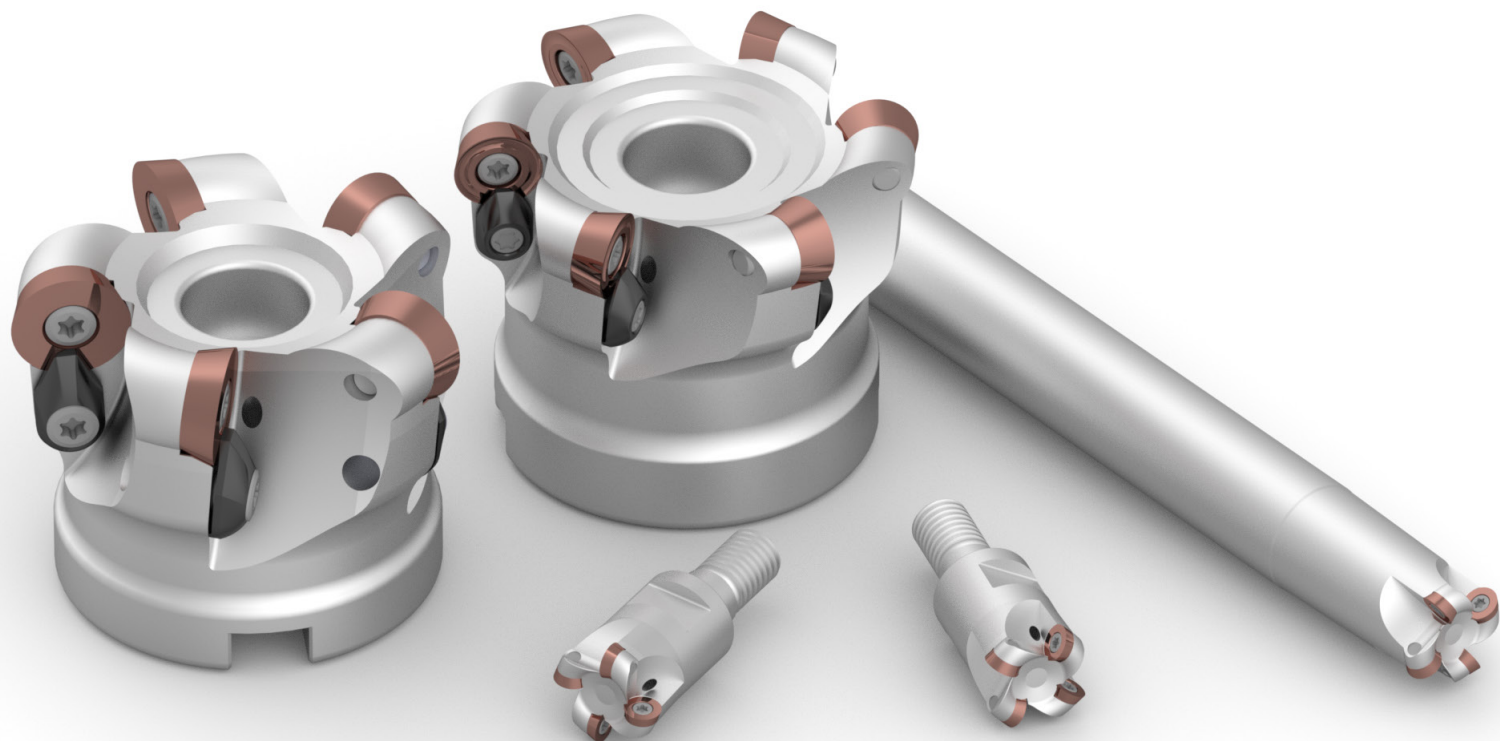
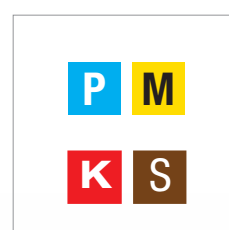
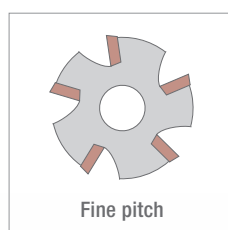
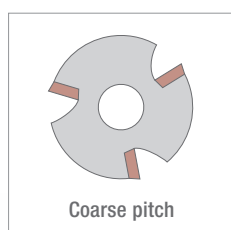




ROUNDPLUS ACTION

per fresatura multifunzionale con inserto tondo



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

Inserti: RD...05 / RD...07 / RD...10 / RD...12 / RD...16

Corpi fresa: NT-RD05 / NT-RD07 / NT-RD10 / NT-RD12 / NT-RD16

Inserti: RC...16 / RC...20

Corpi fresa: NT-RC16H / NT-RC20H

Inserti: RP...12

Corpi fresa: NT-RP12H

nixkoTOOLS

uemme
TOOLS and EQUIPMENT

VALIDITA': 31/12/2023

ROUNDPLUS

Facing and Profiling milling cutters for multi-functional application

APPLICATION

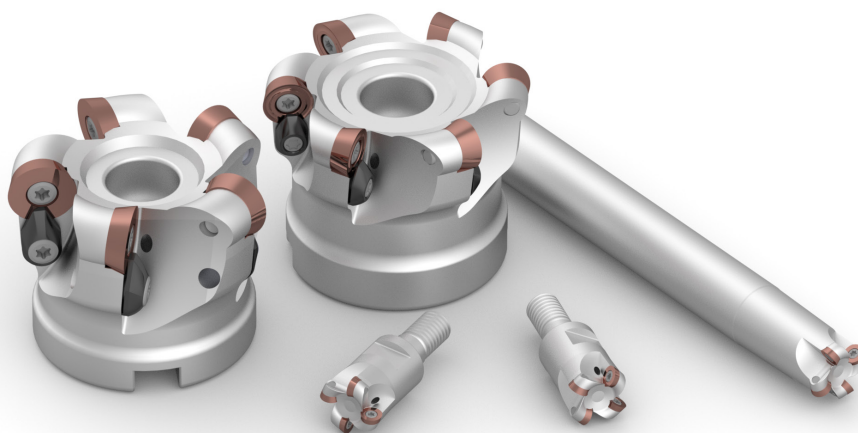
- Profiling of finishing/ semi-finishing/ roughing
- Face milling of finishing/ semi-finishing/ roughing
- Possible to do ramping and pocket interpolation

ISO APPLICATION FIELDS

P M K S

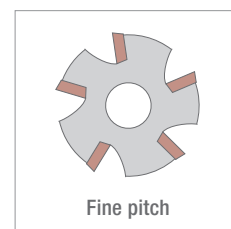
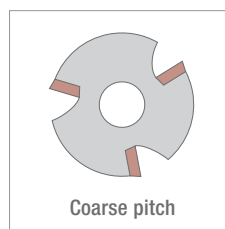
ADVANTAGES AND CHARACTERISTICS

- Insert geometries available for finishing/ semi-finishing/ roughing
- Cutters range from D9 all the way to D160
- Low cutting force with good robustness, allows long overhang working (up to 10xD)
- Multi-functional tool with good flexibility in machining



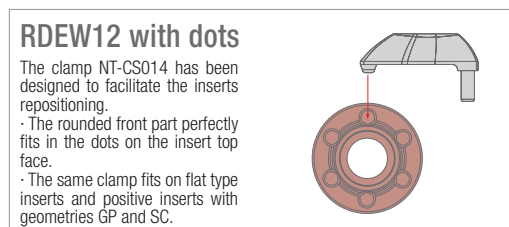
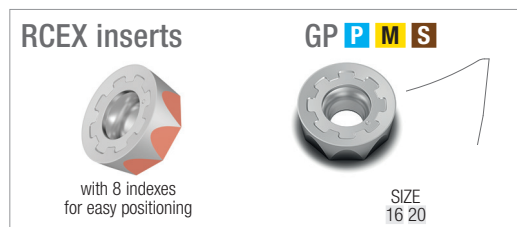
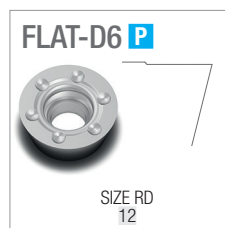
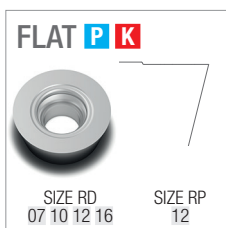
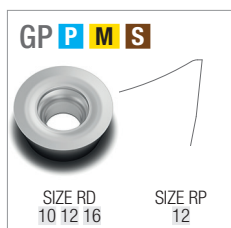
• Cutter bodies

- Arbor type
- Cylindrical type (up to 10xD)
- Screw-in type
- Extension sleeves (steel/carbide 10xD)
- From D9 to D160



• Inserts

- Multi-edges
- IC 05 / 07 / 10 / 12 / 16 / 20
- Cemented carbide grades with PVD and CVD coatings
- Geometries: SC, GP, Flat



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

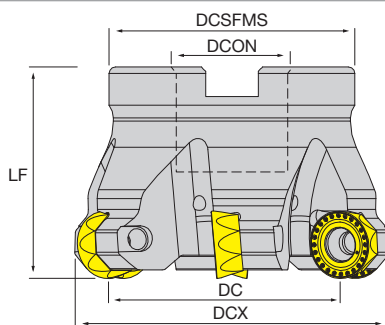
F - ACCESSORIES

G - SPARE PARTS

NT-RC

RoundPlus RC

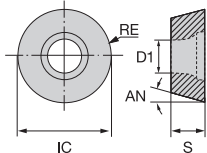
- Positive general face milling cutters for RC inserts
- All with coolant through
- Very robust milling solution for massive chip removal application



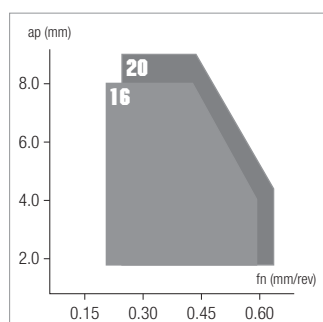
Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
NT-RC16H D063-F22-Z05	●	63	5		22	50	-	45	-	0.46 Kg	RCEX1606
NT-RC16H D080-F27-Z06	●	80	6		27	50	-	58	-	0.78 Kg	RCEX1606
NT-RC16H D100-F32-Z06	●	100	6		32	50	-	70	-	1.26 Kg	RCEX1606
NT-RC20H D100-F32-Z06	●	100	6		32	50	-	70	-	1.19 Kg	RCEX2006
NT-RC20H D125-F40-Z07	●	125	7		40	63	-	90	-	2.71 Kg	RCEX2006
NT-RC20H D160-F40-Z08	●	160	8		40	63	-	100	-	3.98 Kg	RCEX2006

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

Spare parts	Insert screws	Flag wrenches
NT-RC16H D000-000-Z00	NT-ST50110T20	NT-FTB20
NT-RC16H D100-F32-Z06	NT-ST50110T20	NT-TT20
NT-RC20H D000-000-Z00	NT-ST60160T25	NT-TT25

RC		HC: Coated carbide HF: Micrograin carbide CVD: Chemical vapour deposition PVD: Physical vapour deposition					HC CVD	HC CVD	HF PVD	HF PVD		
RoundPlus RC							JC8520	JC9540	JP8725	JP9535		
- GP geometry is for general purpose use 8 index facets for seating - Both PVD and CVD coated carbide grades available - Very reliable and cost effective solution for massive metal removal operations	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		100 280						
M				90 210		80 200						
K			160 320									
N												
S				30 70		20 60						
H												
GENERAL	Designation		RE	IC	S	D1	AN					Stock
	 with 8 indexes	RCEX1606M0E-GP-8X	8	16	6.35	5.5	7°	●	●	●	●	
		RCEX2006M0E-GP-8X	10	20	6.35	6.5	7°	●	●	●	●	

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



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

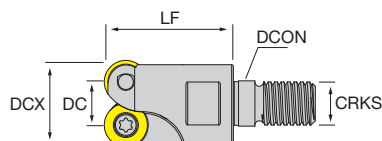
G - SPARE PARTS

NT-RD

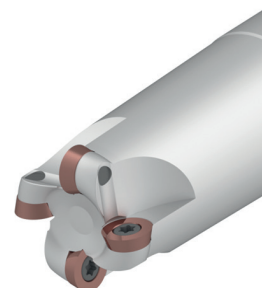
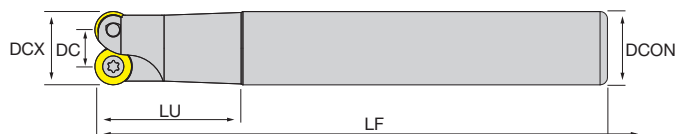
RoundPlus RD

- Positive general face milling cutters for RD inserts, with or without coolant through, various options available
- Very convenient multipurpose tool, at small depth of cut could be used as highfeed, at bigger depth of cut is robust with big radii, can also do profiling and copy milling
- Tolerance of tool diameter (with Nikko inserts installed) 0/-0.2
- Steel and carbide arbors available for screw-in type holders

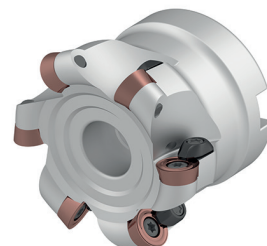
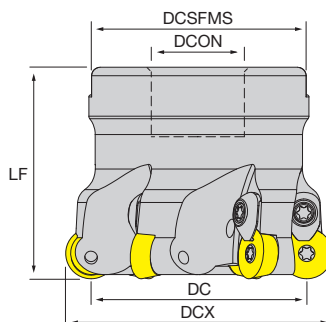
Screw-in



Cylindrical



Arbor



Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
SCREW-IN - WITHOUT COOLANT HOLES											
NT-RD05 D012-M06-Z02	▽	12	2		6.5	18	-	-	M6	0.01 Kg	RD∞0501
NT-RD05 D012-M06-Z03	▽	12	3		6.5	18	-	-	M6	0.01 Kg	RD∞0501
NT-RD05 D013-M06-Z02	▽	13	2		6.5	18	-	-	M6	0.01 Kg	RD∞0501
NT-RD05 D013-M06-Z03	▽	13	3		6.5	18	-	-	M6	0.01 Kg	RD∞0501
NT-RD05 D016-M08-Z04	▽	16	4		8.5	23	-	-	M8	0.03 Kg	RD∞0501
NT-RD05 D017-M08-Z04	▽	17	4		8.5	23	-	-	M8	0.03 Kg	RD∞0501
NT-RD07 D016-M08-Z02	▽	16	2		8.5	23	-	-	M8	0.03 Kg	RD∞0702
NT-RD07 D017-M08-Z02	▽	17	2		8.5	23	-	-	M8	0.03 Kg	RD∞0702
NT-RD07 D017-M08-Z03	▽	17	3		8.5	23	-	-	M8	0.03 Kg	RD∞0702
NT-RD07 D021-M10-Z02	▽	21	2		10.5	30	-	-	M10	0.06 Kg	RD∞0702
NT-RD07 D021-M10-Z03	▽	21	3		10.5	30	-	-	M10	0.05 Kg	RD∞0702
NT-RD07 D025-M12-Z05	▽	25	5		12.5	35	-	-	M12	0.10 Kg	RD∞0702
NT-RD07 D026-M12-Z04	▽	26	4		12.5	35	-	-	M12	0.11 Kg	RD∞0702
NT-RD07 D026-M12-Z05	▽	26	5		12.5	35	-	-	M12	0.10 Kg	RD∞0702
NT-RD07 D035-M16-Z05	▽	35	5		17	43	-	-	M16	0.24 Kg	RD∞0702
NT-RD10 D021-M10-Z02	▽	21	2		10.5	30	-	-	M10	0.05 Kg	RD∞1003
SCREW-IN - WITH COOLANT HOLES											
NT-RD07H D016-M08-Z03	●	16	3		8.5	23	-	-	M8	0.02 Kg	RD∞0702
NT-RD07H D020-M10-Z03	●	20	3		10.5	30	-	-	M10	0.06 Kg	RD∞0702
NT-RD07H D025-M12-Z04	●	25	4		12.5	35	-	-	M12	0.09 Kg	RD∞0702
NT-RD07H D035-M16-Z06	●	35	6		17	43	-	-	M16	0.22 Kg	RD∞0702
NT-RD10H D020-M10-Z02	●	20	2		10.5	30	-	-	M10	0.05 Kg	RD∞1003
NT-RD10H D025-M12-Z03	●	25	3		12.5	35	-	-	M12	0.09 Kg	RD∞1003
NT-RD10H D026-M12-Z03	●	26	3		12.5	35	-	-	M12	0.09 Kg	RD∞1003
NT-RD10H D030-M12-Z03	●	30	3		12.5	35	-	-	M12	0.11 Kg	RD∞1003

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

Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
NT-RD10H D032-M16-Z03	●	32	3		17	43	-	-	M16	0.20 Kg	RDoo1003
NT-RD10H D032-M16-Z04	●	32	4		17	43	-	-	M16	0.18 Kg	RDoo1003
NT-RD10H D035-M16-Z03	●	35	3		17	43	-	-	M16	0.22 Kg	RDoo1003
NT-RD10H D035-M16-Z04	●	35	4		17	43	-	-	M16	0.20 Kg	RDoo1003
NT-RD10H D040-M16-Z04	●	40	4		17	43	-	-	M16	0.24 Kg	RDoo1003
NT-RD10H D042-M16-Z05	●	42	5		17	43	-	-	M16	0.21 Kg	RDoo1003
CYLINDRICAL - WITHOUT COOLANT HOLES											
NT-RD05 D009-S08-Z02	▽	9	2		8	100	12	-	-	0.04 Kg	RDoo0501
NT-RD05 D011-S10-Z02	▽	11	2		10	100	15	-	-	0.06 Kg	RDoo0501
NT-RD05 D013-S12-Z03	▽	13	3		12	100	18	-	-	0.08 Kg	RDoo0501
NT-RD05 D017-S16-Z04	▽	17	4		16	150	20	-	-	0.23 Kg	RDoo0501
NT-RD07 D021-S20-Z03	▽	21	3		20	150	25	-	-	0.35 Kg	RDoo0702
NT-RD07 D026-S25-Z05	▽	26	5		25	150	25	-	-	0.55 Kg	RDoo0702
NT-RD07 D035-S32-Z06	▽	35	6		32	150	30	-	-	0.92 Kg	RDoo0702
CYLINDRICAL - WITH COOLANT HOLES											
NT-RD05H D010-S10-Z02	●	10	2		10	100	18	-	-	0.05 Kg	RDoo0501
NT-RD05H D012-S12-Z03	●	12	3		12	100	22	-	-	0.07 Kg	RDoo0501
NT-RD05H D016-S16-Z04	●	16	4		16	150	30	-	-	0.21 Kg	RDoo0501
NT-RD07H D016-S16-Z02	●	16	2		16	150	25	-	-	0.21 Kg	RDoo0702
NT-RD07H D017-S16-Z02	●	17	2		16	150	20	-	-	0.20 Kg	RDoo0702
NT-RD07H D020-S20-Z03	●	20	3		20	150	35	-	-	0.33 Kg	RDoo0702
NT-RD07H D025-S25-Z05	●	25	5		25	150	40	-	-	0.51 Kg	RDoo0702
NT-RD10H D020-S20-Z02	●	20	2		20	150	40	-	-	0.32 Kg	RDoo1003
NT-RD10H D021-S20-Z02	●	21	2		20	150	25	-	-	0.34 Kg	RDoo1003
NT-RD10H D025-S25-Z03	●	25	3		25	150	40	-	-	0.50 Kg	RDoo1003
NT-RD10H D026-S25-Z03	●	26	3		25	150	25	-	-	0.52 Kg	RDoo1003
NT-RD10H D030-S25-Z03	●	30	3		25	150	25	-	-	0.53 Kg	RDoo1003
NT-RD10H D032-S32-Z03	●	32	3		32	150	40	-	-	0.82 Kg	RDoo1003
NT-RD10H D035-S32-Z04	●	35	4		32	150	35	-	-	0.85 Kg	RDoo1003
ARBOR - WITHOUT COOLANT HOLES											
NT-RD16 D066-F22-Z05	▽	66	5		22	50	-	56	-	0.62 Kg	RDoo1604
ARBOR - WITH COOLANT HOLES											
NT-RD10H D042-F16-Z05	●	42	5		16	40	-	35	-	0.20 Kg	RDoo1003
NT-RD10H D052-F22-Z06	●	52	6		22	40	-	46	-	0.33 Kg	RDoo1003
NT-RD12H D040-F16-Z04	○	40	4		16	50	-	-	-	-	RDoo1204
NT-RD12H D042-F16-Z04	●	42	4		16	50	-	38	-	0.25 Kg	RDoo1204
NT-RD12H D050-F22-Z04	●	50	4		22	50	-	46	-	0.35 Kg	RDoo1204
NT-RD12H D050-F22-Z05	●	50	5		22	50	-	46	-	0.37 Kg	RDoo1204
NT-RD12H D052-F22-Z04	●	52	4		22	50	-	46	-	0.40 Kg	RDoo1204
NT-RD12H D052-F22-Z05	●	52	5		22	50	-	46	-	0.42 Kg	RDoo1204
NT-RD12H D063-F22-Z05	●	63	5		22	50	-	52	-	0.56 Kg	RDoo1204
NT-RD12H D063-F22-Z06	●	63	6		22	50	-	52	-	0.58 Kg	RDoo1204
NT-RD12H D066-F22-Z06	●	66	6		22	50	-	56	-	0.71 Kg	RDoo1204
NT-RD12H D080-F27-Z07	●	80	7		27	50	-	60	-	0.93 Kg	RDoo1204
NT-RD16H D063-F22-Z05	●	63	5		22	50	-	52	-	0.50 Kg	RDoo1604
NT-RD16H D066-F27-Z05	●	66	5		27	50	-	56	-	0.56 Kg	RDoo1604
NT-RD16H D080-F27-Z05	●	80	5		27	50	-	60	-	0.85 Kg	RDoo1604
NT-RD16H D080-F27-Z06	●	80	6		27	50	-	60	-	0.87 Kg	RDoo1604
NT-RD16H D100-F32-Z07	●	100	7		32	50	-	70	-	1.22 Kg	RDoo1604
NT-RD16H D125-F40-Z08	●	125	8		40	63	-	90	-	2.50 Kg	RDoo1604

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

Spare parts	Insert screws	Flag wrenches	Clamping set
NT-RD05o DCX ≤ 10	NT-ST20033T06	NT-FTB06	-
NT-RD05o DCX ≥ 11	NT-ST20040T06	NT-FTB06	-
NT-RD07o Dooo-ooo-Zoo	NT-ST25056T08HQ	NT-FTB08	-
NT-RD10o DCX ≤ 26	NT-ST35070T15	NT-FTB15	-

Spare parts	Insert screws	Flag wrenches	Clamping set
NT-RD10o DCX = 30	NT-ST35095T15HQ	NT-FTB15	-
NT-RD10o DCX ≥ 32	NT-ST35095T15HQ	NT-FTB15	NT-CS013
NT-RD12H Dooo-ooo-Zoo	NT-ST40110T15HQ	NT-FTB15	NT-CS014
NT-RD16H Dooo-ooo-Zoo	NT-ST45110T20	NT-FTB20	NT-CS021

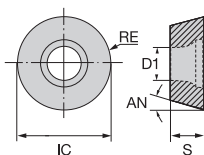
RD
RoundPlus RD

- GP geometry is for general purpose use, SC geometry is sharper
- Reinforced with chamfer edge type available in multiple sizes
- Both PVD and CVD coated different carbide grades available
- Different dots fits with the same universal-clamp on our cutters
- Very reliable and cost efficient solution for multiple purpose and massive metal removal operations

 HC: Coated carbide
 HF: Micrograin carbide
 HT: Cermet
 CVD: Chemical vapour deposition
 PVD: Physical vapour deposition

HC CVD	HF PVD	HF PVD	HF PVD	HF PVD	HF PVD	HT
JC9540	JP5520	JP5530	JP7525	JP8725	JP9535	JU4525

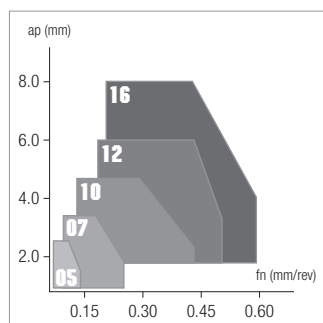
Stable machining, light cut	● 1 st choice	○ suitable
General machining, medium cut	● 1 st choice	○ suitable
Unstable machining, heavy cut	⚙ 1 st choice	⚙ suitable

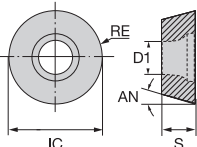
Dimensions
ISO
Vc(m/min) - suggested cutting speed range (bold: 1st choice)


P	100 260	100 260	100 280	130 300
M	90 210	60 180	60 180	80 200
K			140 300	
N				
S	30 70			20 60
H				

Designation		RE	IC	S	D1	AN	Stock									
GENERAL	GP P M S	RDET0803M0E-GP	4	8	3.18	2.9	15°			○						
		RDET1003M0E-GP	5	10	3.18	4.4	15°		▽	●		▲	●			
		RDET1073M0E-GP	5	10	3.97	4.4	15°			○		○				
		RDET1204M0E-GP	6	12	4.76	4.4	15°	●		●		▲	●			
		RDMT1204M0E-GP	6	12	4.76	4.4	15°			●						
		RDET1604M0E-GP	8	16	4.76	5.5	15°			○		●	●			
LOW FORCE	SC P	RDET1204M0E-SC	6	12	4.76	4.4	15°			○						
		RDET1604M0E-SC	8	16	4.76	5.5	15°		▽	●		▲				
REINFORCED	MOE P M K	RDEW0501M0E	2.5	5	1.51	2.2	15°			●	●	●	○			
		RDEW0702M0E	3.5	7	2.38	2.8	15°						●	▽		
REINFORCED	MOT P K	RDEW0702M0T	3.5	7	2.38	2.8	15°		▽	●	●	▲				
		RDEW1003M0T	5	10	3.18	4.4	15°			●	●	●				
		RDEW1073M0T	5	10	3.97	4.4	15°		▽	●						
		RDEW1204M0T	6	12	4.76	4.4	15°			●	○	●				
		RDEW1604M0T	8	16	4.76	5.5	15°			●	●	●				
		RDMW1604M0T	8	16	4.76	5.5	15°			●		●				
REINFORCED	MOT P	RDMW1204M0T-D6	6	12	4.76	4.4	15°					●				
		RDEW1605M0T-D6	8	16	5.66	5.5	15°		▽							

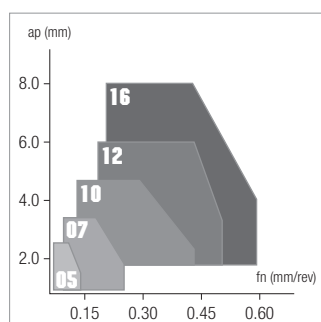
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



RD	HC: Coated carbide HF: Micrograin carbide HT: Cermet CVD: Chemical vapour deposition PVD: Physical vapour deposition						
	HC CVD	HF PVD	HF PVD	HF PVD	HF PVD	HF PVD	HT
RoundPlus RD	JP9540	JP5520	JP5530	JP7525	JP8725	JP9535	JU4525
- GP geometry is for general purpose use, SC geometry is sharper - Reinforced with chamfer edge type available in multiple sizes - Both PVD and CVD coated different carbide grades available - Different dots fits with the same universal-clamp on our cutters - Very reliable and cost efficient solution for multiple purpose and massive metal removal operations	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	100 260	100 260	100 280	130 300		
	M	90 210	60 180	60 180	80 200		
	K			140 300			
	N						
	S	30 70			20 60		
	H						

Designation		RE	IC	S	D1	AN	Stock				
REINFORCED  flat type - 8 dots chamfered edge	MOT P	RDEW12T3MOT-D8	6	12	3.97	4.4	15°		○	●	
		RDEW1204MOT-D8	6	12	4.76	4.4	15°		○		
		RDMW1204MOT-D8	6	12	4.76	4.4	15°		○		
		RDMW1605MOT-D8	8	16	5.66	5.5	15°		●		

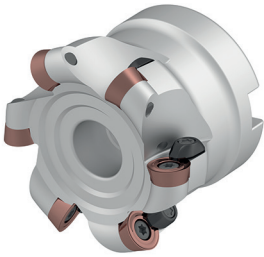
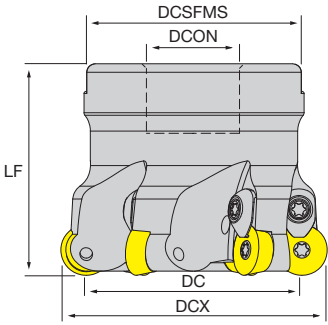
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



NT-RP

RoundPlus RP

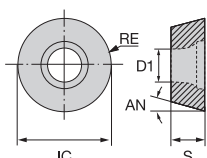
- Positive general face milling cutters for RP inserts
- All with coolant through
- High clearance angle useful for M and S material roughing



Designation	Stock	DCX	CICT	DC	DCON	LF	LU	DCSFMS	CRKS	WT	MIID
NT-RP12H D042-F16-Z04	●	42	4		16	50	-	38	-	0.26 Kg	RPoo1204
NT-RP12H D050-F22-Z05	●	50	5		22	50	-	46	-	0.40 Kg	RPoo1204
NT-RP12H D052-F22-Z05	●	52	5		22	50	-	46	-	0.40 Kg	RPoo1204
NT-RP12H D063-F22-Z06	●	63	6		22	50	-	52	-	0.59 Kg	RPoo1204
NT-RP12H D066-F22-Z06	●	66	6		22	50	-	56	-	0.73 Kg	RPoo1204
NT-RP12H D080-F27-Z07	●	80	7		27	50	-	60	-	0.94 Kg	RPoo1204

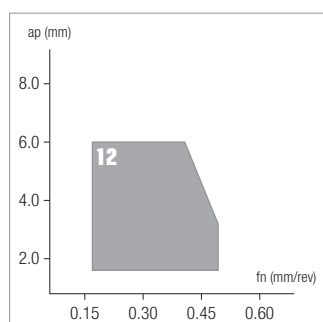
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches	Clamping set
NT-RP12H Dooo-Foo-Zoo	NT-ST40110T15HQ	NT-FTB15	NT-CS013

RP	HC: Coated carbide HF: Micrograin carbide CVD: Chemical vapour deposition PVD: Physical vapour deposition				HC CVD	HF PVD	HF PVD	HF PVD									
					JP9540	JP5530	JP8725	JP9535									
RoundPlus RP																	
	Stable machining, light cut ● 1 st choice ○ suitable						○										
	General machining, medium cut ● 1 st choice ○ suitable				●	●	●	●									
	Unstable machining, heavy cut ▲ 1 st choice ▼ suitable				▲	▼		▲									
- Sharp / general purpose /reinforced with chamfer edge types available - Flat top surface or with geometries all fit with the same universal-clamp on our cutters - Both PVD and CVD coated different carbide grades available - Very reliable and cost efficient solution for roughing, especially on stainless steel or heat resistant super alloys	Dimensions				ISO					Vc(m/min) - suggested cutting speed range (bold: 1 st choice)							
					P					100 260	100 280						
					M				90 210	60 180		80 200					
					K												
					N												
					S				30 70			20 60					
					H												

Designation		RE	IC	S	D1	AN	Stock			
GENERAL GP P M S	 chipbreaker type honed edge	RPET1204M0E-GP	6	12	4.76	4.4	11°		●	●
		RPMT1204M0E-GP	6	12	4.76	4.4	11°	●	●	
LOW FORCE SC P	 chipbreaker type honed edge	RPET1204M0E-SC	6	12	4.76	4.4	11°	○		
REINFORCED MOT P	 flat type chamfered edge	RPEW1204M0T	6	12	4.76	4.4	11°	●		
		RPMW1204M0T	6	12	4.76	4.4	11°	●	●	

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



	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP5530			JP8725			JU4225		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	100%	100	140	180	100	150	200	130	180	230
				30%	160	200	240	160	210	260	200	240	280
				10%	220	240	260	220	250	280	260	280	300
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	100%	80	120	160	90	130	170	120	150	180
				30%	120	160	200	130	170	210	180	210	240
				10%	180	200	220	190	210	230	230	250	270
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	100%	60	90	120	80	110	140	90	120	150
				30%	100	130	160	120	150	180	150	180	210
				10%	140	170	200	160	190	220	190	220	250
	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC9540			JP5530			JP9535		
					min	start	max	min	start	max	min	start	max
	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	100%	90	130	170	60	100	140	80	120	160
				30%	110	160	210	80	130	180	100	150	200
				10%	130	190	250	100	160	220	120	180	240
C - GROOVING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	100%	70	100	130				60	90	120
				30%	80	110	140				70	100	130
				10%	90	120	150				80	110	140
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	100%	90	120	150	60	90	120	80	110	140
				30%	110	150	190	80	120	160	100	140	180
				10%	130	170	210	100	140	180	120	160	200
D - MILLING	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		100%	80	110	140				70	100	130
				30%	90	120	150				80	110	140
				100%	100	130	160				90	120	150
	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP7525								
					min	start	max						
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	100%	140	180	220						
				30%	160	210	260						
				10%	180	240	300						
E - DRILLING	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	100%	100	140	180						
				30%	120	170	220						
				10%	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%	90	120	150						
				30%	120	150	180						
				10%	150	180	210						
	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JC9540			JP9535					
					min	start	max	min	start	max			
F - ACCESSORIES	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		100%	30	40	50	20	30	40			
				30%	40	50	60	30	40	50			
				10%	50	60	70	40	50	60			
	S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		100%				40	50	60			
				30%				50	60	70			
				10%				60	70	80			

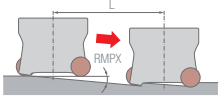
ae: radial depth of cut; DC: milling cutter diameter

Complete workpiece materials p. H1.

DESIGNATION	ae/DCX	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
IC=10 GP chipbreaker	100%	0.50	1.50	2.50	0.10	0.18	0.26
	30%	1.00	3.00	5.00	0.12	0.21	0.30
	10%	1.00	3.00	5.00	0.16	0.28	0.40
IC=12 GP chipbreaker	100%	1.00	2.00	3.00	0.12	0.23	0.34
	30%	1.00	3.50	6.00	0.16	0.28	0.40
	10%	1.00	3.50	6.00	0.20	0.35	0.50
IC=16 GP chipbreaker	100%	1.00	2.50	4.00	0.16	0.28	0.40
	30%	1.00	4.50	8.00	0.20	0.33	0.46
	10%	1.00	4.50	8.00	0.24	0.42	0.60
IC=20 GP chipbreaker	100%	1.00	3.00	5.00	0.18	0.33	0.48
	30%	1.00	5.50	10.00	0.22	0.40	0.58
	10%	1.00	5.50	10.00	0.30	0.50	0.70
IC=12 SC chipbreaker	100%	1.00	2.00	3.00	0.12	0.20	0.28
	30%	1.00	3.50	6.00	0.14	0.24	0.34
	10%	1.00	3.50	6.00	0.16	0.28	0.40
IC=16 SC chipbreaker	100%	1.00	2.50	4.00	0.14	0.25	0.36
	30%	1.00	4.50	8.00	0.18	0.30	0.42
	10%	1.00	4.50	8.00	0.22	0.35	0.48

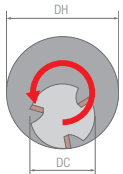
DESIGNATION	ae/DCX	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
IC=05 Flat (MOE)	100%	0.25	0.75	1.25	0.04	0.06	0.08
	30%	0.50	1.50	2.50	0.06	0.08	0.10
	10%	0.50	1.50	2.50	0.08	0.10	0.12
IC=07 Flat (MOE, MOT)	100%	0.25	1.00	1.75	0.08	0.12	0.16
	30%	0.50	2.00	3.50	0.10	0.15	0.20
	10%	0.50	2.00	3.50	0.12	0.18	0.24
IC=10 Flat (MOT)	100%	0.50	1.50	2.50	0.12	0.20	0.28
	30%	1.00	3.00	5.00	0.15	0.25	0.35
	10%	1.00	3.00	5.00	0.18	0.30	0.42
IC=12 Flat (MOT)	100%	1.00	2.00	3.00	0.16	0.27	0.38
	30%	1.00	3.50	6.00	0.20	0.34	0.48
	10%	1.00	3.50	6.00	0.24	0.40	0.56
IC=16 Flat (MOT)	100%	1.00	2.50	4.00	0.19	0.32	0.45
	30%	1.00	4.50	8.00	0.24	0.40	0.56
	10%	1.00	4.50	8.00	0.28	0.47	0.66

Parameters for ramping

	NT-RD05H			NT-RD07H			NT-RD10H		
	DCX	RMPX	L	DCX	RMPX	L	DCX	RMPX	L
	10	6.2°	2.1	16	4.7°	2.6	20	9.4°	6.6
	12	4.4°	1.8	17	4.1°	2.4	21	6.6°	4.8
	13	3.6°	1.6	20	3.3°	2.2	25	4.4°	3.9
	16	2.0°	1.0	25	2.3°	2.0	26	4.3°	3.9
	17	2.0°	1.0	35	2.0°	1.0	30	3.2°	3.4
							32	1.2°	1.5
							35	1.0°	1.4
							40	0.9°	1.4
							42	0.8°	1.3
							52	0.6°	0.9

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

Parameters for helical milling

	NT-RD05H			NT-RD07H			NT-RD10H		
	DCX	DH min.	DH max.	DCX	DH min.	DH max.	DCX	DH min.	DH max.
	10	12	18	16	24	30	20	22	38
	12	16	22	17	26	32	21	24	40
	13	18	24	20	32	38	25	32	48
	16	24	30	25	42	48	26	34	50
	17	26	32	35	62	68	30	42	58
							32	46	62
							35	52	68
							40	62	78
							42	66	82
							52	86	102

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