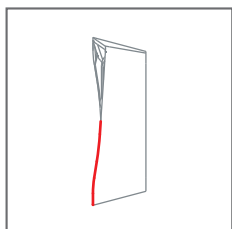


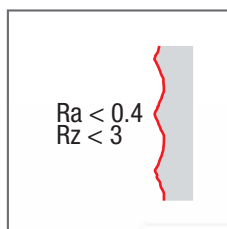


REKPLUS ACTION

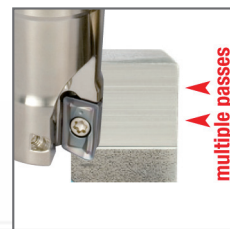
Il meglio per lo spallamento



helical cutting
edge profile



excellent surface finishing
($R_z < 3\mu\text{m}$ and
 $R_a < 0.4\mu\text{m}$ is now possible!)



no signs
on shouldering wall

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

Inserti: NT-RKP11 HGP/HSC
Corpi fresa: NT-RKP11

Inserti: NT-RKP16 HGP/HSC
Corpi fresa: NT-RKP16

nixkoTOOLS

uemme
TOOLS and EQUIPMENT

REKPLUS

Versatile shoulder milling cutters capable of ramping for diverse application

APPLICATION

- Shoulder milling
- Long overhang milling
- Profiling and Pocketing
- Linear and helical ramping

ISO APPLICATION FIELDS

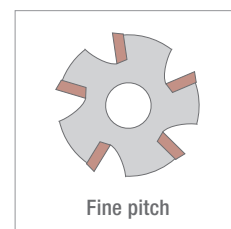
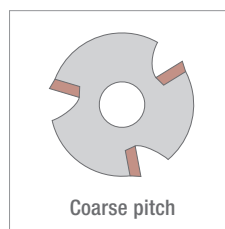
P M K N S

ADVANTAGES AND CHARACTERISTICS

- Inserts of helical geometry type can produce high precision 90°.
- The straight geometries are suitable for roughing without special finishing needs and ensure excellent competitiveness.
- Extremely complete range of cutter bodies with cylindrical shank (Weldon also available), both with standard and 10xD lengths, with threaded connection plus 10xD extensive sleeves, all with internal cooling.

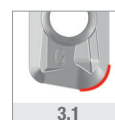
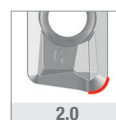
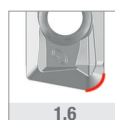
• Cutter bodies

- Arbor type
- Cylindrical type (up to 10xD)
- Screw-in type
- Extension sleeves (steel/carbide 10xD)
- From D16 to D100

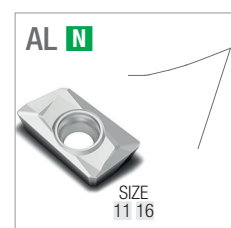
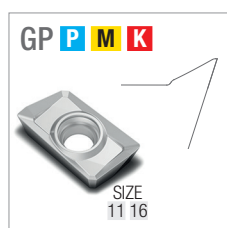


• Inserts

- 2 cutting edges
- Edge length 11 and 16
- Cemented carbide grades with CVD and PVD coatings
- Geometries: HSC, HGP, GP, TE, AL.



Helical geometries are available with a wide range of radii.

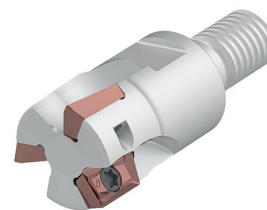
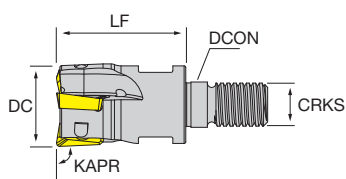


NT-RKP

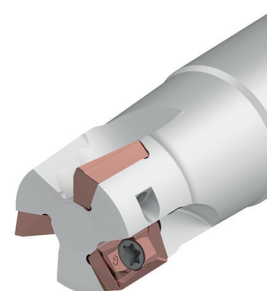
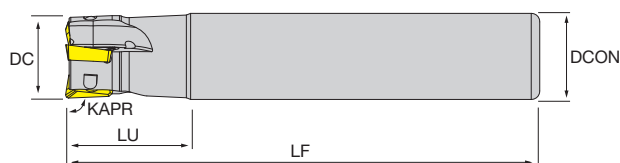
RekPlus

- Positive type precision shoulder milling system, with coolant through
- Tolerance of tool diameter (with Nikko inserts installed) 0/-0.2
- 10xD cylindrical body and screw-in type for applications that need long-overhang
- High-Quality Swiss screws available to guarantee your machining process

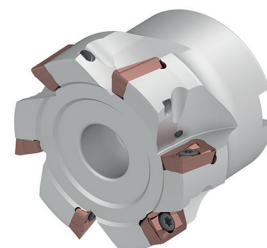
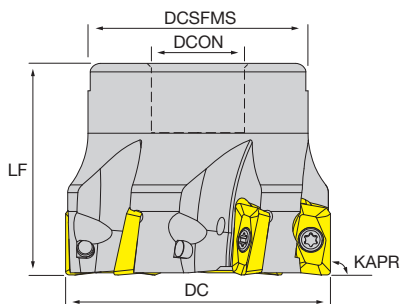
Screw-in



Cylindrical



Arbor



Designation	Stock	DC	CICT	DCON	LF	LU	DCSFMS	CRKS	KAPR	WT	MIID
SCREW-IN											
NT-RKP11 D016-M08-Z02	●	16	2	8.5	25	-	-	M8	90°	0.03 Kg	NT-RKP11
NT-RKP11 D020-M10-Z03	●	20	3	10.5	38	-	-	M10	90°	0.07 Kg	NT-RKP11
NT-RKP11 D025-M12-Z03	●	25	3	12.5	38	-	-	M12	90°	0.12 Kg	NT-RKP11
NT-RKP11 D025-M12-Z04	●	25	4	12.5	38	-	-	M12	90°	0.11 Kg	NT-RKP11
NT-RKP11 D032-M16-Z04	●	32	4	17	43	-	-	M16	90°	0.23 Kg	NT-RKP11
NT-RKP11 D032-M16-Z05	●	32	5	17	43	-	-	M16	90°	0.22 Kg	NT-RKP11
NT-RKP16 D025-M12-Z02	●	25	2	12.5	38	-	-	M12	90°	0.11 Kg	NT-RKP16
NT-RKP16 D032-M16-Z03	●	32	3	17	43	-	-	M16	90°	0.19 Kg	NT-RKP16
NT-RKP16 D040-M16-Z04	●	40	4	17	43	-	-	M16	90°	0.24 Kg	NT-RKP16
CYLINDRICAL											
NT-RKP11 D016-S16-Z02	●	16	2	16	100	25	-	-	90°	0.13 Kg	NT-RKP11
NT-RKP11 D020-S20-Z03	●	20	3	20	110	30	-	-	90°	0.23 Kg	NT-RKP11
NT-RKP11 D025-S25-Z03	●	25	3	25	120	35	-	-	90°	0.41 Kg	NT-RKP11
NT-RKP11 D025-S25-Z04	●	25	4	25	120	35	-	-	90°	0.40 Kg	NT-RKP11
NT-RKP11 D032-S32-Z04	●	32	4	32	130	35	-	-	90°	0.74 Kg	NT-RKP11
NT-RKP11 D032-S32-Z05	●	32	5	32	130	35	-	-	90°	0.73 Kg	NT-RKP11
NT-RKP16 D025-S25-Z02	●	25	2	25	120	35	-	-	90°	0.40 Kg	NT-RKP16
NT-RKP16 D032-S32-Z03	●	32	3	32	130	45	-	-	90°	0.71 Kg	NT-RKP16
CYLINDRICAL - LONG TYPE (10XD)											
NT-RKP11 D016-S15-Z02-L	●	16	2	15	160	25	-	-	90°	0.19 Kg	NT-RKP11
NT-RKP11 D016-S16-Z02-L	●	16	2	16	160	25	-	-	90°	0.21 Kg	NT-RKP11
NT-RKP11 D017-S16-Z02-L	●	17	2	16	170	25	-	-	90°	0.23 Kg	NT-RKP11
NT-RKP11 D020-S19-Z03-L	●	20	3	19	200	30	-	-	90°	0.39 Kg	NT-RKP11
NT-RKP11 D020-S20-Z03-L	●	20	3	20	200	30	-	-	90°	0.43 Kg	NT-RKP11
NT-RKP11 D021-S20-Z03-L	●	21	3	20	210	30	-	-	90°	0.46 Kg	NT-RKP11

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

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

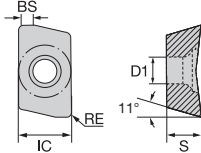
F - ACCESSORIES

G - SPARE PARTS

Designation	Stock	DC	CICT	DCON	LF	LU	DCSFMS	CRKS	KAPR	WT	MIID
NT-RKP11 D025-S24-Z03-L	●	25	3	25	250	35	-	-	90°	0.82 Kg	NT-RKP11
NT-RKP11 D025-S25-Z03-L	●	25	3	25	250	35	-	-	90°	0.89 Kg	NT-RKP11
NT-RKP11 D026-S25-Z03-L	●	26	3	25	260	35	-	-	90°	0.94 Kg	NT-RKP11
CYLINDRICAL - REDUCED SHANK											
NT-RKP11 D020-S16-Z03	●	20	3	16	110	30	-	-	90°	0.15 Kg	NT-RKP11
NT-RKP11 D025-S20-Z03	●	25	3	20	120	35	-	-	90°	0.28 Kg	NT-RKP11
NT-RKP11 D028-S25-Z04	○	28	4	25	120	35	-	-	90°	-	NT-RKP11
NT-RKP11 D030-S25-Z04	○	30	4	25	130	35	-	-	90°	-	NT-RKP11
NT-RKP11 D032-S25-Z04	●	32	4	25	130	35	-	-	90°	0.49 Kg	NT-RKP11
NT-RKP16 D040-S32-Z04	●	40	4	32	150	45	-	-	90°	0.89 Kg	NT-RKP16
CYLINDRICAL - WELDON CONNECTION											
NT-RKP11 D016-W16-Z02	●	16	2	16	80	25	-	-	90°	0.10 Kg	NT-RKP11
NT-RKP11 D020-W20-Z03	●	20	3	20	90	30	-	-	90°	0.18 Kg	NT-RKP11
NT-RKP11 D025-W25-Z04	●	25	4	25	100	35	-	-	90°	0.32 Kg	NT-RKP11
ARBOR											
NT-RKP11 D032-F16-Z04	●	32	4	16	40	-	28	-	90°	0.11 Kg	NT-RKP11
NT-RKP11 D040-F16-Z05	●	40	5	16	40	-	35	-	90°	0.22 Kg	NT-RKP11
NT-RKP11 D040-F16-Z06	●	40	6	16	40	-	35	-	90°	0.20 Kg	NT-RKP11
NT-RKP11 D050-F22-Z05	●	50	5	22	40	-	40	-	90°	0.33 Kg	NT-RKP11
NT-RKP11 D050-F22-Z07	●	50	7	22	40	-	46	-	90°	0.37 Kg	NT-RKP11
NT-RKP11 D063-F22-Z06	●	63	6	22	40	-	50	-	90°	0.59 Kg	NT-RKP11
NT-RKP11 D063-F22-Z08	●	63	8	22	40	-	50	-	90°	0.57 Kg	NT-RKP11
NT-RKP11 D080-F27-Z07	●	80	7	27	50	-	60	-	90°	1.21 Kg	NT-RKP11
NT-RKP11 D080-F27-Z10	●	80	10	27	50	-	60	-	90°	1.07 Kg	NT-RKP11
NT-RKP16 D040-F16-Z04	●	40	4	16	40	-	35	-	90°	0.19 Kg	NT-RKP16
NT-RKP16 D040-F16-Z05	●	40	5	16	40	-	35	-	90°	0.18 Kg	NT-RKP16
NT-RKP16 D050-F22-Z04	●	50	4	22	40	-	40	-	90°	0.29 Kg	NT-RKP16
NT-RKP16 D050-F22-Z05	●	50	5	22	40	-	40	-	90°	0.27 Kg	NT-RKP16
NT-RKP16 D063-F22-Z05	●	63	5	22	40	-	50	-	90°	0.53 Kg	NT-RKP16
NT-RKP16 D063-F22-Z06	●	63	6	22	40	-	50	-	90°	0.51 Kg	NT-RKP16
NT-RKP16 D080-F27-Z06	●	80	6	27	50	-	60	-	90°	1.09 Kg	NT-RKP16
NT-RKP16 D080-F27-Z08	●	80	8	27	50	-	60	-	90°	1.06 Kg	NT-RKP16
NT-RKP16 D100-F32-Z07	●	100	7	32	50	-	80	-	90°	1.90 Kg	NT-RKP16
NT-RKP16 D100-F32-Z09	●	100	9	32	50	-	80	-	90°	1.85 Kg	NT-RKP16

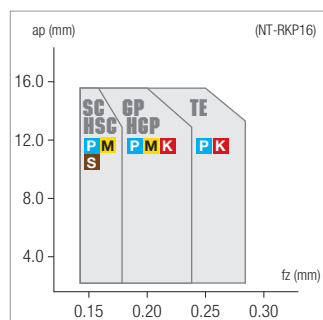
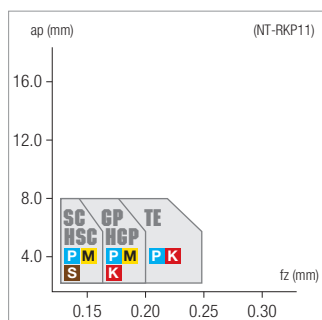
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
		
NT-RKP11 D000-000-Z00	NT-ST25056T08HQ	NT-FTB08
NT-RKP16 D000-000-Z00	NT-ST40095T15HQ	NT-FTB15

NT-RKP		HC: Coated carbide HF: Micrograin carbide HT: Cermet CVD: Chemical vapour deposition PVD: Physical vapour deposition															
RekPlus																	
- HGP and HSC are high precision helical type geometries, better guarantee your shouldering precision - GP, TE and SC are economical straight type geometries - Available in different radii besides R0.8, such as R0.4, 1.2, 1.6, 2.0, 3.1 - Available with cermet and diverse carbide grades covering PMKNS applications - Aluminum type available with different radius. For more possibilities for non ferrous materials, please go to AluRek series - For H materials please go to advanced milling chapter		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													
		 2 edges		Vc(m/min) - suggested cutting speed range (bold: 1 st choice)													
P	100 260			100 260	80 220				100 260	100 280			130 300				
M	60 180			60 180	60 180						80 200	80 180					
K	180 360						140 300	140 300									
N														300 1100			
S					20 50						20 60	20 50					
H																	

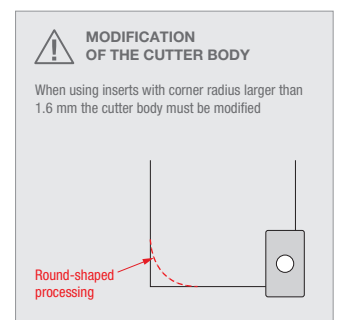
GENERAL	 helical type all-around application	Designation	RE	IC	S	D1	BS	Stock									
		NT-RKP11R04M-HGP	0.4	6.35	3.5	2.8	1.2						●				
		NT-RKP11R08M-HGP	0.8	6.35	3.5	2.8	0.7			●		●	●				
		NT-RKP11R12M-HGP	1.2	6.35	3.5	2.8	0.5					●		●			
		NT-RKP11R16M-HGP	1.6	6.35	3.5	2.8	-					●		●			
		NT-RKP16R08M-HGP	0.8	9.525	4.76	4.5	0.7			▲		●	▲	●			
		NT-RKP16R12M-HGP	1.2	9.525	4.76	4.5	0.5					●		●			
		NT-RKP16R16M-HGP	1.6	9.525	4.76	4.5	-					●		●			
		NT-RKP16R20M-HGP	2	9.525	4.76	4.5	-					●		●			
		NT-RKP16R31M-HGP	3.1	9.525	4.76	4.5	-					●		●			
LOW FORCE	 helical type low cutting force	HSC P M S															
		NT-RKP11R04M-HSC	0.4	6.35	3.5	2.8	1.2					●		●			
		NT-RKP11R08M-HSC	0.8	6.35	3.5	2.8	0.7			●			●	●			
		NT-RKP11R12M-HSC	1.2	6.35	3.5	2.8	0.5					●		●			
		NT-RKP16R08M-HSC	0.8	9.525	4.76	4.5	0.7			▲		●	▲	●			
		NT-RKP16R12M-HSC	1.2	9.525	4.76	4.5	0.5					●		●			

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



⚠ UPCOMING GRADES UPDATE (only for helical type)

OLD	NEW
JP8625	JP8725
JP9635	JP9535 JP5540
JP7615	JP7525



A - TURNING	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP5530			JP5540			JP8625		
	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	100%	min	start	max	min	start	max	min	start	max
				30%	100	140	180	80	120	160	100	140	180
				10%	160	200	240	120	160	200	160	200	240
B - THREADING	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	100%	80	120	160	60	100	140	80	120	160
				30%	120	160	200	100	140	180	120	160	200
				10%	180	200	220	160	180	200	180	200	220
C - GROOVING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	100%	60	90	120				60	90	120
				30%	100	130	160				100	130	160
				10%	140	170	200				140	170	200
D - MILLING	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP5530			JP5540			JP9535		
	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	100%	min	start	max	min	start	max	min	start	max
				30%	60	100	140	60	100	140	80	120	160
				10%	80	130	180	80	130	180	100	150	200
E - DRILLING	P8	Precipitation hardening stainless steel (ex. 1.4548/5 CrNiCuNb 17 4/17-4-PH)	≤ 450	100%				50	80	110	60	90	120
				30%				60	90	120	70	100	130
				10%				70	100	130	80	110	140
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	100%	60	90	120	60	90	120	80	110	140
30%				80	120	160	80	120	160	100	140	180	
10%				100	140	180	100	140	180	120	160	200	
F - ACCESSORIES	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		100%				60	90	120	70	100	130
				30%				70	100	130	80	110	140
								80	110	140	90	120	150
G - SPARE PARTS	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP7525			JP7615					
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	100%	min	start	max	min	start	max			
				30%	140	180	220	140	180	220			
				10%	160	210	260	160	210	260			
H - OTHER	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	100%	100	140	180	100	140	180			
				30%	120	170	220	120	170	220			
				10%	140	200	260	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	90	120	150			
30%				120	150	180	120	150	180				
10%				150	180	210	150	180	210				
I - OTHER	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JU6520								
	N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		100%	min	start	max						
				30%	300	400	500						
				10%	400	600	800						
N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AlSi12)		100%	200	250	300							
			30%	300	350	400							
			10%	400	450	500							
J - SPECIAL	ISO 513	MATERIAL	HARDNESS HB	ae/DC	JP5540			JP9535			JP9635		
	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		100%	min	start	max	min	start	max	min	start	max
				30%	20	25	30	20	30	40	20	25	30
				10%	30	35	40	30	40	50	30	35	40
S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		100%	40	45	50	40	50	60	40	45	50	
			30%	40	40	50	40	50	60	40	50	60	
			10%	50	60	70	60	70	80	50	60	70	

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

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

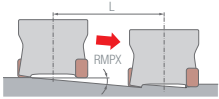
F - ACCESSORIES

G - SPARE PARTS

DESIGNATION	ae/DC	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
NT-RKP11R00M-HGP	100%	1.00	2.50	4.00	0.06	0.09	0.12
	30%	1.00	4.50	8.00	0.08	0.11	0.14
	10%	1.00	4.50	8.00	0.10	0.15	0.20
NT-RKP16R00M-HGP	100%	1.00	4.00	7.00	0.10	0.13	0.16
	30%	1.00	8.00	15.00	0.12	0.16	0.20
	10%	1.00	8.00	15.00	0.16	0.20	0.24
NT-RKP11R00M-HSC	100%	1.00	2.50	4.00	0.04	0.07	0.10
	30%	1.00	4.50	8.00	0.06	0.09	0.12
	10%	1.00	4.50	8.00	0.08	0.12	0.16
NT-RKP16R00M-HSC	100%	1.00	4.00	7.00	0.06	0.10	0.14
	30%	1.00	8.00	15.00	0.10	0.13	0.16
	10%	1.00	8.00	15.00	0.12	0.15	0.18

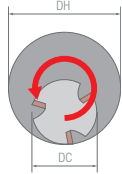
DESIGNATION	ae/DC	DEPTH OF CUT			FEED RATE		
		ap (mm)			fz (mm)		
		min	start	max	min	start	max
NT-RKP11R08M-GP	100%	1.00	2.50	4.00	0.06	0.09	0.12
	30%	1.00	4.50	8.00	0.08	0.11	0.14
	10%	1.00	4.50	8.00	0.10	0.15	0.20
NT-RKP16R08M-GP	100%	1.00	4.00	7.00	0.10	0.13	0.16
	30%	1.00	8.00	15.00	0.12	0.16	0.20
	10%	1.00	8.00	15.00	0.16	0.20	0.24
NT-RKP11R08M-SC	100%	1.00	2.50	4.00	0.04	0.07	0.10
	30%	1.00	4.50	8.00	0.06	0.09	0.12
	10%	1.00	4.50	8.00	0.08	0.12	0.16
NT-RKP16R08M-SC	100%	1.00	4.00	7.00	0.06	0.10	0.14
	30%	1.00	8.00	15.00	0.10	0.13	0.16
	10%	1.00	8.00	15.00	0.12	0.15	0.18
NT-RKP11R08M-TE	100%	1.00	2.50	4.00	0.08	0.11	0.14
	30%	1.00	4.50	8.00	0.10	0.14	0.18
	10%	1.00	4.50	8.00	0.12	0.17	0.22
NT-RKP16R08M-TE	100%	1.00	4.00	7.00	0.12	0.15	0.18
	30%	1.00	8.00	15.00	0.14	0.18	0.22
	10%	1.00	8.00	15.00	0.18	0.23	0.28
NT-RKP11R00G-AL	100%	1.00	2.50	4.00	0.08	0.14	0.20
	30%	1.00	4.50	8.00	0.10	0.17	0.24
	10%	1.00	4.50	8.00	0.12	0.20	0.28
NT-RKP16R00G-AL	100%	1.00	4.00	7.00	0.11	0.18	0.25
	30%	1.00	8.00	15.00	0.14	0.22	0.30
	10%	1.00	8.00	15.00	0.16	0.25	0.34

Parameters for ramping

	NT-RKP11			NT-RKP16				
	DC	RMPX	L	DC	RMPX	L		
	16	4.2°	10.8	25	5.0°	9.0		
	17	3.9°	11.5	32	1.7°	24.3		
	20	2.9°	15.4	40	1.1°	36.5		
	21	2.7°	16.6					
	25	2.0°	21.5					
	26	1.9°	22.4					
	32	1.4°	29.5					
	40	1.0°	39.3					

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

Parameters for helical milling

	NT-RKP11 R0.4			NT-RKP11 R0.8/1.2/1.6						
	DC	DH min.	DH max.	DC	DH min.	DH max.				
	16	20	32	16	21	31				
	17	22	34	17	23	33				
	20	28	40	20	29	39				
	21	30	42	21	31	41				
	25	38	50	25	39	49				
	26	40	52	26	41	51				
	32	52	64	32	53	63				
	40	68	80	40	69	79				
	NT-RKP16 R0.8			NT-RKP16 R1.2/1.6/2.0			NT-RKP16 R3.1			
	DC	DH min.	DH max.	DC	DH min.	DH max.	DC	DH min.	DH max.	
	25	32	49	25	33	49	25	35	47	
	32	46	63	32	47	63	32	49	61	
	40	62	79	40	63	79	40	65	77	

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