

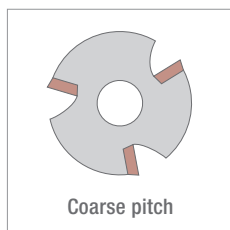


HF4PLUS ACTION

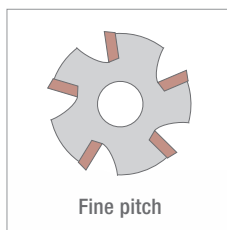
per fresatura ad alto avanzamento



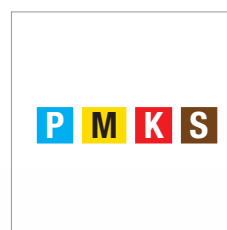
Extension arbors



Coarse pitch



Fine pitch



Acquista 30 inserti e ottieni il corpo fresa allo sconto speciale del 60%

Inserti: SDMT10
Corpi fresa: NT-SD10HF

Inserti: SDMT112
Corpi fresa: NT-SD12HF

Inserti: SDMT15
Corpi fresa: NT-SD15HF

Inserti: SPMT07
Corpi fresa: NT-SP07HF

nixkoTOOLS

uemme
TOOLS and EQUIPMENT

scadenza: 31/12/2025

HF4PLUS

High productivity high feed milling system available from big to small diameters

APPLICATION

- Semi-finishing or roughing of surfaces
- Profiling and contouring
- Linear or trochoidal ramping
- Pocketing

ISO APPLICATION FIELDS

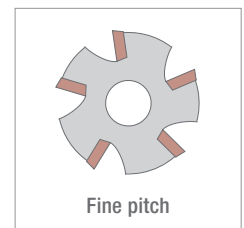
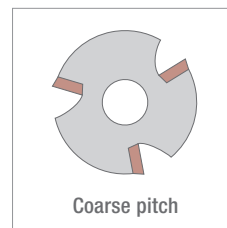
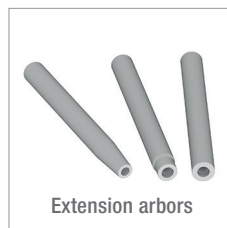
P M K S

ADVANTAGES AND CHARACTERISTICS

- High feed machining that effectively reduces cycle time and improves efficiency
- Versatile in operations and simplify the process (can do face milling, ramping, helical pocketing, counterbore and countersink, combines roughing and semi finishing)
- Multiple-curve edge design improves robustness and reliability
- Available from mini size 07 to cost-effective 10, frequent 12 and large size 15

• Cutter bodies

- Arbor type
- Cylindrical type
- Screw-in type
- Extension sleeves (steel/carbide 10xD)
- From D20 to D125



• Inserts

- 4 edges
- Edge length 07, 10, 12 and 15
- Cemented carbide grades with PVD and CVD coatings
- Geometries: SC, GP, SS, TE



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

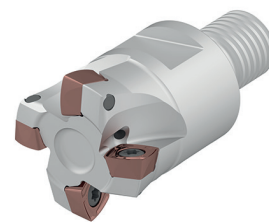
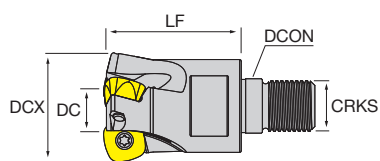
G - SPARE PARTS

NT-SD

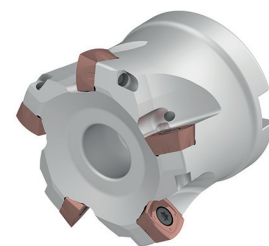
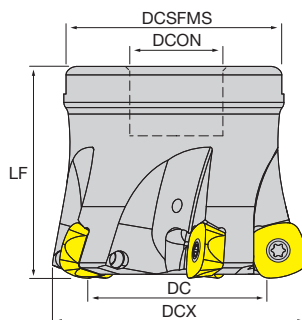
HF4Plus SD

- High feed milling system with positive square inserts, with coolant through
- Diverse combination of diameters and pitches, available with different insert sizes
- Tolerance of tool diameter (with Nikko inserts installed) 0/-0.2
- Steel and carbide arbors available for screw-in type holders

Screw-in



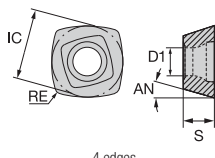
Arbor



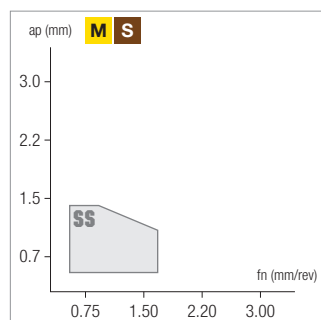
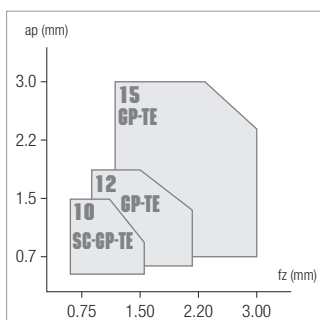
Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
SCREW-IN											
NT-SD10HF D035-M16-Z04	●	35	4	20	17	40	-	-	M16	0.18 Kg	SDMT1004
NT-SD10HF D042-M16-Z05	●	42	5	27	17	40	-	-	M16	0.23 Kg	SDMT1004
NT-SD12HF D032-M16-Z02	●	32	2	12.5	17	43	-	-	M16	0.18 Kg	SDMT1205
NT-SD12HF D035-M16-Z03	●	35	3	15.5	17	43	-	-	M16	0.19 Kg	SDMT1205
NT-SD12HF D040-M16-Z04	●	40	4	20.5	17	43	-	-	M16	0.20 Kg	SDMT1205
NT-SD12HF D042-M16-Z04	●	42	4	22.5	17	43	-	-	M16	0.22 Kg	SDMT1205
ARBOR											
NT-SD10HF D050-F22-Z06	●	50	6	35	22	50	-	47	-	0.38 Kg	SDMT1004
NT-SD10HF D052-F22-Z06	●	52	6	37	22	50	-	47	-	0.39 Kg	SDMT1004
NT-SD10HF D063-F27-Z07	●	63	7	48	27	50	-	58	-	0.65 Kg	SDMT1004
NT-SD10HF D066-F27-Z07	●	66	7	51	27	50	-	60	-	0.72 Kg	SDMT1004
NT-SD10HF D080-F27-Z08	●	80	8	65	27	50	-	65	-	1.00 Kg	SDMT1004
NT-SD12HF D042-F16-Z04	●	42	4	22.5	16	40	-	35	-	0.19 Kg	SDMT1205
NT-SD12HF D050-F22-Z04	●	50	4	30.5	22	50	-	47	-	0.37 Kg	SDMT1205
NT-SD12HF D050-F22-Z05	●	50	5	30.5	22	50	-	47	-	0.35 Kg	SDMT1205
NT-SD12HF D052-F22-Z04	●	52	4	32.5	22	50	-	47	-	0.39 Kg	SDMT1205
NT-SD12HF D052-F22-Z05	●	52	5	32.5	22	50	-	47	-	0.37 Kg	SDMT1205
NT-SD12HF D063-F22-Z04	●	63	4	43.5	22	50	-	52	-	0.56 Kg	SDMT1205
NT-SD12HF D063-F22-Z05	●	63	5	43.5	22	50	-	52	-	0.54 Kg	SDMT1205
NT-SD12HF D063-F27-Z04	●	63	4	43.5	27	50	-	52	-	0.58 Kg	SDMT1205
NT-SD12HF D063-F27-Z05	●	63	5	43.5	27	50	-	52	-	0.56 Kg	SDMT1205
NT-SD12HF D066-F27-Z06	●	66	6	46.5	27	50	-	60	-	0.68 Kg	SDMT1205
NT-SD12HF D080-F27-Z06	●	80	6	60.5	27	50	-	65	-	0.94 Kg	SDMT1205
NT-SD12HF D080-F27-Z07	●	80	7	60.5	27	50	-	65	-	0.99 Kg	SDMT1205
NT-SD12HF D100-F32-Z07	●	100	7	80.5	32	50	-	70	-	1.60 Kg	SDMT1205
NT-SD15HF D080-F27-Z05	●	80	5	61	27	50	-	58	-	0.80 Kg	SDMT1505
NT-SD15HF D080-F27-Z06	●	80	6	61	27	50	-	58	-	0.60 Kg	SDMT1505
NT-SD15HF D100-F32-Z06	●	100	6	81	32	50	-	70	-	1.20 Kg	SDMT1505
NT-SD15HF D125-F40-Z07	●	125	7	106	40	63	-	90	-	2.28 Kg	SDMT1505

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
		
NT-SD10HF D000-000-Z00	NT-ST35095T15HQ	NT-FTB15
NT-SD12HF D000-000-Z00	NT-ST40110T15HQ	NT-FTB15
NT-SD15HF D000-000-Z00	NT-ST50110T20	NT-FTB20

SDMT		HC: Coated carbide HF: Micrograin carbide CVD: Chemical vapour deposition PVD: Physical vapour deposition		HC	HC	HF	HF	HF	HF	HF	HF					
				CVD	CVD	PVD	PVD	PVD	PVD	PVD	PVD					
HF4Plus SD				JC8520	JC9540	JP5530	JP7525	JP8725	JP9535	JP9545						
- GP geometry is for general purpose use - SC and SS geometries are sharper, for M and S materials - TE edge is reinforced and stronger - Available with diverse carbide grades covering PMKS applications - For the program radius and various other parameters for CNC program please go to the technical instruction page, it differs with sizes and geometries	Stable machining, light cut		● 1 st choice	○ suitable	●				○							
	General machining, medium cut		● 1 st choice	○ suitable	○	●	●	●	●	●	○					
	Unstable machining, heavy cut		⚡ 1 st choice	⚡ suitable		⚡	⚡	⚡		⚡	⚡					
	Dimensions		ISO		Vc(m/min) - suggested cutting speed range (bold: 1 st choice)											
			P	130 300		100 260		100 280								
			M		90 210	60 180			80 200	60 180						
K			160 320			140 300										
N																
S				30 70				20 60	20 50							
H																
GENERAL	Designation		RE	IC	S	D1	AN							Stock		
		SDMT100410R-GP	10	10	4.76	4	15°	●	●	●	●	●	●			
		SDMT120512R-GP	12	12.7	5.56	4.4	15°	●	●	●	●	●				
		SDMT150512R-GP	12	15.875	5.56	5.5	15°	●	●		●	●				
LOW FORCE		SDMT100410R-SC	10	10	4.76	4	15°			●		●				
SUPER SHARP		SDMT120512R-SS	12	12.7	5.56	4.4	15°		●			●				
REINFORCED		SDMT100410R-TE	10	10	4.76	4	15°			●		●	●			
		SDMT120512R-TE	12	12.7	5.56	4.4	15°	●		●		●				
		SDMT150512R-TE	12	15.875	5.56	5.5	15°	●				●				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▼ stock exhaustion



Rp SUGGESTED PROGRAMMING RADIUS

SDMT 10	2.5
SDMT 12	3.5
SDMT 15	5.0

more details at page D83



SDMT12-SS

SS geometry generates a bigger milling cutter diameter compared to GP and TE types.

Please add **0.85 mm** to DCX values and **0.40 mm** to LF values, shown on page D78.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

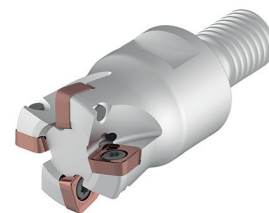
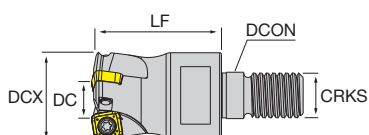
G - SPARE PARTS

NT-SP

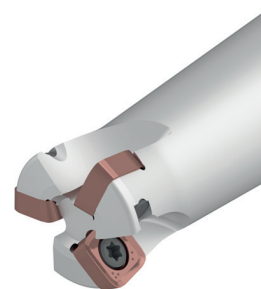
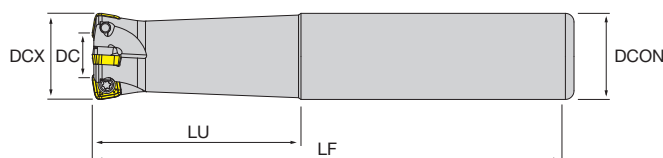
HF4Plus SP

- High feed milling system with positive square inserts, with coolant through
- Diverse combination of diameters and pitches available, focus on small diameters
- Tolerance of tool diameter (with Nikko inserts installed) 0/-0.2
- Steel and carbide arbors available for screw-in type holders

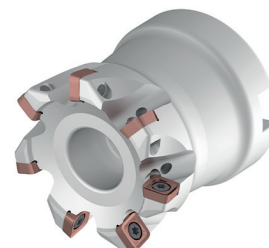
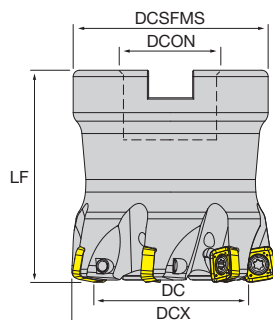
Screw-in



Cylindrical



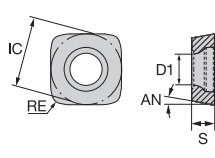
Arbor



Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
SCREW-IN											
NT-SP07HF D020-M10-Z02	●	20	2	7.3	10.5	30	-	-	M10	0.05 Kg	SPMT07T2
NT-SP07HF D020-M10-Z03	●	20	3	7.3	10.5	30	-	-	M10	0.04 Kg	SPMT07T2
NT-SP07HF D025-M12-Z03	●	25	3	12.3	12.5	35	-	-	M12	0.10 Kg	SPMT07T2
NT-SP07HF D025-M12-Z04	●	25	4	12.3	12.5	35	-	-	M12	0.10 Kg	SPMT07T2
NT-SP07HF D032-M16-Z04	●	32	4	19.3	17	40	-	-	M16	0.19 Kg	SPMT07T2
NT-SP07HF D032-M16-Z05	●	32	5	19.3	17	40	-	-	M16	0.17 Kg	SPMT07T2
NT-SP07HF D035-M16-Z05	●	35	5	22.3	17	40	-	-	M16	0.20 Kg	SPMT07T2
NT-SP07HF D042-M16-Z06	●	42	6	29.3	17	40	-	-	M16	0.24 Kg	SPMT07T2
CYLINDRICAL											
NT-SP07HF D020-S20-Z03	●	20	3	7.3	20	130	50	-	-	0.26 Kg	SPMT07T2
NT-SP07HF D025-S25-Z03	●	25	3	12.3	25	140	60	-	-	0.44 Kg	SPMT07T2
NT-SP07HF D025-S25-Z04	●	25	4	12.3	25	140	60	-	-	0.40 Kg	SPMT07T2
NT-SP07HF D032-S32-Z05	●	32	5	19.3	32	150	70	-	-	0.79 Kg	SPMT07T2
ARBOR											
NT-SP07HF D040-F16-Z05	●	40	5	27.3	16	40	-	35	-	0.21 Kg	SPMT07T2
NT-SP07HF D040-F16-Z06	●	40	6	27.3	16	40	-	35	-	0.20 Kg	SPMT07T2
NT-SP07HF D042-F16-Z05	●	42	5	29.3	16	40	-	35	-	0.22 Kg	SPMT07T2
NT-SP07HF D042-F16-Z06	●	42	6	29.3	16	40	-	35	-	0.21 Kg	SPMT07T2
NT-SP07HF D050-F22-Z07	●	50	7	37.3	22	50	-	46	-	0.41 Kg	SPMT07T2
NT-SP07HF D052-F22-Z07	●	52	7	39.3	22	50	-	46	-	0.44 Kg	SPMT07T2

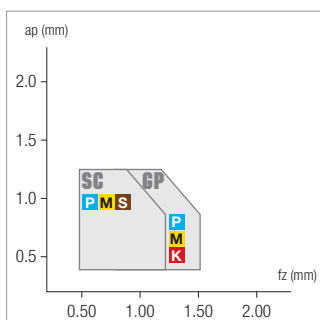
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
NT-SP07HF D000-000-Z00	NT-ST30070T10HQ	NT-FTB10

SPMT		HC: Coated carbide HF: Micrograin carbide CVD: Chemical vapour deposition PVD: Physical vapour deposition		HC	HC	HF	HF	HF	HF	HF	HF	
				CVD	CVD	PVD	PVD	PVD	PVD	PVD	PVD	
HF4Plus SP				JP8520	JP9540	JP5530	JP7525	JP8725	JP9535	JP9545		
- GP geometry is for general purpose use - SC is sharper for M and S materials - Available with diverse carbide grades covering PMKS applications - For the program radius and various other parameters for CNC program please go to the technical instruction page	Stable machining, light cut		● 1 st choice	○ suitable	●				○			
	General machining, medium cut		● 1 st choice	○ suitable	○	●	●	●	●	●	○	
	Unstable machining, heavy cut		⚙ 1 st choice	⚙ suitable		⚙	⚙	⚙		⚙	⚙	
	Dimensions		ISO									
			Vc(m/min) - suggested cutting speed range (bold: 1 st choice)									
P			130 300		100 260		100 280					
M				90 210	60 180			80 200	60 180			
K			160 320			140 300						
N												
S				30 70				20 60	20 50			
H												

Designation		RE	IC	S	D1	AN	Stock							
GENERAL	GP P M K		SPMT07T210R-GP	1	7.8	2.8	3.5	11°	●	●	●	●	●	●
LOW FORCE	SC P M S		SPMT07T210R-SC	1	7.8	2.8	3.5	11°		●		●		

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



 **Rp SUGGESTED PROGRAMMING RADIUS**

SPMT 07 2.0

more details at page D83

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC8520			JP5530			JP8725		
	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	100%	130	180	230	100	140	180	100	150	200
				30%	200	240	280	160	200	240	160	210	260
				10%	260	280	300	220	240	260	220	250	280
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	100%	100	140	180	80	120	160	90	130	170	
			30%	160	200	240	120	160	200	130	170	210	
			10%	220	240	260	180	200	220	190	210	230	
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	100%	70	100	130	60	90	120	80	110	140	
			30%	120	160	200	100	130	160	120	150	180	
			10%	200	220	240	140	170	200	160	190	220	
ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC9540			JP9535			JP9545			
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	100%	90	130	170	80	120	160	60	100	140	
			30%	110	160	210	100	150	200	80	130	180	
			10%	130	190	250	120	180	240	100	160	220	
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	100%	70	100	130	60	90	120	50	80	110	
			30%	80	110	140	70	100	130	60	90	120	
			10%	90	120	150	80	110	140	70	100	130	
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	100%	90	120	150	80	110	140	60	90	120	
			30%	110	150	190	100	140	180	80	120	160	
			10%	130	170	210	120	160	200	100	140	180	
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		100%	80	110	140	70	100	130	60	90	120	
			30%	90	120	150	80	110	140	70	100	130	
			100	130	160	90	120	150	80	110	140		
ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC8520			JP7525						
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	100%	160	200	240	140	180	220				
			30%	180	230	280	160	210	260				
			10%	200	260	320	180	240	300				
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	100%	120	160	200	100	140	180				
			30%	140	190	240	120	170	220				
			10%	160	220	280	140	200	260				
K3 - K4	Austenitic and ADI cast iron (ex. 0.6660/GGL-NiCr 20 2/Ni-Resist 2, GJS-1000-5/ADI1000)	250 ÷ 500	100%	100	130	160	90	120	150				
			30%	120	160	200	120	150	180				
			10%	140	190	240	150	180	210				
ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC9540			JP9535			JP9545			
S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		100%	30	40	50	20	30	40	20	25	30	
			30%	40	50	60	30	40	50	30	35	40	
			10%	50	60	70	40	50	60	40	45	50	
S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		100%				40	50	60	30	40	50	
			30%				50	60	70	40	50	60	
			10%				60	70	80	50	60	70	

ae: radial depth of cut; DC: milling cutter diameter
Complete workpiece materials p. H1.

DESIGNATION	ae/DCX	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
SPMT07T210R-GP	100%	0.20	0.60	1.00	0.40	0.70	1.00
	30%	0.20	0.60	1.00	0.50	0.90	1.30
	10%	0.20	0.60	1.00	0.60	1.10	1.60
SDMT100410R-GP	100%	0.30	0.90	1.50	0.40	0.75	1.10
	30%	0.30	0.90	1.50	0.50	1.00	1.50
	10%	0.30	0.90	1.50	0.60	1.20	1.60
SDMT120512R-GP	100%	0.40	1.20	2.00	0.60	0.90	1.20
	30%	0.40	1.20	2.00	0.70	1.10	1.50
	10%	0.40	1.20	2.00	0.80	1.30	1.80
SDMT150512R-GP	100%	0.60	1.80	3.00	0.60	1.00	1.40
	30%	0.60	1.80	3.00	0.80	1.30	1.80
	10%	0.60	1.80	3.00	0.90	1.50	2.10
SPMT07T210R-SC	100%	0.20	0.60	1.00	0.30	0.60	0.90
	30%	0.20	0.60	1.00	0.40	0.80	1.20
	10%	0.20	0.60	1.00	0.50	0.90	1.40
SDMT100410R-SC	100%	0.30	0.90	1.50	0.30	0.70	1.10
	30%	0.30	0.90	1.50	0.40	0.90	1.40
	10%	0.30	0.90	1.50	0.50	1.00	1.50

DESIGNATION	ae/DCX	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
SDMT100410R-TE	100%	0.30	0.90	1.50	0.60	0.90	1.20
	30%	0.30	0.90	1.50	0.70	1.20	1.60
	10%	0.30	0.90	1.50	0.80	1.40	1.60
SDMT120512R-TE	100%	0.40	1.20	2.00	0.70	1.00	1.30
	30%	0.40	1.20	2.00	0.90	1.30	1.70
	10%	0.40	1.20	2.00	1.00	1.50	2.00
SDMT150512R-TE	100%	0.60	1.80	3.00	0.80	1.20	1.60
	30%	0.60	1.80	3.00	1.00	1.50	2.00
	10%	0.60	1.80	3.00	1.20	1.80	2.40
SDMT120512R-SS	100%	0.40	0.70	1.00	0.50	0.80	1.10
	30%	0.40	0.70	1.00	0.60	1.00	1.40
	10%	0.40	0.70	1.00	0.70	1.20	1.70

Approximate programming radius adjustment (Rp)

	SPMT07			SDMT10			SDMT12 *			SDMT15		
	Rp	undercut K	overcut r	Rp	undercut K	overcut r	Rp	undercut K	overcut r	Rp	undercut K	overcut r
	1.5	0.69	0	2	1.18	0	3	1.28	0	4.5	1.15	0
	2	0.61	0	2.5	1.02	0	3.5	1.11	0	5	0.99	0
	2.5	0.54	0.08	3	0.86	0.02	4	0.95	0.02	5.5	0.82	0.14
	3	0.46	0.24	3.5	0.70	0.13	4.5	0.79	0.14	6	0.67	0.03

*for SDMT12-SS programming radius adjustment please see next page. Green background are suggested values.

Parameters for ramping

	SPMT07			SDMT10			SDMT12 *			SDMT15		
	DCX	RMPX	L	DCX	RMPX	L	DCX	RMPX	L	DCX	RMPX	L
	20	3.5°	2.5	35	1.6°	2	32	4.0°	4.5	80		
	25	3.0°	1.6	42	1.5°	1.7	40	2.4°	3.4	100		
	32	1.2°	1.4	50	0.8°	1.5	42	2.1°	3.2	125		
	35	1.2°	1.5	52	1.0°	2	50	1.5°	2.9			
	40	1.0°	1.3	63	0.6°	1.8	52	1.0°	2			
	42	0.9°	1.3	66	0.6°	1.8	63	1.0°	2.5			
	52	0.6°	1.2	80	0.4°	1.6	66	0.9°	2.5			
							80	0.7°	2.2			
							100					

*for SDMT12-SS guide for ramping please see next page.

RMPX: max. ramping angle; L: max. ramping path

Parameters for helical milling

	SPMT07			SDMT10			SDMT12 *			SDMT15		
	DCX	DH min.	DH max.	DCX	DH min.	DH max.	DCX	DH min.	DH max.	DCX	DH min.	DH max.
	20	28	40	35	54	70	32	46	64	80		
	25	38	50	42	68	84	40	62	80	100		
	32	52	64	50	84	100	42	66	84	125		
	35	58	70	52	88	104	50	82	100			
	40	68	80	63	110	126	52	86	104			
	42	72	84	66	116	132	63	108	126			
	52	92	104	80	144	160	66	114	132			
							80	142	160			
							100					

*for SDMT12-SS guide for helical milling please see next page.

DH min.: min. cutting dia.; DH max.: max. cutting dia.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

Approximate programming radius adjustment (Rp)

	SDMT12-SS					
	Rp	undercut K	overcut r			
	3	1.52	0			
	3.5	1.45	0			
	4	1.28	0.07			

Green background are suggested values.

Parameters for ramping

	SDMT12-SS					
	DCX	RMPX	L			
	32	5.5°	6			
	40	3.7°	5.2			
	42	3.3°	5			
	50	2.4°	4.4			
	52	2.2°	4.2			
	63	1.5°	3.7			
	66	1.4°	3.5			
	80	1.0°	3.3			

RMPX: max. ramping angle; L: max. ramping path

Parameters for helical milling

	SDMT12-SS					
	DCX	DH min.	DH max.			
	32	42	64			
	40	58	80			
	42	62	84			
	50	78	100			
	52	82	104			
	63	104	126			
	66	110	132			
	80	138	160			

DH min.: min. cutting dia.; DH max.: max. cutting dia.

NOTE



uemme s.r.l.

Viale Lavoro e Industria
25030 Coccaglio (BS)
ITALIA

info

T | +39 030 7700112
M | Info@uemme.eu
S | www.uemme.eu

Scansiona
il Qrcode

scopri il mondo
uemme

