	215	240	280	320
	—	—	—	—	*970*	*1050*	*1250*	*1400*	*940*	*1025*	*1225*	*1375*	*950*	*1050*	*1225*	*1400*	*890*	*970*	*1150*	*1300*	*710*	*790*	*920*	*1050*
P5	—	—	—	—	285	315	365	410	275	305	360	400	275	305	365	410	260	285	340	380	195	215	250	280
	—	—	—	—	*940*	*1025*	*1200*	*1350*	*900*	*1000*	*1175*	*1300*	*900*	*1000*	*1200*	*1350*	*850*	*940*	*1125*	*1250*	*640*	*710*	*820*	*920*
P6	—	—	—	—	320	350	410	460	310	340	400	450	315	350	410	460	295	325	380	425	215	245	280	315
	—	—	—	—	*1050*	*1150*	*1350*	*1500*	*1025*	*1125*	*1300*	*1475*	*1025*	*1150*	*1350*	*1500*	*970*	*1075*	*1250*	*1400*	*710*	*800*	*920*	*1025*
P7	—	—	—	—	300	330	390	435	295	325	380	425	300	330	385	435	280	305	360	400	205	230	265	300
	—	—	—	—	*980*	*1075*	*1275*	*1425*	*970*	*1075*	*1250*	*1400*	*980*	*1075*	*1275*	*1425*	*920*	*1000*	*1175*	*1300*	*670*	*750*	*870*	*980*
P8	—	—	—	—	280	310	360	410	270	300	355	400	275	305	360	410	260	285	335	380	190	215	245	280
	—	—	—	—	*920*	*1025*	*1175*	*1350*	*890*	*980*	*1175*	*1300*	*900*	*1000*	*1175*	*1350*	*850*	*940*	*1100*	*1250*	*620*	*710*	*800*	*920*
P11	—	—	—	—	290	320	375	420	285	315	370	415	290	320	375	425	270	300	350	390	200	225	255	290
	—	—	—	—	*950*	*1050*	*1225*	*1375*	*940*	*1025*	*1225*	*1350*	*950*	*1050*	*1225*	*1400*	*890*	*980*	*1150*	*1275*	*660*	*740*	*840*	*950*
P12	—	—	—	—	195	210	245	275	190	205	245	270	190	210	245	270	180	200	230	250	120	140	155	170
	—	—	—	—	*640*	*690*	*800*	*900*	*620*	*670*	*800*	*890*	*620*	*690*	*800*	*890*	*590*	*660*	*750*	*820*	*395*	*460*	*510*	*560*
M1	—	—	—	—	—	—	—	—	190	220	265	310	220	250	300	355	190	215	260	305	170	195	230	270
	—	—	—	—	—	—	—	—	*620*	*720*	*870*	*1025*	*720*	*820*	*980*	*1175*	*620*	*710*	*850*	*1000*	*560*	*640*	*750*	*890*
M2	—	—	—	—	—	—	—	—	160	180	220	255	180	205	250	295	155	175	215	250	140	160	195	225
	—	—	—	—	—	—	—	—	*520*	*590*	*720*	*840*	*590*	*670*	*820*	*970*	*510*	*570*	*710*	*820*	*460*	*520*	*640*	*740*
M3	—	—	—	—	—	—	—	—	130	145	180	210	145	170	200	240	125	145	175	205	115	130	155	185
	—	—	—	—	—	—	—	—	*425*	*475*	*590*	*690*	*475*	*560*	*660*	*790*	*410*	*475*	*570*	*670*	*375*	*425*	*510*	*610*
M4	—	—	—	—	—	—	—	—	100	115	140	165	115	130	155	185	100	110	135	160	85	100	120	140
	—	—	—	—	—	—	—	—	*330*	*375*	*460*	*540*	*375*	*425*	*510*	*610*	*330*	*360*	*445*	*520*	*280*	*330*	*395*	*460*
M5	—	—	—	—	—	—	—	—	85	95	115	135	95	110	130	155	85	95	115	135	70	80	100	115
	—	—	—	—	—	—	—	—	*280*	*310*	*375*	*445*	*310*	*360*	*425*	*510*	*280*	*310*	*375*	*445*	*230*	*260*	*330*	*375*
K1	—	—	—	—	385	420	495	560	375	410	485	550	240	275	335	390	355	390	455	520	—	—	—	—
	—	—	—	—	*1275*	*1375*	*1625*	*1825*	*1225*	*1350*	*1600*	*1800*	*790*	*900*	*1100*	*1275*	*1175*	*1275*	*1500*	*1700*	—	—	—	—
K2	—	—	—	—	345	380	445	495	335	370	435	485	215	245	300	350	310	345	410	460	—	—	—	—
	—	—	—	—	*1125*	*1250*	*1450*	*1625*	*1100*	*1225*	*1425*	*1600*	*710*	*800*	*980*	*1150*	*1025*	*1125*	*1350*	*1500*	—	—	—	—
K3	—	—	—	—	290	320	375	420	285	310	365	410	180	205	250	295	265	290	345	390	—	—	—	—
	—	—	—	—	*950*	*1050*	*1225*	*1375*	*940*	*1025*	*1200*	*1350*	*590*	*670*	*820*	*970*	*870*	*950*	*1125*	*1275*	—	—	—	—
K4	—	—	—	—	275	305	355	400	270	300	350	390	170	195	240	280	250	275	330	370	—	—	—	—
	—	—	—	—	*900*	*1000*	*1175*	*1300*	*890*	*980*	*1150*	*1275*	*560*	*640*	*790*	*920*	*820*	*900*	*1075*	*1225*	—	—	—	—
K5	—	—	—	—	170	190	220	250	165	185	215	245	105	120	145	170	155	170	200	225	—	—	—	—
	—	—	—	—	*560*	*620*	*720*	*820*	*540*	*610*	*710*	*800*	*345*	*395*	*475*	*560*	*510*	*560*	*660*	*740*	—	—	—	—
K6	—	—	—	—	245	270	315	355	240	260	310	345	150	175	210	250	220	245	290	325	—	—	—	—
	—	—	—	—	*800*	*890*	*1025*	*1175*	*790*	*850*	*1025*	*1125*	*490*	*570*	*690*	*820*	*720*	*800*	*950*	*1075*	—	—	—	—
K7	—	—	—	—	220	240	280	320	215	235	275	315	135	155	185	220	200	220	255	290	—	—	—	—
	—	—	—	—	*720*	*790*	*920*	*1050*	*710*	*770*	*900*	*1025*	*445*	*510*	*610*	*720*	*660*	*720*	*840*	*950*	—	—	—	—
N1	1575	1800	2150	2525	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	5175	*5900*	*7050*	*8275*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	640	730	870	1025	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	2100	*2400*	*2850*	*3375*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	425	490	580	680	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1400	*1600*	*1900*	*2225*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	485	560	660	780	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1600	*1825*	*2175*	*2550*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	55	65	75	90	46	50	65	75	27	30	36	43
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*215*	*245*	*295*	*150*	*165*	*215*	*245*	*90*	*100*	*120*	*140*
S2	—	—	—	—	—	—	—	—	—	—	—	—	45	50	60	75	37	42	50	60	21	24	29	34
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*165*	*195*	*245*	*120*	*140*	*165*	*195*	*70*	*80*	*95*	*110*
S3	—	—	—	—	—	—	—	—	—	—	—	—	40	45	55	65	33	37	45	50	19	21	26	30
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*150*	*180*	*215*	*110*	*120*	*150*	*165*	*60*	*70*	*85*	*100*
S11	—	—	—	—	—	—	—	—	—	—	—	—	80	90	105	125	65	75	90	105	37	43	50	60
	—	—	—	—	—	—	—	—	—	—	—	—	*260*	*295*	*345*	*410*	*215*	*245*	*295*	*345*	*120*	*140*	*165*	*195*
S12	—	—	—	—	—	—	—	—	—	—	—	—	55	60	75	85	44	50	60	70	35	39	48	55
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*245*	*280*	*145*	*165*	*195*	*230*	*115*	*130*	*155*	*180*
S13	—	—	—	—	—	—	—	—	—	—	—	—	32	36	43	50	26	30	36	42	20	23	27	32
	—	—	—	—	—	—	—	—	—	—	—	—	*105*	*120*	*140*	*165*	*85*	*100*	*120*	*140*	*65*	*75*	*90*	*105*
H5	—	—	—	—	50	55	70	80	—	—	—	—	46	55	65	75	41	47	55	65	—	—	—	—
	—	—	—	—	*165*	*180*	*230*	*260*	—	—	—	—	*150*	*180*	*215*	*245*	*135*	*155*	*180*	*215*	—	—	—	—
H8	—	—	—	—	55	60	75	90	—	—	—	—	49	55	70	80	43	49	60	70	—	—	—	—
	—	—	—	—	*180*	*195*	*245*	*295*	—	—	—	—	*160*	*180*	*230*	*260*	*140*	*160*	*195*	*230*	—	—	—	—
H11	—	—	—	—	65	75	90	105	—	—	—	—	60	65	80	95	50	60	70	85	—	—	—	—
	—	—	—	—	*215*	*245*	*295*	*345*	—	—	—	—	*195*	*215*	*260*	*310*	*165*	*195*	*230*	*280*	—	—	—	—
H12	—	—	—	—	100	110	135	160	—	—	—	—	95	110	135	160	80	90	110	125	—	—	—	—
	—	—	—	—	*330*	*360*	*445*	*520*	—	—	—	—	*310*	*360*	*445*	*520*	*260*	*295*	*360*	*410*	—	—	—	—

R217/220.29I-08 – In mm



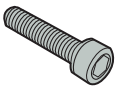
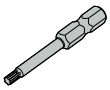
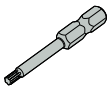
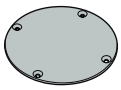


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 696-698
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

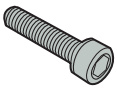
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.29I-0050-08.4A	03278978	Manicotto	34,2	50,0	4	8,0	22,0	41,0	–	22,0	50,0	–	4,8	84,4	98,0	9700	0,4	RP..1605
R220.29I-0052-08.4A	03278979	Manicotto	36,2	52,0	4	8,0	22,0	41,0	–	22,0	50,0	–	5,7	88,4	102,0	9600	0,4	RP..1605
R220.29I-0063-08.4A	03278980	Manicotto	47,1	63,0	4	8,0	22,0	49,0	–	22,0	50,0	–	7,5	110,2	124,0	8700	0,6	RP..1605
R220.29I-0063-08.5A	03278981	Manicotto	47,1	63,0	5	8,0	22,0	49,0	–	22,0	50,0	–	7,1	110,2	124,0	8700	0,7	RP..1605
R220.29I-0063-08.6A	03278982	Manicotto	47,1	63,0	6	8,0	22,0	49,0	–	22,0	50,0	–	7,1	110,2	124,0	8700	0,6	RP..1605
R220.29I-0066-08.6A	03278984	Manicotto	50,0	66,0	6	8,0	27,0	61,0	–	27,0	50,0	–	6,7	116,0	130,0	8400	0,8	RP..1605
R220.29I-0066-08.5A	03278983	Manicotto	50,1	66,0	5	8,0	27,0	61,0	–	27,0	50,0	–	6,9	116,2	130,0	8400	0,8	RP..1605
R220.29I-0080-08.5A	03278985	Manicotto	64,1	80,0	5	8,0	27,0	61,0	–	27,0	50,0	–	5,0	144,2	158,0	7700	1,1	RP..1605
R220.29I-0080-08.7A	03278986	Manicotto	64,1	80,0	7	8,0	27,0	61,0	–	27,0	50,0	–	5,0	144,2	158,0	7700	1,1	RP..1605
R220.29I-0084-08.5A	03278987	Manicotto	68,1	84,0	5	8,0	32,0	79,0	–	32,0	50,0	–	4,6	152,2	166,0	7500	1,4	RP..1605
R220.29I-0100-08.6MA	03278992	Manicotto	84,1	100,0	6	8,0	32,0	79,0	–	32,0	50,0	–	3,8	184,2	198,0	6800	1,7	RP..1605
R220.29I-0100-08.8A	03278988	Manicotto	84,1	100,0	8	8,0	32,0	79,0	–	32,0	50,0	–	3,7	184,2	198,0	6800	1,7	RP..1605
R220.29I-0125-08.6MA	03278991	Manicotto	109,1	125,0	6	8,0	40,0	90,0	–	40,0	63,0	–	2,8	234,2	248,0	6100	3,1	RP..1605
R220.29I-0125-08.10A	03278989	Manicotto	109,1	125,0	10	8,0	40,0	90,0	–	40,0	63,0	–	2,8	234,2	248,0	6100	3,2	RP..1605
R220.29I-8160-08.7MA	03278993	Manicotto	143,1	160,0	7	8,0	40,0	90,0	–	40,0	63,0	–	2,2	302,2	318,0	5400	4,2	RP..1605
R220.29I-8160-08.10A	03278990	Manicotto	144,1	160,0	10	8,0	40,0	90,0	–	40,0	63,0	–	2,1	304,2	318,0	5400	4,2	RP..1605
R217.29I-1632.RE-08.2A	03278975	Combimaster	15,9	32,0	2	8,0	–	30,0	M16	–	40,0	62,75	17,8	47,8	62,0	12200	0,3	RP..1605
R217.29I-1640.RE-08.3A	03278976	Combimaster	24,2	40,0	3	8,0	–	30,0	M16	–	40,0	62,75	2,4	64,4	78,0	10900	0,3	RP..1605
R217.29I-2040.RE-08.3A	03278977	Combimaster	24,2	40,0	3	8,0	–	36,5	M20	–	40,0	67,0	2,4	64,4	78,0	10900	0,3	RP..1605

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Supporto inserto	Chiave	Coperchio	Vite coperchio	Chiave per vite supporto	Vite supporto	Vite di fermo
										
R217.29I-1632-2040	–	1/4HEX-T20PX50	C05010-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0050-0052	220.17-692M	1/4HEX-T20PX50	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0063	MC6S10X40	1/4HEX-T20PX50	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0066-0080	MC6S12X40	1/4HEX-T20PX50	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0084	950E1645	1/4HEX-T20PX50	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0100	950E1645	1/4HEX-T20PX90	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0100MA	950E1645	1/4HEX-T20PX90	C05018-T20P	SRP1604IM0	1/4HEX-T05PX50	–	–	1/4HEX-H5.0X50	CA5010	SX2035-T05P
R220.29I-0125	MC6S20X50	1/4HEX-T20PX90	C05013-T20P	–	1/4HEX-T05PX50	–	–	–	–	SX2035-T05P
R220.29I-0125MA	MC6S20X50	1/4HEX-T20PX90	C05018-T20P	SRP1604IM0	1/4HEX-T05PX50	–	–	1/4HEX-H5.0X50	CA5010	SX2035-T05P
R220.29I-8160	–	1/4HEX-T20PX90	C05013-T20P	–	1/4HEX-T05PX50	SC160-53	MF6S4X10	–	–	SX2035-T05P
R220.29I-8160MA	–	1/4HEX-T20PX90	C05018-T20P	SRP1604IM0	1/4HEX-T05PX50	SC160-53	MF6S4X10	1/4HEX-H5.0X50	CA5010	SX2035-T05P

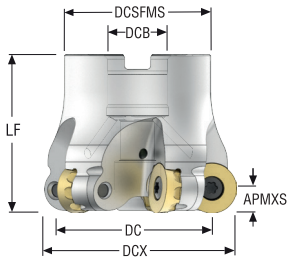
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.29I-1632-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.29I-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.29I-08 – Pollici

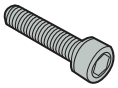
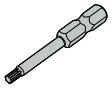
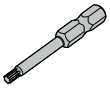




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 696-698
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch		inch	inch		lb	
R220.29I-02.00-08.4A	03278994	Manicotto	1.379	2.000	4	0.315	0.750	1.614	0.750	2.000	2,7	3.388	3.921	9600	0.880	RP..1605
R220.29I-02.50-08.5A	03278995	Manicotto	1.876	2.500	5	0.315	0.750	1.811	0.750	2.000	7,0	4.382	4.921	8700	1.540	RP..1605
R220.29I-03.00-08.6A	03278996	Manicotto	2.376	3.000	6	0.315	1.000	2.402	1.000	2.000	5,3	5.381	5.921	7700	2.200	RP..1605
R220.29I-04.00-08.7A	03278997	Manicotto	3.375	4.000	7	0.315	1.500	3.504	1.500	2.500	3,6	7.380	7.921	6800	5.510	RP..1605

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave	Vite di fermo
					
R220.29I-02.00-02.50	UC6S3/8UNFX11/2	1/4HEX-T20PX50	C05013-T20P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C05013-T20P	1/4HEX-T05PX50	SX2035-T05P
R220.29I-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P	1/4HEX-T05PX50	SX2035-T05P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29I-08 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RPKT1605M0T-8-M12 MP2501	3,0 *0.12*	0,38 0.015	0,38 0.015	0,46 0.018	0,75 0.030
P2	RPKT1605M0T-8-M12 MP2501	3,0 *0.12*	0,40 0.016	0,40 0.016	0,48 0.019	0,75 0.030
P3	RPKT1605M0T-8-M12 MP2501	3,0 *0.12*	0,38 0.015	0,38 0.015	0,44 0.017	0,70 0.028
P4	RPKT1605M0T-8-M12 MP2501	3,0 *0.12*	0,36 0.014	0,36 0.014	0,44 0.017	0,70 0.028
P5	RPKT1605M0T-8-M12 MP2501	3,0 *0.12*	0,36 0.014	0,36 0.014	0,42 0.017	0,70 0.028
P6	RPKT1605M0T-8-M18 MS2500	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
P7	RPKT1605M0T-6-M18 MS2500	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
P8	RPKT1605M0T-6-M18 MS2500	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,1 0.044
P11	RPKT1605M0T-6-M18 MS2500	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
P12	RPKT1605M0T-6-M18 MS2500	2,5 *0.10*	0,40 0.016	0,40 0.016	0,48 0.019	0,75 0.030
M1	RPHT1605M0T-8-M12 MS2050	3,0 *0.12*	0,40 0.016	0,40 0.016	0,48 0.019	0,75 0.030
M2	RPHT1605M0T-8-M12 MS2050	3,0 *0.12*	0,36 0.014	0,36 0.014	0,42 0.017	0,70 0.028
M3	RPHT1605M0T-8-M12 MS2050	2,5 *0.10*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
M4	RPKT1605M0T-8-M12 MP3501	1,9 *0.075*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
M5	RPKT1605M0T-8-M12 MP3501	1,9 *0.075*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
K1	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,60 0.024	0,60 0.024	0,70 0.028	1,2 0.048
K2	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
K3	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
K4	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
K5	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,60 0.024	0,95 0.038
K6	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,55 0.022	0,55 0.022	0,65 0.026	1,0 0.040
K7	RPKT1605M0T-8-M18 MK2050	3,0 *0.12*	0,48 0.019	0,48 0.019	0,60 0.024	0,95 0.038
N1	RPHT1605M0T-8-ME11 F40M	— —	— —	— —	— —	— —
N2	RPHT1605M0T-8-ME11 F40M	— —	— —	— —	— —	— —
N3	RPHT1605M0T-8-ME11 F40M	— —	— —	— —	— —	— —
N11	RPHT1605M0T-8-ME11 F40M	— —	— —	— —	— —	— —
S1	RPKT1605M0T-8-M12 MS2500	1,9 *0.075*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S2	RPKT1605M0T-8-M12 MS2500	1,9 *0.075*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S3	RPKT1605M0T-8-M12 MS2500	1,9 *0.075*	0,30 0.012	0,30 0.012	0,34 0.013	0,55 0.022
S11	RPHT1605M0T-8-M12 MS2050	2,5 *0.10*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S12	RPHT1605M0T-8-M12 MS2050	2,5 *0.10*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S13	RPHT1605M0T-8-M12 MS2050	1,9 *0.075*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
H5	RPKW1605M0T-8-MD20 F15M	2,5 *0.10*	0,44 0.017	0,44 0.017	0,55 0.022	0,85 0.034
H8	RPKW1605M0T-8-MD20 F15M	2,5 *0.10*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
H11	RPKW1605M0T-8-MD20 F15M	2,5 *0.10*	0,44 0.017	0,44 0.017	0,55 0.022	0,85 0.034
H12	RPKW1605M0T-8-MD20 F15M	2,5 *0.10*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

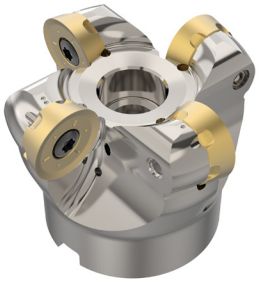
R217/220.29I-08 – Parametri di taglio v_c = (m/min)/(sf/min)

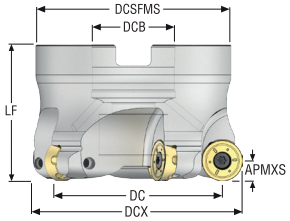
SMG	F15M				MK2050				MP3000				MS2050				F40M				MP2051				MP2050			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	205	240	285	335	255	295	355	420	235	270	340	405	270	310	365	420	260	285	330	370	315	375	480	560	295	340	410	475
	670	*790*	*940*	*1100*	*840*	*970*	*1175*	*1375*	*770*	*890*	*1125*	*1325*	*890*	*1025*	*1200*	*1375*	*850*	*940*	*1075*	*1225*	*1025*	*1225*	*1575*	*1825*	*970*	*1125*	*1350*	*1550*
P2	200	235	280	325	245	290	345	410	225	265	330	395	255	295	350	405	245	270	315	360	295	350	455	550	280	330	390	460
	660	*770*	*920*	*1075*	*800*	*950*	*1125*	*1350*	*740*	*870*	*1075*	*1300*	*840*	*970*	*1150*	*1325*	*800*	*890*	*1025*	*1175*	*970*	*1150*	*1500*	*1800*	*920*	*1075*	*1275*	*1500*
P3	175	205	245	285	220	255	305	360	205	240	300	350	225	260	310	360	215	240	285	320	265	315	415	490	245	285	350	405
	570	*670*	*800*	*940*	*720*	*840*	*1000*	*1175*	*670*	*790*	*980*	*1150*	*740*	*850*	*1025*	*1175*	*710*	*790*	*940*	*1050*	*870*	*1025*	*1350*	*1600*	*800*	*940*	*1150*	*1325*
P4	155	180	215	250	195	225	270	315	180	210	260	310	205	230	275	315	200	225	265	300	245	285	365	430	220	255	305	360
	510	*590*	*710*	*820*	*640*	*740*	*890*	*1025*	*590*	*690*	*850*	*1025*	*670*	*750*	*900*	*1025*	*660*	*740*	*870*	*980*	*800*	*940*	*1200*	*1400*	*720*	*840*	*1000*	*1175*
P5	150	175	205	245	185	215	260	300	175	200	250	295	195	220	265	300	185	205	240	265	230	275	350	410	210	245	290	345
	490	*570*	*670*	*800*	*610*	*710*	*850*	*980*	*570*	*660*	*820*	*970*	*640*	*720*	*870*	*980*	*610*	*670*	*790*	*870*	*750*	*900*	*1150*	*1350*	*690*	*800*	*950*	*1125*
P6	165	195	235	275	205	240	290	345	195	225	280	340	215	250	295	340	210	230	270	300	260	305	390	465	235	275	330	385
	540	*640*	*770*	*900*	*670*	*790*	*950*	*1125*	*640*	*740*	*920*	*1125*	*710*	*820*	*970*	*1125*	*690*	*750*	*890*	*980*	*850*	*1000*	*1275*	*1525*	*770*	*900*	*1075*	*1275*
P7	155	185	220	260	195	230	275	325	185	210	265	320	205	235	280	320	195	220	255	285	245	290	370	435	220	260	310	365
	510	*610*	*720*	*850*	*640*	*750*	*900*	*1075*	*610*	*690*	*870*	*1050*	*670*	*770*	*920*	*1050*	*640*	*720*	*840*	*940*	*800*	*950*	*1225*	*1425*	*720*	*850*	*1025*	*1200*
P8	150	175	205	240	185	215	260	300	175	200	250	295	190	215	265	300	180	200	240	265	225	265	350	410	205	240	290	345
	490	*570*	*670*	*790*	*610*	*710*	*850*	*980*	*570*	*660*	*820*	*970*	*620*	*710*	*870*	*980*	*590*	*660*	*790*	*870*	*740*	*870*	*1150*	*1350*	*670*	*790*	*950*	*1125*
P11	155	180	215	250	190	220	265	315	180	205	260	315	200	230	270	310	190	210	245	275	225	290	400	520	215	250	300	355
	510	*590*	*710*	*820*	*620*	*720*	*870*	*1025*	*590*	*670*	*850*	*1025*	*660*	*750*	*890*	*1025*	*620*	*690*	*800*	*900*	*740*	*950*	*1300*	*1700*	*710*	*820*	*980*	*1175*
P12	—	—	—	—	125	150	180	210	130	150	185	215	135	155	180	205	130	145	165	185	170	215	280	355	145	165	200	235
	—	—	—	—	*410*	*490*	*590*	*690*	*425*	*490*	*610*	*710*	*445*	*510*	*590*	*670*	*425*	*475*	*540*	*610*	*560*	*710*	*920*	*1175*	*475*	*540*	*660*	*770*
M1	—	—	—	—	—	—	—	—	180	205	250	295	190	225	270	315	175	205	245	285	245	310	440	580	200	235	280	330
	—	—	—	—	—	—	—	—	*590*	*670*	*820*	*970*	*620*	*740*	*890*	*1025*	*570*	*670*	*800*	*940*	*800*	*1025*	*1450*	*1900*	*660*	*770*	*920*	*1075*
M2	—	—	—	—	—	—	—	—	150	175	205	240	160	185	225	260	145	170	205	240	215	275	380	495	170	195	235	275
	—	—	—	—	—	—	—	—	*490*	*570*	*670*	*790*	*520*	*610*	*740*	*850*	*475*	*560*	*670*	*790*	*710*	*900*	*1250*	*1625*	*560*	*640*	*770*	*900*
M3	—	—	—	—	—	—	—	—	120	140	170	200	130	150	180	210	120	135	165	195	185	235	325	415	135	160	190	220
	—	—	—	—	—	—	—	—	*395*	*460*	*560*	*660*	*425*	*490*	*590*	*690*	*395*	*445*	*540*	*640*	*610*	*770*	*1075*	*1350*	*445*	*520*	*620*	*720*
M4	—	—	—	—	—	—	—	—	95	110	135	160	100	115	140	165	90	105	130	150	150	190	250	325	105	120	145	175
	—	—	—	—	—	—	—	—	*310*	*360*	*445*	*520*	*330*	*375*	*460*	*540*	*295*	*345*	*425*	*490*	*490*	*620*	*820*	*1075*	*345*	*395*	*475*	*570*
M5	—	—	—	—	—	—	—	—	80	90	110	130	85	95	115	140	75	90	105	125	125	155	210	270	90	100	125	145
	—	—	—	—	—	—	—	—	*260*	*295*	*360*	*425*	*280*	*310*	*375*	*460*	*245*	*295*	*345*	*410*	*410*	*510*	*690*	*890*	*295*	*330*	*410*	*475*
K1	160	185	220	260	265	310	375	440	190	220	265	310	—	—	—	—	170	200	240	280	—	—	—	—	—	—	—	—
	520	*610*	*720*	*850*	*870*	*1025*	*1225*	*1450*	*620*	*720*	*870*	*1025*	—	—	—	—	*560*	*660*	*790*	*920*	—	—	—	—	—	—	—	—
K2	140	165	195	235	240	280	335	390	170	195	235	275	—	—	—	—	155	180	215	250	—	—	—	—	—	—	—	—
	460	*540*	*640*	*770*	*790*	*920*	*1100*	*1275*	*560*	*640*	*770*	*900*	—	—	—	—	*510*	*590*	*710*	*820*	—	—	—	—	—	—	—	—
K3	120	140	165	195	200	235	280	330	140	165	200	235	—	—	—	—	130	150	180	210	—	—	—	—	—	—	—	—
	395	*460*	*540*	*640*	*660*	*770*	*920*	*1075*	*460*	*540*	*660*	*770*	—	—	—	—	*425*	*490*	*590*	*690*	—	—	—	—	—	—	—	—
K4	115	135	160	190	190	225	270	315	135	160	190	220	—	—	—	—	125	145	175	205	—	—	—	—	—	—	—	—
	375	*445*	*520*	*620*	*620*	*740*	*890*	*1025*	*445*	*520*	*620*	*720*	—	—	—	—	*410*	*475*	*570*	*670*	—	—	—	—	—	—	—	—
K5	70	80	95	115	120	140	165	195	85	100	120	140	—	—	—	—	75	90	105	125	—	—	—	—	—	—	—	—
	230	*260*	*310*	*375*	*395*	*460*	*540*	*640*	*280*	*330*	*395*	*460*	—	—	—	—	*245*	*295*	*345*	*410*	—	—	—	—	—	—	—	—
K6	100	115	140	165	170	200	235	275	120	140	165	195	—	—	—	—	110	130	150	180	—	—	—	—	—	—	—	—
	330	*375*	*460*	*540*	*560*	*660*	*770*	*900*	*395*	*460*	*540*	*640*	—	—	—	—	*360*	*425*	*490*	*590*	—	—	—	—	—	—	—	—
K7	90	105	125	145	155	180	215	250	110	125	150	175	—	—	—	—	100	115	135	160	—	—	—	—	—	—	—	—
	295	*345*	*410*	*475*	*510*	*590*	*710*	*820*	*360*	*410*	*490*	*570*	—	—	—	—	*330*	*375*	*445*	*520*	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1275	1475	1775	2100	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*4175*	*4850*	*5825*	*6900*	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	510	600	720	840	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1675*	*1975*	*2350*	*2750*	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	340	400	475	560	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1300*	*1550*	*1825*	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	390	455	540	640	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1275*	*1500*	*1775*	*2100*	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	44	50	60	75	47	55	65	75	43	50	60	70	50	60	70	85	50	60	70	85
	—	—	—	—	—	—	—	—	*145*	*165*	*195*	*245*	*155*	*180*	*215*	*245*	*140*	*165*	*195*	*230*	*165*	*195*	*230*	*280*	*165*	*195*	*230*	*280*
S2	—	—	—	—	—	—	—	—	36	41	50	60	38	44	55	60	35	40	48	55	42	48	60	70	42	48	60	70
	—	—	—	—	—	—	—	—	*120*	*135*	*165*	*195*	*125*	*145*	*180*	*195*	*115*	*130*	*155*	*180*	*140*	*155*	*195*	*230*	*140*	*155*	*195*	*230*
S3	—	—	—	—	—	—	—	—	32	36	44	50	33	39	46	55	30	35	42	49	37	42	50	60	37	42	50	60
	—	—	—	—	—	—	—	—	*105*	*120*	*145*	*165*	*110*	*130*	*150*	*180*	*100*	*115*	*140*	*160*	*120*	*140*	*165*	*195*	*120*	*140*	*165*	*195*
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	75	90	105	60	70	85	95	70	85	100	115	70	85	100	115
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*245*	*295*	*345*	*195*	*230*	*280*	*310*	*230*	*280*	*330*	*375*	*230*	*280*	*330*	*375*
S12	—	—	—	—	—	—	—	—	—	—	—	—	45	55	65	75	41	48	60	65	50	60	70	80	50	60	70	80
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*180*	*215*	*245*	*135*	*155*	*195*	*215*	*165*	*195*	*230*	*260*	*165*	*195*	*230*	*260*
S13	—	—	—	—	—	—	—	—	—	—	—	—	27	31	37	43	24	28	34	39	29	34	41	48	29	34	41	48
	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*120*	*140*	*80*	*90*	*110*	*130*	*95*	*110*	*135*	*155*	*95*	*110*	*135*	*155*
H5	34	40	48	55	44	50	60	70	38	44	55	60	—	—	—	—	37	43	50	60	—	—	—	—	—	—	—	—
	110	*130*	*155*	*180*	*145*	*165*	*195*	*230*	*125*	*145*	*180*	*195*	—	—	—	—	*120*	*140*	*165*	*195*	—	—	—	—	—	—	—	—
H8	37	43	50	60	47	55	65	75	41	48	55	65	—	—	—	—	39	46	55	65	—	—	—	—	—	—	—	—
	120	*140*	*165*	*195*	*155*	*180*	*215*	*245*	*135*	*155*	*180*	*215*	—	—	—	—	*130*	*150*	*180*	*215*	—	—	—	—	—	—	—	—
H11	43	50	60	70	55	65	80	90	48	55	70	80	—	—	—	—	47	55	65	75	110	140	180	230	55	65	75	90
	140	*165*	*195*	*230*	*180*	*215*	*260*	*295*	*155*	*180*	*230*	*260*	—	—	—	—	*155*	*180*	*215*	*245*	*360*	*460*	*590*	*750*	*180*	*215*	*245*	*295*
H12	65	75	90	105	85	95	115	135	80	90	110	130	—	—	—	—	70	80	100	115	110	140	175	215	90	105	125	145
	215	*245*	*295*	*345*	*280*	*310*	*375*	*445*	*260*	*295*	*360*	*425*	—	—	—	—	*230*	*260*	*330*	*375*	*360*	*460*	*570*	*710*	*295*	*345*	*410*	*475*

R217/220.29I-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	365 *1200*	405 *1325*	480 *1575*	550 *1800*	350 *1150*	395 *1300*	465 *1525*	530 *1750*	335 *1100*	380 *1250*	450 *1475*	520 *1700*	310 *1025*	345 *1125*	410 *1350*	475 *1550*	240 *790*	275 *900*	325 *1075*	370 *1225*
P2	355 *1175*	395 *1300*	465 *1525*	530 *1750*	340 *1125*	385 *1275*	455 *1500*	520 *1700*	325 *1075*	370 *1225*	440 *1450*	500 *1650*	300 *980*	340 *1125*	400 *1300*	460 *1500*	230 *750*	260 *850*	310 *1025*	360 *1175*
P3	315 *1025*	355 *1175*	415 *1350*	470 *1550*	305 *1000*	340 *1125*	405 *1325*	455 *1500*	290 *950*	330 *1075*	390 *1275*	445 *1450*	270 *890*	305 *1000*	360 *1175*	405 *1325*	200 *660*	230 *750*	275 *900*	315 *1025*
P4	280 *920*	310 *1025*	365 *1200*	410 *1350*	270 *890*	300 *980*	355 *1175*	400 *1300*	255 *840*	290 *950*	345 *1125*	390 *1275*	240 *790*	265 *870*	315 *1025*	355 *1175*	195 *640*	220 *720*	265 *870*	300 *980*
P5	265 *870*	295 *970*	350 *1150*	395 *1300*	255 *840*	290 *950*	340 *1125*	385 *1275*	245 *800*	275 *900*	330 *1075*	375 *1225*	225 *740*	255 *840*	300 *980*	340 *1125*	170 *560*	195 *640*	230 *750*	265 *870*
P6	295 *970*	335 *1100*	390 *1275*	450 *1475*	290 *950*	325 *1075*	380 *1250*	440 *1450*	275 *900*	310 *1025*	370 *1225*	425 *1400*	255 *840*	285 *940*	340 *1125*	390 *1275*	195 *640*	220 *720*	260 *850*	300 *980*
P7	280 *920*	315 *1025*	370 *1225*	425 *1400*	270 *890*	305 *1000*	360 *1175*	415 *1350*	260 *850*	295 *970*	345 *1125*	405 *1325*	240 *790*	270 *890*	320 *1050*	370 *1225*	180 *590*	210 *690*	245 *800*	280 *920*
P8	265 *870*	295 *970*	350 *1150*	395 *1300*	255 *840*	290 *950*	340 *1125*	385 *1275*	245 *800*	275 *900*	330 *1075*	375 *1225*	225 *740*	255 *840*	300 *980*	340 *1125*	170 *560*	190 *620*	230 *750*	265 *870*
P11	275 *900*	305 *1000*	360 *1175*	415 *1350*	265 *870*	295 *970*	350 *1150*	405 *1325*	255 *840*	285 *940*	335 *1100*	390 *1275*	235 *770*	260 *850*	310 *1025*	360 *1175*	175 *570*	200 *660*	240 *790*	275 *900*
P12	185 *610*	210 *690*	240 *790*	270 *890*	185 *610*	205 *670*	235 *770*	265 *870*	175 *570*	195 *640*	230 *750*	260 *850*	165 *540*	180 *590*	210 *690*	240 *790*	115 *375*	135 *445*	155 *510*	175 *570*
M1	— —	— —	— —	— —	180 *590*	210 *690*	255 *840*	300 *980*	195 *640*	230 *750*	275 *900*	325 *1075*	170 *560*	195 *640*	235 *770*	280 *920*	150 *490*	175 *570*	210 *690*	250 *820*
M2	— —	— —	— —	— —	150 *490*	175 *570*	210 *690*	245 *800*	165 *540*	190 *620*	230 *750*	265 *870*	140 *460*	165 *540*	195 *640*	230 *750*	125 *410*	145 *475*	175 *570*	205 *670*
M3	— —	— —	— —	— —	125 *410*	145 *475*	175 *570*	205 *670*	135 *445*	155 *510*	190 *620*	220 *720*	115 *375*	135 *445*	165 *540*	190 *620*	100 *330*	120 *395*	145 *475*	165 *540*
M4	— —	— —	— —	— —	95 *310*	110 *360*	135 *445*	160 *520*	105 *345*	120 *395*	145 *475*	175 *570*	90 *295*	105 *345*	125 *410*	150 *490*	80 *260*	90 *295*	110 *360*	130 *425*
M5	— —	— —	— —	— —	80 *260*	95 *310*	115 *375*	135 *445*	85 *280*	100 *330*	120 *395*	145 *475*	75 *245*	85 *280*	105 *345*	125 *410*	65 *215*	75 *245*	90 *295*	110 *360*
K1	355 *1175*	400 *1300*	470 *1550*	540 *1775*	345 *1125*	385 *1275*	455 *1500*	520 *1700*	215 *710*	255 *840*	305 *1000*	360 *1175*	305 *1000*	340 *1125*	405 *1325*	465 *1525*	— —	— —	— —	— —
K2	320 *1050*	360 *1175*	420 *1375*	475 *1550*	310 *1025*	350 *1150*	410 *1350*	465 *1525*	195 *640*	225 *740*	270 *890*	315 *1025*	275 *900*	310 *1025*	365 *1200*	410 *1350*	— —	— —	— —	— —
K3	270 *890*	305 *1000*	355 *1175*	400 *1300*	265 *870*	295 *970*	345 *1125*	390 *1275*	165 *540*	190 *620*	230 *750*	270 *890*	235 *770*	260 *850*	310 *1025*	350 *1150*	— —	— —	— —	— —
K4	260 *850*	290 *950*	340 *1125*	385 *1275*	250 *820*	280 *920*	330 *1075*	375 *1225*	155 *510*	180 *590*	220 *720*	255 *840*	220 *720*	250 *820*	295 *970*	335 *1100*	— —	— —	— —	— —
K5	160 *520*	180 *590*	210 *690*	240 *790*	160 *520*	175 *570*	205 *670*	235 *770*	95 *310*	115 *375*	135 *445*	160 *520*	140 *460*	155 *510*	185 *610*	205 *670*	— —	— —	— —	— —
K6	230 *750*	255 *840*	300 *980*	340 *1125*	220 *720*	250 *820*	290 *950*	330 *1075*	140 *460*	160 *520*	195 *640*	225 *740*	195 *640*	220 *720*	260 *850*	295 *970*	— —	— —	— —	— —
K7	210 *690*	235 *770*	270 *890*	305 *1000*	200 *660*	225 *740*	265 *870*	300 *980*	125 *410*	145 *475*	175 *570*	205 *670*	180 *590*	200 *660*	235 *770*	265 *870*	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	— —	— —	50 *165*	60 *195*	70 *230*	85 *280*	42 *140*	48 *155*	60 *195*	70 *230*	24 *80*	28 *90*	34 *110*	40 *130*
S2	— —	— —	— —	— —	— —	— —	— —	— —	41 *135*	48 *155*	60 *195*	70 *230*	34 *110*	39 *130*	47 *155*	55 *180*	20 *65*	23 *75*	27 *90*	32 *105*
S3	— —	— —	— —	— —	— —	— —	— —	— —	36 *120*	42 *140*	50 *165*	60 *195*	30 *100*	35 *115*	42 *140*	48 *155*	17 *55*	20 *65*	24 *80*	28 *90*
S11	— —	— —	— —	— —	— —	— —	— —	— —	70 *230*	80 *260*	100 *330*	115 *375*	60 *195*	70 *230*	80 *260*	95 *310*	34 *110*	39 *130*	47 *155*	55 *180*
S12	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	70 *230*	80 *260*	40 *130*	47 *155*	55 *180*	65 *215*	31 *100*	36 *120*	44 *145*	50 *165*
S13	— —	— —	— —	— —	— —	— —	— —	— —	29 *95*	33 *110*	40 *130*	48 *155*	24 *80*	27 *90*	33 *110*	39 *130*	18 *60*	21 *70*	25 *80*	30 *100*
H5	48 *155*	55 *180*	70 *230*	80 *260*	— —	— —	— —	— —	42 *140*	49 *160*	60 *195*	70 *230*	37 *120*	43 *140*	50 *165*	60 *195*	— —	— —	— —	— —
H8	55 *180*	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —	46 *150*	55 *180*	65 *215*	75 *245*	41 *135*	47 *155*	55 *180*	65 *215*	— —	— —	— —	— —
H11	60 *195*	70 *230*	85 *280*	100 *330*	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	48 *155*	55 *180*	65 *215*	80 *260*	— —	— —	— —	— —
H12	95 *310*	110 *360*	130 *425*	155 *510*	— —	— —	— —	— —	90 *295*	105 *345*	125 *410*	150 *490*	75 *245*	85 *280*	100 *330*	120 *395*	— —	— —	— —	— —

R220.29I-38 – Pollici



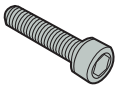
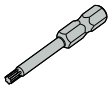
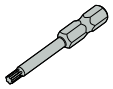


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 707-709
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch		inch	inch		lb	
R220.29I-02.50-38-04A	10005910	Manicotto	1.756	2.500	4	0.374	0.750	1.789	0.750	2.000	10,39	4.256	4.921	5800	1.320	RP..1906
R220.29I-03.00-38-06A	10005911	Manicotto	2.256	3.000	6	0.374	1.000	2.289	1.000	2.000	7,69	5.256	5.921	5100	1.980	RP..1906
R220.29I-04.00-38-05A	10005912	Manicotto	3.256	4.000	5	0.374	1.500	3.539	1.500	2.500	5,06	7.256	7.921	4500	5.070	RP..1906
R220.29I-04.00-38-06A	10005913	Manicotto	3.256	4.000	6	0.374	1.500	3.539	1.500	2.500	5,06	7.256	7.921	4500	5.070	RP..1906
R220.29I-05.00-38-07A	10005914	Manicotto	4.256	5.000	7	0.374	1.500	3.539	1.500	2.500	3,76	9.256	9.921	4000	6.830	RP..1906
R220.29I-05.00-38-09A	10005915	Manicotto	4.256	5.000	9	0.374	1.500	3.539	1.500	2.500	3,76	9.256	9.921	4000	6.610	RP..1906

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Grano di tenuta	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave
					
R220.29I-02.50	UC6S3/8UNFX11/2	SX2035-T05P	1/4HEX-T20PX50	C05013-T20P	1/4HEX-T05PX50
R220.29I-03.00	UC6S1/2UNFX1-1/2	SX2035-T05P	1/4HEX-T20PX50	C05013-T20P	1/4HEX-T05PX50
R220.29I-04.00-05.00	UC6S3/4UNFX1-1/4	SX2035-T05P	1/4HEX-T20PX90	C05013-T20P	1/4HEX-T05PX50

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.29I-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217.29I-025 – Selezione dell'inserto – In mm/ In pollici

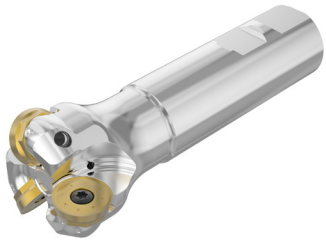
SMG		a_p	f_z			
			100%	30%	10%	5%
P1	RPHT190600T-6-M13 T350M	4,0 *0.16*	0,60 0.024	0,60 0.024	0,90 0.036	1,3 0.050
P2	RPHT190600T-6-M13 T350M	4,0 *0.16*	0,60 0.024	0,60 0.024	0,90 0.036	1,3 0.050
P3	RPHT190600T-6-M13 T350M	4,0 *0.16*	0,55 0.022	0,60 0.024	0,85 0.034	1,2 0.048
P4	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,60 0.024	0,85 0.034	1,2 0.048
P5	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,55 0.022	0,85 0.034	1,2 0.048
P6	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,55 0.022	0,80 0.032	1,2 0.048
P7	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,55 0.022	0,80 0.032	1,2 0.048
P8	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,60 0.024	0,85 0.034	1,2 0.048
P11	RPHT190600T-6-M13 MS2500	4,0 *0.16*	0,55 0.022	0,55 0.022	0,80 0.032	1,2 0.048
P12	RPHT190600T-6-M13 MS2500	3,0 *0.12*	0,42 0.017	0,40 0.016	0,55 0.022	0,80 0.032
M1	RPHT190600T-6-M13 F40M	4,0 *0.16*	0,60 0.024	0,60 0.024	0,90 0.036	1,3 0.050
M2	RPHT190600T-6-M13 F40M	4,0 *0.16*	0,55 0.022	0,55 0.022	0,85 0.034	1,2 0.048
M3	RPHT190600T-6-M13 F40M	3,0 *0.12*	0,50 0.020	0,48 0.019	0,65 0.026	0,95 0.038
M4	RPHT190600T-6-M13 F40M	2,5 *0.10*	0,48 0.019	0,50 0.020	0,60 0.024	0,80 0.032
M5	RPHT190600T-6-M13 F40M	2,5 *0.10*	0,48 0.019	0,50 0.020	0,60 0.024	0,80 0.032
S1	RPHT190600T-6-M13 MS2500	2,5 *0.10*	0,48 0.019	0,50 0.020	0,60 0.024	0,80 0.032
S2	RPHT190600T-6-M13 MS2500	2,5 *0.10*	0,48 0.019	0,50 0.020	0,60 0.024	0,80 0.032
S3	RPHT190600T-6-M13 MS2500	2,5 *0.10*	0,44 0.017	0,46 0.018	0,55 0.022	0,75 0.030
S11	RPHT190600T-6-M13 MS2050	2,5 *0.10*	0,55 0.022	0,50 0.020	0,65 0.026	0,95 0.038
S12	RPHT190600T-6-M13 MS2050	2,5 *0.10*	0,55 0.022	0,50 0.020	0,65 0.026	0,95 0.038
S13	RPHT190600T-6-M13 MS2050	2,5 *0.10*	0,48 0.019	0,50 0.020	0,60 0.024	0,80 0.032

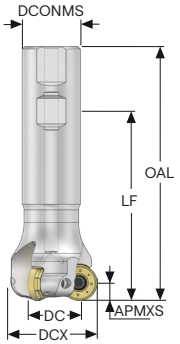
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29I-025 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	T350M				F40M				MS2050				MS2500			
	100%	30%	10%	5%	100%	30%	10%	5%	100%	30%	10%	5%	100%	30%	10%	5%
P1	215 *710*	305 *1000*	355 *1175*	370 *1225*	190 *620*	265 *870*	310 *1025*	320 *1050*	205 *670*	290 *950*	340 *1125*	355 *1175*	270 *890*	380 *1250*	445 *1450*	465 *1525*
P2	210 *690*	295 *970*	345 *1125*	360 *1175*	185 *610*	260 *850*	300 *980*	315 *1025*	200 *660*	285 *940*	330 *1075*	345 *1125*	265 *870*	370 *1225*	435 *1425*	450 *1475*
P3	185 *610*	255 *840*	305 *1000*	320 *1050*	160 *520*	220 *720*	265 *870*	275 *900*	180 *590*	245 *800*	290 *950*	305 *1000*	235 *770*	320 *1050*	380 *1250*	400 *1300*
P4	165 *540*	225 *740*	270 *890*	280 *920*	145 *475*	195 *640*	235 *770*	245 *800*	155 *510*	215 *710*	255 *840*	270 *890*	205 *670*	280 *920*	335 *1100*	350 *1150*
P5	155 *510*	220 *720*	255 *840*	265 *870*	135 *445*	190 *620*	220 *720*	230 *750*	150 *490*	210 *690*	245 *800*	255 *840*	195 *640*	275 *900*	320 *1050*	335 *1100*
P6	175 *570*	250 *820*	290 *950*	300 *980*	155 *510*	215 *710*	255 *840*	260 *850*	170 *560*	235 *770*	280 *920*	285 *940*	220 *720*	310 *1025*	365 *1200*	375 *1225*
P7	165 *540*	235 *770*	275 *900*	285 *940*	145 *475*	205 *670*	240 *790*	245 *800*	160 *520*	225 *740*	265 *870*	270 *890*	210 *690*	295 *970*	345 *1125*	355 *1175*
P8	155 *510*	215 *710*	255 *840*	265 *870*	135 *445*	185 *610*	220 *720*	230 *750*	150 *490*	205 *670*	245 *800*	255 *840*	195 *640*	270 *890*	320 *1050*	335 *1100*
P11	160 *520*	225 *740*	270 *890*	275 *900*	140 *460*	200 *660*	235 *770*	240 *790*	155 *510*	215 *710*	255 *840*	265 *870*	200 *660*	285 *940*	335 *1100*	345 *1125*
P12	110 *360*	150 *490*	175 *570*	185 *610*	95 *310*	130 *425*	155 *510*	160 *520*	105 *345*	145 *475*	170 *560*	175 *570*	135 *445*	190 *620*	220 *720*	230 *750*
M1	160 *520*	230 *750*	265 *870*	280 *920*	145 *475*	210 *690*	245 *800*	250 *820*	160 *520*	230 *750*	265 *870*	275 *900*	190 *620*	265 *870*	310 *1025*	325 *1075*
M2	135 *445*	190 *620*	220 *720*	230 *750*	120 *395*	175 *570*	200 *660*	210 *690*	135 *445*	190 *620*	220 *720*	230 *750*	155 *510*	220 *720*	255 *840*	270 *890*
M3	110 *360*	155 *510*	180 *590*	190 *620*	100 *330*	140 *460*	165 *540*	170 *560*	110 *360*	155 *510*	180 *590*	190 *620*	130 *425*	180 *590*	210 *690*	220 *720*
M4	150 *490*	210 *690*	245 *800*	260 *850*	80 *260*	110 *360*	125 *410*	135 *445*	85 *280*	120 *395*	140 *460*	150 *490*	100 *330*	140 *460*	165 *540*	175 *570*
M5	150 *490*	210 *690*	245 *800*	260 *850*	65 *215*	90 *295*	105 *345*	115 *375*	70 *230*	100 *330*	115 *375*	125 *410*	85 *280*	115 *375*	135 *445*	145 *475*
S1	41 *135*	55 *180*	65 *215*	70 *230*	37 *120*	50 *165*	60 *195*	65 *215*	41 *135*	55 *180*	65 *215*	70 *230*	49 *160*	70 *230*	80 *260*	85 *280*
S2	33 *110*	45 *150*	55 *180*	55 *180*	30 *100*	41 *135*	48 *155*	50 *165*	33 *110*	45 *150*	55 *180*	55 *180*	40 *130*	55 *180*	65 *215*	70 *230*
S3	29 *95*	40 *130*	47 *155*	49 *160*	26 *85*	36 *120*	42 *140*	45 *150*	29 *95*	40 *130*	47 *155*	49 *160*	35 *115*	48 *155*	55 *180*	60 *195*
S11	55 *180*	80 *260*	90 *295*	95 *310*	50 *165*	70 *230*	85 *280*	85 *280*	55 *180*	80 *260*	90 *295*	95 *310*	70 *230*	95 *310*	110 *360*	115 *375*
S12	39 *130*	55 *180*	65 *215*	65 *215*	35 *115*	49 *160*	60 *195*	60 *195*	39 *130*	55 *180*	65 *215*	65 *215*	47 *155*	65 *215*	80 *260*	80 *260*
S13	23 *75*	31 *100*	37 *120*	39 *130*	21 *70*	29 *95*	33 *110*	36 *120*	23 *75*	31 *100*	37 *120*	39 *130*	28 *90*	38 *125*	45 *150*	48 *155*

R217.29I-10 – In mm

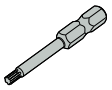




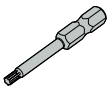
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 707-709
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.29I-3250.3-10.3.080A	10295636	Weldon	30,0	50,0	3	10,0	32,0	104,0	86,5	78,5	78,5	139,5	9,57	80,0	98,0	7800	0,9	RP..2006

Parti di ricambio, comprese nella fornitura

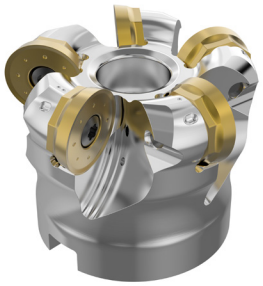
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
	1/4HEX-T20PX50	C05013-T20P

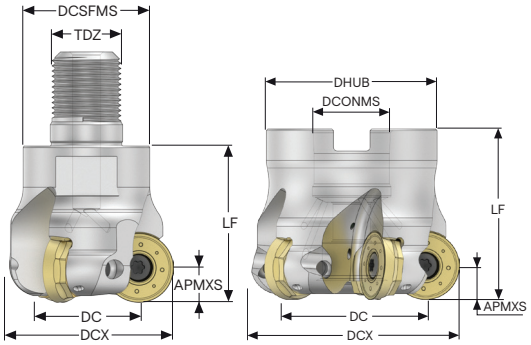
Accessori

Per fresa	Chiave dinamometrica regolabile	Coppia di serraggio inserto	Chiave	Vite di fermo	Chiave dinamometrica
					
	1/4HEX-T-HANDLE-5.0-14.0NM	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.29I-10 – In mm



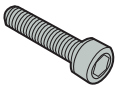
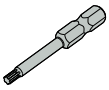
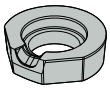
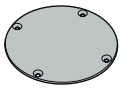


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 707-709
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

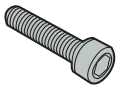
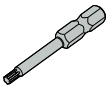
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	APMXE	DHUB	DCSFMS	TDZ	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm		mm	mm		mm	mm		kg	
R220.29I-0063-10-4A	10254929	Manicotto	43,0	63,0	4	10,0	10,0	50,0	49,0	–	22,0	50,0	5,65	106,0	124,0	7000	0,6	RP..2006
R220.29I-0063-10-5A	10254930	Manicotto	43,0	63,0	5	10,0	10,0	50,0	49,0	–	22,0	50,0	5,65	106,0	124,0	7000	0,6	RP..2006
R220.29I-0066-10-5A	10254931	Manicotto	46,0	66,0	5	10,0	10,0	62,0	61,0	–	27,0	50,0	7,6	112,0	130,0	6800	0,7	RP..2006
R220.29I-0080-10-5A	10254932	Manicotto	60,0	80,0	5	10,0	10,0	62,0	61,0	–	27,0	50,0	5,55	140,0	158,0	6200	0,9	RP..2006
R220.29I-0080-10-6A	10254933	Manicotto	60,0	80,0	6	10,0	10,0	62,0	61,0	–	27,0	50,0	5,55	140,0	158,0	6200	0,9	RP..2006
R220.29I-0100-10-5MA	10254934	Manicotto	80,0	100,0	5	10,0	10,0	80,0	79,0	–	32,0	50,0	4,0	180,0	198,0	5500	1,6	RP..2006
R220.29I-0100-10-7A	10254935	Manicotto	80,0	100,0	7	10,0	10,0	80,0	79,0	–	32,0	50,0	4,0	180,0	198,0	5500	1,6	RP..2006
R220.29I-0125-10-6MA	10254936	Manicotto	105,0	125,0	6	10,0	10,0	91,0	90,0	–	40,0	63,0	2,97	230,0	248,0	4900	2,9	RP..2006
R220.29I-0125-10-8A	10254937	Manicotto	105,0	125,0	8	10,0	10,0	91,0	90,0	–	40,0	63,0	2,97	230,0	248,0	4900	2,9	RP..2006
R220.29I-8160-10-7MA	10254938	Manicotto	140,0	160,0	7	10,0	10,0	120,0	90,0	–	40,0	63,0	2,18	300,0	318,0	4400	4,3	RP..2006
R220.29I-8200-10-9MA	10254939	Manicotto	180,0	200,0	9	10,0	10,0	160,0	130,0	–	60,0	63,0	1,67	380,0	398,0	3900	5,5	RP..2006
R220.29I-8250-10-10MA	10254942	Manicotto	230,0	250,0	10	10,0	10,0	210,0	130,0	–	60,0	63,0	1,29	480,0	498,0	3500	12,3	RP..2006
R217.29I-1640.RE-10-2A	10254927	Combimaster	20,0	40,0	2	10,0	10,0	–	30,0	M16	–	40,0	15,57	60,0	78,0	8800	0,2	RP..2006
R217.29I-2050.RE-10-3A	10254928	Combimaster	30,0	50,0	3	10,0	10,0	–	36,5	M20	–	45,0	9,57	80,0	98,0	7800	0,4	RP..2006

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

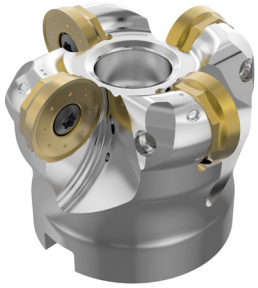
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Supporto inserto	Coperchio	Vite coperchio	Chiave per vite supporto	Vite supporto
								
R217.29I	–	1/4HEX-T20PX50	C05013-T20P	–	–	–	–	–
R220.29I-0100	MLC6S16X35	1/4HEX-T20PX90	C05013-T20P	–	–	–	–	–
R220.29I-0100MA	MLC6S16X35	1/4HEX-T20PX90	C05018-T20P	SRP2004IM0	–	–	1/4HEX-H5.0X50	CA5010
R220.29I-0125	MLC6S20X40	1/4HEX-T20PX90	C05013-T20P	–	–	–	–	–
R220.29I-0125MA	MLC6S20X40	1/4HEX-T20PX90	C05018-T20P	SRP2004IM0	–	–	1/4HEX-H5.0X50	CA5010
R220.29I-063	MC6S10X40	1/4HEX-T20PX50	C05013-T20P	–	–	–	–	–
R220.29I-066	MC6S12X40	1/4HEX-T20PX50	C05013-T20P	–	–	–	–	–
R220.29I-080	MC6S12X35	1/4HEX-T20PX50	C05013-T20P	–	–	–	–	–
R220.29I-8160	–	1/4HEX-T20PX90	C05018-T20P	SRP2004IM0	SC160-53	MF6S4X10	1/4HEX-H5.0X50	CA5010
R220.29I-8200	–	1/4HEX-T20PX90	C05018-T20P	SRP2004IM0	SC-200-90	MF6S4X10	1/4HEX-H5.0X50	CA5010
R220.29I-8250	–	1/4HEX-T20PX90	C05018-T20P	SRP2004IM0	SC-250-90	MF6S4X10	1/4HEX-H5.0X50	CA5010

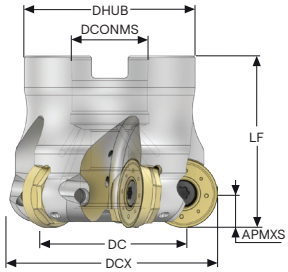
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Coppia di serraggio inserto	Chiave	Vite di fermo	Chiave dinamometrica
						
R217.29I	1/4HEX-T-HANDLE-5.0-14.0NM	–	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-063-0125	1/4HEX-T-HANDLE-5.0-14.0NM	–	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-8160	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-8200-8250	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.29I-10 – Pollici



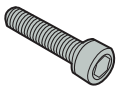
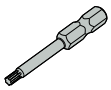


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 707-709
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

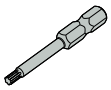
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DHUB	DCSFMS	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch		inch	inch		lb	
R220.29I-02.50-10-4A	10254940	Manicotto	1.713	2.500	4	0.394	0.750	1.829	1.789	0.750	2.000	5,8	4.213	4.921	7000	1.320	RP..2006
R220.29I-03.00-10-5A	10254941	Manicotto	2.213	3.000	5	0.394	1.000	2.329	2.289	1.000	2.000	5,99	5.213	5.921	6300	1.760	RP..2006

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

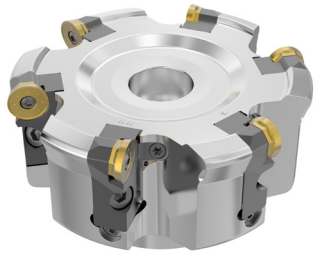
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.29I-02.50	UC6S3/8UNFX11/2	1/4HEX-T20PX50	C05013-T20P
R220.29I-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C05013-T20P

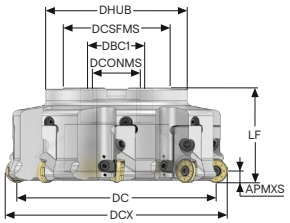
Accessori

Per fresa	Chiave dinamometrica regolabile	Coppia di serraggio inserto	Chiave	Vite di fermo	Chiave dinamometrica
					
R220.29I-02.50	1/4HEX-T-HANDLE-5.0-14.0NM	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-03.00	1/4HEX-T-HANDLE-5.0-14.0NM	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.29I-10 – In mm



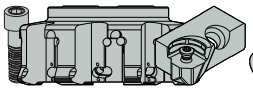
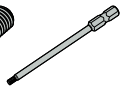
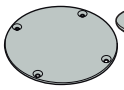
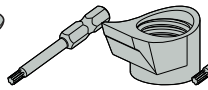


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 707-709
—Per il programma inserti completo, vedere le pagine 879
—Per la spiegazione degli attributi ISO, vedere pag. 16

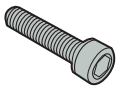
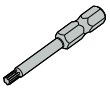
Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DHUB	DCSFMS	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R220.29I-0153-10-6CA	10254943	Manicotto	133,0	153,0	6	10,0	40,0	91,0	90,0	40,0	80,0	1,83	286,0	304,0	4500	6,9	RP..2006
R220.29I-8188-10-8CA	10254944	Manicotto	168,0	188,0	8	10,0	40,0	120,0	90,0	40,0	80,0	1,43	356,0	374,0	4000	8,2	RP..2006
R220.29I-8228-10-10CA	10254945	Manicotto	208,0	228,0	10	10,0	60,0	164,0	130,0	60,0	80,0	1,15	436,0	454,0	3700	11,5	RP..2006

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Corpo base	Modulo	Vite modulo	Chiave per vite inserto	Vite di bloccaggio inserto	Coperchio	Vite coperchio	Chiave di regolazione	Cuneo di bloccaggio	Chiave per vite cuneo	Vite cuneo
												
R220.29I-0153	AU1114T-T15P	MC6S20X70	B-R220.21/29I-0153-6CA	RP20ZR-R	FS98030	1/4HEX-T20PX90	C05013-T20P	–	–	1/4HEX-T15PX50	CW0810	1/4HEX-T25PX50	LD8020-T25P
R220.29I-8188	AU1114T-T15P	–	B-R220.21/29I-8188-8CA	RP20ZR-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-160-90	MF6S4X10	1/4HEX-T15PX50	CW0810	1/4HEX-T25PX50	LD8020-T25P
R220.29I-8228	AU1114T-T15P	–	B-R220.21/29I-8228-10CA	RP20ZR-R	FS98030	1/4HEX-T20PX90	C05013-T20P	SC-200-90	MF6S4X10	1/4HEX-T15PX50	CW0810	1/4HEX-T25PX50	LD8020-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Coppia di serraggio inserto	Chiave	Vite di fermo	Chiave dinamometrica
						
R220.29I-0153	1/4HEX-T-HANDLE-5.0-14.0NM	–	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-8188	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50
R220.29I-8228	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S16X50	5.0NM	1/4HEX-T05PX50	SX2035-T05P	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.29-10 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RPKT2006M0T-8-ME12 MP2501	4,0 *0.16*	0,38 0.015	0,38 0.015	0,44 0.017	0,70 0.028
P2	RPKT2006M0T-8-ME12 MP2501	4,0 *0.16*	0,38 0.015	0,38 0.015	0,46 0.018	0,70 0.028
P3	RPKT2006M0T-8-ME12 MP2501	4,0 *0.16*	0,36 0.014	0,36 0.014	0,42 0.017	0,70 0.028
P4	RPKT2006M0T-8-M15 MP2501	4,0 *0.16*	0,44 0.017	0,44 0.017	0,50 0.020	0,85 0.034
P5	RPKT2006M0T-8-M15 MP2501	4,0 *0.16*	0,44 0.017	0,44 0.017	0,50 0.020	0,80 0.032
P6	RPKT2006M0T-8-M20 MP1501	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
P7	RPKT2006M0T-8-M20 MP1501	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
P8	RPKT2006M0T-8-M20 MP2501	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
P11	RPKT2006M0T-8-ME12 MP3501	4,0 *0.16*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
P12	RPKT2006M0T-8-M20 MP1501	3,0 *0.12*	0,46 0.018	0,46 0.018	0,55 0.022	0,85 0.034
M1	RPHT2006M0T-8-M13 MS2050	4,0 *0.16*	0,42 0.017	0,42 0.017	0,48 0.019	0,80 0.032
M2	RPHT2006M0T-8-M13 MS2050	4,0 *0.16*	0,38 0.015	0,38 0.015	0,44 0.017	0,70 0.028
M3	RPHT2006M0T-8-M13 MS2050	3,0 *0.12*	0,34 0.013	0,34 0.013	0,40 0.016	0,65 0.026
M4	RPKT2006M0T-8-ME12 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
M5	RPKT2006M0T-8-ME12 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
K1	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,65 0.026	0,65 0.026	0,75 0.030	1,2 0.048
K2	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
K3	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
K4	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
K5	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,55 0.022	0,55 0.022	0,60 0.024	1,0 0.040
K6	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,60 0.024	0,60 0.024	0,70 0.028	1,1 0.044
K7	RPKT2006M0T-8-M20 MK2050	4,0 *0.16*	0,55 0.022	0,55 0.022	0,60 0.024	1,0 0.040
S1	RPKT2006M0T-8-ME12 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
S2	RPKT2006M0T-8-ME12 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
S3	RPKT2006M0T-8-ME12 MP3501	2,5 *0.10*	0,28 0.011	0,28 0.011	0,34 0.013	0,50 0.020
S11	RPKT2006M0T-8-ME12 MS2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S12	RPKT2006M0T-8-ME12 MS2050	3,0 *0.12*	0,32 0.013	0,32 0.013	0,38 0.015	0,60 0.024
S13	RPKT2006M0T-8-ME12 MS2050	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
H5	RPKW2006M0T-8-MD22 MP1501	3,0 *0.12*	0,50 0.020	0,50 0.020	0,60 0.024	0,90 0.036
H8	RPKW2006M0T-8-MD22 MP1501	3,0 *0.12*	0,38 0.015	0,38 0.015	0,44 0.017	0,70 0.028
H11	RPKW2006M0T-8-MD22 MP1501	3,0 *0.12*	0,50 0.020	0,50 0.020	0,60 0.024	0,90 0.036
H12	RPKW2006M0T-8-MD22 MP1501	3,0 *0.12*	0,38 0.015	0,38 0.015	0,44 0.017	0,70 0.028

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.29-10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M				MK2050				MP3000				MS2050				F40M				MP2051				MP2050			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	195 *640*	220 *720*	275 *900*	320 *1050*	240 *790*	275 *900*	340 *1125*	400 *1300*	285 *940*	320 *1050*	400 *1300*	465 *1525*	260 *850*	290 *950*	345 *1125*	400 *1300*	260 *850*	280 *920*	335 *1100*	370 *1225*	315 *1025*	360 *1175*	480 *1575*	570 *1875*	285 *940*	325 *1075*	385 *1275*	455 *1500*
P2	190 *620*	215 *710*	260 *850*	310 *1025*	235 *770*	270 *890*	330 *1075*	385 *1275*	275 *900*	315 *1025*	385 *1275*	445 *1450*	245 *800*	275 *900*	335 *1100*	390 *1275*	250 *820*	275 *900*	325 *1075*	360 *1175*	305 *1000*	350 *1150*	470 *1550*	550 *1800*	270 *890*	310 *1025*	375 *1225*	440 *1450*
P3	165 *540*	190 *620*	230 *750*	270 *890*	205 *670*	235 *770*	285 *940*	340 *1125*	245 *800*	275 *900*	335 *1100*	395 *1300*	215 *710*	245 *800*	295 *970*	345 *1125*	220 *720*	240 *790*	285 *940*	320 *1050*	275 *900*	315 *1025*	415 *1350*	495 *1625*	235 *770*	270 *890*	330 *1075*	390 *1275*
P4	145 *475*	170 *560*	200 *660*	240 *790*	180 *590*	210 *690*	255 *840*	300 *980*	215 *710*	245 *800*	300 *980*	350 *1150*	195 *640*	220 *720*	260 *850*	300 *980*	200 *660*	220 *720*	265 *870*	305 *1000*	240 *790*	275 *900*	365 *1200*	435 *1425*	210 *690*	245 *800*	290 *950*	345 *1125*
P5	140 *460*	160 *520*	200 *660*	230 *750*	175 *570*	200 *660*	245 *800*	285 *940*	205 *670*	235 *770*	285 *940*	330 *1075*	185 *610*	210 *690*	250 *820*	290 *950*	190 *620*	210 *690*	240 *790*	270 *890*	240 *790*	275 *900*	350 *1150*	415 *1350*	200 *660*	230 *750*	280 *920*	330 *1075*
P6	155 *510*	180 *590*	220 *720*	260 *850*	200 *660*	230 *750*	275 *900*	325 *1075*	240 *790*	270 *890*	320 *1050*	380 *1250*	210 *690*	235 *770*	285 *940*	325 *1075*	215 *710*	235 *770*	270 *890*	305 *1000*	270 *890*	310 *1025*	390 *1275*	470 *1550*	225 *740*	260 *850*	315 *1025*	370 *1225*
P7	150 *490*	170 *560*	210 *690*	245 *800*	190 *620*	215 *710*	260 *850*	310 *1025*	225 *740*	255 *840*	305 *1000*	355 *1175*	195 *640*	220 *720*	265 *870*	305 *1000*	200 *660*	220 *720*	255 *840*	285 *940*	255 *840*	290 *950*	370 *1225*	440 *1450*	215 *710*	245 *800*	300 *980*	345 *1125*
P8	140 *460*	160 *520*	195 *640*	230 *750*	175 *570*	200 *660*	240 *790*	285 *940*	205 *670*	235 *770*	280 *920*	330 *1075*	180 *590*	205 *670*	250 *820*	290 *950*	185 *610*	205 *670*	240 *790*	270 *890*	230 *750*	265 *870*	350 *1150*	415 *1350*	200 *660*	230 *750*	275 *900*	330 *1075*
P11	145 *475*	165 *540*	205 *670*	240 *790*	185 *610*	210 *690*	255 *840*	300 *980*	220 *720*	245 *800*	295 *970*	345 *1125*	190 *620*	215 *710*	260 *850*	295 *970*	195 *640*	215 *710*	250 *820*	280 *920*	230 *750*	290 *950*	400 *1300*	520 *1700*	210 *690*	240 *790*	290 *950*	335 *1100*
P12	— —	— —	— —	— —	120 *395*	140 *460*	165 *540*	200 *660*	145 *475*	165 *540*	195 *640*	220 *720*	130 *425*	145 *475*	175 *570*	200 *660*	130 *425*	140 *460*	165 *540*	185 *610*	165 *540*	205 *670*	275 *900*	355 *1175*	135 *445*	155 *510*	190 *620*	225 *740*
M1	— —	— —	— —	— —	— —	— —	— —	— —	190 *620*	220 *720*	265 *870*	305 *1000*	185 *610*	215 *710*	260 *850*	300 *980*	180 *590*	205 *670*	250 *820*	290 *950*	250 *820*	310 *1025*	450 *1475*	580 *1900*	195 *640*	225 *740*	270 *890*	315 *1025*
M2	— —	— —	— —	— —	— —	— —	— —	— —	155 *510*	180 *590*	215 *710*	255 *840*	155 *510*	175 *570*	215 *710*	250 *820*	150 *490*	170 *560*	205 *670*	240 *790*	220 *720*	275 *900*	375 *1225*	495 *1625*	160 *520*	185 *610*	225 *740*	260 *850*
M3	— —	— —	— —	— —	— —	— —	— —	— —	130 *425*	145 *475*	175 *570*	205 *670*	125 *410*	145 *475*	175 *570*	205 *670*	120 *395*	140 *460*	165 *540*	195 *640*	190 *620*	235 *770*	320 *1050*	415 *1350*	135 *445*	150 *490*	180 *590*	215 *710*
M4	— —	— —	— —	— —	— —	— —	— —	— —	100 *330*	115 *375*	135 *445*	160 *520*	100 *330*	110 *360*	135 *445*	160 *520*	95 *310*	110 *360*	130 *425*	150 *490*	155 *510*	190 *620*	255 *840*	325 *1075*	100 *330*	115 *375*	140 *460*	165 *540*
M5	— —	— —	— —	— —	— —	— —	— —	— —	80 *260*	95 *310*	115 *375*	135 *445*	80 *260*	95 *310*	110 *360*	130 *425*	80 *260*	90 *295*	110 *360*	125 *410*	130 *425*	160 *520*	215 *710*	270 *890*	85 *280*	95 *310*	115 *375*	140 *460*
K1	150 *490*	170 *560*	205 *670*	245 *800*	250 *820*	290 *950*	355 *1175*	420 *1375*	200 *660*	230 *750*	280 *920*	325 *1075*	— —	— —	— —	— —	175 *570*	200 *660*	245 *800*	285 *940*	— —	— —	— —	— —	— —	— —	— —	— —
K2	135 *445*	150 *490*	190 *620*	220 *720*	225 *740*	255 *840*	320 *1050*	370 *1225*	175 *570*	205 *670*	245 *800*	290 *950*	— —	— —	— —	— —	155 *510*	180 *590*	215 *710*	255 *840*	— —	— —	— —	— —	— —	— —	— —	— —
K3	115 *375*	130 *425*	160 *520*	185 *610*	190 *620*	220 *720*	270 *890*	310 *1025*	150 *490*	170 *560*	210 *690*	245 *800*	— —	— —	— —	— —	135 *445*	155 *510*	180 *590*	215 *710*	— —	— —	— —	— —	— —	— —	— —	— —
K4	105 *345*	125 *410*	150 *490*	180 *590*	180 *590*	210 *690*	255 *840*	300 *980*	145 *475*	165 *540*	200 *660*	235 *770*	— —	— —	— —	— —	125 *410*	145 *475*	175 *570*	205 *670*	— —	— —	— —	— —	— —	— —	— —	— —
K5	70 *230*	80 *260*	95 *310*	110 *360*	115 *375*	130 *425*	160 *520*	185 *610*	90 *295*	100 *330*	120 *395*	140 *460*	— —	— —	— —	— —	75 *245*	90 *295*	105 *345*	125 *410*	— —	— —	— —	— —	— —	— —	— —	— —
K6	95 *310*	110 *360*	135 *445*	155 *510*	160 *520*	185 *610*	225 *740*	260 *850*	125 *410*	145 *475*	175 *570*	205 *670*	— —	— —	— —	— —	110 *360*	130 *425*	155 *510*	180 *590*	— —	— —	— —	— —	— —	— —	— —	— —
K7	85 *280*	100 *330*	120 *395*	140 *460*	145 *475*	170 *560*	200 *660*	235 *770*	115 *375*	130 *425*	155 *510*	180 *590*	— —	— —	— —	— —	100 *330*	115 *375*	135 *445*	160 *520*	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	— —	— —	46 *150*	55 *180*	65 *215*	75 *245*	46 *150*	50 *165*	65 *215*	75 *245*	44 *145*	50 *165*	60 *195*	70 *230*	55 *180*	60 *195*	75 *245*	85 *280*	50 *165*	55 *180*	70 *230*	80 *260*
S2	— —	— —	— —	— —	— —	— —	— —	— —	37 *120*	42 *140*	50 *165*	60 *195*	37 *120*	42 *140*	50 *165*	60 *195*	35 *115*	40 *130*	49 *160*	55 *180*	43 *140*	49 *160*	60 *195*	70 *230*	40 *130*	46 *150*	55 *180*	65 *215*
S3	— —	— —	— —	— —	— —	— —	— —	— —	33 *110*	37 *120*	45 *150*	55 *180*	32 *105*	37 *120*	44 *145*	55 *180*	31 *100*	35 *115*	43 *140*	50 *165*	38 *125*	43 *140*	50 *165*	60 *195*	35 *115*	40 *130*	48 *155*	60 *195*
S11	— —	— —	— —	— —	— —	— —	— —	— —	65 *215*	75 *245*	90 *295*	105 *345*	65 *215*	75 *245*	85 *280*	105 *345*	60 *195*	70 *230*	85 *280*	100 *330*	75 *245*	85 *280*	100 *330*	120 *395*	70 *230*	80 *260*	95 *310*	115 *375*
S12	— —	— —	— —	— —	— —	— —	— —	— —	45 *150*	50 *165*	60 *195*	75 *245*	44 *145*	50 *165*	60 *195*	70 *230*	42 *140*	48 *155*	60 *195*	70 *230*	50 *165*	60 *195*	70 *230*	80 *260*	49 *160*	55 *180*	65 *215*	80 *260*
S13	— —	— —	— —	— —	— —	— —	— —	— —	26 *85*	30 *100*	36 *120*	42 *140*	26 *85*	29 *95*	35 *115*	42 *140*	25 *80*	28 *90*	34 *110*	40 *130*	30 *100*	34 *110*	41 *135*	48 *155*	28 *90*	32 *105*	39 *130*	46 *150*
H5	32 *105*	37 *120*	45 *150*	55 *180*	41 *135*	47 *155*	55 *180*	70 *230*	40 *130*	46 *150*	55 *180*	65 *215*	— —	— —	— —	— —	37 *120*	42 *140*	50 *165*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —
H8	35 *115*	40 *130*	49 *160*	55 *180*	45 *150*	50 *165*	60 *195*	75 *245*	42 *140*	49 *160*	55 *180*	65 *215*	— —	— —	— —	— —	40 *130*	46 *150*	55 *180*	65 *215*	— —	— —	— —	— —	— —	— —	— —	— —
H11	41 *135*	47 *155*	55 *180*	70 *230*	55 *180*	60 *195*	75 *245*	85 *280*	50 *165*	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —	47 *155*	55 *180*	65 *215*	75 *245*	110 *360*	135 *445*	180 *590*	230 *750*	50 *165*	60 *195*	75 *245*	85 *280*
H12	65 *215*	70 *230*	85 *280*	100 *330*	80 *260*	90 *295*	105 *345*	125 *410*	80 *260*	95 *310*	110 *360*	130 *425*	— —	— —	— —	— —	70 *230*	80 *260*	100 *330*	115 *375*	110 *360*	140 *460*	175 *570*	215 *710*	90 *295*	100 *330*	120 *395*	140 *460*

R217/220.29-10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP1501				MP2501				MS2500				MP3501				T25M				MM4500			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	340 *1125*	375 *1225*	455 *1500*	520 *1700*	375 *1225*	410 *1350*	490 *1600*	560 *1825*	315 *1025*	345 *1125*	430 *1400*	490 *1600*	375 *1225*	415 *1350*	490 *1600*	550 *1800*	250 *820*	285 *940*	350 *1150*	405 *1325*	230 *750*	255 *840*	305 *1000*	355 *1175*
P2	330 *1075*	365 *1200*	445 *1450*	500 *1650*	365 *1200*	400 *1300*	475 *1550*	540 *1775*	305 *1000*	335 *1100*	415 *1350*	475 *1550*	365 *1200*	405 *1325*	480 *1575*	530 *1750*	245 *800*	280 *920*	340 *1125*	395 *1300*	220 *720*	245 *800*	300 *980*	345 *1125*
P3	295 *970*	325 *1075*	380 *1250*	445 *1450*	320 *1050*	350 *1150*	415 *1350*	475 *1550*	270 *890*	300 *980*	360 *1175*	420 *1375*	320 *1050*	355 *1175*	420 *1375*	475 *1550*	215 *710*	245 *800*	295 *970*	350 *1150*	190 *620*	215 *710*	260 *850*	305 *1000*
P4	260 *850*	285 *940*	350 *1150*	390 *1275*	285 *940*	315 *1025*	375 *1225*	415 *1350*	240 *790*	265 *870*	325 *1075*	370 *1225*	285 *940*	310 *1025*	370 *1225*	415 *1350*	190 *620*	215 *710*	260 *850*	305 *1000*	185 *610*	210 *690*	250 *820*	290 *950*
P5	245 *800*	275 *900*	330 *1075*	370 *1225*	275 *900*	300 *980*	355 *1175*	405 *1325*	230 *750*	255 *840*	310 *1025*	350 *1150*	275 *900*	305 *1000*	350 *1150*	395 *1300*	180 *590*	210 *690*	250 *820*	295 *970*	165 *540*	185 *610*	225 *740*	255 *840*
P6	290 *950*	320 *1050*	375 *1225*	425 *1400*	305 *1000*	335 *1100*	400 *1300*	455 *1500*	265 *870*	295 *970*	350 *1150*	405 *1325*	310 *1025*	340 *1125*	395 *1300*	445 *1450*	205 *670*	235 *770*	280 *920*	330 *1075*	185 *610*	205 *670*	250 *820*	285 *940*
P7	270 *890*	300 *980*	350 *1150*	405 *1325*	290 *950*	320 *1050*	375 *1225*	430 *1400*	250 *820*	280 *920*	330 *1075*	380 *1250*	295 *970*	320 *1050*	375 *1225*	420 *1375*	195 *640*	220 *720*	265 *870*	310 *1025*	175 *570*	195 *640*	235 *770*	270 *890*
P8	245 *800*	275 *900*	320 *1050*	370 *1225*	270 *890*	295 *970*	350 *1150*	400 *1300*	230 *750*	255 *840*	300 *980*	350 *1150*	270 *890*	300 *980*	350 *1150*	395 *1300*	180 *590*	205 *670*	250 *820*	295 *970*	160 *520*	180 *590*	220 *720*	255 *840*
P11	265 *870*	290 *950*	340 *1125*	390 *1275*	280 *920*	310 *1025*	365 *1200*	420 *1375*	245 *800*	270 *890*	320 *1050*	370 *1225*	285 *940*	315 *1025*	360 *1175*	410 *1350*	190 *620*	215 *710*	255 *840*	300 *980*	170 *560*	190 *620*	230 *750*	265 *870*
P12	175 *570*	195 *640*	225 *740*	260 *850*	190 *620*	210 *690*	240 *790*	270 *890*	165 *540*	180 *590*	215 *710*	245 *800*	185 *610*	205 *670*	235 *770*	265 *870*	120 *395*	140 *460*	170 *560*	200 *660*	115 *375*	125 *410*	150 *490*	170 *560*
M1	— —	— —	— —	— —	190 *620*	215 *710*	265 *870*	305 *1000*	185 *610*	210 *690*	260 *850*	305 *1000*	195 *640*	225 *740*	275 *900*	320 *1050*	195 *640*	225 *740*	275 *900*	320 *1050*	145 *475*	165 *540*	200 *660*	235 *770*
M2	— —	— —	— —	— —	155 *510*	180 *590*	220 *720*	260 *850*	155 *510*	175 *570*	220 *720*	255 *840*	165 *540*	190 *620*	225 *740*	265 *870*	165 *540*	190 *620*	225 *740*	265 *870*	120 *395*	140 *460*	170 *560*	195 *640*
M3	— —	— —	— —	— —	130 *425*	145 *475*	180 *590*	210 *690*	125 *410*	145 *475*	180 *590*	210 *690*	135 *445*	150 *490*	180 *590*	215 *710*	135 *445*	150 *490*	180 *590*	215 *710*	100 *330*	115 *375*	135 *445*	160 *520*
M4	— —	— —	— —	— —	100 *330*	115 *375*	140 *460*	160 *520*	100 *330*	115 *375*	140 *460*	160 *520*	105 *345*	120 *395*	145 *475*	165 *540*	105 *345*	120 *395*	145 *475*	165 *540*	75 *245*	85 *280*	105 *345*	125 *410*
M5	— —	— —	— —	— —	85 *280*	95 *310*	115 *375*	135 *445*	85 *280*	95 *310*	115 *375*	135 *445*	85 *280*	100 *330*	120 *395*	140 *460*	85 *280*	100 *330*	120 *395*	140 *460*	65 *215*	75 *245*	90 *295*	105 *345*
K1	335 *1100*	370 *1225*	450 *1475*	510 *1675*	365 *1200*	405 *1325*	480 *1575*	540 *1775*	205 *670*	235 *770*	290 *950*	340 *1125*	370 *1225*	410 *1350*	480 *1575*	540 *1775*	195 *640*	220 *720*	270 *890*	315 *1025*	— —	— —	— —	— —
K2	300 *980*	330 *1075*	400 *1300*	450 *1475*	330 *1075*	365 *1200*	430 *1400*	495 *1625*	185 *610*	210 *690*	260 *850*	300 *980*	335 *1100*	370 *1225*	425 *1400*	480 *1575*	175 *570*	200 *660*	235 *770*	280 *920*	— —	— —	— —	— —
K3	255 *840*	280 *920*	340 *1125*	380 *1250*	280 *920*	305 *1000*	365 *1200*	415 *1350*	155 *510*	175 *570*	220 *720*	255 *840*	285 *940*	310 *1025*	360 *1175*	405 *1325*	145 *475*	170 *560*	200 *660*	235 *770*	— —	— —	— —	— —
K4	240 *790*	265 *870*	325 *1075*	365 *1200*	265 *870*	295 *970*	350 *1150*	400 *1300*	150 *490*	170 *560*	210 *690*	240 *790*	270 *890*	295 *970*	345 *1125*	390 *1275*	140 *460*	160 *520*	190 *620*	225 *740*	— —	— —	— —	— —
K5	155 *510*	170 *560*	200 *660*	225 *740*	165 *540*	180 *590*	215 *710*	245 *800*	95 *310*	105 *345*	130 *425*	150 *490*	165 *540*	180 *590*	210 *690*	240 *790*	85 *280*	95 *310*	120 *395*	140 *460*	— —	— —	— —	— —
K6	215 *710*	235 *770*	285 *940*	320 *1050*	235 *770*	260 *850*	305 *1000*	350 *1150*	130 *425*	150 *490*	185 *610*	215 *710*	240 *790*	260 *850*	305 *1000*	340 *1125*	125 *410*	140 *460*	170 *560*	200 *660*	— —	— —	— —	— —
K7	200 *660*	220 *720*	255 *840*	290 *950*	210 *690*	230 *750*	275 *900*	310 *1025*	120 *395*	135 *445*	165 *540*	190 *620*	210 *690*	230 *750*	270 *890*	305 *1000*	110 *360*	125 *410*	150 *490*	180 *590*	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	70 *230*	80 *260*	48 *155*	55 *180*	65 *215*	80 *260*	— —	— —	— —	— —	23 *75*	27 *90*	32 *105*	38 *125*
S2	— —	— —	— —	— —	— —	— —	— —	— —	40 *130*	45 *150*	55 *180*	65 *215*	39 *130*	44 *145*	55 *180*	65 *215*	— —	— —	— —	— —	19 *60*	21 *70*	26 *85*	31 *100*
S3	— —	— —	— —	— —	— —	— —	— —	— —	35 *115*	39 *130*	48 *155*	55 *180*	34 *110*	39 *130*	47 *155*	55 *180*	— —	— —	— —	— —	17 *55*	19 *60*	23 *75*	27 *90*
S11	— —	— —	— —	— —	— —	— —	— —	— —	65 *215*	75 *245*	95 *310*	110 *360*	65 *215*	75 *245*	95 *310*	110 *360*	— —	— —	— —	— —	33 *110*	38 *125*	45 *150*	55 *180*
S12	— —	— —	— —	— —	— —	— —	— —	— —	46 *150*	55 *180*	65 *215*	75 *245*	46 *150*	55 *180*	65 *215*	75 *245*	— —	— —	— —	— —	30 *100*	35 *115*	41 *135*	49 *160*
S13	— —	— —	— —	— —	— —	— —	— —	— —	28 *90*	31 *100*	38 *125*	44 *145*	27 *90*	31 *100*	38 *125*	44 *145*	— —	— —	— —	— —	18 *60*	20 *65*	24 *80*	28 *90*
H5	46 *150*	50 *165*	65 *215*	75 *245*	— —	— —	— —	— —	40 *130*	46 *150*	55 *180*	65 *215*	42 *140*	48 *155*	60 *195*	70 *230*	— —	— —	— —	— —	— —	— —	— —	— —
H8	50 *165*	55 *180*	70 *230*	80 *260*	— —	— —	— —	— —	44 *145*	50 *165*	60 *195*	70 *230*	46 *150*	55 *180*	60 *195*	75 *245*	— —	— —	— —	— —	— —	— —	— —	— —
H11	60 *195*	65 *215*	80 *260*	95 *310*	— —	— —	— —	— —	50 *165*	60 *195*	70 *230*	85 *280*	55 *180*	60 *195*	75 *245*	85 *280*	— —	— —	— —	— —	— —	— —	— —	— —
H12	90 *295*	105 *345*	125 *410*	145 *475*	— —	— —	— —	— —	85 *280*	100 *330*	120 *395*	140 *460*	85 *280*	95 *310*	110 *360*	130 *425*	— —	— —	— —	— —	— —	— —	— —	— —



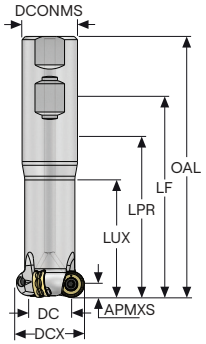
R217/220.28 FRESE CON INSERTI TONDI

La nostra gamma di inserti tondi bilaterali di dimensione 12 e frese, R217/220.28, è ideale per applicazioni di copiatura leggera, spianatura, scanalatura e contornatura in tutti i materiali da lavorare.

- Gamma di frese 32-100 mm (1,25-4”)
- Profondità di taglio massima 6 mm (0,236”)
- Profondità di taglio per scanalatura consigliata 3 mm (0,118”)
- Fino a 16 taglienti

R217/220.28-06 – Pollici

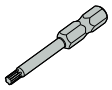




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 713, 714–715
—Per il programma inserti completo, vedere le pagine 875
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.28-01.25-3-06-3A	03092089	Weldon	0.780	1.250	3	0.236	1.000	3.642	2.280	2.578	2.504	4.783	0,4	2.030	2.421	15600	1.100	RNMU1204

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.28-..	1/4HEX-T15PX50	C04009-T15P

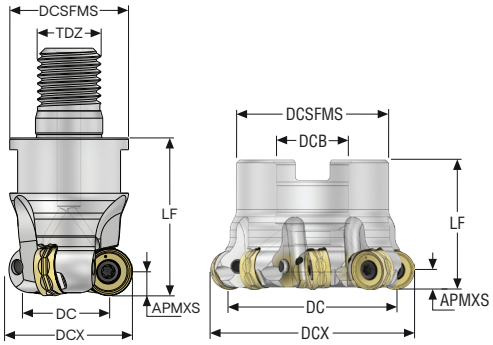
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.28-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.28-06 – In mm

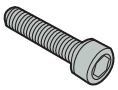
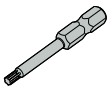




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 713, 714–715
—Per il programma inserti completo, vedere le pagine 875
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm	mm		mm	mm	mm		mm	mm	mm		mm	mm		kg	
R220.28-0040-06.4A	03092080	Manicotto	28,0	40,0	4	6,0	16,0	35,0	–	16,0	40,0	–	0,54	68,0	78,0	14000	0,3	RNMU1204
R220.28-0050-06.5A	03092081	Manicotto	38,0	50,0	5	6,0	22,0	42,0	–	22,0	40,0	–	0,62	88,0	98,0	12500	0,3	RNMU1204
R220.28-0050-06.6A	03092082	Manicotto	38,0	50,0	6	6,0	22,0	42,0	–	22,0	40,0	–	0,62	88,0	98,0	12500	0,4	RNMU1204
R220.28-0052-06.5A	03092083	Manicotto	40,0	52,0	5	6,0	22,0	47,0	–	22,0	40,0	–	0,6	92,0	102,0	12300	0,4	RNMU1204
R220.28-0063-06.6A	03092084	Manicotto	51,0	63,0	6	6,0	22,0	47,0	–	22,0	40,0	–	0,47	114,0	124,0	11200	0,5	RNMU1204
R220.28-0063-06.8A	03092086	Manicotto	51,0	63,0	8	6,0	22,0	47,0	–	22,0	40,0	–	0,47	114,0	124,0	10000	0,5	RNMU1204
R220.28-0066-06.7A	03092087	Manicotto	54,0	66,0	7	6,0	27,0	62,0	–	27,0	50,0	–	0,45	120,0	130,0	10900	0,9	RNMU1204
R220.28-0080-06.8A	03092088	Manicotto	67,9	80,0	8	6,0	27,0	62,0	–	27,0	50,0	–	0,53	147,9	158,0	10000	1,1	RNMU1204
R217.28-1632.RE-06.3A	03092078	Combimaster	20,1	32,0	3	6,0	–	30,0	M16	–	40,0	62,75	0,4	52,1	62,0	15600	0,3	RNMU1204

Parti di ricambio, comprese nella fornitura

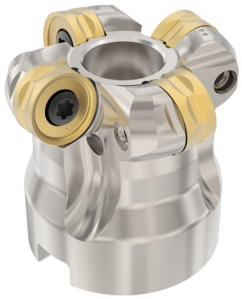
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.28-..	–	1/4HEX-T15PX50	C04009-T15P
R220.28-0040-0063	220.17-692	1/4HEX-T15PX50	C04009-T15P
R220.28-0066	MC6S12X40	1/4HEX-T15PX50	C04009-T15P
R220.28-0080	MC6S12X40	1/4HEX-T15PX50	C04009-T15P

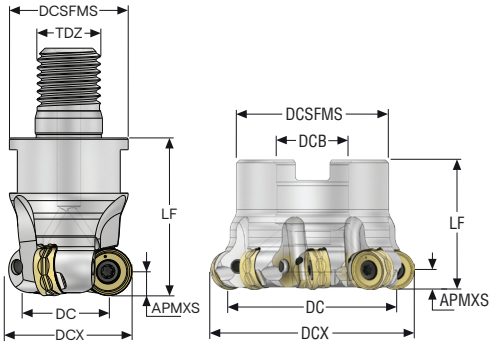
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.28-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.28-06 – Pollici

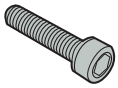
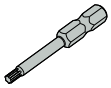




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 713, 714–715
—Per il programma inserti completo, vedere le pagine 875
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch	inch		inch	inch	inch	inch	inch		inch	inch		lb	
R220.28-02.00-06-5A	03092092	Manicotto	1.528	2.000	5	0.236	0.750	1.654	0.750	1.500	0,61	3.528	3.921	12500	0.660	RNMU1204
R220.28-02.00-06-6A	03092093	Manicotto	1.528	2.000	6	0.236	0.750	1.654	0.750	1.500	0,61	3.528	3.921	12500	0.660	RNMU1204
R220.28-02.50-06-7A	03092094	Manicotto	2.028	2.500	7	0.236	0.750	1.850	0.750	1.500	0,47	4.528	4.921	11200	1.100	RNMU1204
R220.28-04.00-06-12A	03137204	Manicotto	3.528	4.000	12	0.236	1.500	3.543	1.500	2.000	0,11	7.528	7.921	8800	3.970	RNMU1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.28-02.00-02.50	UC6S3/8UNFX1-1/4	1/4HEX-T15PX50	C04009-T15P
R220.28-04.00	ULC6S3/4UNFX11/2	1/4HEX-T15PX90	C04009-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.28-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.28 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z			
			100%	70%	30%	10%
P1	RNMU1204M0-ME10 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,34 0.013	0,55 0.022
P2	RNMU1204M0-ME10 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
P3	RNMU1204M0-ME10 MP3501	2,5 *0.10*	0,30 0.012	0,30 0.012	0,34 0.013	0,55 0.022
P4	RNMU1204M0T-M10 MP2501	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
P5	RNMU1204M0T-M10 MP2501	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
P6	RNMU1204M0T-M10 MP2501	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
P7	RNMU1204M0T-M10 MP2501	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
P8	RNMU1204M0T-M10 MP2050	2,5 *0.10*	0,30 0.012	0,30 0.012	0,34 0.013	0,55 0.022
P11	RNMU1204M0T-M10 MP2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
P12	RNMU1204M0T-M10 MS2500	1,9 *0.075*	0,22 0.0085	0,22 0.0085	0,25 0.010	0,40 0.016
M1	RNMU1204M0-ME10 MS2050	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
M2	RNMU1204M0-ME10 MS2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
M3	RNMU1204M0-ME10 MS2050	1,9 *0.075*	0,26 0.010	0,26 0.010	0,30 0.012	0,46 0.018
M4	RNMU1204M0T-M10 MP3501	1,4 *0.055*	0,26 0.010	0,26 0.010	0,30 0.012	0,48 0.019
M5	RNMU1204M0T-M10 MP3501	1,4 *0.055*	0,26 0.010	0,26 0.010	0,30 0.012	0,48 0.019
K1	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,30 0.012	0,30 0.012	0,36 0.014	0,55 0.022
K2	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
K3	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
K4	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
K5	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,25 0.010	0,25 0.010	0,30 0.012	0,46 0.018
K6	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,28 0.011	0,28 0.011	0,32 0.013	0,50 0.020
K7	RNMU1204M0T-M10 MK2050	2,5 *0.10*	0,25 0.010	0,25 0.010	0,30 0.012	0,46 0.018
N1	RNMU1204M0-ME10 F40M	2,5 *0.10*	0,40 0.016	0,40 0.016	0,46 0.018	0,70 0.028
N2	RNMU1204M0-ME10 F40M	2,5 *0.10*	0,40 0.016	0,40 0.016	0,46 0.018	0,70 0.028
N3	RNMU1204M0-ME10 F40M	2,5 *0.10*	0,40 0.016	0,40 0.016	0,46 0.018	0,70 0.028
N11	RNMU1204M0-ME10 F40M	2,5 *0.10*	0,40 0.016	0,40 0.016	0,46 0.018	0,70 0.028
S1	RNMU1204M0T-M10 MS2500	1,4 *0.055*	0,26 0.010	0,26 0.010	0,30 0.012	0,48 0.019
S2	RNMU1204M0T-M10 MS2500	1,4 *0.055*	0,26 0.010	0,26 0.010	0,30 0.012	0,48 0.019
S3	RNMU1204M0T-M10 MS2500	1,4 *0.055*	0,25 0.010	0,25 0.010	0,28 0.011	0,44 0.017
S11	RNMU1204M0-ME10 MS2050	1,7 *0.065*	0,28 0.011	0,28 0.011	0,32 0.013	0,48 0.019
S12	RNMU1204M0-ME10 MS2050	1,7 *0.065*	0,28 0.011	0,28 0.011	0,32 0.013	0,48 0.019
S13	RNMU1204M0-ME10 MS2050	1,4 *0.055*	0,26 0.010	0,26 0.010	0,30 0.012	0,48 0.019
H5	RNMU1204M0T-M10 MP3501	1,9 *0.075*	0,22 0.0085	0,22 0.0085	0,25 0.010	0,40 0.016
H8	RNMU1204M0T-M10 MP3501	1,7 *0.065*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013
H11	RNMU1204M0T-M10 MP3501	1,9 *0.075*	0,22 0.0085	0,22 0.0085	0,25 0.010	0,40 0.016
H12	RNMU1204M0T-M10 MP3501	1,7 *0.065*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.28 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK2050				MS2050				F40M				MP2051			
P1	100%285	70%325	30%390	10%460	100%265	70%295	30%350	10%405	100%255	70%275	30%320	10%360	100%335	70%375	30%470	10%560
P1	940 *275*	1075 *310*	1275 *380*	1500 *445*	870 *255*	970 *280*	1150 *340*	1325 *395*	840 *245*	900 *260*	1050 *310*	1175 *350*	1100 *310*	1225 *350*	1550 *460*	1825 *540*
P2	900 *240*	1025 *270*	1250 *330*	1450 *390*	840 *225*	920 *245*	1125 *300*	1300 *345*	800 *215*	850 *230*	1025 *275*	1150 *305*	1025 *280*	1150 *315*	1500 *405*	1775 *470*
P3	790 *215*	890 *245*	1075 *290*	1275 *345*	740 *200*	800 *225*	980 *265*	1125 *305*	710 *200*	750 *215*	900 *255*	1000 *290*	920 *255*	1025 *285*	1325 *355*	1550 *415*
P4	710 *205*	800 *235*	950 *280*	1125 *330*	660 *190*	740 *215*	870 *250*	1000 *295*	660 *185*	710 *200*	840 *230*	950 *260*	840 *245*	940 *275*	1175 *340*	1350 *400*
P5	670 *230*	770 *260*	920 *315*	1075 *370*	620 *215*	710 *240*	820 *285*	970 *330*	610 *210*	660 *225*	750 *260*	850 *295*	800 *275*	900 *310*	1125 *380*	1300 *450*
P6	750 *220*	850 *245*	1025 *295*	1225 *350*	710 *205*	790 *225*	940 *265*	1075 *310*	690 *195*	740 *210*	850 *245*	970 *280*	900 *260*	1025 *290*	1250 *360*	1475 *425*
P7	720 *200*	800 *230*	970 *280*	1150 *325*	670 *190*	740 *210*	870 *250*	1025 *290*	640 *180*	690 *195*	800 *230*	920 *260*	850 *235*	950 *265*	1175 *340*	1400 *395*
P8	660 *210*	750 *240*	920 *285*	1075 *340*	620 *200*	690 *220*	820 *260*	950 *300*	590 *190*	640 *205*	750 *240*	850 *270*	770 *235*	870 *290*	1125 *390*	1300 *510*
P11	690 *140*	790 *155*	940 *190*	1125 *220*	660 *130*	720 *145*	850 *170*	980 *195*	620 *130*	670 *135*	790 *160*	890 *175*	770 *165*	950 *200*	1275 *260*	1675 *325*
P12	460 —	510 —	620 —	720 —	425 *185*	475 *210*	560 *260*	640 *305*	425 *170*	445 *190*	520 *235*	570 *275*	540 *255*	660 *310*	850 *445*	1075 *580*
M1	— —	— —	— —	— —	610 *155*	690 *180*	850 *215*	1000 *250*	560 *145*	620 *160*	770 *195*	900 *230*	840 *225*	1025 *275*	1450 *370*	1900 *485*
M2	— —	— —	— —	— —	510 *125*	590 *145*	710 *170*	820 *205*	475 *115*	520 *130*	640 *155*	750 *185*	740 *190*	900 *230*	1225 *305*	1600 *395*
M3	— —	— —	— —	— —	410 *100*	475 *110*	560 *135*	670 *160*	375 *90*	425 *100*	510 *120*	610 *145*	620 *150*	750 *185*	1000 *235*	1300 *300*
M4	— —	— —	— —	— —	330 *80*	360 *95*	445 *110*	520 *130*	295 *75*	330 *85*	395 *100*	475 *120*	490 *125*	610 *150*	770 *200*	980 *250*
M5	— *295*	— *335*	— *410*	— *480*	260 —	310 —	360 —	425 —	245 *165*	280 *190*	330 *230*	395 *270*	410 —	490 —	660 —	820 —
K1	970 *265*	1100 *300*	1350 *360*	1575 *430*	— —	— —	— —	— —	540 *150*	620 *170*	750 *205*	890 *240*	— —	— —	— —	— —
K2	870 *225*	980 *255*	1175 *305*	1400 *365*	— —	— —	— —	— —	490 *125*	560 *145*	670 *170*	790 *205*	— —	— —	— —	— —
K3	740 *215*	840 *245*	1000 *290*	1200 *345*	— —	— —	— —	— —	410 *120*	475 *140*	560 *165*	670 *195*	— —	— —	— —	— —
K4	710 *130*	800 *150*	950 *180*	1125 *210*	— —	— —	— —	— —	395 *75*	460 *85*	540 *100*	640 *120*	— —	— —	— —	— —
K5	425 *190*	490 *215*	590 *255*	690 *305*	— —	— —	— —	— —	245 *105*	280 *120*	330 *145*	395 *170*	— —	— —	— —	— —
K6	620 *170*	710 *190*	840 *230*	1000 *270*	— —	— —	— —	— —	345 *95*	395 *110*	475 *130*	560 *155*	— —	— —	— —	— —
K7	560 —	620 —	750 —	890 —	— —	— —	— —	— —	310 *1225*	360 *1400*	425 *1700*	510 *2025*	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	4025 *500*	4600 *560*	5575 *690*	6650 *820*	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	1650 *335*	1825 *375*	2275 *460*	2700 *540*	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	1100 *380*	1225 *430*	1500 *520*	1775 *620*	— —	— —	— —	— —
N11	— —	— —	— —	— —	— *46*	— *50*	— *65*	— *75*	1250 *42*	1400 *47*	1700 *55*	2025 *65*	— *50*	— *55*	— *70*	— *80*
S1	— —	— —	— —	— —	150 *37*	165 *42*	215 *50*	245 *60*	140 *34*	155 *38*	180 *46*	215 *55*	165 *41*	180 *46*	230 *55*	260 *65*
S2	— —	— —	— —	— —	120 *33*	140 *37*	165 *45*	195 *50*	110 *30*	125 *34*	150 *41*	180 *47*	135 *36*	150 *40*	180 *49*	215 *55*
S3	— —	— —	— —	— —	110 *65*	120 *70*	150 *85*	165 *105*	100 *60*	110 *65*	135 *80*	155 *95*	120 *70*	130 *80*	160 *95*	180 *115*
S11	— —	— —	— —	— —	215 *44*	230 *50*	280 *60*	345 *70*	195 *40*	215 *45*	260 *55*	310 *65*	230 *48*	260 *55*	310 *65*	375 *80*
S12	— —	— —	— —	— —	145 *26*	165 *29*	195 *35*	230 *41*	130 *24*	150 *27*	180 *32*	215 *38*	155 *28*	180 *32*	215 *39*	260 *45*
S13	— *47*	— *55*	— *65*	— *75*	85 —	95 —	115 —	135 —	80 *35*	90 *40*	105 *48*	125 *55*	90 —	105 —	130 —	150 —
H5	155 *50*	180 *55*	215 *70*	245 *80*	— —	— —	— —	— —	115 *38*	130 *43*	155 *50*	180 *60*	— —	— —	— —	— —
H8	165 *60*	180 *70*	230 *80*	260 *95*	— —	— —	— —	— —	125 *45*	140 *50*	165 *60*	195 *70*	— *105*	— *130*	— *170*	— *210*
H11	195 *90*	230 *100*	260 *120*	310 *140*	— —	— —	— —	— —	150 *70*	165 *75*	195 *90*	230 *105*	345 *100*	425 *125*	560 *155*	690 *190*
	295	330	395	460	—	—	—	—	230	245	295	345	330	410	510	620

R217/220.28 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MP2050				MP2501				MS2500				MP3501			
	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%	100%	70%	30%	10%
P1	285 *940*	325 *1075*	390 *1275*	455 *1500*	415 *1350*	450 *1475*	520 *1700*	580 *1900*	395 *1300*	430 *1400*	500 *1650*	570 *1875*	370 *1225*	400 *1300*	465 *1525*	530 *1750*
P2	275 *900*	310 *1025*	380 *1250*	445 *1450*	395 *1300*	430 *1400*	500 *1650*	570 *1875*	375 *1225*	410 *1350*	485 *1600*	550 *1800*	350 *1150*	385 *1275*	455 *1500*	510 *1675*
P3	240 *790*	270 *890*	330 *1075*	390 *1275*	345 *1125*	375 *1225*	440 *1450*	495 *1625*	330 *1075*	360 *1175*	425 *1400*	480 *1575*	310 *1025*	335 *1100*	395 *1300*	445 *1450*
P4	215 *710*	245 *800*	290 *950*	340 *1125*	310 *1025*	340 *1125*	390 *1275*	435 *1425*	295 *970*	325 *1075*	375 *1225*	425 *1400*	280 *920*	305 *1000*	350 *1150*	390 *1275*
P5	205 *670*	235 *770*	280 *920*	330 *1075*	295 *970*	325 *1075*	370 *1225*	420 *1375*	285 *940*	310 *1025*	360 *1175*	410 *1350*	265 *870*	290 *950*	335 *1100*	380 *1250*
P6	230 *750*	260 *850*	310 *1025*	370 *1225*	335 *1100*	365 *1200*	415 *1350*	470 *1550*	320 *1050*	350 *1150*	400 *1300*	460 *1500*	300 *980*	325 *1075*	375 *1225*	425 *1400*
P7	220 *720*	245 *800*	295 *970*	350 *1150*	315 *1025*	340 *1125*	395 *1300*	445 *1450*	300 *980*	330 *1075*	380 *1250*	430 *1400*	280 *920*	305 *1000*	355 *1175*	400 *1300*
P8	200 *660*	230 *750*	280 *920*	325 *1075*	290 *950*	315 *1025*	370 *1225*	415 *1350*	280 *920*	305 *1000*	360 *1175*	405 *1325*	260 *850*	285 *940*	335 *1100*	375 *1225*
P11	210 *690*	240 *790*	285 *940*	340 *1125*	305 *1000*	330 *1075*	380 *1250*	430 *1400*	290 *950*	320 *1050*	370 *1225*	420 *1375*	275 *900*	300 *980*	345 *1125*	390 *1275*
P12	140 *460*	155 *510*	190 *620*	220 *720*	195 *640*	215 *710*	245 *800*	270 *890*	190 *620*	205 *670*	235 *770*	260 *850*	180 *590*	195 *640*	220 *720*	245 *800*
M1	195 *640*	220 *720*	270 *890*	320 *1050*	200 *660*	225 *740*	275 *900*	325 *1075*	220 *720*	245 *800*	300 *980*	355 *1175*	185 *610*	210 *690*	260 *850*	305 *1000*
M2	165 *540*	185 *610*	225 *740*	265 *870*	170 *560*	190 *620*	230 *750*	270 *890*	185 *610*	205 *670*	245 *800*	295 *970*	155 *510*	180 *590*	215 *710*	250 *820*
M3	135 *445*	150 *490*	180 *590*	215 *710*	135 *445*	155 *510*	185 *610*	220 *720*	150 *490*	165 *540*	200 *660*	235 *770*	125 *410*	145 *475*	170 *560*	205 *670*
M4	105 *345*	115 *375*	140 *460*	165 *540*	105 *345*	120 *395*	145 *475*	170 *560*	115 *375*	130 *425*	155 *510*	185 *610*	100 *330*	110 *360*	135 *445*	160 *520*
M5	85 *280*	95 *310*	115 *375*	140 *460*	90 *295*	100 *330*	120 *395*	140 *460*	95 *310*	110 *360*	130 *425*	155 *510*	80 *260*	95 *310*	110 *360*	130 *425*
K1	— —	— —	— —	— —	400 *1300*	435 *1425*	510 *1675*	570 *1875*	240 *790*	270 *890*	330 *1075*	390 *1275*	355 *1175*	385 *1275*	455 *1500*	520 *1700*
K2	— —	— —	— —	— —	360 *1175*	390 *1275*	450 *1475*	510 *1675*	215 *710*	245 *800*	295 *970*	350 *1150*	320 *1050*	350 *1150*	405 *1325*	455 *1500*
K3	— —	— —	— —	— —	305 *1000*	330 *1075*	380 *1250*	430 *1400*	185 *610*	210 *690*	250 *820*	295 *970*	270 *890*	295 *970*	340 *1125*	385 *1275*
K4	— —	— —	— —	— —	290 *950*	315 *1025*	365 *1200*	410 *1350*	175 *570*	200 *660*	235 *770*	280 *920*	260 *850*	285 *940*	325 *1075*	370 *1225*
K5	— —	— —	— —	— —	180 *590*	195 *640*	220 *720*	250 *820*	105 *345*	120 *395*	145 *475*	170 *560*	160 *520*	175 *570*	200 *660*	225 *740*
K6	— —	— —	— —	— —	255 *840*	280 *920*	320 *1050*	360 *1175*	155 *510*	175 *570*	210 *690*	250 *820*	230 *750*	250 *820*	285 *940*	325 *1075*
K7	— —	— —	— —	— —	230 *750*	250 *820*	285 *940*	320 *1050*	140 *460*	155 *510*	185 *610*	220 *720*	205 *670*	225 *740*	255 *840*	285 *940*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	50 *165*	55 *180*	70 *230*	80 *260*	— —	— —	— —	— —	55 *180*	65 *215*	75 *245*	90 *295*	46 *150*	50 *165*	65 *215*	75 *245*
S2	41 *135*	46 *150*	55 *180*	65 *215*	— —	— —	— —	— —	45 *150*	50 *165*	60 *195*	70 *230*	37 *120*	42 *140*	50 *165*	60 *195*
S3	36 *120*	40 *130*	49 *160*	55 *180*	— —	— —	— —	— —	40 *130*	45 *150*	55 *180*	65 *215*	33 *110*	37 *120*	45 *150*	50 *165*
S11	70 *230*	80 *260*	95 *310*	115 *375*	— —	— —	— —	— —	80 *260*	90 *295*	105 *345*	125 *410*	65 *215*	70 *230*	85 *280*	105 *345*
S12	48 *155*	55 *180*	65 *215*	80 *260*	— —	— —	— —	— —	55 *180*	60 *195*	75 *245*	85 *280*	44 *145*	50 *165*	60 *195*	70 *230*
S13	28 *90*	32 *105*	39 *130*	45 *150*	— —	— —	— —	— —	32 *105*	36 *120*	43 *140*	50 *165*	26 *85*	29 *95*	35 *115*	41 *135*
H5	— —	— —	— —	— —	— —	— —	— —	— —	46 *150*	50 *165*	60 *195*	75 *245*	41 *135*	46 *150*	55 *180*	65 *215*
H8	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	65 *215*	75 *245*	43 *140*	49 *160*	60 *195*	70 *230*
H11	55 *180*	60 *195*	70 *230*	85 *280*	— —	— —	— —	— —	60 *195*	65 *215*	80 *260*	95 *310*	50 *165*	60 *195*	70 *230*	80 *260*
H12	90 *295*	100 *330*	120 *395*	140 *460*	— —	— —	— —	— —	95 *310*	110 *360*	130 *425*	155 *510*	80 *260*	90 *295*	105 *345*	120 *395*



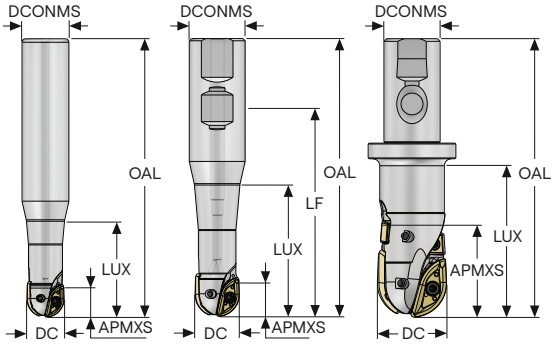
R218.20/19/24 A TESTA SFERICA

Offriamo una vasta gamma di frese a testa sferica altamente produttive per tutti i materiali e le applicazioni, che vanno dagli utensili per impieghi generali a quelli per segmenti specifici. La fresa a testa sferica è progettata per offrire prestazioni superiori e una maggiore affidabilità nelle applicazioni di copiatura.

– A testa sferica K=1, 3 taglienti, gamma di frese 16-40 mm (0,75-1")
– A testa sferica K=2, 2 taglienti, gamma di frese 12-50 mm (0,5-2")
– A testa sferica conica, 2 taglienti, gamma di frese 16 mm

R218.20 – In mm

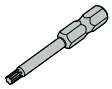




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726-747
—Per il programma inserti completo, vedere le pagine 896, 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS		LF	LS	LUX	LPR	OAL	RMPX°	RPMX	Peso	218.20	SPM.
			mm		mm	mm	mm	mm	mm	mm	mm			kg		
R218.20-2520.3-18.070A	00031654	Weldon	20,0	2	18,0	25,0	93,94	56,0	54,0	70,0	126,0	45,0	20200	0,4	-100(2)	–
R218.20-2525.3-22.060A	00038464	Weldon	25,0	2	22,0	25,0	83,96	60,0	56,0	60,0	116,0	45,0	16900	0,4	-125(2)	–
R218.20-2525.3-22.080A	00031897	Weldon	25,0	2	22,0	25,0	103,96	60,0	75,5	80,0	136,0	45,0	16900	0,5	-125(2)	–
R218.20-3230.3-45.100A	00032046	Weldon	30,0	2	44,0	32,0	123,93	70,0	71,0	100,0	160,0	45,0	12500	0,8	-150(2)	SPMT10(2)
R218.20-3232.3-28.070A	00032245	Weldon	32,0	2	28,0	32,0	93,92	60,0	68,0	70,0	130,0	45,0	10900	0,7	-160(2)	–
R218.20-3232.3-28.100A	00030731	Weldon	32,0	2	28,0	32,0	123,92	70,0	89,0	100,0	160,0	45,0	10900	0,9	-160(2)	–
R218.20-3232.3-54.100A	00030733	Weldon	32,0	2	54,0	32,0	123,92	70,0	89,0	100,0	160,0	45,0	10900	0,8	-160(2)	SPMT10(3)
R218.20-1612.0-10.112A	02627903	Cilindrico	12,0	2	10,0	16,0	–	120,0	25,0	112,0	160,0	45,0	30000	0,3	-060(2)	–
R218.20-2016.0-14.070A	02722506	Cilindrico	16,0	2	14,0	20,0	–	70,0	36,0	70,0	120,0	45,0	28500	0,3	-080(2)	–
R218.20-1616.0-14.105E	00031596	Cilindrico	16,0	2	14,0	16,0	–	115,0	49,0	117,0	165,0	45,0	28500	0,5	-080(2)	–
R218.20-2520.0-18.120A	00031701	Cilindrico	20,0	2	18,0	25,0	–	104,0	54,0	120,0	176,0	45,0	20200	0,6	-100(2)	–
R218.20-3225.0-22.160A	00031940	Cilindrico	25,0	2	22,0	32,0	–	130,0	68,0	160,0	220,0	45,0	16900	1,1	-125(2)	–
R218.20-3230.0-26.160A	00032027	Cilindrico	30,0	2	27,0	32,0	–	130,0	73,0	160,0	220,0	45,0	12500	1,1	-150(2)	–
R218.20-3232.0-28.160A	00030730	Cilindrico	32,0	2	28,0	32,0	–	130,0	90,0	160,0	220,0	45,0	10900	1,2	-160(2)	–

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto centrale	Vite di bloccaggio inserto periferico
			
R218.20.. Ø16	1/4HEX-T08PX50	C02506-T08P	–
R218.20.. Ø20	1/4HEX-T09PX50	C03007-T09P	–
R218.20.. Ø25-30	1/4HEX-T15PX50	C04009-T15P	–
R218.20.. Ø30-100A	1/4HEX-T15PX50	C04009-T15P	C03508-T15P
R218.20.. Ø32	1/4HEX-T15PX50	C04011-T15P	–
R218.20.. Ø32-100A	1/4HEX-T15PX50	C04011-T15P	C03508-T15P
R218.20-1612	1/4HEX-T06PX50	C01805-T06P	–

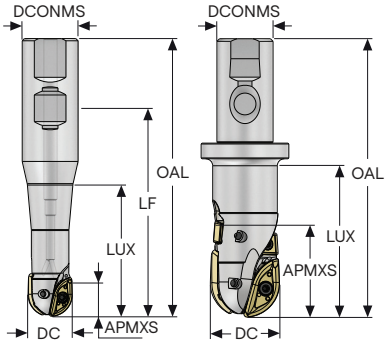
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Coppia di serraggio inserto 2	Chiave dinamometrica	Chiave dinamometrica 2
						
R218.20.. Ø16	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	–	T00-08P12	–
R218.20.. Ø20	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	–	T00-09P20	–
R218.20.. Ø25-32	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	–	T00-15P35	–
R218.20.. Ø30-32-100A	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	3.0NM	T00-15P35	T00-15P30
R218.20-1612	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	–	T00-06P05	–

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20 – In mm

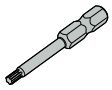
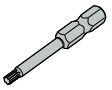




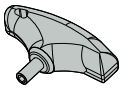
–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726-747
–Per il programma inserti completo, vedere le pagine 880, 917
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS		LF	LS	LUX	LPR	OAL	RMPX°	RPMX	Peso	218.20	SCET
			mm		mm	mm	mm	mm	mm	mm	mm	mm			kg		
R218.20-5050.3-70.150	00032677	Weldon	50,0	2	70,0	–	50,0	184,87	80,0	149,0	149,87	229,87	45,0	3700	2,7	-250(2)	SC..12 (3)
R218.20-3240.3S-60.100	00032440	Seco-Weldon	40,0	2	60,0	50,0	32,0	–	59,5	89,0	99,9	159,4	45,0	7200	1,1	-200(2)	SC..12 (3)
R218.20-3250.3S-70.100	00032627	Seco-Weldon	50,0	2	70,0	50,0	32,0	–	59,5	91,0	99,87	159,37	45,0	3700	1,3	-250(2)	SC..12 (3)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto centrale	Vite di bloccaggio inserto periferico	Chiave inserto periferico
				
R218.20.. Ø40	1/4HEX-T20PX50	C05013-T20P	C45011-T20P	–
R218.20.. Ø50	1/4HEX-T25PX50	C06018-T25P	C45011-T20P	1/4HEX-T20PX50

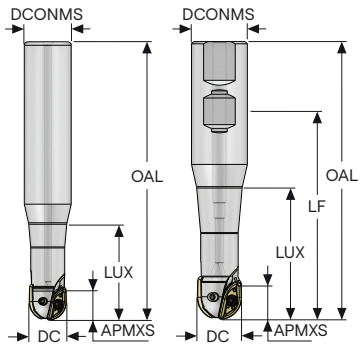
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.20.. Ø40	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R218.20.. Ø50	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00T-25P80

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20 – Pollici

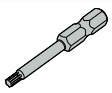




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726-747
—Per il programma inserti completo, vedere le pagine 896, 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch	inch			lb	
R218.20-0.500.3-11-060A	02687514	Weldon	0.500	2	0.433	0.750	3.313	2.362	0.827	2.362	4.331	45,0	30000	0.440	218.20-0.250
R218.20-0.625.3-14-050A	02740373	Weldon	0.625	2	0.551	0.625	2.919	2.299	1.500	1.969	3.874	45,0	28500	0.440	218.20-080
R218.20-0.750.3-17-070A	00040022	Weldon	0.750	2	0.669	1.000	3.895	2.280	2.000	2.831	5.035	45,0	20200	0.880	218.20-0.375
R218.20-01.00.3-22-070A	00040024	Weldon	1.000	2	0.866	1.000	3.896	2.362	2.000	2.756	5.039	45,0	16900	1.100	218.20-125
R218.20-01.25.3-28-100A	00040025	Weldon	1.250	2	1.102	1.250	5.073	2.673	3.500	3.937	6.213	45,0	10900	1.540	218.20-160
R218.20-01.50.3-34-100A	00040027	Weldon	1.500	2	1.339	1.500	5.435	3.083	3.500	3.870	6.626	45,0	7200	2.650	218.20-0.750
R218.20-0.500.0-11-111A	02687512	Cilindrico	0.500	2	0.433	0.625	–	4.724	1.142	4.408	6.298	45,0	30000	0.660	218.20-0.250
R218.20-0.625.0-14-070A	02740370	Cilindrico	0.625	2	0.551	0.750	–	2.819	1.398	2.756	4.785	45,0	28500	0.660	218.20-080
R218.20-0.750.0-17-120A	00040031	Cilindrico	0.750	2	0.669	1.000	–	4.248	2.087	4.797	7.002	45,0	20200	1.320	218.20-0.375
R218.20-01.00.0-22-160A	00040032	Cilindrico	1.000	2	0.866	1.250	–	4.996	2.795	6.215	8.577	45,0	16900	2.200	218.20-125

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.20-0.500	1/4HEX-T06PX50	C02052-T06P
R218.20-0.625	1/4HEX-T08PX50	C02506-T08P
R218.20-0.750	1/4HEX-T09PX50	C03006-T09P
R218.20-01.00	1/4HEX-T15PX50	C04009-T15P
R218.20-01.25	1/4HEX-T15PX50	C04011-T15P
R218.20-01.50	1/4HEX-T20PX50	C05013-T20P

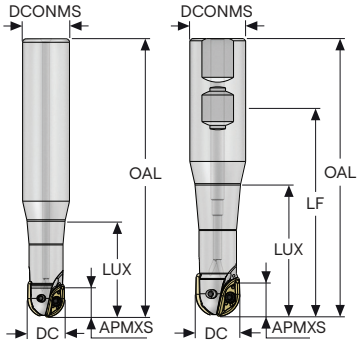
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.20-0.500	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05
R218.20-0.625	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R218.20-0.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R218.20-01.00-01.25	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R218.20-01.50	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20 – Pollici

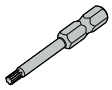
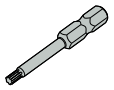




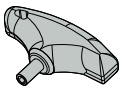
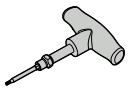
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726-747
—Per il programma inserti completo, vedere le pagine 880, 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RMPX°	RPMX	Peso	218.20	SCET
			inch		inch	inch	inch	inch	inch	inch	inch			lb		
R218.20-02.00.3-70-120A	02740375	Weldon	2.000	2	2.756	2.000	6.124	3.243	4.705	4.818	7.967	45,0	3700	5.730	-250.R (2)	SC..12 (3)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto centrale	Vite di bloccaggio inserto periferico	Chiave inserto periferico
				
R218.20-02.00	1/4HEX-T25PX50	C06018-T25P	C45011-T20P	1/4HEX-T20PX50

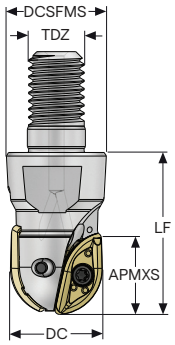
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.20-02.00	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	8.0NM	T00T-25P80

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20 – In mm



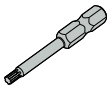


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726-747
—Per il programma inserti completo, vedere le pagine 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RMPX°	RPMX	Peso	Inserto
			mm		mm	mm		mm	mm			kg	
R218.20-0612.RE-10A	02731891	Combimaster	12,0	2	10,0	11,0	M6	20,0	33,5	45,0	30000	0,1	218.20-060
R218.20-0812.RE-10A	02627909	Combimaster	12,0	2	10,0	13,5	M8	23,0	40,75	45,0	30000	0,1	218.20-060
R218.20-0816.RE-14A	02742691	Combimaster	16,0	2	14,0	13,5	M8	23,0	40,75	45,0	28500	0,1	218.20-080
R218.20-1016.RE-14A	00031585	Combimaster	16,0	2	14,0	18,0	M10	28,0	46,75	45,0	28500	0,1	218.20-080
R218.20-1020.RE-18A	00039896	Combimaster	20,0	2	18,0	18,0	M10	28,0	46,75	45,0	20200	0,1	218.20-100
R218.20-1220.RE-18A	00031619	Combimaster	20,0	2	18,0	21,5	M12	35,0	56,75	45,0	20200	0,2	218.20-100
R218.20-1225.RE-22A	00031777	Combimaster	25,0	2	22,0	21,5	M12	35,0	56,75	45,0	16900	0,2	218.20-125
R218.20-1630.RE-26A	00032025	Combimaster	30,0	2	27,0	28,5	M16	40,0	62,75	45,0	12500	0,2	218.20-150
R218.20-1632.RE-28A	00030728	Combimaster	32,0	2	28,0	28,5	M16	40,0	62,75	45,0	10900	0,2	218.20-160
R218.20-1640.RE-35A	00032409	Combimaster	40,0	2	35,0	34,0	M16	50,0	72,75	45,0	7200	0,3	218.20-200
R218.20-2040.RE-35A	02928081	Combimaster	40,0	2	35,0	36,5	M20	55,0	82,0	45,0	7200	0,4	218.20-200
R218.20-2050.RE-44A	02928082	Combimaster	50,0	2	44,0	36,5	M20	65,0	92,0	45,0	5000	0,5	218.20-250

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.20-0612-0812	1/4HEX-T06PX50	C01805-T06P
R218.20-0816-1016	1/4HEX-T08PX50	C02506-T08P
R218.20-1020-1220	1/4HEX-T09PX50	C03007-T09P
R218.20-1225-1630	1/4HEX-T15PX50	C04009-T15P
R218.20-1632	1/4HEX-T15PX50	C04011-T15P
R218.20-1640-2040	1/4HEX-T20PX50	C05013-T20P
R218.20-2050	1/4HEX-T25PX50	C06018-T25P

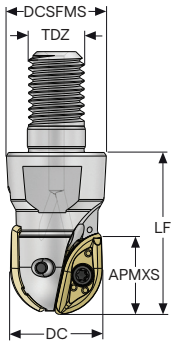
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.20-0612-0812	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05
R218.20-0816-1016	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	1.2NM	T00-08P12
R218.20-1020-1220	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R218.20-1225-1632	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R218.20-1640-2040	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R218.20-2050	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	8.0NM	T00T-25P80

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20 – Pollici



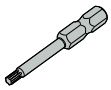


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 726–747
—Per il programma inserti completo, vedere le pagine 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RMPX°	RPMX	Peso	Inserto
			inch		inch	inch		inch	inch			lb	
R218.20-0.500-06RE-11A	02687515	Combimaster	0.500	2	0.433	0.433	M6	0.787	1.319	45,0	30000	0.220	218.20-0.250
R218.20-0.500-08RE-11A	02687516	Combimaster	0.500	2	0.433	0.531	M8	0.906	1.604	45,0	28500	0.220	218.20-0.250
R218.20-0.750-10RE-17A	02428548	Combimaster	0.750	2	0.669	0.728	M10	1.102	1.841	45,0	20200	0.220	218.20-0.375
R218.20-01.00-12RE-22A	00040018	Combimaster	1.000	2	0.866	0.846	M12	1.378	2.234	45,0	16900	0.440	218.20-125
R218.20-01.25-16RE-28A	00040019	Combimaster	1.250	2	1.102	1.122	M16	1.575	2.470	45,0	10900	0.220	218.20-160
R218.20-01.50-16RE-34A	00040020	Combimaster	1.500	2	1.339	1.339	M16	1.969	2.864	45,0	7200	0.660	218.20-0.750
R218.20-02.00-20RE-44A	02928066	Combimaster	2.000	2	1.732	1.437	M20	2.559	3.622	45,0	5000	1.100	218.20-250

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.20-0.500	1/4HEX-T06PX50	C02052-T06P
R218.20-0.750	1/4HEX-T09PX50	C03006-T09P
R218.20-01.00	1/4HEX-T15PX50	C04009-T15P
R218.20-01.25	1/4HEX-T15PX50	C04011-T15P
R218.20-01.50	1/4HEX-T20PX50	C05013-T20P
R218.20-02.00	1/4HEX-T25PX50	C06018-T25P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.20-0.500	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05
R218.20-0.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R218.20-01.00-01.25	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R218.20-01.50	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	5.0NM	T00-20P50
R218.20-02.00	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-T-HANDLE	8.0NM	T00T-25P80

Chiavi dinamometriche e fisse, vedere pagina 931

R218.20-0.250 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,075 0.0030	0,10 0.0040
P2	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,075 0.0030	0,10 0.0040
P3	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,042 0.0017	0,042 0.0017	0,046 0.0018	0,070 0.0028	0,095 0.0038
P4	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,042 0.0017	0,042 0.0017	0,046 0.0017	0,070 0.0028	0,095 0.0038
P5	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
P6	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0036
P7	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0036
P8	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,042 0.0017	0,042 0.0017	0,046 0.0018	0,070 0.0028	0,095 0.0038
P11	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0036
P12	218.20-0.250ER-M03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,032 0.0013	0,046 0.0018	0,065 0.0026
M1	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,075 0.0030	0,10 0.0040
M2	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
M3	218.20-0.250ER-ME03 F40M	5,0 *0.20*	0,034 0.0013	0,034 0.0013	0,036 0.0014	0,055 0.0022	0,075 0.0030
M4	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
M5	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
K1	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,075 0.0030	0,10 0.0040
K2	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
K3	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
K4	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
K5	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,036 0.0014	0,036 0.0014	0,040 0.0016	0,060 0.0024	0,085 0.0034
K6	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,040 0.0016	0,040 0.0016	0,044 0.0017	0,065 0.0026	0,095 0.0038
K7	218.20-0.250ER-M03 F40M	7,0 *0.28*	0,036 0.0014	0,036 0.0014	0,040 0.0016	0,060 0.0024	0,085 0.0034
N1	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,095 0.0038	0,13 0.0050
N2	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,095 0.0038	0,13 0.0050
N3	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,095 0.0038	0,13 0.0050
N11	218.20-0.250ER-ME03 F40M	7,0 *0.28*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,095 0.0038	0,13 0.0050
S1	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
S2	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
S3	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,030 0.0012	0,030 0.0012	0,030 0.0012	0,046 0.0018	0,060 0.0024
S11	218.20-0.250ER-ME03 F40M	4,5 *0.18*	0,036 0.0014	0,036 0.0014	0,038 0.0015	0,055 0.0022	0,075 0.0030
S12	218.20-0.250ER-ME03 F40M	4,5 *0.18*	0,036 0.0014	0,036 0.0014	0,038 0.0015	0,055 0.0022	0,075 0.0030
S13	218.20-0.250ER-ME03 F40M	4,0 *0.16*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
H5	218.20-0.250ER-M03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,032 0.0013	0,046 0.0018	0,065 0.0026
H8	218.20-0.250ER-M03 F40M	4,5 *0.18*	0,024 0.00095	0,024 0.00095	0,024 0.00095	0,036 0.0014	0,050 0.0020
H11	218.20-0.250ER-M03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,032 0.0013	0,046 0.0018	0,065 0.0026
H12	218.20-0.250ER-M03 F40M	4,5 *0.18*	0,024 0.00095	0,024 0.00095	0,024 0.00095	0,036 0.0014	0,050 0.0020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-0.250 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M				
	100%	70%	30%	10%	5%
P1	335 *1100*	355 *1175*	390 *1275*	420 *1375*	440 *1450*
P2	325 *1075*	345 *1125*	380 *1250*	410 *1350*	430 *1400*
P3	280 *920*	300 *980*	325 *1075*	355 *1175*	370 *1225*
P4	250 *820*	265 *870*	295 *970*	325 *1075*	345 *1125*
P5	240 *790*	250 *820*	275 *900*	295 *970*	310 *1025*
P6	265 *870*	280 *920*	305 *1000*	335 *1100*	350 *1150*
P7	250 *820*	265 *870*	290 *950*	315 *1025*	330 *1075*
P8	235 *770*	250 *820*	275 *900*	295 *970*	310 *1025*
P11	245 *800*	260 *850*	280 *920*	305 *1000*	320 *1050*
P12	155 *510*	165 *540*	170 *560*	175 *570*	185 *610*
M1	225 *740*	245 *800*	295 *970*	345 *1125*	375 *1225*
M2	185 *610*	205 *670*	240 *790*	280 *920*	305 *1000*
M3	155 *510*	170 *560*	195 *640*	220 *720*	240 *790*
M4	125 *410*	130 *425*	150 *490*	165 *540*	180 *590*
M5	105 *345*	110 *360*	125 *410*	140 *460*	150 *490*
K1	220 *720*	245 *800*	290 *950*	335 *1100*	370 *1225*
K2	195 *640*	215 *710*	255 *840*	300 *980*	320 *1050*
K3	165 *540*	180 *590*	215 *710*	250 *820*	270 *890*
K4	160 *520*	175 *570*	205 *670*	240 *790*	260 *850*
K5	95 *310*	105 *345*	125 *410*	145 *475*	155 *510*
K6	140 *460*	150 *490*	180 *590*	210 *690*	230 *750*
K7	120 *395*	135 *445*	160 *520*	185 *610*	200 *660*
N1	1700 *5575*	1850 *6075*	2200 *7225*	2575 *8450*	2800 *9175*
N2	680 *2225*	740 *2425*	890 *2925*	1025 *3375*	1125 *3700*
N3	455 *1500*	495 *1625*	590 *1925*	690 *2275*	750 *2450*
N11	520 *1700*	570 *1875*	680 *2225*	790 *2600*	860 *2825*
S1	60 *195*	60 *195*	70 *230*	80 *260*	85 *280*
S2	46 *150*	49 *160*	55 *180*	65 *215*	70 *230*
S3	40 *130*	43 *140*	48 *155*	55 *180*	60 *195*
S11	80 *260*	85 *280*	100 *330*	110 *360*	120 *395*
S12	55 *180*	60 *195*	70 *230*	75 *245*	85 *280*
S13	32 *105*	34 *110*	39 *130*	44 *145*	48 *155*
H5	47 *155*	50 *165*	60 *195*	65 *215*	70 *230*
H8	49 *160*	50 *165*	60 *195*	70 *230*	75 *245*
H11	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*
H12	90 *295*	95 *310*	105 *345*	120 *395*	130 *425*

R218.20-0.375 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,17 0.0065
P2	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,17 0.0065
P3	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,12 0.0048	0,16 0.0065
P4	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0048	0,16 0.0065
P5	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
P6	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,15 0.0060
P7	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,15 0.0060
P8	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,12 0.0048	0,16 0.0065
P11	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,15 0.0060
P12	218.20-0.375ER-M05 F40M	8,0 *0.32*	0,048 0.0019	0,048 0.0019	0,050 0.0020	0,080 0.0030	0,11 0.0044
M1	218.20-0.375ER-ME05 MS2050	10,0 *0.40*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,17 0.0065
M2	218.20-0.375ER-ME05 MS2050	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
M3	218.20-0.375ER-ME05 MS2050	8,0 *0.32*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,090 0.0036	0,13 0.0050
M4	218.20-0.375ER-ME05 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
M5	218.20-0.375ER-ME05 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
K1	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,17 0.0065
K2	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
K3	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
K4	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
K5	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,060 0.0024	0,060 0.0024	0,065 0.0026	0,10 0.0040	0,14 0.0055
K6	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
K7	218.20-0.375ER-M05 F40M	10,0 *0.40*	0,060 0.0024	0,060 0.0024	0,065 0.0026	0,10 0.0040	0,14 0.0055
N1	218.20-0.375ER-ME05 F40M	10,0 *0.40*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
N2	218.20-0.375ER-ME05 F40M	10,0 *0.40*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
N3	218.20-0.375ER-ME05 F40M	10,0 *0.40*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
N11	218.20-0.375ER-ME05 F40M	10,0 *0.40*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
S1	218.20-0.375ER-ME05 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
S2	218.20-0.375ER-ME05 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
S3	218.20-0.375ER-ME05 F40M	6,0 *0.24*	0,050 0.0020	0,050 0.0020	0,050 0.0020	0,075 0.0030	0,10 0.0040
S11	218.20-0.375ER-ME05 MS2050	7,0 *0.28*	0,060 0.0024	0,060 0.0024	0,060 0.0024	0,090 0.0036	0,13 0.0050
S12	218.20-0.375ER-ME05 MS2050	7,0 *0.28*	0,060 0.0024	0,060 0.0024	0,060 0.0024	0,090 0.0036	0,13 0.0050
S13	218.20-0.375ER-ME05 MS2050	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
H5	218.20-0.375ER-M05 F40M	8,0 *0.32*	0,048 0.0019	0,048 0.0019	0,050 0.0020	0,080 0.0030	0,11 0.0044
H8	218.20-0.375ER-M05 F40M	7,0 *0.28*	0,038 0.0015	0,038 0.0015	0,040 0.0016	0,060 0.0024	0,080 0.0032
H11	218.20-0.375ER-M05 F40M	8,0 *0.32*	0,048 0.0019	0,048 0.0019	0,050 0.0020	0,080 0.0030	0,11 0.0044
H12	218.20-0.375ER-M05 F40M	7,0 *0.28*	0,038 0.0015	0,038 0.0015	0,040 0.0016	0,060 0.0024	0,080 0.0032

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-0.375 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	280 *920*	305 *1000*	370 *1225*	435 *1425*	475 *1550*	335 *1100*	355 *1175*	415 *1350*	470 *1550*	500 *1650*	310 *1025*	320 *1050*	365 *1200*	405 *1325*	425 *1400*
P2	275 *900*	300 *980*	360 *1175*	425 *1400*	460 *1500*	325 *1075*	345 *1125*	400 *1300*	455 *1500*	485 *1600*	300 *980*	315 *1025*	355 *1175*	390 *1275*	410 *1350*
P3	240 *790*	260 *850*	315 *1025*	365 *1200*	400 *1300*	285 *940*	305 *1000*	350 *1150*	390 *1275*	420 *1375*	260 *850*	275 *900*	310 *1025*	335 *1100*	355 *1175*
P4	210 *690*	230 *750*	275 *900*	320 *1050*	355 *1175*	250 *820*	265 *870*	305 *1000*	345 *1125*	370 *1225*	230 *750*	245 *800*	280 *920*	310 *1025*	330 *1075*
P5	200 *660*	220 *720*	265 *870*	310 *1025*	335 *1100*	240 *790*	255 *840*	295 *970*	335 *1100*	355 *1175*	220 *720*	230 *750*	260 *850*	285 *940*	300 *980*
P6	225 *740*	245 *800*	295 *970*	350 *1150*	385 *1275*	270 *890*	285 *940*	330 *1075*	375 *1225*	400 *1300*	245 *800*	260 *850*	290 *950*	320 *1050*	340 *1125*
P7	215 *710*	230 *750*	280 *920*	330 *1075*	360 *1175*	255 *840*	270 *890*	310 *1025*	355 *1175*	375 *1225*	235 *770*	245 *800*	275 *900*	305 *1000*	320 *1050*
P8	200 *660*	220 *720*	265 *870*	305 *1000*	335 *1100*	240 *790*	255 *840*	295 *970*	330 *1075*	355 *1175*	220 *720*	230 *750*	260 *850*	285 *940*	300 *980*
P11	205 *670*	225 *740*	270 *890*	320 *1050*	350 *1150*	245 *800*	260 *850*	300 *980*	340 *1125*	365 *1200*	225 *740*	235 *770*	265 *870*	295 *970*	310 *1025*
P12	140 *460*	150 *490*	170 *560*	200 *660*	220 *720*	160 *520*	170 *560*	185 *610*	205 *670*	220 *720*	150 *490*	155 *510*	160 *520*	175 *570*	185 *610*
M1	— —	— —	— —	— —	— —	235 *770*	255 *840*	305 *1000*	360 *1175*	395 *1300*	200 *660*	220 *720*	265 *870*	310 *1025*	335 *1100*
M2	— —	— —	— —	— —	— —	190 *620*	210 *690*	250 *820*	295 *970*	320 *1050*	165 *540*	180 *590*	215 *710*	255 *840*	275 *900*
M3	— —	— —	— —	— —	— —	165 *540*	175 *570*	200 *660*	235 *770*	255 *840*	140 *460*	150 *490*	170 *560*	200 *660*	220 *720*
M4	— —	— —	— —	— —	— —	130 *425*	135 *445*	160 *520*	180 *590*	195 *640*	110 *360*	115 *375*	135 *445*	155 *510*	170 *560*
M5	— —	— —	— —	— —	— —	110 *360*	115 *375*	130 *425*	150 *490*	165 *540*	95 *310*	95 *310*	115 *375*	130 *425*	140 *460*
K1	220 *720*	235 *770*	285 *940*	335 *1100*	365 *1200*	— —	— —	— —	— —	— —	200 *660*	215 *710*	260 *850*	305 *1000*	330 *1075*
K2	190 *620*	210 *690*	250 *820*	295 *970*	320 *1050*	— —	— —	— —	— —	— —	175 *570*	190 *620*	225 *740*	270 *890*	290 *950*
K3	160 *520*	175 *570*	210 *690*	250 *820*	270 *890*	— —	— —	— —	— —	— —	145 *475*	160 *520*	190 *620*	230 *750*	245 *800*
K4	155 *510*	170 *560*	200 *660*	240 *790*	260 *850*	— —	— —	— —	— —	— —	140 *460*	155 *510*	185 *610*	215 *710*	235 *770*
K5	95 *310*	105 *345*	125 *410*	145 *475*	155 *510*	— —	— —	— —	— —	— —	85 *280*	95 *310*	110 *360*	130 *425*	145 *475*
K6	135 *445*	150 *490*	180 *590*	210 *690*	230 *750*	— —	— —	— —	— —	— —	125 *410*	135 *445*	160 *520*	190 *620*	205 *670*
K7	120 *395*	130 *425*	160 *520*	185 *610*	200 *660*	— —	— —	— —	— —	— —	110 *360*	120 *395*	145 *475*	170 *560*	185 *610*
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1500 *4925*	1600 *5250*	1950 *6400*	2275 *7475*	2500 *8200*
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	600 *1975*	650 *2125*	790 *2600*	920 *3025*	1000 *3275*
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	400 *1300*	435 *1425*	530 *1750*	610 *2000*	670 *2200*
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	460 *1500*	495 *1625*	600 *1975*	700 *2300*	770 *2525*
S1	— —	— —	— —	— —	— —	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*	50 *165*	55 *180*	65 *215*	70 *230*	80 *260*
S2	— —	— —	— —	— —	— —	49 *160*	50 *165*	60 *195*	65 *215*	75 *245*	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*
S3	— —	— —	— —	— —	— —	43 *140*	44 *145*	50 *165*	60 *195*	65 *215*	37 *120*	38 *125*	44 *145*	50 *165*	55 *180*
S11	— —	— —	— —	— —	— —	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*	70 *230*	75 *245*	90 *295*	100 *330*	110 *360*
S12	— —	— —	— —	— —	— —	60 *195*	60 *195*	70 *230*	80 *260*	90 *295*	50 *165*	55 *180*	60 *195*	70 *230*	75 *245*
S13	— —	— —	— —	— —	— —	34 *110*	36 *120*	41 *135*	47 *155*	50 *165*	29 *95*	31 *100*	35 *115*	40 *130*	44 *145*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	45 *150*	50 *165*	60 *195*	65 *215*
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	45 *150*	47 *155*	55 *180*	65 *215*	70 *230*
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	75 *245*	85 *280*
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	80 *260*	85 *280*	100 *330*	115 *375*	125 *410*

R218.20-0.750 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,24 0.0095	0,34 0.013
P2	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,25 0.010	0,34 0.013
P3	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,24 0.0095	0,32 0.013
P4	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
P5	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
P6	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,30 0.012
P7	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,30 0.012
P8	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,24 0.0095	0,32 0.013
P11	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,30 0.012
P12	218.20-0.750ER-ME10 F40M	16,0 *0.65*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
M1	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,25 0.010	0,34 0.013
M2	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
M3	218.20-0.750ER-ME10 F40M	16,0 *0.65*	0,11 0.0044	0,11 0.0044	0,12 0.0048	0,18 0.0070	0,25 0.010
M4	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,16 0.0065	0,22 0.0085
M5	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,16 0.0065	0,22 0.0085
K1	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,15 0.0060	0,15 0.0060	0,16 0.0065	0,25 0.010	0,34 0.013
K2	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
K3	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
K4	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
K5	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,20 0.0080	0,28 0.011
K6	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
K7	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,12 0.0048	0,12 0.0048	0,13 0.0050	0,20 0.0080	0,28 0.011
N1	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,32 0.013	0,44 0.017
N2	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,32 0.013	0,44 0.017
N3	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,32 0.013	0,44 0.017
N11	218.20-0.750ER-ME10 F40M	20,0 *0.80*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,32 0.013	0,44 0.017
S1	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,16 0.0065	0,22 0.0085
S2	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,16 0.0065	0,22 0.0085
S3	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,15 0.0060	0,20 0.0080
S11	218.20-0.750ER-ME10 F40M	14,0 *0.55*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,18 0.0070	0,25 0.010
S12	218.20-0.750ER-ME10 F40M	14,0 *0.55*	0,12 0.0048	0,12 0.0048	0,12 0.0048	0,18 0.0070	0,25 0.010
S13	218.20-0.750ER-ME10 F40M	12,0 *0.48*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,16 0.0065	0,22 0.0085
H5	218.20-0.750ER-ME10 F40M	16,0 *0.65*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
H8	218.20-0.750ER-ME10 F40M	14,0 *0.55*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,16 0.0065
H11	218.20-0.750ER-ME10 F40M	16,0 *0.65*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
H12	218.20-0.750ER-ME10 F40M	14,0 *0.55*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-0.750 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	265 *870*	275 *900*	320 *1050*	365 *1200*	380 *1250*	220 *720*	235 *770*	280 *920*	320 *1050*	340 *1125*
P2	260 *850*	265 *870*	315 *1025*	350 *1150*	370 *1225*	215 *710*	230 *750*	270 *890*	310 *1025*	335 *1100*
P3	225 *740*	235 *770*	275 *900*	305 *1000*	325 *1075*	190 *620*	200 *660*	235 *770*	265 *870*	290 *950*
P4	200 *660*	210 *690*	250 *820*	285 *940*	305 *1000*	180 *590*	190 *620*	225 *740*	255 *840*	275 *900*
P5	190 *620*	195 *640*	230 *750*	260 *850*	275 *900*	160 *520*	170 *560*	200 *660*	225 *740*	240 *790*
P6	215 *710*	220 *720*	260 *850*	295 *970*	310 *1025*	180 *590*	190 *620*	220 *720*	255 *840*	275 *900*
P7	200 *660*	210 *690*	245 *800*	275 *900*	295 *970*	170 *560*	180 *590*	210 *690*	240 *790*	255 *840*
P8	190 *620*	195 *640*	230 *750*	255 *840*	275 *900*	160 *520*	170 *560*	200 *660*	225 *740*	240 *790*
P11	195 *640*	205 *670*	235 *770*	270 *890*	285 *940*	165 *540*	175 *570*	205 *670*	235 *770*	250 *820*
P12	135 *445*	140 *460*	155 *510*	170 *560*	180 *590*	105 *345*	110 *360*	125 *410*	135 *445*	145 *475*
M1	175 *570*	190 *620*	230 *750*	270 *890*	295 *970*	140 *460*	155 *510*	185 *610*	220 *720*	240 *790*
M2	145 *475*	155 *510*	190 *620*	225 *740*	245 *800*	115 *375*	125 *410*	155 *510*	185 *610*	195 *640*
M3	125 *410*	130 *425*	155 *510*	180 *590*	195 *640*	100 *330*	105 *345*	125 *410*	145 *475*	160 *520*
M4	100 *330*	105 *345*	120 *395*	140 *460*	150 *490*	80 *260*	85 *280*	100 *330*	115 *375*	125 *410*
M5	85 *280*	85 *280*	100 *330*	115 *375*	125 *410*	65 *215*	70 *230*	80 *260*	95 *310*	100 *330*
K1	170 *560*	185 *610*	225 *740*	265 *870*	290 *950*	— —	— —	— —	— —	— —
K2	150 *490*	165 *540*	200 *660*	240 *790*	255 *840*	— —	— —	— —	— —	— —
K3	130 *425*	140 *460*	170 *560*	200 *660*	215 *710*	— —	— —	— —	— —	— —
K4	120 *395*	130 *425*	160 *520*	190 *620*	205 *670*	— —	— —	— —	— —	— —
K5	75 *245*	80 *260*	100 *330*	115 *375*	125 *410*	— —	— —	— —	— —	— —
K6	110 *360*	115 *375*	140 *460*	170 *560*	180 *590*	— —	— —	— —	— —	— —
K7	95 *310*	105 *345*	125 *410*	150 *490*	165 *540*	— —	— —	— —	— —	— —
N1	1275 *4175*	1375 *4500*	1675 *5500*	1975 *6475*	2150 *7050*	— —	— —	— —	— —	— —
N2	510 *1675*	550 *1800*	680 *2225*	800 *2625*	870 *2850*	— —	— —	— —	— —	— —
N3	345 *1125*	370 *1225*	455 *1500*	530 *1750*	580 *1900*	— —	— —	— —	— —	— —
N11	390 *1275*	420 *1375*	520 *1700*	610 *2000*	660 *2175*	— —	— —	— —	— —	— —
S1	46 *150*	49 *160*	55 *180*	65 *215*	70 *230*	25 *80*	26 *85*	30 *100*	34 *110*	38 *125*
S2	37 *120*	39 *130*	45 *150*	50 *165*	55 *180*	20 *65*	21 *70*	24 *80*	28 *90*	30 *100*
S3	33 *110*	34 *110*	40 *130*	45 *150*	50 *165*	18 *60*	18 *60*	21 *70*	24 *80*	27 *90*
S11	65 *215*	65 *215*	80 *260*	90 *295*	100 *330*	34 *110*	35 *115*	42 *140*	48 *155*	55 *180*
S12	44 *145*	46 *150*	55 *180*	65 *215*	70 *230*	31 *100*	33 *110*	39 *130*	45 *150*	49 *160*
S13	26 *85*	28 *90*	32 *105*	36 *120*	40 *130*	19 *60*	20 *65*	23 *75*	26 *85*	28 *90*
H5	38 *125*	40 *130*	47 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H8	41 *135*	43 *140*	50 *165*	60 *195*	65 *215*	— —	— —	— —	— —	— —
H11	48 *155*	50 *165*	60 *195*	70 *230*	75 *245*	— —	— —	— —	— —	— —
H12	75 *245*	75 *245*	90 *295*	105 *345*	115 *375*	— —	— —	— —	— —	— —

R218.20-060 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-060ER-ME03 F40M	6,0 *0.24*	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,075 0.0030	0,10 0.0040
P2	218.20-060ER-ME03 F40M	6,0 *0.24*	0,046 0.0018	0,046 0.0018	0,050 0.0020	0,075 0.0030	0,10 0.0040
P3	218.20-060ER-ME03 F40M	6,0 *0.24*	0,044 0.0017	0,044 0.0017	0,046 0.0018	0,070 0.0028	0,10 0.0040
P4	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,046 0.0018	0,070 0.0028	0,095 0.0038
P5	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
P6	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,095 0.0038
P7	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,095 0.0038
P8	218.20-060ER-ME03 F40M	6,0 *0.24*	0,044 0.0017	0,044 0.0017	0,046 0.0018	0,070 0.0028	0,10 0.0040
P11	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,095 0.0038
P12	218.20-060ER-ME03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,030 0.0012	0,046 0.0018	0,065 0.0026
M1	218.20-060ER-ME03 MS2050	6,0 *0.24*	0,046 0.0018	0,046 0.0018	0,050 0.0020	0,075 0.0030	0,10 0.0040
M2	218.20-060ER-ME03 MS2050	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
M3	218.20-060ER-ME03 MS2050	5,0 *0.20*	0,034 0.0013	0,034 0.0013	0,036 0.0014	0,055 0.0022	0,075 0.0030
M4	218.20-060ER-ME03 F40M	3,5 *0.14*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
M5	218.20-060ER-ME03 F40M	3,5 *0.14*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
K1	218.20-060ER-ME03 F40M	6,0 *0.24*	0,046 0.0018	0,046 0.0018	0,050 0.0020	0,075 0.0030	0,10 0.0040
K2	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
K3	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
K4	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
K5	218.20-060ER-ME03 F40M	6,0 *0.24*	0,038 0.0015	0,038 0.0015	0,040 0.0016	0,060 0.0024	0,085 0.0034
K6	218.20-060ER-ME03 F40M	6,0 *0.24*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,070 0.0028	0,095 0.0038
K7	218.20-060ER-ME03 F40M	6,0 *0.24*	0,038 0.0015	0,038 0.0015	0,040 0.0016	0,060 0.0024	0,085 0.0034
N1	218.20-060ER-ME03 F40M	6,0 *0.24*	0,060 0.0024	0,060 0.0024	0,060 0.0026	0,095 0.0038	0,13 0.0050
N2	218.20-060ER-ME03 F40M	6,0 *0.24*	0,060 0.0024	0,060 0.0024	0,060 0.0026	0,095 0.0038	0,13 0.0050
N3	218.20-060ER-ME03 F40M	6,0 *0.24*	0,060 0.0024	0,060 0.0024	0,060 0.0026	0,095 0.0038	0,13 0.0050
N11	218.20-060ER-ME03 F40M	6,0 *0.24*	0,060 0.0024	0,060 0.0024	0,060 0.0026	0,095 0.0038	0,13 0.0050
S1	218.20-060ER-ME03 F40M	3,5 *0.14*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
S2	218.20-060ER-ME03 F40M	3,5 *0.14*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
S3	218.20-060ER-ME03 F40M	3,5 *0.14*	0,030 0.0012	0,030 0.0012	0,030 0.0012	0,046 0.0018	0,060 0.0024
S11	218.20-060ER-ME03 MS2050	4,0 *0.16*	0,036 0.0014	0,036 0.0014	0,038 0.0015	0,055 0.0022	0,075 0.0030
S12	218.20-060ER-ME03 MS2050	4,0 *0.16*	0,036 0.0014	0,036 0.0014	0,038 0.0015	0,055 0.0022	0,075 0.0030
S13	218.20-060ER-ME03 MS2050	3,5 *0.14*	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,048 0.0019	0,065 0.0026
H5	218.20-060ER-ME03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,030 0.0012	0,046 0.0018	0,065 0.0026
H8	218.20-060ER-ME03 F40M	4,0 *0.16*	0,024 0.00095	0,024 0.00095	0,024 0.00095	0,036 0.0014	0,050 0.0020
H11	218.20-060ER-ME03 F40M	5,0 *0.20*	0,030 0.0012	0,030 0.0012	0,030 0.0012	0,046 0.0018	0,065 0.0026
H12	218.20-060ER-ME03 F40M	4,0 *0.16*	0,024 0.00095	0,024 0.00095	0,024 0.00095	0,036 0.0014	0,050 0.0020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-060 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050					F40M				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	365 *1200*	390 *1275*	440 *1450*	490 *1600*	520 *1700*	355 *1175*	375 *1225*	410 *1350*	445 *1450*	470 *1550*
P2	355 *1175*	380 *1250*	425 *1400*	480 *1575*	510 *1675*	345 *1125*	365 *1200*	400 *1300*	435 *1425*	455 *1500*
P3	305 *1000*	330 *1075*	370 *1225*	410 *1350*	440 *1450*	300 *980*	315 *1025*	345 *1125*	375 *1225*	395 *1300*
P4	270 *890*	290 *950*	325 *1075*	360 *1175*	385 *1275*	265 *870*	280 *920*	310 *1025*	345 *1125*	365 *1200*
P5	260 *850*	275 *900*	310 *1025*	345 *1125*	370 *1225*	250 *820*	265 *870*	290 *950*	315 *1025*	330 *1075*
P6	290 *950*	310 *1025*	350 *1150*	390 *1275*	415 *1350*	280 *920*	300 *980*	325 *1075*	355 *1175*	370 *1225*
P7	275 *900*	295 *970*	330 *1075*	365 *1200*	390 *1275*	265 *870*	280 *920*	305 *1000*	335 *1100*	350 *1150*
P8	255 *840*	275 *900*	310 *1025*	345 *1125*	370 *1225*	250 *820*	265 *870*	290 *950*	315 *1025*	330 *1075*
P11	265 *870*	285 *940*	320 *1050*	355 *1175*	380 *1250*	260 *850*	275 *900*	300 *980*	325 *1075*	340 *1125*
P12	165 *540*	175 *570*	185 *610*	205 *670*	220 *720*	160 *520*	170 *560*	175 *570*	185 *610*	195 *640*
M1	265 *870*	285 *940*	340 *1125*	400 *1300*	440 *1450*	240 *790*	260 *850*	310 *1025*	365 *1200*	400 *1300*
M2	215 *710*	235 *770*	280 *920*	325 *1075*	355 *1175*	195 *640*	215 *710*	255 *840*	295 *970*	325 *1075*
M3	175 *570*	190 *620*	220 *720*	255 *840*	280 *920*	160 *520*	175 *570*	200 *660*	235 *770*	255 *840*
M4	140 *460*	150 *490*	170 *560*	195 *640*	215 *710*	130 *425*	135 *445*	155 *510*	175 *570*	195 *640*
M5	120 *395*	125 *410*	145 *475*	165 *540*	180 *590*	110 *360*	110 *360*	130 *425*	150 *490*	160 *520*
K1	— —	— —	— —	— —	— —	235 *770*	255 *840*	305 *1000*	355 *1175*	390 *1275*
K2	— —	— —	— —	— —	— —	205 *670*	225 *740*	270 *890*	310 *1025*	340 *1125*
K3	— —	— —	— —	— —	— —	175 *570*	190 *620*	225 *740*	265 *870*	290 *950*
K4	— —	— —	— —	— —	— —	165 *540*	180 *590*	215 *710*	250 *820*	275 *900*
K5	— —	— —	— —	— —	— —	100 *330*	110 *360*	130 *425*	155 *510*	165 *540*
K6	— —	— —	— —	— —	— —	145 *475*	160 *520*	190 *620*	220 *720*	245 *800*
K7	— —	— —	— —	— —	— —	130 *425*	140 *460*	165 *540*	195 *640*	215 *710*
N1	— —	— —	— —	— —	— —	1775 *5825*	1925 *6325*	2325 *7625*	2725 *8950*	2975 *9750*
N2	— —	— —	— —	— —	— —	720 *2350*	780 *2550*	940 *3075*	1100 *3600*	1200 *3925*
N3	— —	— —	— —	— —	— —	475 *1550*	520 *1700*	630 *2075*	730 *2400*	800 *2625*
N11	— —	— —	— —	— —	— —	550 *1800*	590 *1925*	720 *2350*	840 *2750*	920 *3025*
S1	65 *215*	70 *230*	80 *260*	90 *295*	100 *330*	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*
S2	55 *180*	55 *180*	65 *215*	75 *245*	80 *260*	49 *160*	50 *165*	60 *195*	65 *215*	75 *245*
S3	46 *150*	48 *155*	55 *180*	65 *215*	70 *230*	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*
S11	95 *310*	95 *310*	115 *375*	130 *425*	140 *460*	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*
S12	65 *215*	65 *215*	80 *260*	90 *295*	100 *330*	60 *195*	60 *195*	70 *230*	80 *260*	90 *295*
S13	37 *120*	39 *130*	45 *150*	50 *165*	55 *180*	34 *110*	35 *115*	41 *135*	47 *155*	50 *165*
H5	— —	— —	— —	— —	— —	48 *155*	50 *165*	60 *195*	70 *230*	75 *245*
H8	— —	— —	— —	— —	— —	50 *165*	55 *180*	65 *215*	70 *230*	80 *260*
H11	— —	— —	— —	— —	— —	60 *195*	65 *215*	75 *245*	90 *295*	95 *310*
H12	— —	— —	— —	— —	— —	90 *295*	100 *330*	115 *375*	130 *425*	140 *460*

R218.20-080 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-080ER-M04 F40M	8,0 *0.32*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P2	218.20-080ER-M04 F40M	8,0 *0.32*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,18 0.0065	0,25 0.0095
P3	218.20-080ER-M04 F40M	8,0 *0.32*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P4	218.20-080ER-M04 F40M	8,0 *0.32*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P5	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P6	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P7	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P8	218.20-080ER-M04 F40M	8,0 *0.32*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P11	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P12	218.20-080ER-M04 F40M	7,0 *0.28*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
M1	218.20-080ER-ME04 MS2050	8,0 *0.32*	0,060 0.0024	0,060 0.0024	0,065 0.0026	0,10 0.0040	0,14 0.0055
M2	218.20-080ER-ME04 MS2050	8,0 *0.32*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,090 0.0036	0,13 0.0050
M3	218.20-080ER-ME04 MS2050	7,0 *0.28*	0,046 0.0018	0,046 0.0018	0,048 0.0019	0,075 0.0030	0,10 0.0040
M4	218.20-080ER-ME04 MP3501	5,0 *0.20*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,090 0.0036
M5	218.20-080ER-ME04 MP3501	5,0 *0.20*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,090 0.0036
K1	218.20-080ER-M04 F40M	8,0 *0.32*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,18 0.0065	0,25 0.0095
K2	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K3	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K4	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K5	218.20-080ER-M04 F40M	8,0 *0.32*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
K6	218.20-080ER-M04 F40M	8,0 *0.32*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K7	218.20-080ER-M04 F40M	8,0 *0.32*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
N1	218.20-080ER-ME04 F40M	8,0 *0.32*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
N2	218.20-080ER-ME04 F40M	8,0 *0.32*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
N3	218.20-080ER-ME04 F40M	8,0 *0.32*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
N11	218.20-080ER-ME04 F40M	8,0 *0.32*	0,14 0.0055	0,14 0.0055	0,15 0.0060	0,22 0.0085	0,32 0.013
S1	218.20-080ER-ME04 MP3501	5,0 *0.20*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,090 0.0036
S2	218.20-080ER-ME04 MP3501	5,0 *0.20*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,090 0.0036
S3	218.20-080ER-ME04 MP3501	5,0 *0.20*	0,040 0.0016	0,040 0.0016	0,040 0.0016	0,060 0.0024	0,085 0.0034
S11	218.20-080ER-ME04 MS2050	6,0 *0.24*	0,046 0.0018	0,046 0.0018	0,050 0.0020	0,075 0.0030	0,10 0.0040
S12	218.20-080ER-ME04 MS2050	6,0 *0.24*	0,046 0.0018	0,046 0.0018	0,050 0.0020	0,075 0.0030	0,10 0.0040
S13	218.20-080ER-ME04 MS2050	5,0 *0.20*	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,065 0.0026	0,090 0.0036
H5	218.20-080ER-M04 F40M	7,0 *0.28*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H8	218.20-080ER-M04 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048
H11	218.20-080ER-M04 F40M	7,0 *0.28*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H12	218.20-080ER-M04 F40M	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-080 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M					MP3501					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	265 *870*	285 *940*	345 *1125*	405 *1325*	440 *1450*	335 *1100*	360 *1175*	410 *1350*	460 *1500*	490 *1600*	290 *950*	300 *980*	345 *1125*	380 *1250*	400 *1300*	420 *1375*	450 *1475*	490 *1600*	530 *1750*	560 *1825*	240 *790*	260 *850*	295 *970*	330 *1075*	355 *1175*
P2	250 *820*	270 *890*	335 *1100*	390 *1275*	425 *1400*	330 *1075*	350 *1150*	400 *1300*	450 *1475*	480 *1575*	275 *900*	285 *940*	335 *1100*	370 *1225*	390 *1275*	410 *1350*	435 *1425*	475 *1550*	520 *1700*	550 *1800*	235 *770*	255 *840*	285 *940*	325 *1075*	345 *1125*
P3	220 *720*	240 *790*	290 *950*	340 *1125*	370 *1225*	280 *920*	300 *980*	345 *1125*	385 *1275*	415 *1350*	245 *800*	255 *840*	290 *950*	320 *1050*	335 *1100*	350 *1150*	375 *1225*	410 *1350*	445 *1450*	470 *1550*	200 *660*	220 *720*	245 *800*	280 *920*	300 *980*
P4	195 *640*	210 *690*	255 *840*	305 *1000*	330 *1075*	250 *820*	270 *890*	305 *1000*	340 *1125*	365 *1200*	215 *710*	225 *740*	260 *850*	300 *980*	320 *1050*	310 *1025*	330 *1075*	360 *1175*	390 *1275*	415 *1350*	195 *640*	210 *690*	235 *770*	265 *870*	280 *920*
P5	190 *620*	205 *670*	245 *800*	290 *950*	315 *1025*	240 *790*	255 *840*	290 *950*	325 *1075*	350 *1150*	205 *670*	215 *710*	245 *800*	270 *890*	285 *940*	295 *970*	315 *1025*	345 *1125*	375 *1225*	395 *1300*	170 *560*	185 *610*	205 *670*	230 *750*	250 *820*
P6	210 *690*	230 *750*	280 *920*	325 *1075*	355 *1175*	270 *890*	285 *940*	325 *1075*	365 *1200*	390 *1275*	235 *770*	240 *790*	275 *900*	305 *1000*	325 *1075*	330 *1075*	355 *1175*	385 *1275*	420 *1375*	440 *1450*	190 *620*	205 *670*	230 *750*	260 *850*	280 *920*
P7	200 *660*	215 *710*	260 *850*	305 *1000*	335 *1100*	255 *840*	270 *890*	310 *1025*	345 *1125*	370 *1225*	220 *720*	230 *750*	260 *850*	290 *950*	305 *1000*	315 *1025*	335 *1100*	365 *1200*	395 *1300*	415 *1350*	180 *590*	195 *640*	220 *720*	245 *800*	265 *870*
P8	185 *610*	200 *660*	240 *790*	285 *940*	310 *1025*	235 *770*	255 *840*	290 *950*	325 *1075*	350 *1150*	205 *670*	210 *690*	240 *790*	270 *890*	285 *940*	295 *970*	315 *1025*	345 *1125*	375 *1225*	395 *1300*	170 *560*	185 *610*	205 *670*	235 *770*	250 *820*
P11	195 *640*	210 *690*	255 *840*	300 *980*	325 *1075*	245 *800*	265 *870*	300 *980*	335 *1100*	360 *1175*	215 *710*	220 *720*	255 *840*	280 *920*	295 *970*	305 *1000*	325 *1075*	355 *1175*	385 *1275*	405 *1325*	175 *570*	190 *620*	215 *710*	240 *790*	255 *840*
P12	125 *410*	135 *445*	160 *520*	190 *620*	205 *670*	155 *510*	165 *540*	180 *590*	200 *660*	210 *690*	140 *460*	145 *475*	160 *520*	175 *570*	180 *590*	180 *590*	190 *620*	200 *660*	215 *710*	225 *740*	105 *345*	115 *375*	120 *395*	135 *445*	140 *460*
M1	— —	— —	— —	— —	— —	240 *790*	260 *850*	310 *1025*	365 *1200*	395 *1300*	185 *610*	200 *660*	245 *800*	285 *940*	310 *1025*	240 *790*	260 *850*	310 *1025*	365 *1200*	395 *1300*	160 *520*	170 *560*	210 *690*	245 *800*	270 *890*
M2	— —	— —	— —	— —	— —	195 *640*	210 *690*	255 *840*	300 *980*	325 *1075*	155 *510*	165 *540*	200 *660*	235 *770*	260 *850*	195 *640*	210 *690*	255 *840*	300 *980*	325 *1075*	135 *445*	145 *475*	175 *570*	205 *670*	225 *740*
M3	— —	— —	— —	— —	— —	160 *520*	170 *560*	200 *660*	235 *770*	255 *840*	125 *410*	135 *445*	160 *520*	190 *620*	205 *670*	160 *520*	170 *560*	200 *660*	235 *770*	255 *840*	110 *360*	120 *395*	140 *460*	160 *520*	175 *570*
M4	— —	— —	— —	— —	— —	130 *425*	135 *445*	155 *510*	180 *590*	195 *640*	105 *345*	110 *360*	125 *410*	145 *475*	160 *520*	130 *425*	135 *445*	155 *510*	180 *590*	195 *640*	90 *295*	95 *310*	110 *360*	125 *410*	135 *445*
M5	— —	— —	— —	— —	— —	110 *360*	115 *375*	130 *425*	150 *490*	165 *540*	85 *280*	90 *295*	105 *345*	120 *395*	135 *445*	110 *360*	115 *375*	130 *425*	150 *490*	165 *540*	75 *245*	80 *260*	90 *295*	105 *345*	115 *375*
K1	200 *660*	215 *710*	265 *870*	310 *1025*	335 *1100*	— —	— —	— —	— —	— —	180 *590*	195 *640*	240 *790*	280 *920*	305 *1000*	415 *1350*	440 *1450*	480 *1575*	530 *1750*	550 *1800*	— —	— —	— —	— —	— —
K2	180 *590*	195 *640*	235 *770*	275 *900*	300 *980*	— —	— —	— —	— —	— —	165 *540*	175 *570*	215 *710*	250 *820*	275 *900*	360 *1175*	385 *1275*	415 *1350*	450 *1475*	480 *1575*	— —	— —	— —	— —	— —
K3	150 *490*	165 *540*	200 *660*	230 *750*	255 *840*	— —	— —	— —	— —	— —	140 *460*	150 *490*	180 *590*	210 *690*	230 *750*	305 *1000*	325 *1075*	350 *1150*	380 *1250*	405 *1325*	— —	— —	— —	— —	— —
K4	145 *475*	155 *510*	190 *620*	220 *720*	240 *790*	— —	— —	— —	— —	— —	130 *425*	140 *460*	170 *560*	200 *660*	220 *720*	290 *950*	310 *1025*	335 *1100*	365 *1200*	385 *1275*	— —	— —	— —	— —	— —
K5	90 *295*	95 *310*	115 *375*	135 *445*	145 *475*	— —	— —	— —	— —	— —	80 *260*	85 *280*	105 *345*	125 *410*	135 *445*	170 *560*	185 *610*	200 *660*	215 *710*	225 *740*	— —	— —	— —	— —	— —
K6	130 *425*	140 *460*	165 *540*	195 *640*	215 *710*	— —	— —	— —	— —	— —	115 *375*	125 *410*	150 *490*	180 *590*	195 *640*	255 *840*	270 *890*	295 *970*	320 *1050*	340 *1125*	— —	— —	— —	— —	— —
K7	115 *375*	120 *395*	145 *475*	175 *570*	190 *620*	— —	— —	— —	— —	— —	105 *345*	110 *360*	135 *445*	160 *520*	170 *560*	220 *720*	235 *770*	255 *840*	275 *900*	290 *950*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1350 *4425*	1450 *4750*	1775 *5825*	2125 *6975*	2300 *7550*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	550 *1800*	590 *1925*	720 *2350*	860 *2825*	920 *3025*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	365 *1200*	395 *1300*	480 *1575*	570 *1875*	620 *2025*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	415 *1350*	450 *1475*	550 *1800*	650 *2125*	700 *2300*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*	48 *155*	50 *165*	60 *195*	70 *230*	75 *245*	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*	27 *90*	29 *95*	33 *110*	38 *125*	42 *140*
S2	— —	— —	— —	— —	— —	49 *160*	50 *165*	60 *195*	65 *215*	75 *245*	39 *130*	41 *135*	47 *155*	55 *180*	60 *195*	49 *160*	50 *165*	60 *195*	65 *215*	75 *245*	22 *70*	23 *75*	27 *90*	31 *100*	34 *110*
S3	— —	— —	— —	— —	— —	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*	34 *110*	36 *120*	41 *135*	48 *155*	50 *165*	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*	19 *60*	20 *65*	23 *75*	27 *90*	30 *100*
S11	— —	— —	— —	— —	— —	85 *280*	90 *295*	100 *330*	120 *395*	130 *425*	65 *215*	70 *230*	80 *260*	95 *310*	105 *345*	85 *280*	90 *295*	100 *330*	120 *395*	130 *425*	38 *125*	40 *130*	46 *150*	55 *180*	60 *195*
S12	— —	— —	— —	— —	— —	60 *195*	60 *195*	70 *230*	85 *280*	90 *295*	46 *150*	49 *160*	55 *180*	65 *215*	70 *230*	60 *195*	60 *195*	70 *230*	85 *280*	90 *295*	35 *115*	37 *120*	42 *140*	50 *165*	55 *180*
S13	— —	— —	— —	— —	— —	34 *110*	36 *120*	41 *135*	47 *155*	50 *165*	27 *90*	28 *90*	33 *110*	38 *125*	42 *140*	34 *110*	36 *120*	41 *135*	47 *155*	50 *165*	21 *70*	21 *70*	25 *80*	29 *95*	31 *100*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	38 *125*	41 *135*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	49 *160*	55 *180*	60 *195*	75 *245*	80 *260*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	110 *360*	120 *395*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —

R218.20-100 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-100ER-M05 F40M	11,0 *0.44*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P2	218.20-100ER-M05 F40M	11,0 *0.44*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P3	218.20-100ER-M05 F40M	11,0 *0.44*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P4	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,11 0.0044	0,16 0.0065	0,22 0.0085
P5	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P6	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P7	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P8	218.20-100ER-M05 F40M	11,0 *0.44*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P11	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P12	218.20-100ER-M05 F40M	9,0 *0.36*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
M1	218.20-100ER-ME05 MS2050	11,0 *0.44*	0,075 0.0030	0,075 0.0030	0,080 0.0032	0,12 0.0048	0,17 0.0065
M2	218.20-100ER-ME05 MS2050	11,0 *0.44*	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,11 0.0044	0,16 0.0065
M3	218.20-100ER-ME05 MS2050	9,0 *0.36*	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,090 0.0036	0,13 0.0050
M4	218.20-100ER-ME05 F40M	6,0 *0.24*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
M5	218.20-100ER-ME05 F40M	6,0 *0.24*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
K1	218.20-100ER-M05 F40M	11,0 *0.44*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
K2	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K3	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K4	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K5	218.20-100ER-M05 F40M	11,0 *0.44*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
K6	218.20-100ER-M05 F40M	11,0 *0.44*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K7	218.20-100ER-M05 F40M	11,0 *0.44*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
N1	218.20-100ER-ME05 F40M	11,0 *0.44*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,22 0.0085	0,32 0.013
N2	218.20-100ER-ME05 F40M	11,0 *0.44*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,22 0.0085	0,32 0.013
N3	218.20-100ER-ME05 F40M	11,0 *0.44*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,22 0.0085	0,32 0.013
N11	218.20-100ER-ME05 F40M	11,0 *0.44*	0,13 0.0050	0,13 0.0050	0,14 0.0055	0,22 0.0085	0,32 0.013
S1	218.20-100ER-ME05 F40M	6,0 *0.24*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
S2	218.20-100ER-ME05 F40M	6,0 *0.24*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
S3	218.20-100ER-ME05 F40M	6,0 *0.24*	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,11 0.0044	0,15 0.0060
S11	218.20-100ER-ME05 MS2050	8,0 *0.32*	0,060 0.0024	0,060 0.0024	0,060 0.0024	0,090 0.0036	0,13 0.0050
S12	218.20-100ER-ME05 MS2050	8,0 *0.32*	0,060 0.0024	0,060 0.0024	0,060 0.0024	0,090 0.0036	0,13 0.0050
S13	218.20-100ER-ME05 MS2050	6,0 *0.24*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,080 0.0032	0,11 0.0044
H5	218.20-100ER-M05 F40M	9,0 *0.36*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H8	218.20-100ER-M05 F40M	8,0 *0.32*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048
H11	218.20-100ER-M05 F40M	9,0 *0.36*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H12	218.20-100ER-M05 F40M	8,0 *0.32*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-100 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	260 *850*	280 *920*	340 *1125*	400 *1300*	430 *1400*	310 *1025*	335 *1100*	385 *1275*	440 *1450*	465 *1525*	285 *940*	295 *970*	340 *1125*	375 *1225*	395 *1300*	240 *790*	260 *850*	290 *950*	330 *1075*	350 *1150*
P2	255 *840*	275 *900*	330 *1075*	390 *1275*	420 *1375*	305 *1000*	325 *1075*	375 *1225*	425 *1400*	455 *1500*	275 *900*	290 *950*	330 *1075*	365 *1200*	385 *1275*	230 *750*	250 *820*	285 *940*	320 *1050*	340 *1125*
P3	215 *710*	235 *770*	285 *940*	340 *1125*	370 *1225*	265 *870*	280 *920*	325 *1075*	365 *1200*	390 *1275*	240 *790*	250 *820*	285 *940*	320 *1050*	335 *1100*	200 *660*	215 *710*	245 *800*	275 *900*	290 *950*
P4	195 *640*	210 *690*	250 *820*	300 *980*	325 *1075*	235 *770*	250 *820*	285 *940*	325 *1075*	345 *1125*	215 *710*	225 *740*	255 *840*	295 *970*	310 *1025*	190 *620*	205 *670*	230 *750*	260 *850*	280 *920*
P5	185 *610*	200 *660*	245 *800*	285 *940*	310 *1025*	220 *720*	235 *770*	275 *900*	310 *1025*	330 *1075*	205 *670*	210 *690*	245 *800*	265 *870*	280 *920*	170 *560*	185 *610*	205 *670*	230 *750*	245 *800*
P6	205 *670*	225 *740*	275 *900*	320 *1050*	350 *1150*	250 *820*	270 *890*	305 *1000*	350 *1150*	370 *1225*	225 *740*	235 *770*	270 *890*	300 *980*	315 *1025*	190 *620*	205 *670*	230 *750*	260 *850*	275 *900*
P7	195 *640*	215 *710*	260 *850*	300 *980*	330 *1075*	240 *790*	255 *840*	290 *950*	330 *1075*	350 *1150*	215 *710*	225 *740*	255 *840*	285 *940*	300 *980*	180 *590*	195 *640*	215 *710*	245 *800*	260 *850*
P8	185 *610*	200 *660*	240 *790*	285 *940*	310 *1025*	220 *720*	235 *770*	275 *900*	310 *1025*	330 *1075*	200 *660*	210 *690*	240 *790*	265 *870*	280 *920*	165 *540*	180 *590*	205 *670*	230 *750*	245 *800*
P11	190 *620*	205 *670*	250 *820*	295 *970*	320 *1050*	230 *750*	245 *800*	280 *920*	320 *1050*	340 *1125*	210 *690*	215 *710*	250 *820*	275 *900*	290 *950*	175 *570*	190 *620*	210 *690*	235 *770*	255 *840*
P12	130 *425*	140 *460*	165 *540*	185 *610*	205 *670*	150 *490*	160 *520*	175 *570*	195 *640*	205 *670*	140 *460*	145 *475*	160 *520*	170 *560*	180 *590*	105 *345*	115 *375*	120 *395*	130 *425*	140 *460*
M1	— —	— —	— —	— —	— —	220 *720*	240 *790*	285 *940*	340 *1125*	365 *1200*	185 *610*	200 *660*	240 *790*	285 *940*	310 *1025*	160 *520*	175 *570*	210 *690*	245 *800*	265 *870*
M2	— —	— —	— —	— —	— —	180 *590*	195 *640*	235 *770*	280 *920*	300 *980*	150 *490*	165 *540*	200 *660*	235 *770*	255 *840*	130 *425*	140 *460*	170 *560*	200 *660*	220 *720*
M3	— —	— —	— —	— —	— —	150 *490*	165 *540*	190 *620*	220 *720*	240 *790*	125 *410*	135 *445*	160 *520*	185 *610*	205 *670*	110 *360*	120 *395*	140 *460*	160 *520*	175 *570*
M4	— —	— —	— —	— —	— —	125 *410*	130 *425*	150 *490*	165 *540*	180 *590*	105 *345*	110 *360*	125 *410*	145 *475*	155 *510*	90 *295*	95 *310*	110 *360*	125 *410*	135 *445*
M5	— —	— —	— —	— —	— —	105 *345*	110 *360*	125 *410*	140 *460*	150 *490*	90 *295*	90 *295*	105 *345*	120 *395*	130 *425*	75 *245*	80 *260*	90 *295*	105 *345*	110 *360*
K1	200 *660*	215 *710*	260 *850*	305 *1000*	335 *1100*	— —	— —	— —	— —	— —	180 *590*	195 *640*	235 *770*	280 *920*	305 *1000*	— —	— —	— —	— —	— —
K2	175 *570*	190 *620*	230 *750*	270 *890*	295 *970*	— —	— —	— —	— —	— —	160 *520*	175 *570*	210 *690*	245 *800*	270 *890*	— —	— —	— —	— —	— —
K3	150 *490*	160 *520*	195 *640*	230 *750*	250 *820*	— —	— —	— —	— —	— —	135 *445*	145 *475*	180 *590*	210 *690*	225 *740*	— —	— —	— —	— —	— —
K4	140 *460*	155 *510*	185 *610*	220 *720*	240 *790*	— —	— —	— —	— —	— —	130 *425*	140 *460*	170 *560*	200 *660*	215 *710*	— —	— —	— —	— —	— —
K5	85 *280*	95 *310*	110 *360*	135 *445*	145 *475*	— —	— —	— —	— —	— —	80 *260*	85 *280*	100 *330*	120 *395*	130 *425*	— —	— —	— —	— —	— —
K6	125 *410*	135 *445*	165 *540*	190 *620*	210 *690*	— —	— —	— —	— —	— —	115 *375*	125 *410*	150 *490*	175 *570*	190 *620*	— —	— —	— —	— —	— —
K7	110 *360*	120 *395*	145 *475*	170 *560*	185 *610*	— —	— —	— —	— —	— —	100 *330*	110 *360*	130 *425*	155 *510*	170 *560*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1350 *4425*	1450 *4750*	1775 *5825*	2075 *6800*	2250 *7375*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	550 *1800*	590 *1925*	720 *2350*	840 *2750*	910 *2975*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	365 *1200*	395 *1300*	480 *1575*	560 *1825*	600 *1975*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	415 *1350*	450 *1475*	550 *1800*	640 *2100*	690 *2275*	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	80 *260*	85 *280*	49 *160*	50 *165*	60 *195*	65 *215*	75 *245*	28 *90*	29 *95*	33 *110*	38 *125*	41 *135*
S2	— —	— —	— —	— —	— —	46 *150*	49 *160*	55 *180*	65 *215*	70 *230*	40 *130*	41 *135*	48 *155*	55 *180*	60 *195*	22 *70*	23 *75*	27 *90*	30 *100*	33 *110*
S3	— —	— —	— —	— —	— —	40 *130*	42 *140*	49 *160*	55 *180*	60 *195*	35 *115*	36 *120*	42 *140*	47 *155*	50 *165*	20 *65*	20 *65*	23 *75*	27 *90*	29 *95*
S11	— —	— —	— —	— —	— —	75 *245*	85 *280*	95 *310*	110 *360*	120 *395*	65 *215*	70 *230*	80 *260*	95 *310*	105 *345*	37 *120*	40 *130*	46 *150*	55 *180*	60 *195*
S12	— —	— —	— —	— —	— —	55 *180*	55 *180*	65 *215*	75 *245*	85 *280*	46 *150*	49 *160*	55 *180*	65 *215*	70 *230*	35 *115*	37 *120*	42 *140*	49 *160*	55 *180*
S13	— —	— —	— —	— —	— —	32 *105*	34 *110*	39 *130*	44 *145*	48 *155*	28 *90*	28 *90*	33 *110*	38 *125*	41 *135*	21 *70*	21 *70*	25 *80*	28 *90*	31 *100*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	39 *130*	42 *140*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	41 *135*	44 *145*	50 *165*	60 *195*	65 *215*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	70 *230*	80 *260*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	105 *345*	115 *375*	— —	— —	— —	— —	— —

R218.20-125 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.20-125ER-M07 F40M	13,0 *0.50*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,17 0.0065	0,24 0.0095
P2	218.20-125ER-M07 F40M	13,0 *0.50*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,17 0.0065	0,24 0.0095
P3	218.20-125ER-M07 F40M	13,0 *0.50*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P4	218.20-125ER-M07 F40M	13,0 *0.50*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P5	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P6	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P7	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P8	218.20-125ER-M07 F40M	13,0 *0.50*	0,10 0.0040	0,10 0.0040	0,11 0.0044	0,16 0.0065	0,22 0.0085
P11	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
P12	218.20-125ER-M07 F40M	11,0 *0.44*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
M1	218.20-125ER-ME07 MS2050	13,0 *0.50*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,17 0.0065	0,24 0.0095
M2	218.20-125ER-ME07 MS2050	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
M3	218.20-125ER-ME07 MS2050	11,0 *0.44*	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,13 0.0050	0,18 0.0070
M4	218.20-125ER-ME07 F40M	8,0 *0.32*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
M5	218.20-125ER-ME07 F40M	8,0 *0.32*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
K1	218.20-125ER-M07 F40M	13,0 *0.50*	0,11 0.0044	0,11 0.0044	0,11 0.0044	0,17 0.0065	0,24 0.0095
K2	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K3	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K4	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K5	218.20-125ER-M07 F40M	13,0 *0.50*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
K6	218.20-125ER-M07 F40M	13,0 *0.50*	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,16 0.0065	0,22 0.0085
K7	218.20-125ER-M07 F40M	13,0 *0.50*	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,14 0.0055	0,20 0.0080
N1	218.20-125ER-ME07 F40M	13,0 *0.50*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,22 0.0085	0,30 0.012
N2	218.20-125ER-ME07 F40M	13,0 *0.50*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,22 0.0085	0,30 0.012
N3	218.20-125ER-ME07 F40M	13,0 *0.50*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,22 0.0085	0,30 0.012
N11	218.20-125ER-ME07 F40M	13,0 *0.50*	0,13 0.0050	0,13 0.0050	0,15 0.0060	0,22 0.0085	0,30 0.012
S1	218.20-125ER-ME07 F40M	8,0 *0.32*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
S2	218.20-125ER-ME07 F40M	8,0 *0.32*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
S3	218.20-125ER-ME07 F40M	8,0 *0.32*	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,11 0.0044	0,14 0.0060
S11	218.20-125ER-ME07 MS2050	9,0 *0.36*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,13 0.0050	0,18 0.0070
S12	218.20-125ER-ME07 MS2050	9,0 *0.36*	0,085 0.0034	0,085 0.0034	0,085 0.0034	0,13 0.0050	0,18 0.0070
S13	218.20-125ER-ME07 MS2050	8,0 *0.32*	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,11 0.0044	0,16 0.0065
H5	218.20-125ER-M07 F40M	11,0 *0.44*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H8	218.20-125ER-M07 F40M	9,0 *0.36*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048
H11	218.20-125ER-M07 F40M	11,0 *0.44*	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,11 0.0044	0,15 0.0060
H12	218.20-125ER-M07 F40M	9,0 *0.36*	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,085 0.0034	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-125 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	260 *850*	285 *940*	340 *1125*	400 *1300*	435 *1425*	315 *1025*	335 *1100*	395 *1300*	450 *1475*	480 *1575*	285 *940*	300 *980*	340 *1125*	380 *1250*	400 *1300*	255 *840*	280 *920*	315 *1025*	355 *1175*	380 *1250*
P2	250 *820*	270 *890*	330 *1075*	390 *1275*	425 *1400*	300 *980*	320 *1050*	380 *1250*	435 *1425*	465 *1525*	275 *900*	285 *940*	330 *1075*	370 *1225*	385 *1275*	250 *820*	270 *890*	305 *1000*	345 *1125*	370 *1225*
P3	220 *720*	235 *770*	285 *940*	340 *1125*	370 *1225*	265 *870*	280 *920*	330 *1075*	380 *1250*	405 *1325*	240 *790*	250 *820*	285 *940*	320 *1050*	340 *1125*	215 *710*	235 *770*	265 *870*	295 *970*	315 *1025*
P4	195 *640*	210 *690*	250 *820*	300 *980*	325 *1075*	235 *770*	250 *820*	290 *950*	335 *1100*	360 *1175*	215 *710*	225 *740*	260 *850*	295 *970*	315 *1025*	205 *670*	225 *740*	250 *820*	280 *920*	300 *980*
P5	185 *610*	200 *660*	245 *800*	285 *940*	315 *1025*	225 *740*	240 *790*	280 *920*	320 *1050*	340 *1125*	205 *670*	215 *710*	245 *800*	270 *890*	285 *940*	180 *590*	195 *640*	220 *720*	250 *820*	265 *870*
P6	210 *690*	225 *740*	275 *900*	320 *1050*	350 *1150*	255 *840*	270 *890*	315 *1025*	360 *1175*	385 *1275*	230 *750*	240 *790*	275 *900*	300 *980*	320 *1050*	205 *670*	220 *720*	250 *820*	280 *920*	300 *980*
P7	200 *660*	215 *710*	260 *850*	305 *1000*	330 *1075*	240 *790*	255 *840*	300 *980*	335 *1100*	360 *1175*	215 *710*	225 *740*	260 *850*	285 *940*	300 *980*	190 *620*	210 *690*	235 *770*	265 *870*	280 *920*
P8	185 *610*	200 *660*	240 *790*	285 *940*	315 *1025*	225 *740*	235 *770*	275 *900*	320 *1050*	340 *1125*	200 *660*	210 *690*	240 *790*	270 *890*	285 *940*	180 *590*	195 *640*	220 *720*	250 *820*	265 *870*
P11	190 *620*	210 *690*	250 *820*	295 *970*	320 *1050*	230 *750*	245 *800*	290 *950*	330 *1075*	350 *1150*	210 *690*	220 *720*	250 *820*	275 *900*	295 *970*	185 *610*	205 *670*	225 *740*	255 *840*	275 *900*
P12	130 *425*	140 *460*	165 *540*	185 *610*	205 *670*	155 *510*	165 *540*	185 *610*	200 *660*	215 *710*	140 *460*	145 *475*	160 *520*	170 *560*	180 *590*	110 *360*	120 *395*	130 *425*	140 *460*	150 *490*
M1	— —	— —	— —	— —	— —	215 *710*	235 *770*	285 *940*	340 *1125*	370 *1225*	185 *610*	195 *640*	245 *800*	285 *940*	310 *1025*	170 *560*	185 *610*	225 *740*	265 *870*	290 *950*
M2	— —	— —	— —	— —	— —	180 *590*	195 *640*	235 *770*	275 *900*	305 *1000*	155 *510*	165 *540*	200 *660*	235 *770*	255 *840*	140 *460*	155 *510*	185 *610*	215 *710*	235 *770*
M3	— —	— —	— —	— —	— —	150 *490*	160 *520*	190 *620*	220 *720*	245 *800*	125 *410*	135 *445*	160 *520*	185 *610*	205 *670*	120 *395*	125 *410*	150 *490*	175 *570*	190 *620*
M4	— —	— —	— —	— —	— —	120 *395*	130 *425*	150 *490*	170 *560*	185 *610*	105 *345*	110 *360*	125 *410*	145 *475*	155 *510*	95 *310*	100 *330*	115 *375*	135 *445*	145 *475*
M5	— —	— —	— —	— —	— —	100 *330*	105 *345*	125 *410*	140 *460*	155 *510*	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*	80 *260*	85 *280*	100 *330*	110 *360*	120 *395*
K1	195 *640*	215 *710*	265 *870*	310 *1025*	335 *1100*	— —	— —	— —	— —	— —	180 *590*	195 *640*	240 *790*	280 *920*	305 *1000*	— —	— —	— —	— —	— —
K2	175 *570*	190 *620*	230 *750*	270 *890*	295 *970*	— —	— —	— —	— —	— —	160 *520*	175 *570*	210 *690*	245 *800*	270 *890*	— —	— —	— —	— —	— —
K3	150 *490*	160 *520*	195 *640*	230 *750*	250 *820*	— —	— —	— —	— —	— —	135 *445*	145 *475*	180 *590*	210 *690*	230 *750*	— —	— —	— —	— —	— —
K4	145 *475*	155 *510*	190 *620*	220 *720*	240 *790*	— —	— —	— —	— —	— —	130 *425*	140 *460*	170 *560*	200 *660*	220 *720*	— —	— —	— —	— —	— —
K5	85 *280*	95 *310*	115 *375*	135 *445*	145 *475*	— —	— —	— —	— —	— —	80 *260*	85 *280*	105 *345*	120 *395*	130 *425*	— —	— —	— —	— —	— —
K6	125 *410*	135 *445*	165 *540*	195 *640*	210 *690*	— —	— —	— —	— —	— —	115 *375*	125 *410*	150 *490*	175 *570*	190 *620*	— —	— —	— —	— —	— —
K7	110 *360*	120 *395*	145 *475*	170 *560*	185 *610*	— —	— —	— —	— —	— —	100 *330*	110 *360*	130 *425*	155 *510*	170 *560*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1375 *4500*	1475 *4850*	1750 *5750*	2100 *6900*	2300 *7550*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	550 *1800*	590 *1925*	710 *2325*	850 *2800*	930 *3050*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	365 *1200*	395 *1300*	475 *1550*	560 *1825*	620 *2025*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	420 *1375*	450 *1475*	540 *1775*	650 *2125*	710 *2325*	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	80 *260*	85 *280*	48 *155*	50 *165*	60 *195*	65 *215*	75 *245*	29 *95*	31 *100*	36 *120*	41 *135*	45 *150*
S2	— —	— —	— —	— —	— —	46 *150*	48 *155*	55 *180*	65 *215*	70 *230*	39 *130*	41 *135*	47 *155*	55 *180*	60 *195*	24 *80*	25 *80*	29 *95*	33 *110*	36 *120*
S3	— —	— —	— —	— —	— —	40 *130*	42 *140*	49 *160*	55 *180*	60 *195*	34 *110*	36 *120*	41 *135*	47 *155*	50 *165*	21 *70*	22 *70*	25 *80*	29 *95*	31 *100*
S11	— —	— —	— —	— —	— —	80 *260*	85 *280*	95 *310*	110 *360*	125 *410*	65 *215*	70 *230*	80 *260*	95 *310*	105 *345*	40 *130*	43 *140*	50 *165*	55 *180*	65 *215*
S12	— —	— —	— —	— —	— —	55 *180*	55 *180*	65 *215*	75 *245*	85 *280*	46 *150*	48 *155*	55 *180*	65 *215*	70 *230*	37 *120*	39 *130*	46 *150*	55 *180*	60 *195*
S13	— —	— —	— —	— —	— —	32 *105*	34 *110*	39 *130*	45 *150*	49 *160*	27 *90*	28 *90*	33 *110*	38 *125*	41 *135*	22 *70*	23 *75*	27 *90*	31 *100*	34 *110*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	39 *130*	42 *140*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	42 *140*	44 *145*	50 *165*	60 *195*	65 *215*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	50 *165*	55 *180*	65 *215*	70 *230*	80 *260*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	105 *345*	115 *375*	— —	— —	— —	— —	— —

R218.20-150 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
P2	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
P3	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,22 0.0085	0,32 0.013
P4	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,15 *0.0060*	0,22 0.0085	0,32 0.013
P5	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P6	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P7	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P8	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,22 0.0085	0,32 0.013
P11	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P12	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	21,0 *0.85*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,20 0.0080
M1	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	26,0 *1.0*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
M2	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	26,0 *1.0*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,22 0.0085
M3	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	21,0 *0.85*	0,075 *0.0030*	0,075 *0.0030*	0,080 *0.0032*	0,12 0.0048	0,17 0.0065
M4	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	16,0 *0.65*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
M5	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	16,0 *0.65*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
K1	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
K2	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K3	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K4	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K5	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
K6	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K7	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
N1	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,44 0.017
N2	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,44 0.017
N3	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,44 0.017
N11	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,44 0.017
S1	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	16,0 *0.65*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
S2	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	16,0 *0.65*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
S3	218.20-150ER-ME07 F40M	SPMT100408T-M08 F40M	16,0 *0.65*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,15 0.0060	0,20 0.0080
S11	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	18,0 *0.70*	0,075 *0.0030*	0,075 *0.0030*	0,080 *0.0032*	0,13 0.0050	0,17 0.0065
S12	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	18,0 *0.70*	0,075 *0.0030*	0,075 *0.0030*	0,080 *0.0032*	0,13 0.0050	0,17 0.0065
S13	218.20-150ER-ME07 MS2050	SPMT100408T-M08 F40M	16,0 *0.65*	0,065 *0.0026*	0,065 *0.0026*	0,070 *0.0028*	0,11 0.0044	0,15 0.0060
H5	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	21,0 *0.85*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,20 0.0080
H8	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	18,0 *0.70*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,12 0.0048	0,16 0.0065
H11	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	21,0 *0.85*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,20 0.0080
H12	218.20-150ER-M08 F40M	SPMT100408T-M08 F40M	18,0 *0.70*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,12 0.0048	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-150 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	305 *1000*	320 *1050*	375 *1225*	430 *1400*	460 *1500*	250 *820*	255 *840*	300 *980*	340 *1125*	360 *1175*	220 *720*	235 *770*	280 *920*	320 *1050*	340 *1125*
P2	290 *950*	305 *1000*	365 *1200*	420 *1375*	445 *1450*	240 *790*	250 *820*	295 *970*	330 *1075*	350 *1150*	215 *710*	230 *750*	270 *890*	310 *1025*	330 *1075*
P3	255 *840*	270 *890*	315 *1025*	365 *1200*	390 *1275*	210 *690*	220 *720*	255 *840*	285 *940*	305 *1000*	190 *620*	200 *660*	235 *770*	265 *870*	285 *940*
P4	225 *740*	235 *770*	280 *920*	320 *1050*	345 *1125*	190 *620*	200 *660*	235 *770*	265 *870*	285 *940*	180 *590*	190 *620*	225 *740*	255 *840*	275 *900*
P5	215 *710*	230 *750*	270 *890*	305 *1000*	325 *1075*	180 *590*	185 *610*	215 *710*	245 *800*	255 *840*	160 *520*	170 *560*	195 *640*	225 *740*	240 *790*
P6	240 *790*	260 *850*	305 *1000*	345 *1125*	365 *1200*	200 *660*	205 *670*	245 *800*	275 *900*	285 *940*	175 *570*	190 *620*	220 *720*	255 *840*	270 *890*
P7	230 *750*	245 *800*	285 *940*	325 *1075*	345 *1125*	190 *620*	195 *640*	230 *750*	260 *850*	270 *890*	165 *540*	180 *590*	210 *690*	240 *790*	255 *840*
P8	215 *710*	225 *740*	265 *870*	305 *1000*	325 *1075*	180 *590*	185 *610*	215 *710*	240 *790*	255 *840*	160 *520*	170 *560*	195 *640*	225 *740*	240 *790*
P11	220 *720*	235 *770*	280 *920*	315 *1025*	335 *1100*	185 *610*	190 *620*	220 *720*	250 *820*	265 *870*	160 *520*	175 *570*	205 *670*	230 *750*	250 *820*
P12	145 *475*	155 *510*	175 *570*	195 *640*	205 *670*	130 *425*	130 *425*	145 *475*	160 *520*	170 *560*	105 *345*	110 *360*	125 *410*	135 *445*	145 *475*
M1	205 *670*	225 *740*	275 *900*	325 *1075*	350 *1150*	165 *540*	175 *570*	215 *710*	255 *840*	280 *920*	140 *460*	150 *490*	185 *610*	220 *720*	240 *790*
M2	175 *570*	185 *610*	225 *740*	265 *870*	290 *950*	135 *445*	145 *475*	175 *570*	210 *690*	230 *750*	115 *375*	125 *410*	155 *510*	185 *610*	195 *640*
M3	145 *475*	155 *510*	180 *590*	210 *690*	235 *770*	115 *375*	125 *410*	145 *475*	170 *560*	185 *610*	100 *330*	105 *345*	125 *410*	145 *475*	160 *520*
M4	115 *375*	125 *410*	140 *460*	165 *540*	180 *590*	95 *310*	100 *330*	115 *375*	130 *425*	140 *460*	80 *260*	85 *280*	100 *330*	110 *360*	120 *395*
M5	100 *330*	105 *345*	120 *395*	135 *445*	150 *490*	80 *260*	85 *280*	95 *310*	110 *360*	120 *395*	70 *230*	70 *230*	85 *280*	95 *310*	100 *330*
K1	— —	— —	— —	— —	— —	160 *520*	175 *570*	210 *690*	250 *820*	275 *900*	— —	— —	— —	— —	— —
K2	— —	— —	— —	— —	— —	140 *460*	155 *510*	185 *610*	225 *740*	240 *790*	— —	— —	— —	— —	— —
K3	— —	— —	— —	— —	— —	120 *395*	130 *425*	160 *520*	190 *620*	205 *670*	— —	— —	— —	— —	— —
K4	— —	— —	— —	— —	— —	115 *375*	125 *410*	150 *490*	180 *590*	195 *640*	— —	— —	— —	— —	— —
K5	— —	— —	— —	— —	— —	70 *230*	75 *245*	95 *310*	110 *360*	120 *395*	— —	— —	— —	— —	— —
K6	— —	— —	— —	— —	— —	100 *330*	110 *360*	135 *445*	160 *520*	170 *560*	— —	— —	— —	— —	— —
K7	— —	— —	— —	— —	— —	90 *295*	100 *330*	120 *395*	140 *460*	155 *510*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	1200 *3925*	1275 *4175*	1575 *5175*	1850 *6075*	2025 *6650*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	480 *1575*	520 *1700*	640 *2100*	750 *2450*	820 *2700*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	320 *1050*	345 *1125*	425 *1400*	500 *1650*	540 *1775*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	365 *1200*	395 *1300*	485 *1600*	570 *1875*	620 *2025*	— —	— —	— —	— —	— —
S1	55 *180*	55 *180*	65 *215*	75 *245*	85 *280*	44 *145*	46 *150*	55 *180*	60 *195*	65 *215*	25 *80*	26 *85*	30 *100*	34 *110*	37 *120*
S2	44 *145*	46 *150*	55 *180*	60 *195*	65 *215*	36 *120*	37 *120*	43 *140*	49 *160*	55 *180*	20 *65*	21 *70*	24 *80*	28 *90*	30 *100*
S3	38 *125*	40 *130*	47 *155*	55 *180*	60 *195*	31 *100*	32 *105*	38 *125*	43 *140*	47 *155*	18 *60*	18 *60*	21 *70*	24 *80*	26 *85*
S11	75 *245*	80 *260*	90 *295*	105 *345*	120 *395*	60 *195*	60 *195*	75 *245*	85 *280*	95 *310*	34 *110*	35 *115*	41 *135*	48 *155*	55 *180*
S12	55 *180*	55 *180*	65 *215*	75 *245*	80 *260*	41 *135*	43 *140*	50 *165*	60 *195*	65 *215*	31 *100*	33 *110*	38 *125*	45 *150*	49 *160*
S13	31 *100*	32 *105*	37 *120*	43 *140*	47 *155*	25 *80*	26 *85*	30 *100*	34 *110*	37 *120*	19 *60*	20 *65*	23 *75*	26 *85*	28 *90*
H5	— —	— —	— —	— —	— —	35 *115*	38 *125*	44 *145*	50 *165*	55 *180*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	39 *130*	40 *130*	47 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	45 *150*	48 *155*	55 *180*	65 *215*	70 *230*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	70 *230*	70 *230*	85 *280*	95 *310*	105 *345*	— —	— —	— —	— —	— —

R218.20-160 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
P2	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
P3	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,22 0.0085	0,32 0.013
P4	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P5	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P6	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P7	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P8	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,22 0.0085	0,32 0.013
P11	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
P12	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,15 0.0060	0,20 0.0080
M1	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	32,0 *1.3*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
M2	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	32,0 *1.3*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
M3	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	26,0 *1.0*	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,14 0.0055	0,19 0.0075
M4	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	19,0 *0.75*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
M5	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	19,0 *0.75*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
K1	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
K2	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K3	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K4	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K5	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
K6	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K7	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
N1	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
N2	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
N3	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
N11	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	32,0 *1.3*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
S1	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	19,0 *0.75*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
S2	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	19,0 *0.75*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
S3	218.20-160ER-ME08 F40M	SPMT100408T-M08 F40M	19,0 *0.75*	0,085 *0.0034*	0,085 *0.0034*	0,095 *0.0038*	0,15 0.0055	0,20 0.0080
S11	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	23,0 *0.90*	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,14 0.0055	0,20 0.0080
S12	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	23,0 *0.90*	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,14 0.0055	0,20 0.0080
S13	218.20-160ER-ME08 MS2050	SPMT100408T-M08 F40M	19,0 *0.75*	0,075 *0.0030*	0,075 *0.0030*	0,080 *0.0032*	0,12 0.0048	0,17 0.0065
H5	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,15 0.0060	0,20 0.0080
H8	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	23,0 *0.90*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,11 0.0044	0,16 0.0065
H11	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	26,0 *1.0*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,15 0.0060	0,20 0.0080
H12	218.20-160ER-M08 F40M	SPMT100408T-M08 F40M	23,0 *0.90*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,11 0.0044	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-160 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	230 *750*	250 *820*	300 *980*	360 *1175*	390 *1275*	290 *950*	305 *1000*	365 *1200*	420 *1375*	445 *1450*	250 *820*	255 *840*	300 *980*	340 *1125*	360 *1175*	235 *770*	250 *820*	295 *970*	340 *1125*	365 *1200*
P2	225 *740*	240 *790*	295 *970*	345 *1125*	380 *1250*	280 *920*	300 *980*	355 *1175*	405 *1325*	435 *1425*	240 *790*	250 *820*	295 *970*	330 *1075*	350 *1150*	230 *750*	245 *800*	285 *940*	330 *1075*	355 *1175*
P3	195 *640*	210 *690*	260 *850*	300 *980*	330 *1075*	250 *820*	265 *870*	310 *1025*	355 *1175*	380 *1250*	215 *710*	220 *720*	255 *840*	285 *940*	305 *1000*	200 *660*	215 *710*	250 *820*	285 *940*	305 *1000*
P4	170 *560*	185 *610*	225 *740*	265 *870*	290 *950*	220 *720*	230 *750*	275 *900*	315 *1025*	335 *1100*	190 *620*	200 *660*	235 *770*	265 *870*	285 *940*	190 *620*	205 *670*	235 *770*	270 *890*	290 *950*
P5	165 *540*	180 *590*	215 *710*	260 *850*	280 *920*	210 *690*	220 *720*	260 *850*	300 *980*	320 *1050*	180 *590*	185 *610*	215 *710*	245 *800*	255 *840*	170 *560*	180 *590*	210 *690*	240 *790*	255 *840*
P6	185 *610*	200 *660*	245 *800*	290 *950*	315 *1025*	235 *770*	250 *820*	295 *970*	335 *1100*	360 *1175*	200 *660*	205 *670*	245 *800*	275 *900*	290 *950*	190 *620*	200 *660*	235 *770*	270 *890*	290 *950*
P7	175 *570*	190 *620*	230 *750*	275 *900*	295 *970*	220 *720*	235 *770*	275 *900*	320 *1050*	340 *1125*	190 *620*	195 *640*	230 *750*	260 *850*	270 *890*	180 *590*	190 *620*	220 *720*	255 *840*	270 *890*
P8	165 *540*	180 *590*	215 *710*	255 *840*	280 *920*	210 *690*	220 *720*	260 *850*	295 *970*	320 *1050*	180 *590*	185 *610*	215 *710*	240 *790*	255 *840*	170 *560*	180 *590*	210 *690*	240 *790*	255 *840*
P11	170 *560*	185 *610*	225 *740*	265 *870*	285 *940*	215 *710*	230 *750*	270 *890*	310 *1025*	330 *1075*	185 *610*	190 *620*	225 *740*	250 *820*	265 *870*	175 *570*	185 *610*	215 *710*	245 *800*	265 *870*
P12	120 *395*	125 *410*	145 *475*	170 *560*	185 *610*	145 *475*	155 *510*	170 *560*	195 *640*	205 *670*	130 *425*	130 *425*	145 *475*	160 *520*	170 *560*	110 *360*	120 *395*	130 *425*	145 *475*	155 *510*
M1	— —	— —	— —	— —	— —	205 *670*	220 *720*	265 *870*	315 *1025*	340 *1125*	165 *540*	175 *570*	215 *710*	255 *840*	280 *920*	150 *490*	160 *520*	200 *660*	235 *770*	255 *840*
M2	— —	— —	— —	— —	— —	165 *540*	180 *590*	220 *720*	260 *850*	280 *920*	135 *445*	145 *475*	175 *570*	210 *690*	230 *750*	125 *410*	135 *445*	160 *520*	195 *640*	210 *690*
M3	— —	— —	— —	— —	— —	145 *475*	150 *490*	180 *590*	210 *690*	225 *740*	115 *375*	125 *410*	145 *475*	170 *560*	185 *610*	105 *345*	115 *375*	135 *445*	155 *510*	170 *560*
M4	— —	— —	— —	— —	— —	115 *375*	120 *395*	140 *460*	160 *520*	175 *570*	95 *310*	100 *330*	115 *375*	130 *425*	140 *460*	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*
M5	— —	— —	— —	— —	— —	95 *310*	100 *330*	115 *375*	130 *425*	145 *475*	80 *260*	80 *260*	95 *310*	110 *360*	120 *395*	70 *230*	75 *245*	85 *280*	100 *330*	110 *360*
K1	175 *570*	190 *620*	235 *770*	275 *900*	300 *980*	— —	— —	— —	— —	— —	160 *520*	175 *570*	210 *690*	250 *820*	275 *900*	— —	— —	— —	— —	— —
K2	155 *510*	170 *560*	205 *670*	245 *800*	265 *870*	— —	— —	— —	— —	— —	140 *460*	155 *510*	185 *610*	225 *740*	240 *790*	— —	— —	— —	— —	— —
K3	130 *425*	145 *475*	175 *570*	210 *690*	225 *740*	— —	— —	— —	— —	— —	120 *395*	130 *425*	160 *520*	190 *620*	205 *670*	— —	— —	— —	— —	— —
K4	125 *410*	135 *445*	165 *540*	200 *660*	215 *710*	— —	— —	— —	— —	— —	115 *375*	125 *410*	150 *490*	180 *590*	195 *640*	— —	— —	— —	— —	— —
K5	80 *260*	85 *280*	100 *330*	120 *395*	130 *425*	— —	— —	— —	— —	— —	70 *230*	75 *245*	95 *310*	110 *360*	120 *395*	— —	— —	— —	— —	— —
K6	110 *360*	120 *395*	145 *475*	175 *570*	190 *620*	— —	— —	— —	— —	— —	100 *330*	110 *360*	135 *445*	160 *520*	170 *560*	— —	— —	— —	— —	— —
K7	100 *330*	110 *360*	130 *425*	155 *510*	170 *560*	— —	— —	— —	— —	— —	90 *295*	100 *330*	120 *395*	140 *460*	155 *510*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1200 *3925*	1275 *4175*	1575 *5175*	1850 *6075*	2025 *6650*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	480 *1575*	520 *1700*	640 *2100*	750 *2450*	820 *2700*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	320 *1050*	345 *1125*	425 *1400*	500 *1650*	540 *1775*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	365 *1200*	395 *1300*	485 *1600*	570 *1875*	620 *2025*	— —	— —	— —	— —	— —
S1	— —	— —	— —	— —	— —	55 *180*	55 *180*	65 *215*	75 *245*	80 *260*	44 *145*	46 *150*	55 *180*	60 *195*	65 *215*	26 *85*	28 *90*	32 *105*	36 *120*	40 *130*
S2	— —	— —	— —	— —	— —	43 *140*	45 *150*	55 *180*	60 *195*	65 *215*	35 *115*	37 *120*	43 *140*	49 *160*	55 *180*	21 *70*	22 *70*	26 *85*	29 *95*	32 *105*
S3	— —	— —	— —	— —	— —	38 *125*	40 *130*	46 *150*	50 *165*	55 *180*	31 *100*	32 *105*	38 *125*	43 *140*	47 *155*	19 *60*	19 *60*	23 *75*	26 *85*	28 *90*
S11	— —	— —	— —	— —	— —	75 *245*	80 *260*	90 *295*	105 *345*	115 *375*	60 *195*	65 *215*	75 *245*	85 *280*	95 *310*	36 *120*	38 *125*	45 *150*	50 *165*	55 *180*
S12	— —	— —	— —	— —	— —	50 *165*	55 *180*	65 *215*	75 *245*	80 *260*	41 *135*	44 *145*	50 *165*	60 *195*	65 *215*	33 *110*	35 *115*	41 *135*	47 *155*	50 *165*
S13	— —	— —	— —	— —	— —	30 *100*	31 *100*	37 *120*	42 *140*	46 *150*	25 *80*	26 *85*	30 *100*	34 *110*	37 *120*	20 *65*	21 *70*	24 *80*	27 *90*	30 *100*
H5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	35 *115*	38 *125*	44 *145*	50 *165*	55 *180*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	38 *125*	41 *135*	47 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	45 *150*	48 *155*	55 *180*	65 *215*	70 *230*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	70 *230*	75 *245*	85 *280*	95 *310*	105 *345*	— —	— —	— —	— —	— —

R218.20-200 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,46 0.018
P2	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,48 0.019
P3	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P4	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P5	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P6	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P7	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P8	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P11	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P12	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	29,0 *1.1*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
M1	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	36,0 *1.4*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
M2	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	36,0 *1.4*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
M3	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	29,0 *1.1*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,18 0.0070	0,24 0.0095
M4	218.20-200ER-ME10 F40M	SCET120612T-ME10 F40M	22,0 *0.85*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
M5	218.20-200ER-ME10 F40M	SCET120612T-ME10 F40M	22,0 *0.85*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K1	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,48 0.019
K2	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K3	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K4	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K5	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,16 *0.0065*	0,16 *0.0065*	0,18 *0.0070*	0,28 0.011	0,38 0.015
K6	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K7	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	36,0 *1.4*	0,16 *0.0065*	0,16 *0.0065*	0,18 *0.0070*	0,28 0.011	0,38 0.015
N1	218.20-200ER-ME10 F40M	SCET120612T-M14 HX	36,0 *1.4*	0,26 *0.010*	0,26 *0.010*	0,28 *0.011*	0,44 0.017	0,60 0.024
N2	218.20-200ER-ME10 F40M	SCET120612T-M14 HX	36,0 *1.4*	0,26 *0.010*	0,26 *0.010*	0,28 *0.011*	0,44 0.017	0,60 0.024
N3	218.20-200ER-ME10 F40M	SCET120612T-M14 HX	36,0 *1.4*	0,26 *0.010*	0,26 *0.010*	0,28 *0.011*	0,44 0.017	0,60 0.024
N11	218.20-200ER-ME10 F40M	SCET120612T-M14 HX	36,0 *1.4*	0,26 *0.010*	0,26 *0.010*	0,28 *0.011*	0,44 0.017	0,60 0.024
S1	218.20-200ER-ME10 F40M	SCET120612T-M14 F40M	22,0 *0.85*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
S2	218.20-200ER-ME10 F40M	SCET120612T-M14 F40M	22,0 *0.85*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
S3	218.20-200ER-ME10 F40M	SCET120612T-M14 F40M	22,0 *0.85*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
S11	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	25,0 *1.0*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,18 0.0070	0,25 0.010
S12	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	25,0 *1.0*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,18 0.0070	0,25 0.010
S13	218.20-200ER-ME10 MS2050	SCET120612T-ME10 MS2050	22,0 *0.85*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
H5	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	29,0 *1.1*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H8	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	25,0 *1.0*	0,095 *0.0038*	0,095 *0.0038*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085
H11	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	29,0 *1.1*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H12	218.20-200ER-M10 F40M	SCET120612T-M14 F40M	25,0 *1.0*	0,095 *0.0038*	0,095 *0.0038*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-200 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	275 *900*	290 *950*	345 *1125*	400 *1300*	430 *1400*	225 *740*	230 *750*	275 *900*	310 *1025*	325 *1075*	220 *720*	230 *750*	280 *920*	320 *1050*	345 *1125*
P2	265 *870*	280 *920*	340 *1125*	390 *1275*	420 *1375*	210 *690*	215 *710*	265 *870*	300 *980*	315 *1025*	205 *670*	215 *710*	270 *890*	315 *1025*	335 *1100*
P3	235 *770*	245 *800*	295 *970*	335 *1100*	365 *1200*	190 *620*	195 *640*	230 *750*	265 *870*	275 *900*	185 *610*	195 *640*	235 *770*	275 *900*	290 *950*
P4	205 *670*	215 *710*	260 *850*	305 *1000*	320 *1050*	170 *560*	175 *570*	210 *690*	245 *800*	265 *870*	175 *570*	185 *610*	220 *720*	260 *850*	280 *920*
P5	195 *640*	210 *690*	250 *820*	290 *950*	305 *1000*	160 *520*	165 *540*	200 *660*	220 *720*	235 *770*	155 *510*	165 *540*	200 *660*	230 *750*	245 *800*
P6	220 *720*	235 *770*	280 *920*	325 *1075*	350 *1150*	180 *590*	185 *610*	225 *740*	250 *820*	265 *870*	175 *570*	185 *610*	225 *740*	255 *840*	280 *920*
P7	210 *690*	220 *720*	265 *870*	305 *1000*	330 *1075*	170 *560*	175 *570*	210 *690*	235 *770*	250 *820*	165 *540*	175 *570*	210 *690*	245 *800*	260 *850*
P8	195 *640*	210 *690*	250 *820*	285 *940*	305 *1000*	160 *520*	165 *540*	195 *640*	220 *720*	235 *770*	155 *510*	165 *540*	195 *640*	230 *750*	245 *800*
P11	200 *660*	215 *710*	255 *840*	295 *970*	320 *1050*	165 *540*	170 *560*	205 *670*	230 *750*	245 *800*	160 *520*	170 *560*	205 *670*	235 *770*	255 *840*
P12	140 *460*	145 *475*	165 *540*	190 *620*	200 *660*	115 *375*	120 *395*	135 *445*	150 *490*	160 *520*	110 *360*	115 *375*	130 *425*	145 *475*	155 *510*
M1	190 *620*	205 *670*	255 *840*	300 *980*	325 *1075*	150 *490*	160 *520*	200 *660*	235 *770*	255 *840*	135 *445*	145 *475*	180 *590*	215 *710*	235 *770*
M2	160 *520*	170 *560*	210 *690*	250 *820*	265 *870*	125 *410*	135 *445*	165 *540*	195 *640*	210 *690*	115 *375*	125 *410*	150 *490*	175 *570*	195 *640*
M3	135 *445*	145 *475*	170 *560*	200 *660*	215 *710*	105 *345*	115 *375*	135 *445*	155 *510*	170 *560*	95 *310*	105 *345*	120 *395*	145 *475*	155 *510*
M4	110 *360*	115 *375*	135 *445*	150 *490*	165 *540*	85 *280*	90 *295*	105 *345*	120 *395*	135 *445*	80 *260*	80 *260*	95 *310*	110 *360*	120 *395*
M5	90 *295*	95 *310*	110 *360*	125 *410*	140 *460*	70 *230*	75 *245*	90 *295*	100 *330*	110 *360*	65 *215*	70 *230*	80 *260*	95 *310*	100 *330*
K1	— —	— —	— —	— —	— —	145 *475*	155 *510*	195 *640*	230 *750*	250 *820*	— —	— —	— —	— —	— —
K2	— —	— —	— —	— —	— —	130 *425*	140 *460*	175 *570*	205 *670*	220 *720*	— —	— —	— —	— —	— —
K3	— —	— —	— —	— —	— —	110 *360*	120 *395*	145 *475*	170 *560*	190 *620*	— —	— —	— —	— —	— —
K4	— —	— —	— —	— —	— —	105 *345*	115 *375*	140 *460*	165 *540*	180 *590*	— —	— —	— —	— —	— —
K5	— —	— —	— —	— —	— —	65 *215*	70 *230*	85 *280*	100 *330*	110 *360*	— —	— —	— —	— —	— —
K6	— —	— —	— —	— —	— —	95 *310*	100 *330*	125 *410*	145 *475*	160 *520*	— —	— —	— —	— —	— —
K7	— —	— —	— —	— —	— —	85 *280*	90 *295*	110 *360*	130 *425*	140 *460*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	1100 *3600*	1175 *3850*	1450 *4750*	1700 *5575*	1850 *6075*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	440 *1450*	470 *1550*	580 *1900*	690 *2275*	750 *2450*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	295 *970*	315 *1025*	385 *1275*	455 *1500*	500 *1650*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	335 *1100*	360 *1175*	445 *1450*	520 *1700*	570 *1875*	— —	— —	— —	— —	— —
S1	50 *165*	55 *180*	60 *195*	70 *230*	80 *260*	40 *130*	42 *140*	49 *160*	55 *180*	60 *195*	24 *80*	25 *80*	30 *100*	34 *110*	37 *120*
S2	41 *135*	43 *140*	50 *165*	55 *180*	65 *215*	32 *105*	33 *110*	40 *130*	46 *150*	50 *165*	20 *65*	20 *65*	24 *80*	27 *90*	30 *100*
S3	36 *120*	38 *125*	44 *145*	50 *165*	55 *180*	28 *90*	30 *100*	35 *115*	40 *130*	44 *145*	17 *55*	18 *60*	21 *70*	24 *80*	26 *85*
S11	70 *230*	75 *245*	85 *280*	100 *330*	110 *360*	55 *180*	60 *195*	70 *230*	80 *260*	85 *280*	33 *110*	35 *115*	41 *135*	48 *155*	50 *165*
S12	48 *155*	50 *165*	60 *195*	70 *230*	75 *245*	38 *125*	40 *130*	47 *155*	55 *180*	60 *195*	31 *100*	32 *105*	38 *125*	44 *145*	47 *155*
S13	29 *95*	30 *100*	35 *115*	40 *130*	44 *145*	23 *75*	23 *75*	28 *90*	32 *105*	35 *115*	18 *60*	19 *60*	22 *70*	26 *85*	28 *90*
H5	— —	— —	— —	— —	— —	32 *105*	34 *110*	41 *135*	48 *155*	50 *165*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	35 *115*	37 *120*	44 *145*	50 *165*	55 *180*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	41 *135*	44 *145*	50 *165*	60 *195*	65 *215*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	65 *215*	65 *215*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	— —

R218.20-250 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,46 0.018
P2	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,46 0.019
P3	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P4	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P5	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P6	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P7	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P8	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
P11	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
P12	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	34,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
M1	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	42,0 *1.7*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,28 0.011	0,40 0.016
M2	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	42,0 *1.7*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
M3	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	34,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
M4	218.20-250ER-ME12 F40M	SCET120612T-ME10 F40M	25,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
M5	218.20-250ER-ME12 F40M	SCET120612T-ME10 F40M	25,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
K1	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,46 0.019
K2	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K3	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K4	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K5	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,16 *0.0065*	0,16 *0.0065*	0,18 *0.0070*	0,28 0.011	0,38 0.015
K6	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,18 *0.0070*	0,18 *0.0070*	0,20 *0.0080*	0,30 0.012	0,42 0.017
K7	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	42,0 *1.7*	0,16 *0.0065*	0,16 *0.0065*	0,18 *0.0070*	0,28 0.011	0,38 0.015
N1	218.20-250ER-ME12 F40M	SCET120612T-M14 HX	42,0 *1.7*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
N2	218.20-250ER-ME12 F40M	SCET120612T-M14 HX	42,0 *1.7*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
N3	218.20-250ER-ME12 F40M	SCET120612T-M14 HX	42,0 *1.7*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
N11	218.20-250ER-ME12 F40M	SCET120612T-M14 HX	42,0 *1.7*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
S1	218.20-250ER-ME12 F40M	SCET120612T-ME10 F40M	25,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
S2	218.20-250ER-ME12 F40M	SCET120612T-ME10 F40M	25,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
S3	218.20-250ER-ME12 F40M	SCET120612T-ME10 F40M	25,0 *1.0*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,18 0.0070	0,24 0.0095
S11	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	29,0 *1.1*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
S12	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	29,0 *1.1*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
S13	218.20-250ER-ME12 MS2050	SCET120612T-ME10 MS2050	25,0 *1.0*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
H5	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	34,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H8	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	29,0 *1.1*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085
H11	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	34,0 *1.3*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H12	218.20-250TR-M14 F40M	SCET120612T-M14 F40M	29,0 *1.1*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085

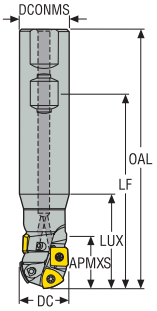
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.20-250 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050					F40M					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	230 *750*	245 *800*	300 *980*	350 *1150*	370 *1225*	195 *640*	205 *670*	245 *800*	275 *900*	295 *970*	205 *670*	220 *720*	265 *870*	305 *1000*	325 *1075*
P2	225 *740*	240 *790*	290 *950*	340 *1125*	360 *1175*	190 *620*	200 *660*	235 *770*	270 *890*	285 *940*	200 *660*	215 *710*	255 *840*	295 *970*	315 *1025*
P3	200 *660*	210 *690*	255 *840*	295 *970*	315 *1025*	170 *560*	175 *570*	210 *690*	235 *770*	250 *820*	175 *570*	185 *610*	220 *720*	255 *840*	275 *900*
P4	175 *570*	185 *610*	225 *740*	265 *870*	280 *920*	150 *490*	160 *520*	195 *640*	220 *720*	235 *770*	165 *540*	180 *590*	215 *710*	245 *800*	260 *850*
P5	165 *540*	180 *590*	215 *710*	250 *820*	270 *890*	145 *475*	150 *490*	180 *590*	205 *670*	215 *710*	145 *475*	155 *510*	190 *620*	215 *710*	230 *750*
P6	185 *610*	200 *660*	245 *800*	280 *920*	300 *980*	165 *540*	170 *560*	200 *660*	230 *750*	240 *790*	165 *540*	175 *570*	210 *690*	245 *800*	260 *850*
P7	175 *570*	190 *620*	230 *750*	265 *870*	285 *940*	155 *510*	160 *520*	190 *620*	215 *710*	225 *740*	155 *510*	165 *540*	200 *660*	230 *750*	245 *800*
P8	165 *540*	180 *590*	215 *710*	245 *800*	265 *870*	140 *460*	145 *475*	180 *590*	200 *660*	210 *690*	145 *475*	155 *510*	185 *610*	215 *710*	230 *750*
P11	170 *560*	185 *610*	225 *740*	260 *850*	275 *900*	150 *490*	155 *510*	185 *610*	210 *690*	220 *720*	150 *490*	160 *520*	195 *640*	225 *740*	240 *790*
P12	115 *375*	125 *410*	145 *475*	165 *540*	175 *570*	100 *330*	105 *345*	120 *395*	140 *460*	145 *475*	95 *310*	105 *345*	120 *395*	135 *445*	145 *475*
M1	165 *540*	180 *590*	220 *720*	260 *850*	280 *920*	135 *445*	145 *475*	180 *590*	210 *690*	230 *750*	130 *425*	140 *460*	170 *560*	205 *670*	220 *720*
M2	135 *445*	150 *490*	180 *590*	215 *710*	235 *770*	110 *360*	120 *395*	150 *490*	175 *570*	190 *620*	105 *345*	115 *375*	140 *460*	170 *560*	185 *610*
M3	110 *360*	120 *395*	145 *475*	170 *560*	185 *610*	90 *295*	100 *330*	120 *395*	140 *460*	155 *510*	90 *295*	95 *310*	115 *375*	135 *445*	145 *475*
M4	95 *310*	100 *330*	115 *375*	135 *445*	145 *475*	75 *245*	80 *260*	95 *310*	110 *360*	120 *395*	75 *245*	80 *260*	90 *295*	105 *345*	115 *375*
M5	75 *245*	85 *280*	95 *310*	110 *360*	120 *395*	65 *215*	70 *230*	80 *260*	90 *295*	100 *330*	60 *195*	65 *215*	75 *245*	90 *295*	95 *310*
K1	— —	— —	— —	— —	— —	135 *445*	145 *475*	175 *570*	210 *690*	225 *740*	— —	— —	— —	— —	— —
K2	— —	— —	— —	— —	— —	120 *395*	130 *425*	155 *510*	185 *610*	200 *660*	— —	— —	— —	— —	— —
K3	— —	— —	— —	— —	— —	100 *330*	110 *360*	135 *445*	160 *520*	170 *560*	— —	— —	— —	— —	— —
K4	— —	— —	— —	— —	— —	95 *310*	105 *345*	125 *410*	150 *490*	165 *540*	— —	— —	— —	— —	— —
K5	— —	— —	— —	— —	— —	60 *195*	65 *215*	80 *260*	90 *295*	100 *330*	— —	— —	— —	— —	— —
K6	— —	— —	— —	— —	— —	85 *280*	90 *295*	110 *360*	135 *445*	145 *475*	— —	— —	— —	— —	— —
K7	— —	— —	— —	— —	— —	75 *245*	80 *260*	100 *330*	115 *375*	130 *425*	— —	— —	— —	— —	— —
N1	— —	— —	— —	— —	— —	970 *3175*	1050 *3450*	1300 *4275*	1525 *5000*	1675 *5500*	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	390 *1275*	425 *1400*	520 *1700*	620 *2025*	670 *2200*	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	260 *850*	280 *920*	350 *1150*	410 *1350*	450 *1475*	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	295 *970*	320 *1050*	400 *1300*	470 *1550*	510 *1675*	— —	— —	— —	— —	— —
S1	43 *140*	47 *155*	55 *180*	65 *215*	70 *230*	36 *120*	38 *125*	44 *145*	50 *165*	55 *180*	22 *70*	24 *80*	28 *90*	32 *105*	35 *115*
S2	35 *115*	38 *125*	43 *140*	50 *165*	55 *180*	29 *95*	31 *100*	36 *120*	41 *135*	45 *150*	18 *60*	19 *60*	22 *70*	26 *85*	28 *90*
S3	31 *100*	32 *105*	38 *125*	44 *145*	48 *155*	25 *80*	27 *90*	31 *100*	36 *120*	39 *130*	16 *50*	17 *55*	19 *60*	23 *75*	25 *80*
S11	60 *195*	65 *215*	75 *245*	85 *280*	95 *310*	48 *155*	50 *165*	60 *195*	70 *230*	80 *260*	30 *100*	32 *105*	38 *125*	44 *145*	48 *155*
S12	40 *130*	43 *140*	50 *165*	60 *195*	65 *215*	33 *110*	36 *120*	42 *140*	50 *165*	55 *180*	28 *90*	30 *100*	35 *115*	41 *135*	45 *150*
S13	24 *80*	26 *85*	30 *100*	35 *115*	38 *125*	20 *65*	22 *70*	25 *80*	29 *95*	31 *100*	17 *55*	18 *60*	21 *70*	24 *80*	26 *85*
H5	— —	— —	— —	— —	— —	28 *90*	31 *100*	37 *120*	44 *145*	48 *155*	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	31 *100*	34 *110*	40 *130*	46 *150*	50 *165*	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	36 *120*	39 *130*	47 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	85 *280*	90 *295*	— —	— —	— —	— —	— —

R218.19 – In mm

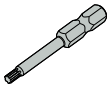




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 751-763
—Per il programma inserti completo, vedere le pagine 896, 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RPMX	Peso	218.20	SPMT
			mm		mm	mm	mm	mm	mm	mm	mm		kg		
R218.19-2016.3-17.050A	75069117	Weldon	16,0	1	17,5	20,0	75,0	60,0	31,0	50,0	100,0	41600	0,3	-080(2)	-0602(2)
R218.19-2520.3-21.069A	75069118	Weldon	20,0	1	21,6	25,0	93,0	82,5	31,0	69,0	125,0	26200	0,4	-100(2)	-0703(2)
R218.19-2525.3-26.074HA	75069119	Weldon	25,0	1	26,6	25,0	98,0	82,5	46,0	74,0	130,0	21700	0,5	-125(2)	-0903(2)
R218.19-3232.3-30.070HA	75069120	Weldon	32,0	1	31,2	32,0	94,0	82,5	46,0	70,0	130,0	14800	0,7	-160(2)	–

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.19-2016	1/4HEX-T07PX50	C02205-T07P
R218.19-2520	1/4HEX-T07PX50	C02506-T07P
R218.19-2525	1/4HEX-T09PX50	C03006-T09P
R218.19-3232	1/4HEX-T15PX50	C03508-T15P

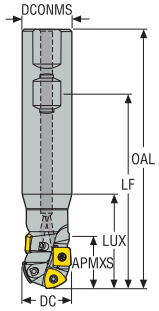
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.19-2016	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R218.19-2520	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R218.19-2525	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R218.19-3232	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R218.19 – Pollici

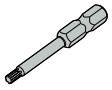




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 751-763
—Per il programma inserti completo, vedere le pagine 896, 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LF	LS	LUX	LPR	OAL	RPMX	Peso	218.20	SPMX
			inch		inch	inch	inch	inch	inch	inch	inch		lb		
R218.19-00.75-3-21M	00087573	Weldon	0.750	1	0.835	0.750	3.015	2.583	1.425	2.047	4.031	26200	0.660	100 (2)	0703 (2)
R218.19-01.00-3-26H	00087575	Weldon	1.000	1	1.063	1.000	3.889	2.835	2.173	2.835	5.031	21700	1.100	125 (2)	0903 (2)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.19-00.75	1/4HEX-T07PX50	C02506-T07P
R218.19-01.00	1/4HEX-T09PX50	C03006-T09P

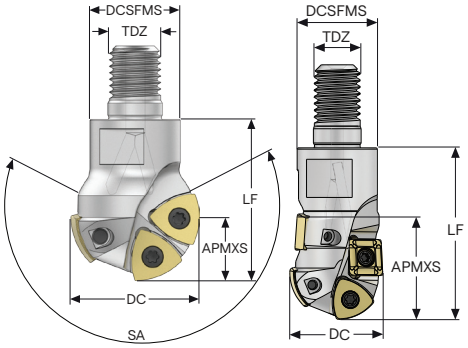
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.19-00.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R218.19-01.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20

Chiavi dinamometriche e fisse, vedere pagina 931

R218.19 – In mm



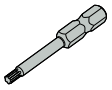


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 751–763
—Per il programma inserti completo, vedere le pagine 896, 916
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RPMX	Peso	218.19	SPMX	SPMT
			mm		mm	mm		mm	mm		kg			
R218.19-0816.RE-12A	02644033	Combimaster	16,0	1	12,0	13,5	M8	23,0	40,75	41600	0,1	-080(2)	-0602	–
R218.19-1020.RE-16A	02644034	Combimaster	20,0	1	16,0	18,0	M10	28,0	46,75	26200	0,1	-100(2)	-0703	–
R218.19-1220.RE-21A	75077649	Combimaster	20,0	1	21,6	21,0	M12	45,0	66,75	26200	0,2	-100(2)	-0703(2)	–
R218.19-1225.RE-14HFA	75094633	Combimaster	25,0	1	12,5	21,0	M12	40,0	61,75	21700	0,2	-125(3)	–	–
R218.19-1225.RE-26HA	75094632	Combimaster	25,0	1	26,6	21,0	M12	45,0	66,75	21700	0,2	-125(2)	-0903(2)	–
R218.19-1632.RE-18HFA	75094580	Combimaster	32,0	1	16,0	28,0	M16	40,0	62,75	14800	0,2	-160(3)	–	–
R218.19-1632.RE-36HA	75077650	Combimaster	32,0	1	38,6	28,0	M16	55,0	77,75	14800	0,3	-160(2)	–	-1004(3)
R218.19-1640.RE-25HFA	00089918	Combimaster	40,0	1	20,0	28,0	M16	50,0	72,75	10400	0,3	-200(3)	–	–

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R218.19-0816	1/4HEX-T07PX50	C02205-T07P
R218.19-1020	1/4HEX-T07PX50	C02506-T07P
R218.19-1220	1/4HEX-T07PX50	C02506-T07P
R218.19-1225	1/4HEX-T09PX50	C03006-T09P
R218.19-1632	1/4HEX-T15PX50	C03508-T15P
R218.19-1640	1/4HEX-T20PX50	C45011-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.19-0816-1220	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R218.19-1225	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R218.19-1632	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30
R218.19-1640	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R218.19-080 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
P2	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,15 *0.0060*	0,15 *0.0060*	0,17 *0.0065*	0,26 0.010	0,36 0.014
P3	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
P4	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
P5	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
P6	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
P7	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
P8	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
P11	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
P12	218.19-080T-M04 F40M	SPMX060204-75 F40M	9,0 *0.36*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
M1	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,15 *0.0060*	0,15 *0.0060*	0,17 *0.0065*	0,26 0.010	0,36 0.014
M2	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
M3	218.19-080T-M04 F40M	SPMX060204-75 F40M	9,0 *0.36*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
M4	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
M5	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
K1	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,15 *0.0060*	0,15 *0.0060*	0,17 *0.0065*	0,26 0.010	0,36 0.014
K2	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
K3	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
K4	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
K5	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,12 *0.0048*	0,12 *0.0048*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
K6	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,34 0.013
K7	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,12 *0.0048*	0,12 *0.0048*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
N1	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,34 0.013	0,48 0.019
N2	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,34 0.013	0,48 0.019
N3	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,34 0.013	0,48 0.019
N11	218.19-080T-M04 F40M	SPMX060204-75 F40M	11,0 *0.44*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,34 0.013	0,48 0.019
S1	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
S2	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
S3	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,16 0.0065	0,22 0.0085
S11	218.19-080T-M04 F40M	SPMX060204-75 F40M	8,0 *0.32*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
S12	218.19-080T-M04 F40M	SPMX060204-75 F40M	8,0 *0.32*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,19 0.0075	0,26 0.010
S13	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
H5	218.19-080T-M04 F40M	SPMX060204-75 F40M	7,0 *0.28*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,14 0.0055	0,20 0.0080
H8	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,11 0.0044	0,15 0.0060
H11	218.19-080T-M04 F40M	SPMX060204-75 F40M	7,0 *0.28*	0,090 *0.0036*	0,090 *0.0036*	0,095 *0.0038*	0,14 0.0055	0,20 0.0080
H12	218.19-080T-M04 F40M	SPMX060204-75 F40M	6,0 *0.24*	0,070 *0.0028*	0,070 *0.0028*	0,075 *0.0030*	0,11 0.0044	0,15 0.0060

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.19-080 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F15M					F30M					F40M					MP2501					MS2500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	235	260	315	370	400	220	240	290	340	370	245	255	305	340	355	390	410	480	540	560	350	375	440	495	520
	770	*850*	*1025*	*1225*	*1300*	*720*	*790*	*950*	*1125*	*1225*	*800*	*840*	*1000*	*1125*	*1175*	*1275*	*1350*	*1575*	*1775*	*1825*	*1150*	*1225*	*1450*	*1625*	*1700*
P2	230	250	300	360	390	210	230	280	330	360	240	250	290	325	345	380	400	460	520	550	345	365	420	480	510
	750	*820*	*980*	*1175*	*1275*	*690*	*750*	*920*	*1075*	*1175*	*790*	*820*	*950*	*1075*	*1125*	*1250*	*1300*	*1500*	*1700*	*1800*	*1125*	*1200*	*1375*	*1575*	*1675*
P3	200	220	265	315	340	185	205	245	290	310	210	220	255	285	300	330	350	400	455	475	300	320	365	415	440
	660	*720*	*870*	*1025*	*1125*	*610*	*670*	*800*	*950*	*1025*	*690*	*720*	*840*	*940*	*980*	*1075*	*1150*	*1300*	*1500*	*1550*	*980*	*1050*	*1200*	*1350*	*1450*
P4	180	195	235	275	300	165	180	220	255	275	190	200	235	265	285	290	310	355	400	420	265	280	325	365	390
	590	*640*	*770*	*900*	*980*	*540*	*590*	*720*	*840*	*900*	*620*	*660*	*770*	*870*	*940*	*950*	*1025*	*1175*	*1300*	*1375*	*870*	*920*	*1075*	*1200*	*1275*
P5	170	185	225	265	285	155	170	210	245	265	175	185	215	240	255	280	295	340	380	400	250	270	310	350	370
	560	*610*	*740*	*870*	*940*	*510*	*560*	*690*	*800*	*870*	*570*	*610*	*710*	*790*	*840*	*920*	*970*	*1125*	*1250*	*1300*	*820*	*890*	*1025*	*1150*	*1225*
P6	190	210	255	295	325	175	190	235	275	300	200	205	245	270	290	310	330	385	425	455	285	300	350	395	420
	620	*690*	*840*	*970*	*1075*	*570*	*620*	*770*	*900*	*980*	*660*	*670*	*800*	*890*	*950*	*1025*	*1075*	*1275*	*1400*	*1500*	*940*	*980*	*1150*	*1300*	*1375*
P7	180	195	240	280	305	165	180	220	260	285	190	195	230	255	270	295	310	360	405	430	265	285	330	370	395
	590	*640*	*790*	*920*	*1000*	*540*	*590*	*720*	*850*	*940*	*620*	*640*	*750*	*840*	*890*	*970*	*1025*	*1175*	*1325*	*1400*	*870*	*940*	*1075*	*1225*	*1300*
P8	170	185	220	265	285	155	170	205	245	265	175	185	215	240	255	280	295	335	380	400	250	270	310	350	370
	560	*610*	*720*	*870*	*940*	*510*	*560*	*670*	*800*	*870*	*570*	*610*	*710*	*790*	*840*	*920*	*970*	*1100*	*1250*	*1300*	*820*	*890*	*1025*	*1150*	*1225*
P11	175	190	230	270	300	160	175	215	250	275	180	190	225	250	265	285	305	350	390	415	260	275	320	360	385
	570	*620*	*750*	*890*	*980*	*520*	*570*	*710*	*820*	*900*	*590*	*620*	*740*	*820*	*870*	*940*	*1000*	*1150*	*1275*	*1350*	*850*	*900*	*1050*	*1175*	*1275*
P12	—	—	—	—	—	110	120	140	165	175	125	130	145	165	170	190	200	220	245	255	170	180	205	225	235
	—	—	—	—	—	*360*	*395*	*460*	*540*	*570*	*410*	*425*	*475*	*540*	*560*	*620*	*660*	*720*	*800*	*840*	*560*	*590*	*670*	*740*	*770*
M1	—	—	—	—	—	170	185	225	265	290	165	180	215	255	275	190	210	250	300	325	200	215	260	310	335
	—	—	—	—	—	*560*	*610*	*740*	*870*	*950*	*540*	*590*	*710*	*840*	*900*	*620*	*690*	*820*	*980*	*1075*	*660*	*710*	*850*	*1025*	*1100*
M2	—	—	—	—	—	140	155	185	220	235	135	145	180	210	225	160	175	210	245	265	165	180	215	255	275
	—	—	—	—	—	*460*	*510*	*610*	*720*	*770*	*445*	*475*	*590*	*690*	*740*	*520*	*570*	*690*	*800*	*870*	*540*	*590*	*710*	*840*	*900*
M3	—	—	—	—	—	120	130	155	180	190	115	125	145	170	185	135	145	170	200	215	140	150	175	210	220
	—	—	—	—	—	*395*	*425*	*510*	*590*	*620*	*375*	*410*	*475*	*560*	*610*	*445*	*475*	*560*	*660*	*710*	*460*	*490*	*570*	*690*	*720*
M4	—	—	—	—	—	100	105	120	140	150	95	100	115	135	140	115	120	135	155	170	115	120	140	160	175
	—	—	—	—	—	*330*	*345*	*395*	*460*	*490*	*310*	*330*	*375*	*445*	*460*	*375*	*395*	*445*	*510*	*560*	*375*	*395*	*460*	*520*	*570*
M5	—	—	—	—	—	85	90	100	115	125	80	85	95	110	120	95	100	110	130	140	95	100	115	135	145
	—	—	—	—	—	*280*	*295*	*330*	*375*	*410*	*260*	*280*	*310*	*360*	*395*	*310*	*330*	*360*	*425*	*460*	*310*	*330*	*375*	*445*	*475*
K1	185	200	240	285	310	170	185	220	260	285	160	175	210	250	270	380	405	465	520	550	—	—	—	—	—
	610	*660*	*790*	*940*	*1025*	*560*	*610*	*720*	*850*	*940*	*520*	*570*	*690*	*820*	*890*	*1250*	*1325*	*1525*	*1700*	*1800*	—	—	—	—	—
K2	160	175	215	250	270	150	160	200	230	250	140	155	190	220	235	335	355	410	460	485	—	—	—	—	—
	520	*570*	*710*	*820*	*890*	*490*	*520*	*660*	*750*	*820*	*460*	*510*	*620*	*720*	*770*	*1100*	*1175*	*1350*	*1500*	*1600*	—	—	—	—	—
K3	135	150	180	210	230	125	135	165	195	210	120	130	160	185	200	285	300	350	390	410	—	—	—	—	—
	445	*490*	*590*	*690*	*750*	*410*	*445*	*540*	*640*	*690*	*395*	*425*	*520*	*610*	*660*	*940*	*980*	*1150*	*1275*	*1350*	—	—	—	—	—
K4	130	140	175	205	220	120	130	160	185	200	115	125	150	180	190	270	285	335	370	390	—	—	—	—	—
	425	*460*	*570*	*670*	*720*	*395*	*425*	*520*	*610*	*660*	*375*	*410*	*490*	*590*	*620*	*890*	*940*	*1100*	*1225*	*1275*	—	—	—	—	—
K5	80	90	105	125	135	75	80	95	115	125	70	75	90	110	120	165	175	200	225	240	—	—	—	—	—
	260	*295*	*345*	*410*	*445*	*245*	*260*	*310*	*375*	*410*	*230*	*245*	*295*	*360*	*395*	*540*	*570*	*660*	*740*	*790*	—	—	—	—	—
K6	115	125	150	180	190	105	115	140	165	175	100	110	135	155	170	240	255	295	325	345	—	—	—	—	—
	375	*410*	*490*	*590*	*620*	*345*	*375*	*460*	*540*	*570*	*330*	*360*	*445*	*510*	*560*	*790*	*840*	*970*	*1075*	*1125*	—	—	—	—	—
K7	105	115	135	160	170	95	105	125	145	160	90	100	120	140	150	215	225	255	285	305	—	—	—	—	—
	345	*375*	*445*	*520*	*560*	*310*	*345*	*410*	*475*	*520*	*295*	*330*	*395*	*460*	*490*	*710*	*740*	*840*	*940*	*1000*	—	—	—	—	—
N1	—	—	—	—	—	1250	1350	1625	1925	2075	1175	1300	1550	1825	1975	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	*4100*	*4425*	*5325*	*6325*	*6800*	*3850*	*4275*	*5075*	*6000*	*6475*	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	500	550	660	780	840	480	520	620	740	800	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	*1650*	*1800*	*2175*	*2550*	*2750*	*1575*	*1700*	*2025*	*2425*	*2625*	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	335	365	435	520	560	320	345	415	495	530	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	*1100*	*1200*	*1425*	*1700*	*1825*	*1050*	*1125*	*1350*	*1625*	*1750*	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	385	415	500	590	640	365	395	475	560	610	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	*1275*	*1350*	*1650*	*1925*	*2100*	*1200*	*1300*	*1550*	*1825*	*2000*	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	45	47	55	60	65	—	—	—	—	—	55	60	70	80	85
	—	—	—	—	—	—	—	—	—	—	*150*	*155*	*180*	*195*	*215*	—	—	—	—	—	*180*	*195*	*230*	*260*	*280*
S2	—	—	—	—	—	—	—	—	—	—	36	38	43	50	55	—	—	—	—	—	46	48	55	65	70
	—	—	—	—	—	—	—	—	—	—	*120*	*125*	*140*	*165*	*180*	—	—	—	—	—	*150*	*155*	*180*	*215*	*230*
S3	—	—	—	—	—	—	—	—	—	—	32	33	38	44	47	—	—	—	—	—	40	42	48	55	60
	—	—	—	—	—	—	—	—	—	—	*105*	*110*	*125*	*145*	*155*	—	—	—	—	—	*130*	*140*	*155*	*180*	*195*
S11	—	—	—	—	—	—	—	—	—	—	60	65	75	85	95	—	—	—	—	—	75	80	95	110	120
	—	—	—	—	—	—	—	—	—	—	*195*	*215*	*245*	*280*	*310*	—	—	—	—	—	*245*	*260*	*310*	*360*	*395*
S12	—	—	—	—	—	—	—	—	—	—	40	44	50	60	65	—	—	—	—	—	50	55	65	75	85
	—	—	—	—	—	—	—	—	—	—	*130*	*145*	*165*	*195*	*215*	—	—	—	—	—	*165*	*180*	*215*	*245*	*280*
S13	—	—	—	—	—	—	—	—	—	—	25	26	30	35	37	—	—	—	—	—	32	34	38	44	47
	—	—	—	—	—	—	—	—	—	—	*80*	*85*	*100*	*115*	*120*	—	—	—	—	—	*105*	*110*	*125*	*145*	*155*
H5	43	46	55	65	70	40	42	50	60	65	38	40	49	60	65	—	—	—	—	—	—	—	—	—	—
	140	*150*	*180*	*215*	*230*	*130*	*140*	*165*	*195*	*215*	*125*	*130*	*160*	*195*	*215*	—	—	—	—	—	—	—	—	—	—
H8	47	50	60	70	75	43	46	55	65	70	41	44	55	60	65	—	—	—	—	—	—	—	—	—	—
	155	*165*	*195*	*230*	*245*	*140*	*150*	*180*	*215*	*230*	*135*	*145*	*180*	*195*	*215*	—	—	—	—	—	—	—	—	—	—
H11	55	60	70	85	90	50	55	65	80	85	48	50	60	75	80	—	—	—	—	—	—	—	—	—	—
	180	*195*	*230*	*280*	*295*	*165*	*180*	*215*	*260*	*280*	*155*	*165*	*195*	*245*	*260*	—	—	—	—	—	—	—	—	—	—
H12	85	90	105	125	135	80	85	100	115	125	75	80	95	110	120	—	—	—	—	—	100	105	130	150	165
	280	*295*	*345*	*410*	*445*	*260*	*280*	*330*	*375*	*410*	*245*	*260*	*310*	*360*	*395*	—	—	—	—	—	*330*	*345*	*425*	*490*	*540*

R218.19-100 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
P2	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P3	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,48 0.019
P4	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,48 0.019
P5	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
P6	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,46 0.018
P7	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,46 0.018
P8	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,48 0.019
P11	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,46 0.018
P12	218.19-100T-M06 F40M	SPMX070304-75 F40M	16,0 *0.65*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,32 0.013
M1	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
M2	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
M3	218.19-100T-M06 F40M	SPMX070304-75 F40M	16,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,38 0.015
M4	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
M5	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
K1	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
K2	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
K3	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
K4	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
K5	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,30 0.012	0,42 0.017
K6	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,19 *0.0075*	0,19 *0.0075*	0,22 *0.0085*	0,32 0.013	0,46 0.018
K7	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,30 0.012	0,42 0.017
N1	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,46 0.018	0,65 0.026
N2	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,46 0.018	0,65 0.026
N3	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,46 0.018	0,65 0.026
N11	218.19-100T-M06 F40M	SPMX070304-75 F40M	19,0 *0.75*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,46 0.018	0,65 0.026
S1	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
S2	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
S3	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
S11	218.19-100T-M06 F40M	SPMX070304-75 F40M	14,0 *0.55*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,38 0.015
S12	218.19-100T-M06 F40M	SPMX070304-75 F40M	14,0 *0.55*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,38 0.015
S13	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
H5	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
H8	218.19-100T-M06 F40M	SPMX070304-75 F40M	11,0 *0.44*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,20 0.0080
H11	218.19-100T-M06 F40M	SPMX070304-75 F40M	12,0 *0.48*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,20 0.0080	0,28 0.011
H12	218.19-100T-M06 F40M	SPMX070304-75 F40M	11,0 *0.44*	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,15 0.0060	0,20 0.0080

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.19-100 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000					F15M					F25M					F30M					MP3000				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	—	—	—	—	—	195	210	260	305	330	180	195	240	280	300	195	210	260	310	335	245	260	330	395	430
	—	—	—	—	—	*640*	*690*	*850*	*1000*	*1075*	*590*	*640*	*790*	*920*	*980*	*640*	*690*	*850*	*1025*	*1100*	*800*	*850*	*1075*	*1300*	*1400*
P2	—	—	—	—	—	190	205	250	295	320	175	190	230	270	290	190	205	250	300	325	240	255	320	385	415
	—	—	—	—	—	*620*	*670*	*820*	*970*	*1050*	*570*	*620*	*750*	*890*	*950*	*620*	*670*	*820*	*980*	*1075*	*790*	*840*	*1050*	*1275*	*1350*
P3	—	—	—	—	—	165	175	220	260	280	150	160	200	240	255	165	180	220	265	280	215	230	285	340	360
	—	—	—	—	—	*540*	*570*	*720*	*850*	*920*	*490*	*520*	*660*	*790*	*840*	*540*	*590*	*720*	*870*	*920*	*710*	*750*	*940*	*1125*	*1175*
P4	—	—	—	—	—	145	160	195	230	245	135	145	175	210	225	145	160	195	230	250	190	200	255	300	320
	—	—	—	—	—	*475*	*520*	*640*	*750*	*800*	*445*	*475*	*570*	*690*	*740*	*475*	*520*	*640*	*750*	*820*	*620*	*660*	*840*	*980*	*1050*
P5	170	185	225	270	285	140	155	190	220	235	130	140	170	205	215	140	155	185	220	240	180	195	240	285	305
	560	*610*	*740*	*890*	*940*	*460*	*510*	*620*	*720*	*770*	*425*	*460*	*560*	*670*	*710*	*460*	*510*	*610*	*720*	*790*	*590*	*640*	*790*	*940*	*1000*
P6	190	205	255	300	320	160	170	210	250	265	145	155	195	230	245	160	175	210	250	270	210	220	270	325	350
	620	*670*	*840*	*980*	*1050*	*520*	*560*	*690*	*820*	*870*	*475*	*510*	*640*	*750*	*800*	*520*	*570*	*690*	*820*	*890*	*690*	*720*	*890*	*1075*	*1150*
P7	180	195	240	285	300	150	160	200	235	250	135	150	185	215	230	150	165	200	240	255	195	210	255	310	330
	590	*640*	*790*	*940*	*980*	*490*	*520*	*660*	*770*	*820*	*445*	*490*	*610*	*710*	*750*	*490*	*540*	*660*	*790*	*840*	*640*	*690*	*840*	*1025*	*1075*
P8	165	180	225	265	285	135	150	185	220	235	125	135	170	200	215	140	155	185	220	235	180	195	240	285	300
	540	*590*	*740*	*870*	*940*	*445*	*490*	*610*	*720*	*770*	*410*	*445*	*560*	*660*	*710*	*460*	*510*	*610*	*720*	*770*	*590*	*640*	*790*	*940*	*980*
P11	175	190	235	275	295	145	155	195	230	245	135	145	180	210	225	145	160	190	230	250	190	205	250	300	320
	570	*620*	*770*	*900*	*970*	*475*	*510*	*640*	*750*	*800*	*445*	*475*	*590*	*690*	*740*	*475*	*520*	*620*	*750*	*820*	*620*	*670*	*820*	*980*	*1050*
P12	120	130	155	180	195	—	—	—	—	—	90	100	115	140	150	95	105	125	150	160	130	140	170	195	210
	395	*425*	*510*	*590*	*640*	—	—	—	—	—	*295*	*330*	*375*	*460*	*490*	*310*	*345*	*410*	*490*	*520*	*425*	*460*	*560*	*640*	*690*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	150	165	205	240	260	170	185	225	265	290
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*490*	*540*	*670*	*790*	*850*	*560*	*610*	*740*	*870*	*950*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	125	140	170	200	215	140	150	185	220	235
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*410*	*460*	*560*	*660*	*710*	*460*	*490*	*610*	*720*	*770*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	115	140	165	175	115	125	155	180	190
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*345*	*375*	*460*	*540*	*570*	*375*	*410*	*510*	*590*	*620*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90	95	110	125	135	100	105	125	140	150
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*295*	*310*	*360*	*410*	*445*	*330*	*345*	*410*	*460*	*490*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75	80	95	105	115	80	85	100	115	125
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*245*	*260*	*310*	*345*	*375*	*260*	*280*	*330*	*375*	*410*
K1	180	195	240	280	305	150	165	200	235	255	140	150	180	215	230	150	165	200	240	260	180	195	235	285	305
	590	*640*	*790*	*920*	*1000*	*490*	*540*	*660*	*770*	*840*	*460*	*490*	*590*	*710*	*750*	*490*	*540*	*660*	*790*	*850*	*590*	*640*	*770*	*940*	*1000*
K2	160	175	215	255	270	135	145	180	210	225	120	135	165	195	205	135	145	175	210	225	160	175	210	250	270
	520	*570*	*710*	*840*	*890*	*445*	*475*	*590*	*690*	*740*	*395*	*445*	*540*	*640*	*670*	*445*	*475*	*570*	*690*	*740*	*520*	*570*	*690*	*820*	*890*
K3	135	150	185	215	230	115	125	150	180	190	105	110	140	165	175	115	125	150	175	190	135	145	180	210	230
	445	*490*	*610*	*710*	*750*	*375*	*410*	*490*	*590*	*620*	*345*	*360*	*460*	*540*	*570*	*375*	*410*	*490*	*570*	*620*	*445*	*475*	*590*	*690*	*750*
K4	130	140	175	205	220	110	115	145	170	180	100	105	130	155	165	110	115	145	170	185	130	140	170	200	215
	425	*460*	*570*	*670*	*720*	*360*	*375*	*475*	*560*	*590*	*330*	*345*	*425*	*510*	*540*	*360*	*375*	*475*	*560*	*610*	*425*	*460*	*560*	*660*	*710*
K5	80	85	105	125	135	65	70	90	105	115	60	65	80	95	105	65	70	90	105	115	80	85	105	125	135
	260	*280*	*345*	*410*	*445*	*215*	*230*	*295*	*345*	*375*	*195*	*215*	*260*	*310*	*345*	*215*	*230*	*295*	*345*	*375*	*260*	*280*	*345*	*410*	*445*
K6	115	125	155	180	195	95	105	125	150	160	85	95	115	135	145	95	105	125	150	160	115	125	150	175	190
	375	*410*	*510*	*590*	*640*	*310*	*345*	*410*	*490*	*520*	*280*	*310*	*375*	*445*	*475*	*310*	*345*	*410*	*490*	*520*	*375*	*410*	*490*	*570*	*620*
K7	100	110	135	160	175	85	90	110	135	145	75	85	105	120	135	85	90	115	135	145	100	110	135	160	170
	330	*360*	*445*	*520*	*570*	*280*	*295*	*360*	*445*	*475*	*245*	*280*	*345*	*395*	*445*	*280*	*295*	*375*	*445*	*475*	*330*	*360*	*445*	*520*	*560*
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1100	1200	1475	1725	1875	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*3600*	*3925*	*4850*	*5650*	*6150*	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	445	480	590	700	760	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1450*	*1575*	*1925*	*2300*	*2500*	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	295	320	395	465	510	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*970*	*1050*	*1300*	*1525*	*1675*	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	340	365	455	530	580	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1125*	*1200*	*1500*	*1750*	*1900*	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H5	45	48	60	70	75	37	39	48	55	60	—	—	—	—	—	37	39	47	55	60	41	44	55	60	70
	150	*155*	*195*	*230*	*245*	*120*	*130*	*155*	*180*	*195*	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	*135*	*145*	*180*	*195*	*230*
H8	49	50	60	75	80	40	43	50	60	65	—	—	—	—	—	40	42	50	60	65	44	47	55	65	70
	160	*165*	*195*	*245*	*260*	*130*	*140*	*165*	*195*	*215*	—	—	—	—	—	*130*	*140*	*165*	*195*	*215*	*145*	*155*	*180*	*215*	*230*
H11	55	60	75	90	95	47	50	60	75	80	—	—	—	—	—	47	50	60	70	80	50	55	65	80	85
	180	*195*	*245*	*295*	*310*	*155*	*165*	*195*	*245*	*260*	—	—	—	—	—	*155*	*165*	*195*	*230*	*260*	*165*	*180*	*215*	*260*	*280*
H12	85	90	110	130	145	70	75	95	110	120	—	—	—	—	—	70	75	90	105	115	85	90	110	125	140
	280	*295*	*360*	*425*	*475*	*230*	*245*	*310*	*360*	*395*	—	—	—	—	—	*230*	*245*	*295*	*345*	*375*	*280*	*295*	*360*	*410*	*460*

R218.19-100 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050					F40M					MP2501					MS2500					MP3501				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	220 *720*	235 *770*	285 *940*	335 *1100*	360 *1175*	210 *690*	220 *720*	260 *850*	300 *980*	320 *1050*	345 *1125*	360 *1175*	430 *1400*	495 *1625*	520 *1700*	330 *1075*	345 *1125*	415 *1350*	480 *1575*	510 *1675*	305 *1000*	320 *1050*	385 *1275*	440 *1450*	470 *1550*
P2	215 *710*	230 *750*	280 *920*	330 *1075*	355 *1175*	205 *670*	215 *710*	255 *840*	295 *970*	310 *1025*	335 *1100*	350 *1150*	420 *1375*	480 *1575*	510 *1675*	320 *1050*	335 *1100*	405 *1325*	465 *1525*	495 *1625*	300 *980*	315 *1025*	375 *1225*	430 *1400*	455 *1500*
P3	190 *620*	205 *670*	245 *800*	290 *950*	305 *1000*	185 *610*	190 *620*	225 *740*	255 *840*	265 *870*	300 *980*	315 *1025*	370 *1225*	420 *1375*	440 *1450*	285 *940*	300 *980*	355 *1175*	405 *1325*	425 *1400*	265 *870*	280 *920*	330 *1075*	375 *1225*	390 *1275*
P4	170 *560*	180 *590*	220 *720*	255 *840*	270 *890*	165 *540*	175 *570*	210 *690*	240 *790*	255 *840*	260 *850*	275 *900*	325 *1075*	370 *1225*	390 *1275*	250 *820*	265 *870*	315 *1025*	360 *1175*	380 *1250*	235 *770*	245 *800*	290 *950*	330 *1075*	350 *1150*
P5	160 *520*	170 *560*	210 *690*	240 *790*	260 *850*	155 *510*	160 *520*	190 *620*	215 *710*	225 *740*	250 *820*	265 *870*	310 *1025*	350 *1150*	370 *1225*	240 *790*	250 *820*	300 *980*	340 *1125*	360 *1175*	225 *740*	235 *770*	280 *920*	315 *1025*	335 *1100*
P6	185 *610*	195 *640*	235 *770*	275 *900*	295 *970*	175 *570*	185 *610*	215 *710*	245 *800*	260 *850*	285 *940*	300 *980*	350 *1150*	400 *1300*	420 *1375*	275 *900*	290 *950*	335 *1100*	390 *1275*	410 *1350*	255 *840*	270 *890*	310 *1025*	360 *1175*	380 *1250*
P7	175 *570*	185 *610*	220 *720*	260 *850*	275 *900*	165 *540*	175 *570*	200 *660*	235 *770*	245 *800*	270 *890*	285 *940*	330 *1075*	380 *1250*	400 *1300*	255 *840*	270 *890*	315 *1025*	365 *1200*	385 *1275*	240 *790*	255 *840*	295 *970*	340 *1125*	355 *1175*
P8	160 *520*	170 *560*	210 *690*	240 *790*	255 *840*	155 *510*	160 *520*	190 *620*	215 *710*	225 *740*	250 *820*	265 *870*	310 *1025*	350 *1150*	370 *1225*	240 *790*	250 *820*	300 *980*	340 *1125*	360 *1175*	225 *740*	235 *770*	280 *920*	315 *1025*	330 *1075*
P11	170 *560*	180 *590*	215 *710*	255 *840*	270 *890*	160 *520*	170 *560*	195 *640*	225 *740*	235 *770*	260 *850*	275 *900*	320 *1050*	370 *1225*	385 *1275*	250 *820*	265 *870*	310 *1025*	355 *1175*	375 *1225*	235 *770*	245 *800*	285 *940*	330 *1075*	345 *1125*
P12	115 *375*	120 *395*	145 *475*	165 *540*	175 *570*	110 *360*	115 *375*	135 *445*	150 *490*	155 *510*	175 *570*	180 *590*	210 *690*	235 *770*	245 *800*	165 *540*	175 *570*	200 *660*	225 *740*	240 *790*	155 *510*	165 *540*	185 *610*	210 *690*	220 *720*
M1	160 *520*	175 *570*	210 *690*	255 *840*	275 *900*	145 *475*	160 *520*	195 *640*	230 *750*	250 *820*	170 *560*	185 *610*	230 *750*	270 *890*	295 *970*	185 *610*	200 *660*	245 *800*	295 *970*	320 *1050*	160 *520*	175 *570*	210 *690*	255 *840*	275 *900*
M2	135 *445*	145 *475*	175 *570*	210 *690*	225 *740*	120 *395*	130 *425*	160 *520*	190 *620*	205 *670*	140 *460*	155 *510*	190 *620*	225 *740*	240 *790*	155 *510*	170 *560*	205 *670*	240 *790*	260 *850*	135 *445*	145 *475*	175 *570*	210 *690*	225 *740*
M3	110 *360*	120 *395*	145 *475*	170 *560*	180 *590*	100 *330*	110 *360*	130 *425*	155 *510*	165 *540*	120 *395*	130 *425*	155 *510*	185 *610*	195 *640*	130 *425*	140 *460*	170 *560*	200 *660*	210 *690*	110 *360*	120 *395*	145 *475*	170 *560*	180 *590*
M4	90 *295*	100 *330*	115 *375*	130 *425*	145 *475*	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*	100 *330*	105 *345*	125 *410*	140 *460*	155 *510*	110 *360*	115 *375*	135 *445*	155 *510*	165 *540*	90 *295*	100 *330*	115 *375*	130 *425*	145 *475*
M5	75 *245*	80 *260*	95 *310*	110 *360*	120 *395*	70 *230*	75 *245*	90 *295*	100 *330*	110 *360*	85 *280*	90 *295*	105 *345*	120 *395*	130 *425*	90 *295*	95 *310*	115 *375*	130 *425*	140 *460*	75 *245*	80 *260*	95 *310*	110 *360*	120 *395*
K1	— —	— —	— —	— —	— —	145 *475*	155 *510*	190 *620*	225 *740*	245 *800*	340 *1125*	355 *1175*	420 *1375*	485 *1600*	510 *1675*	205 *670*	225 *740*	275 *900*	325 *1075*	355 *1175*	300 *980*	315 *1025*	380 *1250*	435 *1425*	460 *1500*
K2	— —	— —	— —	— —	— —	125 *410*	140 *460*	170 *560*	200 *660*	215 *710*	305 *1000*	320 *1050*	375 *1225*	425 *1400*	450 *1475*	185 *610*	200 *660*	245 *800*	285 *940*	310 *1025*	270 *890*	285 *940*	335 *1100*	380 *1250*	405 *1325*
K3	— —	— —	— —	— —	— —	110 *360*	115 *375*	145 *475*	170 *560*	180 *590*	255 *840*	270 *890*	315 *1025*	360 *1175*	380 *1250*	155 *510*	170 *560*	205 *670*	245 *800*	260 *850*	230 *750*	240 *790*	285 *940*	325 *1075*	340 *1125*
K4	— —	— —	— —	— —	— —	105 *345*	110 *360*	135 *445*	160 *520*	175 *570*	245 *800*	255 *840*	305 *1000*	345 *1125*	365 *1200*	150 *490*	160 *520*	195 *640*	230 *750*	250 *820*	220 *720*	230 *750*	270 *890*	310 *1025*	325 *1075*
K5	— —	— —	— —	— —	— —	65 *215*	70 *230*	85 *280*	100 *330*	105 *345*	150 *490*	160 *520*	185 *610*	210 *690*	225 *740*	90 *295*	100 *330*	120 *395*	145 *475*	155 *510*	135 *445*	140 *460*	170 *560*	190 *620*	200 *660*
K6	— —	— —	— —	— —	— —	90 *295*	100 *330*	120 *395*	140 *460*	155 *510*	215 *710*	225 *740*	265 *870*	305 *1000*	320 *1050*	130 *425*	140 *460*	175 *570*	205 *670*	220 *720*	195 *640*	200 *660*	240 *790*	270 *890*	285 *940*
K7	— —	— —	— —	— —	— —	80 *260*	90 *295*	110 *360*	125 *410*	140 *460*	190 *620*	205 *670*	240 *790*	270 *890*	285 *940*	115 *375*	125 *410*	155 *510*	185 *610*	200 *660*	170 *560*	180 *590*	215 *710*	245 *800*	255 *840*
N1	— —	— —	— —	— —	— —	1050 *3450*	1125 *3700*	1400 *4600*	1650 *5425*	1800 *5900*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N2	— —	— —	— —	— —	— —	420 *1375*	455 *1500*	570 *1875*	660 *2175*	730 *2400*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N3	— —	— —	— —	— —	— —	280 *920*	305 *1000*	375 *1225*	445 *1450*	485 *1600*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
N11	— —	— —	— —	— —	— —	320 *1050*	350 *1150*	430 *1400*	510 *1675*	550 *1800*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
S1	43 *140*	46 *150*	55 *180*	60 *195*	65 *215*	39 *130*	42 *140*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	— —	55 *180*	55 *180*	65 *215*	75 *245*	80 *260*	43 *140*	46 *150*	55 *180*	60 *195*	65 *215*
S2	35 *115*	37 *120*	44 *145*	50 *165*	55 *180*	32 *105*	34 *110*	40 *130*	45 *150*	49 *160*	— —	— —	— —	— —	— —	42 *140*	45 *150*	55 *180*	60 *195*	65 *215*	35 *115*	37 *120*	44 *145*	50 *165*	55 *180*
S3	31 *100*	33 *110*	38 *125*	44 *145*	47 *155*	28 *90*	30 *100*	35 *115*	40 *130*	43 *140*	— —	— —	— —	— —	— —	37 *120*	40 *130*	47 *155*	55 *180*	55 *180*	31 *100*	33 *110*	38 *125*	44 *145*	47 *155*
S11	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*	55 *180*	60 *195*	70 *230*	80 *260*	85 *280*	— —	— —	— —	— —	— —	70 *230*	80 *260*	90 *295*	105 *345*	110 *360*	60 *195*	65 *215*	75 *245*	85 *280*	90 *295*
S12	41 *135*	44 *145*	50 *165*	60 *195*	65 *215*	37 *120*	40 *130*	47 *155*	55 *180*	60 *195*	— —	— —	— —	— —	— —	50 *165*	55 *180*	65 *215*	75 *245*	80 *260*	41 *135*	44 *145*	50 *165*	60 *195*	65 *215*
S13	24 *80*	26 *85*	31 *100*	35 *115*	38 *125*	22 *70*	24 *80*	28 *90*	31 *100*	34 *110*	— —	— —	— —	— —	— —	30 *100*	32 *105*	37 *120*	42 *140*	46 *150*	24 *80*	26 *85*	31 *100*	35 *115*	38 *125*
H5	— —	— —	— —	— —	— —	35 *115*	37 *120*	45 *150*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	38 *125*	40 *130*	49 *160*	55 *180*	60 *195*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	44 *145*	48 *155*	55 *180*	70 *230*	75 *245*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
H12	— —	— —	— —	— —	— —	70 *230*	70 *230*	90 *295*	100 *330*	110 *360*	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —

R218.19-125 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,25 *0.010*	0,38 0.015	0,55 0.022
P2	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,25 *0.010*	0,38 0.015	0,55 0.022
P3	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P4	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P5	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
P6	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,50 0.019
P7	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,50 0.019
P8	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P11	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,34 0.013	0,50 0.019
P12	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	19,0 *0.75*	0,14 *0.0055*	0,14 *0.0055*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
M1	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,25 *0.010*	0,38 0.015	0,55 0.022
M2	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
M3	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	19,0 *0.75*	0,17 *0.0065*	0,17 *0.0065*	0,18 *0.0070*	0,28 0.011	0,40 0.016
M4	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
M5	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
K1	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,22 *0.0085*	0,22 *0.0085*	0,25 *0.010*	0,38 0.015	0,55 0.022
K2	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
K3	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
K4	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
K5	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
K6	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,36 0.014	0,50 0.020
K7	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,44 0.017
N1	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N2	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N3	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N11	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	24,0 *0.95*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
S1	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
S2	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
S3	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,24 0.0095	0,32 0.013
S11	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	17,0 *0.65*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,28 0.011	0,40 0.016
S12	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	17,0 *0.65*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,28 0.011	0,40 0.016
S13	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	14,0 *0.55*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,36 0.014
H5	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	15,0 *0.60*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H8	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	13,0 *0.50*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085
H11	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	15,0 *0.60*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H12	218.19-125T-T3-M07 F40M	SPMX090304-75 F40M	13,0 *0.50*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,16 0.0065	0,22 0.0085

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.19-125 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000					F15M					F25M					F30M					MP3000					MS2050				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	—	—	—	—	—	180	195	240	285	300	165	180	220	260	275	190	210	250	300	320	240	255	315	380	405	215	230	275	325	345
	—	—	—	—	—	*590*	*640*	*790*	*940*	*980*	*540*	*590*	*720*	*850*	*900*	*620*	*690*	*820*	*980*	*1050*	*790*	*840*	*1025*	*1250*	*1325*	*710*	*750*	*900*	*1075*	*1125*
P2	—	—	—	—	—	175	190	230	275	295	160	175	210	255	270	185	200	245	290	315	235	245	310	370	390	210	225	270	320	335
	—	—	—	—	—	*570*	*620*	*750*	*900*	*970*	*520*	*570*	*690*	*840*	*890*	*610*	*660*	*800*	*950*	*1025*	*770*	*800*	*1025*	*1225*	*1275*	*690*	*740*	*890*	*1050*	*1100*
P3	—	—	—	—	—	155	165	205	245	260	140	155	185	225	235	160	175	215	255	275	200	210	270	325	350	180	190	235	280	300
	—	—	—	—	—	*510*	*540*	*670*	*800*	*850*	*460*	*510*	*610*	*740*	*770*	*520*	*570*	*710*	*840*	*900*	*660*	*690*	*890*	*1075*	*1150*	*590*	*620*	*770*	*920*	*980*
P4	—	—	—	—	—	135	145	180	215	230	125	135	165	200	210	140	155	190	225	245	175	185	240	285	310	160	170	210	245	265
	—	—	—	—	—	*445*	*475*	*590*	*710*	*750*	*410*	*445*	*540*	*660*	*690*	*460*	*510*	*620*	*740*	*800*	*570*	*610*	*790*	*940*	*1025*	*520*	*560*	*690*	*800*	*870*
P5	155	170	210	250	270	130	140	175	205	225	120	130	160	190	205	140	150	185	215	235	175	185	235	275	295	160	170	205	235	250
	510	*560*	*690*	*820*	*890*	*425*	*460*	*570*	*670*	*740*	*395*	*425*	*520*	*620*	*670*	*460*	*490*	*610*	*710*	*770*	*570*	*610*	*770*	*900*	*970*	*520*	*560*	*670*	*770*	*820*
P6	175	190	235	280	300	145	155	195	230	250	135	145	180	210	230	155	170	205	245	260	200	210	265	315	330	175	190	230	270	280
	570	*620*	*770*	*920*	*980*	*475*	*510*	*640*	*750*	*820*	*445*	*475*	*590*	*690*	*750*	*510*	*560*	*670*	*800*	*850*	*660*	*690*	*870*	*1025*	*1075*	*570*	*620*	*750*	*890*	*920*
P7	165	180	225	265	285	135	150	185	220	235	125	135	170	200	215	145	160	195	230	245	185	200	250	295	315	165	180	215	255	265
	540	*590*	*740*	*870*	*940*	*445*	*490*	*610*	*720*	*770*	*410*	*445*	*560*	*660*	*710*	*475*	*520*	*640*	*750*	*800*	*610*	*660*	*820*	*970*	*1025*	*540*	*590*	*710*	*840*	*870*
P8	155	170	205	250	265	130	140	170	205	220	120	130	155	190	200	135	145	180	215	235	170	180	225	275	295	150	160	200	235	250
	510	*560*	*670*	*820*	*870*	*425*	*460*	*560*	*670*	*720*	*395*	*425*	*510*	*620*	*660*	*445*	*475*	*590*	*710*	*770*	*560*	*590*	*740*	*900*	*970*	*490*	*520*	*660*	*770*	*820*
P11	160	175	215	255	275	135	145	180	210	230	120	130	165	195	210	145	155	190	225	240	180	195	245	290	305	160	175	210	245	260
	520	*570*	*710*	*840*	*900*	*445*	*475*	*590*	*690*	*750*	*395*	*425*	*540*	*640*	*690*	*475*	*510*	*620*	*740*	*790*	*590*	*640*	*800*	*950*	*1000*	*520*	*570*	*690*	*800*	*850*
P12	110	120	145	170	185	—	—	—	—	—	85	90	110	130	140	95	105	125	145	160	130	135	165	190	205	110	120	140	160	170
	360	*395*	*475*	*560*	*610*	—	—	—	—	—	*280*	*295*	*360*	*425*	*460*	*310*	*345*	*410*	*475*	*520*	*425*	*445*	*540*	*620*	*670*	*360*	*395*	*460*	*520*	*560*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	150	165	200	235	250	165	180	220	260	280	155	170	205	245	265
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*490*	*540*	*660*	*770*	*820*	*540*	*590*	*720*	*850*	*920*	*510*	*560*	*670*	*800*	*870*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	125	135	165	195	210	140	150	185	215	230	130	140	175	200	220
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*410*	*445*	*540*	*640*	*690*	*460*	*490*	*610*	*710*	*750*	*425*	*460*	*570*	*660*	*720*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100	110	135	160	170	110	120	150	175	190	105	115	140	165	180
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*330*	*360*	*445*	*520*	*560*	*360*	*395*	*490*	*570*	*620*	*345*	*375*	*460*	*540*	*590*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85	90	105	125	135	90	100	115	135	145	85	95	110	130	140
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*280*	*295*	*345*	*410*	*445*	*295*	*330*	*375*	*445*	*475*	*280*	*310*	*360*	*425*	*460*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	75	90	100	110	75	80	95	115	125	75	80	90	105	115
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*295*	*330*	*360*	*245*	*260*	*310*	*375*	*410*	*245*	*260*	*295*	*345*	*375*
K1	165	180	220	265	280	140	150	185	220	235	125	135	170	200	215	150	160	195	230	250	175	190	230	275	295	—	—	—	—	—
	540	*590*	*720*	*870*	*920*	*460*	*490*	*610*	*720*	*770*	*410*	*445*	*560*	*660*	*710*	*490*	*520*	*640*	*750*	*820*	*570*	*620*	*750*	*900*	*970*	—	—	—	—	—
K2	150	160	200	235	255	125	135	165	195	210	110	120	150	180	195	130	145	175	205	220	155	170	210	240	265	—	—	—	—	—
	490	*520*	*660*	*770*	*840*	*410*	*445*	*540*	*640*	*690*	*360*	*395*	*490*	*590*	*640*	*425*	*475*	*570*	*670*	*720*	*510*	*560*	*690*	*790*	*870*	—	—	—	—	—
K3	125	135	170	200	215	105	110	140	165	180	95	105	130	150	165	110	120	150	170	185	135	145	175	205	220	—	—	—	—	—
	410	*445*	*560*	*660*	*710*	*345*	*360*	*460*	*540*	*590*	*310*	*345*	*425*	*490*	*540*	*360*	*395*	*490*	*560*	*610*	*445*	*475*	*570*	*670*	*720*	—	—	—	—	—
K4	120	130	160	190	205	100	105	135	160	170	90	100	120	145	155	105	115	140	165	180	125	140	170	195	210	—	—	—	—	—
	395	*425*	*520*	*620*	*670*	*330*	*345*	*445*	*520*	*560*	*295*	*330*	*395*	*475*	*510*	*345*	*375*	*460*	*540*	*590*	*410*	*460*	*560*	*640*	*690*	—	—	—	—	—
K5	75	80	100	115	125	60	65	80	95	105	55	60	75	90	95	65	70	85	100	110	75	85	105	120	130	—	—	—	—	—
	245	*260*	*330*	*375*	*410*	*195*	*215*	*260*	*310*	*345*	*180*	*195*	*245*	*295*	*310*	*215*	*230*	*280*	*330*	*360*	*245*	*280*	*345*	*395*	*425*	—	—	—	—	—
K6	105	115	140	170	180	85	95	115	140	150	80	85	110	125	140	95	100	125	145	155	110	120	150	175	185	—	—	—	—	—
	345	*375*	*460*	*560*	*590*	*280*	*310*	*375*	*460*	*490*	*260*	*280*	*360*	*410*	*460*	*310*	*330*	*410*	*475*	*510*	*360*	*395*	*490*	*570*	*610*	—	—	—	—	—
K7	95	105	125	150	160	80	85	105	125	135	75	80	95	115	120	80	90	110	130	140	100	105	130	155	170	—	—	—	—	—
	310	*345*	*410*	*490*	*520*	*260*	*280*	*345*	*410*	*445*	*245*	*260*	*310*	*375*	*395*	*260*	*295*	*360*	*425*	*460*	*330*	*345*	*425*	*510*	*560*	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	41	49	55	60	43	46	55	65	70	41	43	50	60	65
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*135*	*160*	*180*	*195*	*140*	*150*	*180*	*215*	*230*	*135*	*140*	*165*	*195*	*215*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31	33	40	46	50	35	37	44	50	55	33	35	41	48	55
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*110*	*130*	*150*	*165*	*115*	*120*	*145*	*165*	*180*	*110*	*115*	*135*	*155*	*180*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	29	35	41	44	30	32	38	45	49	29	31	36	43	46
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*95*	*115*	*135*	*145*	*100*	*105*	*125*	*150*	*160*	*95*	*100*	*120*	*140*	*150*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	60	70	85	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*230*	*280*	*295*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38	41	50	60	60
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*125*	*135*	*165*	*195*	*195*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23	24	29	34	37
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*75*	*80*	*95*	*110*	*120*
H5	39	42	50	60	65	32	35	43	50	55	—	—	—	—	—	33	36	44	50	55	37	40	49	60	65	—	—	—	—	—
	130	*140*	*165*	*195*	*215*	*105*	*115*	*140*	*165*	*180*	—	—	—	—	—	*110*	*120*	*145*	*165*	*180*	*120*	*130*	*160*	*195*	*215*	—	—	—	—	—
H8	44	47	55	65	70	36	39	47	55	60	—	—	—	—	—	37	40	47	55	60	41	45	55	60	65	—	—	—	—	—
	145	*155*	*180*	*215*	*230*	*120*	*130*	*155*	*180*	*195*	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	*135*	*150*	*180*	*195*	*215*	—	—	—	—	—
H11	50	55	65	80	85	41	45	55	65	70	—	—	—	—	—	42	46	55	65	70	47	50	60	75	80	—	—	—	—	—
	165	*180*	*215*	*260*	*280*	*135*	*150*	*180*	*215*	*230*	—	—	—	—	—	*140*	*150*	*180*	*215*	*230*	*155*	*165*	*195*	*245*	*260*	—	—	—	—	—
H12	80	85	100	115	130	65	70	85	95	105	—	—	—	—	—	65	70	85	100	110	80	85	100	120	130	—	—	—	—	—
	260	*280*	*330*	*375*	*425*	*215*	*230*	*280*	*310*	*345*	—	—	—	—	—	*215*	*230*	*280*	*330*	*360*	*260*	*280*	*330*	*395*	*425*	—	—	—	—	—

R218.19-125 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M					MP1501					MP2501					MS2500					MP3501					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	205	215	255	290	300	280	290	355	405	420	340	355	420	480	500	325	340	405	465	490	300	315	375	430	450	190	200	245	290	305
	670	*710*	*840*	*950*	*980*	*920*	*950*	*1175*	*1325*	*1375*	*1125*	*1175*	*1375*	*1575*	*1650*	*1075*	*1125*	*1325*	*1525*	*1600*	*980*	*1025*	*1225*	*1400*	*1475*	*620*	*660*	*800*	*950*	*1000*
P2	200	205	245	280	295	270	280	340	395	410	330	345	405	465	490	315	330	395	455	475	295	305	365	415	440	185	195	240	280	300
	660	*670*	*800*	*920*	*970*	*890*	*920*	*1125*	*1300*	*1350*	*1075*	*1125*	*1325*	*1525*	*1600*	*1025*	*1075*	*1300*	*1500*	*1550*	*970*	*1000*	*1200*	*1350*	*1450*	*610*	*640*	*790*	*920*	*980*
P3	175	180	215	245	260	240	250	300	350	360	285	295	355	410	435	270	285	340	395	420	250	265	315	365	390	160	170	210	245	265
	570	*590*	*710*	*800*	*850*	*790*	*820*	*980*	*1150*	*1175*	*940*	*970*	*1175*	*1350*	*1425*	*890*	*940*	*1125*	*1300*	*1375*	*820*	*870*	*1025*	*1200*	*1275*	*520*	*560*	*690*	*800*	*870*
P4	155	165	200	235	250	210	220	270	310	320	250	260	310	360	380	240	250	300	350	370	220	230	280	320	340	150	160	200	235	250
	510	*540*	*660*	*770*	*820*	*690*	*720*	*890*	*1025*	*1050*	*820*	*850*	*1025*	*1175*	*1250*	*790*	*820*	*980*	*1150*	*1225*	*720*	*750*	*920*	*1050*	*1125*	*490*	*520*	*660*	*770*	*820*
P5	150	155	185	210	220	200	210	255	295	310	245	260	305	345	365	235	250	295	335	355	220	230	275	305	325	140	150	180	205	220
	490	*510*	*610*	*690*	*720*	*660*	*690*	*840*	*970*	*1025*	*800*	*850*	*1000*	*1125*	*1200*	*770*	*820*	*970*	*1100*	*1175*	*720*	*750*	*900*	*1000*	*1075*	*460*	*490*	*590*	*670*	*720*
P6	170	175	210	240	245	225	235	290	330	350	275	290	345	390	410	265	280	330	380	400	245	260	310	350	365	155	165	205	235	250
	560	*570*	*690*	*790*	*800*	*740*	*770*	*950*	*1075*	*1150*	*900*	*950*	*1125*	*1275*	*1350*	*870*	*920*	*1075*	*1250*	*1300*	*800*	*850*	*1025*	*1150*	*1200*	*510*	*540*	*670*	*770*	*820*
P7	160	165	200	225	235	215	225	270	310	330	260	275	325	370	385	250	265	315	360	375	235	245	290	330	345	150	155	190	225	235
	520	*540*	*660*	*740*	*770*	*710*	*740*	*890*	*1025*	*1075*	*850*	*900*	*1075*	*1225*	*1275*	*820*	*870*	*1025*	*1175*	*1225*	*770*	*800*	*950*	*1075*	*1125*	*490*	*510*	*620*	*740*	*770*
P8	145	150	180	210	220	200	210	250	295	305	240	250	300	345	365	225	240	290	335	355	210	220	265	305	325	135	140	175	205	220
	475	*490*	*590*	*690*	*720*	*660*	*690*	*820*	*970*	*1000*	*790*	*820*	*980*	*1125*	*1200*	*740*	*790*	*950*	*1100*	*1175*	*690*	*720*	*870*	*1000*	*1075*	*445*	*460*	*570*	*670*	*720*
P11	155	160	195	220	225	205	215	265	300	320	255	265	315	360	375	240	255	305	350	365	225	235	280	320	335	145	155	185	215	230
	510	*520*	*640*	*720*	*740*	*670*	*710*	*870*	*980*	*1050*	*840*	*870*	*1025*	*1175*	*1225*	*790*	*840*	*1000*	*1150*	*1200*	*740*	*770*	*920*	*1050*	*1100*	*475*	*510*	*610*	*710*	*750*
P12	105	110	130	145	150	145	150	180	200	210	170	180	205	230	240	160	170	195	225	235	150	160	185	205	220	95	105	120	140	145
	345	*360*	*425*	*475*	*490*	*475*	*490*	*590*	*660*	*690*	*560*	*590*	*670*	*750*	*790*	*520*	*560*	*640*	*740*	*770*	*490*	*520*	*610*	*670*	*720*	*310*	*345*	*395*	*460*	*475*
M1	145	155	190	225	240	—	—	—	—	—	170	185	220	265	285	185	200	240	285	305	155	170	205	245	265	125	135	160	195	205
	475	*510*	*620*	*740*	*790*	—	—	—	—	—	*560*	*610*	*720*	*870*	*940*	*610*	*660*	*790*	*940*	*1000*	*510*	*560*	*670*	*800*	*870*	*410*	*445*	*520*	*640*	*670*
M2	120	130	160	185	200	—	—	—	—	—	140	155	185	215	235	150	165	200	235	255	130	140	175	200	220	105	110	135	160	170
	395	*425*	*520*	*610*	*660*	—	—	—	—	—	*460*	*510*	*610*	*710*	*770*	*490*	*540*	*660*	*770*	*840*	*425*	*460*	*570*	*660*	*720*	*345*	*360*	*445*	*520*	*560*
M3	95	105	130	150	160	—	—	—	—	—	115	125	150	180	190	125	135	165	195	210	105	115	140	165	180	85	90	110	130	140
	310	*345*	*425*	*490*	*520*	—	—	—	—	—	*375*	*410*	*490*	*590*	*620*	*410*	*445*	*540*	*640*	*690*	*345*	*375*	*460*	*540*	*590*	*280*	*295*	*360*	*425*	*460*
M4	80	85	100	115	125	—	—	—	—	—	95	100	120	140	150	100	110	130	150	165	85	95	110	130	140	70	75	85	100	110
	260	*280*	*330*	*375*	*410*	—	—	—	—	—	*310*	*330*	*395*	*460*	*490*	*330*	*360*	*425*	*490*	*540*	*280*	*310*	*360*	*425*	*460*	*230*	*245*	*280*	*330*	*360*
M5	65	70	85	95	105	—	—	—	—	—	80	85	100	115	125	85	90	105	125	135	75	80	90	105	115	55	60	70	85	90
	215	*230*	*280*	*310*	*345*	—	—	—	—	—	*260*	*280*	*330*	*375*	*410*	*280*	*295*	*345*	*410*	*445*	*245*	*260*	*295*	*345*	*375*	*180*	*195*	*230*	*280*	*295*
K1	140	155	185	220	235	275	285	345	395	415	330	350	410	470	495	200	220	265	315	340	295	310	365	420	440	—	—	—	—	—
	460	*510*	*610*	*720*	*770*	*900*	*940*	*1125*	*1300*	*1350*	*1075*	*1150*	*1350*	*1550*	*1625*	*660*	*720*	*870*	*1025*	*1125*	*970*	*1025*	*1200*	*1375*	*1450*	—	—	—	—	—
K2	125	135	165	195	210	245	255	310	355	375	300	310	370	415	440	180	195	240	280	305	265	280	330	370	395	—	—	—	—	—
	410	*445*	*540*	*640*	*690*	*800*	*840*	*1025*	*1175*	*1225*	*980*	*1025*	*1225*	*1350*	*1450*	*590*	*640*	*790*	*920*	*1000*	*870*	*920*	*1075*	*1225*	*1300*	—	—	—	—	—
K3	105	115	140	165	180	205	215	265	300	320	250	265	315	350	375	155	165	205	235	255	225	235	280	315	335	—	—	—	—	—
	345	*375*	*460*	*540*	*590*	*670*	*710*	*870*	*980*	*1050*	*820*	*870*	*1025*	*1150*	*1225*	*510*	*540*	*670*	*770*	*840*	*740*	*770*	*920*	*1025*	*1100*	—	—	—	—	—
K4	100	110	135	155	170	195	205	250	285	305	240	250	300	335	355	145	160	195	225	245	215	225	270	300	320	—	—	—	—	—
	330	*360*	*445*	*510*	*560*	*640*	*670*	*820*	*940*	*1000*	*790*	*820*	*980*	*1100*	*1175*	*475*	*520*	*640*	*740*	*800*	*710*	*740*	*890*	*980*	*1050*	—	—	—	—	—
K5	60	65	80	95	105	125	130	155	175	185	145	155	185	205	220	90	95	120	140	150	130	135	165	185	195	—	—	—	—	—
	195	*215*	*260*	*310*	*345*	*410*	*425*	*510*	*570*	*610*	*475*	*510*	*610*	*670*	*720*	*295*	*310*	*395*	*460*	*490*	*425*	*445*	*540*	*610*	*640*	—	—	—	—	—
K6	90	95	120	140	150	175	180	220	255	270	210	220	265	295	315	130	140	170	200	215	190	200	235	265	280	—	—	—	—	—
	295	*310*	*395*	*460*	*490*	*570*	*590*	*720*	*840*	*890*	*690*	*720*	*870*	*970*	*1025*	*425*	*460*	*560*	*660*	*710*	*620*	*660*	*770*	*870*	*920*	—	—	—	—	—
K7	80	85	105	125	135	160	165	195	225	240	185	195	235	265	280	115	125	150	180	195	165	175	210	235	250	—	—	—	—	—
	260	*280*	*345*	*410*	*445*	*520*	*540*	*640*	*740*	*790*	*610*	*640*	*770*	*870*	*920*	*375*	*410*	*490*	*590*	*640*	*540*	*570*	*690*	*770*	*820*	—	—	—	—	—
N1	1000	1100	1350	1600	1725	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3275	*3600*	*4425*	*5250*	*5650*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	405	440	550	650	700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1325	*1450*	*1800*	*2125*	*2300*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	270	295	365	430	465	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	890	*970*	*1200*	*1400*	*1525*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	310	335	415	490	530	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1025	*1100*	*1350*	*1600*	*1750*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	37	39	47	55	60	—	—	—	—	—	—	—	—	—	—	50	55	65	75	80	41	43	50	60	65	21	22	26	31	34
	120	*130*	*155*	*180*	*195*	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*215*	*245*	*260*	*135*	*140*	*165*	*195*	*215*	*70*	*70*	*85*	*100*	*110*
S2	30	32	38	44	48	—	—	—	—	—	—	—	—	—	—	40	43	50	60	65	33	35	41	48	55	17	18	21	25	27
	100	*105*	*125*	*145*	*155*	—	—	—	—	—	—	—	—	—	—	*130*	*140*	*165*	*195*	*215*	*110*	*115*	*135*	*155*	*180*	*55*	*60*	*70*	*80*	*90*
S3	26	28	33	39	42	—	—	—	—	—	—	—	—	—	—	35	37	44	50	55	29	31	36	43	46	15	16	19	22	24
	85	*90*	*110*	*130*	*140*	—	—	—	—	—	—	—	—	—	—	*115*	*120*	*145*	*165*	*180*	*95*	*100*	*120*	*140*	*150*	*49*	*50*	*60*	*70*	*80*
S11	49	55	65	75	80	—	—	—	—	—	—	—	—	—	—	65	70	85	100	110	55	60	70	85	90	28	30	37	43	46
	160	*180*	*215*	*245*	*260*	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*280*	*330*	*360*	*180*	*195*	*230*	*280*	*295*	*90*	*100*	*120*	*140*	*150*
S12	34	37	45	55	55	—	—	—	—	—	—	—	—	—	—	46	50	60	70	75	38	41	50	60	60	26	28	34	40	43
	110	*120*	*150*	*180*	*180*	—	—	—	—	—	—	—	—	—	—	*150*	*165*	*195*	*230*	*245*	*125*	*135*	*165*	*195*	*195*	*85*	*90*	*110*	*130*	*140*
S13	21	22	26	31	33	—	—	—	—	—	—	—	—	—	—	28	30	35	41	45	23	24	29	34	37	16	17	20	23	25
	70	*70*	*85*	*100*	*110*	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*115*	*135*	*150*	*75*	*80*	*95*	*110*	*120*	*50*	*55*	*65*	*75*	*80*
H5	32	35	42	49	55	40	44	55	65	70	—	—	—	—	—	41	45	55	65	70	37	40	48	55	60	—	—	—	—	—
	105	*115*	*140*	*160*	*180*	*130*	*145*	*180*	*215*	*230*	—	—	—	—	—	*135*	*150*	*180*	*215*	*230*	*120*	*130*	*155*	*180*	*195*	—	—	—	—	—
H8	35	38	45	55	60	45	48	60	65	75	—	—	—	—	—	46	50	60	70	75	41	44	50	60	65	—	—	—	—	—
	115	*125*	*150*	*180*	*195*	*150*	*155*	*195*	*215*	*245*	—	—	—	—	—	*150*	*165*	*195*	*230*	*245*	*135*	*145*	*165*	*195*	*215*	—	—	—	—	—
H11	40	44	55	65	70	50	55	65	80	85	—	—	—	—	—	55	55	70	80	90	47	50	60	70	80	—	—	—	—	—
	130	*145*	*180*	*215*	*230*	*165*	*180*	*215*	*260*	*280*	—	—	—	—	—	*180*	*180*	*230*	*260*	*295*	*155*	*165*	*195*	*230*	*260*	—	—	—	—	—
H12	65	70	80	95	105	80	85	105	120	130	—	—	—	—	—	90	100	115	135	150	75	80	95	110	120	—	—	—	—	—
	215	*230*	*260*	*310*	*345*	*260*	*280*	*345*	*395*	*425*	—	—	—	—	—	*295*	*330*	*375*	*445*	*490*	*245*	*260*	*310*	*360*	*395*	—	—	—	—	—

R218.19-160 – Selezione dell'inserto – In mm/ In pollici

SMG			a_p	f_z				
				100%	70%	30%	10%	5%
P1	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,25 *0.010*	0,38 0.015	0,55 0.022
P2	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,24 *0.0095*	0,24 *0.0095*	0,26 *0.010*	0,40 0.016	0,55 0.022
P3	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,38 0.015	0,50 0.020
P4	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P5	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P6	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P7	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P8	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,38 0.015	0,50 0.020
P11	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
P12	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	22,0 *0.85*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,25 0.010	0,34 0.013
M1	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,24 *0.0095*	0,24 *0.0095*	0,26 *0.010*	0,40 0.016	0,55 0.022
M2	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
M3	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	22,0 *0.85*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,30 0.012	0,40 0.016
M4	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
M5	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
K1	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,24 *0.0095*	0,24 *0.0095*	0,26 *0.010*	0,40 0.016	0,55 0.022
K2	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
K3	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
K4	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
K5	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,46 0.018
K6	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,22 *0.0085*	0,22 *0.0085*	0,24 *0.0095*	0,36 0.014	0,50 0.020
K7	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,32 0.013	0,46 0.018
N1	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N2	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N3	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
N11	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	28,0 *1.1*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,50 0.020	0,70 0.028
S1	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
S2	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
S3	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,24 0.0095	0,34 0.013
S11	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	20,0 *0.80*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,30 0.012	0,40 0.016
S12	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	20,0 *0.80*	0,17 *0.0065*	0,17 *0.0065*	0,19 *0.0075*	0,30 0.012	0,40 0.016
S13	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	17,0 *0.65*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,26 0.010	0,36 0.014
H5	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	18,0 *0.70*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H8	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	15,0 *0.60*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095
H11	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	18,0 *0.70*	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 0.0085	0,30 0.012
H12	218.19-160T-04-M08 F40M	SPMT100408T-M08 F40M	15,0 *0.60*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,17 0.0065	0,24 0.0095

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.19-160 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1000					F15M					MK2050					F25M					F30M					MP3000					MS2050				
		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%
P1	—	—	—	—	—	175	190	240	280	305	190	205	255	300	330	195	215	260	310	330	190	205	245	295	315	235	245	310	370	395	210	225	270	320	340
	—	—	—	—	—	*570*	*620*	*790*	*920*	*1000*	*620*	*670*	*840*	*980*	*1075*	*640*	*710*	*850*	*1025*	*1075*	*620*	*670*	*800*	*970*	*1025*	*770*	*800*	*1025*	*1225*	*1300*	*690*	*740*	*890*	*1050*	*1125*
P2	—	—	—	—	—	170	185	225	270	295	185	200	245	295	320	185	200	250	295	320	180	195	240	280	305	215	230	300	355	385	200	210	265	305	330
	—	—	—	—	—	*560*	*610*	*740*	*890*	*970*	*610*	*660*	*800*	*970*	*1050*	*610*	*660*	*820*	*970*	*1050*	*590*	*640*	*790*	*920*	*1000*	*710*	*750*	*980*	*1175*	*1275*	*660*	*690*	*870*	*1000*	*1075*
P3	—	—	—	—	—	150	165	200	240	255	165	175	215	260	275	165	180	220	260	285	155	170	210	245	270	195	205	265	310	345	175	190	230	270	295
	—	—	—	—	—	*490*	*540*	*660*	*790*	*840*	*540*	*570*	*710*	*850*	*900*	*540*	*590*	*720*	*850*	*940*	*510*	*560*	*690*	*800*	*890*	*640*	*670*	*870*	*1025*	*1125*	*570*	*620*	*750*	*890*	*970*
P4	—	—	—	—	—	135	145	180	210	230	145	155	195	230	250	145	160	195	230	250	140	150	185	220	240	170	180	230	280	305	155	165	205	240	260
	—	—	—	—	—	*445*	*475*	*590*	*690*	*750*	*475*	*510*	*640*	*750*	*820*	*475*	*520*	*640*	*750*	*820*	*460*	*490*	*610*	*720*	*790*	*560*	*590*	*750*	*920*	*1000*	*510*	*540*	*670*	*790*	*850*
P5	155	165	205	245	265	125	135	170	200	220	135	150	185	220	235	140	150	185	220	240	130	145	175	210	230	165	175	220	270	290	150	160	195	230	245
	510	*540*	*670*	*800*	*870*	*410*	*445*	*560*	*660*	*720*	*445*	*490*	*610*	*720*	*770*	*460*	*490*	*610*	*720*	*790*	*425*	*475*	*570*	*690*	*750*	*540*	*570*	*720*	*890*	*950*	*490*	*520*	*640*	*750*	*800*
P6	175	190	230	280	295	145	160	190	230	245	160	170	210	250	265	155	170	215	250	270	150	160	205	235	255	185	195	260	300	325	165	175	225	260	275
	570	*620*	*750*	*920*	*970*	*475*	*520*	*620*	*750*	*800*	*520*	*560*	*690*	*820*	*870*	*510*	*560*	*710*	*820*	*890*	*490*	*520*	*670*	*770*	*840*	*610*	*640*	*850*	*980*	*1075*	*540*	*570*	*740*	*850*	*900*
P7	165	180	220	260	280	140	150	180	215	230	150	160	195	235	250	145	160	200	235	255	140	150	190	225	240	175	185	245	285	305	155	165	215	245	260
	540	*590*	*720*	*850*	*920*	*460*	*490*	*590*	*710*	*750*	*490*	*520*	*640*	*770*	*820*	*475*	*520*	*660*	*770*	*840*	*460*	*490*	*620*	*740*	*790*	*570*	*610*	*800*	*940*	*1000*	*510*	*540*	*710*	*800*	*850*
P8	155	165	200	245	260	125	135	165	200	215	135	150	180	220	230	140	150	185	215	240	130	145	175	205	230	165	175	220	260	290	150	160	195	225	245
	510	*540*	*660*	*800*	*850*	*410*	*445*	*540*	*660*	*710*	*445*	*490*	*590*	*720*	*750*	*460*	*490*	*610*	*710*	*790*	*425*	*475*	*570*	*670*	*750*	*540*	*570*	*720*	*850*	*950*	*490*	*520*	*640*	*740*	*800*
P11	160	175	210	255	270	135	145	175	210	225	145	155	190	230	245	145	155	195	225	245	135	150	185	215	235	170	180	240	275	300	155	160	205	235	255
	520	*570*	*690*	*840*	*890*	*445*	*475*	*570*	*690*	*740*	*475*	*510*	*620*	*750*	*800*	*475*	*510*	*640*	*740*	*800*	*445*	*490*	*610*	*710*	*770*	*560*	*590*	*790*	*900*	*980*	*510*	*520*	*670*	*770*	*840*
P12	110	115	140	170	185	—	—	—	—	—	95	105	125	150	165	100	105	125	150	160	95	100	120	145	155	125	135	160	190	200	110	115	135	160	170
	360	*375*	*460*	*560*	*610*	—	—	—	—	—	*310*	*345*	*410*	*490*	*540*	*330*	*345*	*410*	*490*	*520*	*310*	*330*	*395*	*475*	*510*	*410*	*445*	*520*	*620*	*660*	*360*	*375*	*445*	*520*	*560*
M1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	145	155	195	225	245	160	170	215	250	275	150	165	205	240	260
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*475*	*510*	*640*	*740*	*800*	*520*	*560*	*710*	*820*	*900*	*490*	*540*	*670*	*790*	*850*
M2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	130	160	190	205	130	145	175	210	225	125	135	165	200	215
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*395*	*425*	*520*	*620*	*670*	*425*	*475*	*570*	*690*	*740*	*410*	*445*	*540*	*660*	*710*
M3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100	110	130	155	165	110	120	145	170	185	105	115	135	165	175
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*330*	*360*	*425*	*510*	*540*	*360*	*395*	*475*	*560*	*610*	*345*	*375*	*445*	*540*	*570*
M4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	80	85	105	120	130	90	95	115	135	145	85	90	110	125	140
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*260*	*280*	*345*	*395*	*425*	*295*	*310*	*375*	*445*	*475*	*280*	*295*	*360*	*410*	*460*
M5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	70	85	100	110	75	80	95	110	120	70	75	90	105	115
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*280*	*330*	*360*	*245*	*260*	*310*	*360*	*395*	*230*	*245*	*295*	*345*	*375*
K1	165	175	215	260	285	135	145	180	215	235	200	215	265	315	345	150	160	200	235	255	140	155	190	225	245	170	180	225	265	290	—	—	—	—	—
	540	*570*	*710*	*850*	*940*	*445*	*475*	*590*	*710*	*770*	*660*	*710*	*870*	*1025*	*1125*	*490*	*520*	*660*	*770*	*840*	*460*	*510*	*620*	*740*	*800*	*560*	*590*	*740*	*870*	*950*	—	—	—	—	—
K2	145	155	195	230	250	120	130	160	190	205	180	190	240	285	305	130	145	175	210	225	125	135	165	200	215	150	160	200	240	260	—	—	—	—	—
	475	*510*	*640*	*750*	*820*	*395*	*425*	*520*	*620*	*670*	*590*	*620*	*790*	*940*	*1000*	*425*	*475*	*570*	*690*	*740*	*410*	*445*	*540*	*660*	*710*	*490*	*520*	*660*	*790*	*850*	—	—	—	—	—
K3	125	135	165	195	210	100	110	135	160	175	150	165	200	240	260	110	120	150	175	190	105	115	140	170	185	125	135	170	200	220	—	—	—	—	—
	410	*445*	*540*	*640*	*690*	*330*	*360*	*445*	*520*	*570*	*490*	*540*	*660*	*790*	*850*	*360*	*395*	*490*	*570*	*620*	*345*	*375*	*460*	*560*	*610*	*410*	*445*	*560*	*660*	*720*	—	—	—	—	—
K4	115	125	160	185	200	95	105	130	155	165	145	155	195	230	245	105	115	140	170	185	100	110	135	160	175	120	130	160	190	210	—	—	—	—	—
	375	*410*	*520*	*610*	*660*	*310*	*345*	*425*	*510*	*540*	*475*	*510*	*640*	*750*	*800*	*345*	*375*	*460*	*560*	*610*	*330*	*360*	*445*	*520*	*570*	*395*	*425*	*520*	*620*	*690*	—	—	—	—	—
K5	75	80	100	115	125	60	65	80	95	105	90	95	120	140	155	65	70	90	105	115	65	70	85	100	110	75	80	100	120	130	—	—	—	—	—
	245	*260*	*330*	*375*	*410*	*195*	*215*	*260*	*310*	*345*	*295*	*310*	*395*	*460*	*510*	*215*	*230*	*295*	*345*	*375*	*215*	*230*	*280*	*330*	*360*	*245*	*260*	*330*	*395*	*425*	—	—	—	—	—
K6	105	110	140	165	180	85	95	115	135	150	125	135	170	200	220	95	100	125	150	160	90	95	120	140	155	105	115	140	170	185	—	—	—	—	—
	345	*360*	*460*	*540*	*590*	*280*	*310*	*375*	*445*	*490*	*410*	*445*	*560*	*660*	*720*	*310*	*330*	*410*	*490*	*520*	*295*	*310*	*395*	*460*	*510*	*345*	*375*	*460*	*560*	*610*	—	—	—	—	—
K7	95	100	125	150	160	80	85	105	125	135	115	125	155	180	200	85	90	115	135	145	80	90	110	125	140	95	105	130	150	165	—	—	—	—	—
	310	*330*	*410*	*490*	*520*	*260*	*280*	*345*	*410*	*445*	*375*	*410*	*510*	*590*	*660*	*280*	*295*	*375*	*445*	*475*	*260*	*295*	*360*	*410*	*460*	*310*	*345*	*425*	*490*	*540*	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37	40	48	55	60	41	44	55	60	70	39	42	50	60	65
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	*135*	*145*	*180*	*195*	*230*	*130*	*140*	*165*	*195*	*215*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	32	39	45	49	33	36	43	50	55	31	34	41	48	50
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*100*	*105*	*130*	*150*	*160*	*110*	*120*	*140*	*165*	*180*	*100*	*110*	*135*	*155*	*165*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	28	34	40	43	29	31	38	44	48	28	30	36	41	45
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*90*	*110*	*130*	*140*	*95*	*100*	*125*	*145*	*155*	*90*	*100*	*120*	*135*	*150*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	60	70	85	90
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*230*	*280*	*295*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37	40	48	55	60
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	24	28	33	36
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*70*	*80*	*90*	*110*	*120*
H5	38	42	50	60	65	32	35	42	49	55	—	—	—	—	—	34	37	45	55	55	32	35	43	50	55	36	39	48	55	60	—	—	—	—	—
	125	*140*	*165*	*195*	*215*	*105*	*115*	*140*	*160*	*180*	—	—	—	—	—	*110*	*120*	*150*	*180*	*180*	*105*	*115*	*140*	*165*	*180*	*120*	*130*	*155*	*180*	*195*	—	—	—	—	—
H8	42	45	55	65	70	34	37	45	55	55	—	—	—	—	—	37	40	48	55	60	35	38	46	55	60	39	43	50	60	65	—	—	—	—	—
	140	*150*	*180*	*215*	*230*	*110*	*120*	*150*	*180*	*180*	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	*115*	*125*	*150*	*180*	*195*	*130*	*140*	*165*	*195*	*215*	—	—	—	—	—
H11	49	55	65	75	85	40	44	55	65	70	—	—	—	—	—	43	47	55	65	75	41	45	55	65	70	46	50	60	70	75	—	—	—	—	—
	160	*180*	*215*	*245*	*280*	*130*	*145*	*180*	*215*	*230*	—	—	—	—	—	*140*	*155*	*180*	*215*	*245*	*135*	*150*	*180*	*215*	*230*	*150*	*165*	*195*	*230*	*245*	—	—	—	—	—
H12	75	80	100	115	125	60	65	80	95	105	65	75	90	105	110	65	70	85	100	110	65	70	80	95	105	75	80	100	115	125	—	—	—	—	—
	245	*260*	*330*	*375*	*410*	*195*	*215*	*260*	*310*	*345*	*215*	*245*	*295*	*345*	*360*	*215*	*230*	*280*	*330*	*360*	*215*	*230*	*260*	*310*	*345*	*245*	*260*	*330*	*375*	*410*	—	—	—	—	—

R218.19-160 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M					MP2050					MP1501					MP2501					MS2500					MP3501					MM4500				
		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%		70%	30%	10%	5%
P1	200	210	245	285	295	230	250	305	365	390	305	315	390	440	470	295	305	380	430	460	280	295	365	415	445	295	310	365	420	440	185	200	240	285	300
	660	*690*	*800*	*940*	*970*	*750*	*820*	*1000*	*1200*	*1275*	*1000*	*1025*	*1275*	*1450*	*1550*	*970*	*1000*	*1250*	*1400*	*1500*	*920*	*970*	*1200*	*1350*	*1450*	*970*	*1025*	*1200*	*1375*	*1450*	*610*	*660*	*790*	*940*	*980*
P2	190	195	240	270	285	220	240	295	350	380	295	310	370	430	460	285	295	360	415	445	270	285	345	405	435	275	290	355	405	430	175	185	235	270	295
	620	*640*	*790*	*890*	*940*	*720*	*790*	*970*	*1150*	*1250*	*970*	*1025*	*1225*	*1400*	*1500*	*940*	*970*	*1175*	*1350*	*1450*	*890*	*940*	*1125*	*1325*	*1425*	*900*	*950*	*1175*	*1325*	*1400*	*570*	*610*	*770*	*890*	*970*
P3	170	175	210	235	255	195	210	260	305	335	260	275	325	380	395	250	265	315	370	385	240	255	305	360	375	245	260	310	355	380	155	165	205	240	260
	560	*570*	*690*	*770*	*840*	*640*	*690*	*850*	*1000*	*1100*	*850*	*900*	*1075*	*1250*	*1300*	*820*	*870*	*1025*	*1225*	*1275*	*790*	*840*	*1000*	*1175*	*1225*	*800*	*850*	*1025*	*1175*	*1250*	*510*	*540*	*670*	*790*	*850*
P4	155	160	195	230	245	170	185	230	270	295	230	240	295	335	355	220	230	285	325	345	215	225	275	320	340	215	225	275	315	335	150	160	195	230	245
	510	*520*	*640*	*750*	*800*	*560*	*610*	*750*	*890*	*970*	*750*	*790*	*970*	*1100*	*1175*	*720*	*750*	*940*	*1075*	*1125*	*710*	*740*	*900*	*1050*	*1125*	*710*	*740*	*900*	*1025*	*1100*	*490*	*520*	*640*	*750*	*800*
P5	140	145	175	205	215	165	175	220	260	280	220	230	280	320	340	210	220	275	315	330	205	210	265	305	325	210	215	260	300	320	130	140	170	205	220
	460	*475*	*570*	*670*	*710*	*540*	*570*	*720*	*850*	*920*	*720*	*750*	*920*	*1050*	*1125*	*690*	*720*	*900*	*1025*	*1075*	*670*	*690*	*870*	*1000*	*1075*	*690*	*710*	*850*	*980*	*1050*	*425*	*460*	*560*	*670*	*720*
P6	160	165	205	230	240	185	200	250	290	315	255	265	315	365	385	245	255	305	355	370	235	245	295	345	365	235	245	300	340	360	150	155	200	230	245
	520	*540*	*670*	*750*	*790*	*610*	*660*	*820*	*950*	*1025*	*840*	*870*	*1025*	*1200*	*1275*	*800*	*840*	*1000*	*1175*	*1225*	*770*	*800*	*970*	*1125*	*1200*	*770*	*800*	*980*	*1125*	*1175*	*490*	*510*	*660*	*750*	*800*
P7	150	155	195	215	230	175	190	235	275	300	240	250	300	345	360	230	240	290	335	350	220	230	280	325	345	220	230	285	320	340	140	145	190	215	230
	490	*510*	*640*	*710*	*750*	*570*	*620*	*770*	*900*	*980*	*790*	*820*	*980*	*1125*	*1175*	*750*	*790*	*950*	*1100*	*1150*	*720*	*750*	*920*	*1075*	*1125*	*720*	*750*	*940*	*1050*	*1125*	*460*	*475*	*620*	*710*	*750*
P8	140	145	175	200	215	165	175	220	255	280	220	230	275	320	335	210	220	265	315	325	205	210	255	305	315	210	215	260	295	320	130	140	170	200	220
	460	*475*	*570*	*660*	*710*	*540*	*570*	*720*	*840*	*920*	*720*	*750*	*900*	*1050*	*1100*	*690*	*720*	*870*	*1025*	*1075*	*670*	*690*	*840*	*1000*	*1025*	*690*	*710*	*850*	*970*	*1050*	*425*	*460*	*560*	*660*	*720*
P11	145	150	190	210	220	170	180	230	270	290	230	245	290	335	350	225	235	280	325	340	215	225	270	315	335	215	225	275	310	330	135	145	185	210	225
	475	*490*	*620*	*690*	*720*	*560*	*590*	*750*	*890*	*950*	*750*	*800*	*950*	*1100*	*1150*	*740*	*770*	*920*	*1075*	*1125*	*710*	*740*	*890*	*1025*	*1100*	*710*	*740*	*900*	*1025*	*1075*	*445*	*475*	*610*	*690*	*740*
P12	105	110	125	140	150	115	125	150	180	190	160	165	195	220	235	155	160	190	215	230	145	155	185	210	225	150	155	180	205	215	95	100	120	135	145
	345	*360*	*410*	*460*	*490*	*375*	*410*	*490*	*590*	*620*	*520*	*540*	*640*	*720*	*770*	*510*	*520*	*620*	*710*	*750*	*475*	*510*	*610*	*690*	*740*	*490*	*510*	*590*	*670*	*710*	*310*	*330*	*395*	*445*	*475*
M1	135	150	185	215	235	155	170	215	250	270	—	—	—	—	—	150	165	200	240	260	165	180	215	260	285	150	165	205	240	260	120	130	160	185	205
	445	*490*	*610*	*710*	*770*	*510*	*560*	*710*	*820*	*890*	—	—	—	—	—	*490*	*540*	*660*	*790*	*850*	*540*	*590*	*710*	*850*	*940*	*490*	*540*	*670*	*790*	*850*	*395*	*425*	*520*	*610*	*670*
M2	115	125	150	180	195	130	140	175	210	225	—	—	—	—	—	125	135	170	200	215	135	145	185	215	235	125	135	165	200	215	100	105	130	155	170
	375	*410*	*490*	*590*	*640*	*425*	*460*	*570*	*690*	*740*	—	—	—	—	—	*410*	*445*	*560*	*660*	*710*	*445*	*475*	*610*	*710*	*770*	*410*	*445*	*540*	*660*	*710*	*330*	*345*	*425*	*510*	*560*
M3	95	105	125	150	160	110	120	145	170	185	—	—	—	—	—	105	115	140	165	175	115	125	150	175	195	105	115	135	165	175	80	90	105	130	135
	310	*345*	*410*	*490*	*520*	*360*	*395*	*475*	*560*	*610*	—	—	—	—	—	*345*	*375*	*460*	*540*	*570*	*375*	*410*	*490*	*570*	*640*	*345*	*375*	*445*	*540*	*570*	*260*	*295*	*345*	*425*	*445*
M4	75	80	100	115	125	85	95	115	130	145	—	—	—	—	—	85	90	110	130	140	90	100	120	140	150	85	90	110	125	140	65	70	85	100	110
	245	*260*	*330*	*375*	*410*	*280*	*310*	*375*	*425*	*475*	—	—	—	—	—	*280*	*295*	*360*	*425*	*460*	*295*	*330*	*395*	*460*	*490*	*280*	*295*	*360*	*410*	*460*	*215*	*230*	*280*	*330*	*360*
M5	65	70	80	95	105	75	80	95	110	120	—	—	—	—	—	70	75	90	105	115	75	85	100	115	125	70	75	90	105	115	55	60	70	85	90
	215	*230*	*260*	*310*	*345*	*245*	*260*	*310*	*360*	*395*	—	—	—	—	—	*230*	*245*	*295*	*345*	*375*	*245*	*280*	*330*	*375*	*410*	*230*	*245*	*295*	*345*	*375*	*180*	*195*	*230*	*280*	*295*
K1	135	145	180	215	230	—	—	—	—	—	300	310	375	435	465	285	300	360	420	450	180	195	240	285	315	280	290	360	405	435	—	—	—	—	—
	445	*475*	*590*	*710*	*750*	—	—	—	—	—	*980*	*1025*	*1225*	*1425*	*1525*	*940*	*980*	*1175*	*1375*	*1475*	*590*	*640*	*790*	*940*	*1025*	*920*	*950*	*1175*	*1325*	*1425*	—	—	—	—	—
K2	120	130	160	190	205	—	—	—	—	—	265	275	340	390	410	255	265	330	380	400	160	175	215	255	275	250	260	315	365	385	—	—	—	—	—
	395	*425*	*520*	*620*	*670*	—	—	—	—	—	*870*	*900*	*1125*	*1275*	*1350*	*840*	*870*	*1075*	*1250*	*1300*	*520*	*570*	*710*	*840*	*900*	*820*	*850*	*1025*	*1200*	*1275*	—	—	—	—	—
K3	100	110	135	160	175	—	—	—	—	—	225	235	285	330	350	215	225	280	320	340	135	145	185	215	235	210	220	265	310	330	—	—	—	—	—
	330	*360*	*445*	*520*	*570*	—	—	—	—	—	*740*	*770*	*940*	*1075*	*1150*	*710*	*740*	*920*	*1050*	*1125*	*445*	*475*	*610*	*710*	*770*	*690*	*720*	*870*	*1025*	*1075*	—	—	—	—	—
K4	95	105	130	155	165	—	—	—	—	—	215	225	275	315	335	205	215	265	305	325	130	140	175	205	225	205	210	255	295	315	—	—	—	—	—
	310	*345*	*425*	*510*	*540*	—	—	—	—	—	*710*	*740*	*900*	*1025*	*1100*	*670*	*710*	*870*	*1000*	*1075*	*425*	*460*	*570*	*670*	*740*	*670*	*690*	*840*	*970*	*1025*	—	—	—	—	—
K5	60	65	80	95	105	—	—	—	—	—	135	140	170	195	210	130	135	165	190	205	80	90	110	130	140	130	135	160	180	195	—	—	—	—	—
	195	*215*	*260*	*310*	*345*	—	—	—	—	—	*445*	*460*	*560*	*640*	*690*	*425*	*445*	*540*	*620*	*670*	*260*	*295*	*360*	*425*	*460*	*425*	*445*	*520*	*590*	*640*	—	—	—	—	—
K6	85	90	115	135	145	—	—	—	—	—	190	195	240	275	295	185	190	235	270	285	115	125	155	180	195	180	185	225	260	275	—	—	—	—	—
	280	*295*	*375*	*445*	*475*	—	—	—	—	—	*620*	*640*	*790*	*900*	*970*	*610*	*620*	*770*	*890*	*940*	*375*	*410*	*510*	*590*	*640*	*590*	*610*	*740*	*850*	*900*	—	—	—	—	—
K7	75	85	105	120	130	—	—	—	—	—	175	180	220	250	265	170	175	215	245	260	105	115	140	165	180	165	170	205	230	245	—	—	—	—	—
	245	*280*	*345*	*395*	*425*	—	—	—	—	—	*570*	*590*	*720*	*820*	*870*	*560*	*570*	*710*	*800*	*850*	*345*	*375*	*460*	*540*	*590*	*540*	*560*	*670*	*750*	*800*	—	—	—	—	—
N1	990	1075	1325	1575	1700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3250	*3525*	*4350*	*5175*	*5575*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	400	430	540	630	690	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1300	*1400*	*1775*	*2075*	*2275*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	265	285	355	425	455	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	870	*940*	*1175*	*1400*	*1500*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	305	330	410	485	520	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1000	*1075*	*1350*	*1600*	*1700*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	35	38	46	55	60	43	46	55	65	70	—	—	—	—	—	—	—	—	—	—	45	49	60	70	75	39	42	50	60	65	20	22	26	30	33
	115	*125*	*150*	*180*	*195*	*140*	*150*	*180*	*215*	*230*	—	—	—	—	—	—	—	—	—	—	*150*	*160*	*195*	*230*	*245*	*130*	*140*	*165*	*195*	*215*	*65*	*70*	*85*	*100*	*110*
S2	28	31	37	43	47	34	37	45	50	55	—	—	—	—	—	—	—	—	—	—	36	39	47	55	60	31	34	41	48	50	16	17	21	24	27
	90	*100*	*120*	*140*	*155*	*110*	*120*	*150*	*165*	*180*	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	*100*	*110*	*135*	*155*	*165*	*50*	*55*	*70*	*80*	*90*
S3	25	27	32	38	41	30	33	39	45	50	—	—	—	—	—	—	—	—	—	—	32	34	42	48	50	28	30	36	41	45	14	15	18	21	23
	80	*90*	*105*	*125*	*135*	*100*	*110*	*130*	*150*	*165*	—	—	—	—	—	—	—	—	—	—	*105*	*110*	*140*	*155*	*165*	*90*	*100*	*120*	*135*	*150*	*46*	*49*	*60*	*70*	*75*
S11	48	55	65	75	80	60	65	75	90	95	—	—	—	—	—	—	—	—	—	—	60	65	80	95	100	55	60	70	85	90	27	30	36	42	46
	155	*180*	*215*	*245*	*260*	*195*	*215*	*245*	*295*	*310*	—	—	—	—	—	—	—	—	—	—	*195*	*215*	*260*	*310*	*330*	*180*	*195*	*230*	*280*	*295*	*90*	*100*	*120*	*140*	*150*
S12	34	36	44	50	55	40	44	55	65	65	—	—	—	—	—	—	—	—	—	—	42	45	55	65	70	37	40	48	55	60	25	27	33	39	42
	110	*120*	*145*	*165*	*180*	*130*	*145*	*180*	*215*	*215*	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*180*	*215*	*230*	*120*	*130*	*155*	*180*	*195*	*80*	*90*	*110*	*130*	*140*
S13	20	21	26	30	33	24	26	31	36	40	—	—	—	—	—	—	—	—	—	—	25	27	33	38	41	22	24	28	33	36	15	16	19	23	25
	65	*70*	*85*	*100*	*110*	*80*	*85*	*100*	*120*	*130*	—	—	—	—	—	—	—	—	—	—	*80*	*90*	*110*	*125*	*135*	*70*	*80*	*90*	*110*	*120*	*49*	*50*	*60*	*75*	*80*
H5	31	33	41	48	50	—	—	—	—	—	44	48	60	70	75	—	—	—	—	—	38	42	50	60	65	35	38	47	55	60	—	—	—	—	—
	100	*110*	*135*	*155*	*165*	—	—	—	—	—	*145*	*155*	*195*	*230*	*245*	—	—	—	—	—	*125*	*140*	*165*	*195*	*215*	*115*	*125*	*155*	*180*	*195*	—	—	—	—	—
H8	34	37	44	50	55	—	—	—	—	—	48	50	60	75	80	—	—	—	—	—	42	45	55	65	70	39	42	50	60	65	—	—	—	—	—
	110	*120*	*145*	*165*	*180*	—	—	—	—	—	*155*	*165*	*195*	*245*	*260*	—	—	—	—	—	*140*	*150*	*180*	*215*	*230*	*130*	*140*	*165*	*195*	*215*	—	—	—	—	—
H11	39	43	50	60	65	46	50	60	70	75	55	60	75	85	95	—	—	—	—	—	49	55	65	75	85	45	49	60	70	75	—	—	—	—	—
	130	*140*	*165*	*195*	*215*	*150*	*165*	*195*	*230*	*245*	*180*	*195*	*245*	*280*	*310*	—	—	—	—	—	*160*	*180*	*215*	*245*	*280*	*150*	*160*	*195*	*230*	*245*	—	—	—	—	—
H12	60	65	80	95	100	80	85	100	120	130	85	95	110	135	145	—	—	—	—	—	85	90	110	130	140	70	75	90	105	115	—	—	—	—	—
	195	*215*	*260*	*310*	*330*	*260*	*280*	*330*	*395*	*425*	*280*	*310*	*360*	*445*	*475*	—	—	—	—	—	*280*	*295*	*360*	*425*	*460*	*230*	*245*	*295*	*345*	*375*	—	—	—	—	—

R218.19-200 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
P1	218.19-200T-05-M10 F40M	18,0 *0.70*	0,28 0.011	0,28 0.011	0,30 0.012	0,44 0.017	0,60 0.024
P2	218.19-200T-05-M10 F40M	18,0 *0.70*	0,28 0.011	0,28 0.011	0,30 0.012	0,46 0.018	0,65 0.026
P3	218.19-200T-05-M10 F40M	18,0 *0.70*	0,26 0.010	0,26 0.010	0,28 0.011	0,42 0.017	0,60 0.024
P4	218.19-200T-05-M10 F40M	18,0 *0.70*	0,26 0.010	0,26 0.010	0,28 0.011	0,42 0.017	0,60 0.024
P5	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
P6	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
P7	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
P8	218.19-200T-05-M10 F40M	18,0 *0.70*	0,26 0.010	0,26 0.010	0,28 0.011	0,42 0.017	0,60 0.024
P11	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
P12	218.19-200T-05-M10 F40M	14,0 *0.55*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,28 0.011	0,38 0.015
M1	218.19-200T-05-M10 F40M	18,0 *0.70*	0,28 0.011	0,28 0.011	0,30 0.012	0,46 0.018	0,65 0.026
M2	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
M3	218.19-200T-05-M10 F40M	14,0 *0.55*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,34 0.013	0,46 0.018
M4	218.19-200T-05-M10 F40M	11,0 *0.44*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,30 0.012	0,40 0.016
M5	218.19-200T-05-M10 F40M	11,0 *0.44*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,30 0.012	0,40 0.016
K1	218.19-200T-05-M10 F40M	18,0 *0.70*	0,28 0.011	0,28 0.011	0,30 0.012	0,46 0.018	0,65 0.026
K2	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
K3	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
K4	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
K5	218.19-200T-05-M10 F40M	18,0 *0.70*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020
K6	218.19-200T-05-M10 F40M	18,0 *0.70*	0,25 0.010	0,25 0.010	0,26 0.010	0,40 0.016	0,55 0.022
K7	218.19-200T-05-M10 F40M	18,0 *0.70*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020
N1	218.19-200T-05-M10 F40M	18,0 *0.70*	0,36 0.014	0,36 0.014	0,38 0.015	0,60 0.024	0,80 0.032
N2	218.19-200T-05-M10 F40M	18,0 *0.70*	0,36 0.014	0,36 0.014	0,38 0.015	0,60 0.024	0,80 0.032
N3	218.19-200T-05-M10 F40M	18,0 *0.70*	0,36 0.014	0,36 0.014	0,38 0.015	0,60 0.024	0,80 0.032
N11	218.19-200T-05-M10 F40M	18,0 *0.70*	0,36 0.014	0,36 0.014	0,38 0.015	0,60 0.024	0,80 0.032
S1	218.19-200T-05-M10 F40M	11,0 *0.44*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,30 0.012	0,40 0.016
S2	218.19-200T-05-M10 F40M	11,0 *0.44*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,30 0.012	0,40 0.016
S3	218.19-200T-05-M10 F40M	11,0 *0.44*	0,18 0.0070	0,18 0.0070	0,19 0.0075	0,28 0.011	0,38 0.015
S11	218.19-200T-05-M10 F40M	13,0 *0.50*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,34 0.013	0,46 0.018
S12	218.19-200T-05-M10 F40M	13,0 *0.50*	0,22 0.0085	0,22 0.0085	0,22 0.0085	0,34 0.013	0,46 0.018
S13	218.19-200T-05-M10 F40M	11,0 *0.44*	0,19 0.0075	0,19 0.0075	0,20 0.0080	0,30 0.012	0,40 0.016
H5	218.19-200T-05-M10 F40M	11,0 *0.44*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,25 0.010	0,34 0.013
H8	218.19-200T-05-M10 F40M	10,0 *0.40*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,19 0.0075	0,26 0.010
H11	218.19-200T-05-M10 F40M	11,0 *0.44*	0,16 0.0065	0,16 0.0065	0,17 0.0065	0,25 0.010	0,34 0.013
H12	218.19-200T-05-M10 F40M	10,0 *0.40*	0,13 0.0050	0,13 0.0050	0,13 0.0050	0,19 0.0075	0,26 0.010

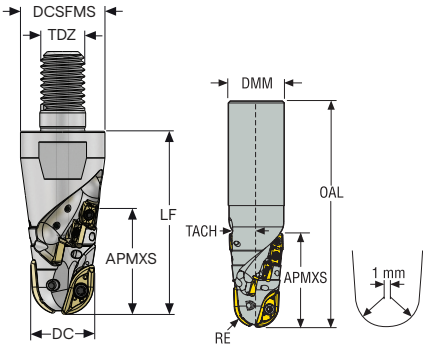
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.19-200 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					F40M				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	215 *710*	230 *750*	285 *940*	340 *1125*	375 *1225*	225 *740*	225 *740*	275 *900*	315 *1025*	340 *1125*
P2	210 *690*	225 *740*	275 *900*	330 *1075*	360 *1175*	215 *710*	220 *720*	265 *870*	305 *1000*	320 *1050*
P3	185 *610*	200 *660*	245 *800*	290 *950*	315 *1025*	195 *640*	195 *640*	235 *770*	270 *890*	285 *940*
P4	165 *540*	175 *570*	215 *710*	255 *840*	280 *920*	175 *570*	180 *590*	220 *720*	255 *840*	270 *890*
P5	160 *520*	170 *560*	210 *690*	250 *820*	270 *890*	165 *540*	165 *540*	205 *670*	230 *750*	245 *800*
P6	180 *590*	190 *620*	235 *770*	280 *920*	305 *1000*	185 *610*	190 *620*	230 *750*	260 *850*	275 *900*
P7	170 *560*	180 *590*	220 *720*	260 *850*	290 *950*	175 *570*	175 *570*	215 *710*	245 *800*	260 *850*
P8	155 *510*	165 *540*	205 *670*	245 *800*	265 *870*	160 *520*	165 *540*	200 *660*	225 *740*	240 *790*
P11	165 *540*	175 *570*	215 *710*	255 *840*	280 *920*	170 *560*	170 *560*	210 *690*	240 *790*	255 *840*
P12	115 *375*	115 *375*	140 *460*	170 *560*	185 *610*	120 *395*	120 *395*	140 *460*	160 *520*	170 *560*
M1	— —	— —	— —	— —	— —	155 *510*	165 *540*	205 *670*	240 *790*	260 *850*
M2	— —	— —	— —	— —	— —	130 *425*	140 *460*	170 *560*	205 *670*	225 *740*
M3	— —	— —	— —	— —	— —	110 *360*	115 *375*	140 *460*	165 *540*	180 *590*
M4	— —	— —	— —	— —	— —	90 *295*	90 *295*	110 *360*	130 *425*	140 *460*
M5	— —	— —	— —	— —	— —	75 *245*	75 *245*	95 *310*	110 *360*	115 *375*
K1	170 *560*	180 *590*	220 *720*	260 *850*	285 *940*	150 *490*	160 *520*	200 *660*	235 *770*	260 *850*
K2	150 *490*	160 *520*	200 *660*	235 *770*	260 *850*	135 *445*	145 *475*	180 *590*	215 *710*	235 *770*
K3	125 *410*	135 *445*	170 *560*	200 *660*	220 *720*	115 *375*	125 *410*	155 *510*	180 *590*	200 *660*
K4	120 *395*	130 *425*	160 *520*	190 *620*	210 *690*	110 *360*	115 *375*	145 *475*	175 *570*	190 *620*
K5	75 *245*	80 *260*	100 *330*	115 *375*	130 *425*	70 *230*	75 *245*	90 *295*	105 *345*	115 *375*
K6	105 *345*	115 *375*	140 *460*	165 *540*	185 *610*	95 *310*	105 *345*	130 *425*	150 *490*	165 *540*
K7	95 *310*	100 *330*	125 *410*	150 *490*	165 *540*	85 *280*	95 *310*	115 *375*	135 *445*	150 *490*
N1	— —	— —	— —	— —	— —	1100 *3600*	1175 *3850*	1450 *4750*	1775 *5825*	1925 *6325*
N2	— —	— —	— —	— —	— —	450 *1475*	475 *1550*	590 *1925*	720 *2350*	770 *2525*
N3	— —	— —	— —	— —	— —	300 *980*	315 *1025*	395 *1300*	475 *1550*	520 *1700*
N11	— —	— —	— —	— —	— —	340 *1125*	360 *1175*	450 *1475*	550 *1800*	590 *1925*
S1	— —	— —	— —	— —	— —	42 *140*	43 *140*	50 *165*	60 *195*	65 *215*
S2	— —	— —	— —	— —	— —	34 *110*	35 *115*	42 *140*	49 *160*	55 *180*
S3	— —	— —	— —	— —	— —	30 *100*	30 *100*	37 *120*	43 *140*	47 *155*
S11	— —	— —	— —	— —	— —	55 *180*	60 *195*	70 *230*	85 *280*	90 *295*
S12	— —	— —	— —	— —	— —	39 *130*	40 *130*	49 *160*	60 *195*	65 *215*
S13	— —	— —	— —	— —	— —	24 *80*	24 *80*	29 *95*	34 *110*	37 *120*
H5	41 *135*	42 *140*	50 *165*	60 *195*	65 *215*	37 *120*	38 *125*	46 *150*	55 *180*	60 *195*
H8	43 *140*	44 *145*	55 *180*	65 *215*	70 *230*	39 *130*	40 *130*	49 *160*	60 *195*	65 *215*
H11	50 *165*	55 *180*	65 *215*	75 *245*	85 *280*	47 *155*	48 *155*	60 *195*	70 *230*	75 *245*
H12	80 *260*	80 *260*	95 *310*	115 *375*	125 *410*	70 *230*	70 *230*	90 *295*	105 *345*	115 *375*

R218.24 – In mm

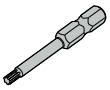
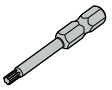




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 765-766
—Per il programma inserti completo, vedere le pagine 904-905, 906, 917
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	OAL	RPMX	Peso	218.20	XO.X
			mm		mm	mm		mm	mm		kg		
R218.24-12R080.RE-028-06.2A	02735924	Combimaster	15,92	2	28,0	23,0	M12	50,0	71,75	18000	0,2	R080 (2)	06 (8)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto centrale	Vite di bloccaggio inserto periferico	Chiave inserto periferico
				
R218.24-080	1/4HEX-T08PX50	C02506-T08P	C01804-T06P	1/4HEX-T06PX50

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R218.24-080	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-08P12

Chiavi dinamometriche e fisse, vedere pagina 931

R218.24-080 – Selezione dell'inserto – In mm/ In pollici

SMG			f_z				
			100%	70%	30%	10%	5%
P1	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,17 *0.0065*	0,24 0.0095
P2	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,18 *0.0070*	0,25 0.010
P3	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,095 *0.0038*	0,095 *0.0038*	0,11 *0.0044*	0,17 *0.0065*	0,24 0.0095
P4	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
P5	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
P6	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
P7	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
P8	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,095 *0.0038*	0,095 *0.0038*	0,11 *0.0044*	0,17 *0.0065*	0,24 0.0095
P11	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
P12	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*	0,15 0.0060
M1	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,055 *0.0022*	0,055 *0.0022*	0,065 *0.0026*	0,10 *0.0040*	0,14 0.0055
M2	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,050 *0.0020*	0,050 *0.0020*	0,060 *0.0024*	0,090 *0.0036*	0,13 0.0050
M3	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,042 *0.0017*	0,042 *0.0017*	0,046 *0.0018*	0,075 *0.0030*	0,10 0.0040
M4	218.20-080ER-ME04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,075 *0.0030*	0,11 *0.0044*	0,16 0.0065
M5	218.20-080ER-ME04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,075 *0.0030*	0,11 *0.0044*	0,16 0.0065
K1	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,18 *0.0070*	0,25 0.010
K2	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
K3	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
K4	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
K5	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,080 *0.0032*	0,080 *0.0032*	0,090 *0.0036*	0,14 *0.0055*	0,20 0.0080
K6	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,090 *0.0036*	0,090 *0.0036*	0,10 *0.0040*	0,16 *0.0065*	0,22 0.0085
K7	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,080 *0.0032*	0,080 *0.0032*	0,090 *0.0036*	0,14 *0.0055*	0,20 0.0080
N1	218.20-080ER-ME04 F40M	XOEX060204FR-E03 F40M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*	0,32 0.013
N2	218.20-080ER-ME04 F40M	XOEX060204FR-E03 F40M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*	0,32 0.013
N3	218.20-080ER-ME04 F40M	XOEX060204FR-E03 F40M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*	0,32 0.013
N11	218.20-080ER-ME04 F40M	XOEX060204FR-E03 F40M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,22 *0.0085*	0,32 0.013
S1	218.20-080ER-ME04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,075 *0.0030*	0,11 *0.0044*	0,16 0.0065
S2	218.20-080ER-ME04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,075 *0.0030*	0,11 *0.0044*	0,16 0.0065
S3	218.20-080ER-ME04 F40M	XOMX060204R-M05 F40M	0,060 *0.0024*	0,060 *0.0024*	0,070 *0.0028*	0,11 *0.0044*	0,15 0.0060
S11	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,042 *0.0017*	0,042 *0.0017*	0,048 *0.0019*	0,075 *0.0030*	0,10 0.0040
S12	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,042 *0.0017*	0,042 *0.0017*	0,048 *0.0019*	0,075 *0.0030*	0,10 0.0040
S13	218.20-080ER-ME04 MS2050	XOMX060204R-M05 MS2050	0,038 *0.0015*	0,038 *0.0015*	0,042 *0.0017*	0,065 *0.0026*	0,090 0.0036
H5	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*	0,15 0.0060
H8	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,048 *0.0019*	0,048 *0.0019*	0,055 *0.0022*	0,085 *0.0034*	0,12 0.0048
H11	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,065 *0.0026*	0,065 *0.0026*	0,070 *0.0028*	0,11 *0.0044*	0,15 0.0060
H12	218.20-080ER-M04 F40M	XOMX060204R-M05 F40M	0,048 *0.0019*	0,048 *0.0019*	0,055 *0.0022*	0,085 *0.0034*	0,12 0.0048

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R218.24-080 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F25M					MS2050					F40M					MP3501					MM4500				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
P1	235	260	315	370	395	305	335	380	430	450	255	270	315	350	365	390	425	460	510	530	220	245	280	315	330
	770	*850*	*1025*	*1225*	*1300*	*1000*	*1100*	*1250*	*1400*	*1475*	*840*	*890*	*1025*	*1150*	*1200*	*1275*	*1400*	*1500*	*1675*	*1750*	*720*	*800*	*920*	*1025*	*1075*
P2	230	255	305	360	385	300	330	370	420	440	250	265	305	335	350	380	410	450	495	510	215	240	270	305	325
	750	*840*	*1000*	*1175*	*1275*	*980*	*1075*	*1225*	*1375*	*1450*	*820*	*870*	*1000*	*1100*	*1150*	*1250*	*1350*	*1475*	*1625*	*1675*	*710*	*790*	*890*	*1000*	*1075*
P3	200	220	265	310	330	255	280	320	360	380	215	230	265	295	305	325	355	385	425	440	185	205	235	265	280
	660	*720*	*870*	*1025*	*1075*	*840*	*920*	*1050*	*1175*	*1250*	*710*	*750*	*870*	*970*	*1000*	*1075*	*1175*	*1275*	*1400*	*1450*	*610*	*670*	*770*	*870*	*920*
P4	175	195	240	280	300	225	250	285	320	335	190	210	245	275	290	285	310	340	375	390	175	195	220	250	265
	570	*640*	*790*	*920*	*980*	*740*	*820*	*940*	*1050*	*1100*	*620*	*690*	*800*	*900*	*950*	*940*	*1025*	*1125*	*1225*	*1275*	*570*	*640*	*720*	*820*	*870*
P5	170	190	225	265	285	220	240	270	305	320	185	195	225	250	260	275	300	325	355	370	155	175	195	220	235
	560	*620*	*740*	*870*	*940*	*720*	*790*	*890*	*1000*	*1050*	*610*	*640*	*740*	*820*	*850*	*900*	*980*	*1075*	*1175*	*1225*	*510*	*570*	*640*	*720*	*770*
P6	190	215	255	300	320	245	270	305	345	360	210	220	255	280	295	310	335	365	400	415	175	195	220	250	260
	620	*710*	*840*	*980*	*1050*	*800*	*890*	*1000*	*1125*	*1175*	*690*	*720*	*840*	*920*	*970*	*1025*	*1100*	*1200*	*1300*	*1350*	*570*	*640*	*720*	*820*	*850*
P7	180	200	240	280	300	230	255	285	325	340	195	210	240	265	275	290	315	345	375	395	165	185	210	235	245
	590	*660*	*790*	*920*	*980*	*750*	*840*	*940*	*1075*	*1125*	*640*	*690*	*790*	*870*	*900*	*950*	*1025*	*1125*	*1225*	*1300*	*540*	*610*	*690*	*770*	*800*
P8	165	185	220	260	280	215	235	270	305	320	180	195	220	245	255	275	300	325	355	370	155	175	195	220	235
	540	*610*	*720*	*850*	*920*	*710*	*770*	*890*	*1000*	*1050*	*590*	*640*	*720*	*800*	*840*	*900*	*980*	*1075*	*1175*	*1225*	*510*	*570*	*640*	*720*	*770*
P11	175	195	235	275	295	225	245	280	315	330	190	205	230	255	270	285	310	335	365	380	160	180	200	230	240
	570	*640*	*770*	*900*	*970*	*740*	*800*	*920*	*1025*	*1075*	*620*	*670*	*750*	*840*	*890*	*940*	*1025*	*1100*	*1200*	*1250*	*520*	*590*	*660*	*750*	*790*
P12	110	125	150	175	185	135	150	170	190	195	120	130	145	160	165	165	180	190	205	215	95	105	115	130	135
	360	*410*	*490*	*570*	*610*	*445*	*490*	*560*	*620*	*640*	*395*	*425*	*475*	*520*	*540*	*540*	*590*	*620*	*670*	*710*	*310*	*345*	*375*	*425*	*445*
M1	—	—	—	—	—	215	245	285	335	360	165	185	225	260	280	215	245	285	335	360	145	160	195	225	240
	—	—	—	—	—	*710*	*800*	*940*	*1100*	*1175*	*540*	*610*	*740*	*850*	*920*	*710*	*800*	*940*	*1100*	*1175*	*475*	*520*	*640*	*740*	*790*
M2	—	—	—	—	—	180	200	235	275	295	140	155	185	215	235	180	200	235	275	295	120	135	160	190	200
	—	—	—	—	—	*590*	*660*	*770*	*900*	*970*	*460*	*510*	*610*	*710*	*770*	*590*	*660*	*770*	*900*	*970*	*395*	*445*	*520*	*620*	*660*
M3	—	—	—	—	—	140	155	185	215	235	110	125	150	175	185	140	155	185	215	235	95	105	130	150	160
	—	—	—	—	—	*460*	*510*	*610*	*710*	*770*	*360*	*410*	*490*	*570*	*610*	*460*	*510*	*610*	*710*	*770*	*310*	*345*	*425*	*490*	*520*
M4	—	—	—	—	—	110	120	140	165	180	85	95	115	135	140	110	120	140	165	180	75	85	100	115	125
	—	—	—	—	—	*360*	*395*	*460*	*540*	*590*	*280*	*310*	*375*	*445*	*460*	*360*	*395*	*460*	*540*	*590*	*245*	*280*	*330*	*375*	*410*
M5	—	—	—	—	—	90	100	120	140	150	70	80	95	110	120	90	100	120	140	150	60	70	80	95	100
	—	—	—	—	—	*295*	*330*	*395*	*460*	*490*	*230*	*260*	*310*	*360*	*395*	*295*	*330*	*395*	*460*	*490*	*195*	*230*	*260*	*310*	*330*
K1	180	200	245	285	305	—	—	—	—	—	165	185	220	260	275	385	415	455	500	520	—	—	—	—	—
	590	*660*	*800*	*940*	*1000*	—	—	—	—	—	*540*	*610*	*720*	*850*	*900*	*1275*	*1350*	*1500*	*1650*	*1700*	—	—	—	—	—
K2	160	180	215	250	270	—	—	—	—	—	145	165	195	230	245	330	360	395	430	450	—	—	—	—	—
	520	*590*	*710*	*820*	*890*	—	—	—	—	—	*475*	*540*	*640*	*750*	*800*	*1075*	*1175*	*1300*	*1400*	*1475*	—	—	—	—	—
K3	135	150	185	215	230	—	—	—	—	—	125	140	165	195	210	280	305	335	365	380	—	—	—	—	—
	445	*490*	*610*	*710*	*750*	—	—	—	—	—	*410*	*460*	*540*	*640*	*690*	*920*	*1000*	*1100*	*1200*	*1250*	—	—	—	—	—
K4	130	145	175	205	220	—	—	—	—	—	120	130	160	185	200	270	290	320	345	360	—	—	—	—	—
	425	*475*	*570*	*670*	*720*	—	—	—	—	—	*395*	*425*	*520*	*610*	*660*	*890*	*950*	*1050*	*1125*	*1175*	—	—	—	—	—
K5	80	90	105	125	135	—	—	—	—	—	70	80	95	115	120	160	175	190	205	215	—	—	—	—	—
	260	*295*	*345*	*410*	*445*	—	—	—	—	—	*230*	*260*	*310*	*375*	*395*	*520*	*570*	*620*	*670*	*710*	—	—	—	—	—
K6	115	130	155	180	190	—	—	—	—	—	105	115	140	165	175	235	260	280	305	320	—	—	—	—	—
	375	*425*	*510*	*590*	*620*	—	—	—	—	—	*345*	*375*	*460*	*540*	*570*	*770*	*850*	*920*	*1000*	*1050*	—	—	—	—	—
K7	100	115	135	160	170	—	—	—	—	—	90	105	125	145	155	205	225	240	260	270	—	—	—	—	—
	330	*375*	*445*	*520*	*560*	—	—	—	—	—	*295*	*345*	*410*	*475*	*510*	*670*	*740*	*790*	*850*	*890*	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	1225	1350	1650	1950	2050	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*4025*	*4425*	*5425*	*6400*	*6725*	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	490	550	670	780	830	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*1600*	*1800*	*2200*	*2550*	*2725*	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	325	365	445	520	550	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*1075*	*1200*	*1450*	*1700*	*1800*	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	375	415	510	600	630	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*1225*	*1350*	*1675*	*1975*	*2075*	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	50	55	65	80	85	40	45	55	65	65	50	55	65	80	85	23	25	30	35	38
	—	—	—	—	—	*165*	*180*	*215*	*260*	*280*	*130*	*150*	*180*	*215*	*215*	*165*	*180*	*215*	*260*	*280*	*75*	*80*	*100*	*115*	*125*
S2	—	—	—	—	—	40	45	55	60	65	32	36	43	50	55	40	45	55	60	65	18	20	24	29	30
	—	—	—	—	—	*130*	*150*	*180*	*195*	*215*	*105*	*120*	*140*	*165*	*180*	*130*	*150*	*180*	*195*	*215*	*60*	*65*	*80*	*95*	*100*
S3	—	—	—	—	—	35	39	47	55	60	28	32	38	44	47	35	40	47	55	60	16	18	21	25	27
	—	—	—	—	—	*115*	*130*	*155*	*180*	*195*	*90*	*105*	*125*	*145*	*155*	*115*	*130*	*155*	*180*	*195*	*50*	*60*	*70*	*80*	*90*
S11	—	—	—	—	—	70	80	95	110	120	55	60	75	90	95	70	80	95	110	120	32	35	42	50	55
	—	—	—	—	—	*230*	*260*	*310*	*360*	*395*	*180*	*195*	*245*	*295*	*310*	*230*	*260*	*310*	*360*	*395*	*105*	*115*	*140*	*165*	*180*
S12	—	—	—	—	—	49	55	65	75	80	39	43	50	60	65	49	55	65	75	80	29	33	39	46	49
	—	—	—	—	—	*160*	*180*	*215*	*245*	*260*	*130*	*140*	*165*	*195*	*215*	*160*	*180*	*215*	*245*	*260*	*95*	*110*	*130*	*150*	*160*
S13	—	—	—	—	—	28	31	37	44	47	23	25	30	35	37	28	31	37	44	47	17	19	23	27	28
	—	—	—	—	—	*90*	*100*	*120*	*145*	*155*	*75*	*80*	*100*	*115*	*120*	*90*	*100*	*120*	*145*	*155*	*55*	*60*	*75*	*90*	*90*
H5	—	—	—	—	—	—	—	—	—	—	33	38	45	55	55	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*110*	*125*	*150*	*180*	*180*	—	—	—	—	—	—	—	—	—	—
H8	—	—	—	—	—	—	—	—	—	—	36	40	47	55	60	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*155*	*180*	*195*	—	—	—	—	—	—	—	—	—	—
H11	—	—	—	—	—	—	—	—	—	—	43	48	55	65	70	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*140*	*155*	*180*	*215*	*230*	—	—	—	—	—	—	—	—	—	—
H12	—	—	—	—	—	—	—	—	—	—	65	70	85	100	105	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*280*	*330*	*345*	—	—	—	—	—	—	—	—	—	—



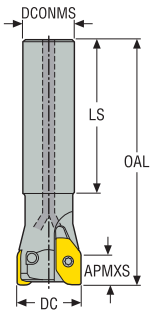
R217/220.97

Le frese ad alta produttività con inserti per alluminio sono progettate per fornire prestazioni ottimali in operazioni di scanalatura, fresatura a spallamento retto e lavorazione di sedi. Questi utensili sono ottimizzati in modo specifico per ottenere avanzamento e asportazione elevati su alluminio.

– Gamma di frese 16-100 mm (0,625-4”)
– Disponibili con attacchi cilindrici, Combimaster o a manicotto

R217.97-X08 – In mm

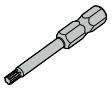




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 780
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.97-1616.0-X08.2A	03245364	Cilindrico	16,0	2	8,0	16,0	67,0	32,49	52,0	100,0	11,0	26,4	30,0	40000	0,2	XPKX0803
R217.97-2020.0-X08.2A	03245365	Cilindrico	20,0	2	8,0	20,0	79,0		70,0	120,0	7,2	34,4	38,0	40000	0,3	XPKX0803
R217.97-2525.0-X08.3A	03245366	Cilindrico	25,0	3	8,0	25,0	99,0		94,0	150,0	5,0	44,4	48,0	40000	0,6	XPKX0803

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-1616-2020	1/4HEX-T07PX50	C02505-T07P
R217.97-2525	1/4HEX-T07PX50	C02506-T07P

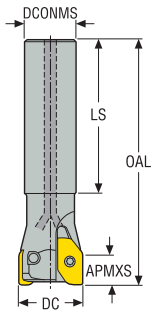
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X08 – Pollici

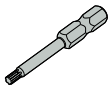




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 780
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.97-0.62-0-X08.2A	03245370	Cilindrico	0.625	2	0.315	0.625	2.638	1.279	2.165	3.937	11,2	1.028	1.171	40000	0.440	XPKX0803
R217.97-0.75-0-X08.2A	03245371	Cilindrico	0.750	2	0.315	0.750	3.110	1.594	2.756	4.724	7,8	1.280	1.421	40000	0.660	XPKX0803
R217.97-1.00-0-X08.3A	03245372	Cilindrico	1.000	3	0.315	1.000	3.898	1.988	3.701	5.906	4,9	1.780	1.921	40000	1.320	XPKX0803

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-0.62-0.75	1/4HEX-T07PX50	C02505-T07P
R217.97-1.00	1/4HEX-T07PX50	C02506-T07P

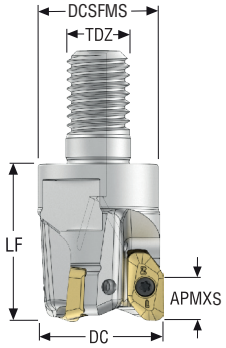
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X08 – In mm



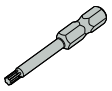


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 780
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm		mm		mm	mm		kg	
R217.97-0816.RE-X08.2A	03245589	Combimaster	16,0	2	8,0	13,5	M8	23,0	11,0	26,4	30,0	40000	0,1	XPKX0803
R217.97-1020.RE-X08.2A	03245362	Combimaster	20,0	2	8,0	18,5	M10	28,0	7,2	34,4	38,0	40000	0,1	XPKX0803
R217.97-1020.RE-X08.3A	03308725	Combimaster	20,0	3	8,0	18,5	M10	28,0	7,2	34,4	38,0	40000	0,1	XPKX0803
R217.97-1225.RE-X08.3A	03245363	Combimaster	25,0	3	8,0	23,0	M12	30,0	5,0	44,4	48,0	40000	0,2	XPKX0803
R217.97-1225.RE-X08.4A	03308726	Combimaster	25,0	4	8,0	23,0	M12	30,0	5,0	44,4	48,0	40000	0,2	XPKX0803

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-0816-1020	1/4HEX-T07PX50	C02505-T07P
R217.97-1225	1/4HEX-T07PX50	C02506-T07P

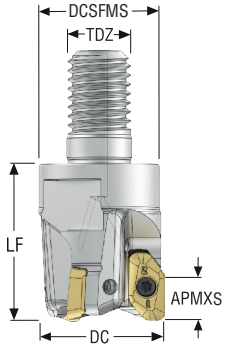
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X08 – Pollici



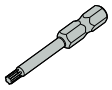


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 780
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCSFMS	TDZ	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch		inch		inch	inch		lb	
R217.97-0.62-08RE-X08.2A	03245367	Combimaster	0.625	2	0.315	0.531	M8	0.906	11,2	1.028	1.171	40000	0.220	XPKX0803
R217.97-0.75-10RE-X08.2A	03245368	Combimaster	0.750	2	0.315	0.728	M10	1.102	7,8	1.280	1.421	40000	0.220	XPKX0803
R217.97-1.00-12RE-X08.3A	03245369	Combimaster	1.000	3	0.315	0.906	M12	1.181	4,9	1.780	1.921	40000	0.220	XPKX0803

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-0.62-0.75	1/4HEX-T07PX50	C02505-T07P
R217.97-1.00	1/4HEX-T07PX50	C02506-T07P

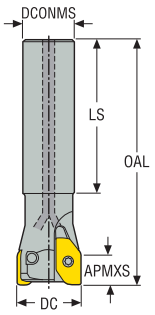
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X12 – In mm

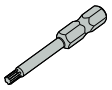




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 781
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.97-2525.0-X12.2A	02450300	Cilindrico	25,0	2	12,0	25,0	95,0	54,5	94,0	150,0	10,0	40,0	49,0	40000	0,6	XPKX12T3
R217.97-3232.0-X12.2A	02450301	Cilindrico	32,0	2	12,0	32,0	85,0	64,5	90,0	150,0	8,0	54,0	63,0	40000	0,9	XPKX12T3
R217.97-3232.0-X12.3A	02450302	Cilindrico	32,0	3	12,0	32,0	85,0	64,5	90,0	150,0	8,0	54,0	63,0	40000	0,9	XPKX12T3

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-..Ø25	1/4HEX-T10PX50	C03508-T10P
R217.97-..Ø32	1/4HEX-T10PX50	C03509-T10P

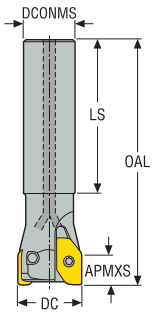
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X12 – Pollici

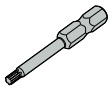




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 781
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.97-01.00-0-12.2A	02450377	Cilindrico	1.000	2	0.472	1.000	3.799	2.165	3.795	6.000	10,0	1.606	1.961	40000	1.320	XPKX12T3

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-01.00	1/4HEX-T10PX50	C03508-T10P

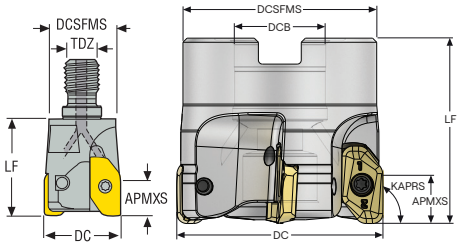
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.97-X12 – In mm



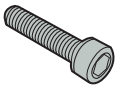
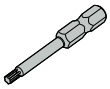


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 781
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm		mm	mm		mm	mm		kg	
R220.97-0050-X12.4A	02450306	Manicotto	50,0	4	12,0	22,0	47,0	–	22,0	45,0	5,0	90,0	99,0	30000	0,4	XPKX12T3
R217.97-1225.RE-X12.2A	02449582	Combimaster	25,0	2	12,0	–	23,0	M12	–	30,0	10,0	40,0	49,0	40000	0,1	XPKX12T3
R217.97-1632.RE-X12.2A	02450297	Combimaster	32,0	2	12,0	–	30,0	M16	–	40,0	8,0	54,0	63,0	40000	0,3	XPKX12T3
R217.97-1632.RE-X12.3A	02450299	Combimaster	32,0	3	12,0	–	30,0	M16	–	40,0	8,0	54,0	63,0	40000	0,3	XPKX12T3
R217.97-1640.RE-X12.3A	02486599	Combimaster	40,0	3	12,0	–	30,0	M16	–	40,0	6,0	70,0	79,0	35000	0,3	XPKX12T3
R217.97-2040.RE-X12.3A	02928076	Combimaster	40,0	3	12,0	–	36,5	M20	–	40,0	6,0	70,0	79,0	35000	0,4	XPKX12T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.97-.. Ø25	–	1/4HEX-T10PX50	C03508-T10P
R217.97-.. Ø32-40	–	1/4HEX-T10PX50	C03509-T10P
R220.97-0050	220.17-692	1/4HEX-T10PX50	C03509-T10P

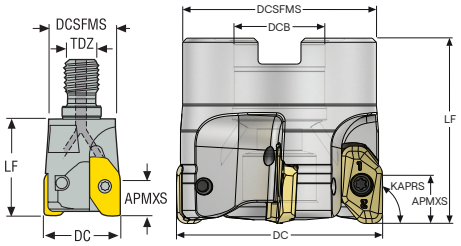
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.97-X12 – Pollici



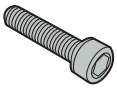
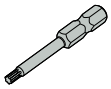


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 781
—Per il programma inserti completo, vedere le pagine 913
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch		inch	inch		inch	inch		lb	
R220.97-02.00-12.3A	02534482	Manicotto	2.000	3	0.472	0.750	1.850	–	0.750	1.772	5,0	3.606	3.961	30000	0.880	XPKX12T3
R220.97-02.00-12.4A	02450395	Manicotto	2.000	4	0.472	0.750	1.850	–	0.750	1.772	5,0	3.606	3.961	30000	1.100	XPKX12T3
R217.97-1.00-12RE-12.2A	02450374	Combimaster	1.000	2	0.472	–	0.906	M12	–	1.181	10,0	1.606	1.961	40000	0.440	XPKX12T3
R217.97-1.25-16RE-12.3A	02450376	Combimaster	1.250	3	0.472	–	1.181	M16	–	1.575	8,0	2.106	2.461	40000	0.440	XPKX12T3
R217.97-01.50-20RE-12.3A	02928061	Combimaster	1.500	3	0.472	–	1.437	M20	–	1.575	6,0	2.606	2.961	35000	0.880	XPKX12T3
R217.97-1.50-16RE-12.3A	02520346	Combimaster	1.500	3	0.472	–	1.181	M16	–	1.575	6,0	2.606	2.961	35000	0.660	XPKX12T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.97-01.00	–	1/4HEX-T10PX50	C03508-T10P
R217.97-01.25-01.50	–	1/4HEX-T10PX50	C03509-T10P
R220.97-..	UC6S3/8UNFX1	1/4HEX-T10PX50	C03509-T10P

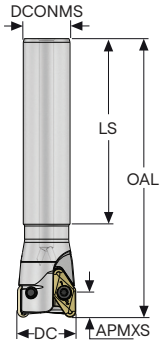
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-V22 – In mm

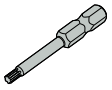




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 782
—Per il programma inserti completo, vedere le pagine 898
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		mm	mm		kg	
R217.97-2532.0-V22.2A	00035425	Cilindrico	32,0	2	14,0	25,0	75,0	64,0	64,0	120,0	15,0	56,0	62,0	40000	0,5	VPGX2206
R217.97-3240.0-V22.2A	00035427	Cilindrico	40,0	2	14,0	32,0	105,0	90,0	90,0	150,0	10,0	72,0	78,0	35000	0,9	VPGX2206

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-..	1/4HEX-T20PX50	C05010-T20P

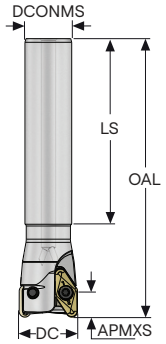
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-V22 – Pollici

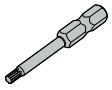




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 782
—Per il programma inserti completo, vedere le pagine 898
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCONMS	LS	LUX	LPR	OAL	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		inch	inch		lb	
R217.97-01.25-0-V22.2A	00054103	Cilindrico	1.250	2	0.551	1.000	4.000	3.795	3.795	6.000	10,0	2.185	2.421	40000	1.320	VPGX2206
R217.97-01.50-0-V22.2A	00054181	Cilindrico	1.500	2	0.551	1.250	4.000	3.638	3.638	6.000	10,0	2.685	2.921	35000	1.980	VPGX2206

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.97-..	1/4HEX-T20PX50	C05010-T20P

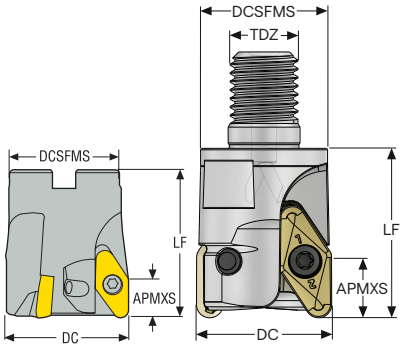
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.97-V22 – In mm



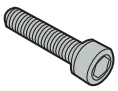
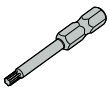


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 782
—Per il programma inserti completo, vedere le pagine 898
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	Cmin	Cmax	RPMX	Peso	Inserto
			mm		mm	mm	mm		mm	mm		mm	mm		kg	
R220.97-0050-V22.2A	00035392	Manicotto	50,0	2	14,0	22,0	47,0	–	22,0	57,0	8,0	92,0	98,0	30000	0,6	VPGX2206
R220.97-0050-V22.3A	00035393	Manicotto	50,0	3	14,0	22,0	47,0	–	22,0	57,0	8,0	92,0	98,0	30000	0,5	VPGX2206
R220.97-0063-V22.3A	00035394	Manicotto	63,0	3	14,0	27,0	50,0	–	–	57,0	6,0	116,0	125,0	27000	0,7	VPGX2206
R220.97-0063-V22.4A	00035395	Manicotto	63,0	4	14,0	27,0	50,0	–	–	57,0	6,0	116,0	125,0	27000	0,7	VPGX2206
R220.97-0080-V22.4A	00035396	Manicotto	80,0	4	14,0	32,0	60,0	–	32,0	57,0	5,0	152,0	158,0	25000	1,1	VPGX2206
R220.97-0100-V22.5A	00035397	Manicotto	100,0	5	14,0	32,0	77,0	–	32,0	57,0	4,0	192,0	198,0	22000	1,9	VPGX2206
R217.97-1632.RE-V22.2A	00035424	Combimaster	32,0	2	14,0	–	30,0	M16	–	40,0	15,0	56,0	62,0	40000	0,2	VPGX2206
R217.97-1640.RE-V22.2A	00035426	Combimaster	40,0	2	14,0	–	30,0	M16	–	40,0	10,0	72,0	78,0	35000	0,3	VPGX2206
R217.97-2040.RE-V22.2A	02928075	Combimaster	40,0	2	14,0	–	36,5	M20	–	45,0	10,0	72,0	78,0	35000	0,4	VPGX2206

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.97-1632-1640	–	1/4HEX-T20PX50	C05010-T20P
R217.97-2040	–	1/4HEX-T20PX50	C05010-T20P
R220.97-0050	MC6S10X40	1/4HEX-T20PX50	C05010-T20P
R220.97-0063	MC6S12X35	1/4HEX-T20PX50	C05013-T20P
R220.97-0080	MC6S16X40	1/4HEX-T20PX50	C05013-T20P
R220.97-0100	MC6S16X40	1/4HEX-T20PX90	C05013-T20P

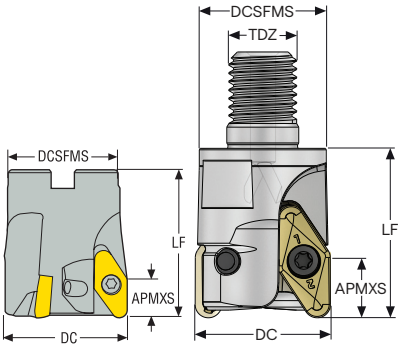
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.97-V22 – Pollici



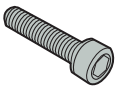
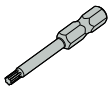


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 782
—Per il programma inserti completo, vedere le pagine 898
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	RMPX°	C min	C max	RPMX	Peso	Inserto
			inch		inch	inch	inch		inch	inch		inch	inch		lb	
R220.97-02.00-V22.2A	00054269	Manicotto	2.000	2	0.551	0.750	1.850	–	0.750	2.250	8,0	3.685	3.921	30000	1.320	VPGX2206
R220.97-02.00-V22.3A	00054587	Manicotto	2.000	3	0.551	0.750	1.850	–	0.750	2.250	8,0	3.685	3.921	30000	1.320	VPGX2206
R220.97-02.50-V22.4A	00055249	Manicotto	2.500	4	0.551	1.000	2.047	–	1.000	2.250	6,0	4.685	4.921	27000	1.760	VPGX2206
R220.97-03.00-V22.4A	00050756	Manicotto	3.000	4	0.551	1.000	2.441	–	1.000	2.250	5,0	5.685	5.921	25000	2.430	VPGX2206
R220.97-04.00-V22.5A	00050828	Manicotto	4.000	5	0.551	1.500	3.543	–	–	2.250	4,0	7.685	7.921	22000	4.850	VPGX2206
R217.97-1.25-16REV22.2A	00054077	Combimaster	1.250	2	0.551	–	1.181	M16	–	1.600	10,0	2.185	2.421	40000	0.660	VPGX2206
R217.97-1.50-16REV22.2A	00054146	Combimaster	1.500	2	0.551	–	1.181	M16	–	1.600	10,0	2.685	2.921	35000	0.660	VPGX2206

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.97-..	–	1/4HEX-T20PX50	C05010-T20P
R220.97-02.00	UC6S3/8UNFX11/2	1/4HEX-T20PX50	C05010-T20P
R220.97-02.50-03.00	UC6S1/2UNFX1-1/2	1/4HEX-T20PX50	C05013-T20P
R220.97-04.00	UC6S3/4UNFX1-1/4	1/4HEX-T20PX90	C05013-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.97-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217.97-X08 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
N1	XPKX080304PDER-E06 H25	4,0 *0.16*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013	0,44 0.017
N2	XPKX080304PDER-E06 H25	4,0 *0.16*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013	0,44 0.017
N3	XPKX080304PDER-E06 H25	4,0 *0.16*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013	0,44 0.017
N11	XPKX080304PDER-E06 H25	4,0 *0.16*	0,18 0.0070	0,18 0.0070	0,20 0.0080	0,32 0.013	0,44 0.017

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.97-X08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H25				
	100%	70%	30%	10%	5%
N1	2025 *6650*	2200 *7225*	2675 *8775*	3175 *10425*	3400 *11150*
N2	510 *1675*	560 *1825*	680 *2225*	800 *2625*	860 *2825*
N3	340 *1125*	370 *1225*	450 *1475*	540 *1775*	570 *1875*
N11	390 *1275*	425 *1400*	510 *1675*	610 *2000*	650 *2125*

R217/220.97-X12 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
N1	XPKX12T304PDER-E08 H25	6,0 *0.24*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,34 0.013	0,48 0.019
N2	XPKX12T304PDER-E08 H25	6,0 *0.24*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,34 0.013	0,48 0.019
N3	XPKX12T304PDER-E08 H25	6,0 *0.24*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,34 0.013	0,48 0.019
N11	XPKX12T304PDER-E08 H25	6,0 *0.24*	0,20 0.0080	0,20 0.0080	0,22 0.0085	0,34 0.013	0,48 0.019

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.97-X12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H25				
	100%	70%	30%	10%	5%
N1	1900 *6225*	2075 *6800*	2525 *8275*	3000 *9850*	3225 *10575*
N2	480 *1575*	520 *1700*	640 *2100*	760 *2500*	820 *2700*
N3	320 *1050*	350 *1150*	425 *1400*	500 *1650*	540 *1775*
N11	365 *1200*	400 *1300*	485 *1600*	580 *1900*	620 *2025*

R217/220.97-V22 – Selezione dell'inserto – In mm/ In pollici

SMG		a_p	f_z				
			100%	70%	30%	10%	5%
N1	VPGX220605ER-E10 H25	7,0 *0.28*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020
N2	VPGX220605ER-E10 H25	7,0 *0.28*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020
N3	VPGX220605ER-E10 H25	7,0 *0.28*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020
N11	VPGX220605ER-E10 H25	7,0 *0.28*	0,22 0.0085	0,22 0.0085	0,24 0.0095	0,36 0.014	0,50 0.020

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.97-V22 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H15					H25				
	100%	70%	30%	10%	5%	100%	70%	30%	10%	5%
N1	1925 *6325*	2075 *6800*	2550 *8375*	3050 *10000*	3300 *10825*	1925 *6325*	2075 *6800*	2550 *8375*	3050 *10000*	3300 *10825*
N2	485 *1600*	530 *1750*	650 *2125*	770 *2525*	840 *2750*	485 *1600*	530 *1750*	650 *2125*	770 *2525*	840 *2750*
N3	325 *1075*	350 *1150*	430 *1400*	510 *1675*	560 *1825*	325 *1075*	350 *1150*	430 *1400*	510 *1675*	560 *1825*
N11	370 *1225*	400 *1300*	490 *1600*	590 *1925*	640 *2100*	370 *1225*	400 *1300*	490 *1600*	590 *1925*	640 *2100*

Chiavi di codifica in mm e in pollici

R	217	.	79	-	18	20	.	0	-	10	A
1	2		3		4	5		6		7	8

R	217	.	79	-	01.50	-	3	-	08	3	A
1	2		3		4		5		6	7	8

1.

R = Rotazione destra
Cx = Seco-Capto

2.

217 = Attacco a stelo
220 = Attacco a manicotto

3.

Tipo di fresa

4.

Diametro stelo (diametro filettatura attacco Combimaster)

5. (Non per la designazione in pollici)

Diametro fresa

6.

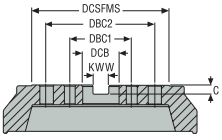
Tipo di stelo
RE = Combimaster
0. = Cilindrico
3. = Weldon

7.

Dimensione dell'inserto

8.

A = Adduzione interna refrigerante



Dimensioni in mm

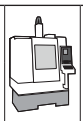
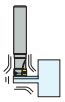
DCB	DCSFMS	DBC1	DBC2	KWW	C
16	30-35	–	–	8,4	5,6
22	42-47	–	–	10,4	6,3
27	48-62	–	–	12,4	7
32	60-90	–	–	14,4	8
40	90-130	66,7	–	16,4	9
60	130-270	101,6	177,8	25,7	14

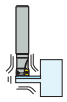
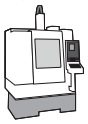
Dimensioni in pollici

DCB	DCSFMS	DBC1	DBC2	KWW	C
0.500	*1.181 - 1.378*			*0.258*	*0.165*
0.750	*1.378 - 1.850*	–	–	*0.321*	*0.193*
1.000	*1.803 - 2.441*	–	–	*0.382*	*0.224*
1.250	*2.250 - 3.031*	–	–	*0.508*	*0.287*
1.500	*2.750 - 3.543*	–	–	*0.630*	*0.382*
2.000	*4.331*	–	–	*0.756*	*0.445*
2.500	*5.118 - 6.299 (8.858)*	*4.000*	*(7.000)*	*1.000*	*0.551*

Per una misurazione più precisa di DCSFMS e DCB, vedere la tabella di ciascun prodotto.

Selezione – In mm

Inserto	a_p max	Capacità di lavorare materiali								
		P	M	K	N	S	H			
XO06 	3,0	■	■	■	■	■	□	■	◩	■
XO10 	6,0	■	■	■	■	■	□	■	■	■
XO12 	7,0	■	■	■	■	■	□	◩	■	■
SCET 	11,0 20,0 30,0 40,0	■	■	■	■	■	□	-	■	◩
XNEX08..L 	7,0	■	■	■	■	■	□	■	■	■

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia		Capacità di lavorare in condizioni instabili	
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida		Capacità di effettuare lavorazioni di entrata in rampa	
Scelta possibile	□	Non consigliata	-	Capacità di effettuare lavorazioni di penetrazione assiale	

Selezione – In mm

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (mm) con numero effettivo di denti												Vedere pagina
			12	16	20	25	32	40	50	63	80	100	125	160	
XO.X06	2		2	3											3, 794
			3	4											
XO.X10	2				2										3, 797
						3	4	5							
XO.X12	2						2	3	4						3, 804
						2	3	4		5					
SCET12	4						2	3	4	5	6	7	8		3, 811
												4			
													4		
														4	
XNEX08	6							3	4	5	6	7			3, 789
									5	6	7	9			

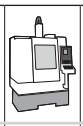
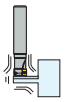
x — x indica il numero di denti (prima scelta)

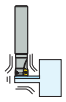
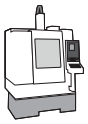
x — x indica il numero di denti

Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili

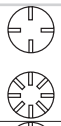
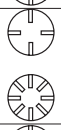
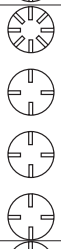
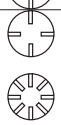
Scelta base

Selezione – Pollici

Inserto	a_p max	Capacità di lavorare materiali								
		P	M	K	N	S	H			
XO10 	0.236	■	■	■	■	■	□	■	■	■
XO12 	0.276	■	■	■	■	■	□	◩	■	■
SCET 	0.433	■	■	■	■	■	□	-	■	◩
XNEX08..L 	0.276	■	■	■	■	■	□	■	■	■

1a scelta	■	Macchina ad alta velocità con bassa potenza/coppia 	Capacità di lavorare in condizioni instabili 
Scelta alternativa	◩	Macchina robusta e stabile con connessione rigida 	Capacità di effettuare lavorazioni di entrata in rampa 
Scelta possibile	□	Non consigliata -	Capacità di effettuare lavorazioni di penetrazione assiale 

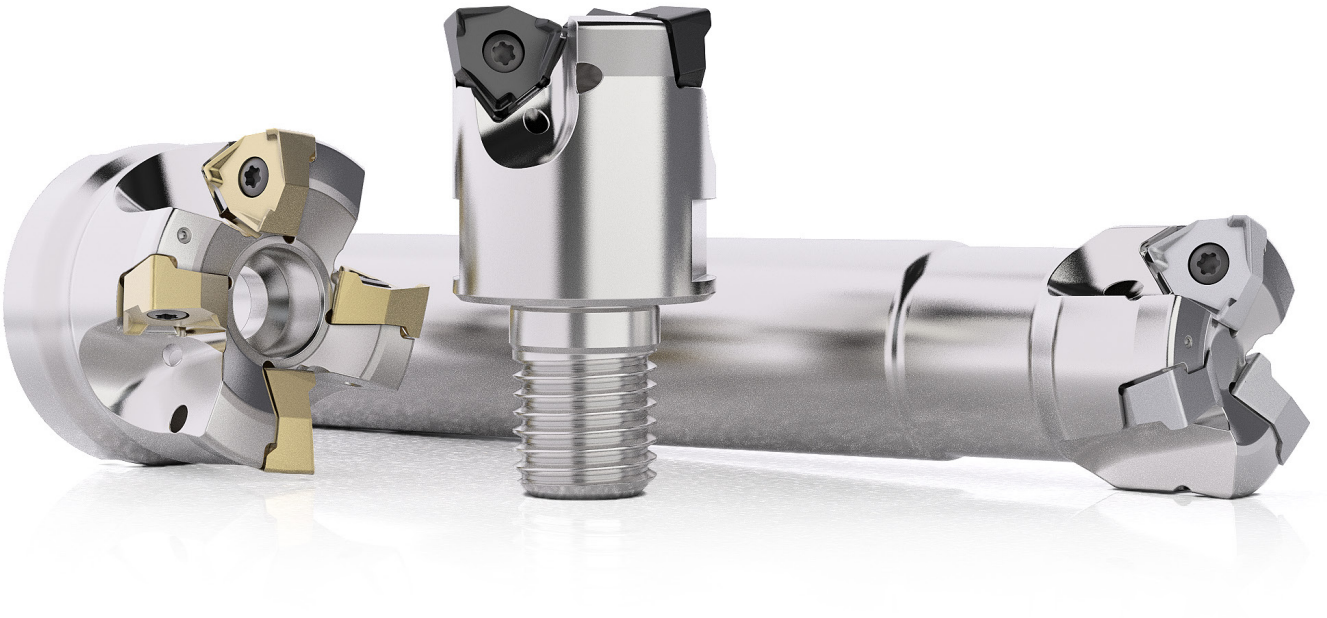
Selezione – Pollici

Inserto	Numero di taglienti	Applicazione	Diametro fresa disponibile (pollici) con numero effettivo di denti								Vedere pagina
			0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	
XO.X10	2		2								3, 797
XO.X12	2			2							3, 804
SCET12	4				2	3	4	5	6	7	3, 811
XNEX08	6					3	4	6	7	9	3, 789

x	x indica il numero di denti (prima scelta)
x	x indica il numero di denti


Strumento di risoluzione dei problemi per fissaggio instabile e/o condizioni instabili


Scelta base



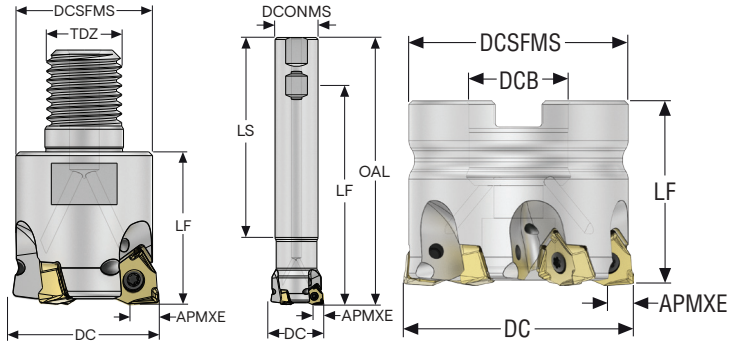
Fresa Square 6 a penetrazione assiale (plunging)

Le frese Plunge Square 6 sono dotate di inserti bilaterali, vale a dire 6 taglienti.

– Gamma di frese: 40-100 mm (1,5-3”)
– Profondità di taglio radiale massima 7 mm (0,275”)
– Gamma raggi di punta dell’inserto 0,8-1,6 mm (0,031-0,063”)

R217/220.79-08 – In mm

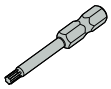




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 791-3, 792
—Per il programma inserti completo, vedere le pagine 899
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	TDZ	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm	mm	mm		mm	mm	mm	mm	mm		kg	
R217.79-3240.3-08-3A	03058304	Weldon	40,0	3	7,0	–	–	–	32,0	164,0	140,0	140,0	200,0	11800	1,3	XNEX08..L
R220.79-0050-08-4A	03058315	Manicotto	50,0	4	7,0	22,0	48,0	–	–	40,0	–	–	–	10600	0,3	XNEX08..L
R220.79-0050-08-5A	03058316	Manicotto	50,0	5	7,0	22,0	48,0	–	–	40,0	–	–	–	10600	0,3	XNEX08..L
R220.79-0063-08-6A	03058318	Manicotto	63,0	6	7,0	27,0	60,0	–	–	50,0	–	–	–	9400	0,7	XNEX08..L
R220.79-0080-08-7A	03058320	Manicotto	80,0	7	7,0	27,0	62,0	–	–	50,0	–	–	–	8400	1,1	XNEX08..L
R217.79-2040.RE-08-3A	03058302	Combimaster	40,0	3	7,0	–	36,5	M20	–	40,0	–	–	–	11800	0,3	XNEX08..L

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
220.79-Ø50	220.17-696	1/4HEX-T15PX50	C04011-T15P
220.79-Ø63	MC6S12X35	1/4HEX-T15PX50	C04011-T15P
R217.79-.. Ø40	–	1/4HEX-T15PX50	C04011-T15P
R220.79- Ø80	–	1/4HEX-T15PX50	C04011-T15P

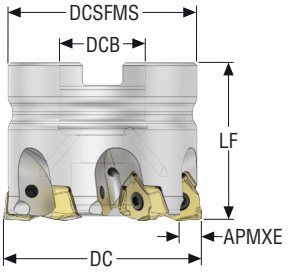
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R217/220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	T00-15P35
R217/220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	5802712	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.79-08 – Pollici

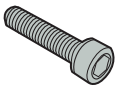
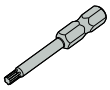




–Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 791-3, 792
–Per il programma inserti completo, vedere le pagine 899
–Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		lb	
R220.79-02.50-08-6A	03058349	Manicotto	2.500	6	0.276	1.000	2.250	1.969	9400	1.980	XNEX08..L

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.79-02.50-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T15PX50	C04011-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.79-08 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	a_{so}			
			100%	70%	50%	30%
P1	XNEX080608TL-M13 F40M	0,18 *0.0070*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P2	XNEX080608TL-M13 F40M	0,19 *0.0075*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P3	XNEX080608TL-M13 MP2501	0,18 *0.0070*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P4	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P5	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P6	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P7	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P8	XNEX080608TL-M13 MP2501	0,18 *0.0070*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P11	XNEX080608TL-M13 MP3501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P12	XNEX080608TL-M13 MP2501	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
M1	XNEX080608TL-M13 F40M	0,19 *0.0075*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
M2	XNEX080608TL-M13 F40M	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
M3	XNEX080608TL-M13 F40M	0,14 *0.0055*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
M4	XNEX080608TL-M13 MP3501	0,12 *0.0048*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
M5	XNEX080608TL-M13 MP3501	0,12 *0.0048*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
K1	XNEX080608TL-M13 MP2501	0,19 *0.0075*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K2	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K3	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K4	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K5	XNEX080608TL-M13 MP2501	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K6	XNEX080608TL-M13 MP2501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K7	XNEX080608TL-M13 MP2501	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
S1	XNEX080608TL-M13 MP3501	0,12 *0.0048*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S2	XNEX080608TL-M13 MP3501	0,12 *0.0048*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S3	XNEX080608TL-M13 MP3501	0,11 *0.0044*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S11	XNEX080608TL-M13 MS2050	0,14 *0.0055*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
S12	XNEX080608TL-M13 MS2050	0,14 *0.0055*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
S13	XNEX080608TL-M13 MS2050	0,12 *0.0048*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
H5	XNEX080608TL-M13 MP3501	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
H8	XNEX080608TL-M13 MP3501	0,090 *0.0036*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
H11	XNEX080608TL-M13 MP3501	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
H12	XNEX080608TL-M13 MP3501	0,090 *0.0036*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.79-08 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050				F40M				MP2501				MP3501			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	190 *620*	210 *690*	225 *740*	240 *790*	180 *590*	195 *640*	205 *670*	215 *710*	305 *1000*	330 *1075*	345 *1125*	365 *1200*	270 *890*	290 *950*	305 *1000*	320 *1050*
P2	180 *590*	200 *660*	210 *690*	225 *740*	170 *560*	185 *610*	190 *620*	200 *660*	290 *950*	315 *1025*	330 *1075*	345 *1125*	255 *840*	275 *900*	290 *950*	305 *1000*
P3	160 *520*	175 *570*	185 *610*	200 *660*	150 *490*	165 *540*	170 *560*	180 *590*	255 *840*	275 *900*	290 *950*	305 *1000*	225 *740*	245 *800*	255 *840*	270 *890*
P4	145 *475*	160 *520*	170 *560*	180 *590*	145 *475*	155 *510*	165 *540*	175 *570*	230 *750*	250 *820*	260 *850*	275 *900*	205 *670*	220 *720*	230 *750*	245 *800*
P5	140 *460*	155 *510*	160 *520*	170 *560*	130 *425*	140 *460*	145 *475*	155 *510*	220 *720*	240 *790*	250 *820*	265 *870*	195 *640*	210 *690*	220 *720*	235 *770*
P6	155 *510*	170 *560*	180 *590*	195 *640*	145 *475*	160 *520*	165 *540*	175 *570*	245 *800*	270 *890*	280 *920*	295 *970*	220 *720*	235 *770*	250 *820*	260 *850*
P7	145 *475*	160 *520*	170 *560*	180 *590*	140 *460*	150 *490*	155 *510*	165 *540*	235 *770*	255 *840*	265 *870*	280 *920*	205 *670*	225 *740*	235 *770*	245 *800*
P8	135 *445*	150 *490*	155 *510*	170 *560*	125 *410*	135 *445*	145 *475*	150 *490*	215 *710*	235 *770*	245 *800*	255 *840*	190 *620*	205 *670*	215 *710*	225 *740*
P11	145 *475*	160 *520*	165 *540*	175 *570*	135 *445*	145 *475*	150 *490*	160 *520*	225 *740*	245 *800*	255 *840*	270 *890*	200 *660*	215 *710*	225 *740*	240 *790*
P12	100 *330*	110 *360*	120 *395*	125 *410*	100 *330*	105 *345*	110 *360*	115 *375*	160 *520*	175 *570*	180 *590*	190 *620*	140 *460*	155 *510*	160 *520*	170 *560*
M1	145 *475*	160 *520*	170 *560*	185 *610*	130 *425*	145 *475*	155 *510*	165 *540*	155 *510*	175 *570*	185 *610*	195 *640*	145 *475*	160 *520*	170 *560*	185 *610*
M2	120 *395*	135 *445*	145 *475*	155 *510*	110 *360*	125 *410*	130 *425*	140 *460*	130 *425*	145 *475*	155 *510*	165 *540*	120 *395*	135 *445*	145 *475*	155 *510*
M3	100 *330*	110 *360*	115 *375*	125 *410*	90 *295*	100 *330*	105 *345*	115 *375*	105 *345*	120 *395*	125 *410*	135 *445*	100 *330*	110 *360*	115 *375*	125 *410*
M4	80 *260*	90 *295*	95 *310*	100 *330*	70 *230*	80 *260*	85 *280*	90 *295*	85 *280*	95 *310*	100 *330*	105 *345*	80 *260*	90 *295*	95 *310*	100 *330*
M5	65 *215*	75 *245*	75 *245*	85 *280*	60 *195*	65 *215*	70 *230*	75 *245*	70 *230*	80 *260*	85 *280*	90 *295*	65 *215*	75 *245*	75 *245*	85 *280*
K1	— —	— —	— —	— —	130 *425*	145 *475*	155 *510*	165 *540*	290 *950*	315 *1025*	330 *1075*	350 *1150*	255 *840*	280 *920*	290 *950*	310 *1025*
K2	— —	— —	— —	— —	115 *375*	130 *425*	135 *445*	145 *475*	265 *870*	290 *950*	300 *980*	320 *1050*	235 *770*	255 *840*	265 *870*	280 *920*
K3	— —	— —	— —	— —	100 *330*	110 *360*	115 *375*	125 *410*	225 *740*	245 *800*	255 *840*	270 *890*	200 *660*	215 *710*	225 *740*	240 *790*
K4	— —	— —	— —	— —	95 *310*	105 *345*	110 *360*	120 *395*	215 *710*	235 *770*	245 *800*	255 *840*	190 *620*	205 *670*	215 *710*	225 *740*
K5	— —	— —	— —	— —	60 *195*	65 *215*	70 *230*	75 *245*	135 *445*	145 *475*	155 *510*	160 *520*	120 *395*	130 *425*	135 *445*	145 *475*
K6	— —	— —	— —	— —	85 *280*	90 *295*	100 *330*	105 *345*	190 *620*	205 *670*	215 *710*	225 *740*	165 *540*	180 *590*	190 *620*	200 *660*
K7	— —	— —	— —	— —	75 *245*	85 *280*	90 *295*	95 *310*	175 *570*	190 *620*	195 *640*	205 *670*	155 *510*	165 *540*	175 *570*	185 *610*
S1	37 *120*	41 *135*	43 *140*	47 *155*	33 *110*	37 *120*	39 *130*	42 *140*	— —	— —	— —	— —	37 *120*	41 *135*	43 *140*	47 *155*
S2	29 *95*	33 *110*	35 *115*	38 *125*	27 *90*	30 *100*	32 *105*	34 *110*	— —	— —	— —	— —	29 *95*	33 *110*	35 *115*	38 *125*
S3	26 *85*	29 *95*	31 *100*	33 *110*	24 *80*	26 *85*	28 *90*	30 *100*	— —	— —	— —	— —	26 *85*	29 *95*	31 *100*	33 *110*
S11	50 *165*	55 *180*	60 *195*	65 *215*	46 *150*	50 *165*	55 *180*	60 *195*	— —	— —	— —	— —	50 *165*	55 *180*	60 *195*	65 *215*
S12	35 *115*	39 *130*	41 *135*	44 *145*	32 *105*	35 *115*	37 *120*	40 *130*	— —	— —	— —	— —	35 *115*	39 *130*	41 *135*	44 *145*
S13	21 *70*	23 *75*	24 *80*	26 *85*	19 *60*	21 *70*	22 *70*	24 *80*	— —	— —	— —	— —	21 *70*	23 *75*	24 *80*	26 *85*
H5	— —	— —	— —	— —	29 *95*	32 *105*	34 *110*	36 *120*	— —	— —	— —	— —	33 *110*	37 *120*	39 *130*	42 *140*
H8	— —	— —	— —	— —	30 *100*	34 *110*	36 *120*	39 *130*	— —	— —	— —	— —	35 *115*	39 *130*	41 *135*	44 *145*
H11	— —	— —	— —	— —	36 *120*	41 *135*	43 *140*	46 *150*	— —	— —	— —	— —	42 *140*	47 *155*	49 *160*	55 *180*
H12	— —	— —	— —	— —	55 *180*	60 *195*	65 *215*	70 *230*	— —	— —	— —	— —	65 *215*	70 *230*	75 *245*	80 *260*

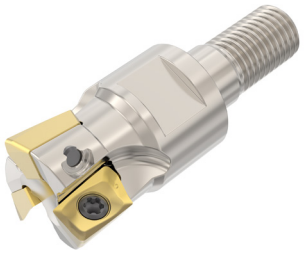


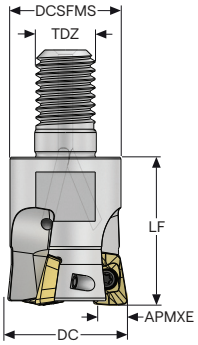
Fresa Turbo a penetrazione assiale (plunging)

Le frese Turbo Plunge possono essere utilizzate sia per la copiatura in tirata che per la copiatura in spinta in una direzione di avanzamento assiale, come nelle cavità profonde per gli utensili per stampi. Tutte le frese di questa famiglia includono l'adduzione refrigerante interna per ottimizzare la rimozione del truciolo.

– Dimensione dell'inserto 06, gamma frese 12-16 mm
– Dimensione dell'inserto 10, gamma frese 20-32 mm (0,75-1")
– Dimensione dell'inserto 12, gamma frese 25-63 mm (1")

R217.79-06 – In mm

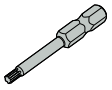




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 795–3, 796
—Per il programma inserti completo, vedere le pagine 904
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm	mm		mm		kg	
R217.79-0612.RE-06.3AN	02705857	Combimaster	12,0	3	3,0	11,0	M6	18,0	32000	0,1	XO..06
R217.79-0816.RE-06.3AN	02705859	Combimaster	16,0	3	3,0	13,5	M8	20,0	28000	0,1	XO..06

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T06PX50	C01804-T06P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.5NM	T00-06P05

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-06 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	a_{so}			
			100%	70%	50%	30%
P1	XOMX060204R-M05 F40M	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P2	XOMX060204R-M05 F40M	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P3	XOMX060204R-M05 F40M	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P4	XOMX060204R-M05 F40M	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P5	XOMX060204R-M05 F40M	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P6	XOMX060204R-M05 F40M	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P7	XOMX060204R-M05 F40M	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P8	XOMX060204R-M05 F40M	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P11	XOMX060204R-M05 MP3000	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
P12	XOMX060204R-M05 MP3000	0,044 *0.0017*	1,7 0.065	1,7 0.065	1,7 0.065	2,0 0.080
M1	XOMX060204R-M05 F40M	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
M2	XOMX060204R-M05 F40M	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
M3	XOMX060204R-M05 F40M	0,050 *0.0020*	1,7 0.065	1,7 0.065	1,7 0.065	2,0 0.080
M4	XOMX060204R-M05 F40M	0,046 *0.0018*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
M5	XOMX060204R-M05 F40M	0,046 *0.0018*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
K1	XOMX060204R-M05 MP3000	0,070 *0.0028*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K2	XOMX060204R-M05 MP3000	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K3	XOMX060204R-M05 MP3000	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K4	XOMX060204R-M05 MP3000	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K5	XOMX060204R-M05 MP3000	0,060 *0.0024*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K6	XOMX060204R-M05 MP3000	0,065 *0.0026*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
K7	XOMX060204R-M05 MP3000	0,060 *0.0024*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
N1	XOEX060204FR-E03 H15	0,075 *0.0030*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
N2	XOEX060204FR-E03 H15	0,075 *0.0030*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
N3	XOEX060204FR-E03 H15	0,075 *0.0030*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
N11	XOEX060204FR-E03 H15	0,075 *0.0030*	2,0 0.080	2,0 0.080	2,0 0.080	2,5 0.10
S1	XOMX060204R-M05 F40M	0,046 *0.0018*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
S2	XOMX060204R-M05 F40M	0,046 *0.0018*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
S3	XOMX060204R-M05 F40M	0,042 *0.0017*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
S11	XOMX060204R-M05 MS2050	0,050 *0.0020*	1,5 0.060	1,5 0.060	1,5 0.060	1,7 0.065
S12	XOMX060204R-M05 MS2050	0,050 *0.0020*	1,5 0.060	1,5 0.060	1,5 0.060	1,7 0.065
S13	XOMX060204R-M05 MS2050	0,046 *0.0018*	1,3 0.050	1,3 0.050	1,3 0.050	1,4 0.055
H5	XOMX060204R-M05 MP3000	0,044 *0.0017*	1,7 0.065	1,7 0.065	1,7 0.065	2,0 0.080
H8	XOMX060204R-M05 MP3000	0,034 *0.0013*	1,5 0.060	1,5 0.060	1,5 0.060	1,7 0.065
H11	XOMX060204R-M05 MP3000	0,044 *0.0017*	1,7 0.065	1,7 0.065	1,7 0.065	2,0 0.080
H12	XOMX060204R-M05 MP3000	0,034 *0.0013*	1,5 0.060	1,5 0.060	1,5 0.060	1,7 0.065

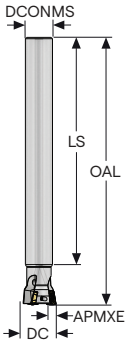
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.79-06 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051				F15M				F30M				MP3000				MS2050				F40M				H15				MM4500			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	—	—	—	—	—	—	—	—	240	270	285	300	325	360	380	400	280	310	325	340	275	295	305	315	—	—	—	—	245	270	280	295
	—	—	—	—	—	—	—	—	*790*	*890*	*940*	*980*	*1075*	*1175*	*1250*	*1300*	*920*	*1025*	*1075*	*1125*	*900*	*970*	*1000*	*1025*	—	—	—	—	*800*	*890*	*920*	*970*
P2	—	—	—	—	—	—	—	—	235	260	275	295	315	350	370	390	275	300	315	330	265	285	295	310	—	—	—	—	240	260	275	290
	—	—	—	—	—	—	—	—	*770*	*850*	*900*	*970*	*1025*	*1150*	*1225*	*1275*	*900*	*980*	*1025*	*1075*	*870*	*940*	*970*	*1025*	—	—	—	—	*790*	*850*	*900*	*950*
P3	—	—	—	—	—	—	—	—	205	225	240	255	270	300	315	335	235	260	270	285	230	245	255	265	—	—	—	—	205	225	235	250
	—	—	—	—	—	—	—	—	*670*	*740*	*790*	*840*	*890*	*980*	*1025*	*1100*	*770*	*850*	*890*	*940*	*750*	*800*	*840*	*870*	—	—	—	—	*670*	*740*	*770*	*820*
P4	—	—	—	—	—	—	—	—	180	200	215	225	245	270	285	300	215	235	245	255	210	225	235	250	—	—	—	—	200	220	230	240
	—	—	—	—	—	—	—	—	*590*	*660*	*710*	*740*	*800*	*890*	*940*	*980*	*710*	*770*	*800*	*840*	*690*	*740*	*770*	*820*	—	—	—	—	*660*	*720*	*750*	*790*
P5	440	490	510	550	—	—	—	—	175	195	205	215	235	260	270	290	205	220	235	245	195	210	220	230	—	—	—	—	175	190	200	210
	1450	*1600*	*1675*	*1800*	—	—	—	—	*570*	*640*	*670*	*710*	*770*	*850*	*890*	*950*	*670*	*720*	*770*	*800*	*640*	*690*	*720*	*750*	—	—	—	—	*570*	*620*	*660*	*690*
P6	495	550	580	610	—	—	—	—	195	215	230	245	265	290	305	325	230	250	260	275	220	240	245	255	—	—	—	—	195	215	225	240
	1625	*1800*	*1900*	*2000*	—	—	—	—	*640*	*710*	*750*	*800*	*870*	*950*	*1000*	*1075*	*750*	*820*	*850*	*900*	*720*	*790*	*800*	*840*	—	—	—	—	*640*	*710*	*740*	*790*
P7	465	520	550	580	—	—	—	—	185	205	215	230	250	275	290	305	215	235	245	260	210	225	235	240	—	—	—	—	185	205	215	225
	1525	*1700*	*1800*	*1900*	—	—	—	—	*610*	*670*	*710*	*750*	*820*	*900*	*950*	*1000*	*710*	*770*	*800*	*850*	*690*	*740*	*770*	*790*	—	—	—	—	*610*	*670*	*710*	*740*
P8	425	475	500	530	—	—	—	—	170	190	200	215	230	255	265	280	200	220	230	240	195	205	215	225	—	—	—	—	175	190	200	210
	1400	*1550*	*1650*	*1750*	—	—	—	—	*560*	*620*	*660*	*710*	*750*	*840*	*870*	*920*	*660*	*720*	*750*	*790*	*640*	*670*	*710*	*740*	—	—	—	—	*570*	*620*	*660*	*690*
P11	455	500	530	560	—	—	—	—	180	200	210	225	240	265	280	295	210	230	240	250	205	220	225	235	—	—	—	—	180	200	205	220
	1500	*1650*	*1750*	*1825*	—	—	—	—	*590*	*660*	*690*	*740*	*790*	*870*	*920*	*970*	*690*	*750*	*790*	*820*	*670*	*720*	*740*	*770*	—	—	—	—	*590*	*660*	*670*	*720*
P12	310	340	360	380	—	—	—	—	115	130	135	145	160	175	185	195	135	150	155	165	135	145	150	155	—	—	—	—	110	120	130	135
	1025	*1125*	*1175*	*1250*	—	—	—	—	*375*	*425*	*445*	*475*	*520*	*570*	*610*	*640*	*445*	*490*	*510*	*540*	*445*	*475*	*490*	*510*	—	—	—	—	*360*	*395*	*425*	*445*
M1	—	—	—	—	—	—	—	—	190	210	225	235	210	235	245	260	200	220	235	250	180	200	210	225	—	—	—	—	155	175	185	195
	—	—	—	—	—	—	—	—	*620*	*690*	*740*	*770*	*690*	*770*	*800*	*850*	*660*	*720*	*770*	*820*	*590*	*660*	*690*	*740*	—	—	—	—	*510*	*570*	*610*	*640*
M2	—	—	—	—	—	—	—	—	155	175	185	195	175	190	205	215	165	180	190	205	150	165	175	185	—	—	—	—	130	145	150	160
	—	—	—	—	—	—	—	—	*510*	*570*	*610*	*640*	*570*	*620*	*670*	*710*	*540*	*590*	*620*	*670*	*490*	*540*	*570*	*610*	—	—	—	—	*425*	*475*	*490*	*520*
M3	—	—	—	—	—	—	—	—	125	140	150	160	140	155	165	175	135	150	155	170	120	135	145	150	—	—	—	—	105	115	125	130
	—	—	—	—	—	—	—	—	*410*	*460*	*490*	*520*	*460*	*510*	*540*	*570*	*445*	*490*	*510*	*560*	*395*	*445*	*475*	*490*	—	—	—	—	*345*	*375*	*410*	*425*
M4	—	—	—	—	—	—	—	—	100	110	115	125	110	120	130	135	105	115	120	130	95	105	110	120	—	—	—	—	80	90	95	100
	—	—	—	—	—	—	—	—	*330*	*360*	*375*	*410*	*360*	*395*	*425*	*445*	*345*	*375*	*395*	*425*	*310*	*345*	*360*	*395*	—	—	—	—	*260*	*295*	*310*	*330*
M5	—	—	—	—	—	—	—	—	80	90	95	105	90	100	105	115	85	95	100	110	80	85	90	100	—	—	—	—	65	75	80	85
	—	—	—	—	—	—	—	—	*260*	*295*	*310*	*345*	*295*	*330*	*345*	*375*	*280*	*310*	*330*	*360*	*260*	*280*	*295*	*330*	—	—	—	—	*215*	*245*	*260*	*280*
K1	600	660	700	740	215	235	250	265	185	205	220	235	220	245	260	275	—	—	—	—	180	200	210	220	—	—	—	—	—	—	—	—
	1975	*2175*	*2300*	*2425*	*710*	*770*	*820*	*870*	*610*	*670*	*720*	*770*	*720*	*800*	*850*	*900*	—	—	—	—	*590*	*660*	*690*	*720*	—	—	—	—	—	—	—	—
K2	530	590	620	660	190	210	220	235	165	185	195	205	195	220	230	245	—	—	—	—	155	175	185	195	—	—	—	—	—	—	—	—
	1750	*1925*	*2025*	*2175*	*620*	*690*	*720*	*770*	*540*	*610*	*640*	*670*	*640*	*720*	*750*	*800*	—	—	—	—	*510*	*570*	*610*	*640*	—	—	—	—	—	—	—	—
K3	450	500	530	560	160	175	185	200	140	155	165	175	165	185	195	205	—	—	—	—	135	150	155	165	—	—	—	—	—	—	—	—
	1475	*1650*	*1750*	*1825*	*520*	*570*	*610*	*660*	*460*	*510*	*540*	*570*	*540*	*610*	*640*	*670*	—	—	—	—	*445*	*490*	*510*	*540*	—	—	—	—	—	—	—	—
K4	430	475	500	530	150	170	180	190	135	150	155	165	160	175	185	200	—	—	—	—	125	140	150	160	—	—	—	—	—	—	—	—
	1400	*1550*	*1650*	*1750*	*490*	*560*	*590*	*620*	*445*	*490*	*510*	*540*	*520*	*570*	*610*	*660*	—	—	—	—	*410*	*460*	*490*	*520*	—	—	—	—	—	—	—	—
K5	265	290	310	325	90	105	110	115	80	90	95	100	95	105	115	120	—	—	—	—	75	85	90	95	—	—	—	—	—	—	—	—
	870	*950*	*1025*	*1075*	*295*	*345*	*360*	*375*	*260*	*295*	*310*	*330*	*310*	*345*	*375*	*395*	—	—	—	—	*245*	*280*	*295*	*310*	—	—	—	—	—	—	—	—
K6	380	420	445	470	135	150	155	165	115	130	140	145	140	155	165	175	—	—	—	—	110	125	130	140	—	—	—	—	—	—	—	—
	1250	*1375*	*1450*	*1550*	*445*	*490*	*510*	*540*	*375*	*425*	*460*	*475*	*460*	*510*	*540*	*570*	—	—	—	—	*360*	*410*	*425*	*460*	—	—	—	—	—	—	—	—
K7	340	375	395	420	120	130	140	150	105	115	120	130	125	135	145	155	—	—	—	—	100	110	115	125	—	—	—	—	—	—	—	—
	1125	*1225*	*1300*	*1375*	*395*	*425*	*460*	*490*	*345*	*375*	*395*	*425*	*410*	*445*	*475*	*510*	—	—	—	—	*330*	*360*	*375*	*410*	—	—	—	—	—	—	—	—
N1	—	—	—	—	1575	1750	1850	1975	1375	1525	1625	1725	—	—	—	—	—	—	—	—	1325	1450	1550	1650	1400	1550	1650	1750	—	—	—	—
	—	—	—	—	*5175*	*5750*	*6075*	*6475*	*4500*	*5000*	*5325*	*5650*	—	—	—	—	—	—	—	—	*4350*	*4750*	*5075*	*5425*	*4600*	*5075*	*5425*	*5750*	—	—	—	—
N2	—	—	—	—	640	710	750	800	560	620	660	700	—	—	—	—	—	—	—	—	530	590	620	660	560	630	660	700	—	—	—	—
	—	—	—	—	*2100*	*2325*	*2450*	*2625*	*1825*	*2025*	*2175*	*2300*	—	—	—	—	—	—	—	—	*1750*	*1925*	*2025*	*2175*	*1825*	*2075*	*2175*	*2300*	—	—	—	—
N3	—	—	—	—	425	470	500	530	370	415	435	465	—	—	—	—	—	—	—	—	355	395	415	440	375	420	440	470	—	—	—	—
	—	—	—	—	*1400*	*1550*	*1650*	*1750*	*1225*	*1350*	*1425*	*1525*	—	—	—	—	—	—	—	—	*1175*	*1300*	*1350*	*1450*	*1225*	*1375*	*1450*	*1550*	—	—	—	—
N11	—	—	—	—	485	540	570	610	425	470	500	530	—	—	—	—	—	—	—	—	405	450	475	510	430	480	510	540	—	—	—	—
	—	—	—	—	*1600*	*1775*	*1875*	*2000*	*1400*	*1550*	*1650*	*1750*	—	—	—	—	—	—	—	—	*1325*	*1475*	*1550*	*1675*	*1400*	*1575*	*1675*	*1775*	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	55	55	60	44	49	50	55	—	—	—	—	25	27	29	31
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*180*	*180*	*195*	*145*	*160*	*165*	*180*	—	—	—	—	*80*	*90*	*95*	*100*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	43	45	49	35	39	41	44	—	—	—	—	20	22	23	25
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*140*	*150*	*160*	*115*	*130*	*135*	*145*	—	—	—	—	*65*	*70*	*75*	*80*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34	38	40	43	31	34	36	39	—	—	—	—	17	19	21	22
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*125*	*130*	*140*	*100*	*110*	*120*	*130*	—	—	—	—	*55*	*60*	*70*	*70*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	75	80	85	60	70	70	80	—	—	—	—	35	39	41	44
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*280*	*195*	*230*	*230*	*260*	—	—	—	—	*115*	*130*	*135*	*145*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	47	50	55	60	43	47	50	55	—	—	—	—	32	36	38	40
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*155*	*165*	*180*	*195*	*140*	*155*	*165*	*180*	—	—	—	—	*105*	*120*	*125*	*130*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	30	32	34	24	27	29	31	—	—	—	—	18	21	22	23
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*105*	*110*	*80*	*90*	*95*	*100*	—	—	—	—	*60*	*70*	*70*	*75*
H5	160	175	185	195	—	—	—	—	39	43	45	48	43	48	50	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	520	*570*	*610*	*640*	—	—	—	—	*130*	*140*	*150*	*155*	*140*	*155*	*165*	*180*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	170	185	195	210	—	—	—	—	41	46	48	50	46	50	55	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	560	*610*	*640*	*690*	—	—	—	—	*135*	*150*	*155*	*165*	*150*	*165*	*180*	*180*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	200	220	235	250	—	—	—	—	49	55	60	60	55	60	65	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	660	*720*	*770*	*820*	—	—	—	—	*160*	*180*	*195*	*195*	*180*	*195*	*215*	*230*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H12	195	215	230	240	—	—	—	—	75	80	85	90	85	95	105	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	640	*710*	*750*	*790*	—	—	—	—	*245*	*260*	*280*	*295*	*280*	*310*	*345*	*360*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

R217.79-10 – In mm

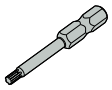




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 801-3, 803
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm		kg	
R217.79-1820.0-10-2A	02842051	Cilindrico	20,0	2	6,0	18,0	112,0	112,0	160,0	29000	0,3	XO.X10T3
R217.79-2025.0-10-3A	02842052	Cilindrico	25,0	3	6,0	20,0	150,0	150,0	200,0	26000	0,4	XO.X10T3
R217.79-2532.0-10-4A	02842053	Cilindrico	32,0	4	6,0	25,0	190,0	190,0	250,0	22900	0,9	XO.X10T3

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T07PX50	C02506-T07P

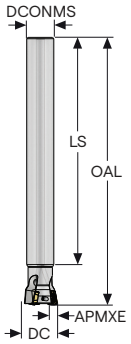
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-10 – Pollici

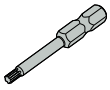




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 801-3, 803
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch		lb	
R217.79-00.75-0-10-2A	02844106	Cilindrico	0.750	2	0.236	0.625	4.724	4.724	6.299	29000	0.440	XO.X10T3
R217.79-01.00-0-10-3A	02844107	Cilindrico	1.000	3	0.236	0.750	5.906	5.906	7.874	15000	1.100	XO.X10T3

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T07PX50	C02506-T07P

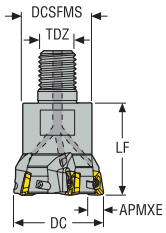
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-10 – In mm



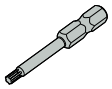


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 801-3, 803
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm	mm		mm		kg	
R217.79-1020.RE-10-2A	02842054	Combimaster	20,0	2	6,0	18,0	M10	28,0	29000	0,1	XO.X10T3
R217.79-1225.RE-10-3A	02842056	Combimaster	25,0	3	6,0	22,5	M12	30,0	26000	0,1	XO.X10T3
R217.79-1632.RE-10-4A	02842057	Combimaster	32,0	4	6,0	29,0	M16	40,0	22900	0,2	XO.X10T3
R217.79-1640.RE-10-5A	02842058	Combimaster	40,0	5	6,0	30,0	M16	40,0	15000	0,3	XO.X10T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T07PX50	C02506-T07P

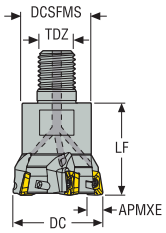
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-10 – Pollici



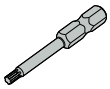


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 801-3, 803
—Per il programma inserti completo, vedere le pagine 905, 906
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			inch		inch	inch		inch		lb	
R217.79-1.00-12RE-10.3A	02844109	Combimaster	1.000	3	0.236	0.886	M12	1.181	15000	0.220	XO.X10T3

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T07PX50	C02506-T07P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-10 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	a_{so}			
			100%	70%	50%	30%
P1	XOMX10T308TR-ME07 F40M	0,10 *0.0040*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P2	XOMX10T308TR-ME07 F40M	0,10 *0.0040*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P3	XOMX10T308TR-ME07 MP2501	0,095 *0.0038*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P4	XOMX10T308TR-ME07 MP2501	0,095 *0.0038*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P5	XOMX10T308TR-M09 MP2501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P6	XOMX10T308TR-M09 MP2501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P7	XOMX10T308TR-M09 MP2501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P8	XOMX10T308TR-M09 MP2501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P11	XOMX10T308TR-M09 MP3501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
P12	XOMX10T308TR-M09 MS2500	0,080 *0.0032*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
M1	XOEX10T308R-M06 F40M	0,085 *0.0034*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
M2	XOEX10T308R-M06 F40M	0,080 *0.0032*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
M3	XOEX10T308R-M06 F40M	0,060 *0.0024*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
M4	XOEX10T308R-M06 MS2050	0,055 *0.0022*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
M5	XOEX10T308R-M06 MS2050	0,055 *0.0022*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
K1	XOMX10T308TR-M09 MK1501	0,13 *0.0050*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K2	XOMX10T308TR-M09 MK1501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K3	XOMX10T308TR-M09 MK1501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K4	XOMX10T308TR-M09 MK1501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K5	XOMX10T308TR-M09 MK1501	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K6	XOMX10T308TR-M09 MK1501	0,12 *0.0048*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
K7	XOMX10T308TR-M09 MK2050	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
N1	XOEX10T308FR-E05 H15	0,090 *0.0036*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
N2	XOEX10T308FR-E05 H15	0,090 *0.0036*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
N3	XOEX10T308FR-E05 H15	0,090 *0.0036*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
N11	XOEX10T308FR-E05 H15	0,090 *0.0036*	4,0 0.16	4,0 0.16	4,0 0.16	5,0 0.20
S1	XOEX10T308R-M06 F40M	0,055 *0.0022*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
S2	XOEX10T308R-M06 F40M	0,055 *0.0022*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
S3	XOEX10T308R-M06 F40M	0,050 *0.0020*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
S11	XOEX10T308R-M06 MS2050	0,060 *0.0024*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S12	XOEX10T308R-M06 MS2050	0,060 *0.0024*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S13	XOEX10T308R-M06 MS2050	0,055 *0.0022*	2,5 0.10	2,5 0.10	2,5 0.10	3,0 0.12
H5	XOMX10T308TR-M09 MH1051	0,080 *0.0032*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
H8	XOMX10T308TR-M09 MH1051	0,060 *0.0024*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
H11	XOMX10T308TR-M09 MP1501	0,080 *0.0032*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
H12	XOMX10T308TR-M09 MP1501	0,060 *0.0024*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217.79-10 – Parametri di taglio v_c = (m/min)/(sf/min)

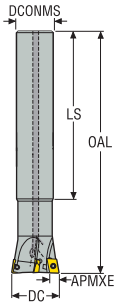
SMG	MH1051				MK2050				MP3000				MS2050				F40M				MP2051				MP2050				H15			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	—	—	—	—	240	265	280	300	235	260	275	295	260	290	300	320	205	220	230	240	330	365	390	415	280	310	330	350	—	—	—	—
	—	—	—	—	*790*	*870*	*920*	*980*	*770*	*850*	*900*	*970*	*850*	*950*	*980*	*1050*	*670*	*720*	*750*	*790*	*1075*	*1200*	*1275*	*1350*	*920*	*1025*	*1075*	*1150*	—	—	—	—
P2	—	—	—	—	235	260	275	290	230	255	270	285	255	280	295	310	200	215	225	235	320	355	380	405	275	305	320	340	—	—	—	—
	—	—	—	—	*770*	*850*	*900*	*950*	*750*	*840*	*890*	*940*	*840*	*920*	*970*	*1025*	*660*	*710*	*740*	*770*	*1050*	*1175*	*1250*	*1325*	*900*	*1000*	*1050*	*1125*	—	—	—	—
P3	—	—	—	—	205	230	245	260	205	230	240	255	225	245	260	270	180	190	200	210	285	320	335	360	240	265	280	300	—	—	—	—
	—	—	—	—	*670*	*750*	*800*	*850*	*670*	*750*	*790*	*840*	*740*	*800*	*850*	*890*	*590*	*620*	*660*	*690*	*940*	*1050*	*1100*	*1175*	*790*	*870*	*920*	*980*	—	—	—	—
P4	—	—	—	—	180	200	215	225	180	200	210	225	195	215	225	240	160	175	185	195	250	280	295	315	210	235	250	265	—	—	—	—
	—	—	—	—	*590*	*660*	*710*	*740*	*590*	*660*	*690*	*740*	*640*	*710*	*740*	*790*	*520*	*570*	*610*	*640*	*820*	*920*	*970*	*1025*	*690*	*770*	*820*	*870*	—	—	—	—
P5	310	340	360	385	175	195	205	215	175	190	200	215	190	205	215	230	150	160	170	175	240	270	285	300	200	225	235	250	—	—	—	—
	1025	*1125*	*1175*	*1275*	*570*	*640*	*670*	*710*	*570*	*620*	*660*	*710*	*620*	*670*	*710*	*750*	*490*	*520*	*560*	*570*	*790*	*890*	*940*	*980*	*660*	*740*	*770*	*820*	—	—	—	—
P6	345	385	405	435	195	215	230	245	195	215	225	240	215	235	250	260	170	180	190	195	280	310	330	350	230	255	270	285	—	—	—	—
	1125	*1275*	*1325*	*1425*	*640*	*710*	*750*	*800*	*640*	*710*	*740*	*790*	*710*	*770*	*820*	*850*	*560*	*590*	*620*	*640*	*920*	*1025*	*1075*	*1150*	*750*	*840*	*890*	*940*	—	—	—	—
P7	325	365	385	410	185	205	215	230	185	205	215	230	205	225	235	245	160	170	180	185	265	295	310	330	215	240	255	270	—	—	—	—
	1075	*1200*	*1275*	*1350*	*610*	*670*	*710*	*750*	*610*	*670*	*710*	*750*	*670*	*740*	*770*	*800*	*520*	*560*	*590*	*610*	*870*	*970*	*1025*	*1075*	*710*	*790*	*840*	*890*	—	—	—	—
P8	310	340	360	385	175	195	205	215	175	190	200	215	190	205	215	230	150	160	170	175	240	270	285	300	200	225	235	250	—	—	—	—
	1025	*1125*	*1175*	*1275*	*570*	*640*	*670*	*710*	*570*	*620*	*660*	*710*	*620*	*670*	*710*	*750*	*490*	*520*	*560*	*570*	*790*	*890*	*940*	*980*	*660*	*740*	*770*	*820*	—	—	—	—
P11	315	350	375	395	180	200	210	225	180	195	210	220	200	215	230	240	155	165	175	180	240	285	310	340	210	235	250	265	—	—	—	—
	1025	*1150*	*1225*	*1300*	*590*	*660*	*690*	*740*	*590*	*640*	*690*	*720*	*660*	*710*	*750*	*790*	*510*	*540*	*570*	*590*	*790*	*940*	*1025*	*1125*	*690*	*770*	*820*	*870*	—	—	—	—
P12	235	260	275	295	120	130	140	150	125	140	150	160	130	140	145	155	105	115	120	125	160	190	205	230	135	150	160	170	—	—	—	—
	770	*850*	*900*	*970*	*395*	*425*	*460*	*490*	*410*	*460*	*490*	*520*	*425*	*460*	*475*	*510*	*345*	*375*	*395*	*410*	*520*	*620*	*670*	*750*	*445*	*490*	*520*	*560*	—	—	—	—
M1	—	—	—	—	—	—	—	—	170	185	200	210	185	210	220	235	145	160	170	180	260	310	340	375	195	220	230	245	—	—	—	—
	—	—	—	—	—	—	—	—	*560*	*610*	*660*	*690*	*610*	*690*	*720*	*770*	*475*	*520*	*560*	*590*	*850*	*1025*	*1125*	*1225*	*640*	*720*	*750*	*800*	—	—	—	—
M2	—	—	—	—	—	—	—	—	140	155	165	175	155	170	180	190	120	135	140	150	220	260	285	315	160	180	190	200	—	—	—	—
	—	—	—	—	—	—	—	—	*460*	*510*	*540*	*570*	*510*	*560*	*590*	*620*	*395*	*445*	*460*	*490*	*720*	*850*	*940*	*1025*	*520*	*590*	*620*	*660*	—	—	—	—
M3	—	—	—	—	—	—	—	—	115	125	135	145	125	140	150	160	100	110	115	125	190	225	245	275	135	150	155	165	—	—	—	—
	—	—	—	—	—	—	—	—	*375*	*410*	*445*	*475*	*410*	*460*	*490*	*520*	*330*	*360*	*375*	*410*	*620*	*740*	*800*	*900*	*445*	*490*	*510*	*540*	—	—	—	—
M4	—	—	—	—	—	—	—	—	90	100	105	115	100	110	115	125	80	85	90	100	150	175	190	215	100	115	120	130	—	—	—	—
	—	—	—	—	—	—	—	—	*295*	*330*	*345*	*375*	*330*	*360*	*375*	*410*	*260*	*280*	*295*	*330*	*490*	*570*	*620*	*710*	*330*	*375*	*395*	*425*	—	—	—	—
M5	—	—	—	—	—	—	—	—	75	85	90	95	80	90	95	105	65	70	75	80	125	145	160	180	85	95	100	110	—	—	—	—
	—	—	—	—	—	—	—	—	*245*	*280*	*295*	*310*	*260*	*295*	*310*	*345*	*215*	*230*	*245*	*260*	*410*	*475*	*520*	*590*	*280*	*310*	*330*	*360*	—	—	—	—
K1	410	455	480	510	250	280	295	315	180	200	210	225	—	—	—	—	140	160	170	180	—	—	—	—	—	—	—	—	—	—	—	—
	1350	*1500*	*1575*	*1675*	*820*	*920*	*970*	*1025*	*590*	*660*	*690*	*740*	—	—	—	—	*460*	*520*	*560*	*590*	—	—	—	—	—	—	—	—	—	—	—	—
K2	370	415	440	465	225	250	265	280	160	175	185	200	—	—	—	—	125	140	150	160	—	—	—	—	—	—	—	—	—	—	—	—
	1225	*1350*	*1450*	*1525*	*740*	*820*	*870*	*920*	*520*	*570*	*610*	*660*	—	—	—	—	*410*	*460*	*490*	*520*	—	—	—	—	—	—	—	—	—	—	—	—
K3	315	350	370	395	190	210	225	235	135	150	155	165	—	—	—	—	105	120	125	135	—	—	—	—	—	—	—	—	—	—	—	—
	1025	*1150*	*1225*	*1300*	*620*	*690*	*740*	*770*	*445*	*490*	*510*	*540*	—	—	—	—	*345*	*395*	*410*	*445*	—	—	—	—	—	—	—	—	—	—	—	—
K4	300	335	355	375	180	200	215	225	130	140	150	160	—	—	—	—	100	115	120	130	—	—	—	—	—	—	—	—	—	—	—	—
	980	*1100*	*1175*	*1225*	*590*	*660*	*710*	*740*	*425*	*460*	*490*	*520*	—	—	—	—	*330*	*375*	*395*	*425*	—	—	—	—	—	—	—	—	—	—	—	—
K5	190	210	220	235	110	125	130	140	80	85	90	100	—	—	—	—	60	70	75	80	—	—	—	—	—	—	—	—	—	—	—	—
	620	*690*	*720*	*770*	*360*	*410*	*425*	*460*	*260*	*280*	*295*	*330*	—	—	—	—	*195*	*230*	*245*	*260*	—	—	—	—	—	—	—	—	—	—	—	—
K6	265	295	310	330	160	175	190	200	115	125	130	140	—	—	—	—	90	100	105	115	—	—	—	—	—	—	—	—	—	—	—	—
	870	*970*	*1025*	*1075*	*520*	*570*	*620*	*660*	*375*	*410*	*425*	*460*	—	—	—	—	*295*	*330*	*345*	*375*	—	—	—	—	—	—	—	—	—	—	—	—
K7	240	270	285	300	140	160	165	175	100	110	120	125	—	—	—	—	80	90	95	100	—	—	—	—	—	—	—	—	—	—	—	—
	790	*890*	*940*	*980*	*460*	*520*	*540*	*570*	*330*	*360*	*395*	*410*	—	—	—	—	*260*	*295*	*310*	*330*	—	—	—	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1050	1175	1250	1325	—	—	—	—	—	—	—	—	1300	1450	1525	1625
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*3450*	*3850*	*4100*	*4350*	—	—	—	—	—	—	—	—	*4275*	*4750*	*5000*	*5325*
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	425	475	500	530	—	—	—	—	—	—	—	—	520	580	610	650
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1400*	*1550*	*1650*	*1750*	—	—	—	—	—	—	—	—	*1700*	*1900*	*2000*	*2125*
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	285	315	335	355	—	—	—	—	—	—	—	—	350	390	410	435
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*940*	*1025*	*1100*	*1175*	—	—	—	—	—	—	—	—	*1150*	*1275*	*1350*	*1425*
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	325	360	380	405	—	—	—	—	—	—	—	—	400	445	470	495
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1075*	*1175*	*1250*	*1325*	—	—	—	—	—	—	—	—	*1300*	*1450*	*1550*	*1625*
S1	—	—	—	—	—	—	—	—	42	47	50	55	46	50	55	60	36	41	43	46	50	55	60	65	50	55	60	65	—	—	—	—
	—	—	—	—	—	—	—	—	*140*	*155*	*165*	*180*	*150*	*165*	*180*	*195*	*120*	*135*	*140*	*150*	*165*	*180*	*195*	*215*	*165*	*180*	*195*	*215*	—	—	—	—
S2	—	—	—	—	—	—	—	—	34	38	40	43	37	41	43	46	29	33	35	37	40	45	47	50	40	45	47	50	—	—	—	—
	—	—	—	—	—	—	—	—	*110*	*125*	*130*	*140*	*120*	*135*	*140*	*150*	*95*	*110*	*115*	*120*	*130*	*150*	*155*	*165*	*130*	*150*	*155*	*165*	—	—	—	—
S3	—	—	—	—	—	—	—	—	30	33	35	38	32	36	38	41	26	29	30	32	35	40	42	45	35	40	42	45	—	—	—	—
	—	—	—	—	—	—	—	—	*100*	*110*	*115*	*125*	*105*	*120*	*125*	*135*	*85*	*95*	*100*	*105*	*115*	*130*	*140*	*150*	*115*	*130*	*140*	*150*	—	—	—	—
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	70	75	80	50	55	60	65	70	80	85	90	70	80	85	90	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*230*	*245*	*260*	*165*	*180*	*195*	*215*	*230*	*260*	*280*	*295*	*230*	*260*	*280*	*295*	—	—	—	—
S12	—	—	—	—	—	—	—	—	—	—	—	—	44	50	50	55	35	39	41	44	49	55	55	60	49	55	55	60	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*145*	*165*	*165*	*180*	*115*	*130*	*135*	*145*	*160*	*180*	*180*	*195*	*160*	*180*	*180*	*195*	—	—	—	—
S13	—	—	—	—	—	—	—	—	—	—	—	—	26	29	30	32	20	23	24	26	28	31	33	35	28	31	33	35	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*95*	*100*	*105*	*65*	*75*	*80*	*85*	*90*	*100*	*110*	*115*	*90*	*100*	*110*	*115*	—	—	—	—
H5	120	135	140	150	41	45	48	50	36	40	42	45	—	—	—	—	30	34	36	38	—	—	—	—	—	—	—	—	—	—	—	—
	395	*445*	*460*	*490*	*135*	*150*	*155*	*165*	*120*	*130*	*140*	*150*	—	—	—	—	*100*	*110*	*120*	*125*	—	—	—	—	—	—	—	—	—	—	—	—
H8	135	150	160	170	44	49	50	55	38	43	45	48	—	—	—	—	33	37	39	41	—	—	—	—	—	—	—	—	—	—	—	—
	445	*490*	*520*	*560*	*145*	*160*	*165*	*180*	*125*	*140*	*150*	*155*	—	—	—	—	*110*	*120*	*130*	*135*	—	—	—	—	—	—	—	—	—	—	—	—
H11	155	170	180	190	50	60	60	65	45	50	55	55	—	—	—	—	39	43	46	49	105	125	135	150	50	55	60	65	—	—	—	—
	510	*560*	*590*	*620*	*165*	*195*	*195*	*215*	*150*	*165*	*180*	*180*	—	—	—	—	*130*	*140*	*150*	*160*	*345*	*410*	*445*	*490*	*165*	*180*	*195*	*215*	—	—	—	—
H12	160	175	185	200	75	85	90	95	75	80	85	95	—	—	—	—	60	65	70	75	100	120	130	145	85	95	105	110	—	—	—	—
	520	*570*	*610*	*660*	*245*	*280*	*295*	*310*	*245*	*260*	*280*	*310*	—	—	—	—	*195*	*215*	*230*	*245*	*330*	*395*	*425*	*475*	*280*	*310*	*345*	*360*	—	—	—	—

R217.79-10 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501				MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	—	—	—	—	350	380	395	415	340	370	385	405	325	355	370	390	300	330	340	360	190	210	220	235
	—	—	—	—	*1150*	*1250*	*1300*	*1350*	*1125*	*1225*	*1275*	*1325*	*1075*	*1175*	*1225*	*1275*	*980*	*1075*	*1125*	*1175*	*620*	*690*	*720*	*770*
P2	—	—	—	—	340	370	385	405	330	360	375	390	315	345	360	380	295	320	335	350	185	205	215	225
	—	—	—	—	*1125*	*1225*	*1275*	*1325*	*1075*	*1175*	*1225*	*1275*	*1025*	*1125*	*1175*	*1250*	*970*	*1050*	*1100*	*1150*	*610*	*670*	*710*	*740*
P3	—	—	—	—	300	325	340	355	295	320	330	350	280	305	320	335	260	285	295	310	165	180	190	200
	—	—	—	—	*980*	*1075*	*1125*	*1175*	*970*	*1050*	*1075*	*1150*	*920*	*1000*	*1050*	*1100*	*850*	*940*	*970*	*1025*	*540*	*590*	*620*	*660*
P4	—	—	—	—	265	285	300	315	260	280	290	305	245	270	280	295	230	250	260	270	155	175	180	190
	—	—	—	—	*870*	*940*	*980*	*1025*	*850*	*920*	*950*	*1000*	*800*	*890*	*920*	*970*	*750*	*820*	*850*	*890*	*510*	*570*	*590*	*620*
P5	—	—	—	—	255	275	285	300	245	265	280	290	235	255	270	280	220	240	250	260	140	155	160	170
	—	—	—	—	*840*	*900*	*940*	*980*	*800*	*870*	*920*	*950*	*770*	*840*	*890*	*920*	*720*	*790*	*820*	*850*	*460*	*510*	*520*	*560*
P6	—	—	—	—	285	310	320	335	275	300	315	330	265	290	300	315	245	265	280	290	155	170	180	190
	—	—	—	—	*940*	*1025*	*1050*	*1100*	*900*	*980*	*1025*	*1075*	*870*	*950*	*980*	*1025*	*800*	*870*	*920*	*950*	*510*	*560*	*590*	*620*
P7	—	—	—	—	270	290	305	315	260	285	295	310	250	270	285	300	235	250	265	275	145	160	170	180
	—	—	—	—	*890*	*950*	*1000*	*1025*	*850*	*940*	*970*	*1025*	*820*	*890*	*940*	*980*	*770*	*820*	*870*	*900*	*475*	*520*	*560*	*590*
P8	—	—	—	—	255	275	285	300	245	265	280	290	235	255	270	280	220	240	250	260	140	155	160	170
	—	—	—	—	*840*	*900*	*940*	*980*	*800*	*870*	*920*	*950*	*770*	*840*	*890*	*920*	*720*	*790*	*820*	*850*	*460*	*510*	*520*	*560*
P11	—	—	—	—	260	280	295	310	255	275	285	300	245	265	275	290	225	245	255	270	145	155	165	175
	—	—	—	—	*850*	*920*	*970*	*1025*	*840*	*900*	*940*	*980*	*800*	*870*	*900*	*950*	*740*	*800*	*840*	*890*	*475*	*510*	*540*	*570*
P12	—	—	—	—	175	190	195	205	170	185	195	205	165	180	185	195	155	165	175	180	100	105	115	120
	—	—	—	—	*570*	*620*	*640*	*670*	*560*	*610*	*640*	*670*	*540*	*590*	*610*	*640*	*510*	*540*	*570*	*590*	*330*	*345*	*375*	*395*
M1	—	—	—	—	—	—	—	—	170	190	200	215	185	205	220	230	160	175	190	200	125	140	145	155
	—	—	—	—	—	—	—	—	*560*	*620*	*660*	*710*	*610*	*670*	*720*	*750*	*520*	*570*	*620*	*660*	*410*	*460*	*475*	*510*
M2	—	—	—	—	—	—	—	—	140	160	165	175	155	170	180	190	130	145	155	165	105	115	120	130
	—	—	—	—	—	—	—	—	*460*	*520*	*540*	*570*	*510*	*560*	*590*	*620*	*425*	*475*	*510*	*540*	*345*	*375*	*395*	*425*
M3	—	—	—	—	—	—	—	—	115	130	135	145	125	140	150	160	110	120	125	135	85	95	100	105
	—	—	—	—	—	—	—	—	*375*	*425*	*445*	*475*	*410*	*460*	*490*	*520*	*360*	*395*	*410*	*445*	*280*	*310*	*330*	*345*
M4	—	—	—	—	—	—	—	—	90	105	110	115	100	110	120	125	85	95	100	110	65	75	80	85
	—	—	—	—	—	—	—	—	*295*	*345*	*360*	*375*	*330*	*360*	*395*	*410*	*280*	*310*	*330*	*360*	*215*	*245*	*260*	*280*
M5	—	—	—	—	—	—	—	—	75	85	90	95	85	95	100	105	70	80	85	90	55	65	65	70
	—	—	—	—	—	—	—	—	*245*	*280*	*295*	*310*	*280*	*310*	*330*	*345*	*230*	*260*	*280*	*295*	*180*	*215*	*215*	*230*
K1	305	385	435	500	345	370	390	405	335	360	380	395	205	230	240	255	295	320	335	350	—	—	—	—
	1000	*1275*	*1425*	*1650*	*1125*	*1225*	*1275*	*1325*	*1100*	*1175*	*1250*	*1300*	*670*	*750*	*790*	*840*	*970*	*1050*	*1100*	*1150*	—	—	—	—
K2	270	340	385	435	305	330	345	360	300	325	335	355	180	205	215	230	265	290	300	315	—	—	—	—
	890	*1125*	*1275*	*1425*	*1000*	*1075*	*1125*	*1175*	*980*	*1075*	*1100*	*1175*	*590*	*670*	*710*	*750*	*870*	*950*	*980*	*1025*	—	—	—	—
K3	205	240	260	285	260	280	295	305	255	275	285	300	155	170	180	195	225	245	255	265	—	—	—	—
	670	*790*	*850*	*940*	*850*	*920*	*970*	*1000*	*840*	*900*	*940*	*980*	*510*	*560*	*590*	*640*	*740*	*800*	*840*	*870*	—	—	—	—
K4	195	230	250	270	245	270	280	295	240	260	270	285	145	165	175	185	215	230	245	255	—	—	—	—
	640	*750*	*820*	*890*	*800*	*890*	*920*	*970*	*790*	*850*	*890*	*940*	*475*	*540*	*570*	*610*	*710*	*750*	*800*	*840*	—	—	—	—
K5	120	140	150	165	150	165	170	180	150	160	165	175	90	100	105	110	130	145	150	155	—	—	—	—
	395	*460*	*490*	*540*	*490*	*540*	*560*	*590*	*490*	*520*	*540*	*570*	*295*	*330*	*345*	*360*	*425*	*475*	*490*	*510*	—	—	—	—
K6	175	205	220	240	220	235	245	260	215	230	240	250	130	145	155	160	190	205	215	225	—	—	—	—
	570	*670*	*720*	*790*	*720*	*770*	*800*	*850*	*710*	*750*	*790*	*820*	*425*	*475*	*510*	*520*	*620*	*670*	*710*	*740*	—	—	—	—
K7	155	180	195	210	195	210	220	230	190	205	215	225	115	130	135	145	170	185	190	200	—	—	—	—
	510	*590*	*640*	*690*	*640*	*690*	*720*	*750*	*620*	*670*	*710*	*740*	*375*	*425*	*445*	*475*	*560*	*610*	*620*	*660*	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	49	55	60	60	40	45	47	50	21	23	24	26
	—	—	—	—	—	—	—	—	—	—	—	—	*160*	*180*	*195*	*195*	*130*	*150*	*155*	*165*	*70*	*75*	*80*	*85*
S2	—	—	—	—	—	—	—	—	—	—	—	—	39	44	46	50	32	36	38	41	17	18	20	21
	—	—	—	—	—	—	—	—	—	—	—	—	*130*	*145*	*150*	*165*	*105*	*120*	*125*	*135*	*55*	*60*	*65*	*70*
S3	—	—	—	—	—	—	—	—	—	—	—	—	34	38	41	44	28	32	33	36	15	16	17	18
	—	—	—	—	—	—	—	—	—	—	—	—	*110*	*125*	*135*	*145*	*90*	*105*	*110*	*120*	*49*	*50*	*55*	*60*
S11	—	—	—	—	—	—	—	—	—	—	—	—	65	75	80	85	55	60	65	70	28	31	33	36
	—	—	—	—	—	—	—	—	—	—	—	—	*215*	*245*	*260*	*280*	*180*	*195*	*215*	*230*	*90*	*100*	*110*	*120*
S12	—	—	—	—	—	—	—	—	—	—	—	—	46	50	55	60	38	42	45	48	26	29	31	33
	—	—	—	—	—	—	—	—	—	—	—	—	*150*	*165*	*180*	*195*	*125*	*140*	*150*	*155*	*85*	*95*	*100*	*110*
S13	—	—	—	—	—	—	—	—	—	—	—	—	27	31	32	35	23	25	27	28	15	17	18	19
	—	—	—	—	—	—	—	—	—	—	—	—	*90*	*100*	*105*	*115*	*75*	*80*	*90*	*90*	*49*	*55*	*60*	*60*
H5	—	—	—	—	45	50	55	55	—	—	—	—	39	44	46	50	35	39	41	44	—	—	—	—
	—	—	—	—	*150*	*165*	*180*	*180*	—	—	—	—	*130*	*145*	*150*	*165*	*115*	*130*	*135*	*145*	—	—	—	—
H8	—	—	—	—	49	55	60	60	—	—	—	—	43	48	50	55	38	42	45	48	—	—	—	—
	—	—	—	—	*160*	*180*	*195*	*195*	—	—	—	—	*140*	*155*	*165*	*180*	*125*	*140*	*150*	*155*	—	—	—	—
H11	—	—	—	—	60	65	70	70	—	—	—	—	50	55	60	65	44	50	50	55	—	—	—	—
	—	—	—	—	*195*	*215*	*230*	*230*	—	—	—	—	*165*	*180*	*195*	*215*	*145*	*165*	*165*	*180*	—	—	—	—
H12	—	—	—	—	90	100	105	110	—	—	—	—	85	95	100	105	70	75	80	85	—	—	—	—
	—	—	—	—	*295*	*330*	*345*	*360*	—	—	—	—	*280*	*310*	*330*	*345*	*230*	*245*	*260*	*280*	—	—	—	—

R217.79-XO12 – In mm

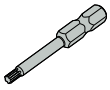




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 807-3, 809
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm		kg	
R217.79-2025.0-XO12-2AN	02732332	Cilindrico	25,0	2	7,0	20,0	150,0	150,0	200,0	20800	0,4	XO..1204
R217.79-2532.0-XO12-3AN	02732333	Cilindrico	32,0	3	7,0	25,0	194,0	194,0	250,0	18400	0,9	XO..1204

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T10PX50	C03507-T10P

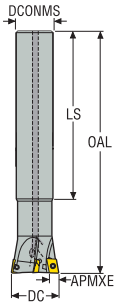
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-XO12 – Pollici

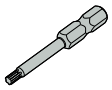




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 807-3, 809
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		lb	
R217.79-1.00.3-XO.2A	00097192	Weldon	1.000	2	0.276	0.750	6.858	5.906	5.906	7.874	20800	1.100	XO..1204

Parti di ricambio, comprese nella fornitura

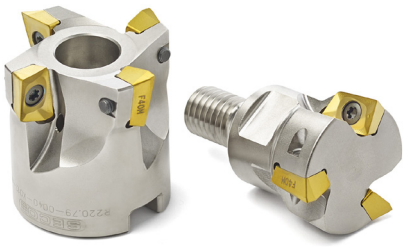
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T10PX50	C03507-T10P

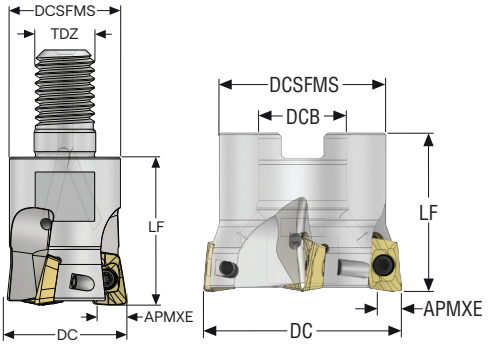
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.79-XO12 – In mm



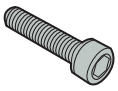
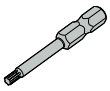


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 807-3, 809
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	TDZ	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm		mm		kg	
R220.79-0040-XO12-4AN	02732351	Manicotto	40,0	4	7,0	16,0	35,0	–	40,0	16400	0,3	XO..1204
R220.79-0050-XO12-4AN	02732353	Manicotto	50,0	4	7,0	22,0	42,0	–	40,0	14800	0,4	XO..1204
R220.79-0063-XO12-5AN	02732354	Manicotto	63,0	5	7,0	22,0	47,0	–	40,0	13200	0,6	XO..1204
R217.79-1225.RE-XO12-2AN	02732338	Combimaster	25,0	2	7,0	–	23,0	M12	30,0	20800	0,1	XO..1204
R217.79-1632.RE-XO12-3AN	02732344	Combimaster	32,0	3	7,0	–	30,0	M16	40,0	18400	0,2	XO..1204

Per gli steli Combimaster, vedere Machining Navigator, catalogo Sistemi di utensili

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R217.79-..	–	1/4HEX-T10PX50	C03507-T10P
R220.79-0040	MC6S8X30	1/4HEX-T10PX50	C03509-T10P
R220.79-0050-0063	220.17-692	1/4HEX-T10PX50	C03509-T10P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.79-XO12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	a_{so}			
			100%	70%	50%	30%
P1	XOMX120408TR-ME08 F40M	0,11 *0.0044*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P2	XOMX120408TR-ME08 F40M	0,11 *0.0044*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P3	XOMX120408TR-M12 MP2501	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P4	XOMX120408TR-M12 MP2501	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P5	XOMX120408TR-M12 MP2501	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P6	XOMX120408TR-M12 MP2501	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P7	XOMX120408TR-M12 MP2501	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P8	XOMX120408TR-M12 MP2501	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P11	XOMX120408TR-M12 MP3501	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
P12	XOEX120408R-M07 MS2500	0,080 *0.0032*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
M1	XOEX120408R-M07 F40M	0,13 *0.0050*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
M2	XOEX120408R-M07 F40M	0,12 *0.0048*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
M3	XOEX120408R-M07 F40M	0,095 *0.0038*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
M4	XOEX120408R-M07 MS2050	0,080 *0.0032*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
M5	XOEX120408R-M07 MS2050	0,080 *0.0032*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
K1	XOMX120408TR-M12 MK1501	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K2	XOMX120408TR-M12 MK1501	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K3	XOMX120408TR-M12 MK2050	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K4	XOMX120408TR-M12 MK2050	0,16 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K5	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K6	XOMX120408TR-MD13 MK2050	0,17 *0.0065*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
K7	XOMX120408TR-MD13 MK2050	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
N1	XOEX120408FR-E06 H15	0,13 *0.0050*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
N2	XOEX120408FR-E06 H15	0,13 *0.0050*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
N3	XOEX120408FR-E06 H15	0,13 *0.0050*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
N11	XOEX120408FR-E06 H15	0,13 *0.0050*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
S1	XOEX120408R-M07 MP3501	0,080 *0.0032*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S2	XOEX120408R-M07 MP3501	0,080 *0.0032*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S3	XOEX120408R-M07 MP3501	0,075 *0.0030*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
S11	XOEX120408R-M07 MS2050	0,095 *0.0038*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
S12	XOEX120408R-M07 MS2050	0,095 *0.0038*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
S13	XOEX120408R-M07 MS2050	0,080 *0.0032*	3,0 0.12	3,0 0.12	3,0 0.12	3,5 0.14
H5	XOMX120408TR-MD13 MH1051	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
H8	XOMX120408TR-MD13 MH1051	0,090 *0.0036*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16
H11	XOMX120408TR-MD13 MP1501	0,11 *0.0044*	4,0 0.16	4,0 0.16	4,0 0.16	4,5 0.18
H12	XOMX120408TR-MD13 MP1501	0,090 *0.0036*	3,5 0.14	3,5 0.14	3,5 0.14	4,0 0.16

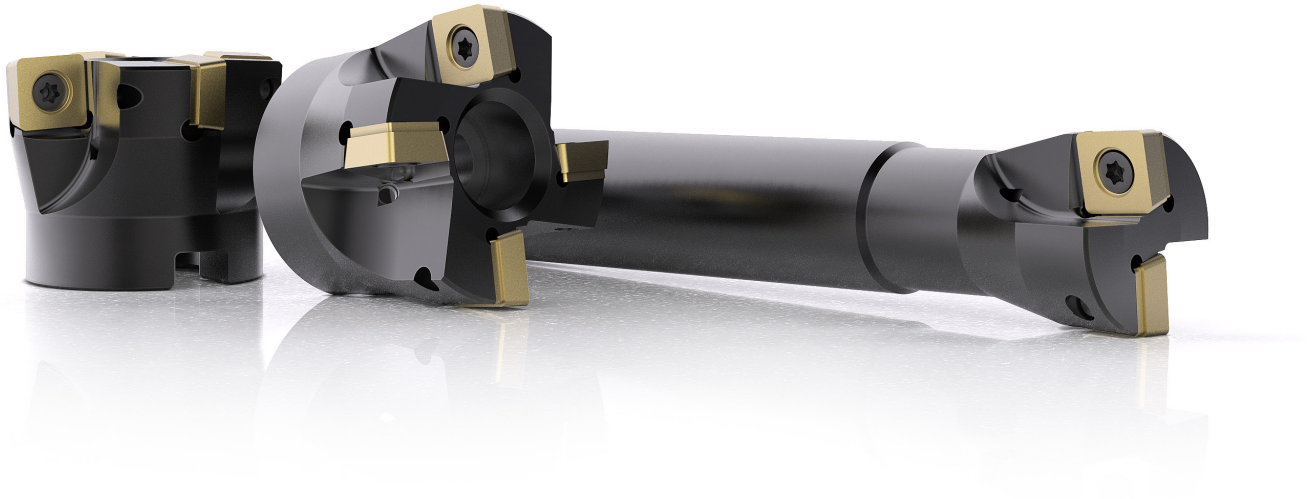
SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.79-XO12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MH1051				MK2050				F30M				MP3000				MS2050				F40M				MP2051				MP2050			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
M1	—	—	—	—	—	—	—	—	—	—	—	—	150	170	180	190	170	190	200	210	160	180	190	205	240	285	315	350	175	195	210	220
	—	—	—	—	—	—	—	—	—	—	—	—	*490*	*560*	*590*	*620*	*560*	*620*	*660*	*690*	*520*	*590*	*620*	*670*	*790*	*940*	*1025*	*1150*	*570*	*640*	*690*	*720*
M2	—	—	—	—	—	—	—	—	—	—	—	—	125	140	150	160	140	155	165	175	135	150	160	170	210	250	270	305	145	165	175	185
	—	—	—	—	—	—	—	—	—	—	—	—	*410*	*460*	*490*	*520*	*460*	*510*	*540*	*570*	*445*	*490*	*520*	*560*	*690*	*820*	*890*	*1000*	*475*	*540*	*570*	*610*
M3	—	—	—	—	—	—	—	—	—	—	—	—	105	115	120	130	115	130	135	145	110	120	125	135	175	210	230	260	120	135	140	150
	—	—	—	—	—	—	—	—	—	—	—	—	*345*	*375*	*395*	*425*	*375*	*425*	*445*	*475*	*360*	*395*	*410*	*445*	*570*	*690*	*750*	*850*	*395*	*445*	*460*	*490*
M4	—	—	—	—	—	—	—	—	—	—	—	—	80	90	95	105	90	100	105	115	85	95	100	105	145	170	185	210	95	105	110	120
	—	—	—	—	—	—	—	—	—	—	—	—	*260*	*295*	*310*	*345*	*295*	*330*	*345*	*375*	*280*	*310*	*330*	*345*	*475*	*560*	*610*	*690*	*310*	*345*	*360*	*395*
M5	—	—	—	—	—	—	—	—	—	—	—	—	70	75	80	85	75	85	90	95	70	80	85	90	120	140	155	175	80	90	95	100
	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*280*	*245*	*280*	*295*	*310*	*230*	*260*	*280*	*295*	*395*	*460*	*510*	*570*	*260*	*295*	*310*	*330*
K1	320	360	380	410	225	255	270	285	120	135	140	150	160	180	190	200	—	—	—	—	160	175	185	200	—	—	—	—	—	—	—	—
	1050	*1175*	*1250*	*1350*	*740*	*840*	*890*	*940*	*395*	*445*	*460*	*490*	*520*	*590*	*620*	*660*	—	—	—	—	*520*	*570*	*610*	*660*	—	—	—	—	—	—	—	—
K2	300	335	355	380	205	230	240	255	105	120	125	135	145	160	170	180	—	—	—	—	140	160	165	180	—	—	—	—	—	—	—	—
	980	*1100*	*1175*	*1250*	*670*	*750*	*790*	*840*	*345*	*395*	*410*	*445*	*475*	*520*	*560*	*590*	—	—	—	—	*460*	*520*	*540*	*590*	—	—	—	—	—	—	—	—
K3	255	285	300	325	175	195	205	220	90	100	105	115	120	135	145	155	—	—	—	—	120	135	140	150	—	—	—	—	—	—	—	—
	840	*940*	*980*	*1075*	*570*	*640*	*670*	*720*	*295*	*330*	*345*	*375*	*395*	*445*	*475*	*510*	—	—	—	—	*395*	*445*	*460*	*490*	—	—	—	—	—	—	—	—
K4	245	270	290	310	165	185	195	210	85	95	100	110	115	130	135	145	—	—	—	—	115	130	135	145	—	—	—	—	—	—	—	—
	800	*890*	*950*	*1025*	*540*	*610*	*640*	*690*	*280*	*310*	*330*	*360*	*375*	*425*	*445*	*475*	—	—	—	—	*375*	*425*	*445*	*475*	—	—	—	—	—	—	—	—
K5	160	175	185	200	100	115	120	130	55	60	65	65	70	80	85	90	—	—	—	—	70	75	80	85	—	—	—	—	—	—	—	—
	520	*570*	*610*	*660*	*330*	*375*	*395*	*425*	*180*	*195*	*215*	*215*	*230*	*260*	*280*	*295*	—	—	—	—	*230*	*245*	*260*	*280*	—	—	—	—	—	—	—	—
K6	215	240	255	270	145	160	170	185	75	85	90	95	105	115	120	130	—	—	—	—	100	110	120	125	—	—	—	—	—	—	—	—
	710	*790*	*840*	*890*	*475*	*520*	*560*	*610*	*245*	*280*	*295*	*310*	*345*	*375*	*395*	*425*	—	—	—	—	*330*	*360*	*395*	*410*	—	—	—	—	—	—	—	—
K7	200	225	240	255	130	145	155	165	70	75	80	85	90	105	110	115	—	—	—	—	90	100	105	110	—	—	—	—	—	—	—	—
	660	*740*	*790*	*840*	*425*	*475*	*510*	*540*	*230*	*245*	*260*	*280*	*295*	*345*	*360*	*375*	—	—	—	—	*295*	*330*	*345*	*360*	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1175	1300	1375	1475	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*3850*	*4275*	*4500*	*4850*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	470	530	560	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1550*	*1750*	*1825*	*1975*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	315	350	370	395	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1025*	*1150*	*1225*	*1300*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	360	400	425	455	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	*1175*	*1300*	*1400*	*1500*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	30	34	36	39	38	43	45	49	42	47	50	55	39	44	46	50	49	55	60	60	46	50	55	60
	—	—	—	—	—	—	—	—	*100*	*110*	*120*	*130*	*125*	*140*	*150*	*160*	*140*	*155*	*165*	*180*	*130*	*145*	*150*	*165*	*160*	*180*	*195*	*195*	*150*	*165*	*180*	*195*
S2	—	—	—	—	—	—	—	—	25	27	29	31	31	34	36	39	34	38	40	43	32	35	37	40	40	44	47	50	37	42	44	47
	—	—	—	—	—	—	—	—	*80*	*90*	*95*	*100*	*100*	*110*	*120*	*130*	*110*	*125*	*130*	*140*	*105*	*115*	*120*	*130*	*130*	*145*	*155*	*165*	*120*	*140*	*145*	*155*
S3	—	—	—	—	—	—	—	—	22	24	26	28	27	30	32	35	30	33	35	38	28	31	33	35	35	39	41	44	33	37	39	42
	—	—	—	—	—	—	—	—	*70*	*80*	*85*	*90*	*90*	*100*	*105*	*115*	*100*	*110*	*115*	*125*	*90*	*100*	*110*	*115*	*115*	*130*	*135*	*145*	*110*	*120*	*130*	*140*
S11	—	—	—	—	—	—	—	—	—	—	—	—	55	60	60	65	60	65	70	75	55	60	65	70	70	75	80	85	65	70	75	80
	—	—	—	—	—	—	—	—	—	—	—	—	*180*	*195*	*195*	*215*	*195*	*215*	*230*	*245*	*180*	*195*	*215*	*230*	*230*	*245*	*260*	*280*	*215*	*230*	*245*	*260*
S12	—	—	—	—	—	—	—	—	—	—	—	—	36	41	43	46	40	45	48	50	38	42	45	48	47	55	55	60	44	49	50	55
	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*135*	*140*	*150*	*130*	*150*	*155*	*165*	*125*	*140*	*150*	*155*	*155*	*180*	*180*	*195*	*145*	*160*	*165*	*180*
S13	—	—	—	—	—	—	—	—	—	—	—	—	22	24	25	27	24	27	28	30	22	25	26	28	28	31	33	35	26	29	31	33
	—	—	—	—	—	—	—	—	—	—	—	—	*70*	*80*	*80*	*90*	*80*	*90*	*90*	*100*	*70*	*80*	*85*	*90*	*90*	*100*	*110*	*115*	*85*	*95*	*100*	*110*
H5	105	115	120	130	—	—	—	—	26	29	31	33	33	37	39	42	—	—	—	—	33	37	39	42	—	—	—	—	—	—	—	—
	345	*375*	*395*	*425*	—	—	—	—	*85*	*95*	*100*	*110*	*110*	*120*	*130*	*140*	—	—	—	—	*110*	*120*	*130*	*140*	—	—	—	—	—	—	—	—
H8	115	130	135	145	—	—	—	—	28	31	33	36	35	39	42	45	—	—	—	—	36	40	42	45	—	—	—	—	—	—	—	—
	375	*425*	*445*	*475*	—	—	—	—	*90*	*100*	*110*	*120*	*115*	*130*	*140*	*150*	—	—	—	—	*120*	*130*	*140*	*150*	—	—	—	—	—	—	—	—
H11	130	145	155	165	—	—	—	—	33	37	39	42	42	47	50	55	—	—	—	—	43	48	50	55	105	125	135	150	48	55	55	60
	425	*475*	*510*	*540*	—	—	—	—	*110*	*120*	*130*	*140*	*140*	*155*	*165*	*180*	—	—	—	—	*140*	*155*	*165*	*180*	*345*	*410*	*445*	*490*	*155*	*180*	*180*	*195*
H12	135	150	160	170	70	80	85	90	50	55	60	65	65	75	80	85	—	—	—	—	65	70	75	80	100	120	130	145	80	90	95	105
	445	*490*	*520*	*560*	*230*	*260*	*280*	*295*	*165*	*180*	*195*	*215*	*215*	*245*	*260*	*280*	—	—	—	—	*215*	*230*	*245*	*260*	*330*	*395*	*425*	*475*	*260*	*295*	*310*	*345*

R217/220.79-XO12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	H15				MK1501				MP1501				MP2501				MS2500				MP3501				MM4500			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	—	—	—	—	—	—	—	—	310	335	355	370	300	325	340	360	345	375	390	415	320	345	360	380	200	220	235	250
	—	—	—	—	—	—	—	—	*1025*	*1100*	*1175*	*1225*	*980*	*1075*	*1125*	*1175*	*1125*	*1225*	*1275*	*1350*	*1050*	*1125*	*1175*	*1250*	*660*	*720*	*770*	*820*
P2	—	—	—	—	—	—	—	—	300	330	345	360	290	315	330	350	335	365	380	400	310	335	350	370	195	215	225	240
	—	—	—	—	—	—	—	—	*980*	*1075*	*1125*	*1175*	*950*	*1025*	*1075*	*1150*	*1100*	*1200*	*1250*	*1300*	*1025*	*1100*	*1150*	*1225*	*640*	*710*	*740*	*790*
P3	—	—	—	—	—	—	—	—	265	290	305	320	260	280	295	310	295	325	340	355	275	300	315	330	175	190	200	215
	—	—	—	—	—	—	—	—	*870*	*950*	*1000*	*1050*	*850*	*920*	*970*	*1025*	*970*	*1075*	*1125*	*1175*	*900*	*980*	*1025*	*1075*	*570*	*620*	*660*	*710*
P4	—	—	—	—	—	—	—	—	235	255	265	280	225	245	260	270	260	285	300	315	245	265	275	290	165	185	195	205
	—	—	—	—	—	—	—	—	*770*	*840*	*870*	*920*	*740*	*800*	*850*	*890*	*850*	*940*	*980*	*1025*	*800*	*870*	*900*	*950*	*540*	*610*	*640*	*670*
P5	—	—	—	—	—	—	—	—	225	245	255	270	215	235	245	260	250	270	285	300	230	250	265	275	145	160	170	180
	—	—	—	—	—	—	—	—	*740*	*800*	*840*	*890*	*710*	*770*	*800*	*850*	*820*	*890*	*940*	*980*	*750*	*820*	*870*	*900*	*475*	*520*	*560*	*590*
P6	—	—	—	—	—	—	—	—	260	280	295	310	250	270	285	300	280	305	320	335	260	285	295	310	165	180	190	205
	—	—	—	—	—	—	—	—	*850*	*920*	*970*	*1025*	*820*	*890*	*940*	*980*	*920*	*1000*	*1050*	*1100*	*850*	*940*	*970*	*1025*	*540*	*590*	*620*	*670*
P7	—	—	—	—	—	—	—	—	245	265	275	290	235	255	270	280	265	290	300	315	245	265	280	295	155	170	180	190
	—	—	—	—	—	—	—	—	*800*	*870*	*900*	*950*	*770*	*840*	*890*	*920*	*870*	*950*	*980*	*1025*	*800*	*870*	*920*	*970*	*510*	*560*	*590*	*620*
P8	—	—	—	—	—	—	—	—	225	245	255	270	215	235	245	260	250	270	285	300	230	250	265	275	145	160	170	180
	—	—	—	—	—	—	—	—	*740*	*800*	*840*	*890*	*710*	*770*	*800*	*850*	*820*	*890*	*940*	*980*	*750*	*820*	*870*	*900*	*475*	*520*	*560*	*590*
P11	—	—	—	—	—	—	—	—	235	255	270	285	230	250	260	275	255	280	295	310	240	260	270	285	150	165	175	185
	—	—	—	—	—	—	—	—	*770*	*840*	*890*	*940*	*750*	*820*	*850*	*900*	*840*	*920*	*970*	*1025*	*790*	*850*	*890*	*940*	*490*	*540*	*570*	*610*
P12	—	—	—	—	—	—	—	—	155	170	180	185	155	165	175	185	175	190	195	210	165	175	185	195	105	115	120	125
	—	—	—	—	—	—	—	—	*510*	*560*	*590*	*610*	*510*	*540*	*570*	*610*	*570*	*620*	*640*	*690*	*540*	*570*	*610*	*640*	*345*	*375*	*395*	*410*
M1	—	—	—	—	—	—	—	—	—	—	—	—	155	175	185	195	195	220	230	245	170	190	200	210	130	150	155	165
	—	—	—	—	—	—	—	—	—	—	—	—	*510*	*570*	*610*	*640*	*640*	*720*	*750*	*800*	*560*	*620*	*660*	*690*	*425*	*490*	*510*	*540*
M2	—	—	—	—	—	—	—	—	—	—	—	—	130	140	150	160	165	180	190	205	140	155	165	175	110	120	130	140
	—	—	—	—	—	—	—	—	—	—	—	—	*425*	*460*	*490*	*520*	*540*	*590*	*620*	*670*	*460*	*510*	*540*	*570*	*360*	*395*	*425*	*460*
M3	—	—	—	—	—	—	—	—	—	—	—	—	105	120	125	135	135	150	160	170	115	130	135	145	90	100	105	115
	—	—	—	—	—	—	—	—	—	—	—	—	*345*	*395*	*410*	*445*	*445*	*490*	*520*	*560*	*375*	*425*	*445*	*475*	*295*	*330*	*345*	*375*
M4	—	—	—	—	—	—	—	—	—	—	—	—	85	95	100	105	105	120	125	135	90	100	105	115	70	80	85	90
	—	—	—	—	—	—	—	—	—	—	—	—	*280*	*310*	*330*	*345*	*345*	*395*	*410*	*445*	*295*	*330*	*345*	*375*	*230*	*260*	*280*	*295*
M5	—	—	—	—	—	—	—	—	—	—	—	—	70	75	80	90	90	100	105	110	75	85	90	95	60	65	70	75
	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*295*	*295*	*330*	*345*	*360*	*245*	*280*	*295*	*310*	*195*	*215*	*230*	*245*
K1	—	—	—	—	285	365	415	480	305	330	345	365	295	320	335	355	215	240	255	275	315	340	355	375	—	—	—	—
	—	—	—	—	*940*	*1200*	*1350*	*1575*	*1000*	*1075*	*1125*	*1200*	*970*	*1050*	*1100*	*1175*	*710*	*790*	*840*	*900*	*1025*	*1125*	*1175*	*1225*	—	—	—	—
K2	—	—	—	—	255	325	370	425	270	295	310	325	260	285	300	315	195	215	225	245	280	305	320	335	—	—	—	—
	—	—	—	—	*840*	*1075*	*1225*	*1400*	*890*	*970*	*1025*	*1075*	*850*	*940*	*980*	*1025*	*640*	*710*	*740*	*800*	*920*	*1000*	*1050*	*1100*	—	—	—	—
K3	—	—	—	—	190	225	240	265	230	250	260	275	220	240	250	265	165	180	190	205	240	260	270	285	—	—	—	—
	—	—	—	—	*620*	*740*	*790*	*870*	*750*	*820*	*850*	*900*	*720*	*790*	*820*	*870*	*540*	*590*	*620*	*670*	*790*	*850*	*890*	*940*	—	—	—	—
K4	—	—	—	—	180	210	230	255	220	240	250	260	210	230	240	255	155	175	185	195	225	245	255	270	—	—	—	—
	—	—	—	—	*590*	*690*	*750*	*840*	*720*	*790*	*820*	*850*	*690*	*750*	*790*	*840*	*510*	*570*	*610*	*640*	*740*	*800*	*840*	*890*	—	—	—	—
K5	—	—	—	—	110	130	140	155	135	150	155	165	135	145	150	160	95	105	110	120	140	150	160	165	—	—	—	—
	—	—	—	—	*360*	*425*	*460*	*510*	*445*	*490*	*510*	*540*	*445*	*475*	*490*	*520*	*310*	*345*	*360*	*395*	*460*	*490*	*520*	*540*	—	—	—	—
K6	—	—	—	—	160	185	205	225	195	210	220	230	185	205	210	225	135	155	160	175	200	215	225	240	—	—	—	—
	—	—	—	—	*520*	*610*	*670*	*740*	*640*	*690*	*720*	*750*	*610*	*670*	*690*	*740*	*445*	*510*	*520*	*570*	*660*	*710*	*740*	*790*	—	—	—	—
K7	—	—	—	—	145	170	180	200	175	190	200	210	170	185	195	205	120	135	145	155	180	195	200	210	—	—	—	—
	—	—	—	—	*475*	*560*	*590*	*660*	*570*	*620*	*660*	*690*	*560*	*610*	*640*	*670*	*395*	*445*	*475*	*510*	*590*	*640*	*660*	*690*	—	—	—	—
N1	1200	1325	1400	1500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3925	*4350*	*4600*	*4925*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	480	540	570	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1575	*1775*	*1875*	*1975*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	320	355	375	405	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1050	*1175*	*1225*	*1325*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	365	410	430	460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1200	*1350*	*1400*	*1500*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	60	60	65	42	47	50	55	22	24	26	28
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*195*	*195*	*215*	*140*	*155*	*165*	*180*	*70*	*80*	*85*	*90*
S2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	46	49	55	34	38	40	43	18	20	21	22
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*140*	*150*	*160*	*180*	*110*	*125*	*130*	*140*	*60*	*65*	*70*	*70*
S3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36	41	43	46	30	33	35	38	15	17	18	20
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*135*	*140*	*150*	*100*	*110*	*115*	*125*	*49*	*55*	*60*	*65*
S11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	80	85	90	60	65	70	75	30	33	35	38
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*230*	*260*	*280*	*295*	*195*	*215*	*230*	*245*	*100*	*110*	*115*	*125*
S12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49	55	60	60	40	45	48	50	28	31	33	35
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*160*	*180*	*195*	*195*	*130*	*150*	*155*	*165*	*90*	*100*	*110*	*115*
S13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29	32	34	37	24	27	28	30	16	18	19	21
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*95*	*105*	*110*	*120*	*80*	*90*	*90*	*100*	*50*	*60*	*60*	*70*
H5	—	—	—	—	—	—	—	—	41	46	48	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*135*	*150*	*155*	*165*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	—	—	—	—	—	—	—	—	45	50	55	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*150*	*165*	*180*	*180*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	—	—	—	—	—	—	—	—	50	60	60	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*165*	*195*	*195*	*215*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H12	—	—	—	—	—	—	—	—	80	90	95	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	*260*	*295*	*310*	*330*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



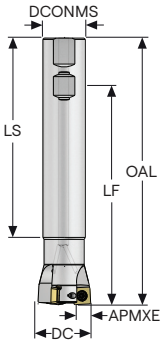
R217/220.79-12

I modelli R217/220.79 per inserti SCET12 sono frese per penetrazione assiale resistenti e robuste.

- Gamma di frese 32-160 mm (1,25-6")
- Profondità di taglio radiale massima: 11 mm (0,433")
- Gamma raggi di punta dell'inserto 1,2-3,1 mm (0,047-0,122")

R217.79-SC..12 – In mm

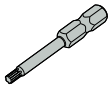




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 816-3, 817
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm	mm		kg	
R217.79-2532.3-12A	00097786	Weldon	32,0	2	11,0	25,0	168,0	144,0	144,0	200,0	12100	0,7	SC..1206
R217.79-3240.3-12A	00097787	Weldon	40,0	3	11,0	32,0	164,0	140,0	140,0	200,0	10800	1,2	SC..1206

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T20PX50	C45011-T20P

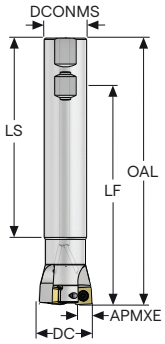
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217.79-SC..12 – Pollici

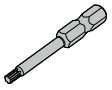




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 816-3, 817
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch	inch		lb	
R217.79-01.25-3-12A	00057587	Weldon	1.250	2	0.433	1.000	7.874	5.669	5.669	7.874	12100	1.760	SC..1206
R217.79-01.50-3-12A	00057588	Weldon	1.500	3	0.433	1.250	6.756	5.512	5.512	7.874	10800	2.430	SC..1206

Parti di ricambio, comprese nella fornitura

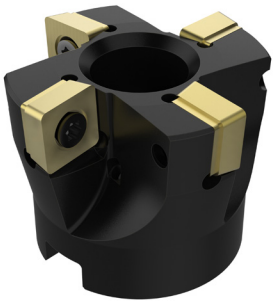
Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R217.79-..	1/4HEX-T20PX50	C45011-T20P

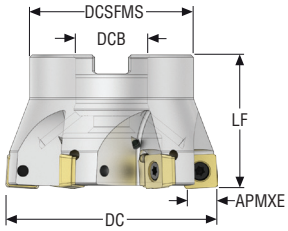
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.79-SC..12 – In mm

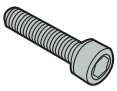
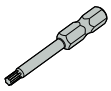




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 816-3, 817
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		kg	
R220.79-0050-12A	00030330	Manicotto	50,0	4	11,0	22,0	42,0	40,0	9700	0,2	SC..1206
R220.79-0063-12A	00030331	Manicotto	63,0	5	11,0	22,0	47,0	40,0	8600	0,5	SC..1206
R220.79-0080-12A	00030332	Manicotto	80,0	6	11,0	27,0	62,0	50,0	7600	0,9	SC..1206
R220.79-0100-12A	00030335	Manicotto	100,0	7	11,0	32,0	77,0	50,0	7000	1,6	SC..1206
R220.79-0125-12	00069980	Manicotto	125,0	8	11,0	40,0	90,0	63,0	6300	3,0	SC..1206

Parti di ricambio, comprese nella fornitura

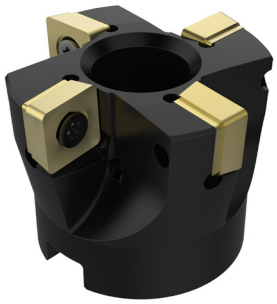
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.79-0050-0063	220.17-692	1/4HEX-T20PX50	C45011-T20P
R220.79-0080	–	1/4HEX-T20PX50	C45011-T20P
R220.79-0100-0125	–	1/4HEX-T20PX90	C45011-T20P

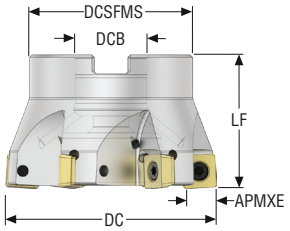
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	5804020	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.79-SC..12 – Pollici

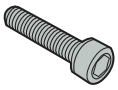
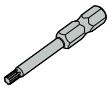




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 816-3, 817
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch		lb	
R220.79-02.00-12A	00039776	Manicotto	2.000	4	0.433	0.750	1.850	1.500	9700	0.880	SC..1206
R220.79-02.50-12A	00039777	Manicotto	2.500	5	0.433	0.750	1.850	1.500	8600	1.320	SC..1206
R220.79-03.00-12A	00039778	Manicotto	3.000	6	0.433	1.000	2.441	2.000	7600	2.650	SC..1206

Parti di ricambio, comprese nella fornitura

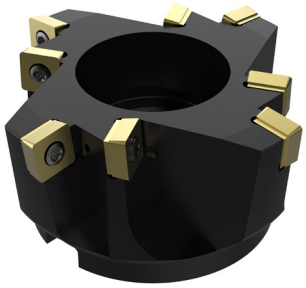
Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.79-02.00-02.50	UC6S3/8UNFX1	1/4HEX-T20PX50	C45011-T20P
R220.79-03.00	UC6S1/2UNFX1-1/4	1/4HEX-T20PX50	C45011-T20P

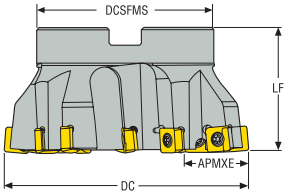
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R220.79-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R220.79-SC..12 – In mm

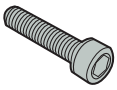
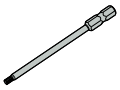




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 816-3, 817
—Per il programma inserti completo, vedere le pagine 880
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXE	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm		kg	
R220.79-0100-20	00045683	Manicotto	100,0	4	20,0	32,0	77,0	50,0	7000	1,3	SC..1206
R220.79-0125-30	00091797	Manicotto	125,0	4	30,0	40,0	90,0	63,0	6300	2,8	SC..1206
R220.79-8160-40	00094578	Manicotto	160,0	4	40,0	40,0	90,0	64,0	5600	4,1	SC..1206

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R220.79-0100	–	1/4HEX-T20PX90	C45011-T20P
R220.79-0125	MC6S20X40	1/4HEX-T20PX90	C45011-T20P
R220.79-8160	–	1/4HEX-T20PX90	C45011-T20P

Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.79-0100-0125	1/4HEX-S-HANDLE-0.8-5.0NM	5803216	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.79-0100-0125	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	5.0NM	T00-20P50
R220.79-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	5.0NM	T00-20P50

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.79-12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z	a_{so}			
			100%	70%	50%	30%
P1	SCET120612T-M14 MP3501	0,20 *0.0080*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P2	SCET120612T-M14 MP3501	0,20 *0.0080*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P3	SCET120612T-M14 MP2501	0,19 *0.0075*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P4	SCET120612T-M14 MP2501	0,19 *0.0075*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P5	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P6	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P7	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P8	SCET120612T-M14 MP2501	0,19 *0.0075*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P11	SCET120612T-M14 MP3501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
P12	SCET120612T-M14 MP2501	0,12 *0.0048*	6,0 0.24	6,0 0.24	6,0 0.24	7,0 0.28
M1	SCET120612T-M14 MS2050	0,20 *0.0080*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
M2	SCET120612T-M14 MS2050	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
M3	SCET120612T-M14 MS2050	0,15 *0.0060*	6,0 0.24	6,0 0.24	6,0 0.24	7,0 0.28
M4	SCET120612T-M14 MP3501	0,13 *0.0050*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
M5	SCET120612T-M14 MP3501	0,13 *0.0050*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
K1	SCET120612T-M14 MK1501	0,20 *0.0080*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K2	SCET120612T-M14 MK1501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K3	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K4	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K5	SCET120612T-M14 MP2501	0,16 *0.0065*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K6	SCET120612T-M14 MP2501	0,18 *0.0070*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
K7	SCET120612T-M14 MP2501	0,16 *0.0065*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
N1	SCET120612T-M14 F40M	0,25 *0.010*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
N2	SCET120612T-M14 F40M	0,25 *0.010*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
N3	SCET120612T-M14 F40M	0,25 *0.010*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
N11	SCET120612T-M14 F40M	0,25 *0.010*	8,0 0.32	8,0 0.32	8,0 0.32	9,0 0.36
S1	SCET120612T-M14 MP3501	0,13 *0.0050*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
S2	SCET120612T-M14 MP3501	0,13 *0.0050*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
S3	SCET120612T-M14 MP3501	0,12 *0.0048*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
S11	SCET120612T-M14 MS2050	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
S12	SCET120612T-M14 MS2050	0,15 *0.0060*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
S13	SCET120612T-M14 MS2050	0,13 *0.0050*	4,5 0.18	4,5 0.18	4,5 0.18	5,0 0.20
H5	SCET120612T-M14 MP3501	0,12 *0.0048*	6,0 0.24	6,0 0.24	6,0 0.24	7,0 0.28
H8	SCET120612T-M14 MP3501	0,095 *0.0038*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24
H11	SCET120612T-M14 MP3501	0,12 *0.0048*	6,0 0.24	6,0 0.24	6,0 0.24	7,0 0.28
H12	SCET120612T-M14 MP3501	0,095 *0.0038*	5,0 0.20	5,0 0.20	5,0 0.20	6,0 0.24

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.79-12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MS2050				F40M				HX				MK1501				MP2501				MP3501				T25M			
	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%	100%	70%	50%	30%
P1	185	205	215	230	170	185	195	205	135	150	155	170	—	—	—	—	290	315	330	350	255	280	290	310	185	205	215	230
	610	*670*	*710*	*750*	*560*	*610*	*640*	*670*	*445*	*490*	*510*	*560*	—	—	—	—	*950*	*1025*	*1075*	*1150*	*840*	*920*	*950*	*1025*	*610*	*670*	*710*	*750*
P2	180	200	210	225	165	180	190	200	130	145	155	165	—	—	—	—	285	310	325	340	250	270	285	300	180	200	210	225
	590	*660*	*690*	*740*	*540*	*590*	*620*	*660*	*425*	*475*	*510*	*540*	—	—	—	—	*940*	*1025*	*1075*	*1125*	*820*	*890*	*940*	*980*	*590*	*660*	*690*	*740*
P3	160	175	185	195	150	160	165	175	115	125	135	145	—	—	—	—	250	275	285	300	220	240	250	265	155	175	185	195
	520	*570*	*610*	*640*	*490*	*520*	*540*	*570*	*375*	*410*	*445*	*475*	—	—	—	—	*820*	*900*	*940*	*980*	*720*	*790*	*820*	*870*	*510*	*570*	*610*	*640*
P4	140	155	160	175	135	150	160	165	100	110	120	125	—	—	—	—	220	240	250	265	195	210	220	235	140	155	160	175
	460	*510*	*520*	*570*	*445*	*490*	*520*	*540*	*330*	*360*	*395*	*410*	—	—	—	—	*720*	*790*	*820*	*870*	*640*	*690*	*720*	*770*	*460*	*510*	*520*	*570*
P5	135	150	160	170	130	140	145	150	95	110	115	125	—	—	—	—	215	235	245	260	190	205	215	230	135	150	160	170
	445	*490*	*520*	*560*	*425*	*460*	*475*	*490*	*310*	*360*	*375*	*410*	—	—	—	—	*710*	*770*	*800*	*850*	*620*	*670*	*710*	*750*	*445*	*490*	*520*	*560*
P6	155	170	180	190	145	155	160	170	110	120	130	140	—	—	—	—	245	265	275	290	215	230	245	255	150	170	175	190
	510	*560*	*590*	*620*	*475*	*510*	*520*	*560*	*360*	*395*	*425*	*460*	—	—	—	—	*800*	*870*	*900*	*950*	*710*	*750*	*800*	*840*	*490*	*560*	*570*	*620*
P7	145	160	170	180	135	145	155	160	105	115	120	130	—	—	—	—	230	250	260	275	200	220	230	240	140	160	165	180
	475	*520*	*560*	*590*	*445*	*475*	*510*	*520*	*345*	*375*	*395*	*425*	—	—	—	—	*750*	*820*	*850*	*900*	*660*	*720*	*750*	*790*	*460*	*520*	*540*	*590*
P8	135	145	155	165	125	135	140	145	95	105	115	120	—	—	—	—	210	230	240	255	185	200	210	220	130	145	155	165
	445	*475*	*510*	*540*	*410*	*445*	*460*	*475*	*310*	*345*	*375*	*395*	—	—	—	—	*690*	*750*	*790*	*840*	*610*	*660*	*690*	*720*	*425*	*475*	*510*	*540*
P11	140	155	165	175	130	140	150	155	100	110	120	125	—	—	—	—	220	240	255	265	195	215	225	235	140	155	160	175
	460	*510*	*540*	*570*	*425*	*460*	*490*	*510*	*330*	*360*	*395*	*410*	—	—	—	—	*720*	*790*	*840*	*870*	*640*	*710*	*740*	*770*	*460*	*510*	*520*	*570*
P12	100	110	115	125	95	105	105	110	70	75	80	85	—	—	—	—	155	170	180	185	140	150	160	165	95	105	110	120
	330	*360*	*375*	*410*	*310*	*345*	*345*	*360*	*230*	*245*	*260*	*280*	—	—	—	—	*510*	*560*	*590*	*610*	*460*	*490*	*520*	*540*	*310*	*345*	*360*	*395*
M1	145	160	170	180	130	145	155	165	—	—	—	—	—	—	—	—	155	170	180	195	145	160	170	180	145	160	170	180
	475	*520*	*560*	*590*	*425*	*475*	*510*	*540*	—	—	—	—	—	—	—	—	*510*	*560*	*590*	*640*	*475*	*520*	*560*	*590*	*475*	*520*	*560*	*590*
M2	120	135	140	150	110	120	130	140	—	—	—	—	—	—	—	—	130	145	150	165	120	135	140	150	120	135	140	150
	395	*445*	*460*	*490*	*360*	*395*	*425*	*460*	—	—	—	—	—	—	—	—	*425*	*475*	*490*	*540*	*395*	*445*	*460*	*490*	*395*	*445*	*460*	*490*
M3	100	110	115	125	90	100	105	115	—	—	—	—	—	—	—	—	105	120	125	135	100	110	115	125	100	110	115	125
	330	*360*	*375*	*410*	*295*	*330*	*345*	*375*	—	—	—	—	—	—	—	—	*345*	*395*	*410*	*445*	*330*	*360*	*375*	*410*	*330*	*360*	*375*	*410*
M4	80	85	90	100	70	80	85	90	—	—	—	—	—	—	—	—	85	95	100	105	80	85	90	100	80	85	90	100
	260	*280*	*295*	*330*	*230*	*260*	*280*	*295*	—	—	—	—	—	—	—	—	*280*	*310*	*330*	*345*	*260*	*280*	*295*	*330*	*260*	*280*	*295*	*330*
M5	65	70	75	80	60	65	70	75	—	—	—	—	—	—	—	—	70	75	80	90	65	70	75	80	65	70	75	80
	215	*230*	*245*	*260*	*195*	*215*	*230*	*245*	—	—	—	—	—	—	—	—	*230*	*245*	*260*	*295*	*215*	*230*	*245*	*260*	*215*	*230*	*245*	*260*
K1	—	—	—	—	130	145	150	160	120	135	145	155	290	370	420	490	285	310	325	345	250	275	285	300	140	160	165	180
	—	—	—	—	*425*	*475*	*490*	*520*	*395*	*445*	*475*	*510*	*950*	*1225*	*1375*	*1600*	*940*	*1025*	*1075*	*1125*	*820*	*900*	*940*	*980*	*460*	*520*	*540*	*590*
K2	—	—	—	—	115	130	135	145	110	120	130	140	260	330	375	435	260	285	295	315	230	250	260	275	125	140	150	160
	—	—	—	—	*375*	*425*	*445*	*475*	*360*	*395*	*425*	*460*	*850*	*1075*	*1225*	*1425*	*850*	*940*	*970*	*1025*	*750*	*820*	*850*	*900*	*410*	*460*	*490*	*520*
K3	—	—	—	—	100	110	115	125	—	—	—	—	190	225	245	270	220	240	250	265	195	210	220	235	110	120	125	135
	—	—	—	—	*330*	*360*	*375*	*410*	—	—	—	—	*620*	*740*	*800*	*890*	*720*	*790*	*820*	*870*	*640*	*690*	*720*	*770*	*360*	*395*	*410*	*445*
K4	—	—	—	—	95	105	110	120	—	—	—	—	180	215	230	255	210	230	240	255	185	200	210	225	105	115	120	130
	—	—	—	—	*310*	*345*	*360*	*395*	—	—	—	—	*590*	*710*	*750*	*840*	*690*	*750*	*790*	*840*	*610*	*660*	*690*	*740*	*345*	*375*	*395*	*425*
K5	—	—	—	—	60	65	70	75	—	—	—	—	110	130	145	160	135	145	150	160	115	125	135	140	65	70	75	80
	—	—	—	—	*195*	*215*	*230*	*245*	—	—	—	—	*360*	*425*	*475*	*520*	*445*	*475*	*490*	*520*	*375*	*410*	*445*	*460*	*215*	*230*	*245*	*260*
K6	—	—	—	—	80	90	95	105	—	—	—	—	160	190	205	225	185	200	210	225	165	180	185	195	90	100	105	115
	—	—	—	—	*260*	*295*	*310*	*345*	—	—	—	—	*520*	*620*	*670*	*740*	*610*	*660*	*690*	*740*	*540*	*590*	*610*	*640*	*295*	*330*	*345*	*375*
K7	—	—	—	—	75	80	85	95	—	—	—	—	145	170	185	200	170	185	195	205	150	165	170	180	80	90	95	105
	—	—	—	—	*245*	*260*	*280*	*310*	—	—	—	—	*475*	*560*	*610*	*660*	*560*	*610*	*640*	*670*	*490*	*540*	*560*	*590*	*260*	*295*	*310*	*345*
N1	—	—	—	—	940	1050	1100	1175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*3075*	*3450*	*3600*	*3850*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	380	420	445	480	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*1250*	*1375*	*1450*	*1575*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	255	280	300	320	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*840*	*920*	*980*	*1050*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	290	320	340	365	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	*950*	*1050*	*1125*	*1200*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	36	40	43	46	33	37	39	42	—	—	—	—	—	—	—	—	—	—	—	—	36	40	43	46	—	—	—	—
	120	*130*	*140*	*150*	*110*	*120*	*130*	*140*	—	—	—	—	—	—	—	—	—	—	—	—	*120*	*130*	*140*	*150*	—	—	—	—
S2	29	33	34	37	27	30	31	34	—	—	—	—	—	—	—	—	—	—	—	—	29	33	34	37	—	—	—	—
	95	*110*	*110*	*120*	*90*	*100*	*100*	*110*	—	—	—	—	—	—	—	—	—	—	—	—	*95*	*110*	*110*	*120*	—	—	—	—
S3	26	29	30	33	23	26	28	30	—	—	—	—	—	—	—	—	—	—	—	—	26	29	30	33	—	—	—	—
	85	*95*	*100*	*110*	*75*	*85*	*90*	*100*	—	—	—	—	—	—	—	—	—	—	—	—	*85*	*95*	*100*	*110*	—	—	—	—
S11	50	55	60	65	45	50	55	55	—	—	—	—	—	—	—	—	—	—	—	—	50	55	60	65	—	—	—	—
	165	*180*	*195*	*215*	*150*	*165*	*180*	*180*	—	—	—	—	—	—	—	—	—	—	—	—	*165*	*180*	*195*	*215*	—	—	—	—
S12	35	39	41	44	31	35	37	40	—	—	—	—	—	—	—	—	—	—	—	—	35	39	41	44	—	—	—	—
	115	*130*	*135*	*145*	*100*	*115*	*120*	*130*	—	—	—	—	—	—	—	—	—	—	—	—	*115*	*130*	*135*	*145*	—	—	—	—
S13	20	23	24	26	19	21	22	24	—	—	—	—	—	—	—	—	—	—	—	—	20	23	24	26	—	—	—	—
	65	*75*	*80*	*85*	*60*	*70*	*70*	*80*	—	—	—	—	—	—	—	—	—	—	—	—	*65*	*75*	*80*	*85*	—	—	—	—
H5	—	—	—	—	28	31	33	36	23	25	27	29	—	—	—	—	—	—	—	—	32	36	38	41	—	—	—	—
	—	—	—	—	*90*	*100*	*110*	*120*	*75*	*80*	*90*	*95*	—	—	—	—	—	—	—	—	*105*	*120*	*125*	*135*	—	—	—	—
H8	—	—	—	—	30	34	36	38	24	27	29	31	—	—	—	—	—	—	—	—	35	39	41	44	—	—	—	—
	—	—	—	—	*100*	*110*	*120*	*125*	*80*	*90*	*95*	*100*	—	—	—	—	—	—	—	—	*115*	*130*	*135*	*145*	—	—	—	—
H11	—	—	—	—	36	40	42	45	29	32	34	36	—	—	—	—	—	—	—	—	41	46	49	50	—	—	—	—
	—	—	—	—	*120*	*130*	*140*	*150*	*95*	*105*	*110*	*120*	—	—	—	—	—	—	—	—	*135*	*150*	*160*	*165*	—	—	—	—
H12	—	—	—	—	55	60	65	70	44	49	50	55	—	—	—	—	—	—	—	—	65	70	75	80	—	—	—	—
	—	—	—	—	*180*	*195*	*215*	*230*	*145*	*160*	*165*	*180*	—	—	—	—	—	—	—	—	*215*	*230*	*245*	*260*	—	—	—	—



Frese per smussatura

Frese per smussatura Turbo 12, R217/220.49-XO12, per inserti XOMX12 con 2 taglienti e disponibili in numerose qualità per la maggior parte dei materiali da lavorare più comuni

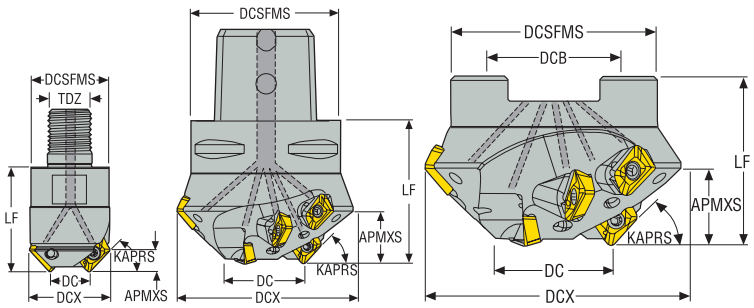
- Angolo di smusso 30°, 45°, 60° e 75°
- Profondità di taglio massima 31 mm (1,22”) con fresa a 75°
- Smussatura anteriore
- Disponibili con attacchi Combimaster, Seco-Capto o a manicotto

Frese per smussatura R215/220.49 per tipi di inserti SPMX06/09/12, 4 taglienti, inserti positivi monolaterali.

- Angolo di smusso 45° e 60°
- Smussatura anteriore e posteriore
- Disponibile con montaggio Weldon e a manicotto

R217/220.49-XO12 – In mm



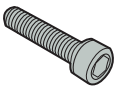


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 821-3, 823
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	KAPRS°	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	TDZ	DCONMS	LF	OAL	RPMX	Peso	Inserto
				mm	mm		mm	mm	mm		mm	mm	mm		kg	
C6-R217.49-032-15-XO12-30.3A	02669613	Seco-Capto	30,0 °	32,0	88,8	3	15,9	–	63,0	–	63,0	60,0	98,0	10900	1,6	XO.X1204
C6-R217.49-032-22-XO12-45.3A	02669615	Seco-Capto	45,0 °	32,0	76,4	3	22,5	–	63,0	–	63,0	60,0	98,0	11800	1,4	XO.X1204
C6-R217.49-032-28-XO12-60.3A	02669616	Seco-Capto	60,0 °	32,0	64,0	3	28,0	–	63,0	–	63,0	60,0	98,0	12900	1,3	XO.X1204
C5-R217.49-032-42-XO12-75.3A	02669617	Seco-Capto	75,0 °	32,0	54,1	3	42,5	–	50,0	–	50,0	70,0	100,0	14100	0,8	XO.X1204
R220.49-0035-15-XO12-30.3A	02669634	Manicotto	30,0 °	35,0	91,9	3	15,9	27,0	62,0	–	27,0	50,0	–	10700	1,1	XO.X1204
R220.49-0035-22-XO12-45.3A	02669637	Manicotto	45,0 °	35,0	79,4	3	22,5	27,0	62,0	–	27,0	50,0	–	11600	0,9	XO.X1204
R220.49-0035-28-XO12-60.3A	02669638	Manicotto	60,0 °	35,0	67,0	3	28,0	27,0	62,0	–	27,0	50,0	–	12600	0,7	XO.X1204
R220.49-0035-31-XO12-75.3A	02669639	Manicotto	75,0 °	35,0	51,5	3	31,0	22,0	47,0	–	22,0	50,0	–	14400	0,4	XO.X1204
R217.49-1616.RE-XO12-45.2A	02669571	Combimaster	45,0 °	16,0	30,8	2	8,0	–	30,0	M16	–	40,0	–	18600	0,3	XO.X1204
R217.49-1216.RE-XO12-60.2A	02669572	Combimaster	60,0 °	16,0	27,0	2	9,0	–	23,0	M12	–	30,0	–	20100	0,2	XO.X1204
R217.49-1620.RE-XO12-30.3A	02669573	Combimaster	30,0 °	20,0	39,8	3	5,5	–	30,0	M16	–	40,0	–	16400	0,3	XO.X1204
R217.49-1620.RE-XO12-45.3A	02669574	Combimaster	45,0 °	20,0	34,8	3	7,7	–	30,0	M16	–	40,0	–	17400	0,3	XO.X1204
R217.49-1620.RE-XO12-60.3A	02669575	Combimaster	60,0 °	20,0	30,5	3	9,0	–	30,0	M16	–	40,0	–	18400	0,3	XO.X1204
R217.49-1220.RE-XO12-75.2A	02669576	Combimaster	75,0 °	20,0	25,4	2	11,0	–	23,0	M12	–	30,0	–	20500	0,2	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 2,4 mm

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
Cx-R217.49 Ø 32 30/45/60/75°	–	H4B-T10P	C03509-T10P	DOUBLE-T
R217.49 Ø 16 45/60°	–	H4B-T10P	C03507-T10P	DOUBLE-T
R217.49 Ø 20 30/45°	–	H4B-T10P	C03509-T10P	DOUBLE-T
R217.49 Ø 20 60/75°	–	H4B-T10P	C03507-T10P	DOUBLE-T
R220.49-... 30/45/60°	MC6S12X35	H4B-T10P	C03509-T10P	DOUBLE-T
R220.49-...75°	MC6S10X40	H4B-T10P	C03509-T10P	DOUBLE-T

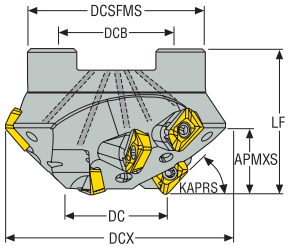
Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217/220.49-..	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.49-XO12 – Pollici



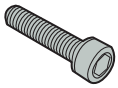


—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 821-3, 823
—Per il programma inserti completo, vedere le pagine 907, 908
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	KAPRS°	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RPMX	Peso	Inserto
				inch	inch		inch	inch	inch	inch	inch		lb	
R220.49-01.38-15-XO12-30.3A	02670045	Manicotto	30,0 °	1.378	3.618	3	0.626	1.000	2.441	1.000	1.969	14400	2.430	XO.X1204
R220.49-01.38-22-XO12-45.3A	02670048	Manicotto	45,0 °	1.378	3.126	3	0.886	1.000	2.441	1.000	1.969	14400	1.980	XO.X1204
R220.49-01.38-28-XO12-60.3A	02670049	Manicotto	60,0 °	1.378	2.638	3	1.110	1.000	2.441	1.000	1.969	14400	1.320	XO.X1204
R220.49-01.38-31-XO12-75.3A	02670051	Manicotto	75,0 °	1.378	2.028	3	1.244	0.750	1.850	0.750	1.969	14400	1.100	XO.X1204

Modifica dei corpi fresa necessaria per raggi di punta > 0,094"

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto	Chiave (impugnatura a T)
				
R220.49-... 30/45/60°	UC6S1/2UNFX1-1/2	H4B-T10P	C03509-T10P	DOUBLE-T
R220.49-...75°	UC6S3/8UNFX11/2	H4B-T10P	C03509-T10P	DOUBLE-T

Accessori

Per fresa	Coppia di serraggio inserto	Chiave dinamometrica
		
R217/220.49-..	3.0NM	T00-10P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.49-XO12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		50%	30%	10%
P1	XOMX120408TR-ME08 F40M	0,17 *0.0065*	0,20 0.0080	0,32 0.013
P2	XOMX120408TR-ME08 F40M	0,17 *0.0065*	0,20 0.0080	0,32 0.013
P3	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,46 0.018
P4	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,46 0.018
P5	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,44 0.017
P6	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,44 0.017
P7	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,44 0.017
P8	XOMX120408TR-M12 MP2501	0,24 *0.0095*	0,28 0.011	0,46 0.018
P11	XOMX120408TR-M12 MP3501	0,24 *0.0095*	0,28 0.011	0,44 0.017
P12	XOEX120408R-M07 MS2500	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
M1	XOEX120408R-M07 F40M	0,19 *0.0075*	0,22 0.0085	0,36 0.014
M2	XOEX120408R-M07 F40M	0,18 *0.0070*	0,20 0.0080	0,34 0.013
M3	XOEX120408R-M07 F40M	0,14 *0.0055*	0,16 0.0065	0,26 0.010
M4	XOEX120408R-M07 MS2050	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
M5	XOEX120408R-M07 MS2050	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
K1	XOMX120408TR-M12 MK1501	0,26 *0.010*	0,30 0.012	0,48 0.019
K2	XOMX120408TR-M12 MK1501	0,24 *0.0095*	0,28 0.011	0,44 0.017
K3	XOMX120408TR-M12 MK2050	0,24 *0.0095*	0,28 0.011	0,44 0.017
K4	XOMX120408TR-M12 MK2050	0,24 *0.0095*	0,28 0.011	0,44 0.017
K5	XOMX120408TR-M12 MK2050	0,22 *0.0085*	0,25 0.010	0,40 0.016
K6	XOMX120408TR-M12 MK2050	0,24 *0.0095*	0,28 0.011	0,44 0.017
K7	XOMX120408TR-M12 MK2050	0,22 *0.0085*	0,25 0.010	0,40 0.016
N1	XOEX120408FR-E06 H15	0,19 *0.0075*	0,22 0.0085	0,36 0.014
N2	XOEX120408FR-E06 H15	0,19 *0.0075*	0,22 0.0085	0,36 0.014
N3	XOEX120408FR-E06 H15	0,19 *0.0075*	0,22 0.0085	0,36 0.014
N11	XOEX120408FR-E06 H15	0,19 *0.0075*	0,22 0.0085	0,36 0.014
S1	XOEX120408R-M07 F40M	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
S2	XOEX120408R-M07 F40M	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
S3	XOEX120408R-M07 F40M	0,11 *0.0044*	0,13 0.0050	0,20 0.0080
S11	XOEX120408R-M07 MS2050	0,14 *0.0055*	0,16 0.0065	0,25 0.010
S12	XOEX120408R-M07 MS2050	0,14 *0.0055*	0,16 0.0065	0,25 0.010
S13	XOEX120408R-M07 MS2050	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
H5	XOMX120408TR-M12 MP3000	0,16 *0.0065*	0,18 0.0070	0,30 0.012
H8	XOMX120408TR-M12 MP3000	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
H11	XOMX120408TR-MD13 MP1501	0,17 *0.0065*	0,20 0.0080	0,32 0.013
H12	XOMX120408TR-M12 MP1501	0,12 *0.0048*	0,14 0.0055	0,22 0.0085
H21	XOMX120408TR-M12 MP1501	0,12 *0.0048*	0,14 0.0055	0,22 0.0085

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

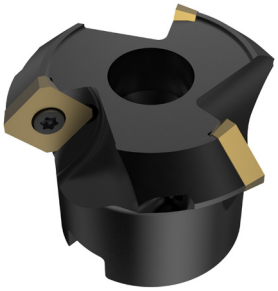
R217/220.49-XO12 – Parametri di taglio v_c = (m/min)/(sf/min)

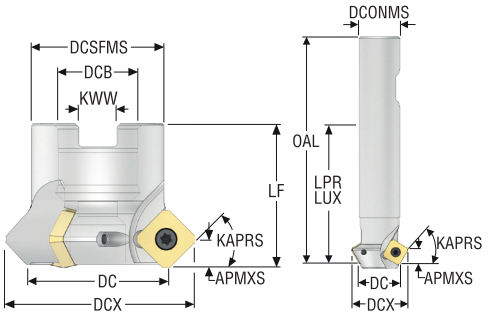
SMG	MH1051			MK2050			MP3000			MS2050			F40M			MP2051			MP2050			H15		
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%
P1	—	—	—	315	355	430	395	440	520	340	375	440	315	345	395	500	540	630	370	415	495	—	—	—
	—	—	—	*1025*	*1175*	*1400*	*1300*	*1450*	*1700*	*1125*	*1225*	*1450*	*1025*	*1125*	*1300*	*1650*	*1775*	*2075*	*1225*	*1350*	*1625*	—	—	—
P2	—	—	—	310	345	410	375	430	500	325	365	425	300	335	375	470	530	620	355	400	480	—	—	—
	—	—	—	*1025*	*1125*	*1350*	*1225*	*1400*	*1650*	*1075*	*1200*	*1400*	*980*	*1100*	*1225*	*1550*	*1750*	*2025*	*1175*	*1300*	*1575*	—	—	—
P3	—	—	—	270	305	360	330	370	440	285	315	370	265	285	330	420	465	530	310	345	415	—	—	—
	—	—	—	*890*	*1000*	*1175*	*1075*	*1225*	*1450*	*940*	*1025*	*1225*	*870*	*940*	*1075*	*1375*	*1525*	*1750*	*1025*	*1125*	*1350*	—	—	—
P4	—	—	—	235	265	320	290	330	395	250	280	330	245	270	315	370	410	470	275	310	375	—	—	—
	—	—	—	*770*	*870*	*1050*	*950*	*1075*	*1300*	*820*	*920*	*1075*	*800*	*890*	*1025*	*1225*	*1350*	*1550*	*900*	*1025*	*1225*	—	—	—
P5	420	490	590	230	255	305	285	315	380	245	270	315	230	245	285	355	390	450	270	295	360	—	—	—
	1375	*1600*	*1925*	*750*	*840*	*1000*	*940*	*1025*	*1250*	*800*	*890*	*1025*	*750*	*800*	*940*	*1175*	*1275*	*1475*	*890*	*970*	*1175*	—	—	—
P6	475	550	670	260	285	345	320	355	425	275	300	355	255	275	320	400	435	500	300	335	400	—	—	—
	1550	*1800*	*2200*	*850*	*940*	*1125*	*1050*	*1175*	*1400*	*900*	*980*	*1175*	*840*	*900*	*1050*	*1300*	*1425*	*1650*	*980*	*1100*	*1300*	—	—	—
P7	445	520	630	245	270	325	305	335	400	260	285	335	240	260	300	380	410	475	285	315	380	—	—	—
	1450	*1700*	*2075*	*800*	*890*	*1075*	*1000*	*1100*	*1300*	*850*	*940*	*1100*	*790*	*850*	*980*	*1250*	*1350*	*1550*	*940*	*1025*	*1250*	—	—	—
P8	410	465	580	225	255	300	280	310	370	240	265	310	220	240	275	350	390	450	260	290	350	—	—	—
	1350	*1525*	*1900*	*740*	*840*	*980*	*920*	*1025*	*1225*	*790*	*870*	*1025*	*720*	*790*	*900*	*1150*	*1275*	*1475*	*850*	*950*	*1150*	—	—	—
P11	435	500	610	240	260	315	295	325	390	255	275	325	235	255	290	390	450	590	275	305	370	—	—	—
	1425	*1650*	*2000*	*790*	*850*	*1025*	*970*	*1075*	*1275*	*840*	*900*	*1075*	*770*	*840*	*950*	*1275*	*1475*	*1925*	*900*	*1000*	*1225*	—	—	—
P12	310	345	425	155	170	210	190	210	250	160	180	210	150	165	190	235	270	345	175	195	240	—	—	—
	1025	*1125*	*1400*	*510*	*560*	*690*	*620*	*690*	*820*	*520*	*590*	*690*	*490*	*540*	*620*	*770*	*890*	*1125*	*570*	*640*	*790*	—	—	—
M1	—	—	—	—	—	—	255	290	345	245	275	325	220	250	295	435	520	680	255	290	340	—	—	—
	—	—	—	—	—	—	*840*	*950*	*1125*	*800*	*900*	*1075*	*720*	*820*	*970*	*1425*	*1700*	*2225*	*840*	*950*	*1125*	—	—	—
M2	—	—	—	—	—	—	215	240	290	205	225	275	185	205	250	370	430	560	215	235	285	—	—	—
	—	—	—	—	—	—	*710*	*790*	*950*	*670*	*740*	*900*	*610*	*670*	*820*	*1225*	*1400*	*1825*	*710*	*770*	*940*	—	—	—
M3	—	—	—	—	—	—	170	190	230	160	180	220	145	165	200	290	330	430	170	190	230	—	—	—
	—	—	—	—	—	—	*560*	*620*	*750*	*520*	*590*	*720*	*475*	*540*	*660*	*950*	*1075*	*1400*	*560*	*620*	*750*	—	—	—
M4	—	—	—	—	—	—	130	145	175	125	140	170	115	125	155	215	240	315	130	145	175	—	—	—
	—	—	—	—	—	—	*425*	*475*	*570*	*410*	*460*	*560*	*375*	*410*	*510*	*710*	*790*	*1025*	*425*	*475*	*570*	—	—	—
M5	—	—	—	—	—	—	110	120	150	105	115	140	95	105	125	180	200	260	110	120	145	—	—	—
	—	—	—	—	—	—	*360*	*395*	*490*	*345*	*375*	*460*	*310*	*345*	*410*	*590*	*660*	*850*	*360*	*395*	*475*	—	—	—
K1	550	650	780	330	375	440	270	305	365	—	—	—	215	245	290	—	—	—	—	—	—	—	—	—
	1800	*2125*	*2550*	*1075*	*1225*	*1450*	*890*	*1000*	*1200*	—	—	—	*710*	*800*	*950*	—	—	—	—	—	—	—	—	—
K2	510	590	720	300	330	395	245	270	325	—	—	—	195	215	260	—	—	—	—	—	—	—	—	—
	1675	*1925*	*2350*	*980*	*1075*	*1300*	*800*	*890*	*1075*	—	—	—	*640*	*710*	*850*	—	—	—	—	—	—	—	—	—
K3	430	500	610	255	280	335	205	230	275	—	—	—	165	185	220	—	—	—	—	—	—	—	—	—
	1400	*1650*	*2000*	*840*	*920*	*1100*	*670*	*750*	*900*	—	—	—	*540*	*610*	*720*	—	—	—	—	—	—	—	—	—
K4	410	475	580	240	265	320	200	220	265	—	—	—	160	175	210	—	—	—	—	—	—	—	—	—
	1350	*1550*	*1900*	*790*	*870*	*1050*	*660*	*720*	*870*	—	—	—	*520*	*570*	*690*	—	—	—	—	—	—	—	—	—
K5	260	300	355	145	165	200	120	135	160	—	—	—	95	105	130	—	—	—	—	—	—	—	—	—
	850	*980*	*1175*	*475*	*540*	*660*	*395*	*445*	*520*	—	—	—	*310*	*345*	*425*	—	—	—	—	—	—	—	—	—
K6	365	420	510	210	235	285	175	195	235	—	—	—	140	155	185	—	—	—	—	—	—	—	—	—
	1200	*1375*	*1675*	*690*	*770*	*940*	*570*	*640*	*770*	—	—	—	*460*	*510*	*610*	—	—	—	—	—	—	—	—	—
K7	335	385	455	185	210	255	155	170	205	—	—	—	125	135	165	—	—	—	—	—	—	—	—	—
	1100	*1275*	*1500*	*610*	*690*	*840*	*510*	*560*	*670*	—	—	—	*410*	*445*	*540*	—	—	—	—	—	—	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	1625	1800	2150	—	—	—	—	—	—	1750	1925	2325
	—	—	—	—	—	—	—	—	—	—	—	—	*5325*	*5900*	*7050*	—	—	—	—	—	—	*5750*	*6325*	*7625*
N2	—	—	—	—	—	—	—	—	—	—	—	—	650	720	870	—	—	—	—	—	—	700	780	940
	—	—	—	—	—	—	—	—	—	—	—	—	*2125*	*2350*	*2850*	—	—	—	—	—	—	*2300*	*2550*	*3075*
N3	—	—	—	—	—	—	—	—	—	—	—	—	435	480	580	—	—	—	—	—	—	470	520	630
	—	—	—	—	—	—	—	—	—	—	—	—	*1425*	*1575*	*1900*	—	—	—	—	—	—	*1550*	*1700*	*2075*
N11	—	—	—	—	—	—	—	—	—	—	—	—	500	550	660	—	—	—	—	—	—	540	600	720
	—	—	—	—	—	—	—	—	—	—	—	—	*1650*	*1800*	*2175*	—	—	—	—	—	—	*1775*	*1975*	*2350*
S1	—	—	—	—	—	—	—	—	—	60	65	80	55	60	70	70	75	90	65	70	85	—	—	—
	—	—	—	—	—	—	—	—	—	*195*	*215*	*260*	*180*	*195*	*230*	*230*	*245*	*295*	*215*	*230*	*280*	—	—	—
S2	—	—	—	—	—	—	—	—	—	47	50	65	42	47	55	55	60	75	50	55	70	—	—	—
	—	—	—	—	—	—	—	—	—	*155*	*165*	*215*	*140*	*155*	*180*	*180*	*195*	*245*	*165*	*180*	*230*	—	—	—
S3	—	—	—	—	—	—	—	—	—	41	46	55	37	41	50	47	55	65	45	50	60	—	—	—
	—	—	—	—	—	—	—	—	—	*135*	*150*	*180*	*120*	*135*	*165*	*155*	*180*	*215*	*150*	*165*	*195*	—	—	—
S11	—	—	—	—	—	—	—	—	—	80	90	110	75	85	100	95	105	130	90	100	120	—	—	—
	—	—	—	—	—	—	—	—	—	*260*	*295*	*360*	*245*	*280*	*330*	*310*	*345*	*425*	*295*	*330*	*395*	—	—	—
S12	—	—	—	—	—	—	—	—	—	55	65	75	50	55	70	65	75	90	60	70	85	—	—	—
	—	—	—	—	—	—	—	—	—	*180*	*215*	*245*	*165*	*180*	*230*	*215*	*245*	*295*	*195*	*230*	*280*	—	—	—
S13	—	—	—	—	—	—	—	—	—	33	36	44	30	33	40	38	42	50	36	40	48	—	—	—
	—	—	—	—	—	—	—	—	—	*110*	*120*	*145*	*100*	*110*	*130*	*125*	*140*	*165*	*120*	*130*	*155*	—	—	—
H5	160	180	220	55	60	70	55	60	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	520	*590*	*720*	*180*	*195*	*230*	*180*	*195*	*230*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H8	175	200	240	55	60	75	55	60	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	570	*660*	*790*	*180*	*195*	*245*	*180*	*195*	*245*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H11	200	225	275	65	75	90	65	75	90	—	—	—	—	—	—	155	175	225	65	75	90	—	—	—
	660	*740*	*900*	*215*	*245*	*295*	*215*	*245*	*295*	—	—	—	—	—	—	*510*	*570*	*740*	*215*	*245*	*295*	—	—	—
H12	200	230	275	95	110	130	105	120	145	—	—	—	—	—	—	135	150	190	110	125	150	—	—	—
	660	*750*	*900*	*310*	*360*	*425*	*345*	*395*	*475*	—	—	—	—	—	—	*445*	*490*	*620*	*360*	*410*	*490*	—	—	—
H21	175	200	240	55	60	75	—	—	—	—	—	—	—	—	—	115	115	125	55	60	75	—	—	—
	570	*660*	*790*	*180*	*195*	*245*	—	—	—	—	—	—	—	—	—	*375*	*375*	*410*	*180*	*195*	*245*	—	—	—

R217/220.49-XO12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	MK1501			MP1501			MP2501			MS2500			MP3501			MM4500		
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%
P1	—	—	—	440	485	560	430	475	550	490	530	610	385	425	490	300	325	385
	—	—	—	*1450*	*1600*	*1825*	*1400*	*1550*	*1800*	*1600*	*1750*	*2000*	*1275*	*1400*	*1600*	*980*	*1075*	*1275*
P2	—	—	—	430	470	540	420	465	530	465	520	590	375	415	470	285	320	370
	—	—	—	*1400*	*1550*	*1775*	*1375*	*1525*	*1750*	*1525*	*1700*	*1925*	*1225*	*1350*	*1550*	*940*	*1050*	*1225*
P3	—	—	—	375	410	470	365	405	460	410	445	510	330	360	410	250	275	320
	—	—	—	*1225*	*1350*	*1550*	*1200*	*1325*	*1500*	*1350*	*1450*	*1675*	*1075*	*1175*	*1350*	*820*	*900*	*1050*
P4	—	—	—	330	365	420	325	355	410	360	400	460	290	320	370	240	265	310
	—	—	—	*1075*	*1200*	*1375*	*1075*	*1175*	*1350*	*1175*	*1300*	*1500*	*950*	*1050*	*1225*	*790*	*870*	*1025*
P5	—	—	—	320	345	400	315	340	395	350	380	440	280	305	355	215	235	275
	—	—	—	*1050*	*1125*	*1300*	*1025*	*1125*	*1300*	*1150*	*1250*	*1450*	*920*	*1000*	*1175*	*710*	*770*	*900*
P6	—	—	—	360	390	450	355	380	440	395	425	495	315	340	395	240	260	305
	—	—	—	*1175*	*1275*	*1475*	*1175*	*1250*	*1450*	*1300*	*1400*	*1625*	*1025*	*1125*	*1300*	*790*	*850*	*1000*
P7	—	—	—	340	365	425	335	360	415	370	405	465	300	320	375	225	245	290
	—	—	—	*1125*	*1200*	*1400*	*1100*	*1175*	*1350*	*1225*	*1325*	*1525*	*980*	*1050*	*1225*	*740*	*800*	*950*
P8	—	—	—	315	345	395	310	340	385	345	375	430	275	305	345	210	230	270
	—	—	—	*1025*	*1125*	*1300*	*1025*	*1125*	*1275*	*1125*	*1225*	*1400*	*900*	*1000*	*1125*	*690*	*750*	*890*
P11	—	—	—	330	355	415	325	350	405	360	390	455	290	315	365	220	240	280
	—	—	—	*1075*	*1175*	*1350*	*1075*	*1150*	*1325*	*1175*	*1275*	*1500*	*950*	*1025*	*1200*	*720*	*790*	*920*
P12	—	—	—	210	230	265	210	225	260	225	245	280	185	200	235	135	145	170
	—	—	—	*690*	*750*	*870*	*690*	*740*	*850*	*740*	*800*	*920*	*610*	*660*	*770*	*445*	*475*	*560*
M1	—	—	—	—	—	—	225	255	300	280	320	380	210	235	280	190	215	255
	—	—	—	—	—	—	*740*	*840*	*980*	*920*	*1050*	*1250*	*690*	*770*	*920*	*620*	*710*	*840*
M2	—	—	—	—	—	—	190	210	250	240	265	320	175	195	235	160	180	215
	—	—	—	—	—	—	*620*	*690*	*820*	*790*	*870*	*1050*	*570*	*640*	*770*	*520*	*590*	*710*
M3	—	—	—	—	—	—	150	170	205	185	210	255	140	155	190	125	140	170
	—	—	—	—	—	—	*490*	*560*	*670*	*610*	*690*	*840*	*460*	*510*	*620*	*410*	*460*	*560*
M4	—	—	—	—	—	—	115	130	160	145	160	195	105	120	150	95	110	130
	—	—	—	—	—	—	*375*	*425*	*520*	*475*	*520*	*640*	*345*	*395*	*490*	*310*	*360*	*425*
M5	—	—	—	—	—	—	95	105	135	120	135	165	90	100	125	80	90	110
	—	—	—	—	—	—	*310*	*345*	*445*	*395*	*445*	*540*	*295*	*330*	*410*	*260*	*295*	*360*
K1	500	610	860	430	475	540	420	465	530	310	355	420	375	420	475	—	—	—
	1650	*2000*	*2825*	*1400*	*1550*	*1775*	*1375*	*1525*	*1750*	*1025*	*1175*	*1375*	*1225*	*1375*	*1550*	—	—	—
K2	445	530	760	390	420	485	380	410	475	280	310	375	340	370	425	—	—	—
	1450	*1750*	*2500*	*1275*	*1375*	*1600*	*1250*	*1350*	*1550*	*920*	*1025*	*1225*	*1125*	*1225*	*1400*	—	—	—
K3	300	340	435	330	355	410	320	350	405	240	265	320	290	310	360	—	—	—
	980	*1125*	*1425*	*1075*	*1175*	*1350*	*1050*	*1150*	*1325*	*790*	*870*	*1050*	*950*	*1025*	*1175*	—	—	—
K4	285	325	415	315	340	390	305	330	385	230	250	305	275	295	345	—	—	—
	940	*1075*	*1350*	*1025*	*1125*	*1275*	*1000*	*1075*	*1275*	*750*	*820*	*1000*	*900*	*970*	*1125*	—	—	—
K5	175	200	255	190	205	240	185	205	235	140	155	185	165	185	215	—	—	—
	570	*660*	*840*	*620*	*670*	*790*	*610*	*670*	*770*	*460*	*510*	*610*	*540*	*610*	*710*	—	—	—
K6	250	285	365	275	300	345	270	295	340	200	220	270	240	260	305	—	—	—
	820	*940*	*1200*	*900*	*980*	*1125*	*890*	*970*	*1125*	*660*	*720*	*890*	*790*	*850*	*1000*	—	—	—
K7	220	255	330	245	265	310	240	260	305	180	195	240	215	235	275	—	—	—
	720	*840*	*1075*	*800*	*870*	*1025*	*790*	*850*	*1000*	*590*	*640*	*790*	*710*	*770*	*900*	—	—	—
N1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
N11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S1	—	—	—	—	—	—	—	—	—	70	80	95	49	55	70	30	33	40
	—	—	—	—	—	—	—	—	—	*230*	*260*	*310*	*160*	*180*	*230*	*100*	*110*	*130*
S2	—	—	—	—	—	—	—	—	—	55	65	75	40	45	55	24	27	32
	—	—	—	—	—	—	—	—	—	*180*	*215*	*245*	*130*	*150*	*180*	*80*	*90*	*105*
S3	—	—	—	—	—	—	—	—	—	50	55	70	35	40	49	21	23	29
	—	—	—	—	—	—	—	—	—	*165*	*180*	*230*	*115*	*130*	*160*	*70*	*75*	*95*
S11	—	—	—	—	—	—	—	—	—	100	110	135	70	80	95	42	47	55
	—	—	—	—	—	—	—	—	—	*330*	*360*	*445*	*230*	*260*	*310*	*140*	*155*	*180*
S12	—	—	—	—	—	—	—	—	—	70	75	95	49	55	65	38	43	55
	—	—	—	—	—	—	—	—	—	*230*	*245*	*310*	*160*	*180*	*215*	*125*	*140*	*180*
S13	—	—	—	—	—	—	—	—	—	40	44	55	28	31	39	22	25	30
	—	—	—	—	—	—	—	—	—	*130*	*145*	*180*	*90*	*100*	*130*	*70*	*80*	*100*
H5	—	—	—	60	65	80	—	—	—	—	—	—	45	50	60	—	—	—
	—	—	—	*195*	*215*	*260*	—	—	—	—	—	—	*150*	*165*	*195*	—	—	—
H8	—	—	—	60	70	85	—	—	—	—	—	—	48	55	65	—	—	—
	—	—	—	*195*	*230*	*280*	—	—	—	—	—	—	*155*	*180*	*215*	—	—	—
H11	—	—	—	75	80	100	—	—	—	—	—	—	55	65	80	—	—	—
	—	—	—	*245*	*260*	*330*	—	—	—	—	—	—	*180*	*215*	*260*	—	—	—
H12	—	—	—	110	125	150	—	—	—	—	—	—	85	95	115	—	—	—
	—	—	—	*360*	*410*	*490*	—	—	—	—	—	—	*280*	*310*	*375*	—	—	—
H21	—	—	—	60	70	85	—	—	—	—	—	—	48	55	65	—	—	—
	—	—	—	*195*	*230*	*280*	—	—	—	—	—	—	*155*	*180*	*215*	—	—	—

R215.39/49 - R220.49 – In mm

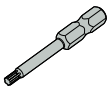




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 826-3, 827
—Per il programma inserti completo, vedere le pagine 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	KAPRS°	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
				mm	mm		mm	mm	mm	mm	mm	mm	mm	mm		kg	
R215.49-1609.3-06	75002621	Weldon	45,0 °	9,0	16,0	1	4,0	–	–	16,0	–	32,0	32,0	80,0	55600	0,2	SPMX0602
R215.49-2016.3-09	75002622	Weldon	45,0 °	16,0	26,0	2	5,0	–	–	20,0	–	60,0	60,0	110,0	27200	0,3	SPMX0903
R215.39-2020.3-09	75002620	Weldon	60,0 °	20,0	27,0	2	6,5	–	–	20,0	–	60,0	60,0	110,0	24300	0,3	SPMX0903
R215.49-3225.3-12	75002623	Weldon	45,0 °	25,0	39,0	2	7,0	–	–	32,0	–	70,0	70,0	130,0	16900	0,7	SPMX12T3
R220.49-0040-12	75012896	Manicotto	45,0 °	40,0	54,0	3	7,0	22,0	37,0	22,0	40,0	–	–	–	13400	0,3	SPMX12T3

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R215.39-09	–	1/4HEX-T09PX50	C03007-T09P
R215.49-06	–	1/4HEX-T07PX50	C02205-T07P
R215.49-09	–	1/4HEX-T09PX50	C03007-T09P
R215.49-12	–	1/4HEX-T15PX50	C03510-T15P
R220.49-12	220.17-691	1/4HEX-T15PX50	C03508-T15P

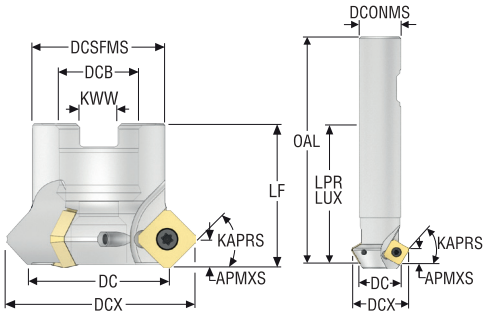
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R215.39-09	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R215.49-06	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R215.49-09	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R215.49-12	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30
R220.49-12	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R215.39/49 - R220.49 – Pollici

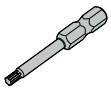




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 3, 826-3, 827
—Per il programma inserti completo, vedere le pagine 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	KAPRS°	DC	DCX	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	LUX	LPR	OAL	RPMX	Peso	Inserto
				inch	inch		inch	inch	inch	inch	inch	inch	inch	inch		lb	
R215.49-00.375-3	00070083	Weldon	45,0 °	0.392	0.647	1	0.157	–	–	0.625	–	1.240	1.240	3.150	55600	0.220	SPMX0602
R215.49-00.625-3	00072168	Weldon	45,0 °	0.625	1.039	2	0.236	–	–	0.750	–	2.362	2.362	4.331	27200	0.660	SPMX0903
R215.39-00.750-3	00070080	Weldon	60,0 °	0.750	1.043	2	0.236	–	–	0.750	–	2.362	2.362	4.331	24300	0.660	SPMX0903
R215.49-01.00-3	00070081	Weldon	45,0 °	1.000	1.551	2	0.276	–	–	1.000	–	2.913	2.913	5.118	16900	1.320	SPMX12T3
R220.49-01.50	00070079	Manicotto	45,0 °	1.500	2.047	3	0.276	0.750	1.575	0.750	1.575	–	–	–	13400	0.660	SPMX12T3

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Vite di bloccaggio inserto
			
R215.39-00.750	–	1/4HEX-T09PX50	C03007-T09P
R215.49-00.375	–	1/4HEX-T07PX50	C02205-T07P
R215.49-00.625	–	1/4HEX-T09PX50	C03007-T09P
R215.49-01.00	–	1/4HEX-T15PX50	C03510-T15P
R220.49-01.50	220.17-695	1/4HEX-T15PX50	C03508-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R215-49.00.375	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R215-49.00.625-00.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R215-49.01.00-01.50	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.49-SPMX06/09/12 – Selezione dell'inserto – mm/Inch

SMG		a_p	f_z		
			50%	30%	10%
P1	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,28 0.011	0,32 0.013	0,50 0.020
P2	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,30 0.012	0,32 0.013	0,50 0.020
P3	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,28 0.011	0,30 0.012	0,48 0.019
P4	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,48 0.019
P5	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
P6	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
P7	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
P8	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,28 0.011	0,30 0.012	0,48 0.019
P11	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
P12	SPMX 06/09/12-75 F40M	3,5 *0.14*	0,18 0.0070	0,20 0.0080	0,32 0.013
M1	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,30 0.012	0,32 0.013	0,50 0.020
M2	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
M3	SPMX 06/09/12-75 F40M	3,5 *0.14*	0,22 0.0085	0,24 0.0095	0,38 0.015
M4	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,20 0.0080	0,22 0.0085	0,32 0.013
M5	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,20 0.0080	0,22 0.0085	0,32 0.013
K1	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,30 0.012	0,32 0.013	0,50 0.020
K2	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
K3	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
K4	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
K5	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,24 0.0095	0,26 0.010	0,42 0.017
K6	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,26 0.010	0,30 0.012	0,46 0.018
K7	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,24 0.0095	0,26 0.010	0,42 0.017
N1	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,36 0.014	0,42 0.017	0,65 0.026
N2	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,36 0.014	0,42 0.017	0,65 0.026
N3	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,36 0.014	0,42 0.017	0,65 0.026
N11	SPMX 06/09/12-75 F40M	4,0 *0.16*	0,36 0.014	0,42 0.017	0,65 0.026
S1	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,20 0.0080	0,22 0.0085	0,32 0.013
S2	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,20 0.0080	0,22 0.0085	0,32 0.013
S3	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,19 0.0075	0,20 0.0080	0,30 0.012
S11	SPMX 06/09/12-75 F40M	3,0 *0.12*	0,22 0.0085	0,25 0.010	0,38 0.015
S12	SPMX 06/09/12-75 F40M	3,0 *0.12*	0,22 0.0085	0,25 0.010	0,38 0.015
S13	SPMX 06/09/12-75 F40M	2,5 *0.10*	0,20 0.0080	0,22 0.0085	0,32 0.013

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R217/220.49-SPMX06/09/12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M		
	50%	30%	10%
P1	275 *900*	300 *980*	355 *1175*
P2	265 *870*	290 *950*	345 *1125*
P3	230 *750*	255 *840*	300 *980*
P4	205 *670*	225 *740*	265 *870*
P5	195 *640*	220 *720*	260 *850*
P6	220 *720*	250 *820*	290 *950*
P7	210 *690*	235 *770*	275 *900*
P8	195 *640*	215 *710*	255 *840*
P11	200 *660*	225 *740*	265 *870*
P12	135 *445*	145 *475*	175 *570*
M1	215 *710*	235 *770*	280 *920*
M2	175 *570*	200 *660*	230 *750*
M3	145 *475*	155 *510*	190 *620*
M4	110 *360*	120 *395*	145 *475*
M5	90 *295*	100 *330*	120 *395*
K1	210 *690*	230 *750*	275 *900*
K2	185 *610*	210 *690*	245 *800*
K3	160 *520*	175 *570*	205 *670*
K4	150 *490*	170 *560*	200 *660*
K5	90 *295*	105 *345*	120 *395*
K6	135 *445*	150 *490*	175 *570*
K7	120 *395*	130 *425*	155 *510*
N1	1525 *5000*	1700 *5575*	2000 *6550*
N2	620 *2025*	690 *2275*	810 *2650*
N3	410 *1350*	460 *1500*	540 *1775*
N11	470 *1550*	520 *1700*	620 *2025*
S1	50 *165*	55 *180*	70 *230*
S2	41 *135*	46 *150*	55 *180*
S3	36 *120*	40 *130*	48 *155*
S11	70 *230*	80 *260*	95 *310*
S12	50 *165*	55 *180*	65 *215*
S13	29 *95*	32 *105*	38 *125*



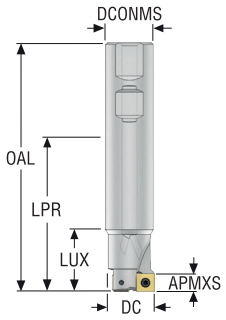
R417.19 LAMATURA

Le frese per lamatura Seco sono adatte per la lavorazione di fori ciechi e svasati. I vantaggi principali includono il taglio uniforme, l'usura ridotta dei cuscinetti del mandrino tramite un elevato bilanciamento dell'utensile e un'elevata sicurezza grazie a un sistema di bloccaggio centrale, il tutto realizzato in una soluzione conveniente.

– Robusti inserti SPMX, disponibili in numerose qualità per la maggior parte dei materiali da lavorare
– Inserti con 4 taglienti
– Gamma di frese con misure in mm, Ø 18-42 mm (misure in pollici Ø 0,625-1,620")

R417.19-SPMX – In mm

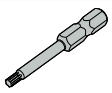




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 831-833
—Per il programma inserti completo, vedere le pagine 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto centrale	Peripheral insert
			mm		mm	mm	mm	mm	mm	mm			kg		
R417.19-2018.3-06A	00070768	Weldon	18,0	1	5,0	9,0	20,0	20,0	60,0	110,0	45,0	39200	0,2	0602AP (1)	060204 (1)
R417.19-2020.3-07A	00012939	Weldon	20,0	1	7,0	10,0	20,0	28,0	70,0	120,0	45,0	26200	0,3	0703AP (1)	070304 (1)
R417.19-2022.3-07A	02201611	Weldon	22,0	1	7,0	11,0	20,0	70,0	70,0	120,0	45,0	25000	0,3	0703AP (1)	070304 (1)
R417.19-2524.3-07A	02201606	Weldon	24,0	1	7,0	12,0	25,0	31,0	74,0	130,0	45,0	24000	0,5	0703AP (1)	070304 (1)
R417.19-2526.3-09A	00070772	Weldon	26,0	1	8,0	13,0	25,0	74,0	74,0	130,0	45,0	21200	0,5	0903AP (1)	090304 (1)
R417.19-2530.3-09A	02201604	Weldon	30,0	1	8,0	15,0	25,0	74,0	74,0	130,0	45,0	19800	0,5	0903AP (1)	090304 (1)
R417.19-3232.3-09A	02201607	Weldon	32,0	1	8,0	16,0	32,0	38,0	70,0	130,0	45,0	19200	0,8	0903AP (1)	090304 (1)
R417.19-3236.3-12A	02201608	Weldon	36,0	1	11,0	18,0	32,0	70,0	70,0	130,0	45,0	12600	0,7	12T3AP (1)	12T308 (1)
R417.19-3238.3-12A	02448870	Weldon	38,0	1	11,0	19,0	32,0	70,0	70,0	130,0	45,0	12300	0,7	12T3AP (1)	12T308 (1)
R417.19-3242.3-12A	02448871	Weldon	42,0	1	11,0	21,0	32,0	70,0	70,0	130,0	45,0	12000	0,7	12T3AP (1)	12T308 (1)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R417.19-06A	1/4HEX-T07PX50	C02205-T07P
R417.19-07A	1/4HEX-T07PX50	C02506-T07P
R417.19-09A	1/4HEX-T09PX50	C03007-T09P
R417.19-12A	1/4HEX-T15PX50	C03510-T15P

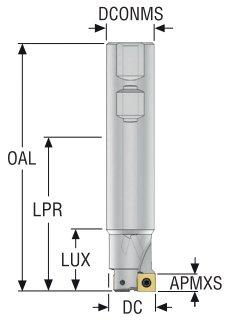
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R417.19-06A	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R417.19-07A	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R417.19-09A	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R417.19-12A	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R417.19-SPMX – Pollici

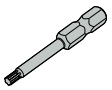




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 831-833
—Per il programma inserti completo, vedere le pagine 897
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	APMXE	DCONMS	LF	LUX	LPR	OAL	RMPX°	RPMX	Peso	Inserto centrale	Peripheral insert
			inch		inch	inch	inch	inch	inch	inch	inch			lb		
R417.19-00.62-3	75072193	Weldon	0.625	1	0.197	0.276	0.750	1.732	0.787	1.732	3.740	45,0	49100	0.440	0602AP (1)	060204 (1)
R417.19-00.750-3	75072183	Weldon	0.750	1	0.197	0.276	0.750	2.323	1.181	2.323	4.331	45,0	32500	0.660	0602AP (1)	060204 (1)
R417.19-00.81-3	75054856	Weldon	0.812	1	0.276	0.276	0.750	2.717	2.717	2.717	4.724	45,0	26200	0.660	0703AP (1)	070304 (1)
R417.19-01.00-3	75072173	Weldon	1.000	1	0.315	0.472	1.000	2.874	1.575	2.874	5.118	45,0	22500	1.100	0903AP (1)	090304 (1)
R417.19-01.18-3	75054857	Weldon	1.181	1	0.315	0.472	1.000	2.874	2.874	2.874	5.118	45,0	21200	1.320	0903AP (1)	090304 (1)
R417.19-01.37-3	75054858	Weldon	1.375	1	0.433	0.472	1.250	2.874	2.874	2.874	5.118	45,0	12600	1.760	12T3AP (1)	12T308 (1)
R417.19-01.62-3	75054859	Weldon	1.620	1	0.433	0.472	1.250	2.874	2.874	2.874	5.118	45,0	12000	1.980	12T3AP (1)	12T308 (1)

Parti di ricambio, comprese nella fornitura

Per fresa	Chiave per vite inserto	Vite di bloccaggio inserto
		
R417.19-00.625-00.750	1/4HEX-T07PX50	C02205-T07P
R417.19-00.812	1/4HEX-T07PX50	C02506-T07P
R417.19-01.00-01.18	1/4HEX-T09PX50	C03007-T09P
R417.19-01.37-01.62	1/4HEX-T15PX50	C03510-T15P

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R417.19-00.625-00.750	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R417.19-00.812	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	0.9NM	T00-07P09
R417.19-01.00-01.18	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	2.0NM	T00-09P20
R417.19-01.37-01.62	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.0NM	T00-15P30

Chiavi dinamometriche e fisse, vedere pagina 931

R417.19-SPMX06/07 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	SPMX 06/07-75 F40M	0,080 *0.0032*	0,085 0.0034	0,13 0.0050
P2	SPMX 06/07-75 F40M	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
P3	SPMX 06/07-75 F40M	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
P4	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
P5	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
P6	SPMX 06/07-75 F40M	0,070 *0.0028*	0,080 0.0032	0,12 0.0048
P7	SPMX 06/07-75 F40M	0,070 *0.0028*	0,080 0.0032	0,12 0.0048
P8	SPMX 06/07-75 F40M	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
P11	SPMX 06/07-75 F40M	0,070 *0.0028*	0,080 0.0032	0,12 0.0048
P12	SPMX 06/07-75 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
M1	SPMX 06/07-75 F40M	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
M2	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
M3	SPMX 06/07-75 F40M	0,060 *0.0024*	0,065 0.0026	0,10 0.0040
M4	SPMX 06/07-75 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
M5	SPMX 06/07-75 F40M	0,050 *0.0020*	0,055 0.0022	0,085 0.0034
K1	SPMX 06/07-75 F40M	0,080 *0.0032*	0,090 0.0036	0,13 0.0050
K2	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
K3	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
K4	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
K5	SPMX 06/07-75 F40M	0,065 *0.0026*	0,070 0.0028	0,11 0.0044
K6	SPMX 06/07-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
K7	SPMX 06/07-75 F40M	0,065 *0.0026*	0,070 0.0028	0,11 0.0044

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R417.19-SPMX09/12 – Selezione dell'inserto – In mm/ In pollici

SMG		f_z		
		100%	30%	10%
P1	SPMX 09/12-75 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P2	SPMX 09/12-75 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
P3	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P4	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P5	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
P6	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
P7	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
P8	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,19 0.0075
P11	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
P12	SPMX 09/12-75 F40M	0,075 *0.0030*	0,080 0.0032	0,12 0.0048
M1	SPMX 09/12-75 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
M2	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
M3	SPMX 09/12-75 F40M	0,085 *0.0034*	0,095 0.0038	0,15 0.0060
M4	SPMX 09/12-75 F40M	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
M5	SPMX 09/12-75 F40M	0,075 *0.0030*	0,085 0.0034	0,13 0.0050
K1	SPMX 09/12-75 F40M	0,12 *0.0048*	0,13 0.0050	0,20 0.0080
K2	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
K3	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
K4	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
K5	SPMX 09/12-75 F40M	0,10 *0.0040*	0,11 0.0044	0,16 0.0065
K6	SPMX 09/12-75 F40M	0,11 *0.0044*	0,12 0.0048	0,18 0.0070
K7	SPMX 09/12-75 F40M	0,10 *0.0040*	0,11 0.0044	0,16 0.0065

SMG = Gruppo materiale Seco
f_z = mm/dente (poll./dente), v_c = m/min (sf/min), a_e/DC = %
Tutti i parametri di taglio sono valori iniziali

R417.19-SPMX06/07/09/12 – Parametri di taglio v_c = (m/min)/(sf/min)

SMG	F40M		
	100%	30%	10%
P1	195 *640*	225 *740*	240 *790*
P2	195 *640*	220 *720*	240 *790*
P3	180 *590*	205 *670*	225 *740*
P4	170 *560*	195 *640*	215 *710*
P5	165 *540*	190 *620*	210 *690*
P6	175 *570*	205 *670*	220 *720*
P7	170 *560*	195 *640*	215 *710*
P8	165 *540*	190 *620*	205 *670*
P11	165 *540*	195 *640*	210 *690*
P12	120 *395*	150 *490*	165 *540*
M1	170 *560*	200 *660*	215 *710*
M2	150 *490*	180 *590*	200 *660*
M3	130 *425*	160 *520*	175 *570*
M4	105 *345*	135 *445*	150 *490*
M5	90 *295*	115 *375*	130 *425*
K1	170 *560*	200 *660*	215 *710*
K2	160 *520*	185 *610*	205 *670*
K3	140 *460*	170 *560*	185 *610*
K4	135 *445*	165 *540*	180 *590*
K5	90 *295*	115 *375*	130 *425*
K6	125 *410*	150 *490*	170 *560*
K7	110 *360*	140 *460*	155 *510*

Introduzione

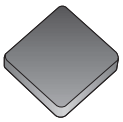
Il nitruro di boro cubico policristallino (PCBN) è un materiale sinterizzato a pressione e temperatura estremamente elevate che possiede proprietà similari a quelle del diamante. Gli inserti in PCBN sono indicati per lavorazioni di materiali ferrosi duri e ghise grigie perlitiche, grazie alla durezza a caldo, alla resistenza all'ossidazione ed alla tenacità di cui sono dotati.

Gli inserti Secomax™ PCBN sono indicati per lavorare:

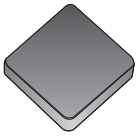
- Acciaio temprato (inclusi riporti duri)
- Ghisa grigia perlitica
- Ghisa bianca fusa in conchiglia
- Acciai al manganese
- Metallo duro
- Leghe da metallurgia delle polveri

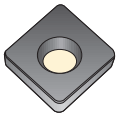
È disponibile a richiesta la pubblicazione "Secomax™ PCBN, Technical Guide" (unicamente in lingua inglese) che contiene una esauriente trattazione sull'impiego degli inserti in PCBN.

Selezione inserto



- Inserto in PCBN integrale
- In funzione della geometria, gli inserti possono essere utilizzati su due lati.
- Qualità: CBN200, CBN300, CBN300P, CBN500, CBN600

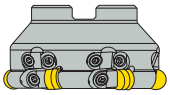




- Strato di CBN sinterizzato sul metallo duro. Inserti monolaterali.
- Qualità: CBN200

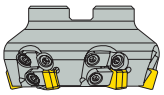
Frese per inserti in PCBN

Frese per spianatura tipo R217/220.70



- Fresa sviluppata appositamente per inserti CBN, 2 dimensioni di inserti.
- Profondità di taglio massima 3 mm DC = 20-63 mm e profondità di taglio massima 4,5 mm DC = 63-200 mm (DC = 125-200 mm con inserti raschianti).
- Inserti per finitura: RNGN060300E (E = arrotondati) RNGN/RNMN090300E
- Inserti per sgrossatura: RNGN/RNMN060300S (S = smussati ed arrotondati) RNGN/RNMN090300S
- Inserti raschianti: SNEX120312ZZ
- Relazione fra la profondità di taglio ed il numero di taglienti disponibili (per lato).

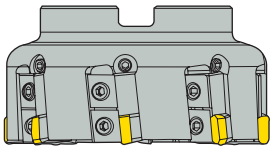
Frese per spianatura tipo 220.74



- Fresa appositamente studiata per inserti CBN, max. profondità di taglio = 8,0 mm D = 63-200 mm.(D = 125-200 mm con inserti raschianti).
- Inserti per finitura: SNEN0903ENE-M06 (E = arrotondati) SNMN090308E SNMN090312E
- Inserti per sgrossatura: SNEN0903ENS-M08 (S = smussati ed arrotondati) SNMN090308S SNMN090312S SNMN090316S
- Inserti raschianti: SNEX120312ZZ

D.O.C a_p (mm)	D.O.C a_p (inch)	RN.. 060300	RN.. 090300	D.O.C a_p (mm)	D.O.C a_p (inch)	RN.. 060300	RNMN 090300
0,1	.004	20	24	1,2	.048	5	7
0,15	.006	16	20	1,5	.060	5	6
0,2	.008	14	17	1,8	.072	4	5
0,25	.010	12	15	2,0	.080	4	5
0,3	.012	11	14	2,5	.100	3	4
0,4	.016	10	12	3,0	.120	3	4
0,5	.020	8	10	3,5	.140	–	4
0,8	.032	7	8	4,0	.160	–	3
1,0	.040	6	7	4,5	.200	–	–

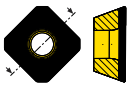
Frese per spallamento retto e per scanalatura tipo R220.68



- Inserti smussati per operazioni di finitura: TNGN1604PNE
- Inserti smussati per operazioni di sgrossatura: TNGN1604PNS
- Inserti arrotondati per operazioni di sgrossatura: TNGN1604PRS

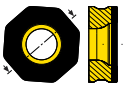
Inserti per frese standard

Frese per spianatura



- Per sgrossatura
- SEEX09T3AFTN-D09-LF
- SEEX1204AFTN-D16-LF
- R220.53

Frese per spianatura



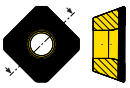
- Per sgrossatura
- ONEW05
- Octomill R217/220.48

Frese per spianatura



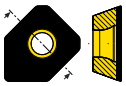
- Per sgrossatura
- SEEN1203AFTN-D16
- R220.13

Frese per spianatura



- Per finitura
- SEEX1203AETN-MD13-LF
- R220.30

Inserto raschiante per una finitura superficiale di alta qualità



- SEEX1204ZZTN-D16-LF

Fresa a disco



- RDHW0803M0S-01030-LF
- R335.25/R335.18

Fresa ad elevato avanzamento



- 218.19-100T-MD08-LF

Fresa a copiare



- RDHW0803M0S-01030-LF
- R217/220.29

Le velocità di taglio consigliate sono riportate sulle tabelle dei parametri.
L'avanzamento consigliato è riportato nella sezione dei parametri di taglio.
Le formule per il calcolo dei parametri di taglio sono riportate a pagina 922

PCBN, Finitura a_p < 0,5 In mm/ In pollici

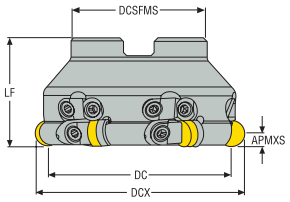
SMG	CBN200		CBN300		CBN500	
	v_c	f_z	v_c	f_z	v_c	f_z
K1	700 — 1900 —	0,050 — 0,20 —	700 — 1700 —	0,050 — 0,20 —	700 — 1700 —	0,050 — 0,20 —
H3	110 — 350 —	0,050 — 0,20 —	— —	— —	— —	— —
H5	200 — 320 —	0,050 — 0,20 —	— —	— —	— —	— —
H7	200 — 300 —	0,050 — 0,20 —	— —	— —	— —	— —
H8	170 — 250 —	0,050 — 0,20 —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —
H21	120 — 220 —	0,050 — 0,20 —	— —	— —	130 — 230 —	0,050 — 0,20 —
H31	120 — 220 —	0,050 — 0,20 —	— —	— —	100 — 270 —	0,050 — 0,20 —
PM1	180 — 400 —	0,050 — 0,20 —	— —	— —	— —	— —
PM2	150 — 300 —	0,050 — 0,20 —	— —	— —	— —	— —
PM3	— —	— —	— —	— —	— —	— —
HF1	— —	— —	— —	— —	— —	— —
HF2	— —	— —	— —	— —	— —	— —

PCBN, Sgrossatura a_p 0,5-3,0 In mm/ In pollici

SMG	CBN200		CBN300		CBN500	
	v_c	f_z	v_c	f_z	v_c	f_z
K1	700 — 1700 —	0,050 — 0,20 —	700 — 1700 —	0,050 — 0,20 —	700 — 1700 —	0,050 — 0,20 —
H3	— —	— —	— —	— —	— —	— —
H5	— —	— —	— —	— —	— —	— —
H7	— —	— —	— —	— —	— —	— —
H8	— —	— —	— —	— —	— —	— —
H11	— —	— —	— —	— —	— —	— —
H21	120 — 220 —	0,050 — 0,20 —	— —	— —	130 — 230 —	0,050 — 0,20 —
H31	120 — 220 —	0,050 — 0,20 —	— —	— —	100 — 270 —	0,050 — 0,20 —
PM1	180 — 400 —	0,050 — 0,20 —	— —	— —	— —	— —
PM2	150 — 300 —	0,050 — 0,20 —	— —	— —	— —	— —
PM3	— —	— —	— —	— —	— —	— —
HF1	150 — 240 —	0,050 — 0,20 —	— —	— —	150 — 250 —	0,050 — 0,20 —
HF2	120 — 300 —	0,050 — 0,20 —	— —	— —	120 — 300 —	0,050 — 0,20 —

220.70-06/09 – In mm

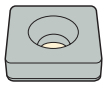
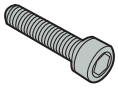
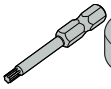
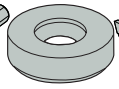
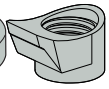




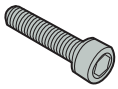
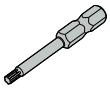
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 845
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm		kg	
R220.70-0063-09-6	00023749	Manicotto	63,0	6	4,5	72,5	22,0	47,0	40,0	10200	0,8	RN..09
R220.70-0080-09-6	00023750	Manicotto	80,0	6	4,5	589,5	27,0	62,0	50,0	9100	1,4	RN..09
R220.70-0100-09-8	00023751	Manicotto	100,0	8	4,5	109,5	32,0	77,0	50,0	8100	2,0	RN..09
R220.70-8160-09-10	00023753	Manicotto	160,0	10	4,5	169,5	40,0	90,0	63,0	6400	5,7	RN..09/SNEX12

Parti di ricambio, comprese nella fornitura

Per fresa	Supporto	Vite per supporto	Vite attacco	Vite calibro di regolazione	Chiave per vite inserto	Supporto inserto	Cuneo inserto	Calibro di regola-zione	Cuneo di regolazione	Vite supporto	Cuneo	Vite cuneo
												
R220.70-0063	–	–	220.17-692	LD6019-T15P	1/4HEX-T15PX50	117.10-620	–	AS6011F	–	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.70-0080	–	–	–	LD6019-T15P	1/4HEX-T15PX50	117.10-620	–	AS6011F	–	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.70-0100	–	–	–	LD6019-T15P	1/4HEX-T15PX50	117.10-620	–	AS6011F	–	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.70-8160	268-621	F94009-T09P	–	LD6019-T15P	1/4HEX-T15PX50	117.10-620	CW0608S	AS6011F	AS6011	174.10-652-T07P	CW0608M	LD6018T-T15P

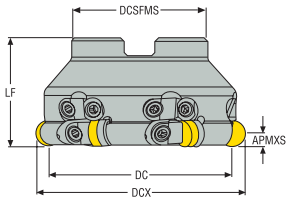
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave per vite supporto	Chiave dinamometrica
						
R220.70-0063-0100	1/4HEX-S-HANDLE-0.8-5.0NM	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35
R220.70-8160	1/4HEX-S-HANDLE-0.8-5.0NM	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

220.70-06/09 – Pollici

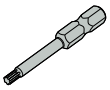
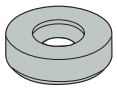




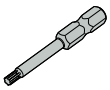
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 845
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch		lb	
R220.70-03.00-09-6	00059852	Manicotto	3.150	6	0.177	3.520	1.000	2.441	2.382	15900	3.530	RN..09

Parti di ricambio, comprese nella fornitura

Per fresa	Vite calibro di regolazione	Chiave per vite inserto	Supporto inserto	Calibro di regolazione	Vite supporto	Cuneo	Vite cuneo
							
R220.70-03.00	LD6019-T15P	1/4HEX-T15PX50	117.10-620	AS6011F	174.10-652-T07P	CW0608M	LD6018T-T15P

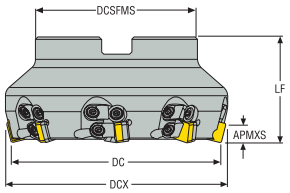
Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave per vite supporto	Chiave dinamometrica
					
R220.70-03.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

220.74-09 – In mm

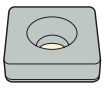
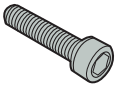
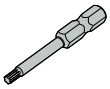
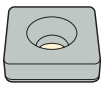




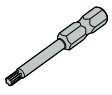
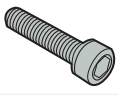
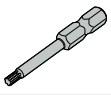
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 847-846
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm		kg	
R220.74-0063-09-6	00023743	Manicotto	63,0	6	8,0	65,3	22,0	47,0	40,0	10200	0,8	SN..09..
R220.74-0080-09-6	00023744	Manicotto	80,0	6	8,0	82,3	27,0	62,0	50,0	9100	1,4	SN..09..
R220.74-0100-09-8	00023745	Manicotto	100,0	8	8,0	102,3	32,0	77,0	50,0	8100	2,1	SN..09..
R220.74-8160-09-10	00023747	Manicotto	160,0	10	8,0	162,3	40,0	90,0	63,0	6400	6,2	SN..09/SNEX12*
R220.74-8200-09-12	00023748	Manicotto	200,0	12	8,0	202,3	60,0	130,0	63,0	5700	9,0	SN..09/SNEX12*

Parti di ricambio, comprese nella fornitura

Per fresa	Supporto	Vite per supporto	Vite attacco	Chiave per vite inserto	Supporto inserto	Calibro di regola-zione	Vite di regolazione	Vite supporto	Cuneo	Vite cuneo
										
R220.74-0063	–	–	220.17-692	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-0080	–	–	–	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-0100	–	–	–	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-8160	–	–	–	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-8200	268-621	F94009-T09P	–	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P

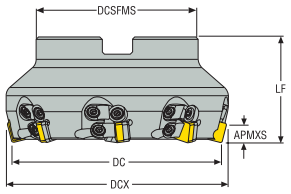
Accessori

Per fresa	Chiave dinamometrica regolabile	Anvil Key	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave per vite supporto	Chiave dinamometrica
							
R220.74-0063-0100	1/4HEX-S-HANDLE-0.8-5.0NM	–	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35
R220.74-8160	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-T09PX50	MC6S12X40	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35
R220.74-8200	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-T09PX50	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

220.74-09 – Pollici

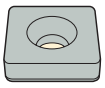
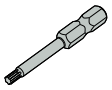
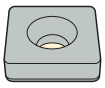




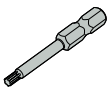
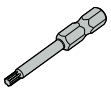
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 847-846
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCX	DCB	DCSFMS	LF	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch		lb	
R220.74-04.00-09-8	00059859	Manicotto	4.028	8	0.315	4.028	1.500	3.543	2.374	8100	6.390	SN..09
R220.74-05.00-09-8	00059860	Manicotto	5.008	8	0.315	5.012	1.500	3.543	2.374	7200	8.600	SN..09 / SNEX12*
R220.74-06.00-09-10	00059861	Manicotto	6.299	10	0.315	6.390	2.000	4.331	2.374	6400	13.670	SN..09 / SNEX12*

Parti di ricambio, comprese nella fornitura

Per fresa	Supporto	Vite per supporto	Chiave per vite inserto	Supporto inserto	Calibro di regolazione	Vite di regolazione	Vite supporto	Cuneo	Vite cuneo
									
R220.74-04.00	–	–	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-05.00	268-621	F94009-T09P	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P
R220.74-06.00	268-621	F94009-T09P	1/4HEX-T15PX50	174.10-620	AS6011	LD6019-T15P	174.10-652-T07P	CW0608M	LD6018T-T15P

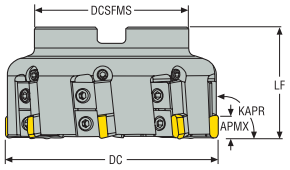
Accessori

Per fresa	Chiave dinamometrica regolabile	Anvil Key	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave per vite supporto	Chiave dinamometrica
							
R220.74-04.00	1/4HEX-S-HANDLE-0.8-5.0NM	–	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35
R220.74-05.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-T09PX50	–	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35
R220.74-06.00	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-T09PX50	58215080	1/4HEX-S-HANDLE	3.5NM	1/4HEX-T07PX50	T00-15P35

Chiavi dinamometriche e fisse, vedere pagina 931

R220.68-T16C – In mm

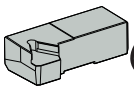
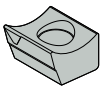
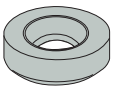
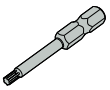
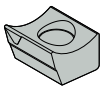
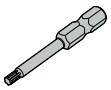




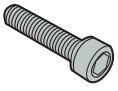
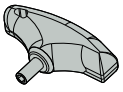
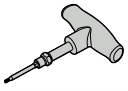
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 848
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RPMX	Peso	Inserto
			mm		mm	mm	mm	mm	mm		kg	
R220.68-0063-T11C-4	02600204	Manicotto	63,0	4	5,0	22,0	47,0	22,0	63,0	20600	1,1	TNGN1103..
R220.68-0063-T16C-4	00063814	Manicotto	63,0	4	14,0	22,0	47,0	22,0	63,0	12000	1,1	TNGN1604..
R220.68-0080-T11C-5	02600206	Manicotto	80,0	5	5,0	27,0	62,0	27,0	63,0	16700	1,7	TNGN1103..
R220.68-0080-T16C-5	00063812	Manicotto	80,0	5	14,0	27,0	62,0	27,0	63,0	9600	1,9	TNGN1604..
R220.68-0100-T11C-6	02600207	Manicotto	100,0	6	5,0	32,0	77,0	32,0	63,0	13400	2,7	TNGN1103..
R220.68-0125-T11C-8	02600208	Manicotto	125,0	8	5,0	40,0	90,0	40,0	63,0	10400	3,4	TNGN1103..
R220.68-0125-T16C-8	00063815	Manicotto	125,0	8	14,0	40,0	90,0	40,0	63,0	6100	3,4	TNGN1604..
R220.68-8160-T11C-10	02600209	Manicotto	160,0	10	5,0	40,0	90,0	40,0	63,0	8400	5,6	TNGN1103..
R220.68-8160-T16C-10	00063813	Manicotto	160,0	10	14,0	40,0	90,0	40,0	63,0	4800	5,9	TNGN1604..

Parti di ricambio, comprese nella fornitura

Per fresa	Unità di regolazione	Vite attacco	Modulo	Anello Seeger	Cuneo inserto	O-ring	Chiave di regolazione	Cuneo di bloccaggio	Chiave per vite cuneo	Vite cuneo
										
R220.68-0063-T11C	AU1114T-T15P	220.17-696	TN11PR	SGH22SMS1582	L257.9-120-T11	220.13-113	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0063-T16C	AU1114T-T15P	220.17-696	TN16PR	SGH22SMS1582	L257.9-120-T16	220.13-113	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0080-T11C	AU1114T-T15P	MC6S12X40	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0080-T16C	AU1114T-T15P	MC6S12X40	TN16PR	–	L257.9-120-T16	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0100-T11C	AU1114T-T15P	MC6S16X35	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0125-T11C	AU1114T-T15P	–	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-0125-T16C	AU1114T-T15P	–	TN16PR	–	L257.9-120-T16	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-8160-T11C	AU1114T-T15P	–	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-8160-T16C	AU1114T-T15P	–	TN16PR	–	L257.9-120-T16	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P

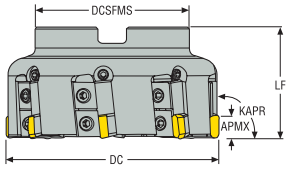
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.68-0063-0125-T11C	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	6.0NM	T00T-25P60
R220.68-0063-0125-T16C	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	6.0NM	T00T-25P60
R220.68-8160-T11C	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	6.0NM	T00T-25P60
R220.68-8160-T16C	1/4HEX-T-HANDLE-5.0-14.0NM	MC6S12X40	1/4HEX-T-HANDLE	6.0NM	T00T-25P60

Chiavi dinamometriche e fisse, vedere pagina 931

R220.68-T16C – Pollici

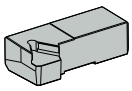
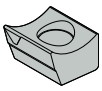
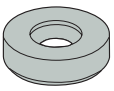
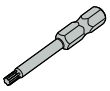
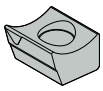
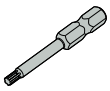




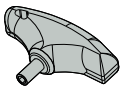
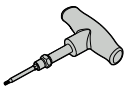
—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 837
—Per il programma inserti completo, vedere le pagine 848
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	ZEFP	APMXS	DCB	DCSFMS	DCONMS	LF	RPMX	Peso	Inserto
			inch		inch	inch	inch	inch	inch		lb	
R220.68-02.50-T11C-4	02611344	Manicotto	2.500	4	0.197	0.750	1.850	0.750	2.480	20600	2.430	TN..11
R220.68-03.00-T11C-5	02611345	Manicotto	3.000	5	0.197	1.000	2.441	1.000	2.480	9600	3.970	TN..11
R220.68-04.00-T11C-6	02611346	Manicotto	4.000	6	0.197	1.500	3.031	1.500	2.480	7600	5.730	TN..11
R220.68-05.00-T11C-8	02611347	Manicotto	5.000	8	0.197	1.500	3.543	1.500	2.480	6100	7.500	TN..11
R220.68-06.00-T11C-10	02611348	Manicotto	6.000	10	0.197	2.000	4.331	2.000	2.480	4800	12.350	TN..11

Parti di ricambio, comprese nella fornitura

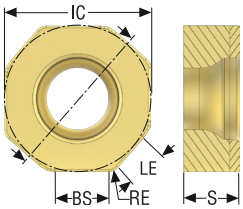
Per fresa	Unità di regolazione	Vite attacco	Modulo	Anello Seeger	Cuneo inserto	O-ring	Chiave di regolazione	Cuneo di bloccaggio	Chiave per vite cuneo	Vite cuneo
										
R220.68-02.50	AU1114T-T15P	220.17-695	TN11PR	SGH19SMS1582	L257.9-120-T11	220.13-114	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-03.00	AU1114T-T15P	UC6S1/2UNFX1-1/4	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-04.00	AU1114T-T15P	UF6S3/4UNFX2	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-05.00	AU1114T-T15P	UF6S3/4UNFX2	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P
R220.68-06.00	AU1114T-T15P	–	TN11PR	–	L257.9-120-T11	–	1/4HEX-T15PX50	L257.9-120M	1/4HEX-T25PX50	LD8020-T25P

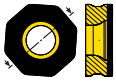
Accessori

Per fresa	Chiave dinamometrica regolabile	Vite attacco	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
					
R220.68-02.50-05.00	1/4HEX-T-HANDLE-5.0-14.0NM	–	1/4HEX-T-HANDLE	6.0NM	T00T-25P60
R220.68-06.00	1/4HEX-T-HANDLE-5.0-14.0NM	58215080	1/4HEX-T-HANDLE	6.0NM	T00T-25P60

Chiavi dinamometriche e fisse, vedere pagina 931

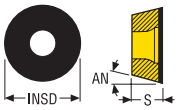
ONEW05





Codice di ordinazione	RE	BS	LE	IC	S	GAN	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
ONEW050410ANSN-02020-LF	1,0 *0.039*	0,3 *0.012*	3,6 *0.142*	12,0 *0.472*	4,427 *0.174*	0,0 °	■					

RDHW

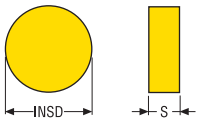


RDHW-LF



Codice di ordinazione	INSD	S	AN°	Qualità CBN					
	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
RDHW0803M0S-01030-LF	8,0 *0.315*	3,18 *0.125*	15,0	■					
RDHW10T3M0S-01030-8-LF	10,0 *0.394*	3,97 *0.156*	15,0	■					

RN.N-LF06/09/12



RNGN



RNGN-LF

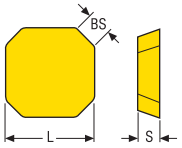


RNMN



Codice di ordinazione	INSD	S	Qualità CBN					
	mm *Inch*	mm *Inch*	CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
RNGN060300S-02020-LF	6,35 *0.250*	3,18 *0.125*	■					
RNGN090300S-02020-LF	9,52 *0.375*	3,18 *0.125*	■					
RNGN120400S-02020-LF	12,7 *0.500*	4,76 *0.187*	■					
RNGN060300S	6,35 *0.250*	3,18 *0.125*	■					
RNGN090300S	9,52 *0.375*	3,18 *0.125*	■					
RNMN060300S	6,35 *0.250*	3,18 *0.125*		■	■			
RNMN060300S-02020P	6,35 *0.250*	3,18 *0.125*						■
RNMN090300E	9,52 *0.375*	3,18 *0.125*		■		■		
RNMN090300S	9,52 *0.375*	3,18 *0.125*		■	■			
RNMN090300S-02020	9,52 *0.375*	3,18 *0.125*				■	■	
RNMN090300S-02020P	9,52 *0.375*	3,18 *0.125*						■

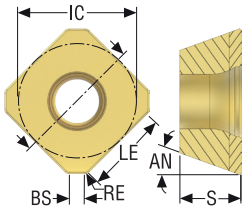
SEE.12

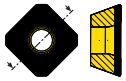


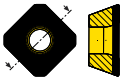
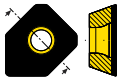


Codice di ordinazione	RE	BS	L	S	GAN	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
SEEN1203AFTN-D16	1,0 *0.039*	1,5 *0.059*	12,7 *0.500*	3,18 *0.125*	0,0 °		■				

SEEX

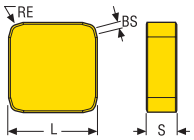




Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
SEEX09T3AFTN-D09-LF	0,5 *0.020*	1,25 *0.049*	2,86 *0.113*	9,52 *0.375*	3,97 *0.156*	20,0	■					
SEEX1203AETN-MD13-LF	1,0 *0.039*	8,0 *0.315*	2,2 *0.087*	12,7 *0.500*	3,18 *0.125*	20,0	■					
SEEX1204AFTN-D16-LF	1,1 *0.043*	1,6 *0.063*	3,81 *0.150*	12,7 *0.500*	4,76 *0.187*	20,0	■					
SEEX1204ZZTN-D16-LF	1,0 *0.039*	7,53 *0.296*	3,81 *0.150*	12,7 *0.500*	4,76 *0.187*	20,0	■					

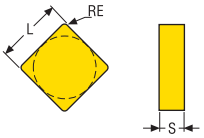
SNEN





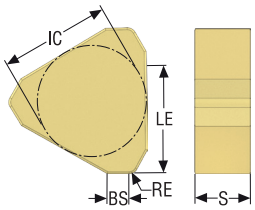
Codice di ordinazione	RE	BS	L	S	GAN	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
SNEN0903ENE-M06	0,8 *0.031*	0,9 *0.035*	9,52 *0.375*	3,18 *0.125*	0,0 °	■					
SNEN0903ENS-M08	0,8 *0.031*	0,9 *0.035*	9,52 *0.375*	3,18 *0.125*	0,0 °	■					

SN..06/09/SNEX12



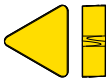
Codice di ordinazione	RE	L	S	GAN	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
SNMN060308E	0,8 *0.031*	6,35 *0.250*	3,18 *0.125*	0,0 °				■		
SNMN060308S	0,8 *0.031*	6,35 *0.250*	3,18 *0.125*	0,0 °		■				
SNMN090308E	0,8 *0.031*	9,525 *0.375*	3,18 *0.125*	0,0 °		■				
SNMN090308S	0,8 *0.031*	9,525 *0.375*	3,18 *0.125*	0,0 °		■				
SNMN090312S	1,2 *0.047*	9,525 *0.375*	3,18 *0.125*	0,0 °		■	■			
SNMN090312S-02020P	1,2 *0.047*	9,525 *0.375*	3,18 *0.125*							■
SNMN090316S	1,6 *0.063*	9,525 *0.375*	3,18 *0.125*	0,0 °		■				
SNGN090308E	0,8 *0.031*	9,525 *0.375*	3,18 *0.125*	0,0 °	■					
SNGN090308S	0,8 *0.031*	9,525 *0.375*	3,18 *0.125*	0,0 °	■					
SNGN090312S	1,2 *0.047*	9,525 *0.375*	3,18 *0.125*	0,0 °	■					
SNGN090316S	1,6 *0.063*	9,525 *0.375*	3,18 *0.125*	0,0 °	■					
SNEX120312ZZ	1,2 *0.047*	12,7 *0.500*	3,18 *0.125*	0,0 °	■					

TNGN



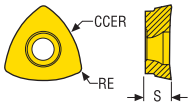
TNGN





Codice di ordinazione	RE	BS	LE	IC	S	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
TNGN1103PNE	0,8 *0.031*	1,0 *0.039*	3,3 *0.130*	6,35 *0.250*	3,18 *0.125*	■					
TNGN1103PNS	0,8 *0.031*	1,0 *0.039*	3,3 *0.130*	6,35 *0.250*	3,18 *0.125*	■					
TNGN1103PRS	1,2 *0.047*	1,0 *0.039*	3,3 *0.130*	6,35 *0.250*	3,18 *0.125*	■					
TNGN1604PNE	0,8 *0.031*	1,9 *0.075*	4,95 *0.195*	9,52 *0.375*	4,76 *0.187*	■					
TNGN1604PNS	0,8 *0.031*	1,9 *0.075*	4,95 *0.195*	9,52 *0.375*	4,76 *0.187*	■					
TNGN1604PRS	1,2 *0.047*	1,3 *0.051*	4,95 *0.195*	9,52 *0.375*	4,76 *0.187*	■					

218.19





Codice di ordinazione	RE	CCER	S	GAN	Qualità CBN					
	mm *Inch*	mm *Inch*	mm *Inch*		CBN200	CBN300	CBN300P	CBN400C	CBN500	CBN600
218.19-100T-MD08-LF	0,8 *0.031*	10,0 *0.394*	2,81 *0.111*	0,0 °	■					

Introduzione

Aree di applicazione

La gamma di prodotti ceramici Secomax è stata sviluppata per soddisfare le sempre crescenti esigenze delle aziende in termini di produttività e prestazioni.

Gli inserti sono pressati e sinterizzati tramite un processo HIP che prevede l'impiego di materia prima molto pura e di elevata qualità, con una microstruttura tale da consentire l'ottenimento di prodotti dalle eccellenti proprietà. Tutte le superfici sono poi rettificate per garantire al prodotto elevati gradi di tolleranza e precisione.

Di conseguenza gli inserti possiedono queste notevoli caratteristiche:

– alta resistenza agli shock termici

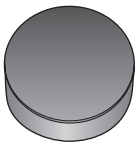
– tenacità ottimizzata

– eccellente resistenza all'usura

– alta qualità del prodotto

Introduzione

CS300



Formato:
Solido.

Composizione:
Qualità ceramica Sialon (Si, Al, O, N).

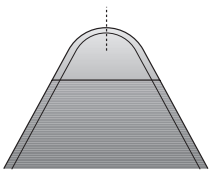
Rivestimento:
Nessun rivestimento.

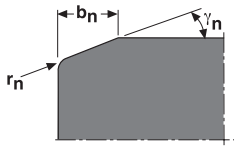
Dimensione smusso di rinforzo ed angolo

CS300	=	0,10 mm x 20°

S	=	Smussato ed arrotondato
T	=	Smussato, non arrotondato
E	=	Arrotondato

Dimensione smusso di rinforzo ed angolo





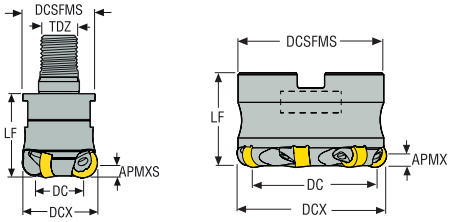
b_n = larghezza smusso
γ_n = angolo di smusso
r_n = raggio arrotondamento

Ceramica, Sgrossatura a_p 0,5 – 3,0 In mm/ In pollici

SMG	CS300	
	v_c	f_z
S1	600 — 1000 *2000 — 3200*	0,050 — 0,15 *0.00197 — 0.00590*
S2	600 — 1000 *2000 — 3200*	0,050 — 0,15 *0.00197 — 0.00590*
S3	600 — 1000 *2000 — 3200*	0,050 — 0,15 *0.00197 — 0.00590*
S11	— —	— —
S12	— —	— —
S13	— —	— —

R217/220.26

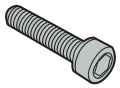
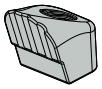




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 849, 850
—Per il programma inserti completo, vedere le pagine 853
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC	DCX	ZEFP	APMXS	DCB	TDZ	DCSFMS	LF	OAL	RMPX°	RPMX	Peso	Inserto
			mm	mm		mm	mm		mm	mm	mm			kg	
R220.26-0050-RN1204.6A	03115702	Manicotto	37,329	50,0	6	6,0	22,0	–	47,0	45,0	–	–	16700	0,5	RN1204
R220.26-0050-RN1207.5A	03115710	Manicotto	37,329	50,0	5	6,0	22,0	–	47,0	45,0	–	–	11900	0,5	RN1207
R220.26-0050-RP1204.6A	03133188	Manicotto	37,409	50,0	6	6,0	22,0	–	47,0	45,0	–	2,3	16700	0,5	RP1204
R220.26-0063-RN1207.6A	03115711	Manicotto	50,323	63,0	6	6,0	27,0	–	60,0	50,0	–	–	10600	0,8	RN1207
R220.26-0063-RN1207.7A	03115712	Manicotto	50,323	63,0	7	6,0	27,0	–	60,0	50,0	–	–	10600	0,9	RN1207
R220.26-0080-RN1207.7A	03115713	Manicotto	67,261	80,0	7	6,0	32,0	–	77,0	50,0	–	–	9400	1,6	RN1207
R220.26-0080-RN1207.8A	03115714	Manicotto	67,261	80,0	8	6,0	32,0	–	77,0	50,0	–	–	9400	1,4	RN1207
R220.26-0100-RN1207.8A	03115715	Manicotto	87,279	100,0	8	6,0	40,0	–	90,0	63,0	–	–	8400	2,8	RN1207
R220.26-0125-RN1207.9	03115716	Manicotto	112,278	125,0	9	6,0	40,0	–	90,0	63,0	–	–	7500	3,6	RN1207
R217.26-1632.RE-RN1204.3A	03115686	Combimaster	19,265	32,0	3	6,0	–	M16	30,0	35,0	57,75	0,0	19100	0,2	RN1204
R217.26-1632.RE-RP1204.3A	03204228	Combimaster	19,439	32,0	3	6,0	–	M16	30,0	35,0	57,75	5,0	20800	0,2	RP1204
R217.26-2040.RE-RN1204.4A	03115687	Combimaster	27,338	40,0	4	6,0	–	M20	36,5	40,0	67,0	0,0	17100	0,4	RN1204
R217.26-2040.RE-RP1204.4A	03115679	Combimaster	27,423	40,0	4	6,0	–	M20	36,5	40,0	67,0	3,2	18600	0,4	RP1204

Parti di ricambio, comprese nella fornitura

Per fresa	Vite attacco	Chiave per vite inserto	Cuneo di bloccaggio	Vite cuneo
				
R217.26-..	–	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-0050	220.17-692	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-0063	MC6S12X40	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-0080	950E1645	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-0100-0125	MC6S20X50	1/4HEX-H2.5X50	CW0508	LD5015C

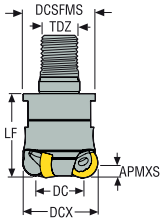
Accessori

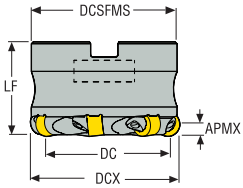
Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.26-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	H00-2535

Chiavi dinamometriche e fisse, vedere pagina 931

R217/220.26 – Pollici



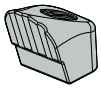




—Per la selezione inserto ed i parametri di taglio raccomandati, vedere le pagine 849, 850
—Per il programma inserti completo, vedere le pagine 853
—Per la spiegazione degli attributi ISO, vedere pag. 16

Codice di ordinazione	Codice prodotto	Tipo di attacco	DC inch	DCX inch	ZEFP	APMXS inch	DCB inch	TDZ	DCSFMS inch	LF inch	OAL inch	RMPX°	RPMX	Peso lb	Inserto
R217.26-01.50-20RE-RN1207.3A	10008700	Manicotto	1.001	1.500	3	0.236	–	M20	1.437	1.575	2.638	0,0	12500	0.880	RN1207
R220.26-02.00-RN1207.5A	03115723	Manicotto	1.501	2.000	5	0.236	0.750	–	1.750	2.000	–	–	11900	1.320	RN1207
R220.26-02.50-RN1207.6A	03115724	Manicotto	2.001	2.500	6	0.236	1.000	–	2.250	2.000	–	–	10600	1.980	RN1207
R220.26-03.00-RN1207.7A	03115725	Manicotto	2.499	3.000	7	0.236	1.250	–	2.750	2.000	–	–	9400	2.870	RN1207

Parti di ricambio, comprese nella fornitura

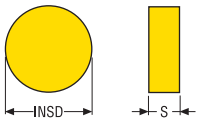
Per fresa	Vite attacco	Chiave per vite inserto	Cuneo di bloccaggio	Vite cuneo
				
R217.26-..	–	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-02.00	UC6S3/8UNFX1-3/4	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-02.50	UC6S1/2UNFX1-1/2	1/4HEX-H2.5X50	CW0508	LD5015C
R220.26-03.00	–	1/4HEX-H2.5X50	CW0508	LD5015C

Accessori

Per fresa	Chiave dinamometrica regolabile	Impugnatura	Coppia di serraggio inserto	Chiave dinamometrica
				
R217/220.26-..	1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-S-HANDLE	3.5NM	H00-2535

Chiavi dinamometriche e fisse, vedere pagina 931

RNGN12



RNGN



RPGN



			Qualità
Codice di ordinazione	**INSD**	**S**	**CBN**
	mm *Inch*	mm *Inch*	CS300
RNGN120400T-01020	12,7 *0.500*	4,76 *0.187*	■
RNGN120700T-01020	12,7 *0.500*	7,94 *0.313*	■
RPGN120400T-01020	12,7 *0.500*	4,76 *0.187*	■

Introduzione

Gli inserti Secomax PCD (diamante policristallino) sono prodotti sinterizzando particelle selezionate di diamante ad elevate temperature e pressioni. Gli inserti in PCD combinano la durezza, la resistenza all'usura e la conduttività termica del diamante con la tenacità del metallo duro.

Gli inserti Secomax™ PCD sono studiati per la lavorazione di leghe e materiali non ferrosi, ad esempio:

- Alluminio
- Rame
- Ottone
- Bronzo
- Metallo duro

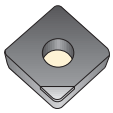
Possono anche essere impiegati per altri materiali, ad esempio:

- Materiali compositi (MMC, ...)
- Plastiche rinforzate
- Grafite
- Carburo di tungsteno
- Ceramiche
- Leghe di titanio

Selezione inserto



- Strato sinterizzato - LF
- PCD sinterizzato su metallo duro.
- Sono utilizzabili tutti i taglienti presenti su un lato.
- Qualità: PCD20, PCD30M



- Placchetta brasata -L1 e -L2
- PCD brasato su inserti standard in metallo duro.
- Qualità: PCD05, PCD20, PCD30

Inserti per frese standard

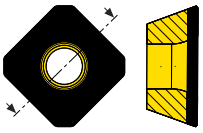
Frese per spianatura

- SEHN12
- R220.13
- R220.30



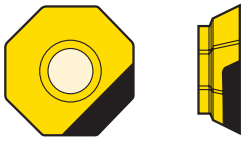
Frese per spianatura

- SEEX12
- R220.53



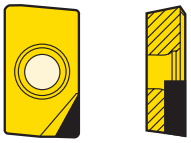
Frese per spianatura

- OFEX05
- R220.43



Frese a spallamento retto

- XOEX06/10/12/16
- 217/220.69



Le velocità di taglio consigliate sono riportate sulle tabelle dei parametri.
L'avanzamento consigliato è riportato nella sezione dei parametri di taglio.
Le formule per il calcolo dei parametri di taglio sono riportate a pagina 922

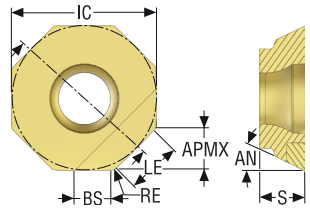
PCD, Sgrossatura a_p 0,5 - 3,0 In mm/ In pollici

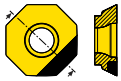
SMG	PCD05		PCD20		PCD30		PCD30M	
	v_c	f_z	v_c	f_z	v_c	f_z	v_c	f_z
N1	600 — 3500 *2000 — 11400*	0,050 — 0,30 *0.00197 — 0.0118*	600 — 3500 *2000 — 11400*	0,050 — 0,30 *0.00197 — 0.0118*	— —	— —	— —	— —
N2	400 — 2500 *1400 — 8200*	0,050 — 0,20 *0.00197 — 0.00787*	400 — 2500 *1400 — 8200*	0,050 — 0,20 *0.00197 — 0.00787*	— —	— —	— —	— —
N3	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*	— —	— —	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*
N11	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	400 — 1200 *1400 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*
TS1	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	— —	— —	— —	— —
TS2	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TS3	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*
TS4	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TP1	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	— —	— —	— —	— —
TP2	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TP3	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*
TP4	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
GR1	100 — 1500 *330 — 4900*	0,10 — 0,20 *0.00394 — 0.00787*	100 — 1500 *330 — 4900*	0,10 — 0,20 *0.00394 — 0.00787*	— —	— —	— —	— —

PCD, Finitura a_p < 0,5 In mm/ In pollici

SMG	PCD05		PCD20		PCD30		PCD30M	
	v_c	f_z	v_c	f_z	v_c	f_z	v_c	f_z
N1	600 — 3500 *2000 — 11400*	0,050 — 0,30 *0.00197 — 0.0118*	600 — 3500 *2000 — 11400*	0,050 — 0,30 *0.00197 — 0.0118*	— —	— —	— —	— —
N2	400 — 2500 *1400 — 8200*	0,050 — 0,20 *0.00197 — 0.00787*	400 — 2500 *1400 — 8200*	0,050 — 0,20 *0.00197 — 0.00787*	— —	— —	— —	— —
N3	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*	— —	— —	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*	300 — 1000 *990 — 3200*	0,050 — 0,10 *0.00197 — 0.00393*
N11	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	400 — 1200 *1400 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*	600 — 1200 *2000 — 3900*	0,10 — 0,50 *0.00394 — 0.0196*
TS1	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	— —	— —	— —	— —
TS2	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TS3	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*
TS4	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TP1	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	100 — 1500 *330 — 4900*	0,10 — 0,40 *0.00394 — 0.0157*	— —	— —	— —	— —
TP2	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
TP3	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*	100 — 800 *330 — 2600*	0,050 — 0,20 *0.00197 — 0.00787*
TP4	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*	400 — 800 *1400 — 2600*	0,10 — 0,20 *0.00394 — 0.00787*
GR1	100 — 1500 *330 — 4900*	0,10 — 0,20 *0.00394 — 0.00787*	100 — 1500 *330 — 4900*	0,10 — 0,20 *0.00394 — 0.00787*	— —	— —	— —	— —

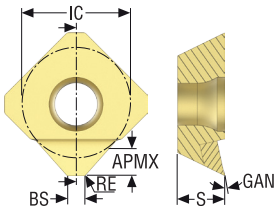
OFEX





								Qualità			
Codice di ordinazione	**RE**	**APMX**	**BS**	**LE**	**IC**	**S**	**AN°**	**PCD**			
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		PCD05	PCD20	PCD30	PCD30M
OFEX05T305FN-M05	0,5 *0.020*	3,0 *0.118*	2,4 *0.094*	3,5 *0.138*	12,79 *0.504*	3,97 *0.156*	26,0		■		

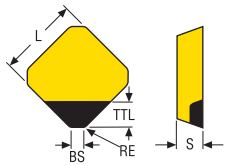
SEEX





								Qualità			
Codice di ordinazione	**RE**	**APMX**	**BS**	**LE**	**IC**	**S**	**GAN**	**PCD**			
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		PCD05	PCD20	PCD30	PCD30M
SEEX09T3AFFN-L1	0,4 *0.016*	2,8 *0.110*	1,5 *0.059*	1,95 *0.077*	9,525 *0.375*	3,97 *0.156*	12,0 °	■	■		

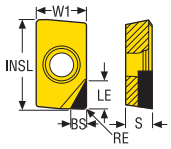
SEHN





							Qualità			
Codice di ordinazione	RE	BS	L	TTL	S	GAN	PCD			
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		PCD05	PCD20	PCD30	PCD30M
SEHN1203AFFN-E08	1,0 *0.039*	1,6 *0.063*	12,7 *0.500*	– *0.500*	3,18 *0.125*	0,0 °		■		

XOEX



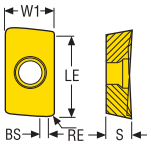




								Qualità			
Codice di ordinazione	RE	BS	LE	INSL	W1	S	GAN	PCD			
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		PCD05	PCD20	PCD30	PCD30M
XOEX060204FR	0,4 *0.016*	1,1 *0.043*	2,5 *0.098*	6,94 *0.273*	4,09 *0.161*	2,45 *0.096*	8,0 °	■			
XOEX10T304F	0,4 *0.016*	1,08 *0.043*	4,0 *0.157*	11,08 *0.436*	6,87 *0.270*	3,77 *0.148*	15,0 °	■	■		
XOEX120404FR	0,4 *0.016*	1,11 *0.044*	4,0 *0.157*	13,88 *0.546*	8,18 *0.322*	5,03 *0.198*	15,0 °		■	■	
XOEX120404FR-L2	0,4 *0.016*	1,95 *0.077*	4,5 *0.177*	13,7 *0.539*	8,18 *0.322*	4,95 *0.195*	14,0 °	■			
XOEX160508F	0,8 *0.031*	1,3 *0.051*	15,7 *0.618*	18,3 *0.720*	10,2 *0.402*	5,8 *0.228*	15,65 °	■	■		■



ABEX26

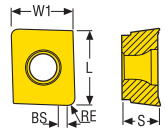


M15

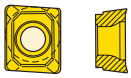


Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2501	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ABEX2606ZFFR-M15	1,6 *0.063*	2,0 *0.079*	24,4 *0.961*	14,0 *0.551*	6,35 *0.250*	17,0 °							■		■	■	■	■		■				
ABEX2606ZZFR-M15	1,6 *0.063*	10,0 *0.394*	24,4 *0.961*	14,0 *0.551*	6,35 *0.250*	17,0 °														■				

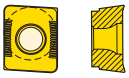
AC..15



M10/M11/M14/MD15

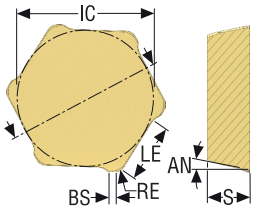


ME10

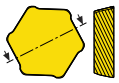


Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																				
							PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ACET150612TR-ME10	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	22,0 °						■	■											
ACET150612TL-M11	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	14,0 °							■											
ACET150612TR-M11	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	14,0 °							■			■	■	■		■	■			
ACET150631TR-M11	3,1 *0.122*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	14,0 °							■											
ACET150612TL-M14	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■											
ACET150612TR-M14	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■			■		■		■				
ACET150630TR-M14	3,0 *0.118*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °														■				
ACET150631TR-M14	3,1 *0.122*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■											
ACET150660TL-M14	6,0 *0.236*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■											
ACET150660TR-M14	6,0 *0.236*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■							■				
ACET150612TR-MD15	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °					■						■			■				
ACET150630TR-MD15	3,0 *0.118*	–	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °											■							
ACMT150612TR-M14	1,2 *0.047*	0,13 *0.005*	14,8 *0.583*	12,7 *0.500*	6,35 *0.250*	15,0 °							■					■						

HPMN12

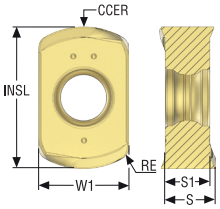


D25



Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																	
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2501	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
HPMN1206ZETR-D25	1,7 *0.067*	0,8 *0.031*	9,0 *0.354*	21,458 *0.845*	6,35 *0.250*	11,0									■		■	■						

LOH.06



D07



M07



MD07

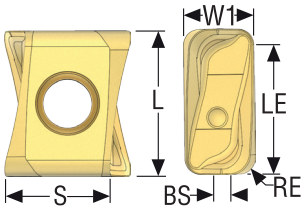


ME06

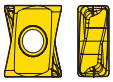


Codice di ordinazione	RE	CCER	INSL	W1	S	S1	GAN	Qualità																		
								PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LOHT060310TR-M07	1,0 *0.039*	5,5 *0.217*	10,0 *0.394*	6,35 *0.250*	3,57 *0.141*	3,17 *0.125*	20,0 °					■	■	■	■	■			■	■	■				
LOHT060310TR-MD07	1,0 *0.039*	5,5 *0.217*	10,0 *0.394*	6,35 *0.250*	3,57 *0.141*	3,17 *0.125*	7,0 °			■		■						■	■						
LOHT060310TR-ME06	1,0 *0.039*	5,5 *0.217*	10,0 *0.394*	6,35 *0.250*	3,57 *0.141*	3,17 *0.125*	27,0 °						■	■						■	■		■		
LOHW060310TR-D07	1,0 *0.039*	5,5 *0.217*	10,0 *0.394*	6,35 *0.250*	3,45 *0.136*	3,17 *0.125*	0,0 °	■				■						■							

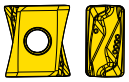
LOEX08/12

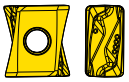


M08/MD08



M09/M12/MD13

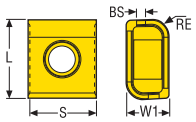




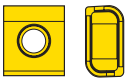
Codice di ordinazione	RE	BS	LE	L	W1	S	GAN	Qualità																				
								PVD											CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LOEX080404TR-M08	0,4 *0.016*	1,29 *0.051*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,67 *0.263*	33,3 °			■		■		■				■	■						
LOEX080408TR-M08	0,8 *0.031*	0,92 *0.036*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,6 *0.260*	34,0 °			■		■	■	■	■	■		■	■		■				
LOEX080412TR-M08	1,2 *0.047*	0,52 *0.020*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,52 *0.257*	33,3 °			■				■					■						
LOEX080416TR-M08	1,6 *0.063*	0,13 *0.005*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,45 *0.254*	33,3 °					■	■	■		■									
LOEX080404TR-MD08	0,4 *0.016*	1,29 *0.051*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,67 *0.263*	29,0 °			■									■						
LOEX080408TR-MD08	0,8 *0.031*	0,92 *0.036*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,6 *0.260*	29,5 °			■				■			■	■	■		■				
LOEX080416TR-MD08	1,6 *0.063*	0,13 *0.005*	8,3 *0.327*	9,3 *0.366*	4,4 *0.173*	6,45 *0.254*	29,5 °							■					■						
LOEX120704R-T4-M09	0,4 *0.016*	2,83 *0.111*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,33 *0.407*	36,0 °							■											
LOEX120708R-T4-M09	0,8 *0.031*	2,47 *0.097*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,26 *0.404*	36,0 °					■	■	■	■	■			■	■					
LOEX120716R-T4-M09	1,6 *0.063*	1,74 *0.069*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,12 *0.398*	36,0 °					■	■	■		■									
LOEX120724R-T4-M09	2,4 *0.094*	1,01 *0.040*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,98 *0.393*	36,0 °						■												
LOEX120731R-T4-M09	3,1 *0.122*	0,37 *0.015*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,88 *0.389*	36,0 °					■	■	■		■									
LOEX120740R-T4-M09	4,0 *0.157*	0,14 *0.006*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,74 *0.383*	36,0 °						■	■											
LOEX120750R-T2-M09	5,0 *0.197*	1,06 *0.042*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,52 *0.375*	36,0 °							■											
LOEX120763R-T2-M09	6,3 *0.248*	0,43 *0.017*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,28 *0.365*	36,0 °						■	■											
LOEX120708TR-T4-M12	0,8 *0.031*	2,47 *0.097*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,26 *0.404*	35,0 °			■		■	■	■	■	■			■	■	■		■		
LOEX120712TR-T4-M12	1,2 *0.047*	2,1 *0.083*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,19 *0.401*	35,0 °							■							■				
LOEX120716TR-T4-M12	1,6 *0.063*	1,74 *0.069*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,12 *0.398*	35,0 °			■				■											
LOEX120720TR-T4-M12	2,0 *0.079*	1,37 *0.054*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,04 *0.395*	35,0 °					■	■	■		■			■						
LOEX120724TR-T4-M12	2,4 *0.094*	1,01 *0.040*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,98 *0.393*	35,0 °						■	■					■						
LOEX120731TR-T4-M12	3,1 *0.122*	0,37 *0.015*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	9,88 *0.389*	35,0 °					■	■	■		■			■						
LOEX120708TR-T4-MD13	0,8 *0.031*	2,47 *0.097*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,26 *0.404*	30,0 °			■				■			■	■	■						
LOEX120712TR-T4-MD13	1,2 *0.047*	2,1 *0.083*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,19 *0.401*	30,0 °			■									■						
LOEX120716TR-T4-MD13	1,6 *0.063*	1,74 *0.069*	12,0 *0.472*	14,2 *0.559*	7,5 *0.295*	10,12 *0.398*	30,0 °			■				■				■	■		■				

Nota: LOEX1207xxR-2-M09 ha solo 2 taglienti

LNHQ14/17

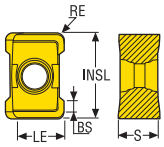


M11/M13

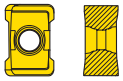


Codice di ordinazione	RE	BS	L	W1	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LNHQ140708TN4-M11	0,8 *0.031*	2,8 *0.110*	14,0 *0.551*	7,5 *0.295*	11,85 *0.467*	16,0 °							■					■						
LNHQ140731TN4-M11	3,1 *0.122*	0,5 *0.020*	14,0 *0.551*	7,5 *0.295*	11,85 *0.467*	16,0 °							■					■						
LNHQ140740TN4-M11	4,0 *0.157*	–	14,0 *0.551*	7,5 *0.295*	11,85 *0.467*	16,0 °							■											
LNHQ140750TN4-M11	5,0 *0.197*	–	14,0 *0.551*	7,5 *0.295*	11,85 *0.467*	16,0 °							■											
LNHQ140760TN4-M11	6,0 *0.236*	–	14,0 *0.551*	7,5 *0.295*	11,85 *0.467*	16,0 °							■					■						

LNK.05/06



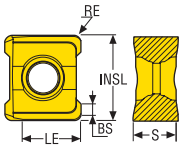
LNK.05 LNK.06 LNKW06



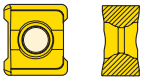
Codice di ordinazione	RE	BS	LE	INSL	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LNKT050404PPN4-E05	0,4 *0.016*	1,3 *0.051*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	23,0 °							■											■
LNKT050404PPTN4-M06	0,4 *0.016*	1,3 *0.051*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °					■		■									■		
LNKT050408PPTN4-M06	0,8 *0.031*	1,3 *0.051*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °					■		■							■				
LNKT050416PPTN4-M06	1,6 *0.063*	0,8 *0.031*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050420PPTN4-M06	2,0 *0.079*	0,8 *0.031*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050424PPTN2-M06	2,4 *0.094*	0,6 *0.024*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050431PPTL1-M06	3,1 *0.122*	0,6 *0.024*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050431PPTR1-M06	3,1 *0.122*	0,6 *0.024*	5,0 *0.197*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050431PPTR1C-M06	3,1 *0.122*	0,6 *0.024*	4,96 *0.195*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT050431PPTL1C-M06	3,1 *0.122*	0,6 *0.024*	4,96 *0.195*	10,0 *0.394*	4,7 *0.185*	15,0 °							■											
LNKT060504PPN-E05	0,4 *0.016*	1,6 *0.063*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT060508PPN-E05	0,8 *0.031*	1,1 *0.043*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT060504PPTN-M06	0,4 *0.016*	1,6 *0.063*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °							■					■		■				
LNKT060508PPTN-M06	0,8 *0.031*	1,1 *0.043*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °			■		■		■			■		■		■				
LNKT060516PPTN-M06	1,6 *0.063*	1,3 *0.051*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °			■				■			■								
LNKT060531PPTN-M06	3,1 *0.122*	0,6 *0.024*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °							■											
LNKT060540PPTL-M06	4,0 *0.157*	0,8 *0.031*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °							■											
LNKT060540PPTR-M06	4,0 *0.157*	0,8 *0.031*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	15,0 °							■											
LNKW060504PPN-MD08	0,4 *0.016*	1,6 *0.063*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	0,0 °			■															
LNKW060508PPN-MD08	0,8 *0.031*	1,1 *0.043*	6,0 *0.236*	10,0 *0.394*	5,0 *0.197*	0,0 °										■		■						

LNK.0504031...C è la prima scelta per CW = da 8 a 9 mm e LNK.0504031 è la prima scelta per CW= da 9 a 10 mm

LNK.08



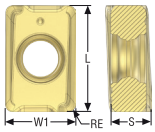
LNK.08



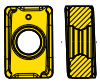
Codice di ordinazione	RE	BS	LE	INSL	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LNKT080504PPN-E05	0,4 *0.016*	1,6 *0.063*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT080508PPN-E05	0,8 *0.031*	1,1 *0.043*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT080520PPN-E05	2,0 *0.079*	0,7 *0.028*	6,7 *0.264*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT080531PPN-E05	3,1 *0.122*	0,6 *0.024*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	23,0 °																		■
LNKT080504PPTN-M06	0,4 *0.016*	1,6 *0.063*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	15,0 °							■					■		■				
LNKT080508PPTN-M06	0,8 *0.031*	1,1 *0.043*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	15,0 °			■		■		■			■		■		■				
LNKT080516PPTN-M06	1,6 *0.063*	1,3 *0.051*	7,2 *0.283*	10,0 *0.394*	5,0 *0.197*	15,0 °			■				■											
LNKT080520PPTN-M06	2,0 *0.079*	0,7 *0.028*	6,7 *0.264*	10,0 *0.394*	5,0 *0.197*	15,0 °			■				■			■								
LNKT080524PPTN-M06	2,4 *0.094*	0,5 *0.020*	6,7 *0.264*	10,0 *0.394*	5,0 *0.197*	15,0 °			■				■			■								
LNKT080531PPTN-M06	3,1 *0.122*	0,6 *0.024*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	15,0 °			■				■			■								
LNKT080540PPTL-M06	4,0 *0.157*	0,8 *0.031*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	15,0 °							■											
LNKT080540PPTR-M06	4,0 *0.157*	0,8 *0.031*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	15,0 °							■											
LNKW080508PPN-MD08	0,8 *0.031*	1,1 *0.043*	7,5 *0.295*	10,0 *0.394*	5,0 *0.197*	0,0 °										■		■						

Nota: Quando si utilizza un inserto LNK con raggio di punta RE= 2,4, 3,1 e 4,0 mm,
modificare il profilo esterno della fresa o del modulo aggiungendo un raggio di punta o uno smusso = 2,5 mm

LN.U1104

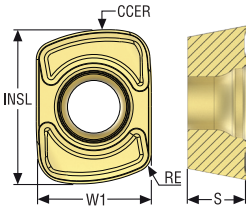


ME07/ME08/M07/M08/M12



Codice di ordinazione	RE	L	W1	S	GAN	Qualità																		
						PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LNEU110408ER-M07	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,53 *0.178*	28,0 °						■	■	■										
LNEU110408SR-M12	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,53 *0.178*	22,9 °			■				■				■	■		■				
LNEU110408SR-ME07	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,32 *0.170*	27,5 °						■												
LNEU110408SR-ME08	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,53 *0.178*	28,0 °						■						■						
LNMU110408ER-M07	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,32 *0.170*	27,5 °						■												
LNMU110408SR-M12	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,32 *0.170*	22,4 °			■									■						
LNMU110408SR-ME08	0,8 *0.031*	12,0 *0.472*	8,0 *0.315*	4,32 *0.170*	27,5 °						■	■											

LPH.05/06/09



E05/E08/ME04/ME05/ME08/M05/M06/M13

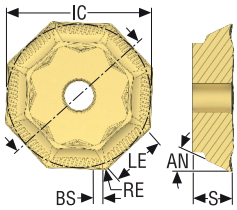


MD05/MD07/MD15/D06/D12/D15



Codice di ordinazione	RE	CCER	INSL	W1	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
LPHT05T210TR-ME04	1,0 *0.039*	6,4 *0.252*	6,8 *0.268*	5,07 *0.200*	2,54 *0.100*	16,0 °						■	■							■				
LPHT060310ER-E05	1,0 *0.039*	8,0 *0.315*	8,5 *0.335*	6,35 *0.250*	3,18 *0.125*	16,0 °							■									■		■
LPHT060310TR-ME05	1,0 *0.039*	8,0 *0.315*	8,5 *0.335*	6,35 *0.250*	3,18 *0.125*	16,0 °					■	■	■									■		
LPHT060310TR-M06	1,0 *0.039*	8,0 *0.315*	8,5 *0.335*	6,35 *0.250*	3,18 *0.125*	11,0 °			■		■	■	■	■	■			■	■	■				
LPHT09T420R-E08	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	20,0 °																		■
LPHW05T210TR-MD05	1,0 *0.039*	6,4 *0.252*	6,8 *0.268*	5,07 *0.200*	2,54 *0.100*	0,0 °																		
LPHW060310TR-MD07	1,0 *0.039*	8,0 *0.315*	8,5 *0.335*	6,35 *0.250*	3,18 *0.125*	0,0 °												■	■					
LPHW060310TR-D06	1,0 *0.039*	8,0 *0.315*	8,5 *0.335*	6,35 *0.250*	3,18 *0.125*	0,0 °	■				■													
LPHW09T420TR-D12	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	0,0 °																		
LPKT05T210TR-M05	1,0 *0.039*	6,4 *0.252*	6,8 *0.268*	5,07 *0.200*	2,54 *0.100*	11,0 °					■	■	■	■	■			■	■					
LPKT09T420TR-ME08	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	15,0 °						■	■									■		
LPKT09T420TR-M13	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	10,0 °					■	■	■	■	■		■	■	■	■				
LPKW05T210TR-MD05	1,0 *0.039*	6,4 *0.252*	6,8 *0.268*	5,07 *0.200*	2,54 *0.100*	0,0 °	■				■							■						
LPKW09T420TR-MD15	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	0,0 °								■			■	■						
LPKW09T420TR-D15	2,0 *0.079*	9,75 *0.384*	14,0 *0.551*	9,5 *0.374*	4,76 *0.187*	0,0 °	■		■		■													

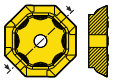
OFER/OFEN/OFMR07



E07/M10/D18/M16



M15



ME10/ME13/ME15

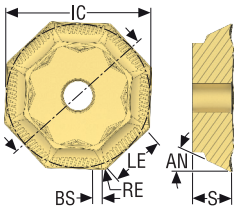


ZZ..M10/M16

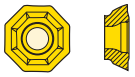


Codice di ordinazione	RE	BS	LE	IC	S	AN°	GAN	Qualità																		
								PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
OFER070405N-E07	0,5 *0.020*	1,4 *0.055*	7,0 *0.276*		4,56 *0.180*	26,0	20,0 °		■															■	
OFER070405TN-ME10	0,5 *0.020*	1,4 *0.055*	7,1 *0.280*		4,56 *0.180*	26,0	18,0 °							■					■						
OFER070405TN-ME15	0,5 *0.020*	1,4 *0.055*	7,1 *0.280*		4,56 *0.180*	26,0	16,0 °							■					■		■				
OFER070405N-M10	0,5 *0.020*	1,4 *0.055*	7,0 *0.276*		4,56 *0.180*	26,0	0,0 °				■														
OFER070405TN-M16	0,5 *0.020*	1,4 *0.055*	7,1 *0.280*		4,56 *0.180*	26,0	0,0 °			■				■			■	■	■		■				
OFMR070405TR-ME13	0,5 *0.020*	1,0 *0.039*	5,2 *0.205*		4,86 *0.191*	26,0	15,0 °												■						
OFMR070405TR-M15	0,5 *0.020*	1,2 *0.047*	5,2 *0.205*		4,86 *0.191*	26,0	0,0 °							■			■		■						
OFEN070405TN-D18	0,5 *0.020*	2,0 *0.079*	7,0 *0.276*	17,96 *0.707*	4,76 *0.187*	26,0	0,0 °					■					■	■	■						
OFEN0704ZZR-M10	0,5 *0.020*	6,6 *0.260*	7,5 *0.295*		4,76 *0.187*	26,0	0,0 °				■														
OFEN0704ZZTR-M16	0,5 *0.020*	6,6 *0.260*	7,4 *0.291*		4,74 *0.187*	26,0	0,0 °										■				■				

OF..05/07



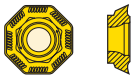
E04/M05/M08/ME07



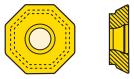
ME10/ME15



ME12/D09



ME13/M15

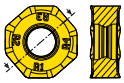


Codice di ordinazione	RE	BS	LE	IC	S	AN°	GAN	Qualità																		
								PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
OFEX05T305N-E04	0,5 *0.020*	1,5 *0.059*	4,9 *0.193*	12,7 *0.500*	3,77 *0.148*	26,0	20,0 °		■																
OFEX05T305TN-ME07	0,5 *0.020*	1,5 *0.059*	4,9 *0.193*	12,7 *0.500*	3,77 *0.148*	26,0	18,0 °							■					■						
OFEX05T305N-M05	0,5 *0.020*	1,5 *0.059*	4,9 *0.193*	12,7 *0.500*	3,77 *0.148*	26,0	0,0 °				■														
OFEX05T305TN-M08	0,5 *0.020*	1,5 *0.059*	4,9 *0.193*	12,7 *0.500*	3,77 *0.148*	26,0	0,0 °							■			■		■		■				
OFEX05T305TN-D09	0,5 *0.020*	1,5 *0.059*	4,9 *0.193*		3,97 *0.156*	26,0	0,0 °											■							
OFMT050405TR-ME12	0,5 *0.020*	1,5 *0.059*	2,6 *0.102*	13,18 *0.519*	4,76 *0.187*	26,0	18,0 °							■											
OFMT070405TN-ME13	0,5 *0.020*	1,1 *0.043*	7,1 *0.280*		4,86 *0.191*	26,0	18,0 °												■						
OFMT070405TN-M15	0,5 *0.020*	1,1 *0.043*	7,1 *0.280*		4,86 *0.191*	26,0	0,0 °							■					■						
OFMT070405TR-M15	0,5 *0.020*	1,0 *0.039*	5,2 *0.205*		4,86 *0.191*	26,0	0,0 °							■											
OFET070405TN-ME10	0,5 *0.020*	1,4 *0.055*	7,1 *0.280*		4,56 *0.180*	26,0	18,0 °							■											
OFET070405TN-ME15	0,5 *0.020*	1,4 *0.055*	7,1 *0.280*		4,56 *0.180*	26,0	18,0 °							■											

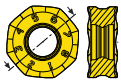
ON.U05

ON.U0504: ME14

ON.U0504: ZZTN-M10



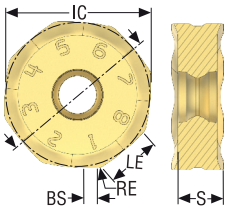
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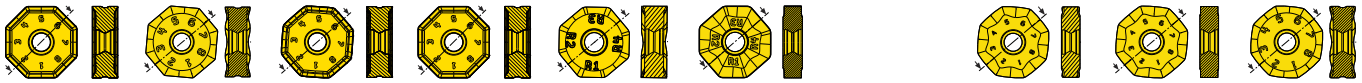


Codice di ordinazione	*	RE	BS	LE	IC	S	GAN	Qualità																				
								PVD									CVD							Non rivestite				
	mm	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25			
ONMU050410ANTN-ME10	*	1,0 *0.039*	0,3 *0.012*	3,9 *0.154*	12,0 *0.472*	4,5 *0.177*	20,0 °						■	■		■												
ONMU050410ANTN-ME11	–	1,0 *0.039*	1,0 *0.039*	3,4 *0.134*	12,0 *0.472*	4,5 *0.177*	20,0 °					■	■	■		■			■								
ONMU050406ANTN-ME14	–	0,6 *0.024*	1,3 *0.051*	3,2 *0.126*	12,0 *0.472*	4,5 *0.177*	25,0 °			■		■	■	■				■	■		■						
ONMU050410ANTN-M10	*	1,0 *0.039*	0,3 *0.012*	4,1 *0.161*	12,0 *0.472*	4,5 *0.177*	20,0 °			■		■		■				■	■		■						
ONMU050410ANTN-M11	–	1,0 *0.039*	1,0 *0.039*	3,4 *0.134*	12,0 *0.472*	4,5 *0.177*	20,0 °			■		■			■		■	■	■		■						
ONEU050410ZZTN4-M10	–	1,0 *0.039*	3,2 *0.126*	3,4 *0.134*	12,0 *0.472*	4,25 *0.167*	20,0 °			■																	

Gli inserti contrassegnati sono compatibili con questi inserti raschianti dedicati:
*ONEU050410ZZTN4-M10
**ONEU090520ZZTN4-M12
***ONEU090520ZZTN4-M14

ON.U09

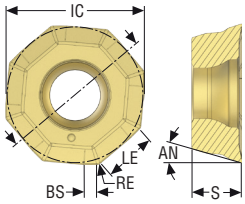


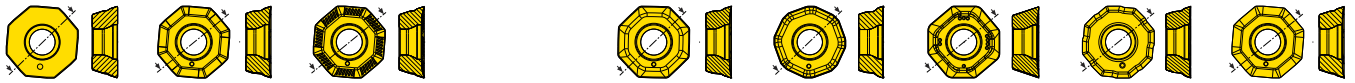


Codice di ordinazione	*	RE	BS	LE	IC	S	GAN	Qualità																		
								PVD											CVD							Non rivestite
	mm	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ONMU090520ANTN-ME12	**	2,0 *0.079*	0,45 *0.018*	7,3 *0.287*	22,0 *0.866*	6,8 *0.268*	20,0 °						■	■		■		■					■		
ONMU090520ANTN-ME13	–	2,0 *0.079*	2,11 *0.083*	7,7 *0.303*	22,0 *0.866*	6,8 *0.268*	20,0 °			■			■	■		■		■	■	■	■				
ONMU090510ANTN-ME16	–	1,0 *0.039*	1,5 *0.059*	6,8 *0.268*	22,0 *0.866*	6,8 *0.268*	25,0 °			■		■	■	■				■	■		■				
ONMU090512TN-ME16	–	1,2 *0.047*	–	8,1 *0.319*	22,0 *0.866*	6,8 *0.268*	25,0 °			■			■		■	■		■	■	■	■				
ONMU090510ANTN-M12	–	1,0 *0.039*	–	8,3 *0.327*	22,0 *0.866*	6,8 *0.268*	20,0 °			■			■		■	■				■					
ONMU090520ANTN-M12	**	2,0 *0.079*	0,45 *0.018*	7,3 *0.287*	22,0 *0.866*	6,8 *0.268*	20,0 °			■				■	■	■		■	■	■	■		■		
ONMU090520ANTN-M13	***	2,0 *0.079*	2,11 *0.083*	7,7 *0.303*	22,0 *0.866*	6,8 *0.268*	20,0 °			■		■		■		■	■	■	■		■		■		
ONMU090520ANTN-M14	***	2,0 *0.079*	0,45 *0.018*	7,3 *0.287*	22,0 *0.866*	5,56 *0.219*	15,0 °			■		■		■			■	■	■		■				
ONMU090520ANTN-M15	–	2,0 *0.079*	2,11 *0.083*	7,7 *0.303*	22,0 *0.866*	5,56 *0.219*	15,0 °			■		■					■	■	■		■				
ONMU090512TN-M30	–	1,2 *0.047*	–	8,1 *0.319*	22,0 *0.866*	6,5 *0.256*	25,0 °										■	■	■						
ONMU090512TN-M45	–	1,2 *0.047*	–	8,1 *0.319*	22,0 *0.866*	6,5 *0.256*	25,0 °										■	■							
ONMU090520ANTN-MD16	***	2,0 *0.079*	0,45 *0.018*	7,3 *0.287*	22,0 *0.866*	5,56 *0.219*	0,0 °										■	■	■		■				
ONMU090520ANTN-MD17	–	2,0 *0.079*	2,11 *0.083*	7,4 *0.291*	22,0 *0.866*	5,56 *0.219*	0,0 °										■	■	■						
ONEU090520ZZTN4-M12	–	2,0 *0.079*	6,3 *0.248*	6,3 *0.248*	21,41 *0.843*	6,8 *0.268*	20,0 °			■								■	■						
ONEU090520ZZTN4-M14	–	2,0 *0.079*	6,3 *0.248*	6,3 *0.248*	21,41 *0.843*	5,56 *0.219*	15,0 °			■				■			■	■	■		■				

Gli inserti contrassegnati sono compatibili con questi inserti raschianti dedicati:
*ONEU050410ZZTN4-M10
**ONEU090520ZZTN4-M12
***ONEU090520ZZTN4-M14

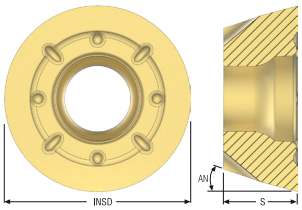
OOET/OOMT/OOEW06



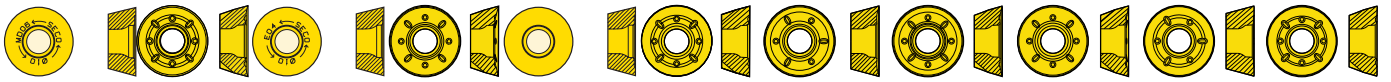


Codice di ordinazione	RE	BS	LE	IC	S	AN°	GAN	Qualità																		
								PVD									CVD							Non rivestite		
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25	MP1020
OOET0605ZZFR-E08	0,6 *0.024*	1,5 *0.059*	4,5 *0.177*	15,8 *0.622*	5,56 *0.219*	18,0	20,0 °																		■	
OOMT060510SN-ME12	1,0 *0.039*	–	5,7 *0.224*	15,78 *0.621*	5,56 *0.219*	18,0	15,0 °						■						■		■					
OOET0605ZZSR-ME12	0,6 *0.024*	1,5 *0.059*	4,5 *0.177*	15,8 *0.622*	5,56 *0.219*	18,0	15,0 °					■	■	■	■	■			■	■	■					
OOMT060510EN-M10	1,0 *0.039*	–	5,7 *0.224*	15,78 *0.621*	5,56 *0.219*	18,0	10,0 °						■		■	■										
OOET0605ZZER-M10	0,6 *0.024*	1,5 *0.059*	4,5 *0.177*	15,8 *0.622*	5,56 *0.219*	18,0	10,0 °						■	■	■	■					■					
OOET0605ZZER-W8-M10	1,0 *0.039*	2,5 *0.098*	2,2 *0.087*	15,76 *0.620*	5,56 *0.219*	18,0	10,0 °					■	■								■					■
OOET0605ZZSR-W4-M15	0,9 *0.035*	4,9 *0.193*	6,0 *0.236*	15,85 *0.624*	5,96 *0.235*	18,0	5,0 °			■			■	■				■	■		■					
OOMT0605ZZSR-M15	0,6 *0.024*	1,5 *0.059*	4,5 *0.177*	15,8 *0.622*	5,56 *0.219*	18,0	10,0 °			■			■	■			■	■	■		■					■
OOMT0605ZZSR-MHF-M16	2,0 *0.079*	1,3 *0.051*	4,0 *0.157*	15,8 *0.622*	5,56 *0.219*	18,0	6,0 °						■						■							
OOMT060510SN-M20	1,0 *0.039*	–	5,7 *0.224*	15,78 *0.621*	5,56 *0.219*	18,0	12,0 °			■							■	■	■		■					
OOEW0605ZZSR-D20	0,6 *0.024*	1,5 *0.059*	4,5 *0.177*	15,8 *0.622*	5,56 *0.219*	18,0	0,0 °	■	■									■								

RD..05/06/07/08/10

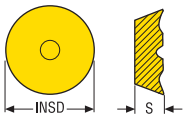


RD.W-MDxx RDHT-E04 RDHT-Exx RDHT-Mxx RDHW-MD01 RDHW-MDxx RDKT-6-M05 RDKT-8-M05 RDKT-8-M07 RDKW-6-MD06 RDKW-8-MD06



Codice di ordinazione	INSD	S	GAN	Qualità																		
				PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
RDHT06T1M0-E02	6,0 *0.236*	2,18 *0.086*	18,0 °							■											■
RDHT0803M0-E03	8,0 *0.315*	3,18 *0.125*	20,0 °							■							■				■
RDHW0501M0-MD01	5,0 *0.197*	1,51 *0.059*	0,0 °					■		■											
RDHW06T1M0-MD02	6,0 *0.236*	2,18 *0.086*	0,0 °		■	■	■	■		■											
RDHW0702M0-MD03	7,0 *0.276*	2,38 *0.094*	0,0 °					■		■											
RDHW0702M0T-MD04	7,0 *0.276*	2,38 *0.094*	0,0 °		■																
RDHW0803M0-MD03	8,0 *0.315*	3,18 *0.125*	0,0 °				■	■	■	■											
RDKW0803M0T-MD05	8,0 *0.315*	3,18 *0.125*	0,0 °	■	■	■				■					■	■					
RDHT10T3M0-8-E04	10,0 *0.394*	3,97 *0.156*	20,0 °							■											■
RDHT10T3M0T-8-M11	10,0 *0.394*	3,97 *0.156*	16,0 °						■	■	■	■									
RDHW10T3M0-8-MD04	10,0 *0.394*	3,97 *0.156*	0,0 °					■		■											
RDHW10T3M0T-8-MD06	10,0 *0.394*	3,97 *0.156*	0,0 °																		
RDKT10T3M0T-6-M05	10,0 *0.394*	3,97 *0.156*	16,0 °						■	■					■	■					
RDKT10T3M0T-8-M05	10,0 *0.394*	3,97 *0.156*	16,0 °						■	■	■	■				■	■		■		
RDKT10T3M0T-8-M07	10,0 *0.394*	3,97 *0.156*	11,0 °			■				■		■			■	■	■		■		
RDKW10T3M0T-6-MD06	10,0 *0.394*	3,97 *0.156*	0,0 °		■					■						■					
RDKW10T3M0T-8-MD06	10,0 *0.394*	3,97 *0.156*	0,0 °	■	■	■		■		■				■	■	■					

REHR16

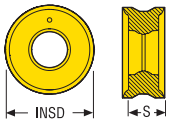


M14/MD15

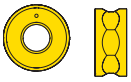


Codice di ordinazione	INSD	S	GAN	Qualità																		
				PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
REHR1605M0T-MD15	16,0 *0.630*	5,56 *0.219*	6,0 °											■							

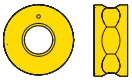
RNMU12



M10

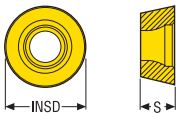


ME10

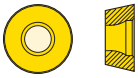


Codice di ordinazione	INSD	S	GAN	Qualità																		
				PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
RNMU1204M0-ME10	12,0 *0.472*	4,8 *0.189*	27,0 °						■	■	■					■	■				
RNMU1204M0T-M10	12,0 *0.472*	4,8 *0.189*	20,0 °			■			■	■	■	■			■	■	■				

ROHT12

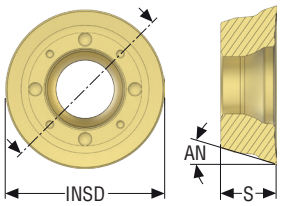


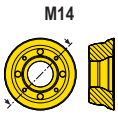
M09/M12/M14



Codice di ordinazione	INSD	S	GAN	Qualità																		
				PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2501	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ROHT1204M0-M12	12,0 *0.472*	4,76 *0.187*	10,0 °													■					
ROHT1204M0-M14	12,0 *0.472*	4,76 *0.187*	16,0 °													■					

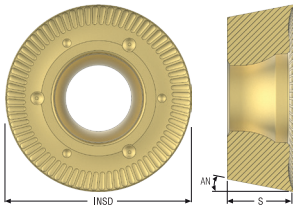
ROMT1605

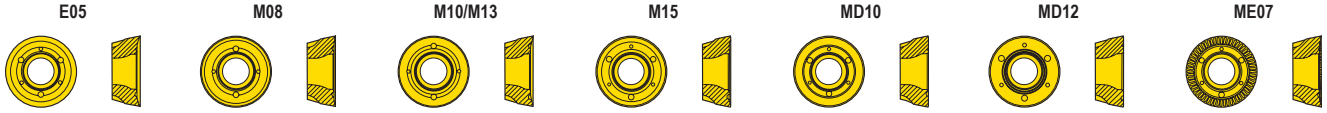




Codice di ordinazione	INSD	S	AN°	GAN	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ROMT1605M0T-8-M14	16,0 *0.630*	5,56 *0.219*	18,0	6,0 °			■			■						■						

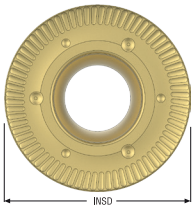
RP..12





Codice di ordinazione	INSD	S	AN°	GAN	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
RPHT1204M0T-4-M08	12,0 *0.472*	4,76 *0.187*	11,0	16,0 °							■						■	■				
RPKT1204M0T-4-M10	12,0 *0.472*	4,76 *0.187*	11,0	11,0 °								■	■									
RPHT1204M0T-4-M13	12,0 *0.472*	4,76 *0.187*	11,0	16,0 °						■		■	■				■					
RPHT1204M0-6-E05	12,0 *0.472*	4,76 *0.187*	11,0	20,0 °						■	■		■									■
RPHT1204M0T-6-ME07	12,0 *0.472*	4,76 *0.187*	11,0	20,0 °						■	■							■		■		
RPHT1204M0T-6-M08	12,0 *0.472*	4,76 *0.187*	11,0	16,0 °						■	■		■			■	■	■		■		
RPHT1204M0T-6-M13	12,0 *0.472*	4,76 *0.187*	11,0	16,0 °						■	■		■			■	■	■				
RPKT1204M0T-6-M15	12,0 *0.472*	4,76 *0.187*	11,0	15,0 °			■				■				■	■	■	■				
RPKW1204M0T-6-MD10	12,0 *0.472*	4,76 *0.187*	11,0	0,0 °	■		■		■						■	■						
RPHW1204M0T-6-MD12	12,0 *0.472*	4,76 *0.187*	11,0	0,0 °																		

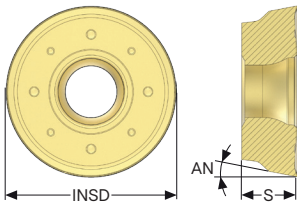
RP..12



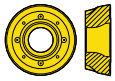


Codice di ordinazione	INSD	S	AN°	GAN	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
RPHT1605M0T-6-ME11	16,0 *0.630*	5,56 *0.219*	11,0	21,0 °						■	■											
RPHT1605M0T-6-M12	16,0 *0.630*	5,56 *0.219*	11,0	15,0 °							■											
RPHT1605M0T-8-ME11	16,0 *0.630*	5,56 *0.219*	11,0	21,0 °						■	■	■	■				■	■		■		
RPHT1605M0T-8-M12	16,0 *0.630*	5,56 *0.219*	11,0	15,0 °						■	■	■	■							■		
RPKT1605M0T-6-M18	16,0 *0.630*	5,56 *0.219*	11,0	15,0 °												■	■					
RPKT1605M0T-8-M12	16,0 *0.630*	5,56 *0.219*	11,0	15,0 °												■	■	■				
RPKT1605M0T-8-M18	16,0 *0.630*	5,56 *0.219*	11,0	15,0 °			■		■		■				■	■	■	■				
RPKW1605M0T-6-MD20	16,0 *0.630*	5,56 *0.219*	11,0	0,0 °			■								■	■	■					
RPKW1605M0T-8-MD20	16,0 *0.630*	5,56 *0.219*	11,0	0,0 °	■	■									■	■						

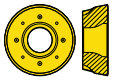
RP..19/20



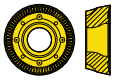
M13/M15/M20



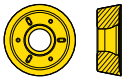
MD10/22



ME12

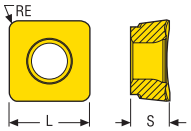


RPHT19-M13

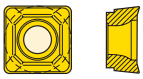


Codice di ordinazione	INSD	S	AN°	GAN	Qualità																	
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*			MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
RPHT190600T-6-M13	19,05 *0.750*	6,39 *0.252*	11,0	16,0 °						■	■						■					
RPHT2006M0T-8-M13	20,0 *0.787*	6,35 *0.250*	11,0	16,0 °						■		■								■		
RPKT2006M0T-6-ME12	20,0 *0.787*	6,35 *0.250*	11,0	20,0 °						■	■								■			
RPKT2006M0T-8-ME12	20,0 *0.787*	6,35 *0.250*	11,0	20,0 °						■	■		■			■		■	■			
RPKT2006M0T-6-M15	20,0 *0.787*	6,35 *0.250*	11,0	15,0 °												■						
RPKT2006M0T-8-M15	20,0 *0.787*	6,35 *0.250*	11,0	15,0 °							■					■		■				
RPKT2006M0T-6-M20	20,0 *0.787*	6,35 *0.250*	11,0	15,0 °											■	■						
RPKT2006M0T-8-M20	20,0 *0.787*	6,35 *0.250*	11,0	15,0 °			■				■				■	■	■	■				
RPKW2006M0-8-MD10	20,0 *0.787*	6,35 *0.250*	11,0	0,0 °					■		■											
RPKW2006M0T-6-MD22	20,0 *0.787*	6,35 *0.250*	11,0	0,0 °											■							
RPKW2006M0T-8-MD22	20,0 *0.787*	6,35 *0.250*	11,0	0,0 °	■	■									■		■					

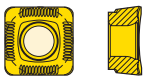
SC..12



M10/M11/M14/MD15/MD16

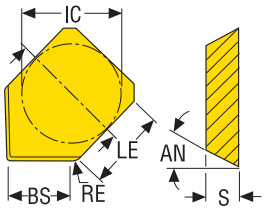


ME10

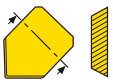


Codice di ordinazione	RE	L	S	GAN	Qualità																				
					PVD									CVD								Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2501	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SCET120612R-M10	1,2 *0.047*	12,673 *0.499*	6,35 *0.250*	20,0 °						■												
SCET120612T-ME10	1,2 *0.047*	12,7 *0.500*	6,35 *0.250*	22,0 °						■	■											
SCET120612T-M11	1,2 *0.047*	12,7 *0.500*	6,35 *0.250*	14,0 °							■		■	■	■	■		■				
SCET120612T-M14	1,2 *0.047*	12,7 *0.500*	6,35 *0.250*	15,0 °						■	■		■	■		■		■				
SCET120612T-MD15	1,2 *0.047*	12,7 *0.500*	6,35 *0.250*	15,0 °					■						■			■				
SCET120630T-M14	3,0 *0.118*	12,7 *0.500*	6,35 *0.250*	15,0 °			■		■	■	■		■			■	■	■				
SCET120630T-MD16	3,0 *0.118*	12,7 *0.500*	6,35 *0.250*	15,0 °							■		■		■	■	■	■				
SCEX120660T-M14	6,0 *0.236*	12,7 *0.500*	6,35 *0.250*	15,0 °																		
SCMT120612T-M14	1,2 *0.047*	12,7 *0.500*	6,35 *0.250*	15,0 °							■							■				

SEAN12-ZZ

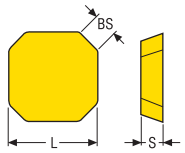


M15-18/MD15

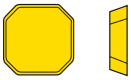


Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SEAN1203ZZTN-M15	1,0 *0.039*	7,3 *0.287*	9,3 *0.366*	12,7 *0.500*	3,18 *0.125*	20,0										■								
SEAN1203ZZTN-MD15	1,0 *0.039*	7,3 *0.287*	9,3 *0.366*	12,7 *0.500*	3,18 *0.125*	20,0											■							

SEAN12

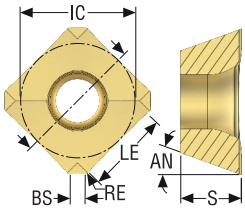


E12-E15/M14-M19

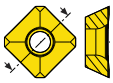


Codice di ordinazione	BS	L	S	GAN	Qualità																				
					PVD											CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SEAN1203AFN-E12	1,5 *0.059*	12,7 *0.500*	3,18 *0.125*	0,0 °		■																
SEAN1203AFTN-M14	1,5 *0.059*	12,7 *0.500*	3,18 *0.125*	0,0 °															■			
SEAN1303AFTN-M14	3,5 *0.138*	12,44 *0.490*	3,36 *0.132*	0,0 °														■				
SEAN1303AFTN-M15	3,5 *0.138*	13,44 *0.529*	3,36 *0.132*	0,0 °										■								
SEAN1604AFTN-M19	4,1 *0.161*	16,8 *0.661*	4,79 *0.189*	0,0 °										■								

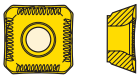
SE.X09



E04/M05/M08/D09

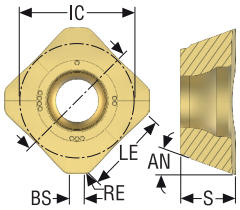


ME06-07



Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SEEX09T3AFN-E04	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0		■															■	
SEEX09T3AFN-M05	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0					■	■	■		■									
SEEX09T3AFTN-M08	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0			■		■		■			■	■	■		■				
SEEX09T3AFTN-ME07	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0							■					■		■	■			
SEEX09T3AFTN-D09	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0											■							
SEMX09T3AFTN-M08	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0							■					■						
SEMX09T3AFTN-ME06	0,3 *0.012*	1,5 *0.059*	7,1 *0.280*	9,525 *0.375*	3,97 *0.156*	20,0												■						

SE.X12/15



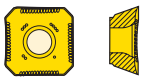
E08/M10/M14/M15/MD18/MD19



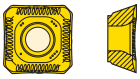
E10/M12/M17/M18/MD20



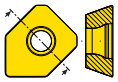
ME11-12



ME15

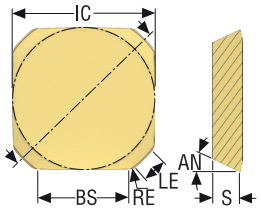


ZZTN-M14-17

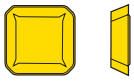


Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																		
							PVD									CVD						Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SEEX1204AFN-E08	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0		■					■											■
SEEX1204AFTN-ME11	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0							■					■		■				
SEEX1204AFN-M10	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0					■	■	■	■	■					■		■		
SEEX1204AFTN-M14	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0			■		■		■			■	■	■		■				
SEEX1204ZZTN-M14	1,12 *0.044*	7,4 *0.291*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0				■			■			■	■	■		■				
SEEX1204AFTN-MD18	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0	■										■			■				
SEMX1204AFTN-ME12	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0						■	■					■		■				
SEMX1204AFTN-M15	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0			■				■			■	■	■		■		■		
SEMX1204AFTN-MD19	1,12 *0.044*	1,5 *0.059*	8,7 *0.343*	12,7 *0.500*	4,76 *0.187*	20,0					■					■	■			■				
SEEX1505AFN-E10	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0																		■
SEEX1505AFN-M12	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0						■	■	■	■					■				
SEEX1505AFTN-M17	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0												■		■				
SEEX1505ZZTN-M17	1,5 *0.059*	9,4 *0.370*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0												■		■				
SEMX1505AFTN-ME15	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0														■				
SEMX1505AFTN-M18	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0			■				■			■	■	■		■				
SEMX1505AFTN-MD20	1,5 *0.059*	1,8 *0.071*	10,3 *0.406*	15,875 *0.625*	5,56 *0.219*	20,0					■						■	■		■				

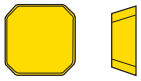
SE..12/15



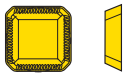
E07



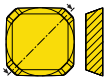
E10-15/M13-18/MD14-20/D16



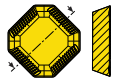
ME10/ME12/ME13/ME16



SEEX1203AFTN-M13/MD14

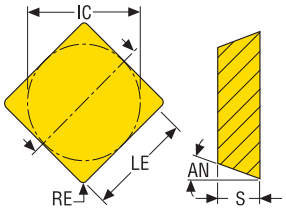


SEKR1303

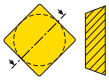


Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SEKR1203AFN-E07	1,0 *0.039*	1,5 *0.059*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0															■			
SEKR1203AFTN-ME10	1,0 *0.039*	1,5 *0.059*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0							■							■	■			
SEKR1203AFTN-ME13	1,0 *0.039*	1,5 *0.059*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0							■					■		■	■			
SEKR1303AFTN-ME13	0,8 *0.031*	3,46 *0.136*	7,0 *0.276*	13,44 *0.529*	3,36 *0.132*	20,0							■											
SEKR1504AFTN-ME16	1,0 *0.039*	1,5 *0.059*	11,6 *0.457*	15,875 *0.625*	4,76 *0.187*	20,0															■			
SEKR1604AFTN-ME16	1,0 *0.039*	4,1 *0.161*	– –	16,8 *0.661*	4,79 *0.189*	20,0															■			
SEEX1203AFTN-M13	1,0 *0.039*	8,0 *0.315*	2,2 *0.087*	12,77 *0.503*	3,18 *0.125*	20,0														■				
SEEX1203AFTN-MD14	1,0 *0.039*	8,0 *0.315*	2,2 *0.087*	12,77 *0.503*	3,18 *0.125*	20,0	■	■								■							■	
SEKN1203AFN-E12	2,0 *0.079*	1,6 *0.063*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0																		
SEKN1203AFTN-M14	1,0 *0.039*	1,5 *0.059*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0							■			■	■	■		■	■			
SEKN1203AFTN-D16	2,0 *0.079*	1,6 *0.063*	8,8 *0.346*	12,7 *0.500*	3,18 *0.125*	20,0											■							
SEKN1204AFTN-M18	1,0 *0.039*	1,5 *0.059*	8,8 *0.346*	12,7 *0.500*	4,76 *0.187*	20,0														■				
SEKN1504AFTN-M18	1,0 *0.039*	1,5 *0.059*	11,6 *0.457*	15,87 *0.625*	4,76 *0.187*	20,0							■			■		■			■			
SEKN1504AFTN-MD20	2,0 *0.079*	1,9 *0.075*	11,6 *0.457*	15,87 *0.625*	4,76 *0.187*	20,0											■							

SENN

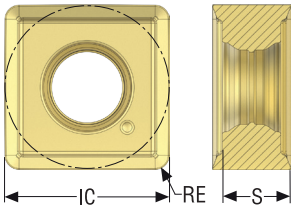


E10/M12

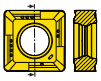


Codice di ordinazione	RE	LE	IC	S	AN°	Qualità																				
						PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SENN120308T-M12	0,8 *0.031*	11,1 *0.437*	12,7 *0.500*	3,18 *0.125*	20,0							■											

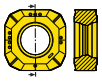
SNFX12



PZ..M08/M10

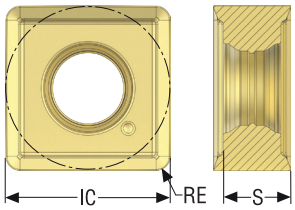


ZZ..M08/M12

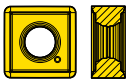


Codice di ordinazione	RE	IC	S	Qualità																				
				PVD										CVD							Non rivestite		
	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25	MP1020
SNFX120408PZER-W8-M08	0,8 *0.031*	12,7 *0.500*	4,61 *0.181*					■	■								■			■		■
SNFX120408PZSR-W8-M10	0,8 *0.031*	12,7 *0.500*	4,61 *0.181*		■	■								■	■							
SNFX1204ZZEN-W8-M08	2,0 *0.079*	12,7 *0.500*	4,61 *0.181*					■	■								■			■		■
SNFX1204ZZSN-W8-M12	2,0 *0.079*	12,7 *0.500*	4,61 *0.181*		■	■							■	■								

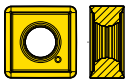
SN.U13



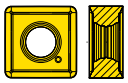
M12



M14

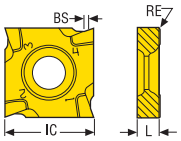


ME10



Codice di ordinazione	RE	IC	S	Qualità																		
				PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNGU130612EN-ME10	1,2 *0.047*	13,587 *0.535*	5,56 *0.219*						■	■	■	■			■	■					
SNGU130612TN-M14	1,2 *0.047*	13,6 *0.535*	5,56 *0.219*			■								■	■						
SNXU130612TN-M12	1,2 *0.047*	13,587 *0.535*	5,56 *0.219*			■			■	■					■	■	■				

SNHQ11

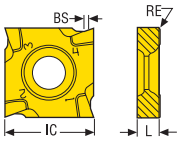




Codice di ordinazione	RE	BS	L	IC	Qualità																		
					PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ110202EL4-E05	0,2 *0.008*	0,5 *0.020*	2,3 *0.091*	11,0 *0.433*																		■
SNHQ110202ER4-E05	0,2 *0.008*	0,5 *0.020*	2,3 *0.091*	11,0 *0.433*																		■
SNHQ110202TL4-M07	0,2 *0.008*	0,5 *0.020*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110202TR4-M07	0,2 *0.008*	0,5 *0.020*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110204TL4-M07	0,4 *0.016*	0,3 *0.012*	2,3 *0.091*	11,0 *0.433*				■			■					■						
SNHQ110204TR4-M07	0,4 *0.016*	0,3 *0.012*	2,3 *0.091*	11,0 *0.433*				■			■					■						
SNHQ110208TL4-M07	0,8 *0.031*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*						■	■									■		
SNHQ110208TR4-M07	0,8 *0.031*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*						■	■									■		
SNHQ110212TL4-M07	1,2 *0.047*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110212TR4-M07	1,2 *0.047*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110216TL4-M07	1,6 *0.063*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110216TR4-M07	1,6 *0.063*	0,2 *0.008*	2,3 *0.091*	11,0 *0.433*							■											
SNHQ110220TL4-M07	2,0 *0.079*	–	2,3 *0.091*	11,0 *0.433*				■														
SNHQ110220TR4-M07	2,0 *0.079*	–	2,3 *0.091*	11,0 *0.433*				■														
SNHQ110302EL4-E05	0,2 *0.008*	0,5 *0.020*	2,7 *0.106*	11,0 *0.433*																		■
SNHQ110302ER4-E05	0,2 *0.008*	0,5 *0.020*	2,7 *0.106*	11,0 *0.433*																		■
SNHQ110302TL4-M07	0,2 *0.008*	0,5 *0.020*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110302TR4-M07	0,2 *0.008*	0,5 *0.020*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110304TL4-M07	0,4 *0.016*	0,3 *0.012*	2,7 *0.106*	11,0 *0.433*				■			■					■						
SNHQ110304TR4-M07	0,4 *0.016*	0,3 *0.012*	2,7 *0.106*	11,0 *0.433*				■			■					■						
SNHQ110308TL4-M07	0,8 *0.031*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110308TR4-M07	0,8 *0.031*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110312TL4-M07	1,2 *0.047*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110312TR4-M07	1,2 *0.047*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110316TL4-M07	1,6 *0.063*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											
SNHQ110316TR4-M07	1,6 *0.063*	0,2 *0.008*	2,7 *0.106*	11,0 *0.433*							■											

Codice di ordinazione	RE	BS	L	IC	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ110320TL4-M07	2,0 *0.079*	–	2,7 *0.106*	11,0 *0.433*				■														
SNHQ110320TR4-M07	2,0 *0.079*	–	2,7 *0.106*	11,0 *0.433*				■														

SNHQ1203/1204



EL/ER2-E05/M07



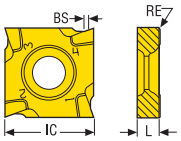
xL/xR4-E05/M07



Codice di ordinazione	RE	BS	L	IC	Qualità																	
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ120302EL4-E05	0,2 *0.008*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*																		■
SNHQ120302ER4-E05	0,2 *0.008*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*																		■
SNHQ120302TL4-M07	0,2 *0.008*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120302TR4-M07	0,2 *0.008*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120304TL4-M07	0,4 *0.016*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*				■			■					■						
SNHQ120304TR4-M07	0,4 *0.016*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*				■			■					■						
SNHQ120308TL4-M07	0,8 *0.031*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*							■					■						
SNHQ120308TR4-M07	0,8 *0.031*	0,75 *0.030*	3,2 *0.126*	12,7 *0.500*							■					■						
SNHQ120310TL4-M07	1,0 *0.039*	0,6 *0.024*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120310TR4-M07	1,0 *0.039*	0,6 *0.024*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120312TL4-M07	1,2 *0.047*	0,4 *0.016*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120312TR4-M07	1,2 *0.047*	0,4 *0.016*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120316TL4-M07	1,6 *0.063*	0,2 *0.008*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120316TR4-M07	1,6 *0.063*	0,2 *0.008*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120320TL4-M07	2,0 *0.079*	0,2 *0.008*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120320TR4-M07	2,0 *0.079*	0,2 *0.008*	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120324EL2-M07	2,4 *0.094*	–	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120324ER2-M07	2,4 *0.094*	–	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120330EL2-M07	3,0 *0.118*	–	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120330ER2-M07	3,0 *0.118*	–	3,2 *0.126*	12,7 *0.500*							■											
SNHQ120404EL4-E05	0,4 *0.016*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*																		■
SNHQ120404ER4-E05	0,4 *0.016*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*																		■
SNHQ120402TL4-M07	0,2 *0.008*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120402TR4-M07	0,2 *0.008*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120404TL4-M07	0,4 *0.016*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*				■			■											
SNHQ120404TR4-M07	0,4 *0.016*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*				■			■											

Codice di ordinazione	RE	BS	L	IC	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ120408TL4-M07	0,8 *0.031*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*				■			■					■						
SNHQ120408TR4-M07	0,8 *0.031*	0,75 *0.030*	4,0 *0.157*	12,7 *0.500*				■			■					■						
SNHQ120412TL4-M07	1,2 *0.047*	0,4 *0.016*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120412TR4-M07	1,2 *0.047*	0,4 *0.016*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120416TL4-M07	1,6 *0.063*	0,2 *0.008*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120416TR4-M07	1,6 *0.063*	0,2 *0.008*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120420TL4-M07	2,0 *0.079*	0,2 *0.008*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120420TR4-M07	2,0 *0.079*	0,2 *0.008*	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120424EL2-M07	2,4 *0.094*	–	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120424ER2-M07	2,4 *0.094*	–	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120431EL2-M07	3,1 *0.122*	–	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120431ER2-M07	3,1 *0.122*	–	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120435EL2-M07	3,5 *0.138*	–	4,0 *0.157*	12,7 *0.500*							■											
SNHQ120435ER2-M07	3,5 *0.138*	–	4,0 *0.157*	12,7 *0.500*							■											

SNHQ12045



EL/ER2-M07

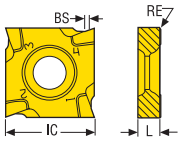


xL/xR4-E05/M07

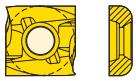


Codice di ordinazione	RE	BS	L	IC	Qualità																	
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ1204504EL4-E05	0,4 *0.016*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*																		■
SNHQ1204504ER4-E05	0,4 *0.016*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*																		■
SNHQ1204502TL4-M07	0,2 *0.008*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204502TR4-M07	0,2 *0.008*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204504TL4-M07	0,4 *0.016*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*				■			■					■						
SNHQ1204504TR4-M07	0,4 *0.016*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*				■			■					■						
SNHQ1204508TL4-M07	0,8 *0.031*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*							■					■						
SNHQ1204508TR4-M07	0,8 *0.031*	0,75 *0.030*	4,5 *0.177*	12,7 *0.500*							■					■						
SNHQ1204512TL4-M07	1,2 *0.047*	0,4 *0.016*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204512TR4-M07	1,2 *0.047*	0,4 *0.016*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204516TL4-M07	1,6 *0.063*	0,2 *0.008*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204516TR4-M07	1,6 *0.063*	0,2 *0.008*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204520TL4-M07	2,0 *0.079*	0,2 *0.008*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204520TR4-M07	2,0 *0.079*	0,2 *0.008*	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204524EL2-M07	2,4 *0.094*	–	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204524ER2-M07	2,4 *0.094*	–	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204531EL2-M07	3,1 *0.122*	–	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204531ER2-M07	3,1 *0.122*	–	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204540EL2-M07	4,0 *0.157*	–	4,5 *0.177*	12,7 *0.500*							■											
SNHQ1204540ER2-M07	4,0 *0.157*	–	4,5 *0.177*	12,7 *0.500*							■											

SNHQ1205



ER/EL2-M07



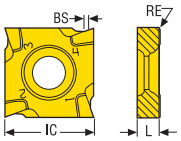
xL/xR4-E05/M07



Codice di ordinazione	RE	BS	L	IC	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ120504EL4-E05	0,4 *0.016*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*																		■
SNHQ120504ER4-E05	0,4 *0.016*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*																		■
SNHQ120502TL4-M07	0,2 *0.008*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120502TR4-M07	0,2 *0.008*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120504TL4-M07	0,4 *0.016*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*				■			■					■				■		
SNHQ120504TR4-M07	0,4 *0.016*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*				■			■					■				■		
SNHQ120508TL4-M07	0,8 *0.031*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*				■			■					■						
SNHQ120508TR4-M07	0,8 *0.031*	0,75 *0.030*	5,4 *0.213*	12,7 *0.500*				■			■					■						
SNHQ120510TL4-M07	1,0 *0.039*	0,6 *0.024*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120510TR4-M07	1,0 *0.039*	0,6 *0.024*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120512TL4-M07	1,2 *0.047*	0,4 *0.016*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120512TR4-M07	1,2 *0.047*	0,4 *0.016*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120516TL4-M07	1,6 *0.063*	0,2 *0.008*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120516TR4-M07	1,6 *0.063*	0,2 *0.008*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120520TL4-M07	2,0 *0.079*	0,2 *0.008*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120520TR4-M07	2,0 *0.079*	0,2 *0.008*	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120524EL2-M07	2,4 *0.094*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120524ER2-M07	2,4 *0.094*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120531EL2-M07	3,1 *0.122*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120531ER2-M07	3,1 *0.122*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120540EL2-M07	4,0 *0.157*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120540ER2-M07	4,0 *0.157*	–	5,4 *0.213*	12,7 *0.500*							■											
SNHQ120550FEL2-M07	5,0 *0.197*	–	5,54 *0.218*	12,7 *0.500*							■											
SNHQ120550FER2-M07	5,0 *0.197*	–	5,54 *0.218*	12,7 *0.500*							■											

Nota: Impiegando inserti SNHQ con raggio al vertice 5 mm, il profilo esterno del corpo fresa deve essere modificato aggiungendo un raggio od uno smusso = 4 mm

SNHQ1207



EL/ER2-M07



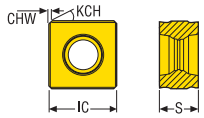
xL/xR4-E05/M07



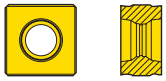
Codice di ordinazione	RE	BS	L	IC	Qualità																	
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHQ120704EL4-E05	0,4 *0.016*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*																		■
SNHQ120704ER4-E05	0,4 *0.016*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*																		■
SNHQ120704TL4-M07	0,4 *0.016*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120704TR4-M07	0,4 *0.016*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120708TL4-M07	0,8 *0.031*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*				■			■					■						
SNHQ120708TR4-M07	0,8 *0.031*	0,75 *0.030*	7,0 *0.276*	12,7 *0.500*				■			■					■						
SNHQ120712TL4-M07	1,2 *0.047*	0,4 *0.016*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120712TR4-M07	1,2 *0.047*	0,4 *0.016*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120716TL4-M07	1,6 *0.063*	0,2 *0.008*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120716TR4-M07	1,6 *0.063*	0,2 *0.008*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120720TL4-M07	2,0 *0.079*	0,2 *0.008*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120720TR4-M07	2,0 *0.079*	0,2 *0.008*	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120724EL2-M07	2,4 *0.094*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120724ER2-M07	2,4 *0.094*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120731EL2-M07	3,1 *0.122*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120731ER2-M07	3,1 *0.122*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120740EL2-M07	4,0 *0.157*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120740ER2-M07	4,0 *0.157*	–	7,0 *0.276*	12,7 *0.500*							■											
SNHQ120750FEL2-M07	5,0 *0.197*	–	7,14 *0.281*	12,7 *0.500*							■											
SNHQ120750FER2-M07	5,0 *0.197*	–	7,14 *0.281*	12,7 *0.500*							■											
SNHQ120760FEL2-M07	6,0 *0.236*	–	7,15 *0.281*	12,7 *0.500*							■											
SNHQ120760FER2-M07	6,0 *0.236*	–	7,15 *0.281*	12,7 *0.500*							■											

Nota: Impiegando inserti SNHQ con raggio al vertice 5 e 6 mm, il profilo esterno del corpo fresa deve essere modificato aggiungendo un raggio od uno smusso = 4 mm

SNHX11/14

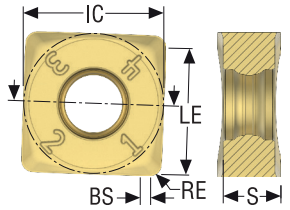


M11/M12

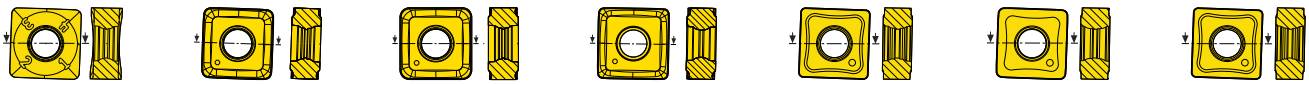


Codice di ordinazione	CHW	IC	S	KCH°	Qualità																		
					PVD										CVD							Non rivestite	
	mm Inch	mm Inch	mm Inch		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHX1106TN8-M11	0,5 0.020	11,0 0.433	6,35 0.250	45,0							■					■		■				
SNHX1406TN8-M12	0,8 0.031	14,5 0.571	6,35 0.250	45,0							■					■						

SNMU12/16

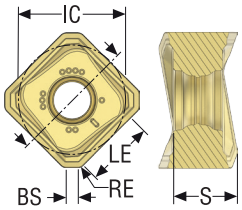


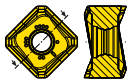
M10 M16 M16-1.6 M18 MD13-0.8 MD13-1.0 MD16

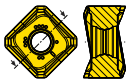


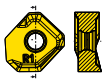
Codice di ordinazione	RE	BS	LE	IC	S	Qualità																	
						PVD									CVD							Non rivestite	
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNMU120408TN-M10	0,8 0.031	–	11,2 0.441	12,0 0.472	4,8 0.189			■								■	■						
SNMU120410TN-M10	1,0 0.039	1,0 0.039	9,9 0.390	12,0 0.472	4,8 0.189			■		■	■	■				■	■	■	■				
SNMU120412TN-M16	1,2 0.047	1,4 0.055	9,2 0.362	12,0 0.472	4,78 0.188			■		■					■	■	■		■				
SNMU120416TN-M16	1,6 0.063	–	10,4 0.409	12,0 0.472	4,78 0.188			■								■	■						
SNMU120408TN-MD13	0,8 0.031	–	11,2 0.441	12,0 0.472	4,8 0.189			■							■								
SNMU120410TN-MD13	1,0 0.039	1,0 0.039	9,8 0.386	12,0 0.472	4,8 0.189			■							■	■	■						
SNMU160612TN-M10	1,2 0.047	1,2 0.047	13,4 0.528	16,0 0.630	6,4 0.252			■		■						■	■						
SNMU160612TN-M18	1,2 0.047	1,6 0.063	13,0 0.512	16,0 0.630	6,38 0.251			■								■	■		■				
SNMU160610TN-MD16	1,0 0.039	–	14,9 0.587	16,0 0.630	6,4 0.252										■	■							
SNMU160612TN-MD16	1,2 0.047	1,2 0.047	13,4 0.528	16,0 0.630	6,4 0.252			■							■	■							

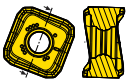
SN.X14/22

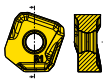


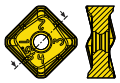

1407AN.R-ME10/M10/M16

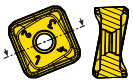


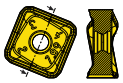

1407AZTR-M10/M16


1407ZN.R-ME10/M10/M16


1407ZZTR-M10/M16

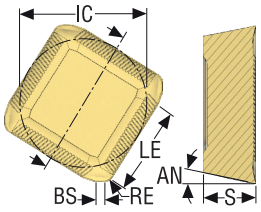

2209ANTR-M12-M18/2209ANR-ME12


2209ZNTL-M18


2209ZNTR-M12-M18/2209ZNR-ME12

Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																
							PVD									CVD						Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SNHX1407ANR-ME10	1,0 *0.039*	1,5 *0.059*	8,4 *0.331*	14,0 *0.551*	6,59 *0.259*	0,0						■	■		■									■
SNMX1407ANTR-M10	1,0 *0.039*	1,5 *0.059*	8,4 *0.331*	14,0 *0.551*	6,59 *0.259*	0,0			■		■	■	■	■	■		■	■	■	■				
SNMX1407ANTR-M16	1,0 *0.039*	1,5 *0.059*	8,4 *0.331*	14,0 *0.551*	6,59 *0.259*	0,0			■		■					■	■	■	■	■				
SNEX1407AZTR-M10	1,0 *0.039*	5,7 *0.224*	8,4 *0.331*	13,975 *0.550*	6,64 *0.261*	0,0			■		■						■							
SNEX1407AZTR-M16	1,0 *0.039*	5,7 *0.224*	8,4 *0.331*	13,975 *0.550*	6,64 *0.261*	0,0			■								■							
SNHX1407ZNR-ME10	1,0 *0.039*	1,5 *0.059*	9,5 *0.374*	14,0 *0.551*	6,59 *0.259*	0,0						■												
SNMX1407ZNTR-M10	1,0 *0.039*	1,5 *0.059*	9,5 *0.374*	14,0 *0.551*	6,59 *0.259*	0,0			■		■	■	■	■	■		■	■	■					
SNMX1407ZNTR-M16	1,0 *0.039*	1,5 *0.059*	9,5 *0.374*	14,0 *0.551*	6,59 *0.259*	0,0			■				■			■	■	■						
SNEX1407ZZTR-M10	1,0 *0.039*	5,7 *0.224*	9,5 *0.374*	14,02 *0.552*	6,19 *0.244*	0,0			■		■						■							
SNEX1407ZZTR-M16	1,0 *0.039*	5,7 *0.224*	9,5 *0.374*	14,02 *0.552*	6,19 *0.244*	0,0			■								■							
SNMX2209ANR-ME12	2,0 *0.079*	1,5 *0.059*	14,8 *0.583*	22,0 *0.866*	8,81 *0.347*	0,0							■											
SNMX2209ANTR-M12	2,0 *0.079*	1,5 *0.059*	14,8 *0.583*	22,0 *0.866*	8,81 *0.347*	0,0						■		■	■			■						
SNMX2209ANTR-M18	2,0 *0.079*	1,5 *0.059*	14,8 *0.583*	22,0 *0.866*	8,81 *0.347*	0,0			■							■	■	■		■				
SNMX2209ZNTR-M12	2,0 *0.079*	1,5 *0.059*	14,3 *0.563*	22,0 *0.866*	8,79 *0.346*	0,0						■	■		■			■						
SNMX2209ZNTR-M18	2,0 *0.079*	1,5 *0.059*	14,3 *0.563*	22,0 *0.866*	8,79 *0.346*	0,0			■								■	■		■				
SNMX2209ZNTL-M18	2,0 *0.079*	1,5 *0.059*	14,3 *0.563*	22,0 *0.866*	8,79 *0.346*	0,0											■	■						

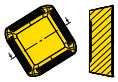
SP..19/28



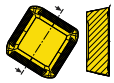
D35



ZETL-M17-MD20

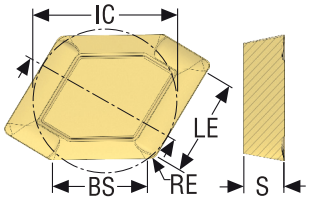


ZETR-M17-MD20-D25

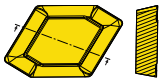


Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																				
							PVD											CVD								Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SPER1906ZETL-M17	3,0 *0.118*	1,8 *0.071*	12,7 *0.500*	19,05 *0.750*	6,35 *0.250*	11,0								■	■									
SPER1906ZETR-M17	1,6 *0.063*	1,8 *0.071*	12,7 *0.500*	19,05 *0.750*	6,35 *0.250*	11,0														■				
SPEN1906ZETL-MD20	1,6 *0.063*	1,8 *0.071*	13,3 *0.524*	19,05 *0.750*	6,35 *0.250*	11,0												■						
SPEN1906ZETR-MD20	1,6 *0.063*	1,8 *0.071*	13,3 *0.524*	19,05 *0.750*	6,35 *0.250*	11,0												■		■				
SPEN1906ZETR-D25	1,6 *0.063*	1,8 *0.071*	13,3 *0.524*	19,05 *0.750*	6,35 *0.250*	11,0											■							
SPEN2807ZETR-D35	2,0 *0.079*	1,8 *0.071*	13,3 *0.524*	28,575 *1.125*	7,938 *0.313*	11,0											■							
SPMR1906ZETR-M17	1,6 *0.063*	1,0 *0.039*	12,9 *0.508*	19,05 *0.750*	6,35 *0.250*	11,0								■	■									

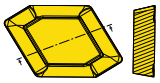
SPE.ZZ



M17/D25/MD20

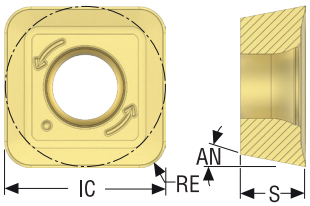


ZZTL-M17

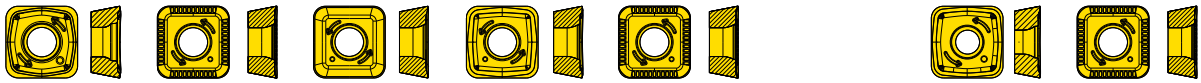


Codice di ordinazione	RE	BS	LE	IC	S	Qualità																				
						PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SPER1906ZZTL-M17	3,0 *0.118*	12,0 *0.472*	14,0 *0.551*	19,05 *0.750*	6,35 *0.250*								■	■									
SPER1906ZZTR-M17	3,0 *0.118*	12,0 *0.472*	14,0 *0.551*	19,05 *0.750*	6,35 *0.250*								■	■									
SPEN1906ZZTR-D25	3,0 *0.118*	12,0 *0.472*	14,0 *0.551*	19,05 *0.750*	6,35 *0.250*											■	■						
SPEN1906ZZTR-MD20	3,0 *0.118*	12,0 *0.472*	14,0 *0.551*	19,05 *0.750*	6,35 *0.250*												■						

SPKT10/14/18

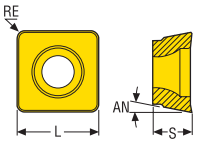


SP10-M10 SP10-MD12 SP10-ME08 SP14-M14 SP14-MD16 SP14-ME10 SP18-M14 SP18-MD16 SP18-ME10

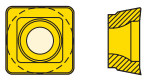


Codice di ordinazione	RE	IC	S	AN°	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SPKT10T317TN-ME08	1,7 *0.067*	10,0 *0.394*	3,97 *0.156*	11,0						■		■				■		■				
SPKT10T317TN-M10	1,7 *0.067*	10,0 *0.394*	3,97 *0.156*	11,0	■		■			■	■	■	■		■	■	■	■		■		
SPKT10T317TN-MD12	1,7 *0.067*	10,0 *0.394*	3,97 *0.156*	11,0	■		■		■		■				■	■						
SPKT140523TN-ME10	2,3 *0.091*	14,0 *0.551*	5,56 *0.219*	11,0						■		■				■		■				
SPKT140523TN-M14	2,3 *0.091*	14,0 *0.551*	5,56 *0.219*	11,0	■		■			■	■	■	■		■	■	■	■		■		
SPKT140523TN-MD16	2,3 *0.091*	14,0 *0.551*	5,56 *0.219*	11,0	■		■		■		■	■			■	■	■	■				
SPKT180630TN-ME10	3,0 *0.118*	18,0 *0.709*	6,35 *0.250*	11,0						■						■		■				
SPKT180630TN-M14	3,0 *0.118*	18,0 *0.709*	6,35 *0.250*	11,0			■			■	■	■	■		■	■	■	■				
SPKT180630TN-MD16	3,0 *0.118*	18,0 *0.709*	6,35 *0.250*	11,0	■		■		■		■				■	■						

SPMT

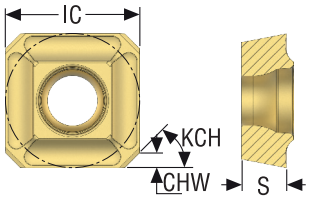


M08



Codice di ordinazione	RE	L	S	AN°	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SPMT100408T-M08	0,8 *0.031*	10,0 *0.394*	4,76 *0.187*	11,0							■											

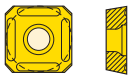
SPMX



-75

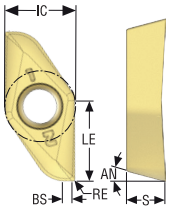


AP-75



Codice di ordinazione	CHW	IC	S	KCH°	Qualità																	
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
SPMX0602AP-75	0,69 *0.027*	6,35 *0.250*	2,38 *0.094*	45,0							■											
SPMX0703AP-75	0,87 *0.034*	7,94 *0.313*	3,18 *0.125*	45,0							■											
SPMX0903AP-75	1,05 *0.041*	9,525 *0.375*	3,18 *0.125*	45,0							■							■				
SPMX12T3AP-75	1,39 *0.055*	12,7 *0.500*	3,97 *0.156*	45,0							■							■				
SPMX060204-75	– –	6,35 *0.250*	2,38 *0.094*	–							■								■			
SPMX070304-75	– –	7,94 *0.313*	3,18 *0.125*	–							■								■			
SPMX090304-75	– –	9,525 *0.375*	3,18 *0.125*	–							■								■			
SPMX12T308-75	– –	12,7 *0.500*	3,97 *0.156*	–							■											

VPGX



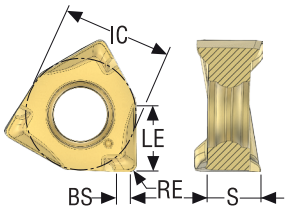
E06/E10



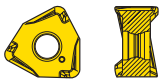
Codice di ordinazione	RE	BS	LE	IC	S	AN°	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
VPGX220605FR-E06	0,5 *0.020*	1,5 *0.059*	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																	■	
VPGX220605ER-E10	0,5 *0.020*	1,5 *0.059*	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220608PDER-E10	0,8 *0.031*	1,1 *0.043*	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220616ER-E10	1,6 *0.063*	–	13,7 *0.539*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220620ER-E10	2,0 *0.079*	–	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220624ER-E10	2,4 *0.094*	–	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220631EN-E10	3,1 *0.122*	–	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220631FN-E06	3,1 *0.122*	–	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																	■	
VPGX220640ER-E10	4,0 *0.157*	–	14,2 *0.559*	12,7 *0.500*	6,35 *0.250*	11,0																		■
VPGX220663ER-E10	6,3 *0.248*	–	11,8 *0.465*	12,7 *0.500*	6,35 *0.250*	11,0																		■

* Inserto con piano raschiante 1,5 mm

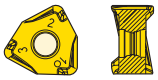
XNEX04/08

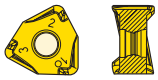


XNEX04..



XNEX08..

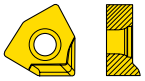




XNEX08..M13

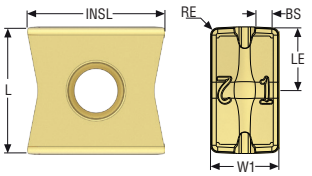


ZZR-M11

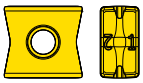


Codice di ordinazione	RE	BS	LE	IC	S	Qualità																		
						PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XNEX040304R-M06	0,4 *0.016*	0,8 *0.031*	4,0 *0.157*	6,7 *0.264*	3,31 *0.130*						■	■											
XNEX040308R-M06	0,8 *0.031*	0,4 *0.016*	4,0 *0.157*	6,7 *0.264*	3,31 *0.130*					■	■	■					■						
XNEX040304TR-M08	0,4 *0.016*	0,8 *0.031*	4,0 *0.157*	6,7 *0.264*	3,29 *0.130*			■		■		■			■	■	■						
XNEX040308TR-M08	0,8 *0.031*	0,4 *0.016*	4,0 *0.157*	6,7 *0.264*	3,29 *0.130*			■		■		■			■	■	■						
XNEX080604TR-M13	0,4 *0.016*	1,8 *0.071*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*					■		■							■				
XNEX080604TR-ME09	0,4 *0.016*	1,8 *0.071*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*					■		■					■						
XNEX080608TR-ME09	0,8 *0.031*	1,4 *0.055*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*			■		■		■			■	■	■		■		■		
XNEX080608R-M08	0,8 *0.031*	1,4 *0.055*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*					■	■	■	■	■				■	■		■		■
XNEX080608TR-M13	0,8 *0.031*	1,3 *0.051*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*			■		■		■			■	■	■		■				
XNEX080608TR-MD15	0,8 *0.031*	1,4 *0.055*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*	■		■		■		■			■	■	■		■				
XNEX080612TR-ME09	1,2 *0.047*	1,0 *0.039*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*							■					■						
XNEX080612TR-M13	1,2 *0.047*	0,9 *0.035*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*			■				■			■		■						
XNEX080612TR-MD15	1,2 *0.047*	1,0 *0.039*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*										■	■	■						
XNEX080616TR-ME09	1,6 *0.063*	0,6 *0.024*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*					■		■					■						
XNEX080616TR-M13	1,6 *0.063*	0,5 *0.020*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*			■		■		■			■	■	■		■				
XNEX080616TR-MD15	1,6 *0.063*	0,7 *0.028*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*			■		■		■			■	■	■		■				
XNEX080608TL-M13	0,8 *0.031*	1,3 *0.051*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*						■	■					■		■				
XNEX080616TL-M13	1,6 *0.063*	0,5 *0.020*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*												■						
XNEX080608ZZR-M11	0,8 *0.031*	6,0 *0.236*	7,5 *0.295*	12,48 *0.491*	6,45 *0.254*					■		■			■								

XNHQ07

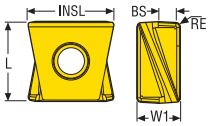


TN8-M11



Codice di ordinazione	RE	INSL	BS	L	LE	W1	GAN	Qualità																		
								PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XNHQ070708TN8-M11	0,8 *0.031*	15,08 *0.594*	1,8 *0.071*	13,63 *0.537*	6,9 *0.272*	7,5 *0.295*	16,0 °			■				■					■						
XNHQ070716TN8-M11	1,6 *0.063*	14,85 *0.585*	1,0 *0.039*	13,63 *0.537*	6,9 *0.272*	7,5 *0.295*	16,0 °			■									■						
XNHQ070731TN8-M11	3,1 *0.122*	14,42 *0.568*	0,6 *0.024*	13,63 *0.537*	6,9 *0.272*	7,5 *0.295*	16,0 °			■									■						

XNHQ09/12/14/17



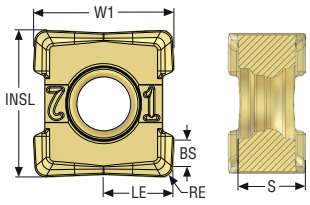
E07/E09/E10/E12/M08/M10/M11/M13



Codice di ordinazione	RE	INSL	BS	L	W1	GAN	Qualità																			
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XNHQ090504TN4-M08	0,4 *0.016*	11,81 *0.465*	2,2 *0.087*	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ090508TN4-M08	0,8 *0.031*	11,7 *0.461*	1,8 *0.071*	9,3 *0.366*	5,5 *0.217*	16,0 °			■				■					■						
XNHQ090512TN4-M08	1,2 *0.047*	11,58 *0.456*	1,4 *0.055*	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ090516TN4-M08	1,6 *0.063*	11,46 *0.451*	1,0 *0.039*	9,3 *0.366*	5,5 *0.217*	16,0 °							■					■						
XNHQ090520TN4-M08	2,0 *0.079*	11,4 *0.449*	0,6 *0.024*	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ090524TN4-M08	2,4 *0.094*	11,2 *0.441*	0,2 *0.008*	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ090531TN4-M08	3,1 *0.122*	11,0 *0.433*	–	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ090540TN4-M08	4,0 *0.157*	10,7 *0.421*	–	9,3 *0.366*	5,5 *0.217*	16,0 °							■											
XNHQ120608EN4-E09	0,8 *0.031*	13,34 *0.525*	2,3 *0.091*	11,7 *0.461*	6,5 *0.256*	21,0 °							■											
XNHQ120608TN4-M10	0,8 *0.031*	13,16 *0.518*	2,3 *0.091*	11,7 *0.461*	6,5 *0.256*	16,0 °			■				■					■						
XNHQ120612TN4-M10	1,2 *0.047*	13,05 *0.514*	1,9 *0.075*	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ120616TN4-M10	1,6 *0.063*	12,94 *0.509*	1,58 *0.062*	11,7 *0.461*	6,5 *0.256*	16,0 °							■					■						
XNHQ120620TN4-M10	2,0 *0.079*	12,81 *0.504*	1,1 *0.043*	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ120624TN4-M10	2,4 *0.094*	12,72 *0.501*	0,7 *0.028*	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ120631TN4-M10	3,1 *0.122*	12,53 *0.493*	0,15 *0.006*	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ120640TN4-M10	4,0 *0.157*	12,25 *0.482*	–	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ120650TN4-M10	5,0 *0.197*	11,87 *0.467*	–	11,7 *0.461*	6,5 *0.256*	16,0 °							■											
XNHQ140708EN4-E10	0,8 *0.031*	15,1 *0.594*	3,0 *0.118*	14,0 *0.551*	7,5 *0.295*	22,0 °							■											■
XNHQ140708TN4-M11	0,8 *0.031*	15,1 *0.594*	3,0 *0.118*	14,0 *0.551*	7,5 *0.295*	16,0 °			■				■					■						
XNHQ140716TN4-M11	1,6 *0.063*	14,8 *0.583*	2,2 *0.087*	14,0 *0.551*	7,5 *0.295*	16,0 °							■					■						
XNHQ140720TN4-M11	2,0 *0.079*	14,7 *0.579*	1,8 *0.071*	14,0 *0.551*	7,5 *0.295*	16,0 °							■											
XNHQ140724TN4-M11	2,4 *0.094*	14,6 *0.575*	1,4 *0.055*	14,0 *0.551*	7,5 *0.295*	16,0 °							■											
XNHQ140731TN4-M11	3,1 *0.122*	14,4 *0.567*	0,7 *0.028*	14,0 *0.551*	7,5 *0.295*	16,0 °							■					■						
XNHQ140740TN4-M11	4,0 *0.157*	14,2 *0.559*	–	14,0 *0.551*	7,5 *0.295*	16,0 °							■											
XNHQ140750TN4-M11	5,0 *0.197*	13,9 *0.547*	–	14,0 *0.551*	7,5 *0.295*	16,0 °							■											
XNHQ140760TN4-M11	6,0 *0.236*	13,6 *0.535*	–	14,0 *0.551*	7,5 *0.295*	16,0 °							■											

Codice di ordinazione	RE	INSL	BS	L	W1	GAN	Qualità																		
							PVD									CVD								Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XNHQ170708EN4-E12	0,8 *0.031*	–	3,0 *0.118*	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170708TN4-M13	0,8 *0.031*	–	3,0 *0.118*	17,0 *0.669*	7,5 *0.295*	16,0 °			■				■					■						
XNHQ170716TN4-M13	1,6 *0.063*	–	2,2 *0.087*	17,0 *0.669*	7,5 *0.295*	16,0 °							■					■						
XNHQ170720TN4-M13	2,0 *0.079*	–	1,8 *0.071*	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170724TN4-M13	2,4 *0.094*	–	1,4 *0.055*	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170731TN4-M13	3,1 *0.122*	–	0,7 *0.028*	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170740TN4-M13	4,0 *0.157*	–	–	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170750TN4-M13	5,0 *0.197*	–	–	17,0 *0.669*	7,5 *0.295*	16,0 °							■											
XNHQ170760TN4-M13	6,0 *0.236*	–	–	17,0 *0.669*	7,5 *0.295*	16,0 °							■											

XNUX05

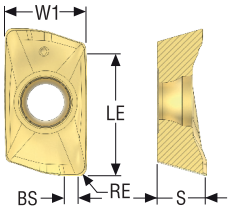


M07

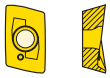


Codice di ordinazione	RE	BS	LE	W1	INSL	S	Qualità																			
							PVD									CVD								Non rivestite		
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XNXU050504TN8-M07	0,4 *0.016*	2,4 *0.094*	5,0 *0.197*	10,24 *0.403*	10,97 *0.432*	5,2 *0.205*							■													
XNXU050508TN8-M07	0,8 *0.031*	2,0 *0.079*	5,0 *0.197*	10,28 *0.405*	10,94 *0.431*	5,2 *0.205*			■				■					■							
XNXU050516TN8-M07	1,6 *0.063*	1,2 *0.047*	5,0 *0.197*	10,36 *0.408*	10,87 *0.428*	5,2 *0.205*			■									■							

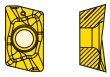
XO.X06



E03

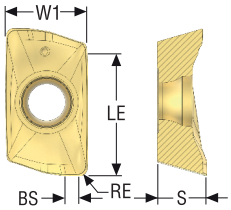


M05

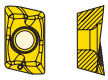


Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																	
							PVD								CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOEX060202FR-E03	0,2 *0.008*	1,1 *0.043*	6,0 *0.236*	4,1 *0.161*	2,45 *0.096*	30,6 °																	■	
XOEX060204FR-E03	0,4 *0.016*	0,9 *0.035*	6,0 *0.236*	4,1 *0.161*	2,45 *0.096*	29,2 °							■										■	
XOMX060202R-M05	0,2 *0.008*	1,1 *0.043*	5,5 *0.217*	4,1 *0.161*	2,45 *0.096*	20,2 °					■		■											
XOMX060204R-M05	0,4 *0.016*	0,91 *0.036*	5,5 *0.217*	4,1 *0.161*	2,45 *0.096*	20,2 °				■	■	■	■									■		
XOMX060208R-M05	0,8 *0.031*	0,51 *0.020*	5,5 *0.217*	4,1 *0.161*	2,45 *0.096*	20,2 °	■	■		■	■	■	■									■		
XOMX060216R-M05	1,6 *0.063*	0,64 *0.025*	5,5 *0.217*	4,1 *0.161*	2,45 *0.096*	20,2 °				■	■	■	■									■		

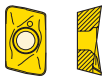
XO.X10



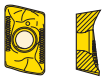
E05/M06



M09



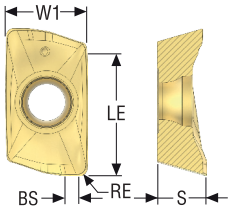
ME07

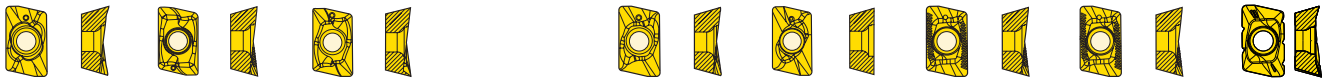


Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																				
							PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOEX10T304FR-E05	0,4 *0.016*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	21,6 °							■										■	
XOEX10T308FR-E05	0,8 *0.031*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	21,6 °							■										■	
XOEX10T312FR-E05	1,2 *0.047*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	21,6 °																	■	
XOEX10T320FR-E05	2,0 *0.079*	0,6 *0.024*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	21,6 °																	■	
XOEX10T331FR-E05	3,1 *0.122*	0,39 *0.015*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	24,1 °																	■	
XOEX10T302R-M06	0,2 *0.008*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	15,1 °							■											
XOEX10T304R-M06	0,4 *0.016*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	15,1 °						■	■					■						
XOEX10T308R-M06	0,8 *0.031*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	15,1 °						■	■	■	■			■	■	■				
XOEX10T312R-M06	1,2 *0.047*	1,3 *0.051*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	15,1 °						■	■											
XOEX10T316R-M06	1,6 *0.063*	1,0 *0.039*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	15,1 °						■	■											
XOEX10T320R-M06	2,0 *0.079*	0,6 *0.024*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	18,8 °						■								■				
XOEX10T324R-M06	2,4 *0.094*	0,2 *0.008*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	18,3 °						■												
XOEX10T331R-M06	3,1 *0.122*	0,4 *0.016*	9,7 *0.382*	6,9 *0.272*	3,8 *0.150*	17,3 °						■	■		■									
XOMX10T304TR-ME07	0,4 *0.016*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °					■	■	■			■	■	■		■				
XOMX10T308TR-ME07	0,8 *0.031*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °					■	■	■	■	■	■	■	■	■	■		■		
XOMX10T312TR-ME07	1,2 *0.047*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °					■	■	■					■		■				
XOMX10T316TR-ME07	1,6 *0.063*	1,0 *0.039*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °					■	■	■	■	■			■		■				
XOMX10T320TR-ME07	2,0 *0.079*	0,6 *0.024*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °					■	■	■					■		■				
XOMX10T324TR-ME07	2,4 *0.094*	0,2 *0.008*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °						■	■					■						
XOMX10T331TR-ME07	3,1 *0.122*	0,4 *0.016*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	20,4 °						■	■	■	■			■						
XOMX10T304TR-M09	0,4 *0.016*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °			■		■		■			■	■	■		■				
XOMX10T308TR-M09	0,8 *0.031*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °	■		■		■		■			■	■	■	■	■		■		
XOMX10T312TR-M09	1,2 *0.047*	1,3 *0.051*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °			■				■							■				
XOMX10T316TR-M09	1,6 *0.063*	1,0 *0.039*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °							■							■				
XOMX10T320TR-M09	2,0 *0.079*	0,6 *0.024*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °							■							■				
XOMX10T324TR-M09	2,4 *0.094*	0,2 *0.008*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °							■											

							Qualità																				
Codice di ordinazione	RE	BS	LE	W1	S	GAN	PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOMX10T331TR-M09	3,1 *0.122*	0,4 *0.016*	9,3 *0.366*	6,9 *0.272*	3,83 *0.151*	10,6 °							■							■				

XO.X12

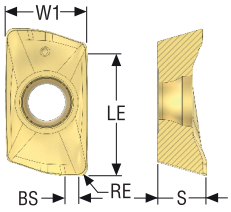




Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																				
							PVD										CVD								Non rivestite		
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOEX120404FR-E06	0,4 *0.016*	2,0 *0.079*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	27,4 °		■					■										■	
XOEX120408FR-E06	0,8 *0.031*	1,6 *0.063*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	27,2 °	■	■					■										■	
XOEX120420FR-E06	2,0 *0.079*	0,6 *0.024*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	21,2 °		■					■											
XOEX120416FR-E06	1,6 *0.063*	1,2 *0.047*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	26,3 °		■					■											
XOEX120431FR-E06	3,1 *0.122*	–	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	24,8 °							■											
XOEX120402R-M07	0,2 *0.008*	2,0 *0.079*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	20,5 °							■											
XOEX120404R-M07	0,4 *0.016*	2,0 *0.079*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	20,5 °				■		■	■					■						
XOEX120408R-M07	0,8 *0.031*	1,6 *0.063*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	20,3 °				■	■	■	■	■	■			■	■	■		■		
XOEX120416R-M07	1,6 *0.063*	1,2 *0.047*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	19,1 °					■	■	■											
XOEX120420R-M07	2,0 *0.079*	0,95 *0.037*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	18,6 °						■												
XOEX120424R-M07	2,4 *0.094*	0,6 *0.024*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	18,6 °				■		■	■											
XOEX120431R-M07	3,1 *0.122*	–	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	15,0 °						■	■	■	■				■	■				
XOEX120440R-M07	4,0 *0.157*	0,725 *0.029*	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	23,7 °						■	■											
XOEX120463R-M07	6,3 *0.248*	–	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	15,3 °						■	■											
XOEX120450R-M07	5,0 *0.197*	–	12,0 *0.472*	8,2 *0.323*	5,03 *0.198*	16,8 °						■	■											
XOEX120408ZZR-M07	0,8 *0.031*	6,6 *0.260*	11,1 *0.437*	8,2 *0.323*	5,03 *0.198*	20,3 °				■	■		■											
XOMX120404TR-ME08	0,4 *0.016*	2,0 *0.079*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■			■		■						
XOMX120408TR-ME08-CS	0,8 *0.031*	1,6 *0.063*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °			■			■	■					■		■				
XOMX120408TR-ME08	0,8 *0.031*	1,6 *0.063*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °			■			■	■	■	■	■		■		■		■		
XOMX120412TR-ME08	1,2 *0.047*	1,2 *0.047*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■					■		■				
XOMX120416TR-ME08	1,6 *0.063*	1,2 *0.047*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °							■	■	■			■		■				
XOMX120420TR-ME08	2,0 *0.079*	1,0 *0.039*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■					■		■				
XOMX120424TR-ME08	2,4 *0.094*	0,92 *0.036*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■					■		■				
XOMX120431TR-ME08	3,1 *0.122*	0,6 *0.024*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■	■	■			■		■				
XOMX120440TR-ME08	4,0 *0.157*	0,8 *0.031*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	20,1 °						■	■		■			■						
XOMX120408TR-M12	0,8 *0.031*	1,6 *0.063*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	10,4 °			■		■		■			■	■	■		■				

Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																		
							PVD									CVD						Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOMX120416TR-M12	1,6 *0.063*	1,2 *0.047*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	10,4 °					■		■							■				
XOMX120431TR-M12	3,1 *0.122*	0,6 *0.024*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	10,4 °					■		■							■				
XOMX120408TR-MD13	0,8 *0.031*	1,6 *0.063*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	14,6 °	■		■		■		■			■	■	■		■				
XOMX120404TR-MD13	0,4 *0.016*	2,0 *0.079*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	14,6 °							■			■	■							
XOMX120412TR-MD13	1,2 *0.047*	1,2 *0.047*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	14,7 °					■		■			■	■							
XOMX120416TR-MD13	1,6 *0.063*	1,2 *0.047*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	14,7 °					■		■			■	■							
XOMX120408TR-D14	0,8 *0.031*	1,6 *0.063*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	1,0 °				■	■					■	■	■						
XOMX120431TR-D14	3,1 *0.122*	0,6 *0.024*	11,6 *0.457*	8,2 *0.323*	5,07 *0.200*	1,0 °				■	■													

XO.X16



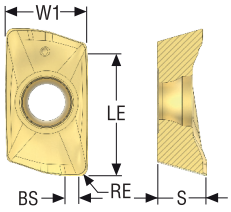
E07/M09 | M13 | MD14 | ME11 | XOMX-M09

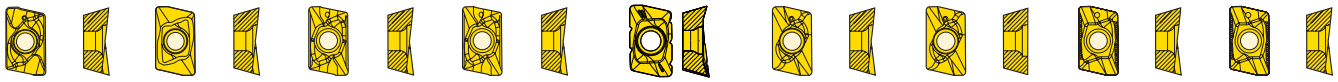


Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																				
							PVD									CVD							Non rivestite	
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOEX160504FR-E07	0,4 0.016	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	23,0 °																		■
XOEX160508FR-E07	0,8 0.031	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	23,0 °																		■
XOEX160504R-M09	0,4 0.016	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °					■		■					■						
XOEX160508R-M09	0,8 0.031	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °					■	■	■	■	■			■						
XOEX160516R-M09	1,6 0.063	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °						■	■											
XOEX160520R-M09	2,0 0.079	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °						■	■											
XOEX160524R-M09	2,4 0.094	1,8 0.071	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °						■	■	■	■									
XOEX160531R-M09	3,1 0.122	1,6 0.063	15,3 0.602	10,2 0.402	5,9 0.232	14,0 °						■	■	■	■									
XOEX160540R-M09	4,0 0.157	1,2 0.047	15,2 0.598	10,2 0.402	5,9 0.232	14,0 °						■	■											
XOEX160550R-M09	5,0 0.197	0,3 0.012	15,0 0.591	10,2 0.402	5,59 0.220	14,0 °						■	■											
XOEX160563R-M09	6,3 0.248	0,2 0.008	14,7 0.579	10,2 0.402	5,34 0.210	14,0 °						■	■											
XOMX160504TR-ME11	0,4 0.016	2,0 0.079	15,4 0.606	10,2 0.402	5,94 0.234	19,0 °							■					■						
XOMX160508TR-ME11	0,8 0.031	2,0 0.079	15,4 0.606	10,2 0.402	5,94 0.234	19,0 °			■			■	■	■	■			■		■				
XOMX160512TR-ME11	1,2 0.047	2,0 0.079	15,4 0.606	10,2 0.402	5,94 0.234	19,0 °							■					■						
XOMX160516TR-ME11	1,6 0.063	2,0 0.079	15,4 0.606	10,2 0.402	5,94 0.234	18,0 °							■					■						
XOMX160520TR-ME11	2,0 0.079	1,9 0.075	15,4 0.606	10,2 0.402	5,94 0.234	18,0 °						■	■					■						
XOMX160524TR-ME11	2,4 0.094	1,8 0.071	15,4 0.606	10,2 0.402	5,93 0.233	18,0 °						■	■											
XOMX160531TR-ME11	3,1 0.122	1,6 0.063	15,4 0.606	10,2 0.402	5,93 0.233	19,0 °						■	■	■	■									
XOMX160540TR-ME11	4,0 0.157	1,2 0.047	15,2 0.598	10,2 0.402	5,93 0.233	19,0 °						■	■											
XOMX160550TR-ME11	5,0 0.197	0,3 0.012	15,0 0.591	10,2 0.402	5,56 0.219	18,0 °						■	■											
XOMX160563TR-ME11	6,3 0.248	0,2 0.008	14,6 0.575	10,2 0.402	5,3 0.209	18,0 °						■	■											
XOMX160508R-M09	0,8 0.031	2,0 0.079	15,4 0.606	10,2 0.402	5,9 0.232	14,0 °						■	■											
XOMX160508TR-M13	0,8 0.031	2,0 0.079	15,4 0.606	10,2 0.402	5,98 0.235	9,0 °			■		■		■			■	■	■		■				
XOMX160516TR-M13	1,6 0.063	2,0 0.079	15,4 0.606	10,2 0.402	5,98 0.235	9,0 °							■											
XOMX160531TR-M13	3,1 0.122	1,6 0.063	15,4 0.606	10,2 0.402	5,98 0.235	9,0 °							■											
XOMX160504TR-MD14	0,4 0.016	2,0 0.079	15,4 0.606	10,2 0.402	6,01 0.237	4,0 °			■															

							Qualità																				
Codice di ordinazione	RE	BS	LE	W1	S	GAN	PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOMX160508TR-MD14	0,8 *0.031*	2,0 *0.079*	15,4 *0.606*	10,2 *0.402*	6,01 *0.237*	4,0 °	■		■		■						■			■				

XO.X18

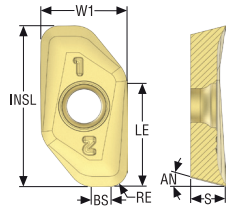




Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																				
							PVD												CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOEX180604FR-E10	0,4 *0.016*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	29,0 °							■											■
XOEX180608FR-E10	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	29,0 °							■											■
XOEX180616FR-E10	1,6 *0.063*	2,3 *0.091*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	30,0 °																		■
XOEX180620FR-E10	2,0 *0.079*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	30,0 °																		■
XOEX180631FR-E10	3,1 *0.122*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	29,0 °																		■
XOEX180608ZZR-M10	0,8 *0.031*	9,0 *0.354*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	22,4 °							■											
XOMX180604TR-ME13	0,4 *0.016*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	25,0 °							■					■						
XOMX180608TR-ME13	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	25,3 °							■			■		■		■		■		
XOMX180616TR-ME13	1,6 *0.063*	2,3 *0.091*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	24,7 °												■						
XOMX180620TR-ME13	2,0 *0.079*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	24,7 °							■					■						
XOMX180631TR-ME13	3,1 *0.122*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,38 *0.251*	23,6 °							■					■						
XOMX180640TR-ME13	4,0 *0.157*	0,8 *0.031*	17,0 *0.669*	11,2 *0.441*	6,38 *0.251*	24,0 °												■						
XOMX180604R-M10	0,4 *0.016*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	22,0 °						■	■											
XOMX180608R-M10	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	22,4 °				■		■	■	■	■			■		■		■		
XOMX180616R-M10	1,6 *0.063*	2,3 *0.091*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	21,7 °						■	■							■		■		
XOMX180620R-M10	2,0 *0.079*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	21,8 °						■	■							■				
XOMX180624R-M10	2,4 *0.094*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,35 *0.250*	21,1 °						■	■											
XOMX180631R-M10	3,1 *0.122*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,35 *0.250*	21,0 °						■	■							■		■		
XOMX180640R-M10	4,0 *0.157*	0,8 *0.031*	17,0 *0.669*	11,2 *0.441*	6,35 *0.250*	21,0 °						■	■							■				
XOMX180650R-M10	5,0 *0.197*	0,3 *0.012*	17,0 *0.669*	11,2 *0.441*	6,35 *0.250*	19,4 °						■	■	■	■					■				
XOMX180663R-M10	6,3 *0.248*	0,3 *0.012*	17,0 *0.669*	11,2 *0.441*	6,35 *0.250*	19,0 °						■	■							■				
XOMX180608R-M10-CS	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	22,4 °			■			■	■					■		■				
XOMX180608TR-M14	0,8 *0.031*	2,38 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,5 °			■	■	■		■			■	■	■		■				
XOMX180612TR-M14	1,2 *0.047*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,5 °			■		■		■			■	■	■		■				
XOMX180616TR-M14	1,6 *0.063*	2,3 *0.091*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,0 °					■		■			■		■		■				
XOMX180620TR-M14	2,0 *0.079*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,0 °							■					■		■				

Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																		
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XOMX180624TR-M14	2,4 *0.094*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,37 *0.251*	14,0 °							■					■		■				
XOMX180631TR-M14	3,1 *0.122*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,37 *0.251*	14,0 °					■		■					■		■				
XOMX180608TR-MD15	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,9 °	■		■	■	■		■			■	■	■		■				
XOMX180612TR-MD15	1,2 *0.047*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,0 °					■		■				■							
XOMX180616TR-MD15	1,6 *0.063*	2,3 *0.091*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	15,3 °					■		■			■				■				
XOMX180608TR-D16	0,8 *0.031*	2,4 *0.094*	17,0 *0.669*	11,2 *0.441*	6,4 *0.252*	11,0 °				■						■	■	■		■				
XOMX180631TR-D16	3,1 *0.122*	2,2 *0.087*	17,0 *0.669*	11,2 *0.441*	6,39 *0.252*	9,0 °					■						■							

XPKX



E06

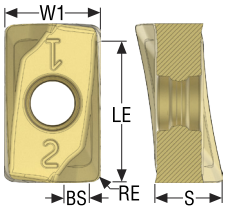


E08



Codice di ordinazione	RE	BS	LE	INSL	W1	S	GAN	Qualità																		
								PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
XPKX080304PDER-E06	0,4 *0.016*	1,3 *0.051*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX080308PDER-E06	0,8 *0.031*	1,3 *0.051*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX080316PDER-E06	1,6 *0.063*	1,2 *0.047*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX080320PDER-E06	2,0 *0.079*	1,3 *0.051*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX080324PDER-E06	2,4 *0.094*	1,2 *0.047*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX080331PDER-E06	3,1 *0.122*	0,5 *0.020*	8,0 *0.315*	13,0 *0.512*	7,0 *0.276*	3,4 *0.134*	11,0																		■
XPKX12T304PDER-E08	0,4 *0.016*	1,5 *0.059*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■
XPKX12T308PDER-E08	0,8 *0.031*	1,5 *0.059*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■
XPKX12T320PDER-E08	2,0 *0.079*	1,9 *0.075*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■
XPKX12T324PDER-E08	2,4 *0.094*	1,5 *0.059*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■
XPKX12T331PDER-E08	3,1 *0.122*	1,7 *0.067*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■
XPKX12T340PDER-E08	4,0 *0.157*	1,1 *0.043*	12,1 *0.476*	18,8 *0.740*	10,0 *0.394*	3,97 *0.156*	11,0																		■

ZOMX11/16



ZOMX16

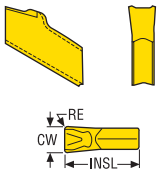


ZOMX11



Codice di ordinazione	RE	BS	LE	W1	S	GAN	Qualità																	
							PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
ZOMX110708TR-ME10	0,8 *0.031*	1,5 *0.059*	10,8 *0.425*	7,92 *0.312*	6,22 *0.245*	34,0 °						■	■					■		■				
ZOMX110708R-M08	0,8 *0.031*	1,5 *0.059*	10,8 *0.425*	7,92 *0.312*	6,22 *0.245*	29,0 °						■	■					■		■				
ZOMX110708TR-M12	0,8 *0.031*	1,5 *0.059*	10,8 *0.425*	7,92 *0.312*	6,22 *0.245*	24,0 °			■				■				■	■		■				
ZOMX110708TR-MD14	0,8 *0.031*	1,5 *0.059*	10,8 *0.425*	7,92 *0.312*	6,22 *0.245*	22,0 °			■		■						■							
ZOMX160708TR-ME10	0,8 *0.031*	2,0 *0.079*	15,5 *0.610*	10,76 *0.424*	7,38 *0.291*	39,1 °						■	■					■		■				
ZOMX160708TR-M12	0,8 *0.031*	2,0 *0.079*	15,5 *0.610*	10,76 *0.424*	7,38 *0.291*	29,0 °			■		■		■				■	■	■	■				
ZOMX160716TR-ME10	1,6 *0.063*	1,2 *0.047*	15,5 *0.610*	10,76 *0.424*	7,26 *0.286*	39,1 °						■	■					■						
ZOMX160716TR-M12	1,6 *0.063*	1,2 *0.047*	15,5 *0.610*	10,76 *0.424*	7,26 *0.286*	29,0 °			■				■				■	■						

150.10



150.10-12



150.10-14

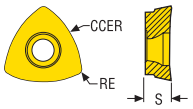


150.10-16



Codice di ordinazione	RE	CW	INSL	Qualità																					
				PVD												CVD								Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	CP500	CP600	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	TGP45	H15	H25
150.10-2.5N-12	0,17 *0.007*	2,5 *0.098*	9,0 *0.354*										■	■						■		■		
150.10-3N-12	0,19 *0.007*	3,1 *0.122*	9,0 *0.354*										■	■						■		■		
150.10-2.25N-14	0,15 *0.006*	2,25 *0.089*	9,0 *0.354*										■	■								■		
150.10-2.5N-14	0,17 *0.007*	2,5 *0.098*	9,0 *0.354*										■	■						■		■		
150.10-3N-14	0,19 *0.007*	3,1 *0.122*	9,0 *0.354*										■	■						■		■		
150.10-2.25N-16	0,15 *0.006*	2,25 *0.089*	9,0 *0.354*										■	■						■		■		
150.10-2.5N-16	0,17 *0.007*	2,5 *0.098*	9,0 *0.354*										■	■						■		■		
150.10-3N-16	0,19 *0.007*	3,1 *0.122*	9,0 *0.354*										■	■						■		■		
150.10-4N-12	0,23 *0.009*	4,1 *0.161*	9,0 *0.354*										■	■						■		■		
150.10-4N-14	0,23 *0.009*	4,1 *0.161*	9,0 *0.354*										■	■						■		■		
150.10-4N-16	0,23 *0.009*	4,1 *0.161*	9,0 *0.354*										■	■						■		■		

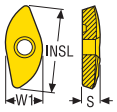
218.19





Codice di ordinazione	RE	CCER	S	GAN	Qualità																		
					PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
218.19-160-04-E07	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	20,0 °																		■
218.19-125T-T3-ME07	0,8 *0.031*	12,5 *0.492*	3,97 *0.156*	20,0 °							■											
218.19-160T-04-ME08	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	20,0 °							■											
218.19-200T-05-ME10	0,6 *0.024*	20,0 *0.787*	5,5 *0.217*	20,0 °							■											
218.19-080T-M04	0,4 *0.016*	8,0 *0.315*	2,38 *0.094*	7,0 °				■			■					■						
218.19-100T-M06	0,8 *0.031*	10,0 *0.394*	2,78 *0.109*	7,0 °				■	■	■	■					■	■	■				
218.19-125T-T3-M07	0,8 *0.031*	12,5 *0.492*	3,97 *0.156*	10,0 °				■	■	■	■					■	■	■		■		
218.19-160T-04-M11	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	15,0 °											■	■	■					
218.19-160T-04-M08	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	10,0 °				■	■	■	■	■				■	■	■		■		
218.19-200T-05-M10	0,6 *0.024*	20,0 *0.787*	5,5 *0.217*	10,0 °							■											
218.19-080T-MD04	0,4 *0.016*	8,0 *0.315*	2,38 *0.094*	0,0 °		■											■					
218.19-100T-MD08	0,8 *0.031*	10,0 *0.394*	2,78 *0.109*	0,0 °		■										■	■					
218.19-125T-T3-MD10	0,8 *0.031*	12,5 *0.492*	3,97 *0.156*	0,0 °		■									■	■	■	■				
218.19-125T-T3-MD08	0,8 *0.031*	12,5 *0.492*	3,97 *0.156*	0,0 °				■	■													
218.19-160T-04-MD11	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	0,0 °		■	■								■	■	■	■				
218.19-160T-04-MD09	1,2 *0.047*	16,0 *0.630*	4,76 *0.187*	0,0 °				■	■													

218.20

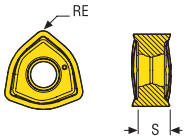


ME/M



Codice di ordinazione	INSL	W1	S	GAN	Qualità																		
					PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
218.20-0.250ER-ME03	12,42 *0.489*	5,46 *0.215*	2,52 *0.099*	11,0 °							■											
218.20-0.250ER-M03	12,42 *0.489*	5,46 *0.215*	2,52 *0.099*	7,0 °							■											
218.20-0.375ER-M05	18,62 *0.733*	8,19 *0.322*	3,85 *0.152*	3,0 °							■											
218.20-0.375ER-ME05	18,62 *0.733*	8,19 *0.322*	3,85 *0.152*	11,0 °						■	■											
218.20-0.750ER-M10	36,44 *1.435*	15,12 *0.595*	7,625 *0.300*	-2,0 °																■		
218.20-0.750ER-ME10	36,44 *1.435*	15,12 *0.595*	7,625 *0.300*	6,0 °							■											
218.20-060ER-ME03	11,73 *0.462*	5,16 *0.203*	2,37 *0.093*	12,0 °						■	■											
218.20-080ER-ME04	15,64 *0.616*	6,88 *0.271*	3,21 *0.126*	5,0 °						■	■							■				
218.20-080ER-M04	15,64 *0.616*	6,88 *0.271*	3,21 *0.126*	1,0 °							■									■		
218.20-100ER-ME05	19,55 *0.770*	8,59 *0.338*	4,05 *0.159*	3,0 °						■	■									■		
218.20-100ER-M05	19,55 *0.770*	8,59 *0.338*	4,05 *0.159*	2,0 °							■									■		
218.20-125ER-ME07	24,48 *0.964*	10,74 *0.423*	5,05 *0.199*	11,0 °						■	■									■		
218.20-125ER-M07	24,48 *0.964*	10,74 *0.423*	5,05 *0.199*	1,0 °							■											
218.20-150ER-ME07	28,7 *1.130*	11,91 *0.469*	5,99 *0.236*	6,0 °						■	■											
218.20-150ER-M08	28,7 *1.130*	11,91 *0.469*	5,99 *0.236*	-2,0 °							■									■		
218.20-160ER-ME08	30,61 *1.205*	12,7 *0.500*	6,4 *0.252*	6,0 °						■	■									■		
218.20-160ER-M08	30,61 *1.205*	12,7 *0.500*	6,4 *0.252*	-2,0 °							■									■		
218.20-200ER-ME10	38,26 *1.506*	15,88 *0.625*	8,06 *0.317*	6,0 °						■	■									■		
218.20-200ER-M10	38,26 *1.506*	15,88 *0.625*	8,06 *0.317*	-2,0 °							■											
218.20-250ER-ME12	47,83 *1.883*	19,85 *0.781*	10,16 *0.400*	6,0 °						■	■									■		
218.20-250TR-M14	47,83 *1.883*	19,85 *0.781*	10,16 *0.400*	-2,0 °							■											

218.21



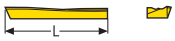
M15 MD17 ME13





Codice di ordinazione	RE	S	GAN	Qualità																				
				PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
218.21-230TR-06-ME13	1,6 *0.063*	5,95 *0.234*	21,0 °						■	■	■					■	■		■		
218.21-230TR-06-M15	1,6 *0.063*	5,95 *0.234*	17,0 °					■	■	■	■				■	■	■				
218.21-230TR-06-MD17	1,6 *0.063*	6,02 *0.237*	7,0 °			■		■						■	■	■					

R235.15

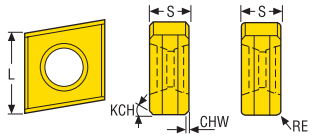


E05

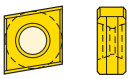


Codice di ordinazione	RE	W1	S	GAN	Qualità																			
					PVD										CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
R235.15-032-E05	0,4 *0.016*	11,15 *0.439*	5,0 *0.197*	22,0 °				■														
R235.15-050-E05	0,4 *0.016*	11,75 *0.463*	5,0 *0.197*	22,0 °				■														
R235.15-080-E05	0,4 *0.016*	11,75 *0.463*	5,0 *0.197*	22,0 °				■														

335.18

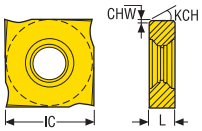


M10/M11/M12

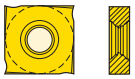


Codice di ordinazione	CHW	L	S	KCH°	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
335.18-1005T-M10	0,5 *0.020*	10,0 *0.394*	5,4 *0.213*	45,0			■				■			■	■	■						
335.18-100508-M10	–	10,0 *0.394*	5,4 *0.213*	0,0														■				
335.18-1305T-M11	0,5 *0.020*	12,7 *0.500*	5,4 *0.213*	45,0			■				■			■	■	■						
335.18-130508-M11	–	12,7 *0.500*	5,4 *0.213*	0,0														■				
335.18-1606T-M12	0,5 *0.020*	16,0 *0.630*	6,4 *0.252*	45,0							■				■	■						
335.18-160608-M12	–	16,0 *0.630*	6,4 *0.252*	0,0																		

335.19

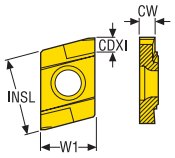






Codice di ordinazione	CHW	L	IC	KCH°	Qualità																		
					PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
335.19-1102-M08	0,1 *0.004*	2,3 *0.091*	11,0 –	45,0							■											
335.19-1103-M08	0,1 *0.004*	2,7 *0.106*	11,0 –	45,0							■											
335.19-1203-M08	0,15 *0.006*	3,2 *0.126*	12,7 –	45,0							■											
335.19-1204-M08	0,15 *0.006*	4,0 *0.157*	12,7 –	45,0							■											
335.19-12045-M08	0,15 *0.006*	4,5 *0.177*	12,7 –	45,0							■											
335.19-1205-M08	0,15 *0.006*	5,4 *0.213*	12,7 –	45,0							■											
335.19-1207-M08	0,15 *0.006*	7,0 *0.276*	12,7 –	45,0							■											
335.19-1203T-MD09	0,1 *0.004*	3,2 *0.126*	12,7 –	20,0							■											
335.19-12045T-MD09	0,1 *0.004*	4,5 *0.177*	12,7 –	20,0							■											
335.19-1204T-MD09	0,1 *0.004*	4,0 *0.157*	12,7 –	20,0							■											
335.19-1205T-MD09	0,1 *0.004*	5,4 *0.213*	12,7 –	20,0							■					■			■			
335.19-1207T-MD09	0,1 *0.004*	7,0 *0.276*	12,7 –	20,0							■											

R335.15-13/18



E08 

M12 

M8 

Codice di ordinazione	INSL	W1	CW	CDXI	GAN	Qualità																		
						PVD									CVD							Non rivestite	
	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*		MH1051	F15M	MK2050	F30M	MP3000	MS2050	F40M	MP2050	MP2051	MK1501	MP1501	MP2501	MS2500	MP3501	T25M	MM4500	H15	H25
R335.15-13110FG-E08	13,5 *0.531*	9,0 *0.354*	1,13 *0.044*	1,8 *0.071*	15,0 °							■											
R335.15-13130FG-E08	13,5 *0.531*	9,0 *0.354*	1,33 *0.052*	2,0 *0.079*	15,0 °							■											
R335.15-13160FG-E08	13,5 *0.531*	9,0 *0.354*	1,63 *0.064*	2,6 *0.102*	15,0 °							■											
R335.15-13185FG-E08	13,5 *0.531*	9,0 *0.354*	1,88 *0.074*	2,6 *0.102*	15,0 °							■											
R335.15-13215FG-E08	13,5 *0.531*	9,0 *0.354*	2,18 *0.086*	3,15 *0.124*	15,0 °							■											
R335.15-13265FG-E08	13,5 *0.531*	9,0 *0.354*	2,68 *0.106*	3,15 *0.124*	15,0 °							■											
R335.15-13215FG-M10	13,5 *0.531*	9,0 *0.354*	2,18 *0.086*	3,15 *0.124*	0,0 °							■											
R335.15-13265FG-M10	13,5 *0.531*	9,0 *0.354*	2,68 *0.106*	3,15 *0.124*	0,0 °							■											
R335.15-18315FG-M12	18,0 *0.709*	9,0 *0.354*	3,2 *0.126*	3,8 *0.150*	0,0 °							■											
R335.15-18350FG-M12	18,0 *0.709*	9,0 *0.354*	3,55 *0.140*	4,1 *0.161*	0,0 °							■											
R335.15-18400FG-M12	18,0 *0.709*	9,0 *0.354*	4,05 *0.159*	4,8 *0.189*	0,0 °							■											
R335.15-18415FG-M12	18,0 *0.709*	9,0 *0.354*	4,2 *0.165*	4,8 *0.189*	0,0 °							■											
R335.15-18500FG-M12	18,0 *0.709*	9,0 *0.354*	5,05 *0.199*	5,5 *0.217*	0,0 °							■											
R335.15-18515FG-M12	18,0 *0.709*	9,0 *0.354*	5,2 *0.205*	5,5 *0.217*	0,0 °							■											

Tolleranza(mm): CW: +0/+0.05 - CDX: +0/+0.15

Calcolo dei parametri di taglio

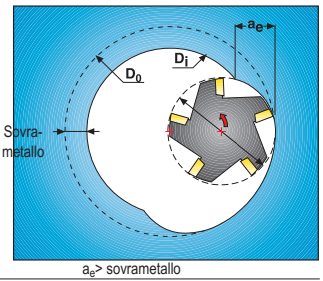
Giri al minuto	$n = \frac{v_c \cdot 1000}{\pi \cdot D_c}$	(giri/min) (pollici/min)
Velocità di taglio	$v_c = \frac{n \cdot \pi \cdot D_c}{1000}$	(m/min) (ft/min)
Velocità di avanzamento	$v_f = n \cdot ZEFP \cdot f_z$	(mm/min) (pollici/min)
Avanzamento per giro	$f = ZEFP \cdot f_z$	(mm/giro) (pollici/giro)
Volume di truciolo asportato	$Q = \frac{a_e \cdot a_p \cdot v_f}{1000}$	(cm^3/min) ($pollici^3$/min)
Velocità di taglio e numero di giri/min. in operazioni di copiatura	$v_c = \frac{n \cdot \pi \cdot D_w}{1000}$	(m/min) (ft/min)
	$D_w = 2 \cdot \sqrt{a_p (D_c - a_p)}$	(mm) (pollici)
	$n = \frac{v_c \cdot 1000}{\pi \cdot D_w}$	(numero di giri al minuto)

Numero di denti effettivo (ZEFP)
Il numero di denti effettivo (ZEFP) è usato per calcolare la velocità di avanzamento (v_f) e l'avanzamento al giro (f).
Per la maggior parte delle frese, il numero di denti effettivo (ZEFP) corrisponde al numero di inserti della fresa (ZNP), ma per alcune frese ZEFP è inferiore a ZNP.

Calcolo dei parametri di taglio

Interpolazione circolare interna
Quando si sceglie l'interpolazione circolare o l'interpolazione elicoidale per allargare un foro, il valore del sovrametallo asportato non corrisponde alla larghezza di taglio. La reale larghezza di taglio deve essere calcolata con la formula riportata sotto.
Il valore della larghezza di taglio reale è quindi usato per il calcolo dell'avanzamento/dente e della velocità di avanzamento.

$$a_e = \frac{D_o^2 - D_i^2}{4\,(D_o - D_c)}$$

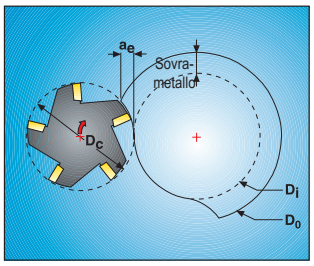


a_e> sovrametallo

Interpolazione circolare esterna
Quando si sceglie l'interpolazione circolare esterna o l'interpolazione elicoidale per diminuire il diametro di un pezzo tondo, il valore del sovrametallo asportato non corrisponde alla larghezza di taglio. La reale larghezza di taglio deve essere calcolata con la formula riportata sotto.

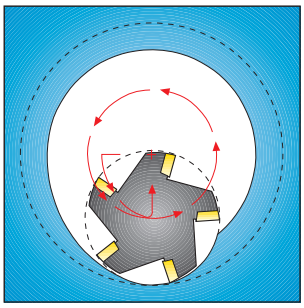
La larghezza di taglio è poi usata per il calcolo dell'avanzamento al dente e della velocità di avanzamento.

$$a_e = \frac{D_o^2 - D_i^2}{4\,(D_i + D_c)}$$

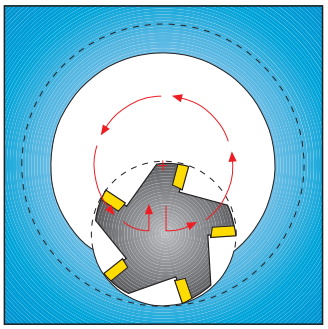


a_e> sovrametallo

Incremento progressivo della larghezza di taglio
Per operazioni in interpolazione circolare, si raccomanda di incrementare progressivamente la larghezza di taglio fino al valore desiderato. Se invece si penetra in direzione radiale, dimezzare l'avanzamento/dente e la velocità di taglio.

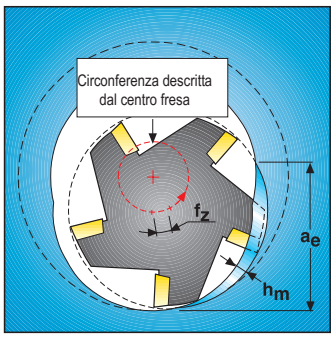


Incremento progressivo della larghezza di taglio – metodo consigliato.



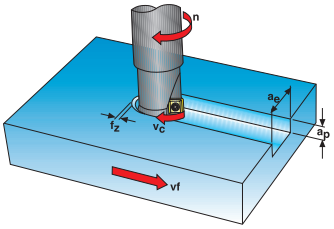
Avanzamento radiale – Ridurre l'avanzamento/dente.

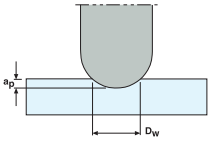
Velocità di avanzamento rispetto al centro della fresa
In interpolazione circolare ed interpolazione elicoidale, per un dato spessore medio del truciolo (hm), la velocità di avanzamento (vf) e l'avanzamento/dente (fz) sono correlati al centro della fresa e non all'esterno.

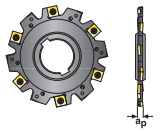


a_e> sovrametallo

Calcolo dei parametri di taglio







a_e	=	Largh. di taglio/prof. di taglio radiale
a_p	=	Prof. di taglio, mm/prof. di taglio assiale
DC	=	Diametro fresa
f	=	Avanzamento per giro
f_z	=	Avanzamento al dente
ZEFP	=	Numero di denti effettivo per il calcolo di vf o di f (vedere sotto)
n	=	Num. di giri al minuto
Q	=	Volume di truciolo asportato
V_c	=	Velocità di taglio
v_f	=	Velocità di avanzamento
v_f	=	Velocità di avanzamento

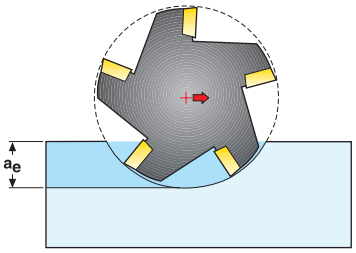
Esempio: Fresa a disco 335.19
Numero di denti totale (ZNP) = 12 Numero di denti effettivo (ZEFP) = 6

Spiegazione: 6 inserti di un lato “ricoprono” gli altri 6 per ottenere la larghezza di taglio della fresa (a_p), ciò significa ZEFP = 6.

Contornatura

Percentuale di impegno del diametro (a_e/DC=%)
30%
20%
10%
5%

Moltiplicare l'avanzamento al dente per il seguente coefficiente
1,25
1,5
2,0
3,0



Questa tabella è valida per angoli di attacco = 90°

a_e/DC %	Avanzamento/dente, mm/dente (f_z)													Coefficiente di velocità
	0,03	0,06	0,08	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,80	1,00	
	Spessore medio del truciolo, mm/dente (hm)													
Larghezza di taglio fino a DC/2														
2 (0,02)					0,02	0,03	0,04	0,04	0,06	0,07	0,08	0,11	0,14	1,8
3 (0,03)				0,02	0,03	0,03	0,04	0,05	0,07	0,09	0,10	0,14	0,17	1,7
5 (0,05)			0,02	0,02	0,03	0,04	0,06	0,07	0,09	0,11	0,13	0,18	0,22	1,6
10 (0,10)		0,02	0,02	0,03	0,05	0,06	0,08	0,09	0,12	0,16	0,19	0,25	0,31	1,5
15 (0,15)	0,011	0,02	0,03	0,04	0,06	0,08	0,09	0,11	0,15	0,19	0,23	0,30		1,4
20 (0,20)	0,013	0,03	0,03	0,04	0,06	0,09	0,11	0,13	0,17	0,22	0,26			1,35
30 (0,30)	0,016	0,03	0,04	0,05	0,08	0,10	0,13	0,16	0,21	0,26	0,31			1,3
40 (0,40)	0,018	0,04	0,05	0,06	0,09	0,12	0,15	0,18	0,23	0,29				1,25
50 (0,50)	0,02	0,04	0,05	0,06	0,10	0,13	0,16	0,19	0,25	0,32				1,2
Cava dal pieno (larghezza di taglio = DC)														
100 (1,00)	0,02	0,04	0,05	0,06	0,10	0,13	0,16	0,19	0,25	0,32				1,0

= Esempio: correzione dell'avanzamento/dente con impegno radiale del 20%; moltiplicare inoltre la velocità di taglio per 1,35.

Quando si eseguono contornature, è necessario incrementare l'avanzamento/dente per mantenere lo spessore truciolo allo stesso valore.
È anche possibile aumentare la velocità di taglio pur mantenendo la stessa durata. Utilizzare la seguente tabella.

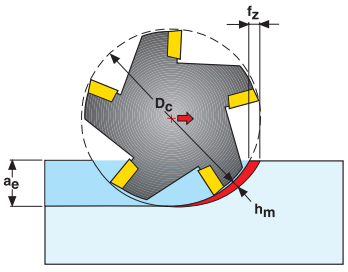
a_e/D_c %	Avanzamento al dente, pollici/dente (fz)													Coefficiente di velocità
	0,0012	0,0024	0,0031	0,004	0,006	0,008	0,010	0,012	0,016	0,020	0,024	0,031	0,039	
	Spessore medio del truciolo, pollici/dente (hm)													
Larghezza di taglio fino a Dc/2														
2 (0,02)					0,0008	0,0012	0,0016	0,0016	0,0024	0,0028	0,0031	0,0043	0,0055	1,8
3 (0,03)				0,0008	0,0012	0,0012	0,0016	0,0020	0,0028	0,0035	0,0039	0,0055	0,0067	1,7
5 (0,05)			0,0008	0,0008	0,0012	0,0016	0,0024	0,0028	0,0035	0,0043	0,0051	0,0071	0,0087	1,6
10 (0,10)		0,0008	0,0008	0,0012	0,0020	0,0024	0,0031	0,0035	0,0047	0,0063	0,0075	0,0098	0,0122	1,5
15 (0,15)	0,0004	0,0008	0,0012	0,0016	0,0024	0,0031	0,0035	0,0043	0,0059	0,0075	0,0091	0,0118		1,4
20 (0,20)	0,0005	0,0012	0,0012	0,0016	0,0024	0,0035	0,0043	0,0051	0,0067	0,0087	0,0102			1,35
30 (0,30)	0,0006	0,0012	0,0016	0,0020	0,0031	0,0039	0,0051	0,0063	0,0083	0,0102	0,0122			1,3
40 (0,40)	0,0007	0,0016	0,0020	0,0024	0,0035	0,0047	0,0059	0,0071	0,0091	0,0114				1,25
50 (0,50)	0,0008	0,0016	0,0020	0,0024	0,0039	0,0051	0,0063	0,0075	0,0098	0,0126				1,2
Cava dal pieno (larghezza di taglio = Dc)														
100 (1,00)	0,0008	0,0016	0,0020	0,0024	0,0039	0,0051	0,0063	0,0075	0,0098	0,0126				1,0

= Esempio: correzione dell'avanzamento/dente con impegno radiale del 20%; moltiplicare inoltre la velocità di taglio per 1,35.

Se a_e/DC < 30%, lo spessore medio del truciolo hm e l'avanzamento al dente fz riportati in tabella possono essere calcolati anche con le seguenti formule.

$$h_m = f_z \cdot \sqrt{\frac{a_e}{D_c}}$$

$$f_z = h_m \cdot \sqrt{\frac{D_c}{a_e}}$$



Questa tabella è valida per angoli di attacco = 45º

a_e/DC %	Avanzamento/dente, mm/dente (f_z)													Coefficiente di velocità
	0,03	0,06	0,08	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,80	1,00	
	Spessore medio del truciolo, mm/dente (hm)													
Larghezza di taglio fino a DC/2														
2 (0,02)					0,01	0,02	0,02	0,03	0,04	0,05	0,06	0,08	0,10	1,8
3 (0,03)				0,01	0,02	0,02	0,03	0,04	0,05	0,06	0,07	0,10	0,12	1,7
5 (0,05)			0,01	0,02	0,02	0,03	0,04	0,05	0,06	0,08	0,09	0,13	0,16	1,6
10 (0,10)		0,01	0,02	0,02	0,03	0,04	0,05	0,07	0,09	0,11	0,13	0,18	0,22	1,5
15 (0,15)	0.008	0,02	0,02	0,03	0,04	0,05	0,07	0,08	0,11	0,13	0,16	0,21		1,4
20 (0,20)	0,009	0,02	0,02	0,03	0,05	0,06	0,08	0,09	0,12	0,15	0,18			1,35
30 (0,30)	0,011	0,02	0,03	0,04	0,05	0,07	0,09	0,11	0,15	0,18	0,22			1,3
40 (0,40)	0,012	0,02	0,03	0,04	0,06	0,08	0,10	0,12	0,17	0,21				1,25
50 (0,50)	0,01	0,03	0,04	0,05	0,07	0,09	0,11	0,14	0,18	0,23				1,2
Spianatura con impegno radiale completo (larghezza di taglio = DC)														
100 (1,00)	0,02	0,04	0,05	0,06	0,10	0,13	0,16	0,19	0,25	0,32				1,0

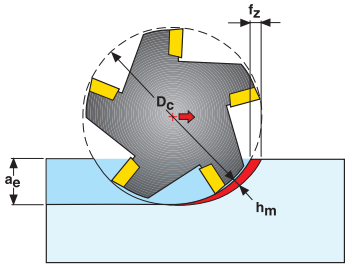
Quando si eseguono contornature, è necessario incrementare l'avanzamento/dente per mantenere lo spessore truciolo allo stesso valore.
È anche possibile aumentare la velocità di taglio pur mantenendo la stessa durata. Utilizzare la seguente tabella.

	Avanzamento al dente, pollici/dente (f_z)													Coefficiente di velocità
	0,0012	0,0024	0,0031	0,004	0,006	0,008	0,010	0,012	0,016	0,020	0,024	0,031	0,039	
	Spessore medio del truciolo, pollici/dente (hm)													
Larghezza di taglio fino a D_c/2														
2 (0,02)					0,0004	0,0008	0,0008	0,0012	0,0016	0,0020	0,0024	0,0031	0,0039	1,8
3 (0,03)				0,0004	0,0008	0,0008	0,0012	0,0016	0,0020	0,0024	0,0028	0,0039	0,0047	1,7
5 (0,05)			0,0004	0,0008	0,0008	0,0012	0,0016	0,0020	0,0024	0,0031	0,0035	0,0051	0,0063	1,6
10 (0,10)		0,0004	0,0008	0,0008	0,0012	0,.0016	0,0020	0,0028	0,0035	0,0043	0,0051	0,0071	0,0087	1,5
15 (0,15)	0,0003	0,0008	0,0008	0,0012	0,0016	0,0020	0,0028	0,0031	0,0043	0,0051	0,0063	0,0083		1,4
20 (0,20)	0,0004	0,0008	0,0008	0,0012	0,0020	0,0024	0,0031	0,0035	0,0047	0,0059	0,0071			1,35
30 (0,30)	0,0004	0,0008	0,0012	0,0016	0,0020	0,0028	0,0035	0,0043	0,0059	0,0071	0,0087			1,3
40 (0,40)	0,0005	0,0008	0,0012	0,0016	0,0024	0,0031	0,0039	0,0047	0,0067	0,0083				1,25
50 (0,50)	0,0004	0,0012	0,0016	0,0020	0,0028	0,0035	0,0043	0,0055	0,0071	0,0091				1,2
Spianatura con impegno radiale completo (larghezza di taglio = D_c)														
100 (1,00)	0,0004	0,0012	0,0016	0,0020	0,0028	0,0035	0,0043	0,0055	0,0071	0,0091				1,0

Se a_e/DC < 30%, lo spessore medio del truciolo hm e l'avanzamento al dente fz riportati in tabella possono essere calcolati anche con le seguenti formule.

$$h_M = f_Z \cdot \sqrt{\frac{a_e}{D_C}} \cdot \sin \kappa$$

$$f_Z = h_M \cdot \sqrt{\frac{D_C}{a_e}} \cdot \frac{1}{\sin \kappa}$$



Questa tabella è valida per angoli di attacco = 60°

a_e/DC %	Avanzamento/dente, mm/dente (f_z)													Coefficiente di velocità
	0,03	0,06	0,08	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,80	1,00	
	Spessore medio del truciolo, mm/dente (hm)													
Larghezza di taglio fino a DC/2														
2 (0,02)					0,02	0,02	0,03	0,04	0,05	0,06	0,07	0,10	0,12	1,8
3 (0,03)				0,01	0,02	0,03	0,04	0,04	0,06	0,07	0,09	0,12	0,15	1,7
5 (0,05)			0,02	0,02	0,03	0,04	0,05	0,06	0,08	0,10	0,12	0,15	0,19	1,6
10 (0,10)		0,02	0,02	0,03	0,04	0,05	0,07	0,08	0,11	0,13	0,16	0,22	0,27	1,5
15 (0,15)	0,010	0,02	0,03	0,03	0,05	0,07	0,08	0,10	0,13	0,16	0,20	0,26		1,4
20 (0,20)	0,011	0,02	0,03	0,04	0,06	0,07	0,09	0,11	0,15	0,19	0,22			1,35
30 (0,30)	0,013	0,03	0,04	0,04	0,07	0,08	0,11	0,13	0,18	0,22	0,27			1,3
40 (0,40)	0,015	0,03	0,04	0,05	0,08	0,10	0,13	0,15	0,20	0,25				1,25
50 (0,50)	0,02	0,03	0,04	0,06	0,08	0,11	0,14	0,17	0,22	0,28				1,2
Spianatura con impegno radiale completo (larghezza di taglio = DC)														
100 (1,00)	0,02	0,04	0,05	0,06	0,10	0,13	0,16	0,19	0,25	0,32				1,0

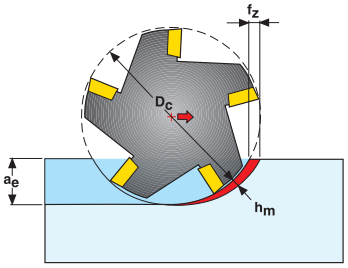
Quando si eseguono contornature, è necessario incrementare l'avanzamento/dente per mantenere lo spessore truciolo allo stesso valore.
È anche possibile aumentare la velocità di taglio pur mantenendo la stessa durata. Utilizzare la seguente tabella.

a_e/D_c %	Avanzamento al dente, pollici/dente (f_z)													Coefficiente di velocità
	0,0012	0,0024	0,0031	0,004	0,006	0,008	0,010	0,012	0,016	0,020	0,024	0,031	1,00	
	Spessore medio del truciolo, pollici/dente (hm)													
Larghezza di taglio fino a D_c/2														
2 (0,02)					0,0008	0,0008	0,0012	0,0016	0,0020	0,0024	0,0028	0,0039	0,0047	1,8
3 (0,03)				0,0004	0,0008	0,0012	0,0016	0,0016	0,0024	0,0028	0,0035	0,0047	0,0059	1,7
5 (0,05)			0,0008	0,0008	0,0012	0,0016	0,0020	0,0024	0,0031	0,0039	0,0047	0,0059	0,0075	1,6
10 (0,10)		0,0008	0,0008	0,0012	0,0016	0,0020	0,0028	0,0031	0,0043	0,0051	0,0063	0,0087	0,0106	1,5
15 (0,15)	0,0004	0,0008	0,0012	0,0012	0,0020	0,0028	0,0031	0,0039	0,0051	0,0063	0,0079	0,0102		1,4
20 (0,20)	0,0004	0,0008	0,0012	0,0016	0,0024	0,0028	0,0035	0,0043	0,0059	0,0075	0,0087			1,35
30 (0,30)	0,0005	0,0012	0,0016	0,0016	0,0028	0,0031	0,0043	0,0051	0,0071	0,0087	0,0102			1,3
40 (0,40)	0,0006	0,0012	0,0016	0,0020	0,0031	0,0039	0,0051	0,0059	0,0079	0,0098				1,25
50 (0,50)	0,0008	0,0012	0,0016	0,0024	0,0031	0,0043	0,0055	0,0067	0,0087	0,0110				1,2
Spianatura con impegno radiale completo (larghezza di taglio = D_c)														
100 (1,00)	0,0008	0,0012	0,0016	0,0024	0,0031	0,0043	0,0055	0,0067	0,0087	0,0110				1,0

Se a_e/DC < 30%, lo spessore medio del truciolo hm e l'avanzamento al dente fz riportati in tabella possono essere calcolati anche con le seguenti formule.

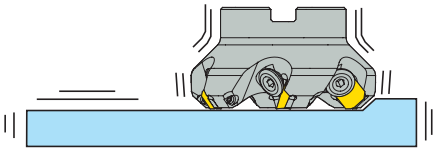
$$h_m = f_z \cdot \sqrt{\frac{a_e}{D_c}}$$

$$f_z = h_m \cdot \sqrt{\frac{D_c}{a_e}}$$

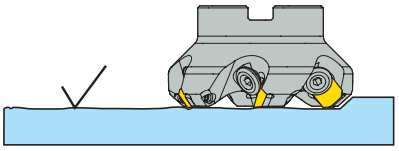


Risoluzione dei problemi di fresatura in metallo duro

Vibrazioni



- Migliorare la stabilità “fresa-pezzo”.
- Cambiare il posizionamento della fresa.
- Ridurre la sporgenza dell’utensile.
- Diminuire la velocità di taglio.
- Aumentare l’avanzamento.
- Ridurre la profondità di taglio.
- Selezionare un’altra geometria inserto, vedere la pagina relativa alle geometrie inserto
- Usare un attacco antivibrante Steadyline



- Migliorare la stabilità “fresa-pezzo”.
- Ridurre la sporgenza dell’utensile.
- Diminuire l’avanzamento.
- Aumentare la velocità di taglio.
- Usare refrigerante.
- Utilizzare inserti raschianti.
- Mantenere il valore di avanzamento/giro all’interno del piano raschiante
- Usare un attacco antivibrante Steadyline

Problemi di durata

Rapida usura sul fianco



- Diminuire la velocità di taglio.
- Aumentare l’avanzamento.
- Utilizzare il metodo di fresatura concorde.

Usura a pettine



- Diminuire la velocità di taglio.
- Diminuire l’avanzamento.
- Non utilizzare refrigerante
- Cambiare il posizionamento della fresa.

Rapida usura ad intaglio



- Diminuire la velocità di taglio.
- Aumentare l’avanzamento.
- Aumentare la profondità di taglio.
- Utilizzare il metodo di fresatura concorde.
- Cambiare il posizionamento della fresa

Tagliente di riporto



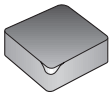
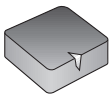
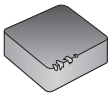
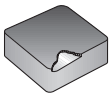
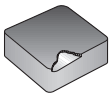
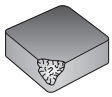
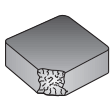
- Aumentare la velocità di taglio.
- Aumentare l’avanzamento
- Non utilizzare refrigerante.
- Utilizzare il metodo di fresatura concorde.
- Cambiare il posizionamento della fresa

Scheggiature

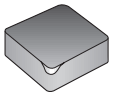
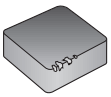


- Aumentare la velocità di taglio.
- Diminuire l’avanzamento.
- Utilizzare il metodo di fresatura discorde.
- Migliorare l’evacuazione del truciolo.
- Cambiare il posizionamento della fresa.
- Ridurre la sporgenza dell’utensile.
- Migliorare la stabilità.

Risoluzione problematiche – PCBN

Problema		Causa possibile	Rimedi suggeriti
Usura sul fianco		Temperatura del tagliente non corretta	• Aumentare la velocità di taglio • Aumentare l'avanzamento • Aumentare la profondità di taglio • Verificare l'altezza del centro di taglio dell'utensile • Controllare il tenore di ferrite libera
Usura a cratere		Temperatura del tagliente non corretta	• Diminuire la velocità di taglio • Diminuire l'avanzamento • Ridurre la dimensione dello smusso • Usare una preparazione tagliente di tipo E • Usare inserti rivestiti • Usare lubrorefrigerante (solo con taglio continuo)
Usura ad intaglio		Temperatura del tagliente non corretta Forze di taglio troppo alte	• Aumentare la velocità di taglio • Diminuire l'avanzamento • Aumentare l'angolo di attacco (preferibilmente inserti tondi) • Modificare la profondità di taglio • Utilizzare inserti con tagliente rinforzato
Scheggiatura del tagliente		Forze di taglio troppo alte	• Utilizzare inserti con tagliente rinforzato • Aumentare la rigidità del sistema • Nelle lavorazioni con taglio interrotto, smussare il pezzo sul lato di entrata e di uscita dell'utensile e sui fori • Variare la velocità di taglio per eliminare le vibrazioni
Sfaldamento del tagliente (taglio continuo)		Forze di taglio troppo alte	• Aumentare la velocità di taglio • Ridurre l'avanzamento • Usare inserti con tagliente smussato ed arrotondato • Verificare l'altezza del centro di taglio dell'utensile • Ridurre l'angolo di attacco
Sfaldamento del tagliente (taglio interrotto)		Forze di taglio troppo alte	• Non usare refrigerante • Usare inserti con tagliente smussato ed arrotondato • Ridurre l'avanzamento • Aumentare la velocità di taglio • Verificare l'altezza del centro di taglio dell'utensile • Ridurre l'angolo di attacco
Rottura del tagliente		Forze di taglio troppo alte	• Ridurre la profondità di taglio • Ridurre velocità di taglio • Aumentare il raggio di punta • Usare inserti con tagliente smussato ed arrotondato • Verificare l'altezza del centro di taglio dell'utensile
Rottura inserto		Forze di taglio troppo alte	• Verificare la sede dell'inserto • Verificare il supporto e la staffa • Verificare l'altezza del centro di taglio dell'utensile

Risoluzioni problematiche – PCD

Problema		Causa possibile	Rimedi suggeriti
Usura sul fianco		Qualità errata Presenza di Fe/Ni/Co	• Utilizzare una qualità PCD a grana più grossa • Controllare la composizione del materiale • Ridurre la velocità di taglio • Usare refrigerante
Formazione del tagliente di riporto		Temperatura del tagliente non corretta Qualità errata	• Diminuire o aumentare la velocità di taglio • Scegliere un inserto più affilato • Utilizzare una qualità a grana più fine
Scheggiatura del tagliente		Scarsa rigidità Qualità errata Parametri di taglio non corretti Elevato errore di eccentricità	• Minimizzare le vibrazioni • Utilizzare una qualità più tenace • Variare i parametri di taglio • Controllare l'impostazione del sistema
Cattiva finitura superficiale		Qualità errata Parametri di taglio più elevati Posizione dell'inserto raschiante errata	• Utilizzare una qualità PCD a grana più fine • Ridurre velocità di taglio ed avanzamento • Controllare la posizione dell'inserto raschiante
Sfaldamento del materiale lavorato		Profondità di taglio troppo elevata	• Ridurre la profondità di taglio • Aggiungere uno smusso in entrata sul componente

Chiavi dinamometriche, chiavi per inserto e coppia di serraggio Combimaster

La gamma di chiavi dinamometriche con valori di coppia fissati è disponibile nelle combinazioni impronta/coppia trasmessa per bloccare la maggior parte dei prodotti Seco di fresatura. Utilizzando una chiave dinamometrica si assicura la coppia di serraggio corretta durante il montaggio dell'inserto.
Le chiavi dinamometriche rispettano la norma ISO 6789.

Chiave di codifica: T00-15P35

T00 = Chiave dinamometrica per bit tipo Torx Plus
T00T = Impugnatura a T per bit tipo Torx Plus
H00T = Chiave dinamometrica a T per bit esagonali
15P = Dimensioni Torx Plus
35 = Coppia di serraggio 3,5 Nm

Si ricorda che i bit non sono intercambiabili tra i modelli a cacciavite e quelli a T.
Torx Plus® è un marchio registrato di proprietà di Camcar-Textron (Stati Uniti)

Chiave dinamometrica*	Bit	Dimensione Torx Plus	Coppia di serraggio Nm/in-lb
T00-06P05	T00-06P	T06P	0,5 / *4,4*
T00-07P05	T00-07P	T07P	0,5 / *4,4*
T00-07P09	T00-07P	T07P	0,9 / *8,0*
T00-08P12	T00-08P	T08P	1,2 / *10,6*
T00-08P20	T00-08P	T08P	2,0 / *17,7*
T00-09P09	T00-09P	T09P	0,9 / *8,0*
T00-09P12	T00-09P	T09P	1,2 / *10,6*
T00-09P20	T00-09P	T09P	2,0 / *17,7*
T00-10P20	T00-10P	T10P	2,0 / *17,7*
T00-10P30	T00-10P	T10P	3,0 / *26,6*
T00-10P35	T00-10P	T10P	3,5 / *31,0*
T00-15P20	T00-15P	T15P	2,0 / *17,7*
T00-15P30	T00-15P	T15P	3,0 / *26,6*
T00-15P35	T00-15P	T15P	3,5 / *31,0*
T00-15P40	T00-15P	T15P	4,0 / *35,4*
T00-15P50	T00-15P	T15P	5,0 / *44,3*
T00-20P35	T00-20P	T20P	3,5 / *31,0*
T00-20P50	T00-20P	T20P	5,0 / *44,3*

*Bit incluso

Chiave dinamometrica*	Bit	Dimensione Torx Plus	Coppia di serraggio Nm/in-lb
T00T-15P50	T00T-15P	T15P	5,0 / *44,3*
T00T-20P50	T00T-20P	T20P	5,0 / *44,3*
T00T-20P60	T00T-20P	T20P	6,0 / *53,1*
T00T-20P80	T00T-20P	T20P	8,0 / *70,8*
T00T-25P50	T00T-25P	T25P	5,0 / *44,3*
T00T-25P60	T00T-25P	T25P	6,0 / *53,1*
T00T-25P80	T00T-25P	T25P	8,0 / *70,8*
H00T-5050	H00T-5.0	–	5,0 Nm
H00T-4050	H00T-4.0	–	5,0 Nm
H00T-4060	H00T-4.0	–	6,0 Nm
H00T-5080	H00T-5.0	–	8,0 Nm
H00T-50100	H00T-5.0	–	10,0 Nm
H00T-60100	H00T-6.0	–	10,0 Nm

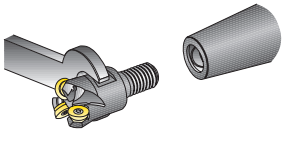
* Bit incluso

*Bit incluso

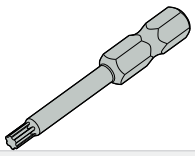
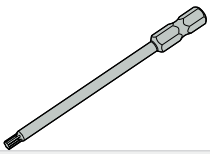
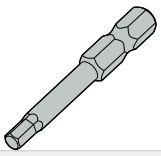
Dimensione Torx Plus	Inserto Torx Plus - corto	Inserto Torx Plus - - lungo	Chiave (impugnatura a T)
T06P	H4B-T06P	-	DOUBLE-T
T07P	H4B-T07P	-	DOUBLE-T
T08P	H4B-T08P	-	DOUBLE-T
T09P	H4B-T09P	-	DOUBLE-T
T10P	H4B-T10P	-	DOUBLE-T
T15P	H4B-T15P	H4B-T15PL	DOUBLE-T
T20P	H6B-T20P	H6B-T20PL	DOUBLE-T
T25P	H6B-T25P	H6B-T25PL	DOUBLE-T
T30P	-	H6B-T30PL	DOUBLE-T

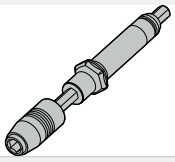
Dimensione esagono	Bit esagonale - corto	Inserto esagonale - lungo	Chiave (impugnatura a T)
3,0 mm	H6B-3.0	-	DOUBLE-T
5,0 mm	-	H6B-H5.0L	DOUBLE-T

Dimensione M Combimaster	Coppia di serraggio
M6	10 Nm
M8	25 Nm
M10	40 Nm
M12	60 Nm
M16	80 Nm
M20	120 Nm



Bit esagonali da 1/4" e impugnature dinamometriche.

Dimensione	Bit Torx Plus (50 mm / 1.96 Pollici)	Bit Torx Plus (90 mm / 3.54 Pollici)	Bit esagonali (50 mm / 1.96 Pollici)
			
Torx Plus - T05P	1/4HEX-T05Px50	-	
Torx Plus - T06P	1/4HEX-T06Px50	-	
Torx Plus - T07P	1/4HEX-T07Px50	-	
Torx Plus - T08P	1/4HEX-T08Px50	1/4HEX-T08Px90	
Torx Plus - T09P	1/4HEX-T09Px50	1/4HEX-T09Px90	
Torx Plus - T10P	1/4HEX-T10Px50	1/4HEX-T10Px90	
Torx Plus - T15P	1/4HEX-T15Px50	1/4HEX-T15Px90	
Torx Plus - T20P	1/4HEX-T20Px50	1/4HEX-T20Px90	
Torx Plus - T25P	1/4HEX-T25Px50	1/4HEX-T25Px90	
Torx Plus - T30P	1/4HEX-T30Px50	-	
Hexagonal - 2,5mm	-	-	1/4HEX-H2.5x50
Hexagonal - 3,0mm	-	-	1/4HEX-H3.0x50
Hexagonal - 4,0mm	-	-	1/4HEX-H4.0x50
Hexagonal - 5,0mm	-	-	1/4HEX-H5.0x50
Hexagonal - 6,0mm	-	-	1/4HEX-H6.0x50

Chiave dinamometrica con Impugnatura tipoS 0,8 - 5,0 Nm (7.1 - 44.0 in.lbs) *	Prolunga per bit perIMPUGNATURA per tipo S **	Chiave dinamometrica con Impugnatura a T 5,0 - 14,0 Nm (44.0 - 123.9 in.lbs) *	Prolunghe per bit con IMPUGNATURA a T ***
			
1/4HEX-S-HANDLE-0.8-5.0NM	1/4HEX-BITHOLDER-S	1/4HEX-T-HANDLE-5.0-14.0NM	1/4HEX-BITHOLDER-T

* Prolunga per bit inclusa
**La prolunga è compatibile anche con le chiavi fisse.
La prolunga è compatibile anche con le chiavi con impugnatura a T fissa.



Acciai, acciai inossidabili ferritici e martensitici

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
P1	Acciai automatici	360 < R_m < 880	11 SMn30 R_m = 385 N/mm²	1500	0,14
P2	Acciai basso legati, C < 0,25% Acciai da costruzione saldabili basso legati	320 < R_m < 600	S235JRG2 R_m = 420 N/mm²	1600	0,23
P3	Acciai ferritici e ferritico-perlitici, C < 0,25% Acciai da costruzione saldabili Acciai da cementazione	430 < R_m < 610	16 MnCr 5 R_m = 550 N/mm²	1800	0,14
P4	Acciai da costruzione basso legati, 0,25% < C < 0,67% Acciai da bonifica basso legati	520 < R_m < 1200	C 45E R_m = 660 N/mm²	2000	0,15
P5	Acciai da costruzione, 0,25% < C < 0,67% Acciai da bonifica	550 < R_m < 1200	42 CrMo 4 R_m = 700 N/mm²	2020	0,18
P6	Acciai basso legati per tempra a cuore, C > 0,67% Acciai basso legati per molle e cuscinetti	520 < R_m < 1200	C 100S R_m = 600 N/mm²	2100	0,17
P7	Acciai per tempra a cuore, C > 0,67% Acciai per molle e cuscinetti	600 < R_m < 1200	100 Cr 6 R_m = 650 N/mm²	2160	0,17
P8	Acciai da utensili Acciai super-rapidi (HSS)	600 < R_m < 1200	X 40 CrMoV 5 1 R_m = 700 N/mm²	2400	0,20
P11	Acciai inossidabili ferritici e martensitici	415 < R_m < 1200	X 20 Cr 13 R_m = 675 N/mm²	2000	0,15
P12	Acciai inossidabili maraging e per indurimento per precipitazione	500 < R_m < 1200	X 5 CrNiCuNb 16 4 R_m = 1100 N/mm²	2100	0,17

Acciai inossidabili automatici, austenitici e duplex

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
M1	Acciai inossidabili austenitici automatici		X 10 CrNiS 18 9	1700	0,14
M2	Acciai inossidabili austenitici con contenuto di elementi in lega basso		X 5 CrNi 18 10	1920	0,18
M3	Acciai inossidabili austenitici con contenuto di elementi in lega medio		X 2 CrNiMo 18 14 3	2070	0,17
M4	Acciai inossidabili austenitici con contenuto di elementi in lega alto ed acciai inossidabili duplex		X 2 CrNiMoN 22 5 3	2230	0,16
M5	Acciai inossidabili austenitici con contenuto di elementi in lega alto ed acciai inossidabili duplex, di difficile lavorabilità		X 2 CrNiMoN 25 7 4	2510	0,13

Ghise

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
K1	Ghise grigie		EN-GJL-250	930	0,32
K2	Ghise a grafite compatta		EN-GJV-400	1000	0,35
K3	Ghise malleabili		EN-GJMB-550-4	1050	0,37
K4	Ghise sferoidali (nodulari)		EN-GJS-500-7	1160	0,37
K5	Ghise austemperate		EN-GJS-1000-5	0	
K6	Ghise austenitiche lamellari		EN-GJLA-XNiCuCr15-6-2	0	
K7	Ghise austenitiche sferoidali (nodulari)		EN-GJSA-XNiMn23-4	0	

Materiali non ferrosi

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
N1	Leghe di alluminio, Si < 9%		AW-7075	0	
N2	Leghe di alluminio, 9% < Si < 16%		AC-44200 Si = 12%	0	
N3	Leghe di alluminio, Si >16%		AlSi17Cu5	0	
N11	Leghe di rame		CW614N	740	0,26

Superleghe e titanio

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
S1	Superleghe a base ferro		Discalloy	0	
S2	Superleghe a base cobalto		Stellite 21	0	
S3	Superleghe a base nichel		Inconel 718	2530	0,21
S11	Titanio, basso legato, (α)		Ti	0	
S12	Titanio, medio legato, (α+β)		TiAl6V4	1500	0,24
S13	Titanio, alto legato, (“quasi β” e β)		Ti10V2Fe3Al	0	

Materiali ad elevata durezza

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
H3	Acciai induriti superficial-mente	58 < HRC < 62	16 MnCr 5 60 HRC	2070	0,14
H5	Acciai bonificati	38 < HRC < 56	42 CrMo 4 50 HRC	2320	0,18
H7	Acciai bonificati Acciai per cuscinetti	56 < HRC < 64	100 Cr 6 60 HRC	2480	0,17
H8	Acciai da utensili Acciai super-rapidi (HSS)	38 < HRC < 64	X 40 CrMoV 5 1 50 HRC	2750	0,20
H11	Acciai inossidabili martensitici	38 < HRC < 50	X 20 Cr 13 45 HRC	2300	0,15
H12	Acciai inossidabili maraged ed induriti per precipitazione	1200 < R_m < 1650	X 5 CrNiCuNb 16 4 R_m = 1450 N/mm^2	2410	0,17
H21	Acciai al manganese	23 < HRC < 64	X 120 Mn 12 50 HRC	0	
H31	Ghise bianche	50 < HRC < 64	EN-GJN-HV600(XCr11) 55 HRC	0	

Altri materiali di difficile lavorabilità

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
PM1	Materiali da metallurgia delle polveri con contenuto di elementi in lega basso		F-0008 Fe-0.7C	0	
PM2	Materiali da metallurgia delle polveri con contenuto di elementi in lega medio		FLC-4608 Fe2Cu1.8Ni 0.5Mo0.2Mn0.8C	0	
PM3	Materiali da metallurgia delle polveri con contenuto di elementi in lega alto Materiali per sedi valvole di scarico			0	
HF1	Leghe per riporti duri Riporto di leghe a base ferro mediante saldatura o plasma			0	
HF2	Leghe per riporti duri Riporto di leghe a base cobalto o nichel mediante saldatura o plasma			0	
CC1	Metallo duro		G50	0	

Plastiche e materiali compositi

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
TS1	Polimeri termoindurenti		Urea formaldeide (UF)	0	
TS2	Compositi di resina termoindurente rinforzata con fibra di carbonio		T300 T700 T800 HTA-S IMA - Resina epossidica (M21)...	0	
TS3	Compositi di resina termoindurente rinforzata con fibra di vetro		Resina epossidica - HX..(42..)/ vetro E (7781...)...	0	
TS4	Compositi di resina termoindurente rinforzata con fibra aramidica		Kevlar 49	0	
TP1	Polimeri termoplastici		Policarbonato (PC)	0	
TP2	Compositi di resina termoplastica rinforzata con fibra di carbonio		PPS/PEEK - T300..	0	
TP3	Compositi di resina termoplastica rinforzata con fibra di vetro		PPS/PEEK - vetro E o A...	0	
TP4	Compositi di resina termoplastica rinforzata con fibra aramidica			0	

Grafite

SMG	Descrizione	Proprietà	Riferimento	$k_{c1.1}$	m_c
GR1	Grafite		R 8500	0	

Gruppo materiale Seco	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
	11 SMn 30	1.0715	1.0715	9 SMn 28	S 250	230 M 07	CF 9 SMn 28	SUM 22	1912	G12130
	11 SMnPb 30	1.0718	1.0718	9 SMnPb 28	S 250 Pb		CF 9 SMnPb 28	SUM 22 L	1914	G12134
	10 S 20	1.0721	1.0721	10 S 20	10 F 1	210 M 15	CF 10 S 20			
			1.0722	10 SPb 20	10 PbF 2		CF 10 SPb 20			
P1	15 SMn 13	1.0725	1.0723	15 S 20		210 A 15		SUM 32	1922	
	35 S20	1.0726	1.0726	35 S 20	35 MF 4	212 M 36			1957	G11400
	46 S20	1.0727	1.0727	46 S 20	45 MF 4	212 M 44			1973	G11460
	11 SMn 37	1.0736	1.0736	9 SMn 36	S 300	240 M 07	CF 9 SMn 36			G12150
	11 SMn 37	1.0736	1.0736	9 SMn 36	S 300	240 M 07	CF 9 SMn 36			G12150
	S235JR	1.0037	1.0037	St 37-2	E 24-2		Fe 360 B	STKM 12 C	1311	
	S235JRG2	1.0038	1.0116	St 37-3	E 24-3, E 24-4	4360-40 C	Fe 360 D FF		1312, 1313	
	S275J2G3	1.0144	1.0144	St 44-3 N	E 28-3, E 28-4	4360-43 C	Fe 430 D FF	SM 41 C	1412, 1414	
	C 10	1.0301	1.0301	C 10	34 C 10, XC 10	045 M 10	C 10	S 10 C		G10100
P2			1.0401	C 15	37 C 12, XC 18	080 M 15	C 15, C 16		1350	G10170
	C22	1.0402	1.0402	C 22	C 20	050 A 20	C 20, C 21		1450	G10200
	S355JR	1.0570	1.0570	St 52-3	E 36-3, E 36-4	4360-50 C	Fe 510 B	SM 50 YA	2172, 2132	
	C 15R	1.1141	1.1141	Ck 15	XC 15, XC 18	080 M 15	C 15, C 16	S 15 C, S 15 CK	1370	G10170
			1.1158	Ck 25	XC 25	060 A 25	C 25	S 25 C		G10250
			1.2162	21 MnCr 5	20 NC 5			SCR 420 H		
	16 Mo 3	1.5415	1.5415	15 Mo 3	15 D 3	1501-240	16 Mo 3		2912	
			1.5423	16 Mo 5		1503-245-420	16 Mo 5	SB 450 M		G45200
	14 NiCr 14	1.5752	1.5752	14 NiCr 14	12 NC 15	655 M 13		SNC 815 (H)		G33106
			1.5919	15 CrNi 6	16 NC 6	S 107	16 CrNi 4			
	18 NiCrMo 7 6	1.6587	1.6587	18 CrNiMo 7 6	18 NCD 6	820 A 16	18 NiCrMo 7			
P3	16 MnCr 5	1.7131	1.7131	16 MnCr 5	16 MC 5	527 M 17	16 MnCr 5	SCR 415	2511	G51170
	16 MnCrS 5	1.7139	1.7139	16 MnCrS 5						
	20 MnCr 5	1.7147	1.7147	20 MnCr 5	20 MC 5		20 MnCr 5	SMnC 420 (H)		G51200
	20 MnCrS 5	1.7149	1.7149	20 MnCrS 5	20 MnCrS 5			SMnC 21 H		
	13 CrMo 4 5	1.7335	1.7335	13 CrMo 4 4	15 CD 3.5	1501-620 Gr. 27	14 CrMo 4 5		2216	
			1.7337	16 CrMo 4 4	15 CD 4.5	1501-620 Gr. 27	14 CrMo 4 5		2216	
	10 CrMo 9 10	1.7380	1.7380	10 CrMo 9 10	10 CD 9.10	1501-622 Gr. 31	12 CrMo 9 10		2218	J21890
	C35		1.0501	C 35	55 C 35	060 A 35	C 35		1550	G10350
	E 335	1.0503	1.0503	C 45	65 C 45	80 M 46	C 45	S 45 C	1650	G10430
	C40		1.0511	C 40	60 C 40	080 M 40	C 40	S 40 C		
	E 360	1.0070	1.0535	St 70-2	A 70-2		Fe 690		1655	
	C60	1.0601	1.0601	C 60	CC 55	080 A 62	C 60			G10600
P4			1.1157	40 Mn 4	35 M 5	150 M 36				G10390
	G 28 Mn6	1.1165	1.1165	30 Mn 5		120 M 36		SMn 1 H, SCMn 2		G13300
	C 35E	1.1181	1.1181	Ck 35	XC 38 H1	080 M 36	C 35	S 35 C	1572	G10340
	C 45E	1.1191	1.1191	Ck 45	XC 42	080 M 46	C 45	S 45 C	1672	G10420
	C 60E	1.1221	1.1221	Ck 60	XC 60	080 A 62	C 60	S 58 C	1665, 1678	G10640
			1.1740	C 60 W	Y3 55			SK 7		
	55 SiCr7	1.7100	1.0904	55 Si 7	55 S 7	250 A 53	55 Si 8		2085, 2090	
			1.2330	35 CrMo 4	34 CD 4	708 A 37	35 CrMo 4		2234	T51620
			1.2542	45 WCrV 7		BS 1	45 WCrV 8 KU		2710	T41901
		1.2714	1.2714	56 NiCrMoV 7		BH 224-5	56 NiCrMoV7-KU	SKT 4		T61206
			1.5121	46 MnSi 4						
			1.5710	36 NiCr 6	35 NC 6	640 A 35		SNC 236		
			1.5736	36 NiCr 10	35 NC 11		35 NiCr 9	SNC 631 (H)		
	36 CrNiMo 4		1.6511	36 CrNiMo 4	40 NCD 3	816 M 40	38 NiCrMo 4 (KB)			G98400
P5	34 CrNiMo 6	1.6582	1.6582	34 CrNiMo 6	35 NCD 6	817 M 40	35 NiCrMo 6 (KW)	SNCM 447	2541	G43400
	34 Cr 4	1.7033	1.7033	34 Cr 4	32 C 4	530 A 32	34 Cr 4 (KB)	SCR 430 (H)		G51320
	41 Cr 4	1.7035	1.7035	41 Cr 4	42 C 4	530 M 40	41 Cr 4	SCR 440 (H)		G51400
	25 CrMo 4	1.7218	1.7218	25 CrMo 4	25 CD 4 S	708 M 25	25 CrMo 4 (KB)	SCM 425	2225	G41300
	42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400
	42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400
			1.7361	32 CrMo 12	30 CD 12	722 M 24	32 CrMo 12		2240	
	50 CrV 4	1.8159	1.8159	50 CrV 4	50 CV 4	735 A 50	51 CrV 4	SUP 10	2230	H61500
	41 CrAlMo 7 10	1.8509	1.8509	41 CrAlMo 7	40 CAD 6.12	905 M 39	41 CrAlMo 7	SACM 645	2940	K24065
	C 67S	1.1231	1.1231	Ck 67	XC 68	060 A 67	C 70		1770	G10700
	C 100S	1.1274	1.1274	Ck 101		060 A 96		SUP 4	1870	G10950
P6	C 105U	1.1545	1.1545	C 105 W1	Y1 105		C 100 KU		1880	
			1.1645	C 105 W2	Y1 105		C 100 KU	SK 3		
			1.1663	C 125 W	Y2 120		C 120 KU	SK 2		

U.N.E./ I.H.A.	AISI / ASTM	GOST	ČSN	Marchi misti	Condizione	Struttura
	1213				Ricotto	
	12 L 13				Ricotto	
	1108				Ricotto	
	11 L 08				Ricotto	
					Ricotto	
	1140	40			Ricotto	
	1146				Ricotto	
	1215				Ricotto	
	12 L 14				Ricotto	
		16D			Ricotto	
	A573 Grade 58	18kp	11 378		Ricotto	
	A573 Grade 70	St14kP	11 448		Ricotto	
	1010	10			Ricotto	
F.1110	1015	15			Ricotto	
	1020, 1023	20	12 024		Ricotto	
		17G1S	11 523		Ricotto	
F.1511	1015	15			Ricotto	
F.1120	1025	25			Ricotto	
					Ricotto	
	A204 Grade A		15 020		Ricotto	
	4520				Ricotto	
	3310, 9314	20X2H4A	16 420		Ricotto	
	4320		16 220		Ricotto	
					Ricotto	
F.1516	5115	12KHN2	14 220		Ricotto	
		18HG			Ricotto	
	5120	20KH	14 221		Ricotto	
	5120 H	20KH			Ricotto	
	A182-F11, A182-F12	12KHM	15 121		Ricotto	
	A387 Grade 12 Cl. 2				Ricotto	
F.155	A182-F22	12KH8	15 313		Ricotto	
F.1130	1035	35	12 040		Ricotto	
F.5110	1045	45	12 050		Ricotto	
	1040	40	12 041		Ricotto	
F.1150	1055	55			Ricotto	
	1060	60	12 061		Ricotto	
	1039	40G			Ricotto	
	1330	30G2			Ricotto	
F.1135	1035	35			Ricotto	
F.1140	1045	45	12 050		Ricotto	
F.1150	1064	60			Ricotto	
	1060	60			Ricotto	
F.144	9255	55S2			Ricotto	
F.1250	4135	35KHM			Ricotto	
F.5241	S1	5KHV2S			Ricotto	
	L6	5KHNV			Ricotto	
	5045				Ricotto	
	3135				Bonificato	
	3435				Ricotto	
	9840				Bonificato	
F.1280	4340	38H2N2MA	16 343		Ricotto	
	5132	35KH			Bonificato	
	5140	40H	14 140		Bonificato	
F.1251	4130	20KHM	15 130		Bonificato	
F.1252	4142, 4140	38HM	15 142		Ricotto	
F.1252	4142, 4140	38HM	15 142		Bonificato	
					Bonificato	
F.143	6150	50KHFA	15 260		Bonificato	
F.1740	A355 Cl. A				Ricotto	
F.5103	1070	70			Ricotto	
F.5117	1095				Ricotto	
F.5118	W1	U10A			Ricotto	
		U10			Ricotto	
	W1	U13			Ricotto	

SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
P7	107 CrV 3	1.2210	1.2210	115 CrV 3	100 C 3		107 CrV 3 KU			T61202
			1.2510	100 MnCrW 4	90 MWCV 5	BO 1	95 MnWCr 5 KU	SKS 3	2140	T31501
	90 MnCrV 8	1.2842	1.2842	90 MnCrV 8	90 MV 8	BO 2	90 MnVCr 8 KU			T31502
	100 Cr 6	1.3505	1.3505	100 Cr 6	100 C 6	534 A 99	100 Cr 6	SUJ 2	2258	G51986
P8	X 210 Cr 12	1.2080	1.2080	X 210 Cr 12	Z 200 C 12	BD 3	X 210 Cr 13 KU	SKD 1		T30403
			1.2343	X 38 CrMoV 5 1	Z 38 CDV 5	BH 11	X 37 CrMoV 5 1 KU	SKD 6		T20811
	X 40 CrMoV 5 1	1.2344	1.2344	X 40 CrMoV 5 1	Z 40 CDV 5	BH 13	X 40 CrMo 5 1 1 KU	SKD 61	2242	T20813
	X 100 CrMoV 5	1.2363	1.2363	X 100 CrMoV 5 1	Z 100 CDV 5	BA 2	X 100 CrMoV 5 1 KU	SKD 12	2260	T30102
			1.2365	X 32 CrMoV 3 3	32 DCV 28	BH 10	30 CrMoV 12 27 KU	SKD 7		T20810
			1.2436	X 210 CrW 12			X 215 CrW 12 1 KU	SKD 2	2312	
			1.2601	X 165 CrMoV 12			X 165 CrMoW 12 KU		2310	
			1.2713	55 NiCrMoV 6	55 NCDV 7			SKT 4		T61206
	HS 6-5-2-5	1.3243	1.3243	S 6-5-2-5	Z 85 WDKCV 06-05-05-04-02		HS 6-5-2-5	SKH 55	2723	
	HS 2-10-1-8	1.3247	1.3247	S 2-10-1-8	Z 110 DKCWV 09-08-04	BM 42	HS 2-9-1-8	SKH 51		T11342
	HS 18-1-2-5	1.3255	1.3255	S 18-1-2-5	Z 80 WKCV 18-05-04-01	BT 4	HS 18-1-1-5	SKH 3		T12004
	HS 6-5-2	1.3343	1.3343	S 6-5-2	Z 85 WDCV 06-05-04-02	BM 2	HS 6-5-2	SKH 9, SKH 51	2722	T11302
	HS 2-9-2	1.3348	1.3348	S 2-9-2	Z 100 DCWV 09-04-02-02		HS 2-9-2	SKH 58	2782	T11307
	HS 18-0-1	1.3355	1.3355	S 18-0-1	Z 80 WCV 18-04-01	BT 1	HS 18-0-1	SKH 2		T12001
P11	X 6 Cr 13	1.4000	1.4000	X 6 Cr 13	Z 6 C 12	403 S 17	X 6 Cr 13	SUS 403	2301	S41008
	X 12 Cr 13	1.4006	1.4006	X 10 Cr 13	Z 10 C 13	410 S 21	X 12 Cr 13	SUS 410	2302	S41000
	X 6 Cr 17	1.4016	1.4016	X 6 Cr 17	Z 8 C 17	430 S 15	X 8 Cr 17	SUS 430	2320	S43000
	X 20 Cr 13	1.4021	1.4021	X 20 Cr 13	Z 20 C 13	420 S 37	X 20 Cr 13	SUS 420 J 1	2303	S42000
	X 39 Cr 13	1.4031	1.4031	X 40 Cr 13	Z 40 C 14	420 S 45	X 40 Cr 14	SUS 420	2304	S40280
	X 70 CrMo 15	1.4109	1.4109	X 65 CrMo 14	Z 70 D 14			SUS 440 A		S44002
	X 90 CrMoV 18	1.4112	1.4112	X 90 CrMoV 18	Z 2 CND 18 05	409 S 19	X CrTi 12	SUS 440 B	2327	S44003
	X 105 CrMo 17	1.4125	1.4125	X 105 CrMo 17	Z 100 CD 17		X 105 CrMo 17	SUS 440 C		S44004
	X 3 CrNIMo 13 3	1.4313	1.4313	X 5 CrNi 13 4	Z 5 CN 13.4	425 C 11	X 6 CrNi 13 04	SCS 5	2385	S41500
	X 18 CrN 28	1.4749	1.4749	X 18 CrN 28	Z 18 C 25				2322	S44600
P12	X 6 NiCrTiMoV 25 15	1.4534	1.4534	X 3 CrNiMoAl 13 8 2						S13800
	X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500
		1.4540	1.4540	X 4 CrNiCuNb 16 4	Z 4 CNUNb 16.4 M					S15500
	X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500
	X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400
	X 5 CrNiCuNb 17 4	1.4548	1.4542	X 5 CrNiCuNb 17 4	Z 6 CNU 17.4			SCS 24, SUS 630		S17400
	X 7 CrNiAl 17 7	1.4564	1.4564	X 7 CrNiAl 17 7	Z 9 CAN 17.7	301 S 81	X 7 CrNiAl 17 7	SUS 631	2388	S17700
	X 2 NiCoMoTi 18 12 4	1.6356	1.6356	X 2 NiCoMoTi 18 12 4						K93160
	X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
	X 2 NiCoMo 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
	X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890
	X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890
M1	X 10 CrNiS 18 9	1.4305	1.4305	X 10 CrNiS 18 9	Z 10 CNF 18.09	303 S 31	X 10 CrNi 18 09	SUS 303	2346	S30300
M2	X 2 CrNi 19 11	1.4306	1.4306	X 2 CrNi 19 11	Z 2 CN 18.10	304 S 12	X 3 Cr Ni 18 11	SUS 304 L	2352	S30403
	X 5 CrNi 18 10	1.4301	1.4301	X 5 CrNi 18 10	Z 6 CN 18.09	304 S 31	X 5 CrNi 18 11	SUS 304	2333	S30400
	X 5 CrNiMo 17 12 2	1.4401	1.4401	X 5 CrNiMo 17 12 2	Z 3 CND 17.11.1	316 S 31	X 5 CrNiMo 17 12	SUS 316	2347	S31600
	X 6 CrNiNb 18 10	1.4550	1.4550	X 6 CrNiNb 18 10	Z 6 CNNb 18.10	347 S 31	X 6 CrNiNb 18 11	SUS 347	2338	S34700
	X 9 CrNi 18 8	1.4310	1.4310	X 12 CrNi 17 7	Z 12 CN 17.07	301 S 21	X 12 CrNi 17 07	SUS 301	(2331)	S30100
	X 12 CrNi 18 8	1.4300	1.4300	X 12 CrNi 18 8	Z 12 CN 18	302 S 25		SUS 302	2331	S30200
M3	X 2 CrNiMo 18 14 3	1.4435	1.4435	X 2 CrNiMo 18 14 3	Z 2 CND 17.13	316 S 12	X 2 CrNiMo 17 13 2	SCS 16, SUS 316 L	2353	S31603
	X 2 CrNiMoN 17 13 3	1.4429	1.4429	X 2 CrNiMoN 17 13 3	Z 2 CND 17.13 Az	316 S 62	X 2 CrNiMoN 17 13 3	SUS 316 LN	2375	S31653
	X 2 CrNiN 18 10	1.4311	1.4311	X 2 CrNiN 19 11	Z 2 CN 18 .10 Az	304 S 62	X 2 CrNiN 18 11	SUS 304 LN	2371	S30453
	X 3 CrNiMo 18 12 3	1.4466	1.4466	X 5 CrNi 18 15		317 S 16	X 5 CrNi 18 15	SUS 317	2366	S31700
	X 9 CrNiSiNCe 21 11 2	1.4835	1.4893	X 9 CrNiSiNCe 21 11 2		310 S 31			2368	S30815
	X 12 CrNi 25 21	1.4335	1.4335	X 12 CrNi 25 21	Z 12 CN 25.20	310 S 24	X 6 CrNi 26 20	SUH 310, SUS 310 S	2361	S31008
M4	X 2 CrNiMoN 22 5 3	1.4462	1.4462	X 2 CrNiMoN 22 5	Z 2 CND 22.05 Az	332 S 15	X 2 CrNiMoN 22 5		2377	S31803
	X 2 CrNiMoSi 19 5	1.4424	1.4417	X 2 CrNiMoSi 19 5	Z 2 CND 18.05.03				2376	S31500
	X 2 NiCrMoCu 25 20 5	1.4539	1.4539	X 2 NiCrMoCu 25 20 5	Z 2 NCDU 25 20	904 S 13			2562	N08904
	X 3 CrNiMo 27 5 2	1.4460	1.4460	X 4 CrNiMo 27 5 2	Z 3 CND 25.7 Az		X 3 CrNiMo 27 5 2	SUS 329 J 1	2324	S32900
	X 5 CrNiCuNb 16 4	1.4980	1.4943	X 4 NiCrTi 25 15	Z 6 NCTDV 25.15	HR 51		SUH 660	2570	S66286
M5	X 1 CrNiMoN 20 18 7	1.4547	1.4529	X 1 CrNiMoN 20 18 7	Z 1 CNDU 20.18.05 Az		X 1 CrNiMoN 20 18 7		2778	S31254
	X 1 CrNiMoN 25 22 8	1.4652	1.4652	X 2 CrNiMoN 25 22 7						S32654
	X 10 NiCrAlTi 32 20	1.4876	1.4876	X 10 NiCrAlTi 32 20	Z 10 NC 32.21			NCF 800		N08800
	X 2 CrNiMoN 25 7 4	1.4410	1.4410	X 2 CrNiMoN 25 7 4	Z 3 CND 25.07 Az		X 2 CrNiMoN 25 7 4		2328	S32750

U.N.E./ I.H.A.	AISI / ASTM	GOST	ČSN	Marchi misti	Condizione	Struttura
F.520L	L2	11KHF			Ricotto	
F.5220	O1	9KHVG			Ricotto	
	O2	9G2F			Ricotto	
F.5230	52100	SHKH15	14 109		Ricotto	
F.5212	D3	KH12			Ricotto	
	H11	4KH5MFS			Ricotto	
F.5318	H13	4KH5MF1S			Ricotto	
F.5227	A2	9KH5VF			Ricotto	
	H10	3KH3M3F			Ricotto	
F.5213		KH12			Ricotto	
		KH12MF			Ricotto	
F.520.S	L6	5KHNM			Ricotto	
F.5613	M35	R6M5K5			Ricotto	
	M42	R2AM9K5			Ricotto	
	T4	R18K5F2			Ricotto	
F.5603	M2	R6M5			Ricotto	
	M7				Ricotto	
	T1	R18			Ricotto	
	403	08KH13			Ricotto	Ferritico
F.3401	410, CA-15	12KH13, 08KH13			Ricotto	Martensitico
F.3113	430	12KH17			Ricotto	Ferritico
F.5261	420	20KH13	17 022		Ricotto	Martensitico
F.3404	420	40KH13			Ricotto	Martensitico
	440 A				Ricotto	Martensitico
	440 B	95KH18			Ricotto	Martensitico
	440 C	95KH18			Ricotto	Martensitico
	A182 F6NM			F6NM	Ricotto	Martensitico
	446	15KH28			Ricotto	Ferritico
	XM-13			PH 13-8 Mo	Ricotto solubilizzato	Austenitico
	XM-12			15-5 PH	H1150	Martensitico
	XM-12			15-5 PH	Ricotto solubilizzato	Martensitico
	XM-12			15-5 PH	H1025	Martensitico
	SAE 630			17-4 PH	H1150	Martensitico
	630			17-4 PH	Ricotto solubilizzato	Martensitico
	631	09KH17N7YU1		17-7 PH	Ricotto solubilizzato	Austenitico/Ferritico
	AMS 6515			Marage 350	Ricotto solubilizzato	Martensitico
	AMS 6521			Marage 300	Ricotto solubilizzato	Martensitico
	AMS 6514			Marage 300, Vascomax C300	Ricotto solubilizzato	Martensitico
	AMS 6512			Marage 250	Ricotto solubilizzato	Martensitico
	AMS 6512			Marage 250, Vascomax C250	Ricotto solubilizzato	Martensitico
F.3508	303	12KH19N9			Ricotto	Austenitico
F.3504	304 L	03KH18N11			Ricotto	Austenitico
F.3504	304	08KH18N10	17 240		Ricotto	Austenitico
F.3534	316	08KH17H13M2T	17 346		Ricotto	Austenitico
F.3524	347	08KH18N12B			Ricotto	Austenitico
F.3517	301	07KH16N6			Ricotto	Austenitico
	302	12KH18N9			Ricotto	Austenitico
F.3533	(316 L)	03KH17N14M3	17 349		Ricotto	Austenitico
	316 LN	03KH16N15M3			Ricotto	Austenitico
F.3541	304 LN	03KH18N11			Ricotto	Austenitico
	317	08KH17H15M3T			Ricotto	Austenitico
				253 MA	Ricotto	Austenitico
	310 S	12KH25N20			Ricotto	Austenitico
	329 LN			SAF 2205	Ricotto	Duplex
				3RE60	Ricotto	Duplex
	904L				Ricotto	Super austenitico
	329				Ricotto	Duplex
	660			A286	Ricotto solubilizzato	Austenitico
				254 SMO	Ricotto	Super austenitico
				654 SMO	Ricotto	Super austenitico
				Alloy 800	Ricotto	Austenitico
	F 53			SAF 2507	Ricotto	Super duplex

SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
K1	EN-GJL-150	0.6150	0.6150	GG-15	Ft 15 D	Grade 150	G15	FC 150	01 15-00	F11601
	EN-GJL-200	0.6200	0.6200	GG-20	Ft 20 D	Grade 220	G20	FC 200	01 20-00	F12101
	EN-GJL-250	0.6250	0.6250	GG-25	Ft 25 D	Grade 260	G25	FC 250	01 25-00	F12401
	EN-GJL-350	0.6350	0.6350	GG-35	Ft 35 D	Grade 350	G35	FC 350	01 35-00	F13502
	EN-GJL-215			GG-220 HB					02 19	
K2	EN-GJV-300			GJV-300						
	EN-GJV-350			GJV-350						
	EN-GJV-400			GJV-400						
	EN-GJV-450			GJV-450						
	EN-GJV-500			GJV-500						
K3	EN-GJMB-550-4	0.8155		GTS-55-04	P 540/5	P 540/5	P 55-04	PCMP55-04	08 54-00	F24130
K4	EN-GJS-350-22	0.7033	0.7033	GGG-35.3	FGS 370-17	Grade 350/22		FCD 350-22L	07 17-15	
	EN-GJS-400-15	0.7040	0.7040	GGG-40	FGS 400-12	Grade 420/12	GS 400-12	FCD 400-18L	07 17-02	F32800
	EN-GJS-400-18	0.7043	0.7043	GGG-40.3	FGS 370-17	Grade 370/17	GSO 42/17		07 17-12	F32800
	EN-GJS-500-7	0.7050	0.7050	GGG-50	FGS 500-7	Grade 500/7	GS 500-7	FCD 500-7	07 27-02	F33800
	EN-GJS-600-3	0.7060	0.7060	GGG-60	FGS 600-3	Grade 600/3	GS 600-3	FCD 600-3	07 32-03	F34100
	EN-GJS-700-2	0.7070	0.7070	GGG-70	FGS 700-2	Grade 700/2	GS 700-2	FCD 700-2	07 37-01	F34800
K5										ADI grade 5
	EN-GJS-1000-5			GJS-1000-5						ADI grade 2
	EN-GJS-1200-2			GJS-1200-2						ADI grade 3
	EN-GJS-1400-1			GJS-1400-1						ADI grade 4
	EN-GJS-800-8			GJS-800-8						ADI grade 1
K6	EN-GJLA-XNiCr 20-2	0.6660	0.6660	GGL-NiCr 20 2	FGL Ni20 Cr2	Grade F2			05 23-00	F41002
	EN-GJLA-XNiCr 30-3	0.6676	0.6676	GGL-NiCr 30 3	FGL Ni30 Cr3	Grade F3				F41004
	EN-GJLA-XNiCuCr 15-6-2	0.6655	0.6655	GGL-NiCuCr 15 6 2	FGL Ni15 Cu6 Cr2	Grade F1				F41000
K7	EN-GJSA-XNiMn 13-7	0.7652	0.7652	GGG-NiMn 13 7	FGS Ni13 Mn7	Grade S6			07 72-00	
	EN-GJSA-XNiCr 20-2	0.7660	0.7660	GGG-NiCr 20 2	FGS Ni20 Cr2	Grade S2				F43000
	EN-GJSA-XNiMn 23-4	0.7673	0.7673	GGG-NiMn 23 4	FGS Ni23 Mn4	Grade S2M				F43010
	EN-GJSA-XNiCr 30-3	0.7676	0.7676	GGG-NiCr 30 3	FGS Ni30 Cr3	Grade S3				F43003
	EN-GJSA-XNi 35	0.7683	0.7683	GGG-Ni 35	FGS Ni35					F43006
N1	AW-1050A	Al99.5	3.0255	Al99.5	A-5/1050A	1B		(A1050)	4007	AA1050A
	AW-2011	AlCuBiPb	3.1655	AlCuBiPb	A-U5PbBi/2011	FC1		A2011	4355	AA2011
	AW-2014	AlCuSiMn	3.1255	AlCuSiMn	A-U4SG/2014	H15			4338	AA2014
	AW-5005	AlMg1	3.3315	AlMg1	A-G0.6	N41			4106	AA5005
	AW-6060	AlMgSi0.5	3.3206	AlMgSi0.5	A-GS/6060	(H9)			4103	AA6060
	AW-6063	AlMgSi0.7	3.3210	AlMgSi0.7	A-GSUC/6061	(H10)		(A6063)	4104, 4107	AA6005
	AW-3103	AlMn1	3.0515	AlMn1		N3			4054	AA3103
	AW-3003	AlMn1Cu	3.0517	AlMn1Cu	A-M1/3003			A3003		AA3003
	AW-7020	AlZn4.5Mg1	3.4335	AlZn4.5Mg1	A-Z5G/7020	H17			4425	AA7020
	AW-7075		3.4365	AlZnMgCu1.5	A-Z5GU/7075	2L95/2L96		A7075		AA7075
	AC-42000		3.2341	G-AlSi5Mg	A-S7G	LM25	3599	AC 4C	4244	
	AC-46200	AlSi8Cu3(Si)	3.2161	G-AlSi8Cu3					4251	A13800
	MG-P-63	MgAl6Zn	3.5612	G-MgAl6Zn	G-A6-Z1	MAG-E-121				M11600
	MG-P-61	MgAl8Zn	3.5812	G-MgAl8Zn	(G-A7-Z1)					
	MN65120	MgSe3Zn2Zr1	3.5103	G-MgSe3Zn2Zr1	ZRE1	MAG6-TE				M12330
N2	AC-43400	AlSi10Mg(Fe)	3.2381	G-AlSi10Mg	A-S10G	LM9			4253	A13600
	AC-44200	AlSi12	3.2382	GD-AlSi12						
	AW-6082	AlMgSi1	3.2315	AlMgSi1	A-SGM0.7/6082	H30			4212	AA6082
N3		AlSi17Cu5						ADC14		
N11	CC331G		2.0940.01	CuAl10Fe	CuAl10Fe	AB1			5710	C95200
	CC333G		2.0975.01	CuAl10Ni	CuAl10Ni5Fe5	AB2			5716	C95500
		CuNi10Fe1Mn	2.0872	CuNi10Fe1Mn	CuNi10Fe1Mn	CN102			5667	C70600
				CuNi10Zn45						
		CW408J	2.0790	CuNi18Zn19Pb	CuNi18Zn19Pb1					C76300
	CW352H		2.1176	CuPb10Sn	CuSn10Pb10	LB2			5640	C93700
	CC480K		2.1050.01	CuSn10	CuSn10	CT1			5443	C90700
			2.1087	CuSn10Zn					5458	C90500
	CW452K	CuSn6	2.1020	CuSn6	CuSn6	PB103		C5191	5428	C51900
	CW502L	CuZn15	2.0240	CuZn15	CuZn15	CZ102		C2300	5112	C23000
	CW706R	CuZn28Sn1	2.0470	CuZn28Sn1	CuZn29Sn1				5220	C44300
	CW508L	CuZn37	2.0321	CuZn37	CuZn37	CZ108			5150	C27200
	CW717R	CuZn38Sn1	2.0530	CuZn38Sn1						C46400
	CW614N	CuZn39Pb3	2.0401	CuZn39Pb3	CuZn39Pb3	CZ121			5170	C38500
	CW612N	CuZn40Pb2	2.0402	CuZn40Pb2	CuZn39Pb2	CZ120			5168	C37800
	CW622N	CuZn44Pb2	2.0410	CuZn44Pb2		CZ104			5272	C68700

U.N.E./ I.H.A.	AISI / ASTM	GOST	ČSN	Marchi misti	Condizione	Struttura
	A48 25 B	Sc 15	422 415			Ghisa grigia
	A48 30 B	Sc 20	422 420			Ghisa grigia
	A48 35 B	Sc 25	422 425			Ghisa grigia
	A48 50 B	Sc 35				Ghisa grigia
	G 3500					Ghisa grigia
	Grade 350					Ghisa a grafite compatta
	Grade 400					Ghisa a grafite compatta
	Grade 400-15					Ghisa a grafite compatta
	Grade 450					Ghisa a grafite compatta
	Grade 500					Ghisa a grafite compatta
	A220 60004				Rinvenuto	Ghisa malleabile
						Ghisa sferoidale (nodulare)
FGE 38-17	60-40-18	Vc 42-12	422 304			Ghisa sferoidale (nodulare)
	60-40-18	Vc 42-12				Ghisa sferoidale (nodulare)
FGE 50-7	A536, 80-55-06	Vc 50-2	422 305			Ghisa sferoidale (nodulare)
FGE 60-2	A476, 80-60-03	Vc 60-2	422 306			Ghisa sferoidale (nodulare)
FGE 70-2	A536, 100-70-03	Vc 70-2				Ghisa sferoidale (nodulare)
	1600/1300/-					Ghisa austemperata
	1050/700/7					Ghisa austemperata
	1200/850/4					Ghisa austemperata
	1400/1100/1					Ghisa austemperata
	850/550/10					Ghisa austemperata
	A436 Type 2			Ni-Resist 2		Ghisa austenitica lamellare
	A436 Type 3			Ni-Resist 3		Ghisa austenitica lamellare
	A436 Type 1			Ni-Resist 1		Ghisa austenitica lamellare
				Nodumag		Ghisa austenitica sferoidale (nodulare)
	A436 Type D-2			Ni-Resist D-2		Ghisa austenitica sferoidale (nodulare)
	A439 Type D-2M			Ni-Resist D-2M		Ghisa austenitica sferoidale (nodulare)
	A436 Type D-3			Ni-Resist D-3		Ghisa austenitica sferoidale (nodulare)
	A439 Type D-5			Ni-Resist D-5		Ghisa austenitica sferoidale (nodulare)
	B26					
	A380					
	AZ61A					
	AZ80A					
	AMS 4442					
	B85					
	A413.2					
	B390.0					
	CA952	BrA9ZH3L				
	CA955	BrA10ZH4N4L				
	CA937					
		BrOF6.5-0.15				
		L90				
		LOMsh70-1-0.05				
		LO60-1				
		LAMsh77-2-0.05				

SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
S1										
S2										
S3	NiMo30		2.4810							N10002
	NiMo16Cr15W		2.4819							N10276
	NiCr19Fe19Nb5Mo3		2.4668							N07718
			2.4669							N07750
	NiCr20TiAl		2.4631							N07080
	NiCr19Co18Mo4Ti3Al3									N07500
	NiCr20Co13Mo4Ti3Al		2.4654							N07001
S11			3.7024							
										R54620
S12										R56320
	TiAl6V4		3.7164							R56400
S13				TiV10Fe2Al3						
H3	16 MnCr 5	1.7131	1.7131	16 MnCr 5	16 MC 5	527 M 17	16 MnCr 5	SCR 415	2511	G51170
H5	C 67S	1.1231	1.1231	Ck 67	XC 68	060 A 67	C 70		1770	G10700
	C 75S	1.1248	1.1248	Ck 75	XC 75	060 A 78	C 75		1774, 1778	G10780
	C 100S	1.1274	1.1274	Ck 101		060 A 96		SUP 4	1870	G10950
	C 105U	1.1545	1.1545	C 105 W1	Y1 105		C 100 KU		1880	
			1.2550	60 WCrV 7	55 WC 20		55 WCrV 8 KU			
	55 Cr 3	1.7176	1.7176	55 Cr 3	55 C 3	527 A 60	55 Cr 3	SUP 9 (A)	2253	G51550
	42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400
H7	107 CrV 3	1.2210	1.2210	115 CrV 3	100 C 3		107 CrV 3 KU			T61202
			1.2510	100 MnCrW 4	90 MWCV 5	BO 1	95 MnWCr 5 KU	SKS 3	2140	T31501
	90 MnCrV 8	1.2842	1.2842	90 MnCrV 8	90 MV 8	BO 2	90 MnVCr 8 KU			T31502
	100 Cr 6	1.3505	1.3505	100 Cr 6	100 C 6	534 A 99	100 Cr 6	SUJ 2	2258	G51986
H8	X 40 CrMoV 5 1	1.2344	1.2344	X 40 CrMoV 5 1	Z 40 CDV 5	BH 13	X 40 CrMo 5 1 1 KU	SKD 61	2242	T20813
	X 100 CrMoV 5	1.2363	1.2363	X 100 CrMoV 5 1	Z 100 CDV 5	BA 2	X 100 CrMoV 5 1 KU	SKD 12	2260	T30102
	X 155 CrVMo 12 1		1.2379	X 155 CrVMo 12 1	Z 160 CDV 12	BD 2	X 155 CrVMo 12 1 KU	SKD 11		T30402
			1.2436	X 210 CrW 12			X 215 CrW 12 1 KU	SKD 2	2312	
			1.2601	X 165 CrMoV 12			X 165 CrMoW 12 KU		2310	
			1.2713	55 NiCrMoV 6	55 NCDV 7			SKT 4		T61206
	HS 6-5-2-5	1.3243	1.3243	S 6-5-2-5	Z 85 WDKCV 06-05-05-04-02		HS 6-5-2-5	SKH 55	2723	
	HS 2-10-1-8	1.3247	1.3247	S 2-10-1-8	Z 110 DKCWV 09-08-	BM 42	HS 2-9-1-8	SKH 51		T11342
	HS 18-0-1	1.3355	1.3355	S 18-0-1	Z 80 WCV 18-04-01	BT 1	HS 18-0-1	SKH 2		T12001
H11	X 20 Cr 13	1.4021	1.4021	X 20 Cr 13	Z 20 C 13	420 S 37	X 20 Cr 13	SUS 420 J 1	2303	S42000
	X 70 CrMo 15	1.4109	1.4109	X 65 CrMo 14	Z 70 D 14			SUS 440 A		S44002
	X 90 CrMoV 18	1.4112	1.4112	X 90 CrMoV 18	Z 2 CND 18 05	409 S 19	X CrTi 12	SUS 440 B	2327	S44003
	X 105 CrMo 17	1.4125	1.4125	X 105 CrMo 17	Z 100 CD 17		X 105 CrMo 17	SUS 440 C		S44004
H12	X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500
	X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400
	X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400
	X 7 CrNiAl 17 7	1.4568	1.4568	X 7 CrNiAl 17 7	Z 9 CAN 17.7	301 S 81	X 7 CrNiAl 17 7	SUS 631	2388	S17700
	X 8 CrNiMoAl 15 7 5	1.4574	1.4574	X 8 CrNiMoAl 15 7 5						S15700
	X 6 NiCrTiMoV 25 15	1.4980	1.4943	X 4 NiCrTi 25 15	Z 6 NCTDV 25.15	HR 51		SUH 660	2570	S66286
	X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890
	X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
	X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
	X 2 NiCoMoTi 18 12 4	1.6356	1.6356	X 2 NiCoMoTi 18 12 4						K93160
H21	X 120 Mn 12	1.3401	1.3401	X 120 Mn 12	Z 120 M 12	BW 10		SC MnH 1	2183	
H31	EN-GJN-HV520	0.9620	0.9620	G-X330 NiCr 4 2	FB Ni4 Cr2 BC	Grade 2 A			05 12-00	F45001
	EN-GJN-HV550	0.9625	0.9625	G-X260 NiCr 4 2	FB Ni4 Cr2 HC	Grade 2 B			05 13-00	F45000
	EN-GJN-HV600(XCr11)	0.9630	0.9630	G-X300 CrNiSi 9 5 2	FB Cr9 Ni5	Grade 2 C, D, E			04 57-00	F45003

U.N.E./ I.H.A.	AISI / ASTM	GOST	ČSN	Marchi misti	Condizione	Struttura
				Discalloy	Indurito per precipitazione	
				Haynes 25		
				Stellite 21		
				Hastelloy C		
		KHN65MV		Hastelloy C-276		
				IN 100		
				Inconel 718		
				Inconel X-750	Ricotto solubilizzato	
				Nimonic 80A		
				René 41		
				Udimet 500		
				Waspalloy		
				Ti	Commercialmente puro	Ti (α)
	AMS 4919			Ti 6-2-4-2	Ricotto	Ti (α)
	AMS 4943			Ti 3Al-2.5V (grd 9)	Ricotto	Ti (α+β)
	AMS 4920, Grade 5	VT6		Ti 6Al-4V	Ricotto	Ti (α+β)
	AMS 4986			Ti 10V-2Fe-3Al	Ricotto	Ti (β)
F.1516	5115	12KHN2	14 220		Indurito superficialmente	
F.5103	1070	70			Bonificato	
F.5107	1078, 1080	75			Bonificato	
F.5117	1095				Bonificato	
F.5118	W1	U10A			Bonificato	
	S1	5KHV2SF			Bonificato	
	5155				Bonificato	
F.1252	4142, 4140	38HM	15 142		Bonificato	
F.520L	L2	11KHF			Bonificato	
F.5220	O1	9KHVG			Bonificato	
	O2	9G2F			Bonificato	
F.5230	52100	SHKH15	14 109		Bonificato	
F.5318	H13	4KH5MF1S			Bonificato	
F.5227	A2	9KH5VF			Bonificato	
F.5211	D2	KH12MF			Bonificato	
F.5213		KH12			Bonificato	
		KH12MF			Bonificato	
F.520.S	L6	5KHNM			Bonificato	
F.5613	M35	R6M5K5			Bonificato	
	M42	R2AM9K5			Bonificato	
	T1	R18			Bonificato	
F.5261	420	20KH13	17 022		Bonificato	Martensitico
	440 A				Bonificato	Martensitico
	440 B	95KH18			Bonificato	Martensitico
	440 C	95KH18			Bonificato	Martensitico
	XM-12			15-5 PH	H900	Martensitico
	SAE 630			17-4 PH	H1025	Martensitico
	SAE 630			17-4 PH	H900	Martensitico
	AMS 5528	09KH17N7YU1		17-7 PH	TH1050	Martensitico
	632			PH 15-7 Mo	TH1050	Martensitico
	660			A286	Indurito per precipitazione	Austenitico
	AMS 6512			Marage 250	Indurito per precipitazione	Martensitico
	AMS 6521			Marage 300	Indurito per precipitazione	Martensitico
	AMS 6521			Marage 300	Indurito per precipitazione	Martensitico
	AMS 6515			Marage 350	Indurito per precipitazione	Martensitico
	A128 Grade A			Hadfield		
	A532 IB (NiCr-LC)			Ni-Hard 2		Ghisa bianca
	A532 IA (NiCr-HC)			Ni-Hard 1		Ghisa bianca
	A532 ID (Ni-HiCr)			Ni-Hard 4		Ghisa bianca

Dichiarazione di conformità

Inserti in metallo duro ed utensili ad inserti

Gli inserti in metallo duro ed i relativi corpi utensile Seco Tools non rientrano nelle categorie prodotto sottocitate. Seco Tools rilascia pertanto la seguente dichiarazione.
Questi prodotti soddisfano tutti i requisiti delle normative RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) ed ELV (End of Life Vehicles).
All'interno del prodotto non sono presenti mercurio, piombo, cromo esavalente, cadmio, CFC, HCFC, ritardanti di fiamma o solventi in concentrazioni maggiori dei livelli di specifica.

Riaffilatura:
Operazioni di rettifica a secco o ad umido possono generare polveri o vapori potenzialmente tossici che possono irritare pelle, occhi, naso, gola e in caso di esposizione prolungata provocare gravi danni alla salute. Per evitare intossicazioni utilizzare appropriate precauzioni ed avvalersi dei dispositivi di protezione individuale.

Smaltimento:
Seco Tools offre la possibilità di acquistare inserti ed utensili in metallo duro usurati da destinare a riciclo. Gli inserti e gli utensili in metallo duro integrale dovranno essere separati dal comune rifiuto metallico (acciaio, alluminio, rame, ecc.).
Il materiale di confezionamento è interamente riciclabile.

Inserti in CBN e PCD

Gli inserti Seco Tools non rientrano nelle categorie prodotto sottocitate. Seco Tools rilascia pertanto la seguente dichiarazione.
Questo prodotto soddisfa tutti i requisiti delle normative RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) ed ELV (End of Life Vehicles).
All'interno del prodotto non sono presenti mercurio, piombo, cromo esavalente, cadmio, CFC, HCFC, ritardanti di fiamma o solventi in concentrazioni maggiori dei livelli di specifica.

Riaffilatura:
Operazioni di rettifica a secco o ad umido possono generare polveri o vapori potenzialmente tossici che possono irritare pelle, occhi, naso, gola e in caso di esposizione prolungata provocare gravi danni alla salute. Per evitare intossicazioni utilizzare appropriate precauzioni ed avvalersi dei dispositivi di protezione individuale.

Smaltimento:
Seco Tools offre la possibilità di acquistare inserti con riporto in CBN o PCD da destinare a riciclo. Gli inserti dovranno essere separati dal comune rifiuto metallico (acciaio, alluminio, rame, ecc.). Inserti in CBN integrale possono essere smaltiti presso una discarica.
Il materiale di confezionamento è interamente riciclabile.

Corpi utensile bruniti

I corpi utensile Seco Tools non rientrano nelle categorie prodotto sottocitate. Seco Tools rilascia pertanto la seguente dichiarazione.
Questo prodotto soddisfa tutti i requisiti delle normative RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) ed ELV (End of Life Vehicles).
All'interno del prodotto non sono presenti mercurio, piombo, cromo esavalente, cadmio, CFC, HCFC, ritardanti di fiamma o solventi in concentrazioni maggiori dei livelli di specifica.

Disposal:
I corpi utensile possono essere destinati a riciclo come ordinario rifiuto metallico (sfridi e trucioli metallici).
Il materiale di confezionamento è interamente riciclabile.

Dichiarazione di conformità

Inserti in cermet

Gli inserti Seco Tools non rientrano nelle categorie prodotto sottocitate. Seco Tools rilascia pertanto la seguente dichiarazione.
Questo prodotto soddisfa tutti i requisiti delle normative RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) ed ELV (End of Life Vehicles).
Gli inserti in cermet qualità C15M contengono nichel e potrebbe verificarsi trasmissione di nichel per contatto con la pelle. La quantità di nichel risulta più elevata rispetto le specifiche del test di riferimento della norma SS-EN 1811, che si riferisce al rilascio di nichel per prodotti che vengono a contatto diretto e prolungato con la pelle. Queste norme sono intese per prodotti che hanno un contatto diretto e prolungato con la pelle, pertanto non sono applicabili in modo diretto ad inserti in cermet. Persone che presentano note reazioni allergiche al nichel sono invitate ad indossare guanti protettivi durante la manipolazione di inserti in cermet.

Riaffilatura:
Operazioni di rettifica a secco o ad umido possono generare polveri o vapori potenzialmente tossici che possono irritare pelle, occhi, naso, gola e in caso di esposizione prolungata provocare gravi danni alla salute. Per evitare intossicazioni utilizzare appropriate precauzioni ed avvalersi dei dispositivi di protezione individuale.

Smaltimento:
Gli inserti usati possono essere riciclati. Gli inserti dovranno essere separati dal comune rifiuto metallico (acciaio, alluminio, rame, ecc.), compresi inserti in metallo duro.
Il materiale di confezionamento è interamente riciclabile.

Corpi utensile con rivestimento al nichel

I corpi utensile Seco Tools non rientrano nelle categorie prodotto sottocitate. Seco Tools rilascia pertanto la seguente dichiarazione.
Questo prodotto soddisfa tutti i requisiti delle normative RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) ed ELV (End of Life Vehicles).
All'interno del prodotto non sono presenti mercurio, piombo, cromo esavalente, cadmio, CFC, HCFC, ritardanti di fiamma o solventi in concentrazioni maggiori dei livelli di specifica.
I corpi utensile contengono nichel e ci potrebbe essere trasmissione di nichel per contatto con la pelle. La quantità di nichel non è più elevata rispetto alle specifiche del test di riferimento della norma SS-EN 1811 che si riferisce al rilascio di nichel per prodotti che vengono a contatto diretto e prolungato con la pelle.
Queste norme sono intese per prodotti che hanno un contatto diretto e prolungato con la pelle e pertanto non sono applicabili in modo diretto ai corpi utensile. Persone che presentano note reazioni allergiche al nichel sono invitate ad indossare guanti protettivi durante la manipolazione dei corpi utensile.

Smaltimento
I corpi utensile possono essere destinati a riciclo come ordinario rifiuto metallico (sfridi e trucioli metallici).
Il materiale di confezionamento è interamente riciclabile.

Elementi leganti aggiunti intenzionalmente

Qualità	Metallo duro											Rivestimento						
	W	Ti	Ta	Nb	Co	Cr	Ni	Mo	C	N	Ru	Ti	Al	C	N	O	Si	Nb
CP20	■				■				■			■			■			
CP200	■				■	■			■			■	■		■			
CP300	■	■	■	■	■				■			■	■		■			
CP500	■				■	■			■			■	■		■			
CP600	■				■	■			■			■	■		■			
C15M	■	■	■	■	■		■	■	■	■								
CF	■		■		■		■	■	■									
CM	■		■		■		■	■	■									
DP2000	■		■	■	■				■			■	■	■	■	■		
DP2501	■	■	■	■	■				■	■		■	■	■	■	■		
DP3000	■	■	■	■	■				■	■		■	■	■	■	■		
DS2050	■				■	■			■			■	■		■			■
DS4050	■				■	■			■			■	■		■			■
F15M	■				■	■			■			■	■		■			
F25M	■	■	■	■	■				■			■	■		■			
F30M	■				■	■			■			■	■		■			
F40M	■				■	■			■			■	■		■			
HX	■		■		■				■									
H02	■		■		■	■			■									
H15	■				■	■			■									
H25	■				■	■			■									
KX	■				■	■			■									
MH1000	■				■	■			■			■	■		■			
MK1500	■		■		■				■			■	■	■	■	■		
MK2050	■		■		■	■			■			■	■		■		■	
MM4500	■				■	■			■			■	■	■	■	■		
MP1501	■		■	■	■				■			■	■	■	■	■		
MP2050	■				■						■	■	■		■		■	
MP2501	■		■	■	■				■			■	■	■	■	■		
MP3000	■				■	■			■			■	■		■			
MP3501	■		■	■	■				■			■	■	■	■	■		
MS2500	■		■	■	■				■			■	■	■	■	■		
MS2050	■				■	■			■			■	■		■			■
RX1500	■		■		■		■	■	■			■	■		■			
RX2000	■		■		■	■			■			■	■		■			
RM2020	■				■				■			■						
RM2090	■				■	■			■			■	■				■	
RN2010	■				■	■			■									
RS2090	■				■	■			■			■	■				■	
T350M	■		■	■	■				■			■	■	■	■	■		
T25M	■		■	■	■				■			■		■	■			
TGH1050	■				■	■			■			■	■		■		■	
TGK1500	■		■		■				■			■	■	■	■	■		
TGP25	■	■	■	■	■				■			■	■	■	■	■		
TGP35	■		■	■	■				■			■	■	■	■	■		
TGP45	■		■	■	■				■			■	■	■	■	■		
TGS2050	■				■	■			■			■	■		■		■	
TH1000	■				■	■			■			■	■		■		■	
TH1500	■				■	■			■			■	■	■	■	■		
TK0501	■				■	■			■			■	■	■	■	■		
TK1501	■		■		■	■			■			■	■	■	■	■		
TM1501	■	■	■	■	■	■			■	■		■	■	■	■	■		
TM2000	■	■	■	■	■				■	■		■	■	■	■	■		
TM2501	■	■	■	■	■				■	■		■	■	■	■	■		
TM3501	■				■				■			■	■	■	■	■		
TM4000	■	■	■	■	■				■	■		■	■	■	■	■		
TP0501	■	■	■	■	■	■			■			■	■	■	■	■		

Dichiarazione di conformità

Qualità	Metallo duro											Rivestimento						
	W	Ti	Ta	Nb	Co	Cr	Ni	Mo	C	N	Ru	Ti	Al	C	N	O	Si	Nb
TP1020	■	■	■	■	■				■	■								
TP1030	■	■	■	■	■				■	■		■	■		■		■	
TP1501	■	■	■	■	■				■	■		■	■	■	■	■		
TP25	■	■	■	■	■	■			■	■		■	■	■	■	■		
TP200	■	■	■	■	■				■	■		■	■	■	■	■		
TP2501	■	■	■	■	■	■			■	■		■	■	■	■	■		
TP3501	■	■	■	■	■				■	■		■	■	■	■	■		
TP40	■		■	■	■				■			■		■	■			
TS2000	■				■	■			■			■	■		■			
TS2050	■				■	■			■			■	■		■		■	
TS2500	■		■		■				■			■	■		■			
TTP2050	■				■	■			■			■	■		■		■	
T250D	■				■	■			■			■	■		■			
T400D	■				■	■			■			■	■		■			
T100R	■		■		■	■			■			■	■		■			
T60M	■	■	■	■	■				■			■	■		■			
883	■		■		■				■									
890	■				■	■			■									

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