新品快递

NEW

MaxiMill 271-12

扩展刀片规格应用

→ 页码 24+25

NEW

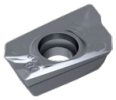
MaxiMill 211-11KN / 211-15KN

玉米铣刀升级

→ 页码 65+71

NEW

MaxiMill 211-20

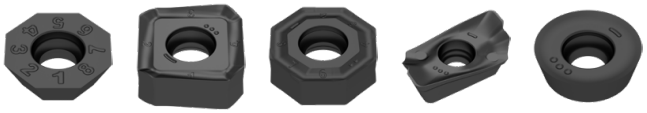


可转位刀片产品扩展

→ 页码 76

NEW

CTCM245



加工高合金钢的新型高性能牌号

目录

CERATIZIT \ Performance

高性能品质产品线

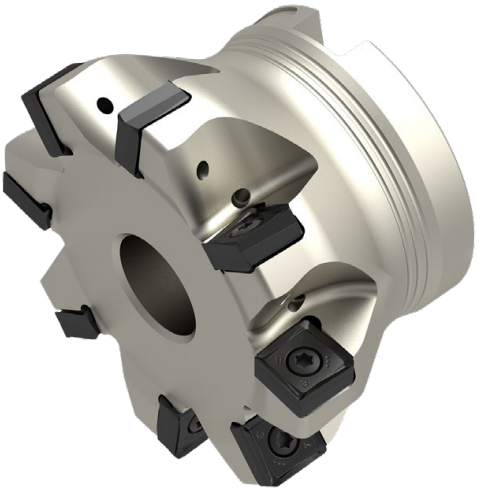
CERATIZIT Performance优质产品线专为特定应用而设计，以其出色的切削性能和卓越的加工能力表现而著称。如果您正在寻找最佳的刀具解决方案，以满足您对生产率的高要求，我们推荐您使用 Performance 高性能品质产品线。

图标索引


中心内冷


径向冷却

κ = 43° 主偏角



ZNF = 刃数

● = **主要应用**

○ = 扩展应用

应用符号


面铣


坡铣


键槽铣刀


插铣


槽铣

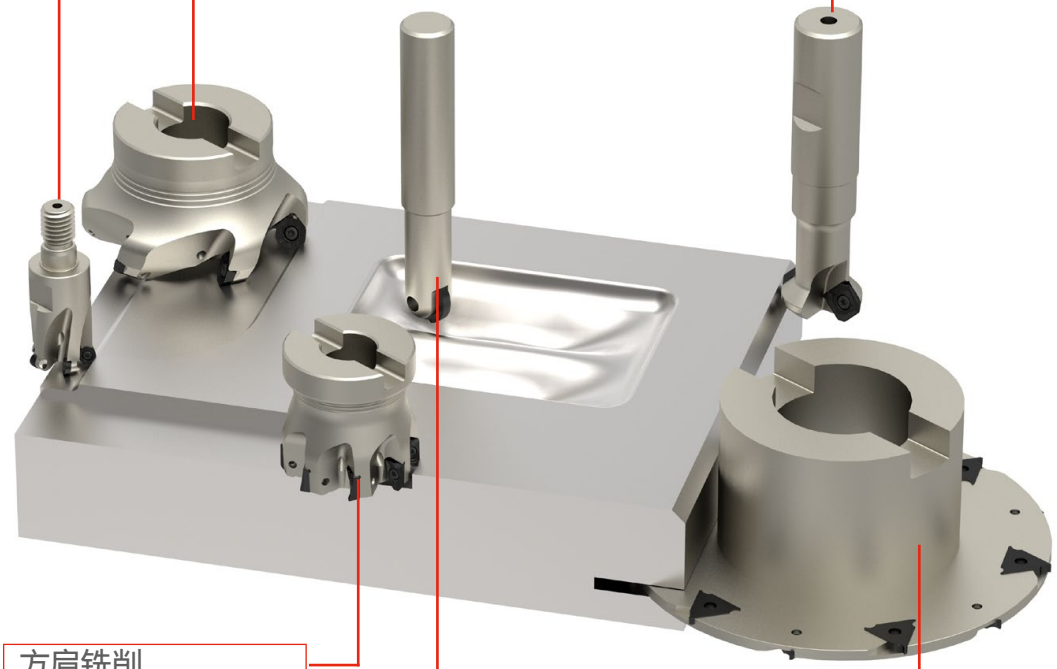

方肩铣削


槽铣刀 (45°)


倒角铣刀


仿形铣削

Toolfinder – 铣削系统



仿形铣削
→ 铣削系统参见:
8+9

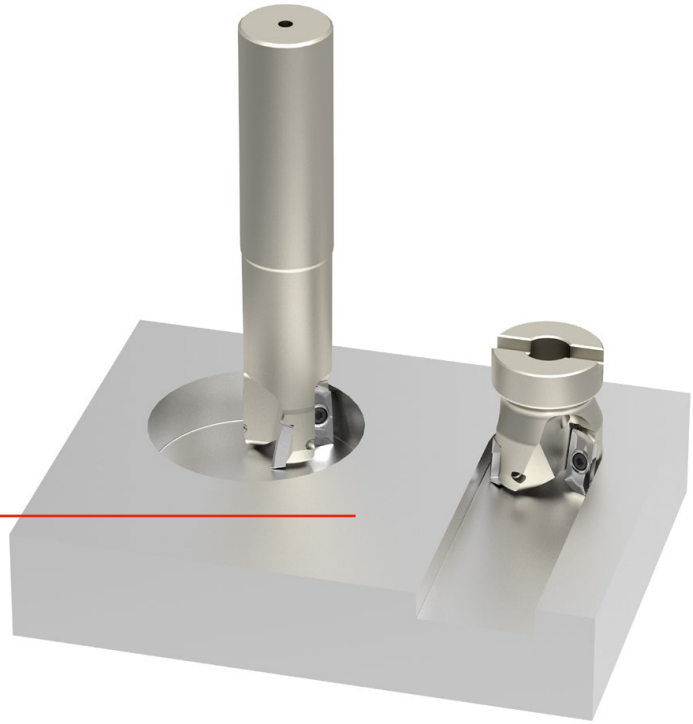
面铣
→ 铣削系统参见:
4+5

倒角/角度铣削
→ 铣削系统参见:
10

方肩铣削
→ 铣削系统参见:
6+7

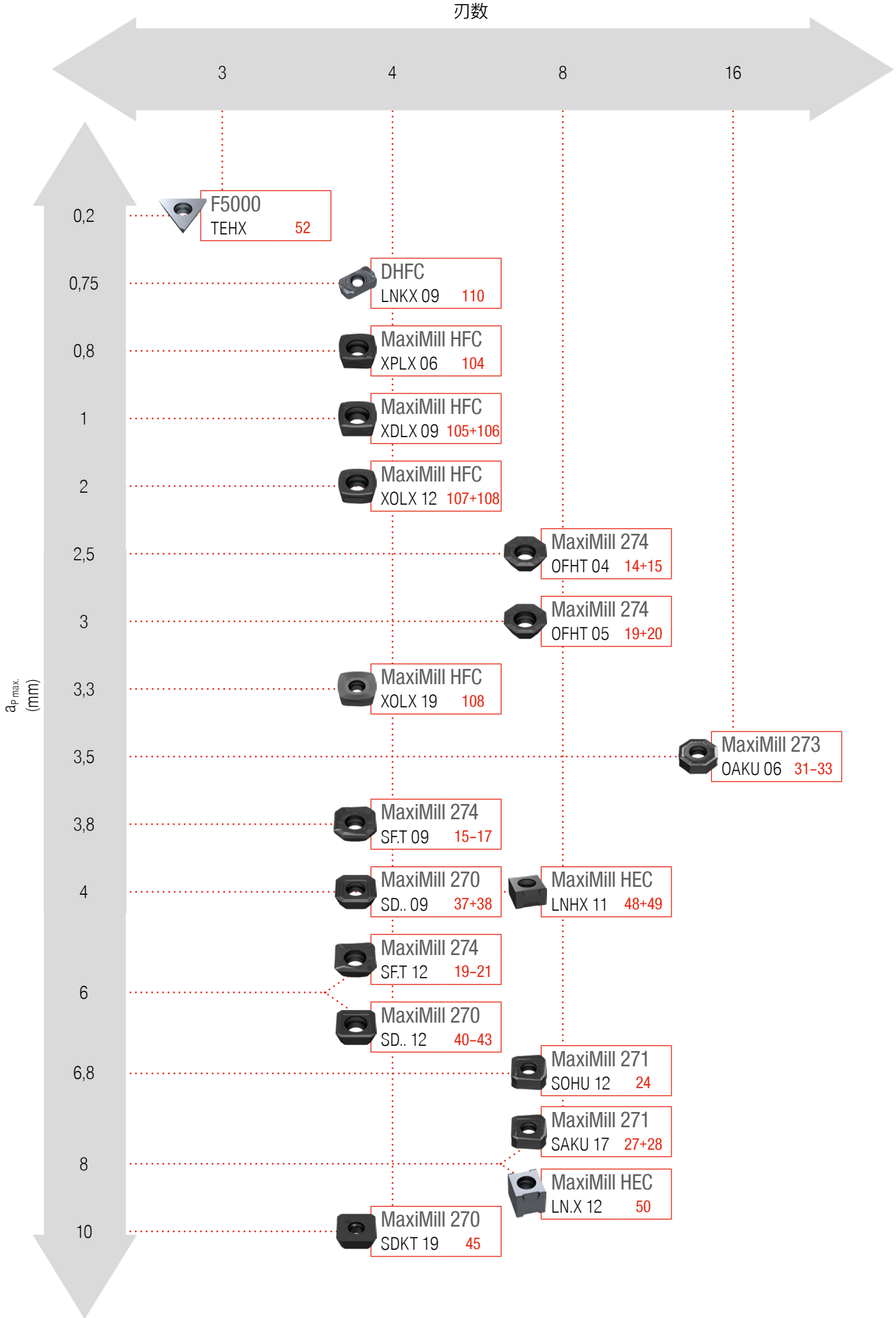
槽铣与切断
→ 铣削系统参见:
10

仿形铣削
→ 铣削系统参见:
8+9



HSC高速/HPC高效-铣削
→ 铣削系统参见:
6+7

Toolfinder - 面铣



概览 - 面铣

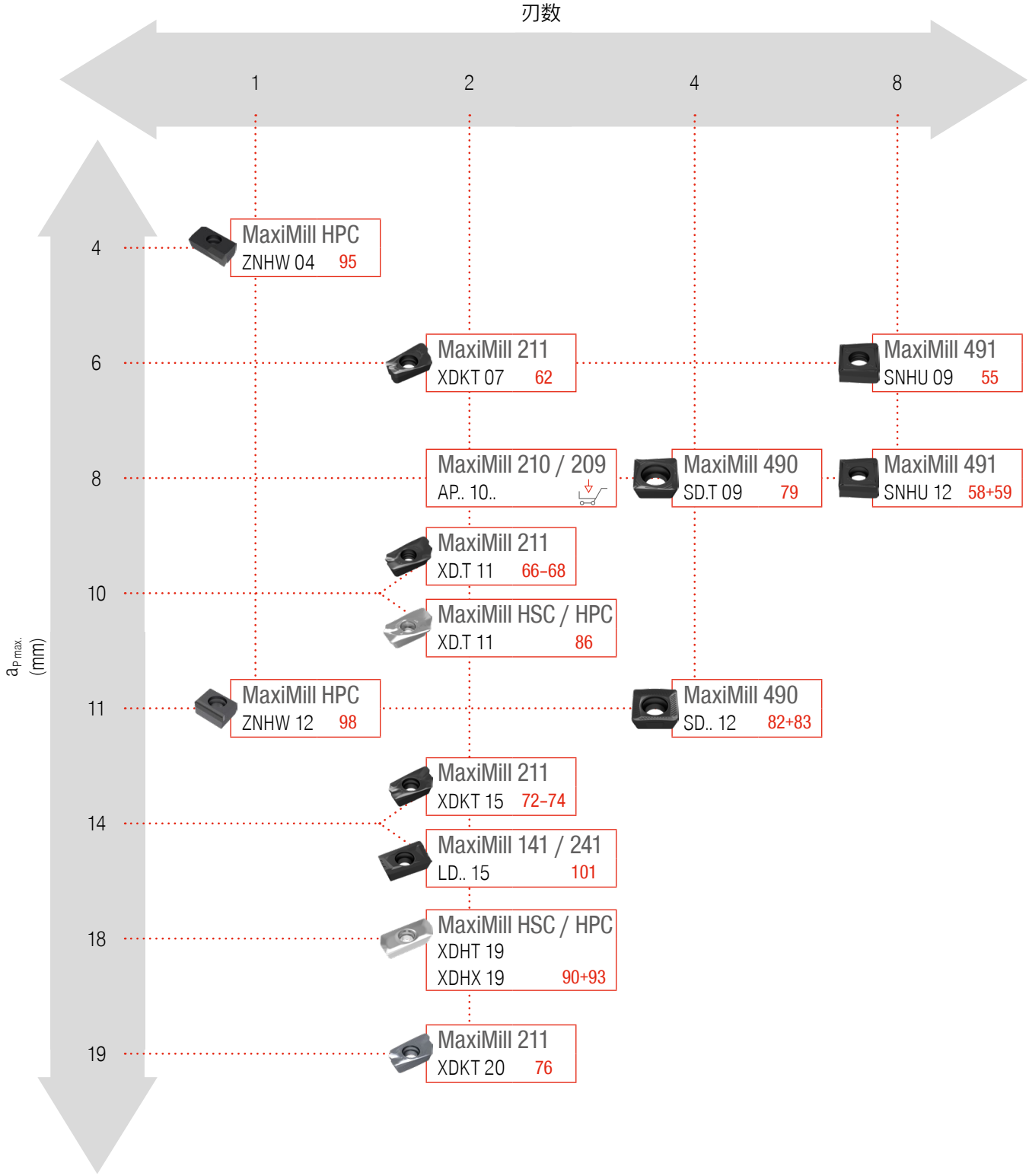
铣削系统	刀片	刃数	$a_{P\,max.}$ (mm)	Ø-直径范围 mm			钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
MaxiMill 274	**OFH.** 04.. / 05.. | **SF.T** 09.. / 12..	8 | 4	2,5–6	Ø 20–32	Ø 20–32	Ø 32–160	●	●	●	●	●			12–21
MaxiMill 271	**SOHU** 1204.. | **SAKU** 1706..	8	6,8 | 8,4		Ø 32–40	Ø 40–250	●	●	●		●			22–28
MaxiMill 273	**OAKU** 0605..	16	3,5		Ø 32–40	Ø 40–250	●	●	●		●			29–33
MaxiMill 270	**SD..** 0903.. / 1204.. / 19..	4	4–10	Ø 16–32	Ø 6–32	Ø 32–315	●	●	●	●	●			34–45
MaxiMill HEC	**LNHX** 1106.. | **LN.X** 1210..	8	4–8			Ø 50–160	●	○	●					46–50
F 5000	**TEHX** 16T3..	3	0,2			Ø 42–100	●	○	●	○		●		51+52
MaxiMill HFC	**X..X** 06.. / 09.. / 12.. / 19..	4	0,8–3,3	Ø 16–42	Ø 16–35	Ø 32–160	●	●	●		●			102–108
DHFC	**LNKX** 09..	4	0,75	Ø 16–42	Ø 16–20		●	●	●		●	●		109+110

可定制非标直径。

更多未列出的转位刀片信息。请访问网上商城 cuttingtools.ceratizit.com

15

Toolfinder – 方肩铣削



概览 - 方肩铣削

铣削系统	刀片	刃数	$a_{P\,max.}$ (mm)	Ø-直径范围 mm				钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
MaxiMill 491	**SNHU** 09T3.. / 1204..	8	6–8	Ø 25–32	Ø 25–32	Ø 40–160		●	●	●	●	●			53–59
MaxiMill 211	**XD.T** 0703.. / 11T3.. / 1505.. / 2007..	2	6–19	Ø 16–40	Ø 10–40	Ø 32–160		●	●	●	●	●	○		60–76
MaxiMill 211KN	**XD.T** 11T3.. / 1505.. / 2007..	2	27–75,5		Ø 25–50	Ø 40–50		●	●	●	●	●			65+71
MaxiMill 490	**SD..** 09T3.. / 1205..	4	8–11	Ø 25–40	Ø 25–32	Ø 40–160		●	●	●	●	●			77–83
MaxiMill 490K	**SD..** 09T3..	4	41			Ø 40–63		●	●	●	●	●			78
MaxiMill HSC / HPC	**XD..** 11T3.. / 1904..	2	10–18	Ø 16–40	Ø 16–32	Ø 40–125	Ø 25–50			○	●				84
MaxiMill HPC	**ZNHW** 04T3.. / 1205..	1	4–11	Ø 20–40	Ø 20–40	Ø 40–315	Ø 40–160			●	●		○		94–98
MaxiMill 141 / 241	**LD..** 1504..	2	14	Ø 25–40	Ø 20–32	Ø 40–100		●	●	●	●				99–101
MaxiMill 209 / 210	**AP..** 1003..	2	8	Ø 16,0–31,7	Ø 9,7–32	Ø 40–125		●	●	●	●	●	●		

可定制非标直径。

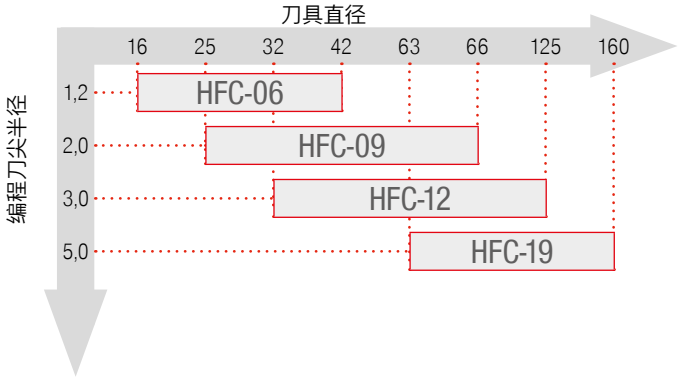
更多未列出的转位刀片信息。请访问网上商城 cuttingtools.ceratizit.com

有关此系统产品信息，请访问网上商城 cuttingtools.ceratizit.com

Toolfinder – 仿形铣削

MaxiMill HFC

102–108



MaxiMill 252

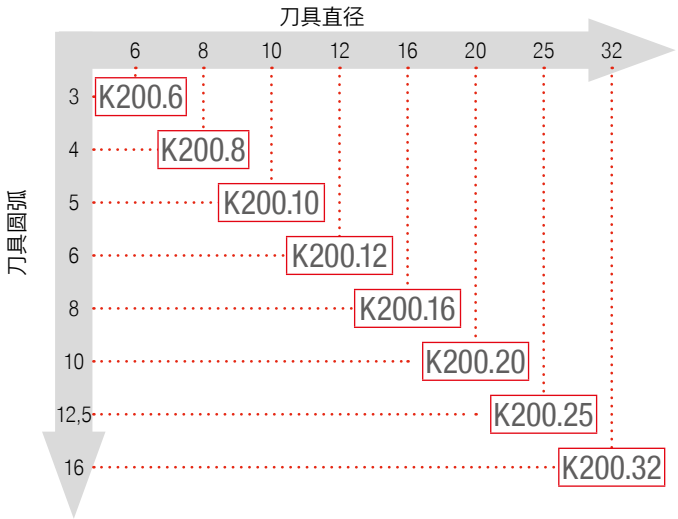
125+126

DHFC

109+110

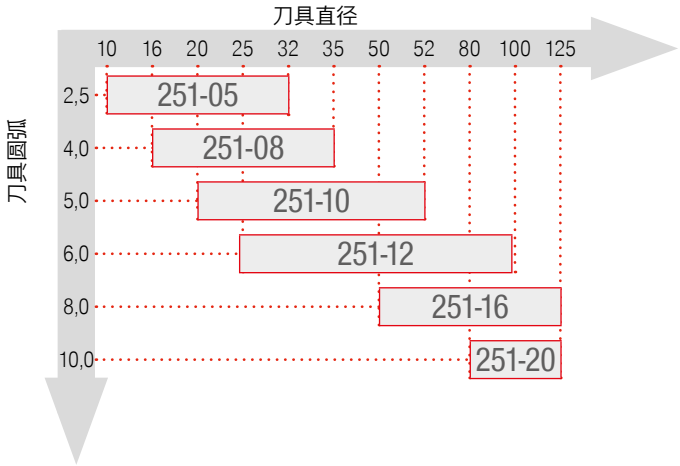
K200.球头铣刀

127–131



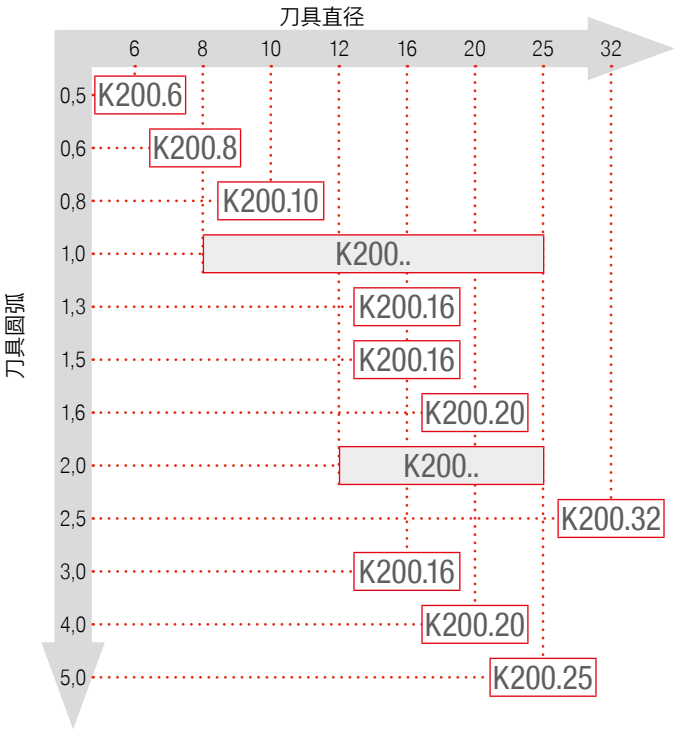
MaxiMill 251 / 251 RS

111–119



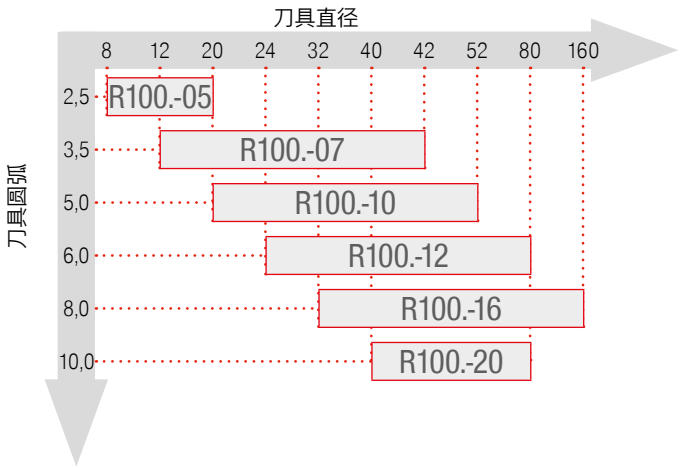
K200.牛鼻铣刀

132–135



R100.

120–124



应用材料

刀具直径

概览 – 仿形铣削

铣削系统	刀片	刃数	$a_{P\,max.}$ (mm)	Ø-直径范围 mm			钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
MaxiMill HFC	**X.LX** 06.. / 09.. / 12.. / 19..	4	0,8–3,3	Ø 16–42	Ø 16–35	Ø 32–160	●	●	●		●			102–108
DHFC	**LNKX** 09..	4	0,75	Ø 16–42	Ø 16–20		●	●	●		○	○		109+110
MaxiMill 251/ 251 RS	**R..X** 05.. / 08.. / 10.. / 12.. / 16.. / 20..	8	2,5–10	Ø 10–42	Ø 10–32	Ø 40–125	●	●	●	●	●			111–119
R100.	**RD.X** 05.. / 07.. / 10.. / 12.. / 16.. / 20..	8	5	Ø 12–42	Ø 8–20	Ø 42–160	●	●	●	●	○	●		120–124
MaxiMill 252	**RNHU** 10.. / 12..	8	3			Ø 40–125	●	●	○		●			125+126
K200.球头铣刀	**RO.X** .... / **XOHX**	1	0,4–8	Ø 8–32	Ø 6–32		●	●	●	●	●	●		127–131
K200.牛鼻铣刀	**XO.X**	1	0,5–8	Ø 8–32	Ø 8–32		●	●	●	●	●	●		132–135

可定制非标直径。

更多未列出的转位刀片信息。请访问网上商城 cuttingtools.ceratizit.com

15

概览 – 倒角铣刀

铣削系统	刀片	刃数	$a_{P\,max.}$ (mm)	Ø-直径范围 mm		钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
MaxiMill 272	**SD..** 0903..	4	4	Ø 6–25		●	●	○	●	●			36–38
MaxiMill 242	**LD..** 1504..	2			Ø 50–92	○	●			●			100+101

可定制非标直径。

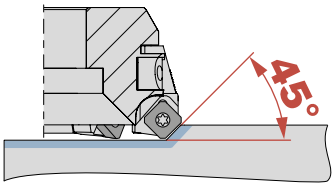
锯片铣刀 - 概览

铣削系统	刀片	刃数	$a_{P\,max.}$ (mm)	Ø-直径范围 mm		钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
TX	**TX..** R/L	3	64	Ø 80–160	Ø 100–200	●	●	●	●	●			136–138

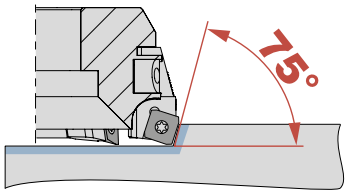
可定制非标直径。

概览 – 刀夹式铣刀

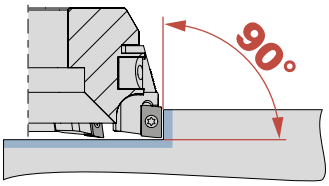
铣削系统	刃数	a_p max. mm	Ø-直径范围 mm	钢	不锈钢	铸铁	有色金属	高温合金/钛合金	淬硬钢	非金属材料	页码
MaxiMill 260	2–16	0,8–33	Ø 80–400	●	●	●	●	●	●		139



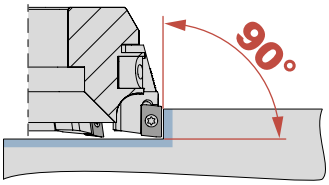
刀夹编号	041	031	029	032	058	057	页码
	SD.. 0903..	**SD..** 1204.. **XD..** 1204..	**SE..** 1204..	**SD..** 1504..	**SA..** 1706..	**OA..** 0605.. **XA..** 0605..	140



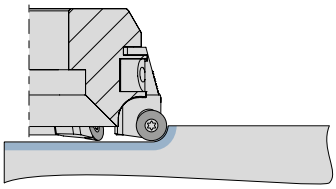
刀夹编号	018	页码
	SP.. 1204..	140



刀夹编号	042	039	051	025	页码
	AP.. 1003..	**SD..** 1205..	**LD..** 1504..	**TP..** 2204..	140



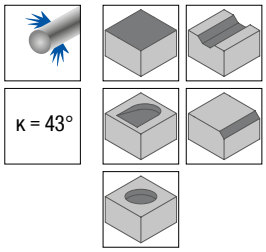
刀夹编号	055	054	056	页码
	SD.. 09T3	**XD..** 11T3	**XD..** 1505	140

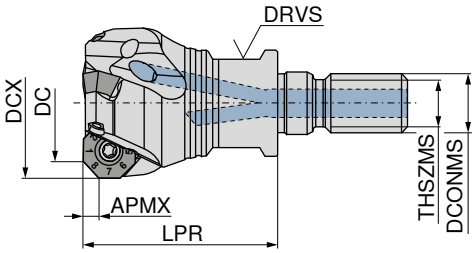


刀夹编号	052	053	页码
	RP.X 1204..	**RP.X** 1604..	140

15

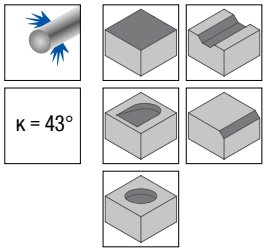
MaxiMill – Screw in 铣刀 G 274-04/-09

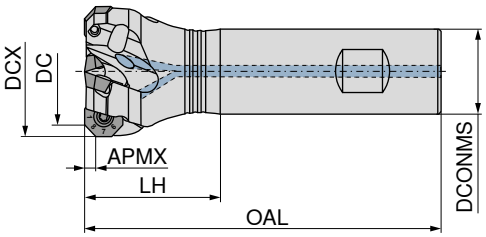




规格型号	DC mm	DCX mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	50 742 ...
G274.20.R.03-09	20	25.5	3	3.8	35	M12	12.5	17	1,2	OF.. 0403 / SF.. 0903	020
G274.25.R.04-09	25	30.6	4	3.8	35	M12	12.5	17	1,2	OF.. 0403 / SF.. 0903	025
G274.32.R.05-09	32	37.6	5	3.8	35	M16	17.0	24	1,2	OF.. 0403 / SF.. 0903	032

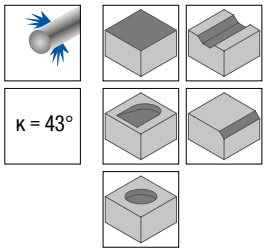
MaxiMill – 立铣刀 C 274-04/-09

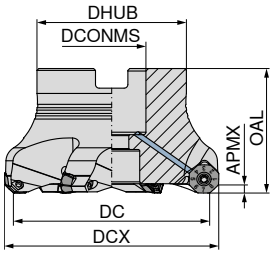


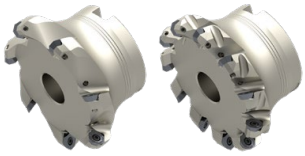


ISO-规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	扭矩 Nm	刀片	A 50 743 ...	B 50 743 ...
C274.20.R.03-09-A20-25	20	25.5	3	3.8	77	25	20	1,2	OF.. 0403 / SF.. 0903	020	
C274.20.R.03-09-B20-25	20	25.5	3	3.8	77	25	20	1,2	OF.. 0403 / SF.. 0903		120
C274.25.R.04-09-A20-32	25	30.6	4	3.8	84	32	20	1,2	OF.. 0403 / SF.. 0903	025	
C274.25.R.04-09-B20-32	25	30.6	4	3.8	84	32	20	1,2	OF.. 0403 / SF.. 0903		125
C274.32.R.05-09-A25-40	32	37.6	5	3.8	98	40	25	1,2	OF.. 0403 / SF.. 0903	032	
C274.32.R.05-09-B25-40	32	37.6	5	3.8	98	40	25	1,2	OF.. 0403 / SF.. 0903		132

MaxiMill – 套式铣刀 A 274-04/-09



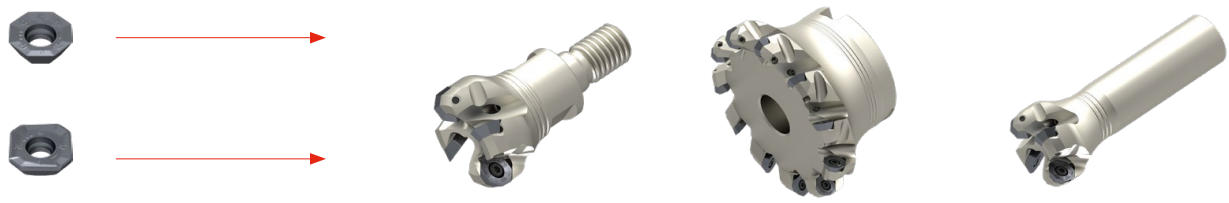




规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	扭矩 Nm	刀片	50 744 ...	50 744 ...
A274.32.R.05-09	32	37.7	5	3.8	40	38	16	1,2	OF.. 0403 / SF.. 0903		032
A274.40.R.04-09	40	45.7	4	3.8	40	38	16	1,2	OF.. 0403 / SF.. 0903	040	
A274.40.R.06-09	40	45.7	6	3.8	40	38	16	1,2	OF.. 0403 / SF.. 0903		140
A274.50.R.05-09	50	55.7	5	3.8	40	48	22	1,2	OF.. 0403 / SF.. 0903	050	
A274.50.R.07-09	50	55.7	7	3.8	40	48	22	1,2	OF.. 0403 / SF.. 0903		150
A274.63.R.06-09	63	68.7	6	3.8	40	48	22	1,2	OF.. 0403 / SF.. 0903	063	
A274.63.R.09-09	63	68.7	9	3.8	40	48	22	1,2	OF.. 0403 / SF.. 0903		163
A274.80.R.07-09	80	85.7	7	3.8	50	58	27	1,2	OF.. 0403 / SF.. 0903	080	
A274.80.R.11-09	80	85.7	11	3.8	50	58	27	1,2	OF.. 0403 / SF.. 0903		180
A274.100.R.09-09	100	105.7	9	3.8	50	78	32	1,2	OF.. 0403 / SF.. 0903	100	
A274.100.R.13-09	100	105.7	13	3.8	50	78	32	1,2	OF.. 0403 / SF.. 0903		200
A274.125.R.12-09	125	130.7	12	3.8	63	88	40	1,2	OF.. 0403 / SF.. 0903	125	

备件 DC	Torx 扭手®-可换接杆 80 950 ...	夹紧扭手-T 80 397 ...	扭手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扭手 80 950 ...
20 - 32	043		125		303	133	191
32 - 40	043	040	125	151	303	133	191
50 - 125	043		125		303	133	191

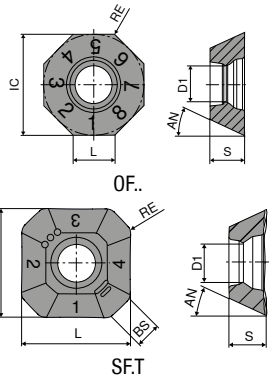
双刀片型 - 一个刀盘适用两种刀片



15

OFHT / OFHW / SFHT / SFKT

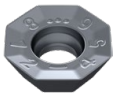
规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
OFH. 0403..	9.52	3.35	3.94	-	3.18	25
SF.T 0903..	9.80	3.35	9.00	2.25	3.50	25



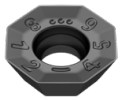
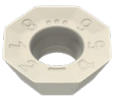
OFHT

		-F50 CTCP220	-F50 CTPP225	-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		OFHT	OFHT	OFHT	OFHT	OFHT	OFHT
		51 002 ...	51 002 ...	51 002 ...	51 003 ...	51 002 ...	51 003 ...
ISO	RE mm						
040305SN	0.5	255	055	005	005	105	105
P		●	●	●	●	●	●
M						○	○
K				○	○	○	○
N							
S							
H							
O							

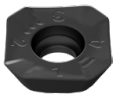
OFHT / OFHW

		-F50 CTPM225	-F50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245	CTPM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		OFHT	OFHT	OFHT	OFHT	OFHT	OFHW
		51 002 ...	51 002 ...	51 002 ...	51 003 ...	51 002 ...	51 105 ...
ISO	RE mm						
040302EN	0.2						452
040305SN	0.5	205	305	405	405	455	
P		●	●	○	○	●	●
M		●	●	●	●	●	●
K							
N							
S							
H							
O							

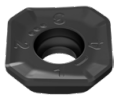
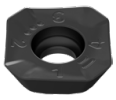
OFHT / OFHW

		NEW	NEW					
		-F50 CTCM245	CTCM245	-M50 CTCK215	-F10 CTWN215	-F50 CTC5240	CTC5240	-F50 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		OFHT	OFHW	OFHT	OFHT	OFHT	OFHW	OFHT
		51 002 ...	51 105 ...	51 003 ...	50 459 ...	51 002 ...	50 457 ...	51 002 ...
ISO	RE mm							
040302EN	0.2		90201				504	
040305FN	0.5				505			
040305SN	0.5	90501		505		15500		555
P		●	●					
M		●	●					
K				●	○			
N					●			
S		○	○			●	●	●
H								
O					○			

SFHT / SFKT

		-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		SFHT	SFKT	SFHT	SFKT
		51 012 ...	51 013 ...	51 012 ...	51 013 ...
ISO	RE mm				
0903AFSR	1	270	270	070	070
P		●	●	●	●
M					
K					
N					
S					
H					
O					

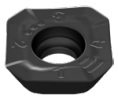
SFHT / SFKT

		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		SFHT	SFKT	SFHT	SFKT
		51 012 ...	51 013 ...	51 012 ...	51 013 ...
ISO	RE mm				
0903AFSR	1	020	020	120	120
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

SFHT / SFKT

		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245	NEW -F50 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		SFHT	SFKT	SFHT	SFHT	SFKT	SFHT	SFHT
		51 012 ...	51 013 ...	51 012 ...	51 012 ...	51 013 ...	51 012 ...	51 012 ...
ISO	RE mm							
0903AFSR	1	220	220	320	420	42000	470	92001
P		●	●	●	○	○	●	●
M		●	●	●	●	●	●	●
K								
N								
S								○
H								
O								

SFKT / SFHT

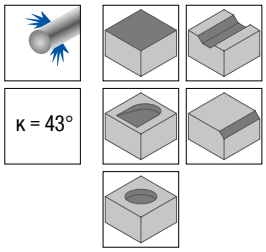
		-R50 CTCK215	-R50 CTPK220	-F10 CTWN215	-F40 CTC5240
		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
					
		SFKT	SFKT	SFHT	SFHT
		51 065 ...	51 065 ...	50 514 ...	50 514 ...
ISO	RE mm				
0903AFFR	1			505	
0903AFSR	1	520	620		504
P					
M					
K		●	●	○	
N				●	
S					●
H					
O				○	

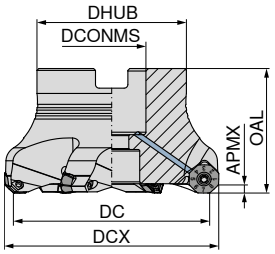
铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 145
起始推荐参数	→ 146	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

15

MaxiMill – 套式铣刀 A 274-05/-12



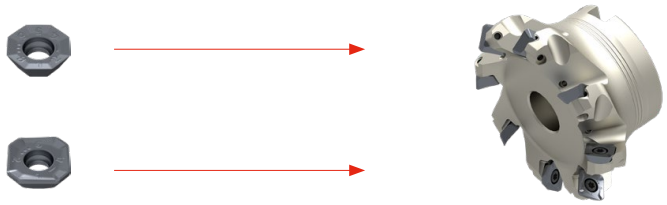


规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	扭矩 Nm	刀片	50 772 ...	50 772 ...
A274.40.R.03-12	40	48.0	3	6	40	38	16	3,2	OFHT 0504 / SFKT 1204	24000	
A274.40.R.04-12	40	48.0	4	6	40	38	16	3,2	OFHT 0504 / SFKT 1204		04000
A274.50.R.05-12	50	58.0	5	6	40	43	22	3,2	OFHT 0504 / SFKT 1204		050
A274.50.R.04-12	50	58.1	4	6	40	43	22	3,2	OFHT 0504 / SFKT 1204	25000	
A274.63.R.06-12	63	71.0	6	6	40	48	22	3,2	OFHT 0504 / SFKT 1204		063
A274.63.R.05-12	63	71.1	5	6	40	48	22	3,2	OFHT 0504 / SFKT 1204	26300	
A274.80.R.06-12	80	88.0	6	6	50	58	27	3,2	OFHT 0504 / SFKT 1204	28000	
A274.80.R.08-12	80	88.0	8	6	50	58	27	3,2	OFHT 0504 / SFKT 1204		080
A274.100.R.10-12	100	107.9	10	6	50	78	32	3,2	OFHT 0504 / SFKT 1204		100
A274.100.R.08-12	100	108.0	8	6	50	78	32	3,2	OFHT 0504 / SFKT 1204	30000	
A274.125.R.12-12	125	132.9	12	6	63	88	40	3,2	OFHT 0504 / SFKT 1204		125
A274.125.R.09-12	125	133.0	9	6	63	88	40	3,2	OFHT 0504 / SFKT 1204	32500	
A274.160.R.14-12	160	167.9	14	6	63	98	40	3,2	OFHT 0504 / SFKT 1204		16000 1)
A274.160.R.11-12	160	168.0	11	6	63	98	40	3,2	OFHT 0504 / SFKT 1204	36000 1)	

1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

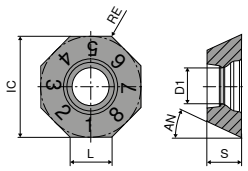
备件 DC	Torx 扭手®-可换接杆	扭手-D	润滑剂	刀片螺钉	扭力扭手
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
40 - 160	054	128	303	340	193

双刀片型 - 一个刀盘适用两种刀片

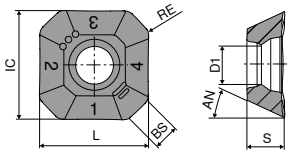


OFHT / SFHT / SFKT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
OFHT 0504..	12.7	4.8	4.5	-	4.76	25
SF.T 1204..	12.7	4.8	12.7	1.42	4.76	25



OF..



SF.T

OFHT

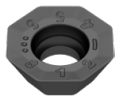
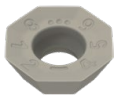
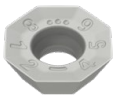
		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		OFHT	OFHT	OFHT	OFHT
		51 002 ...	51 003 ...	51 002 ...	51 003 ...
ISO	RE mm				
050410SN	1	010	01000	110	11000
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

OFHT

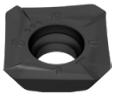
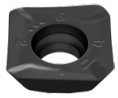
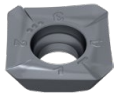
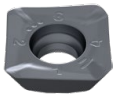
		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		OFHT	OFHT	OFHT	OFHT	OFHT	OFHT
		51 002 ...	51 003 ...	51 002 ...	51 002 ...	51 003 ...	51 002 ...
ISO	RE mm						
050410SN	1	210	210	310	410	41000	460
P		●	●	●	○	○	●
M		●	●	●	●	●	●
K							
N							
S							
H							
O							

15

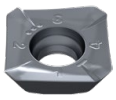
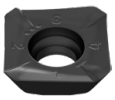
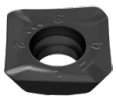
OFHT

		NEW		
		-F50 CTCM245	-F10 CTWN215	-F50 CTC5240
		DRAGONSKIN		DRAGONSKIN
				
		OFHT	OFHT	OFHT
		51 002 ...	51 122 ...	51 002 ...
ISO	RE mm			
050410FN	1		36000	
050410SN	1	91001		16000
P		●		
M		●		
K			○	
N			●	
S		○		●
H				
O			○	

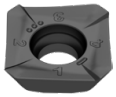
SFHT / SFKT

		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		SFHT	SFKT	SFHT	SFKT
		51 012 ...	51 013 ...	51 012 ...	51 013 ...
ISO	RE mm				
1204AFSR	1	02500	025	12500	125
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

SFHT / SFKT

ISO	RE mm	-F50 CTPM225 DRAGONSKIN	-M50 CTPM225 DRAGONSKIN	-F50 CTCM235 DRAGONSKIN	-M50 CTCM235 DRAGONSKIN	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN
							
		SFHT	SFKT	SFHT	SFKT	SFHT	SFKT
		51 012 ...	51 013 ...	51 012 ...	51 013 ...	51 012 ...	51 013 ...
1204AFSR	1	225	225	325	325	42500	425
P		●	●	●	●	○	○
M		●	●	●	●	●	●
K							
N							
S							
H							
O							

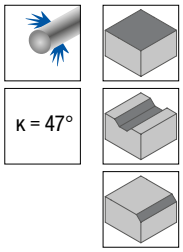
SFHT

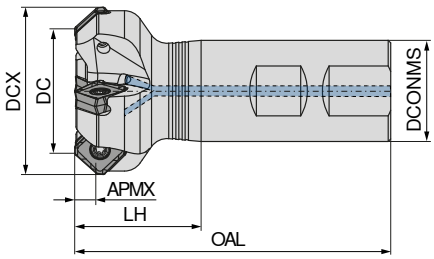
ISO	RE mm	-F50 CTPM245 DRAGONSKIN	NEW -F50 CTCM245 DRAGONSKIN	-F10 CTWN215	-F40 CTC5240 DRAGONSKIN
					
		SFHT	SFHT	SFHT	SFHT
		51 012 ...	51 012 ...	51 123 ...	50 514 ...
1204AFER	1				50900
1204AFFR	1			37000	
1204AFSR	1	47500	92501		
P		●	●		
M		●	●		
K				○	
N				●	
S			○		●
H					
O				○	

铣削指南

15

MaxiMill – 立铣刀 C 271-12





NEW

B

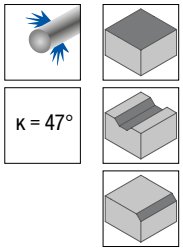
50 786 ...

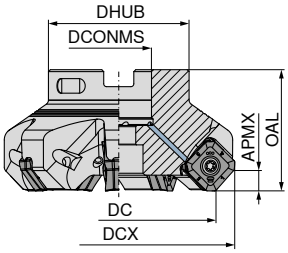
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	RPMX 1/min.	扭矩 Nm	刀片	
C271.32.R.03-12-B-40	32	45	3	6.8	100	40	32	18400	3,2	SOHU 1204.. / XOHU 1204..	03203
C271.40.R.04-12-B32-40	40	53	4	6.8	100	40	32	16800	3,2	SOHU 1204.. / XOHU 1204..	04004

备件 DC	Torx 扭手®-可换接杆	扭手-D	润滑剂	刀片螺钉	扭力扭手
					
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
32 - 40	054	120	303	859	193

MaxiMill – 套式铣刀 A 271-12

▲ 每个刀片8个切削刃

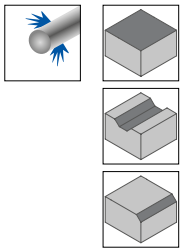


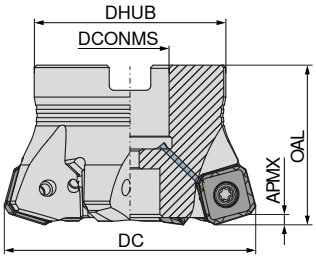


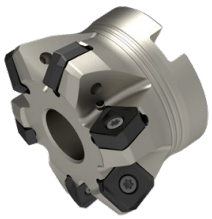
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	NEW 50 787 ...	NEW 50 787 ...
A271.40.R.04-12	40	53	4	6.8	40	38	16	17900	3,2	SOHU 1204.. / XOHU 1204..		04004
A271.50.R.05-12	50	63	5	6.8	40	43	22	15200	3,2	SOHU 1204.. / XOHU 1204..		05005
A271.63.R.07-12	63	76	7	6.8	40	48	22	13100	3,2	SOHU 1204.. / XOHU 1204..		06307
A271.80.R.06-12	80	93	6	6.8	50	58	27	11300	3,2	SOHU 1204.. / XOHU 1204..	08006	
A271.80.R.08-12	80	93	8	6.8	50	58	27	11300	3,2	SOHU 1204.. / XOHU 1204..		08008
A271.100.R.07-12	100	113	7	6.8	63	78	32	9900	3,2	SOHU 1204.. / XOHU 1204..	10007	
A271.100.R.10-12	100	113	10	6.8	63	78	32	9900	3,2	SOHU 1204.. / XOHU 1204..		10010
A271.125.R.08-12	125	138	8	6.8	63	88	40	8700	3,2	SOHU 1204.. / XOHU 1204..	12508	
A271.125.R.12-12	125	138	12	6.8	63	88	40	8700	3,2	SOHU 1204.. / XOHU 1204..		12512
A271.160.R.09-12	160	173	9	6.8	63	98	40	7600	3,2	SOHU 1204.. / XOHU 1204..	16009 1)	
A271.160.R.14-12	160	173	14	6.8	63	98	40	7600	3,2	SOHU 1204.. / XOHU 1204..		16014 1)
A271.200.R.11-12	200	213	11	6.8	63	132	60	6700	3,2	SOHU 1204.. / XOHU 1204..	20011 1)	
A271.200.R.17-12	200	213	17	6.8	63	132	60	6700	3,2	SOHU 1204.. / XOHU 1204..		20017 1)
A271.250.R.13-12	250	263	13	6.8	63	132	60	6000	3,2	SOHU 1204.. / XOHU 1204..	25013 1)	
A271.250.R.21-12	250	263	21	6.8	63	132	60	6000	3,2	SOHU 1204.. / XOHU 1204..		25021 1)

1) 无内冷却液供应

MaxiMill – 套式铣刀 A 271-12 HFC







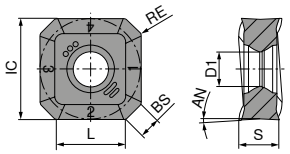
规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	NEW 50 788 ...
A271.50.R.04-12-HFC	50	4	2.6	40	43	22	14600	3,2	SOHU 1204..	05004
A271.63.R.06-12-HFC	63	6	2.6	40	48	22	12500	3,2	SOHU 1204..	06306
A271.80.R.07-12-HFC	80	7	2.6	50	58	27	10800	3,2	SOHU 1204..	08007

备件	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
40 (5078704004)	054	040	120	151	303	859	193
50 - 250	054		120		303	859	193
50 (5078805004)	054	050	120	154	303	859	193

15

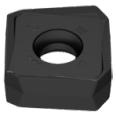
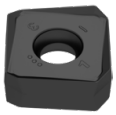
SOHU

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
SOHU 1204..	13.36	4.4	8.8	1.7	5.00	7.4

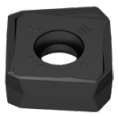
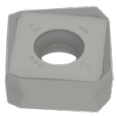


SOHU

SOHU

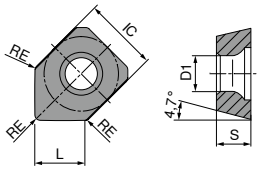
		NEW	NEW	NEW	NEW	NEW	NEW
		-M50 CTCP230	-M50 CTPP235	-M50 CTCM235	-M50 CTPM240	-F50 CTPM245	-F50 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		SOHU	SOHU	SOHU	SOHU	SOHU	SOHU
		51 138 ...	51 138 ...	51 138 ...	51 138 ...	51 140 ...	51 140 ...
ISO	RE mm						
1204ABSR	0.8	02000	12000	32000	42000	47000	92001
P		●	●	●	○	●	●
M			○	●	●	●	●
K		○	○				
N							
S							○
H							
O							

SOHU

		NEW	NEW	NEW	NEW
		-R50 CTCK215	-R50 CTPK220	-F40 CTC5240	-F50 CTC5240
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		SOHU	SOHU	SOHU	SOHU
		51 139 ...	51 139 ...	51 148 ...	51 140 ...
ISO	RE mm				
1204ABSR	0.8	52000	62000	12001	17000
P					
M					
K		●	●		
N					
S				●	●
H					
O					

XOHU

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XOHU 1204..	13.36	4.4	8.8	1.83	5.00



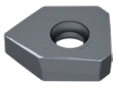
XOHU

XOHU

NEW

-M50
CTPP235

DRAGONSKIN



XOHU
51 141 ...

ISO	RE mm	12000
1204ABSR	0.8	
P		●
M		○
K		○
N		
S		
H		
O		

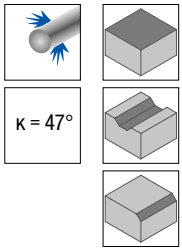
铣削指南

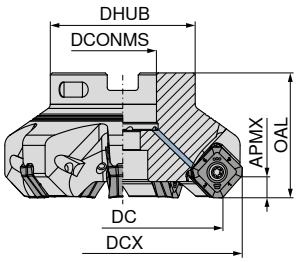
切削参数推荐值	→ 141-144	起始推荐参数	→ 149
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

15

MaxiMill – 套式铣刀 A 271

▲ 每个刀片8个切削刃





50 767 ...

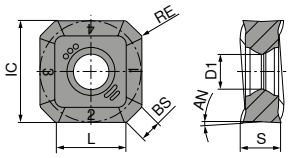
ISO-规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	扭矩 Nm	刀片	
A271.50.R.04-17	50	66.1	4	8.4	40	22	43	5	SAKU 1706	050
A271.63.R.06-17	63	79.1	6	8.4	40	22	48	5	SAKU 1706	063
A271.80.R.07-17	80	96.1	7	8.4	50	27	58	5	SAKU 1706	080
A271.100.R.08-17	100	116.1	8	6.8	50	32	78	5	SAKU 1706	100
A271.125.R.10-17	125	141.1	10	8.4	63	40	88	5	SAKU 1706	125
A271.160.R.12-17	160	176.1	12	8.4	63	40	104	5	SAKU 1706	16000 1)
A271.200.R.13-17	200	216.1	13	8.4	63	60	134	5	SAKU 1706	20000 2)
A271.250.R.15-17	250	266.1	15	8.4	63	60	134	5	SAKU 1706	25000 2)

1) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应
2) 前面配有4个M16螺纹孔，用于固定铣刀盘，孔径-Ø = 101.6 mm / 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆	扳手-D	润滑剂	刀片螺钉	扭力扳手
					
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
50 - 250	037	114	303	302	193

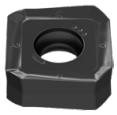
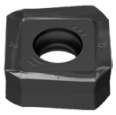
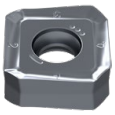
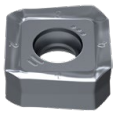
SAKU

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
SAKU 1706..	17	5.8	11.85	3.7	6.35	3

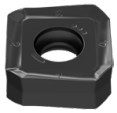
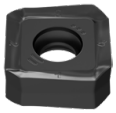
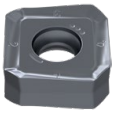
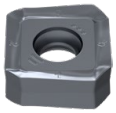


SAKU

SAKU

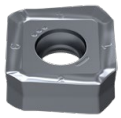
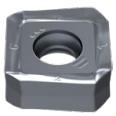
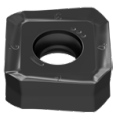
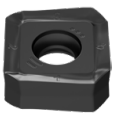
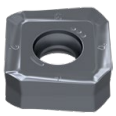
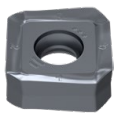
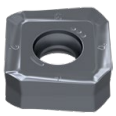
		-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		 SAKU	 SAKU	 SAKU	 SAKU
		51 004 ...	51 005 ...	51 004 ...	51 005 ...
ISO	RE mm				
1706ABSR	0.8	270	270	070	070
P		●	●	●	●
M					
K					
N					
S					
H					
O					

SAKU

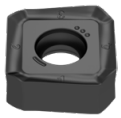
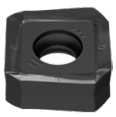
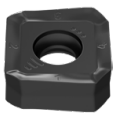
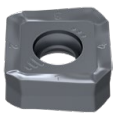
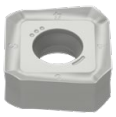
		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		 SAKU	 SAKU	 SAKU	 SAKU
		51 004 ...	51 005 ...	51 004 ...	51 005 ...
ISO	RE mm				
1706ABSR	0.8	020	020	120	120
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

15

SAKU

		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-M50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU
		51 004 ...	51 005 ...	51 004 ...	51 005 ...	51 004 ...	51 005 ...	51 004 ...
ISO	RE mm							
1706ABSR	0.8	220	220	320	320	420	420	470
P		●	●	●	●	○	○	●
M		●	●	●	●	●	●	●
K								
N								
S								
H								
O								

SAKU

		NEW -F50 CTCM245	-M50 CTCK215	-R50 CTCK215	-M50 CTPK220	-R50 CTPK220	-F50 CTC5240	-F50 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU
		51 004 ...	51 005 ...	51 058 ...	51 005 ...	51 058 ...	50 306 ...	51 004 ...
ISO	RE mm							
1706ABSR	0.8	92001	520	520	620	620	520	570
钢		●	○	○	○	○		
不锈钢		●						
铸铁			●	●	●	●		
有色金属								
高温合金/钛合金		●					●	●
淬硬钢								

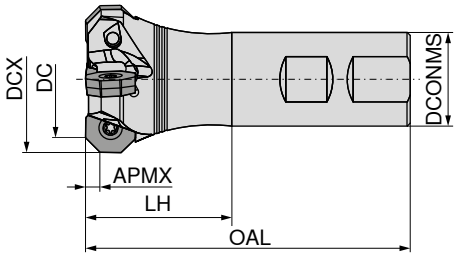
铣削指南

切削参数推荐值	→ 141-144	起始推荐参数	→ 149
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

MaxiMill – 立铣刀 C 273

▲ 每个刀片16个切削刃

κ = 45°



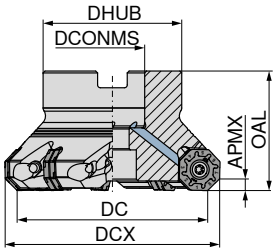
B

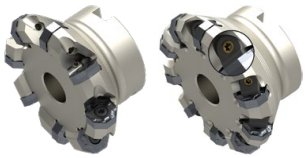
规格型号	DC mm	DCX mm	ZNF	APMX mm	DCONMS h6 mm	LH mm	OAL mm	扭矩 Nm	刀片	50 762 ...
C273.32.R.03-06-B-40	32	42.1	3	3.5	32	40	101	5	OAKU / XAHT 0605	032
C273.40.R.04-06-B32-50	40	50.1	4	3.5	32	50	111	5	OAKU / XAHT 0605	040

MaxiMill – 套式铣刀 A 273

▲ 每个刀片16个切削刃

κ = 45°





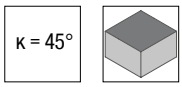
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	50 741 ...	50 741 ...
A273.40.R.04-06	40	50.2	3	3.5	40	16	38	5	OAKU / XAHT 0605	040	
A273.40.R.04-06	40	50.2	4	3.5	40	16	38	5	OAKU / XAHT 0605	140 5)	
A273.50.R.05-06	50	60.2	5	3.5	40	22	43	5	OAKU / XAHT 0605	050	
A273.63.R.07-06	63	73.2	7	3.5	40	22	48	5	OAKU / XAHT 0605	063	
A273.80.R.08-06	80	90.2	8	3.5	50	27	58	5	OAKU / XAHT 0605	080	
A273.80.R.10-06	80	90.2	10	3.5	50	27	58	5	OAKU / XAHT 0605		180 1)
A273.100.R.10-06	100	110.2	10	3.5	50	32	78	5	OAKU / XAHT 0605	100	
A273.100.R.14-06	100	110.2	14	3.5	50	32	78	5	OAKU / XAHT 0605		200 1)
A273.125.R.12-06	125	135.2	12	3.5	63	40	88	5	OAKU / XAHT 0605	125	
A273.125.R.17-06	125	135.2	17	3.5	63	40	88	5	OAKU / XAHT 0605		225 1)
A273.160.R.14-06	160	170.2	14	3.5	63	40	104	5	OAKU / XAHT 0605	160 4)	
A273.160.R.20-06	160	170.2	20	3.5	63	40	104	5	OAKU / XAHT 0605		260 2)
A273.200.R.25-06	200	210.2	25	3.5	63	60	153	5	OAKU / XAHT 0605		300 3)
A273.250.R.31-06	250	260.2	31	3.5	63	60	153	5	OAKU / XAHT 0605		25031 3)

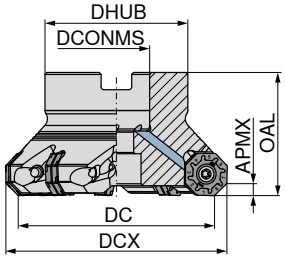
1) 带夹紧楔，无内冷却液供应
2) 带夹紧楔，无内冷却液供应 / 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应
3) 带夹紧楔，无内冷却液供应 / 前面配有4个M16螺纹孔，用于固定铣刀盘，孔径-Ø = 101.6 mm / 无内冷却液供应
4) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应
5) 无内冷却液供应

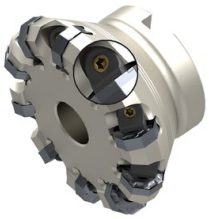
备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	楔块夹紧螺钉 70 950 ...	夹紧楔 70 950 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
40	037	040			114	151	302	193
50	037	050			114	154	302	193
63 - 80	037				114		302	193
80 - 100	036		844	845	113			193
100 - 125	037				114		302	193
125	036		844	845	113			193
160	037				114		302	193
160 - 250	036		844	845	113			193

MaxiMill – 套式铣刀 A 273

▲ 双面 16 刃
▲ 轴向可调







50 777 ...

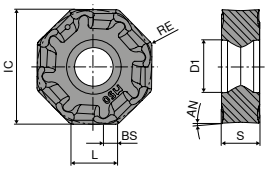
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	
A273.80.R.10A10-06	80	90.2	10	3.5	50	27	58	5	OAKU / XAHT 0605	**08010 1)**
A273.100.R.14A14-06	100	110.2	14	3.5	50	32	78	5	OAKU / XAHT 0605	**10014 1)**
A273.125.R.17A17-06	125	135.2	17	3.5	63	40	88	5	OAKU / XAHT 0605	**12517 1)**
A273.160.R.20A20-06	160	170.2	20	3.5	63	40	104	5	OAKU / XAHT 0605	**16020 2)**
A273.200.R.25A25-06	200	210.2	25	3.5	63	60	153	5	OAKU / XAHT 0605	**20025 3)**
A273.250.R.31A31-06	250	260.2	31	3.5	63	60	153	5	OAKU / XAHT 0605	**25031 3)**

1) 硬质合金材质刀杆
2) 硬质合金材质刀杆 / 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm
3) 硬质合金材质刀杆 / 前面配有4个M16螺纹孔，用于固定铣刀盘，孔径-Ø = 101.6 mm

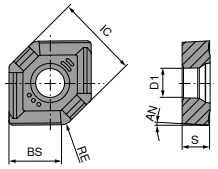
备件 DC	Torx 扭手®-可换接杆	 楔块夹紧螺钉	 夹紧楔	 扳手-D	 润滑剂	 夹紧楔块	 扭力扳手
	80 950 ...	**70 950 ...**	**70 950 ...**	**80 950 ...**	**70 950 ...**	**70 950 ...**	**80 950 ...**
80 - 250	**036**	**844**	**845**	**113**	**303**	**199**	**193**

OAKU / XAHT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
XAHT 0605..	17.08	6.0	-	11.95	5.56	3
OAKU 0605..	17.10	5.8	6	2.00	5.66	3

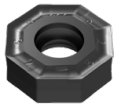
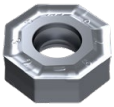


OAKU

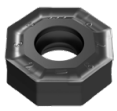
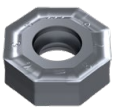


XAHT

OAKU

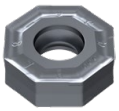
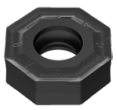
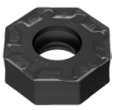
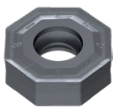
		-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		OAKU	OAKU	OAKU	OAKU
		51 000 ...	51 001 ...	51 000 ...	51 001 ...
ISO	RE mm				
060508SR	0.8	258	258	058	058
P		●	●	●	●
M					
K					
N					
S					
H					
O					

OAKU

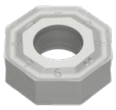
		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		OAKU	OAKU	OAKU	OAKU
		51 000 ...	51 001 ...	51 000 ...	51 001 ...
ISO	RE mm				
060508SR	0.8	008	008	108	108
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

15

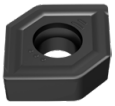
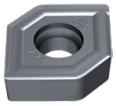
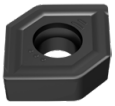
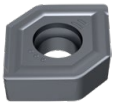
OAKU

		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-M50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F40 CTPM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		OAKU	OAKU	OAKU	OAKU	OAKU	OAKU	OAKU
		51 000 ...	51 001 ...	51 000 ...	51 001 ...	51 000 ...	51 001 ...	51 104 ...
ISO	RE mm							
060508ER	0.8							458
060508SR	0.8	208	208	308	308	408	408	
P		●	●	●	●	○	○	●
M		●	●	●	●	●	●	●
K								
N								
S								
H								
O								

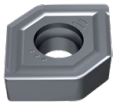
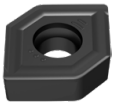
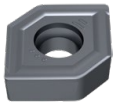
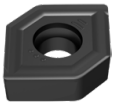
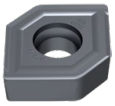
OAKU

		NEW						
		-F40 CTCM245	-M50 CTCK215	-R50 CTCK215	-M50 CTPK220	-R50 CTPK220	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		OAKU	OAKU	OAKU	OAKU	OAKU	OAKU	OAKU
		51 104 ...	51 001 ...	51 027 ...	51 001 ...	51 027 ...	50 446 ...	51 104 ...
ISO	RE mm							
060508ER	0.8	90801					550	50801
060508SR	0.8		508	508	608	608		
P		●						
M		●						
K			●	●	●	●		
N								
S		○					●	●
H								
O								

XAHT

		-M50 CTCP220	-M50 CTPP225	-M50 CTCP230	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		XAHT	XAHT	XAHT	XAHT
		51 014 ...	51 014 ...	51 014 ...	51 014 ...
ISO	RE mm				
060525SR	2.5	275	075	025	125
P		●	●	●	●
M					○
K				○	○
N					
S					
H					
O					

XAHT

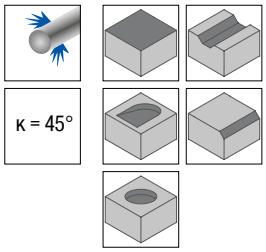
		-M50 CTPM225	-M50 CTCM235	-M50 CTPM240	-M50 CTCK215	-M50 CTPK220
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		XAHT	XAHT	XAHT	XAHT	XAHT
		51 014 ...	51 014 ...	51 014 ...	51 014 ...	51 014 ...
ISO	RE mm					
060525SR	2.5	225	325	425	525	625
P		●	●	○		
M		●	●	●		
K					●	●
N						
S						
H						
O						

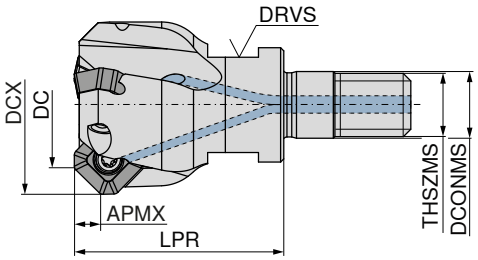
铣削指南

切削参数推荐值	→ 141–144	起始推荐参数	→ 150
技术信息	→ 189–194	断屑槽型描述及概览	→ 195–197
牌号描述及概览	→ 198–201		

15

MaxiMill – Screw in 铣刀 45° G 270-09

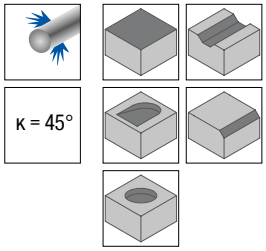


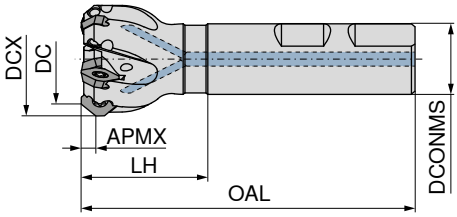


55 202 ...

规格型号	DC mm	DCX mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	
G270.ESF.16.R.02-09	16	24.4	2	4	27	M8	8.5	10	1,8	SD.. 0903..	016
G270.ESF.20.R.03-09	20	28.4	3	4	33	M10	10.5	15	1,8	SD.. 0903..	020
G270.ESF.25.R.04-09	25	33.4	4	4	35	M12	12.5	17	1,8	SD.. 0903..	025
G270.ESF.32.R.05-09	32	40.4	5	4	35	M16	17.0	17	1,8	SD.. 0903..	032

MaxiMill – 立铣刀 45° C 270-09



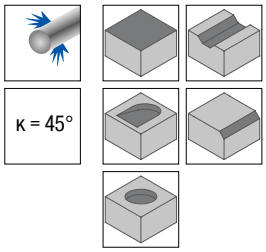


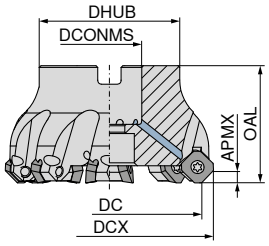
B

50 666 ...

规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	扭矩 Nm	刀片	
C270.06.R.01-09	6	14.4	1	4	80	32	16	1,2	SD.. 0903..	006
C270.12.R.01-09	12	20.4	1	4	80	32	16	1,2	SD.. 0903..	012
C270.16.R.02-09	16	24.4	2	4	90	40	20	1,8	SD.. 0903..	016
C270.20.R.03-09	20	28.4	3	4	90	40	20	1,8	SD.. 0903..	020
C270.25.R.04-09	25	33.4	4	4	100	44	25	1,8	SD.. 0903..	025
C270.32.R.05-09	32	40.4	5	4	95	36	25	1,8	SD.. 0903..	032

MaxiMill – 套式铣刀 45° A 270-09







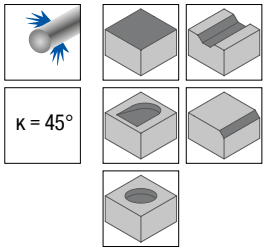

规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	扭矩 Nm	右手刀具 50 704 ...	右手刀具 50 705 ...	右手刀具 50 706 ...	左 50 707 ...
A270.32.R.05-09	32	40.4	5	4	40	34	16	1,8			**532**	
A270.40.R.04-09	40	48.4	4	4	40	38	16	1,8		**540**		
A270.40.R.06-09	40	48.4	6	4	40	38	16	1,8			**540**	
A270.42.R.06-09	42	50.4	6	4	40	38	16	1,8			**542**	
A270.50.R.06-09	50	58.4	6	4	40	43	22	1,8		**550**		
A270.50.R.08-09	50	58.4	8	4	40	43	22	1,8			**550**	
A270.50.L.08-09	50	58.4	8	4	40	43	22	1,8				**550**
A270.52.R.08-09	52	60.4	8	4	40	43	22	1,8			**552**	
A270.63.R.05-09	63	71.4	5	4	40	48	22	1,8	**563**			
A270.63.R.08-09	63	71.4	8	4	40	48	22	1,8		**563**		
A270.63.R.10-09	63	71.4	10	4	40	48	22	1,8			**563**	
A270.63.L.10-09	63	71.4	10	4	40	48	22	1,8				**563**
A270.66.R.10-09	66	74.4	10	4	40	48	22	1,8			**566**	
A270.80.R.06-09	80	88.4	6	4	50	58	27	1,8	**580**			
A270.80.R.10-09	80	88.4	10	4	50	58	27	1,8		**580**		
A270.80.R.12-09	80	88.4	12	4	50	58	27	1,8			**580**	
A270.80.L.12-09	80	88.4	12	4	50	58	27	1,8				**580**
A270.100.R.07-09	100	108.4	7	4	50	78	32	1,8	**600**			
A270.100.R.12-09	100	108.4	12	4	50	78	32	1,8		**600**		
A270.100.R.14-09	100	108.4	14	4	50	78	32	1,8			**600**	
A270.125.R.12-09	125	133.4	12	4	63	88	40	1,8		**625**		
A270.160.R.12-09	160	168.4	12	4	63	93	40	1,8	**660** [1]			

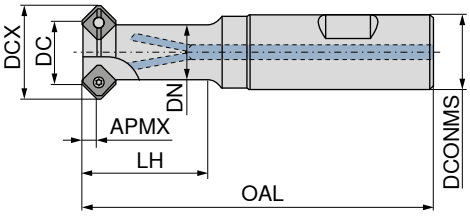
1) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应

- ▲ 50 704 ...疏齿，用于铝合金、有色金属和塑料等
- ▲ 50 705 ...标准齿 应用广范，从铝合金、有色金属到软钢
- ▲ 50 706 ...密齿，高进给率应用，主要加工钢和铸铁材料
- ▲ 50 707 ...同 50 706 ...，但为**左旋**型号

MaxiMill – 倒角铣刀 C 272-09

▲ 正反倒角





B

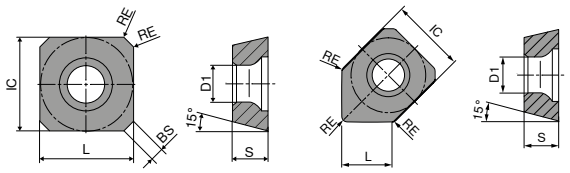
50 669 ...

规格型号	DC mm	DCX mm	ZNF	APMX mm	DN mm	OAL mm	LH mm	DCONMS mm	扭矩 Nm	刀片	
C272.06.R.01-09	6	14.4	1	4	10	91	24.0	16	1,2	SD.. 0903..	006
C272.08.R.01-09	8	16.4	1	4	10	91	25.5	16	1,2	SD.. 0903..	008
C272.12.R.01-09	12	20.4	1	4	12	91	26.0	16	1,2	SD.. 0903..	012
C272.16.R.02-09	16	24.4	2	4	15	97	30.0	20	1,8	SD.. 0903..	016
C272.18.R.02-09	18	26.4	2	4	16	97	30.0	20	1,8	SD.. 0903..	018
C272.25.R.03-09	25	33.4	3	4	21	109	35.0	25	1,8	SD.. 0903..	025

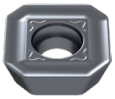
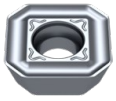
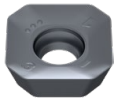
备件 DC	Torx 扳手®-可换接杆	扳手-D	润滑剂	刀片螺钉	扭力扳手
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
6 - 12	033	110	303	365	191
16 - 25	033	110	303	115	191

SDHW / SDNT / SDHT / XDHW

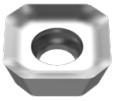
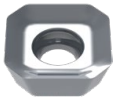
规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDHW 0903..	9.52	3.4	5.50	1.68	3.18
SD.. 0903..	9.52	3.4	9.52	1.68	3.18



SDHW / SDNT / SDHT

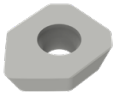
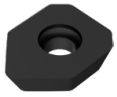
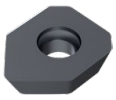
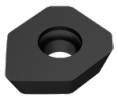
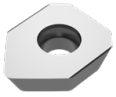
		TCM10	-29 CTCP230	-29 CTPP235	-33 CTPM240	-33P CTPM240	-F50 CTPM245	NEW -F50 CTCM245
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		CERMET						
		SDHW	SDNT	SDNT	SDHT	SDHT	SDHT	SDHT
		50 428 ...	51 011 ...	51 011 ...	51 028 ...	51 086 ...	51 109 ...	51 109 ...
ISO	RE mm							
0903AESN	1	898	020	120	420	420	470	92001
P		●	●	●	○	○	●	●
M				○	●	●	●	●
K		○	○	○				
N								
S								○
H								
O								

SDNT / SDHT

		-31 CTCK215	-27P H216T	-27P AMZ	-M31 CTC5240	-F50 CTCS245
		DRAGONSKIN			DRAGONSKIN	DRAGONSKIN
						
		SDNT	SDHT	SDHT	SDHT	SDHT
		51 029 ...	50 426 ...	50 426 ...	50 421 ...	51 109 ...
ISO	RE mm					
0903AEFN	1		548	848		
0903AESN	1	520			509	57100
P						
M						
K		●	○	○		
N			●	●		
S					●	●
H						
O			○	○		

15

XDHW

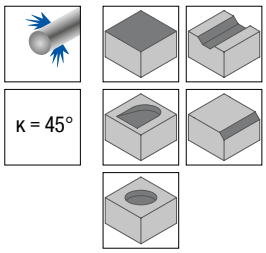
		TCM10	CTCP230	CTPP235	CTCK215	H216T
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
						
		CERMET				
		XDHW	XDHW	XDHW	XDHW	XDHW
		50 449 ...	**51 015 ...**	**51 015 ...**	**51 015 ...**	**50 449 ...**
ISO	RE mm					
0903AEEN	1				**520**	
0903AEFN	1					**548**
0903AESN	1	**898**	**020**	**120**		
P		●	●	●		
M				○		
K		○	○	○	●	○
N						●
S						
H						
O						○

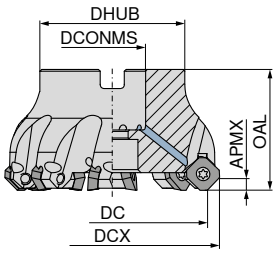
铣削指南

切削参数推荐值	→ 141-144	加工方式	→ 151
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

MaxiMill – 套式铣刀 45° A 270-12

▲ 50 705 ... 标准齿距适用于宽广的应用范围，从铝合金、有色金属到更软的钢材料
▲ 50 706 ... 窄齿距适用于最高的切削效率，主要加工钢和铸铁材料





规格型号	DC mm	DCX mm	ZNF	APMX mm	DCONMS H6 mm	OAL mm	DHUB mm	扭矩 Nm	刀片	50 705 ...	50 706 ...
A270.32.R.03-12	32	46	3	6	16	40	32	5	SD../XD.. 1204..	032	
A270.40.R.03-12	40	54	3	6	16	40	38	5	SD../XD.. 1204..	040	
A270.40.R.04-12	40	54	4	6	16	40	38	5	SD../XD.. 1204..		040
A270.50.R.04-12	50	64	4	6	22	40	43	5	SD../XD.. 1204..	050	
A270.50.R.05-12	50	64	5	6	22	40	43	5	SD../XD.. 1204..		050
A270.63.R.04-12	63	77	4	6	22	40	48	5	SD../XD.. 1204..	063	
A270.63.R.06-12	63	77	6	6	22	40	48	5	SD../XD.. 1204..		063
A270.80.R.05-12	80	94	5	6	27	50	58	5	SD../XD.. 1204..	080	
A270.80.R.08-12	80	94	8	6	27	50	58	5	SD../XD.. 1204..		080
A270.100.R.06-12	100	114	6	6	32	50	78	5	SD../XD.. 1204..	100	
A270.100.R.10-12	100	114	10	6	32	50	78	5	SD../XD.. 1204..		100
A270.125.R.07-12	125	139	7	6	40	63	88	5	SD../XD.. 1204..	125	
A270.125.R.12-12	125	139	12	6	40	63	88	5	SD../XD.. 1204..		125
A270.160.R.08-12	160	174	8	6	40	63	94	5	SD../XD.. 1204..	160 [1]	

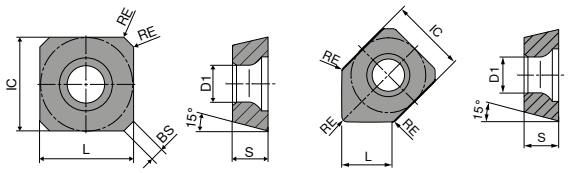
1) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
32 - 40	037	040	114	151	303	01200	193
50 - 160	037		114		303	01200	193

15

SDHT / SDHW / SDMT / XDHW

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDHW 1204..	12.7	5.5	7.5	1.74	4.76
SD.. 1204..	12.7	5.5	12.7	1.74	4.76



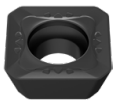
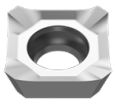
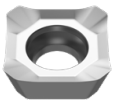
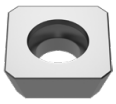
SDHT / SDHW / SDMT

		TCM10	-R TCM10	-29R CTCP230	-R CTCP230	CTCP230
				DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		CERMET SDHT	CERMET SDHW	SDMT	SDHT	SDHW
		50 426 ...	50 428 ...	51 010 ...	51 006 ...	51 008 ...
ISO	RE mm					
1204AESN	0.2	900				
1204AESN	1.0		899	020	020	020
P		●	●	●	●	●
M						
K		○	○	○	○	○
N						
S						
H						
O						

SDMT / SDHT / SDHW

		-29R CTPP235	-R CTPP235	-R CTPP235	-33 CTPM240	-F50 CTPM245	NEW -F50 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		SDMT	SDHT	SDHW	SDHT	SDHT	SDHT
		51 010 ...	51 006 ...	51 008 ...	51 028 ...	51 109 ...	51 109 ...
ISO	RE mm						
1204AESN	1	120	120	120	425	475	92501
P		●	●	●	○	●	●
M		○	○	○	●	●	●
K		○	○	○			
N							
S							○
H							
O							

SDMT / SDHW / SDHT

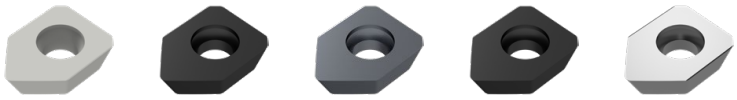
		-31 CTCK215 DRAGONSKIN	-R CTCK215 DRAGONSKIN	-27 H216T	-27P H216T	H216T
						
		SDMT	SDHW	SDHT	SDHT	SDHW
		51 059 ...	51 008 ...	50 426 ...	50 426 ...	50 428 ...
ISO	RE mm					
1204AEEN	1.0	520	520			
1204AEFN	0.2			504		
1204AEFN	1.0				554	
1204AESN	0.2					600
P						
M						
K		●	●	○	○	○
N				●	●	●
S						
H						
O				○	○	○

SDHT

		-M31 CTC5240 DRAGONSKIN	-F50 CTCS245 DRAGONSKIN
			
		SDHT	SDHT
		50 421 ...	51 109 ...
ISO	RE mm		
1204AESN	1	512	57600
P			
M			
K			
N			
S		●	●
H			
O			

15

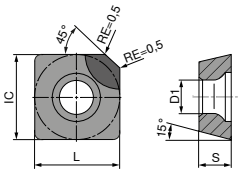
XDHW



ISO	RE mm	TCM10	CTCP230	CTPP235	CTCK215	H216T
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
		CERMET				
		XDHW	XDHW	XDHW	XDHW	XDHW
		50 449 ...	51 015 ...	51 015 ...	51 015 ...	50 449 ...
1204AEEN	1				525	
1204AEFN	1					600
1204AESN	1	900	025	125		
P		●	●	●		
M				○		
K		○	○	○	●	○
N						●
S						
H						
O						○

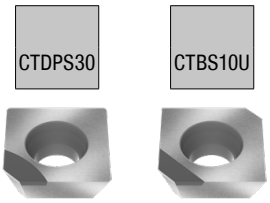
SDHW

规格型号	IC mm	D1 mm	L mm	S mm
SDHW 1204..	12.7	5.5	12.7	4.76



SDHW

SDHW



ISO	CTDPS30 DIAMOND SDHW 51 900 ...	CTBS10U CBN SDHW 51 900 ...
1204AEFN-2	100 1)	
1204AEFN-3	102 2)	
1204AETN-2		300 1)
P		
M		
K		●
N	●	
S		
H		○
O		

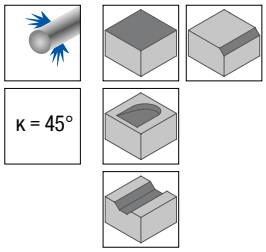
1) $a_{p\,max.}$ = 2.0 mm
2) $a_{P\,max.}$ = 3,5 mm

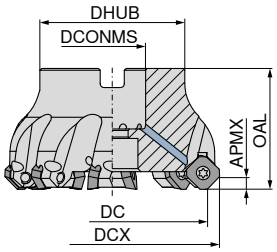
铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 151
技术信息	→ 189–194	断屑槽型描述及概览	→ 195–197
牌号描述及概览	→ 198–201		

15

MaxiMill – 套式铣刀 45° A 270-19





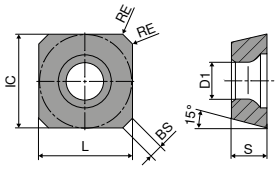
规格型号	DC mm	DCX mm	ZNF	APMX mm	DCONMS H6 mm	OAL mm	DHUB mm	扭矩 Nm	刀片	左手 50 698 ...	右手 50 698 ...
A270.125.R.07-19	125	146.4	7	10	40	63	88	5	SD.. 1907..		**12507**
A270.160.R.09-19	160	181.4	9	10	40	63	104	5	SD.. 1907..		**16009** 1)
A270.200.R.11-19	200	221.1	11	10	60	63	134	5	SD.. 1907..		**20011** 2)
A270.250.L.14-19	250	271.4	14	10	60	63	134	5	SD.. 1907..	**75014** 2)	
A270.250.R.14-19	250	271.4	14	10	60	63	134	5	SD.. 1907..		**25014** 2)
A270.315.L.17-19	315	336.4	17	10	60	63	226	5	SD.. 1907..	**81517** 4)	
A270.315.R.17-19	315	336.4	17	10	60	63	226	5	SD.. 1907..		**31517** 3)

1) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应
2) 前面配有4个M16螺纹孔，用于固定铣刀盘，孔径-Ø = 101.6 mm / 无内冷却液供应
3) 带 4 x M16 螺栓 安装孔，节圆直径 = 101.6 mm；带 4 x M20 螺栓安装孔，节圆直径 = 177.8 mm。 / 无内冷却液供应
4) 带 4 x M16 螺栓 安装孔，节圆直径 = 101.6 mm；带 4 x M20 螺栓安装孔，节圆直径 = 177.8 mm。

备件 DC	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	硬质合金支架 S 70 950 ...	螺纹套筒 70 950 ...	扭力扳手 80 950 ...
125 - 315	**037**	**114**	**303**	**302**	**01500**	**01400**	**193**

SDKT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
SDKT 1907..	19.15	6	19.15	1.5	7.35	15
SDKT 1907..	19.15	6	19.15	1.5	7.16	15



SD..

SDKT

		-M50 CTCP220	-R50 CTPP225	-R50 CTCP230	-M50 CTPP235	-R50 CTPP235	-R50 CTPM225	-R50 CTCK215
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		SDKT	SDKT	SDKT	SDKT	SDKT	SDKT	SDKT
		51 131 ...	51 132 ...	51 132 ...	51 131 ...	51 132 ...	51 132 ...	51 132 ...
ISO	RE mm							
1907AESN	1.6	22001	07000	02100	12000	12300	22200	52000
P		●	●	●	●	●	●	
M					○	○	●	
K				○	○	○		●
N								
S								
H								
O								

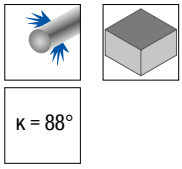
铣削指南

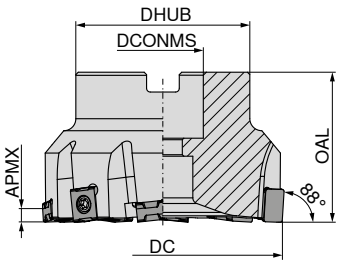
切削参数推荐值	→ 141–144	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

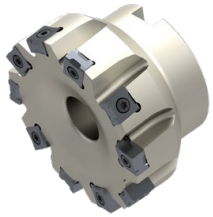
15

MaxiMill – 套式铣刀 HEC-11

▲ 不可调节







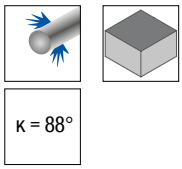
50 725 ...

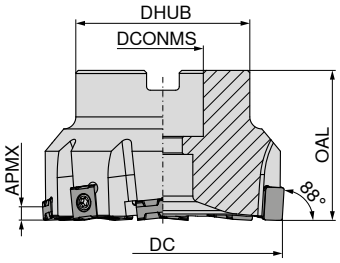
ISO-规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	
AHEC.50.R.06-11	50	6	6	40	48	22	12700	3,2	LNHX 1106	050
AHEC.63.R.08-11	63	8	6	40	48	22	10100	3,2	LNHX 1106	063
AHEC.80.R.10-11	80	10	6	50	58	27	8000	3,2	LNHX 1106	080
AHEC.100.R.12-11	100	12	6	50	78	32	6400	3,2	LNHX 1106	100
AHEC.125.R.12-11	125	12	6	63	88	40	5100	3,2	LNHX 1106	125
AHEC.125.R.16-11	125	16	6	63	88	40	5100	3,2	LNHX 1106	12516
AHEC.160.R.20-11	160	20	6	63	100	40	4000	3,2	LNHX 1106	160 1)

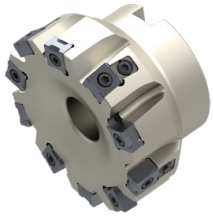
1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

MaxiMill – HEC 11 套式铣刀

▲ 轴向可调, 齿距相同







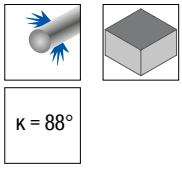
50 733 ...

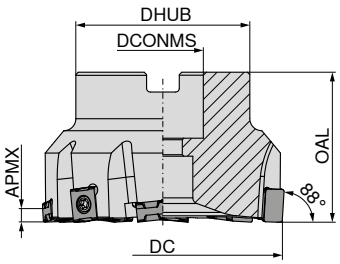
规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	
AHEC.50.R.06A03-11	50	6	6	40	48	22	12700	3,2	LNHX 1106	050
AHEC.63.R.08A04-11	63	8	6	40	48	22	10100	3,2	LNHX 1106	063
AHEC.80.R.10A05-11	80	10	6	50	58	27	8000	3,2	LNHX 1106	080
AHEC.100.R.12A06-11	100	12	6	50	78	32	6400	3,2	LNHX 1106	100
AHEC.125.R.16A08-11	125	16	6	63	88	40	5100	3,2	LNHX 1106	125
AHEC.160.R.20A10-11	160	20	6	63	100	40	4000	3,2	LNHX 1106	160 1)

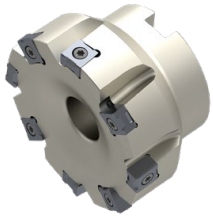
1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

MaxiMill – 套式铣刀 HEC-11

▲ 带不等齿距，不可调节







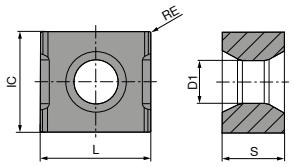
规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 733 ...
AHEC.50.R.04B-11	50	4	6	40	48	22	12700	3,2	LNHX 1106	**550**
AHEC.63.R.06B-11	63	6	6	40	48	22	10100	3,2	LNHX 1106	**563**
AHEC.80.R.08B-11	80	8	6	50	58	27	8000	3,2	LNHX 1106	**580**
AHEC.100.R.10B-11	100	10	6	50	78	32	6400	3,2	LNHX 1106	**600**
AHEC.125.R.12B-11	125	12	6	63	88	40	5100	3,2	LNHX 1106	**625**
AHEC.160.R.14B-11	160	14	6	63	100	40	4000	3,2	LNHX 1106	**660** [1]

1) 带 M12 螺栓 安装孔，节圆直径 = 66.7 mm / 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆 80 950 ...	润滑剂 70 950 ...	冷却垫片 70 950 ...	刀片螺钉 70 950 ...	夹紧楔块 70 950 ...	扭力扳手 80 950 ...
50 - 63	**036**	**303**	**852**	**113**		**193**
80	**036**	**303**	**853**	**113**	**199**	**193**
100	**036**	**303**	**854**	**113**		**193**
125	**036**	**303**	**855**	**113**		**193**
160	**036**	**303**		**113**		**193**

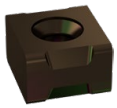
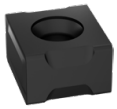
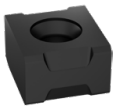
LNHX

规格型号	IC mm	D1 mm	L mm	S mm
LNHX 1106..	10	4.27	11	6.35



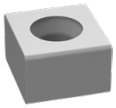
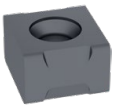
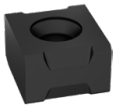
LNHX

LNHX

		CTEP210	CTCK215	-R50 CTCK215	-Q CTCK215
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		CERMET			
		LNHX	LNHX	LNHX	LNHX
		51 046 ...	51 046 ...	51 024 ...	51 045 ...
ISO	RE mm				
1106PNER	0.5		520	520	
1106ZZER	0.5				520 [1]
1106PNER	0.8	820			
110616EN	1.6		51600		
P		●			
M					
K		●	●	●	●
N					
S					
H					
O					

1) -Q = 修光刃刀片

LNHX

		CTPK220	-R50 CTPK220	CTN3105	CTL3215	-Q CTL3215
		DRAGONSKIN	DRAGONSKIN			
						
		LNHX	LNHX	CERAMIC LNHX	CBN LNHX	CBN LNHX
		51 046 ...	51 024 ...	50 500 ...	51 046 ...	51 045 ...
ISO	RE mm					
110608EN	0.8		**608**			
1106PNER	0.5	**620**	**620**			
1106PNSR	0.5			**904**		
1106PNSR					**87200**	
1106ZZER						**87000** [1]
P						
M						
K		●	●	●	●	●
N						
S						
H					○	○
O						

1) -Q = 修光刃刀片

铣削指南

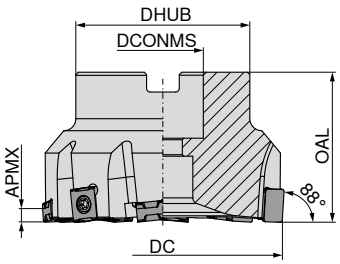
切削参数推荐值	→ 141–144	装配说明	→ 152
技术信息	→ 189–194	断屑槽型描述及概览	→ 195–197
牌号描述及概览	→ 198–201		

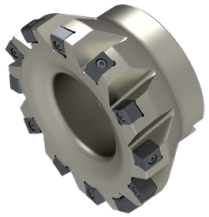
15

MaxiMill – 套式铣刀 HEC-12

▲ 不可调节

κ = 88°





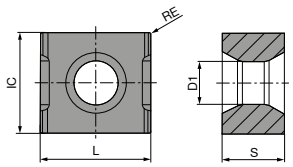
规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 725 ...
AHEC.125.R.12-1210	125	12	8	63	88	40	5000	3,2	LN.. 1210..	32512
AHEC.160.R.16-1210	160	16	8	63	88	40	3900	3,2	LN.. 1210..	36016 1)

1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

备件 DC	扭手-D	冷却垫片	刀片螺钉
			
	80 950 ...	70 950 ...	70 950 ...
125 - 160	105	855	10800

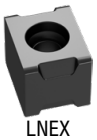
LNHX / LNEX

规格型号	IC mm	D1 mm	L mm	S mm
LN.X 1210..	10	4.4	12.7	10.00



LNHX

LNHX / LNEX

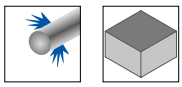
	CTCK215	CTPK220	-R50 CTPK220
			
	LNHX	LNEX	LNHX
	51 135 ...	51 133 ...	51 134 ...
ISO / RE mm			
121008EN 0.8			60800
121008SN 0.8	50900		
121020EN 0.2		62000	
121020SN 2.0	52100		
P			
M			
K	●	●	●
N			
S			
H			
O			

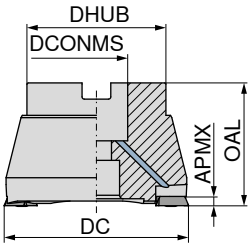
铣削指南

切削参数推荐值 → 141–144
装配说明 → 152
技术信息 → 189–194
断屑槽型描述及概览 → 195–197
牌号描述及概览 → 198–201

F 5000 A 精加工铣刀

▲ 可µm 级调节
▲ 螺钉 (56 950 017)，扳手 Torx 20 (80 950 114)





ISO-规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	扭矩 Nm	刀片	56 511 ...
F5000A.42.2.43.IK	42	2	0.2	43	16	35	3,2	TEHX 16T3..	421
F5000A.52.2.43.IK	52	2	0.2	43	22	48	3,2	TEHX 16T3..	521
F5000A.66.2.53.IK	66	2	0.2	53	27	60	3,2	TEHX 16T3..	661
F5000A.80.2.53.IK	80	2	0.2	53	27	60	3,2	TEHX 16T3..	801
F5000A.100.2.53	100	2	0.2	53	32	70	3,2	TEHX 16T3..	910 [1]

1) 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆 80 950 ...	T 型扳手 80 950 ...	扳手-D 80 950 ...	强力螺钉 56 950 ...	轴向跳动调整螺钉 56 950 ...	润滑剂 70 950 ...	刀片螺钉 56 950 ...	扭力扳手 80 950 ...
42	036	088	114	121	017	303	028	193
52	036	088	113		017	303	028	193
66	036	088	113		017	303	028	193
80	036	088	113		017	303	028	193
100	036	088	113	121	017	303	028	193

产品描述

▲ 刀片夹紧螺钉 56 950 028 的锁紧扭矩为 3.2 Nm。
▲ 该刀具加工出的表面具有 Rz ≤ 2.5 µm 的卓越表面质量以及较高的轴向跳动精度。
▲ 两个高精度调整螺钉可 µm 精度调节。
▲ 可达镜面效果，减少磨削工艺。从而有效缩短交货时间及成本。
▲ 该刀具也非常适用于不稳定工件和低功率机床。

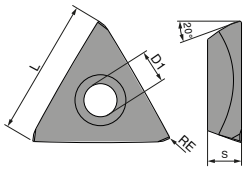
用于调整轴向跳动的螺钉安装在每个铣刀上，并且必须拧紧至预设值。否则在加工过程中螺钉会有松动的危险。这可能导致工件或刀具损坏，也会危及机床操作员的安全。如果不需要用于微调的螺钉，我们建议将其从刀具中取出。

材料名称	v_c m/min	f_z mm	a_p mm
钢	150–250*)	0,5–2	0,05–0,2
铸铁	150–250*)	0,5–2	0,05–0,2
≤ 56 HRC 的硬材	35–200*)	0,2–1	0,05–0,1

*) 取决于工件的加工和结构状态。

TEHX

规格型号	L mm	S mm	D1 mm
TEHX 16T3..	14.32	4.00	3.9



TEHX

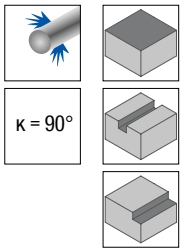
TEHX
56 327 ...

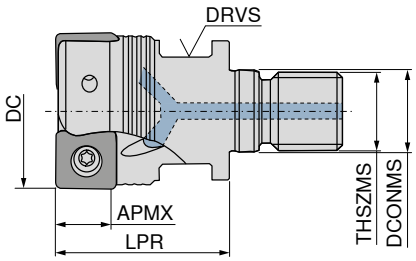
ISO	RE mm	
16T3ZF	0.2	151
P		●
M		●
K		●
N		
S		
H		●
O		

铣削指南

切削参数推荐值	→ 141-144	技术信息	→ 189-194
断屑槽型描述及概览	→ 195-197	牌号描述及概览	→ 198-201

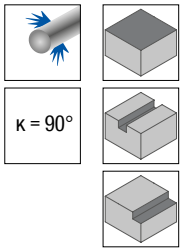
MaxiMill – Screw in 铣刀 G 491

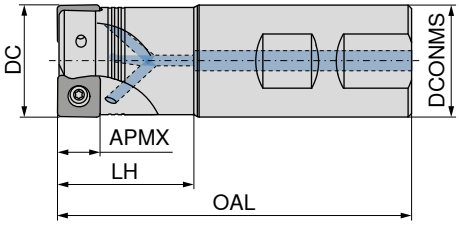




规格型号	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	50 773 ...
G491.25.R.03-09	25	3	6	35	M12	12.5	17	2	SNHU 09T3	125
G491.32.R.03-09	32	3	6	35	M16	17.0	24	2	SNHU 09T3	132
G491.32.R.04-09	32	4	6	35	M16	17.0	24	2	SNHU 09T3	232

MaxiMill – 立铣刀 C 491

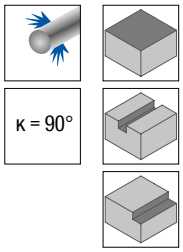


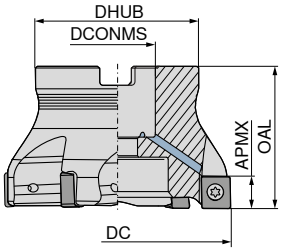


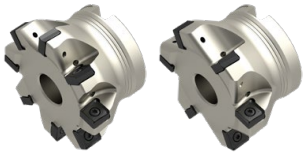
规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 774 ...	B 50 774 ...
C491.25.R.03-09-B-32	25	3	6	89	32	25	23500	2	SNHU 09T3		425
C491.25.R.03-09-A-50-225	25	3	6	225	50	25	23500	2	SNHU 09T3	325	
C491.32.R.03-09-B-40	32	3	6	101	40	32	19600	2	SNHU 09T3		632
C491.32.R.04-09-B-40	32	4	6	101	40	32	19600	2	SNHU 09T3		432
C491.32.R.03-09-A-63-250	32	3	6	250	63	32	19600	2	SNHU 09T3	532	
C491.32.R.04-09-A-63-250	32	4	6	250	63	32	19600	2	SNHU 09T3	332	

备件 DC	Torx 扭手®-可换接杆 80 950 ...	扭手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扭手 80 950 ...
25 - 32	053	119	303	710	193
32	054	128	303	859	193

MaxiMill – 套式铣刀 A 491







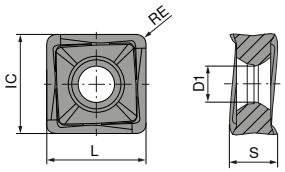
规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 776 ...	50 775 ...
A491.40.R.03-09	40	3	6	40	38	16	16800	2	SNHU 09T3		240
A491.40.R.05-09	40	5	6	40	38	16	16800	2	SNHU 09T3	240	
A491.50.R.04-09	50	4	6	40	43	22	14600	2	SNHU 09T3		250
A491.50.R.06-09	50	6	6	40	43	22	14600	2	SNHU 09T3	250	
A491.63.R.05-09	63	5	6	40	48	22	12700	2	SNHU 09T3		263
A491.63.R.08-09	63	8	6	40	48	22	12700	2	SNHU 09T3	263	
A491.80.R.06-09	80	6	6	50	58	27	11100	2	SNHU 09T3		280
A491.80.R.10-09	80	10	6	50	58	27	11100	2	SNHU 09T3	280	
A491.100.R.07-09	100	7	6	50	78	32	9800	2	SNHU 09T3		300
A491.100.R.12-09	100	12	6	50	78	32	9800	2	SNHU 09T3	300	
A491.125.R.08-09	125	8	6	63	88	40	8700	2	SNHU 09T3		325
A491.125.R.15-09	125	15	6	63	88	40	8700	2	SNHU 09T3	325	

1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

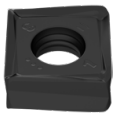
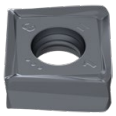
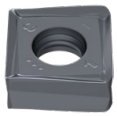
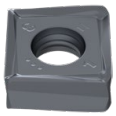
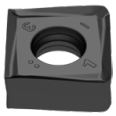
备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
40	053	040	119	151	303	710	193
50 - 125	053		119		303	710	193

SNHU

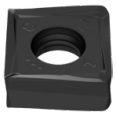
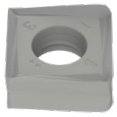
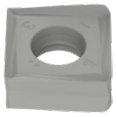
规格型号	IC mm	L mm	S mm	D1 mm
SNHU 09T3..	9.15	9.15	3.70	3.85



SNHU

		-M50 CTCP230	-M50 CTPP235	-F50 CTPM240	-M50 CTPM240	-F40 CTPM245	NEW -F40 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		SNHU	SNHU	SNHU	SNHU	SNHU	SNHU
		51 120 ...	51 120 ...	51 119 ...	51 120 ...	51 126 ...	51 126 ...
ISO	RE mm						
09T308ER	0.8					45800	90801
09T308SR	0.8	008	108	408	408		
09T312SR	1.2	01200	11200	41200	41200		
09T316SR	1.6	01600	11600	41600	41600		
P		●	●	○	○	●	●
M			○	●	●	●	●
K		○	○				
N							
S							○
H							
O							

SNHU

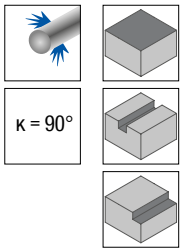
		-R50 CTCK215	NEW -R50 CTPK220	-F10 CTWN215	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN			DRAGONSKIN	DRAGONSKIN
						
		SNHU	SNHU	SNHU	SNHU	SNHU
		51 121 ...	51 121 ...	51 118 ...	51 126 ...	51 126 ...
ISO	RE mm					
09T308ER	0.8				15800	55800
09T308FR	0.8			358		
09T308SR	0.8	508	60800			
09T312FR	1.2			36200		
09T312SR	1.2	51200				
09T316FR	1.6			36600		
09T316SR	1.6	51600				
P						
M						
K		●	●	○		
N				●		
S					●	●
H						
O				○		

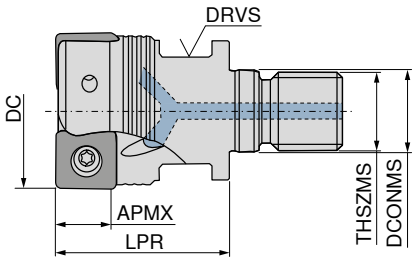
15

铣削指南

切削参数推荐值 → 141-144
起始推荐参数 → 154
技术信息 → 189-194
断屑槽型描述及概览 → 195-197
牌号描述及概览 → 198-201

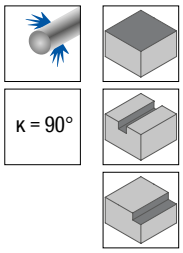
MaxiMill – Screw in 铣刀 G 491

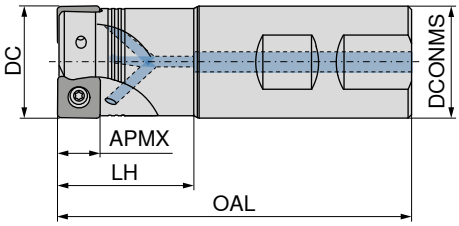




规格型号	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	50 773 ...
G491.32.R.02-12	32	2	8	35	M16	17	24	3,2	SNHU 1204	032

MaxiMill – 立铣刀 C 491

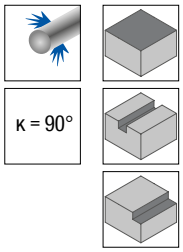


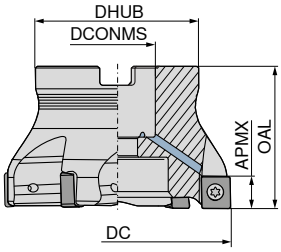


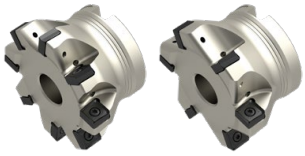
规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 774 ...	B 50 774 ...
C491.32.R.02-12-B-40	32	2	8	102	40	32	13600	3,2	SNHU 1204		032
C491.32.R.02-12-A-63-250	32	2	8	250	63	32	10200	3,2	SNHU 1204	232	

备件 DC	Torx 扭手®-可换接杆 80 950 ...	扭手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扭手 80 950 ...
25 - 32	053	119	303	710	193
32	054	128	303	859	193

MaxiMill – 套式铣刀 A 491







规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 776 ...	50 775 ...
A491.40.R.03-12	40	3	8	40	38	16	11500	3,2	SNHU 1204		040
A491.40.R.04-12	40	4	8	40	38	16	11500	3,2	SNHU 1204	040	
A491.50.R.04-12	50	4	8	40	43	22	9800	3,2	SNHU 1204		050
A491.50.R.05-12	50	5	8	40	43	22	9800	3,2	SNHU 1204	050	
A491.63.R.05-12	63	5	8	40	48	22	8500	3,2	SNHU 1204		063
A491.63.R.06-12	63	6	8	40	48	22	8500	3,2	SNHU 1204	063	
A491.80.R.06-12	80	6	8	50	58	27	7400	3,2	SNHU 1204		080
A491.80.R.08-12	80	8	8	50	58	27	7400	3,2	SNHU 1204	080	
A491.100.R.07-12	100	7	8	50	78	32	6500	3,2	SNHU 1204		100
A491.100.R.10-12	100	10	8	50	78	32	6500	3,2	SNHU 1204	100	
A491.125.R.08-12	125	8	8	63	88	40	5700	3,2	SNHU 1204		125
A491.125.R.12-12	125	12	8	63	88	40	5700	3,2	SNHU 1204	125	
A491.160.R.09-12	160	9	8	63	98	40	5000	3,2	SNHU 1204		160 1)
A491.160.R.14-12	160	14	8	63	98	40	5000	3,2	SNHU 1204	160 1)	

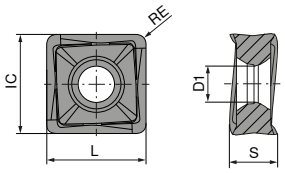
1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
40	054	040	128	151	303	859	193
50 - 160	054		128		303	859	193

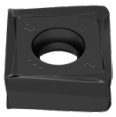
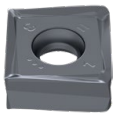
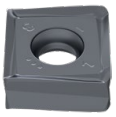
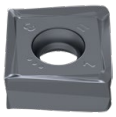
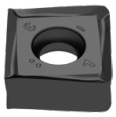
15

SNHU

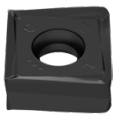
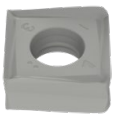
规格型号	IC mm	L mm	S mm	D1 mm
SNHU 1204..	12.2	12.2	5.00	4.4



SNHU

		-M50 CTCP230	-M50 CTPP235	-F50 CTPM240	-M50 CTPM240	-F40 CTPM245	NEW -F40 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		SNHU	SNHU	SNHU	SNHU	SNHU	SNHU
		51 100 ...	51 100 ...	51 102 ...	51 100 ...	51 128 ...	51 128 ...
ISO	RE mm						
120408ER	0.8					45800	90801
120408SR	0.8	008	108	408	408		
120412SR	1.2		112	412			
120416SR	1.6		116	416			
120420SR	2.0		120	420			
P		●	●	○	○	●	●
M			○	●	●	●	●
K		○	○				
N							
S							○
H							
O							

SNHU

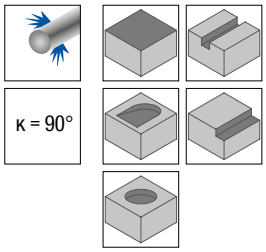
ISO	RE mm	-R50 CTCK215 DRAGONSKIN	-R50 CTPK220 DRAGONSKIN	-F10 CTWN215	-F40 CTC5240 DRAGONSKIN	-F40 CTCS245 DRAGONSKIN
						
		SNHU	SNHU	SNHU	SNHU	SNHU
		51 103 ...	51 103 ...	51 101 ...	51 128 ...	51 128 ...
120408ER	0.8				15800	55800
120408FR	0.8			358		
120408SR	0.8	508	608			
120412FR	1.2			362		
120412SR	1.2	512				
120416FR	1.6			366		
120416SR	1.6	516				
120420FR	2.0			370		
120420SR	2.0	520				
P						
M						
K		●	●	○		
N				●		
S					●	●
H						
O				○		

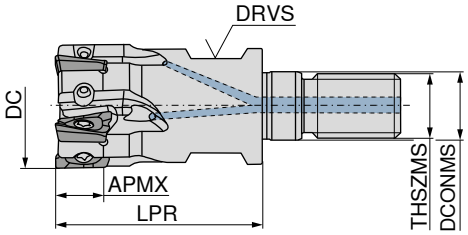
铣削指南

切削参数推荐值	→ 141-144	起始推荐参数	→ 154
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

15

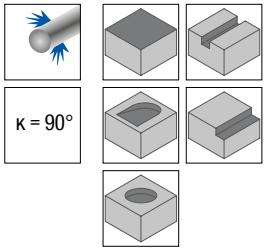
MaxiMill – Screw in 铣刀 G 211-07

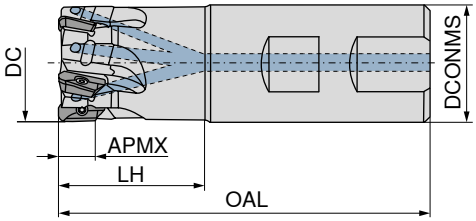




规格型号	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	50 751 ...
G211.16.R.04-07	16	4	6	27	8.5	M8	10	50400	1	XD.T 0703	016
G211.20.R.05-07	20	5	6	33	10.5	M10	15	44280	1	XD.T 0703	020
G211.25.R.06-07	25	6	6	35	12.5	M12	17	39480	1	XD.T 0703	025
G211.32.R.08-07	32	8	6	35	17.0	M16	24	36240	1	XD.T 0703	032

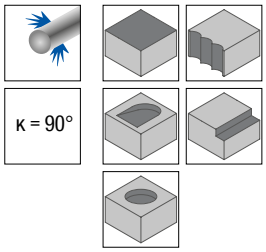
MaxiMill – 立铣刀 C 211-07

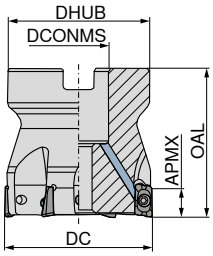


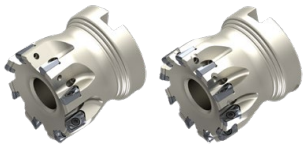


规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 752 ...	B 50 752 ...
C211.10.R.01-07-A-20	10	1	6	61.0	20	10	72000	1	XD.T 0703	010	
C211.12.R.02-07-A-20	12	2	6	66.5	20	12	66600	1	XD.T 0703	012	
C211.16.R.04-07-A/B-25	16	4	6	74.5	25	16	50400	1	XD.T 0703	016	216
C211.16.R.03-07-A-32-165	16	3	6	165.0	32	16	17760	1	XD.T 0703	116	
C211.20.R.05-07-A/B-25	20	5	6	77.0	25	20	44280	1	XD.T 0703	020	220
C211.20.R.04-07-A-40-200	20	4	6	200.0	40	20	12600	1	XD.T 0703	120	
C211.25.R.06-07-A/B20-32	25	6	6	84.0	32	20	39840	1	XD.T 0703	025	225
C211.25.R.05-07-A20-50-225	25	5	6	225.0	50	20	11280	1	XD.T 0703	125	
C211.32.R.08-07-A/B25-40	32	8	6	98.0	40	25	36240	1	XD.T 0703	032	232

MaxiMill – 套式铣刀 A 211-07







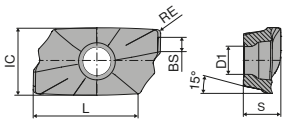
规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	RPMX 1/min.	扭矩 Nm	刀片	50 753 ...	50 754 ...
A211.32.R.06-07	32	6	6	40	16	38	36240	1	XD.T 0703	032	
A211.32.R.08-07	32	8	6	40	16	38	36240	1	XD.T 0703		032
A211.40.R.08-07	40	8	6	40	16	38	33240	1	XD.T 0703	040	
A211.40.R.10-07	40	10	6	40	16	38	33240	1	XD.T 0703		040
A211.50.R.10-07	50	10	6	40	22	43	30480	1	XD.T 0703	050	
A211.50.R.12-07	50	12	6	40	22	43	30480	1	XD.T 0703		050

备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
10 - 32	051		124		303	137	191
32	051	040	124	151	303	137	191
40 - 50	051		124		303	137	191

15

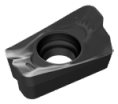
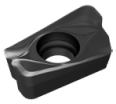
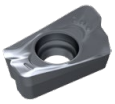
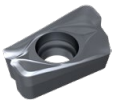
XDKT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDKT 0703..	4.9	2.5	7.8	1.2	3.18

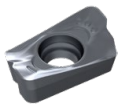
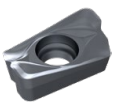
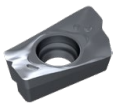
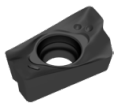
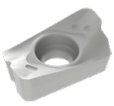
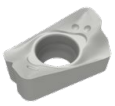


XDKT

XDKT

ISO	RE mm	-F50 CTCP230 DRAGONSKIN	-M50 CTCP230 DRAGONSKIN	-F50 CTPP235 DRAGONSKIN	-M50 CTPP235 DRAGONSKIN
		 XDKT 51 033 ...	 XDKT 51 036 ...	 XDKT 51 033 ...	 XDKT 51 036 ...
070304SR	0.4	004	004	104	104
070308SR	0.8	008	008	108	108
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

XDKT

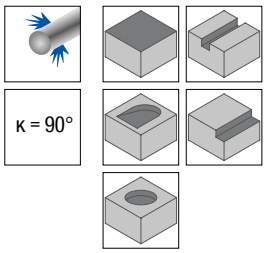
ISO	RE mm	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-F40 CTPM245 DRAGONSKIN	NEW -F40 CTCM245 DRAGONSKIN	-F20 CTWN215	-F40 CTC5240 DRAGONSKIN	-F40 CTCS245 DRAGONSKIN
		 XDKT 51 033 ...	 XDKT 51 036 ...	 XDKT 51 112 ...	 XDKT 51 112 ...	 XDKT 50 507 ...	 XDKT 50 498 ...	 XDKT 51 112 ...
070304ER	0.4			454	90401		544	
070304FR	0.4					504		
070304SR	0.4	404	404					
070308ER	0.8			458	90801		548	558
070308FR	0.8					508		
070308SR	0.8	408	408					
P		○	○	●	●			
M		●	●	●	●			
K						○		
N						●		
S					○		●	●
H								
O						○		

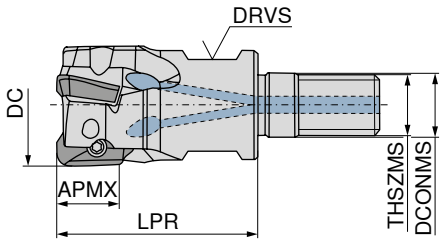
铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 155
起始推荐参数	→ 155	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

MaxiMill – Screw in 铣刀 G 211-11

▲ 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

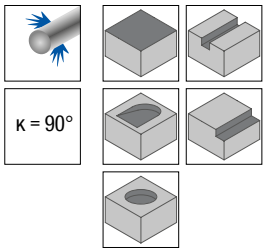


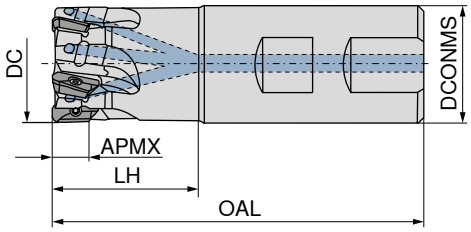


规格型号	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	50 736 ...
G211.16.R.02-11	16	2	10	27	8.5	M8	10	42000	1,6	XD.T 11T3	016
G211.20.R.03-11	20	3	10	33	10.5	M10	15	36900	1,6	XD.T 11T3	020
G211.25.R.03-11	25	3	10	35	12.5	M12	17	33200	1,6	XD.T 11T3	12500
G211.25.R.04-11	25	4	10	35	12.5	M12	17	33200	1,6	XD.T 11T3	025
G211.32.R.04-11	32	4	10	35	17.0	M16	24	30200	1,6	XD.T 11T3	13200
G211.32.R.05-11	32	5	10	35	17.0	M16	24	30200	1,6	XD.T 11T3	032
G211.40.R.06-11	40	6	10	35	17.0	M16	27	27700	1,6	XD.T 11T3	040

MaxiMill – 立铣刀 C 211-11

▲ 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

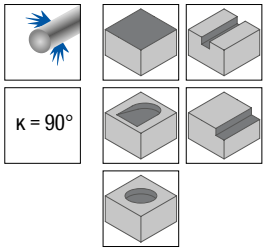


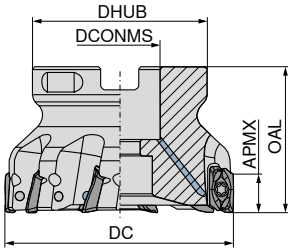


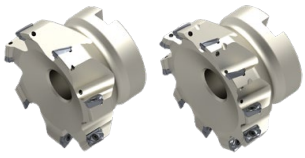
规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 737 ...	B 50 737 ...
C211.12.R.01-11-B-20	12	1	10	75	20	16	55000	1,6	XD.T 11T3		012
C211.16.R.02-11-A/B-25	16	2	10	75	25	16	42000	1,6	XD.T 11T3	116	016
C211.16.R.02-11-A15-32-165	16	2	10	165	32	15	14800	1,6	XD.T 11T3	316	
C211.16.R.02-11-A-32-165	16	2	10	165	32	16	14800	1,6	XD.T 11T3	216	
C211.20.R.03-11-A-25	20	3	10	77	25	20	36900	1,6	XD.T 11T3	120	
C211.20.R.02-11-B-25	20	2	10	77	25	20	36900	1,6	XD.T 11T3		02002
C211.20.R.02-11-A-25	20	2	10	77	25	20	36900	1,6	XD.T 11T3	12002	
C211.20.R.03-11-B-25	20	3	10	77	25	20	36900	1,6	XD.T 11T3		020
C211.20.R.03-11-A-32-165	20	3	10	165	32	20	15800	1,6	XD.T 11T3	320	
C211.20.R.02-11-A-40-200	20	2	10	200	40	20	10500	1,6	XD.T 11T3	420	
C211.20.R.02-11-A19-40-200	20	2	10	200	40	19	10500	1,6	XD.T 11T3	620	
C211.25.R.03-11-A/B-32	25	3	10	90	32	25	33200	1,6	XD.T 11T3	625	725
C211.25.R.04-11-A/B-32	25	4	10	90	32	25	33200	1,6	XD.T 11T3	125	025
C211.25.R.04-11-A-40-165	25	4	10	165	40	25	19900	1,6	XD.T 11T3	325	
C211.25.R.03-11-A-50-225	25	3	10	225	50	25	9400	1,6	XD.T 11T3	425	
C211.25.R.02-11-A-50-225	25	2	10	225	50	25	9400	1,6	XD.T 11T3	02502	
C211.25.R.03-11-A24-50-225	25	3	10	225	50	24	9400	1,6	XD.T 11T3	825	
C211.32.R.04-11-A-40	32	4	10	102	40	32	30200	1,6	XD.T 11T3	13204	
C211.32.R.05-11-B25-40	32	5	10	102	40	25	30200	1,6	XD.T 11T3		73200
C211.32.R.04-11-B-25	32	4	10	102	40	32	30200	1,6	XD.T 11T3		83200
C211.32.R.04-11-A25-40	32	4	10	102	40	25	30200	1,6	XD.T 11T3	53204	
C211.32.R.05-11-A/B-40	32	5	10	102	40	32	30200	1,6	XD.T 11T3	132	032
C211.32.R.05-11-A-50-165	32	5	10	165	50	32	20900	1,6	XD.T 11T3	332	
C211.32.R.04-11-A-64-250	32	4	10	250	64	32	8500	1,6	XD.T 11T3	432	
C211.40.R.06-11-B32-50	40	6	10	110	50	32	27700	1,6	XD.T 11T3		04000
C211.40.R.06-11-B-50	40	6	10	122	50	40	27700	1,6	XD.T 11T3		14000

MaxiMill – 套式铣刀 A 211-11

▲ 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。





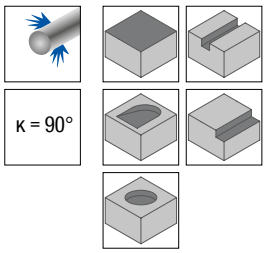


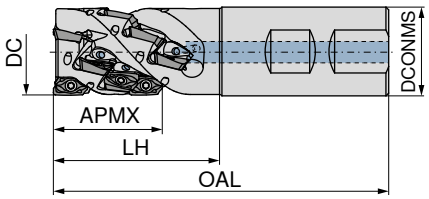
规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	RPMX 1/min.	扭矩 Nm	刀片	50 738 ...	50 739 ...
A211.40.R.04-11	40	4	10	40	16	38	27700	1,6	XD.T 11T3	040	
A211.40.R.06-11	40	6	10	40	16	38	27700	1,6	XD.T 11T3		040
A211.50.R.08-11	50	8	10	40	22	43	25400	1,6	XD.T 11T3		050
A211.50.R.05-11	50	5	10	40	22	43	25400	1,6	XD.T 11T3	050	
A211.63.R.10-11	63	10	10	40	22	48	23300	1,6	XD.T 11T3		063
A211.63.R.06-11	63	6	10	40	22	48	23300	1,6	XD.T 11T3	063	
A211.80.R.10-11	80	10	10	50	27	58	21300	1,6	XD.T 11T3		180
A211.80.R.07-11	80	7	10	50	27	58	21300	1,6	XD.T 11T3	080	
A211.80.R.12-11	80	12	10	50	27	58	21300	1,6	XD.T 11T3		08012
A211.100.R.08-11	100	8	10	50	32	78	19600	1,6	XD.T 11T3	10000	
A211.100.R.14-11	100	14	10	50	32	78	19600	1,6	XD.T 11T3		10014
A211.125.R.10-11	125	10	10	63	40	88	17900	1,6	XD.T 11T3	12500	

备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
12	043		125		303	116	191
16 - 32	043		125		303	128	191
40	043	040	125	151	303	131	191
50	043	050	125	154	303	131	191
63 - 125	043		125		303	131	191

MaxiMill – 玉米铣刀 C 211-11KN

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数





NEW

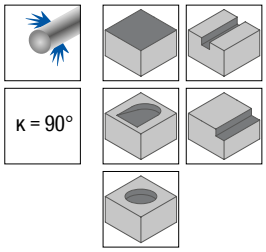
B

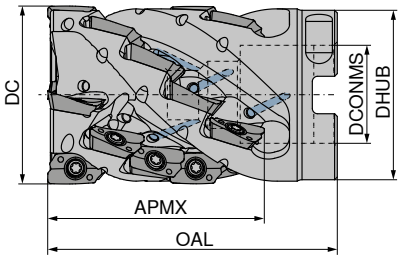
50 784 ...

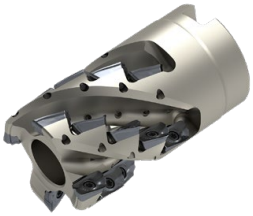
ISO-规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	ZEFP	ZNP	扭矩 Nm	刀片	
C211.25.R.02KN3-11-B-40	25	2	28	97	40	25	6	3	1,6	XD.T 11T3	02523
C211.25.R.02KN4-11-B-50	25	2	37	107	50	25	8	4	1,6	XD.T 11T3	02524
C211.25.R.02KN5-11-B-60	25	2	46	117	60	25	10	5	1,6	XD.T 11T3	02525
C211.32.R.02KN4-11-B-50	32	2	37	111	50	32	8	4	1,6	XD.T 11T3	03224
C211.32.R.03KN5-11-B-60	32	3	46	121	60	32	15	5	1,6	XD.T 11T3	03235
C211.40.R.03KN4-11-B32-50	40	3	37	111	50	32	12	4	1,6	XD.T 11T3	04034
C211.40.R.04KN5-11-B32-60	40	4	46	121	60	32	20	5	1,6	XD.T 11T3	04045

MaxiMill – 玉米铣刀 A 211-11KN

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数







NEW

50 794 ...

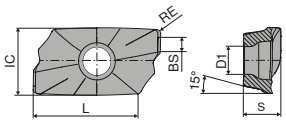
ISO-规格型号	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	
A211.40.R.03KN4-11	40	3	37	12	4	65	22	38	1,6	XD.T 11T3	04034
A211.40.R.04KN4-11	40	4	37	16	4	65	22	38	1,6	XD.T 11T3	04044
A211.40.R.04KN5-11	40	4	46	20	5	74	22	38	1,6	XD.T 11T3	04045
A211.50.R.04KN5-11	50	4	46	20	5	75	27	48	1,6	XD.T 11T3	05045
A211.50.R.05KN5-11	50	5	46	25	5	75	27	48	1,6	XD.T 11T3	05055
A211.50.R.05KN6-11	50	5	55	30	6	85	27	48	1,6	XD.T 11T3	05056

备件 规格型号	 螺旋塞	Torx 扳手®-可换接杆	扳手-D	 润滑剂	 刀片螺钉	 内六角螺钉	 扭力扳手
	70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
A211.40. KN4		043	125	303	20400	20900	191
A211.40. KN5		043	125	303	20400	21000	191
A211.50. KN5	002	043	125	303	20400	20600	191
A211.50. KN6	002	043	125	303	20400	20600	191
C211.25		043	125	303	20700		191
C211.32		043	125	303	20700		191
C211.40		043	125	303	20400		191

15

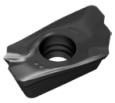
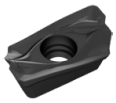
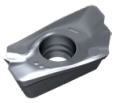
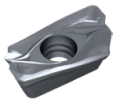
XDKT / XDHT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XD.T 11T302..	6.8	2.8	10.6	2	3.80
XD.T 11T304..	6.8	2.8	10.6	1.8	3.80
XD.T 11T308..	6.8	2.8	10.6	1.4	3.80
XD.T 11T312..	6.8	2.8	10.6	1.4	3.80
XD.T 11T316..	6.8	2.8	10.6	1.4	3.80
XD.T 11T320..	6.8	2.8	10.6	1.4	3.80
XD.T 11T325..	6.8	2.8	10.6	1.4	3.80
XD.T 11T332..	6.8	2.8	10.6	0.8	3.80
XD.T 11T340..	6.8	2.8	10.6	-	3.80
XDHT 11T350..	6.8	2.8	10.6	-	3.80
XDKT 11T332..	6.8	2.8	10.6	1.4	3.80
XDKT 11T332..	6.8	2.8	10.6	-	3.80

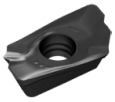
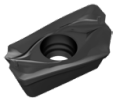
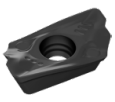
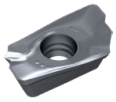
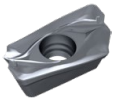
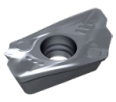


XDKT

XDKT

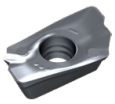
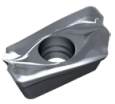
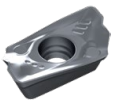
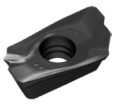
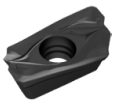
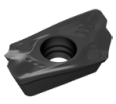
	-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	XDKT	XDKT	XDKT	XDKT
	51 034 ...	51 037 ...	51 034 ...	51 037 ...
ISO / RE mm				
11T308SR 0.8	258	258	058	058
P	●	●	●	●
M				
K				
N				
S				
H				
O				

XDKT

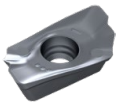
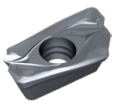
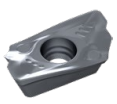
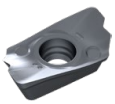
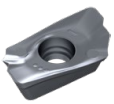
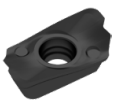
	-F50 CTCP230	-M50 CTCP230	-R50 CTCP230	-F50 CTPP235	-M50 CTPP235	-R50 CTPP235
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
	XDKT	XDKT	XDKT	XDKT	XDKT	XDKT
	51 034 ...	51 037 ...	51 039 ...	51 034 ...	51 037 ...	51 039 ...
ISO / RE mm						
11T304SR 0.4	004	004	004	104	104	104
11T308SR 0.8	008	008	008	108	108	108
11T312SR 1.2		012			112	
11T320SR 2.0	020 1)	020 1)	020 1)	120 1)	120 1)	120 1)
11T325SR 2.5	025 1)	025 1)	025 1)	125 1)	125 1)	125 1)
11T332SR 3.2				13200		
11T340SR 4.0				14000		
P	●	●	●	●	●	●
M				○	○	○
K	○	○	○	○	○	○
N						
S						
H						
O						

1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

XDKT

ISO	RE mm	-F50 CTPM225 DRAGONSKIN	-M50 CTPM225 DRAGONSKIN	-R50 CTPM225 DRAGONSKIN	-F50 CTCM235 DRAGONSKIN	-M50 CTCM235 DRAGONSKIN	-R50 CTCM235 DRAGONSKIN
							
		XDKT 51 034 ...	XDKT 51 037 ...	XDKT 51 039 ...	XDKT 51 034 ...	XDKT 51 037 ...	XDKT 51 039 ...
11T308SR	0.8	208	208	208	308	308	308
P		●	●	●	●	●	●
M		●	●	●	●	●	●
K							
N							
S							
H							
O							

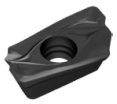
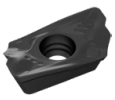
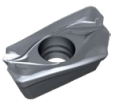
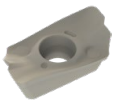
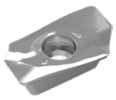
XDKT

ISO	RE mm	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-R50 CTPM240 DRAGONSKIN	-F40 CTPM245 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	NEW -F40 CTCM245 DRAGONSKIN	NEW -F50 CTCM245 DRAGONSKIN
								
		XDKT 51 034 ...	XDKT 51 037 ...	XDKT 51 039 ...	XDKT 51 113 ...	XDKT 51 034 ...	XDKT 51 113 ...	XDKT 51 034 ...
11T304ER	0.4				454		90401	
11T304SR	0.4		404					
11T308ER	0.8				458		90801	
11T308SR	0.8	408	408	408		458		90801
11T312ER	1.2				462		91201	
11T312SR	1.2	412	412	412				
11T316ER	1.6				466		91601	
11T320ER	2.0				470 1)		92001 1)	
11T320SR	2.0	420 1)	420 1)	420 1)				
11T325ER	2.5				475 1)		92501 1)	
11T332ER	3.2				482 1)		93201 1)	
11T332SR	3.2	432 1)	432 1)	432 1)				
11T340ER	4.0				490 1)		94001 1)	
P		○	○	○	●	●	●	●
M		●	●	●	●	●	●	●
K								
N								
S							○	○
H								
O								

1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

15

XDKT / XDHT

		-M50 CTCK215	-R50 CTCK215	-M50 CTPK220	-F20 CTWN215	-27P H216T
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		
						
		XDKT	XDKT	XDKT	XDKT	XDHT
		51 037 ...	51 039 ...	51 037 ...	50 478 ...	50 477 ...
ISO	RE mm					
11T302FR	0.2				502	502
11T304FR	0.4				504	504
11T304SR	0.4	504				
11T308FR	0.8				508	508
11T308SR	0.8	508	508	608		
11T312FR	1.2					512
11T316FR	1.6					516
11T320FR	2.0				520 1)	520 1)
11T325FR	2.5				525 1)	525 1)
11T332FR	3.2					532 1)
11T340FR	4.0					540 1)
11T350FR	5.0					550 1)
P						
M						
K		●	●	●	○	○
N					●	●
S						
H						
O					○	○

1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

XDKT

		-F40 CTC5240	-F40 CTCS245	-R60 CTP6215
		DRAGONSKIN	DRAGONSKIN	
				
		XDKT	XDKT	XDKT
		50 463 ...	51 113 ...	50 464 ...
ISO	RE mm			
11T304ER	0.4	504		
11T308ER	0.8	500	558	
11T308SR	0.8			300
11T312ER	1.2	512	562	
11T316ER	1.6	516	566	
11T320ER	2.0	520 1)	570	
11T325ER	2.5	525 1)	57500 1)	
11T332ER	3.2	532 1)	582	
11T340ER	4.0	540 1)	59000 1)	
P				
M				
K				●
N				
S		●	●	
H				●
O				

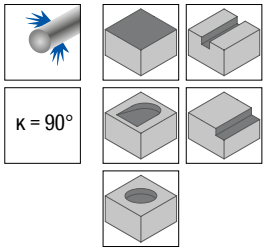
1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

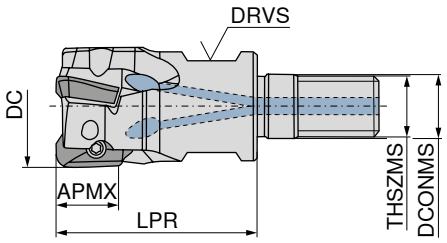
铣削指南

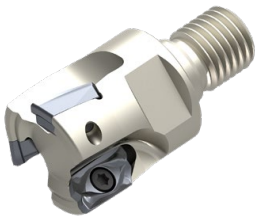
切削参数推荐值	→ 141-144	加工方式	→ 156
起始推荐参数	→ 156	技术信息	→ 189-194
断屑槽型描述及概览	→ 195-197	牌号描述及概览	→ 198-201

MaxiMill – Screw in 铣刀 G 211-15

▲ 当刀片圆角半径>2.5mm时，请进行合理的刀盘改制。



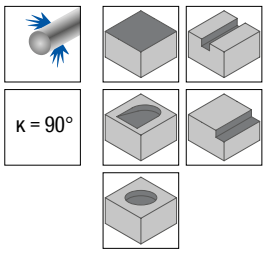


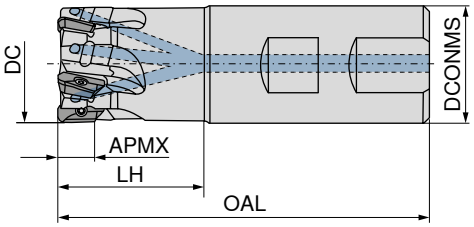


规格型号	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	50 746 ...
G211.25.R.02-15	25	2	14	35	12.5	M12	17	26560	3,2	XD.T 1505	025
G211.32.R.03-15	32	3	14	35	17.0	M16	24	30200	3,2	XD.T 1505	032
G211.40.R.04-15	40	4	14	40	17.0	M16	27	27700	3,2	XD.T 1505	040

MaxiMill – 立铣刀 C 211-15

▲ 当刀片圆角半径>2.5mm时，请进行合理的刀盘改制。

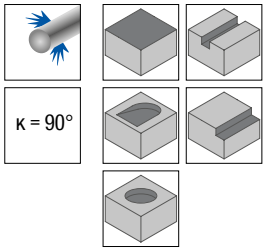


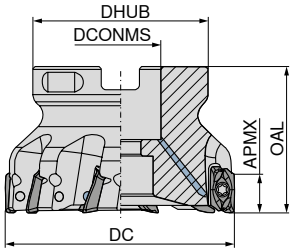


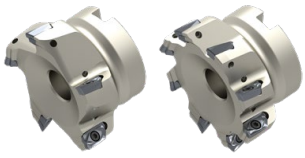
规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 747 ...	B 50 747 ...
C211.25.R.02-15-B20-32	25	2	14	83	32	20	26560	3,2	XD.T 1505		125
C211.25.R.02-15-B/A-32	25	2	14	90	32	25	26560	3,2	XD.T 1505	225	025
C211.25.R.02-15-A-50-225	25	2	14	225	50	25	7520	3,2	XD.T 1505	325	
C211.32.R.03-15-B25-40	32	3	14	96	40	25	22160	3,2	XD.T 1505		132
C211.32.R.03-15-A-40	32	3	14	103	40	32	24160	3,2	XD.T 1505	232	
C211.32.R.03-15-B-40	32	3	14	103	40	32	24160	3,2	XD.T 1505		032
C211.32.R.03-15-A-63-250	32	3	14	250	63	32	6800	3,2	XD.T 1505	332	
C211.40.R.04-15-A-50	40	4	14	110	50	32	22160	3,2	XD.T 1505	240	
C211.40.R.04-15-B32-50	40	4	14	110	50	32	22160	3,2	XD.T 1505		040
C211.40.R.03-15-A-50-275	40	3	14	275	50	32	6120	3,2	XD.T 1505	340	

MaxiMill – 套式铣刀 A 211-15

▲ 当刀片圆角半径>2.5mm, 时请进行合理的刀盘改制。







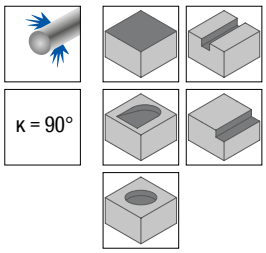
规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	RPMX 1/min.	扭矩 Nm	刀片	50 748 ...	50 749 ...
A211.40.R.03-15	40	3	14	40	16	38	22160	3,2	XD.T 1505	040	
A211.40.R.04-15	40	4	14	40	16	38	22160	3,2	XD.T 1505		040
A211.50.R.03-15	50	3	14	40	22	43	20320	3,2	XD.T 1505	050	
A211.50.R.05-15	50	5	14	40	22	43	20320	3,2	XD.T 1505		050
A211.63.R.04-15	63	4	14	45	22	48	18640	3,2	XD.T 1505	063	
A211.63.R.06-15	63	6	14	45	22	48	18640	3,2	XD.T 1505		063
A211.80.R.05-15	80	5	14	50	27	58	17040	3,2	XD.T 1505	080	
A211.80.R.08-15	80	8	14	50	27	58	17040	3,2	XD.T 1505		080
A211.100.R.06-15	100	6	14	50	32	78	15680	3,2	XD.T 1505	100	
A211.100.R.10-15	100	10	14	50	32	78	15680	3,2	XD.T 1505		100
A211.125.R.07-15	125	7	14	63	40	88	14320	3,2	XD.T 1505	125	
A211.125.R.11-15	125	11	14	63	40	88	14320	3,2	XD.T 1505		125
A211.160.R.08-15	160	8	14	63	40	93	13200	3,2	XD.T 1505	160 [1]	
A211.160.R.12-15	160	12	14	63	40	93	13200	3,2	XD.T 1505		160 [1]

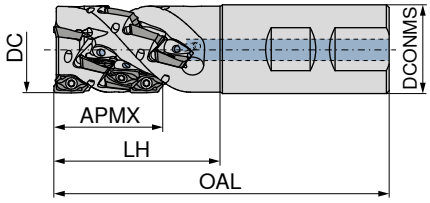
1) 无内冷却液供应

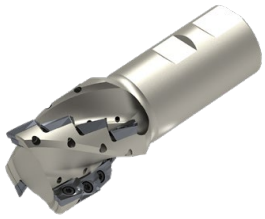
备件 DC	Torx 扭手®-可换接杆 80 950 ...	夹紧扭手-T 80 397 ...	扭手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扭手 80 950 ...
25 - 32	054		128		303	839	193
40	054	040	128	151	303	839	193
50	054	050	128	154	303	839	193
63 - 160	054		128		303	839	193

MaxiMill – 套式立铣刀 C 211-15KN

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数







NEW

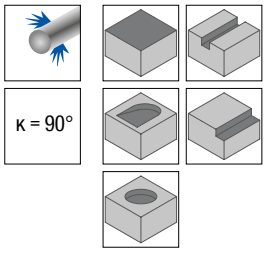
B

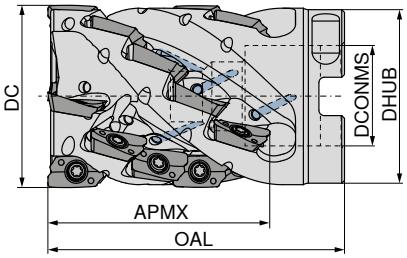
50 783 ...

ISO-规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	ZEFP	ZNP	扭矩 Nm	刀片	
C211.40.R.03KN3-15-B32-60	40	3	39.6	121	60	32	9	3	3,2	XD.T 1505	04033
C211.50.R.03KN4-15-B40-68	50	3	52.6	138	67	40	12	4	3,2	XD.T 1505	05034

MaxiMill – 套式立铣刀 A 211-15KN

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数





NEW

50 781 ...

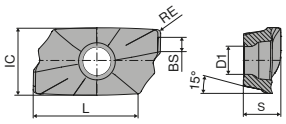
ISO-规格型号	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	
A211.50.R.03KN4-15	50	3	52.6	12	4	87	27	48	3,2	XD.T 1505	05034
A211.50.R.03KN5-15	50	3	65.8	15	5	100	27	48	3,2	XD.T 1505	05035
A211.50.R.04KN5-15	50	4	65.8	20	5	100	27	48	3,2	XD.T 1505	05045
A211.63.R.03KN4-15	63	3	52.6	12	4	76	27	58	3,2	XD.T 1505	06334
A211.63.R.03KN5-15	63	3	65.8	15	5	90	27	58	3,2	XD.T 1505	06335
A211.63.R.04KN6-15	63	4	78.5	24	6	102	27	58	3,2	XD.T 1505	06346
A211.63.R.05KN5-15	63	5	65.8	25	5	90	27	58	3,2	XD.T 1505	06355
A211.80.R.04KN5-15	80	4	65.8	20	5	90	32	78	3,2	XD.T 1505	08045
A211.80.R.05KN6-15	80	5	78.5	30	6	102	32	78	3,2	XD.T 1505	08056

备件 规格型号	 螺旋塞 70 950 ...	 Torx 扭手®-可换接杆 80 950 ...	 扭手-D 80 950 ...	 润滑剂 70 950 ...	 刀片螺钉 70 950 ...	 内六角螺钉 70 950 ...	 扭力扭手 80 950 ...
A211.50	002	054	128	303	20800	20600	193
A211.63	002	054	128	303	20500	20600	193
A211.80	004	054	128	303	20500	234	193
C211.40		054	128	303	20800		193
C211.50		054	128	303	20800		193

15

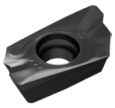
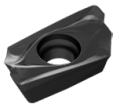
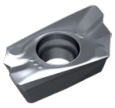
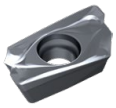
XDKT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDKT 150508..	9.3	4.4	14.8	1.6	5.56
XDKT 150512..	9.3	4.4	14.8	1.6	5.56
XDKT 150516..	9.3	4.4	14.8	1.6	5.56
XDKT 150520..	9.3	4.4	14.8	1.6	5.56
XDKT 150525..	9.3	4.4	14.8	1.6	5.56
XDKT 150530..	9.3	4.4	14.8	1.6	5.56
XDKT 150532..	9.3	4.4	14.8	1.9	5.56
XDKT 150540..	9.3	4.4	14.8	1.2	5.56
XDKT 150560..	9.3	4.4	14.8	-	5.56

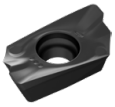
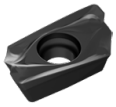
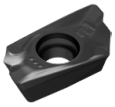
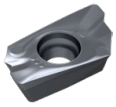
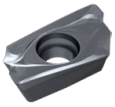
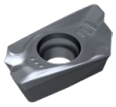


XDKT

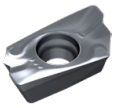
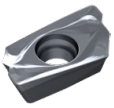
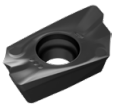
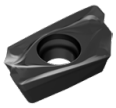
XDKT

		-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		XDKT	XDKT	XDKT	XDKT
		51 035 ...	51 038 ...	51 035 ...	51 038 ...
ISO	RE mm				
150508SR	0.8	258	258	058	058
P		●	●	●	●
M					
K					
N					
S					
H					
O					

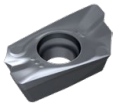
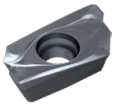
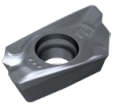
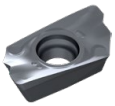
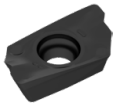
XDKT

		-F50 CTCP230	-M50 CTCP230	-R50 CTCP230	-F50 CTPP235	-M50 CTPP235	-R50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		XDKT	XDKT	XDKT	XDKT	XDKT	XDKT
		51 035 ...	51 038 ...	51 040 ...	51 035 ...	51 038 ...	51 040 ...
ISO	RE mm						
150508SR	0.8	008	008	008	108	108	108
150512SR	1.2		012			112	
150516SR	1.6		016			116	
150520SR	2.0			020		120	120
150530SR	3.0		030			130	
150540SR	4.0		040			140	
P		●	●	●	●	●	●
M					○	○	○
K		○	○	○	○	○	○
N							
S							
H							
O							

XDKT

ISO	RE mm	-F50 CTPM225 DRAGONSKIN	-M50 CTPM225 DRAGONSKIN	-F50 CTCM235 DRAGONSKIN	-M50 CTCM235 DRAGONSKIN
					
		XDKT 51 035 ...	XDKT 51 038 ...	XDKT 51 035 ...	XDKT 51 038 ...
150508SR	0.8	208	208	308	308
P		●	●	●	●
M		●	●	●	●
K					
N					
S					
H					
O					

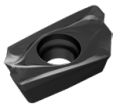
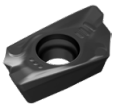
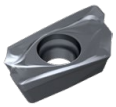
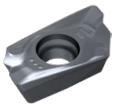
XDKT

ISO	RE mm	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-R50 CTPM240 DRAGONSKIN	-F40 CTPM245 DRAGONSKIN	NEW -F40 CTCM245 DRAGONSKIN
						
		XDKT 51 035 ...	XDKT 51 038 ...	XDKT 51 040 ...	XDKT 51 114 ...	XDKT 51 114 ...
150508ER	0.8				458	90801
150508SR	0.8	408	408	408		
150512ER	1.2					91201
150512SR	1.2		412			
150516ER	1.6					91601
150516SR	1.6		416			
150520ER	2.0					92001 1)
150525ER	2.5					92501 1)
150530SR	3.0		430			
150532ER	3.2				482 1)	93201 1)
150540ER	4.0				490 1)	94001 1)
150540SR	4.0		440			
150560ER	6.0					96001 1)
P		○	○	○	●	●
M		●	●	●	●	●
K						
N						
S						○
H						
O						

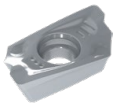
1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

15

XDKT

		-M50 CTCK215	-R50 CTCK215	-M50 CTPK220	-R50 CTPK220	-F20 CTWN215
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
						
		XDKT	XDKT	XDKT	XDKT	XDKT
		51 038 ...	51 040 ...	51 038 ...	51 040 ...	50 479 ...
ISO	RE mm					
150508FR	0.8					508
150508SR	0.8	508	508	608	608	
P						
M						
K		●	●	●	●	○
N						●
S						
H						
O						○

XDKT

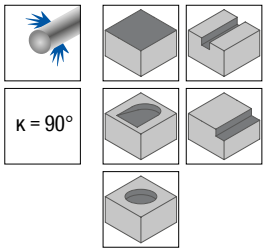
		-F40 CTC5240	-F40 CTCS245	-R60 CTP6215
		DRAGONSKIN	DRAGONSKIN	
				
		XDKT	XDKT	XDKT
		50 473 ...	51 114 ...	50 469 ...
ISO	RE mm			
150508ER	0.8	508	558	
150508SR	0.8			300
150532ER	3.2	532 [1]		
150540ER	4.0	540 [1]	59000 [1]	
P				
M				
K				●
N				
S		●	●	
H				●
O				

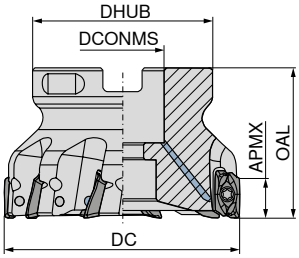
1) 当刀片圆角半径>2.5mm时，请进行合理的刀盘改制。

铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 157
起始推荐参数	→ 157	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

MaxiMill – 套式铣刀 A 211-20



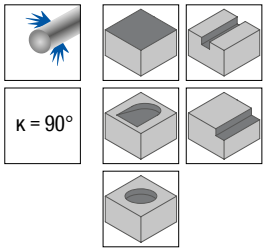


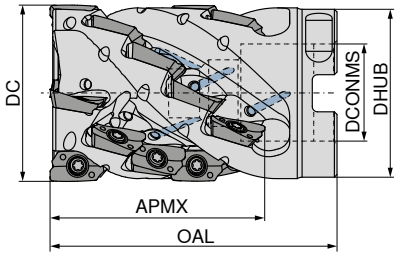
50 778 ...

规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	RPMX 1/min.	扭矩 Nm	刀片	
A211.63.R.05-20	63	5	19	45	22	48	14400	5	XD.. 2007..	06305
A211.80.R.06-20	80	6	19	50	27	58	12400	5	XD.. 2007..	08006
A211.100.R.07-20	100	7	19	50	32	78	10900	5	XD.. 2007..	10007

MaxiMill – 玉米铣刀 A 211-20K

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数





NEW

50 780 ...

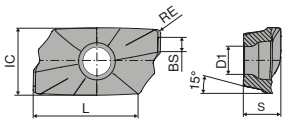
规格型号	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	
A211.63.R.04K4-20	63	4	68	16	4	92	27	58	5	XD.. 2007..	06304
A211.80.R.05K4-20	80	5	68	20	4	92	32	76	5	XD.. 2007..	08005

备件 DC	 螺旋塞 70 950 ...	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	 润滑剂 70 950 ...	 刀片螺钉 70 950 ...	 内六角螺钉 70 950 ...	扭力扳手 80 950 ...
63		037	106	303	280	180	193
80		037	106	303	280	181	193
63	003	037	106	303	280	181	193
80	004	037	106	303	280	234	193
100		037	106	303	280		193

15

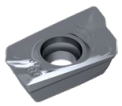
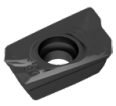
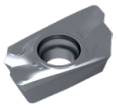
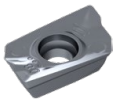
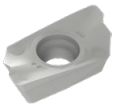
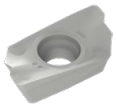
XDKT

规格型号	IC mm	D1 mm	L mm	S mm
XDKT 200708..	12.5	5.5	18.8	6.93
XDKT 200716..	12.5	5.5	18.8	6.89
XDKT 200732..	12.5	5.5	18.8	6.82
XDKT 200740..	12.5	5.5	18.8	6.80
XDKT 200760..	12.5	5.5	18.8	6.80



XDKT

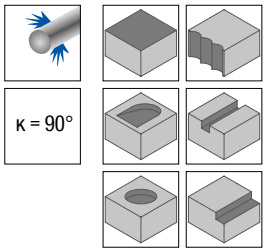
XDKT

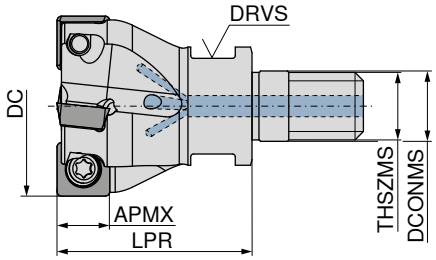
		NEW	NEW		NEW	NEW		
		-M50 CTPP235	-M50 CTCP230	-F40 CTPM245	-F40 CTCM245	-M50 CTPK220	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		XDKT	XDKT	XDKT	XDKT	XDKT	XDKT	XDKT
		51 145 ...	51 145 ...	51 127 ...	51 127 ...	51 145 ...	51 127 ...	51 127 ...
ISO	RE mm							
200708ER	0.8	10800	00800	45800	90801	60800	15800	55800
200716ER	1.6	11600	01600	46600	91601	61600	16600	56600
200732ER	3.2			48200	93201		18200	58200
200740ER	4.0				94001		19000	
200760ER	6.0				96001		19200	
P		●	●	●	●			
M		○		●	●			
K		○	○			●		
N								
S					○		●	●
H								
O								

铣削指南

切削参数推荐值	→ 141-144	加工方式	→ 158
起始推荐参数	→ 158	技术信息	→ 189-194
断屑槽型描述及概览	→ 195-197	牌号描述及概览	→ 198-201

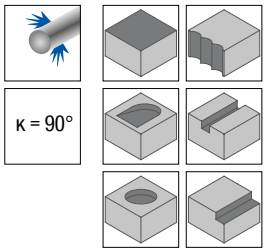
MaxiMill – Screw in 铣刀 G 490-09

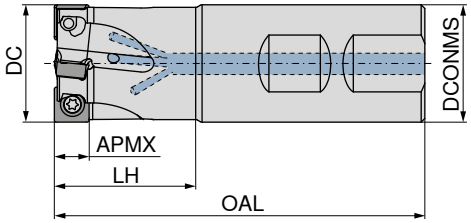




规格型号	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	50 726 ...
G490.25.R.03-09	25	3	8	35	M12	12.5	17	3,2	SD.. 09T3..	025
G490.32.R.04-09	32	4	8	35	M16	17.0	24	3,2	SD.. 09T3..	032

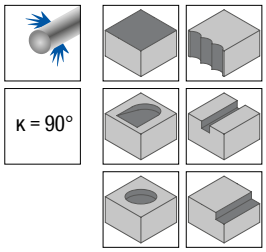
MaxiMill – 立铣刀 C 490-09

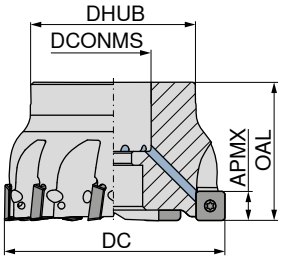


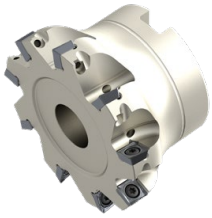


规格型号	DC mm	ZNF	APMX mm	DCONMS mm	OAL mm	LH mm	扭矩 Nm	刀片	A 50 727 ...	B 50 727 ...
C490.25.R.03-09-B-32	25	3	8	25	88	32	3,2	SD.. 09T3..		025
C490.25.R.02-09-A-20	25	2	8	20	165	40	3,2	SD.. 09T3..	225	
C490.25.R.02-09-A-40-165	25	2	8	25	165	40	3,2	SD.. 09T3..	125	
C490.32.R.04-09-B-25	32	4	8	25	100	40	3,2	SD.. 09T3..		132
C490.32.R.04-09-B-40	32	4	8	32	100	40	3,2	SD.. 09T3..		032

MaxiMill – 套式铣刀 A 490-09







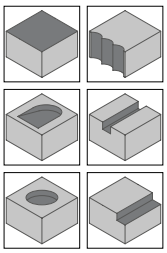
规格型号	DC mm	ZNF	APMX mm	DHUB mm	DCONMS H6 mm	OAL mm	扭矩 Nm	刀片	50 728 ...
A490.40.R.05-09	40	5	8	38	16	40	3,2	SD.. 09T3..	040
A490.42.R.06-09	42	6	8	38	16	40	3,2	SD.. 09T3..	042
A490.50.R.06-09	50	6	8	43	22	40	3,2	SD.. 09T3..	050
A490.52.R.07-09	52	7	8	43	22	40	3,2	SD.. 09T3..	052
A490.63.R.07-09	63	7	8	48	22	40	3,2	SD.. 09T3..	063
A490.66.R.08-09	66	8	8	48	22	40	3,2	SD.. 09T3..	066
A490.80.R.09-09	80	9	8	58	27	50	3,2	SD.. 09T3..	080
A490.100.R.10-09	100	10	8	78	32	50	3,2	SD.. 09T3..	100
A490.160.R.14-09	160	14	8	88	40	62	3,2	SD.. 09T3..	160 [1]

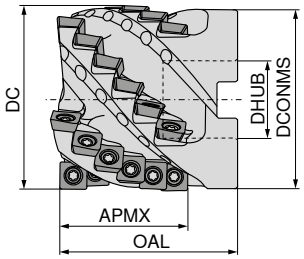
1) 无内冷却液供应

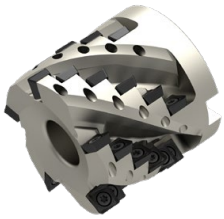
MaxiMill – 玉米铣刀 C 490-09K

▲ ZEFP = 刀片数量
▲ ZNP = 刀片行数

κ = 90°







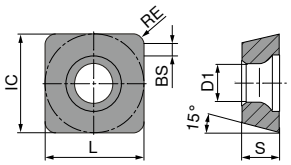
50 761 ...

规格型号	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS H6 mm	DHUB mm	扭矩 Nm	刀片	
A490.40.R.03K6-09	40	3	41	18	6	55	16	38	3,2	SD.. 09T3..	040
A490.50.R.04K6-09	50	4	41	24	6	55	22	48	3,2	SD.. 09T3..	050
A490.63.R.05K6-09	63	5	41	30	6	60	27	61	3,2	SD.. 09T3..	063

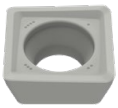
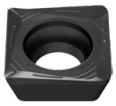
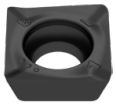
备件 DC	Torx 扳手®-可换接杆	夹紧扳手-T	扳手-D	强力螺钉	润滑剂	刀片螺钉	扭力扳手
							
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
25 - 32	036		113		303	110	192
40 - 42	036	040	113	151	303	110	192
50 - 160	036		113		303	110	192

SDHT / SDNT

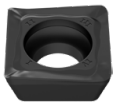
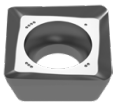
规格型号	IC mm	D1 mm	L mm	BS mm	S mm
SD.T 09T3..	9.52	4.4	9.52	2.5	3.97



SDHT / SDNT

		TCM10	-29 CTCP230	CTPP235	-29 CTPP235	-33 CTPM240	-F50 CTPM245	NEW -F50 CTCM245
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		CERMET						
		SDHT	SDNT	SDNT	SDNT	SDNT	SDNT	SDNT
		50 424 ...	51 011 ...	51 082 ...	51 011 ...	51 030 ...	51 111 ...	51 111 ...
ISO	RE mm							
09T308ER	0.8			108			458	90801
09T308SR	0.8	900	008		108	408		
P		●	●	●	●	○	●	●
M				○	○	●	●	●
K		○	○	○	○			
N								
S								○
H								
O								

SDNT / SDHT

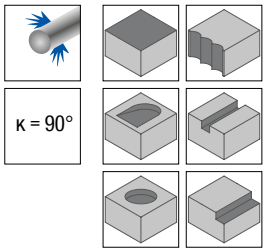
		-31 CTCK215	-27P H216T	-27P AMZ	-27 CTC5240	-M31 CTC5240	-F10 CTCS245
		DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		SDNT	SDHT	SDHT	SDHT	SDNT	SDHT
		51 029 ...	50 424 ...	50 424 ...	50 496 ...	50 425 ...	51 125 ...
ISO	RE mm						
09T308ER	0.8				508	508	55800
09T308FR	0.8		550	650			
09T308SR	0.8	508					
P							
M							
K		●	○	○			
N			●	●			
S					●	●	●
H							
O			○	○			

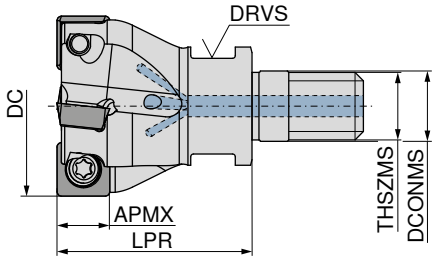
铣削指南

切削参数推荐值	→ 141–144	起始推荐参数	→ 159
技术信息	→ 189–194	断屑槽型描述及概览	→ 195–197
牌号描述及概览	→ 198–201		

15

MaxiMill – Screw in 铣刀 G 490-12

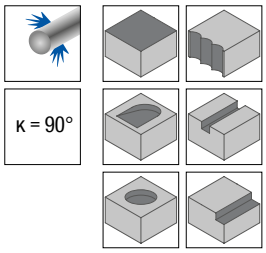


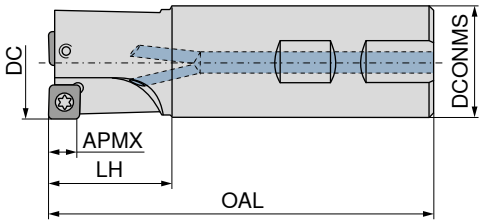


50 726 ...

规格型号	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	
G490.32.R.03-12	32	3	10.7	35	M16	17	24	3,2	SD.. 1205..	13200
G490.40.R.04-12	40	4	10.7	40	M16	17	24	3,2	SD.. 1205..	14000

MaxiMill – 立铣刀 C 490-12





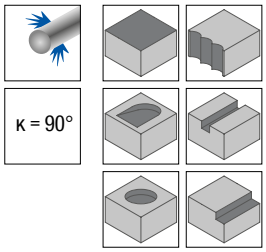
B

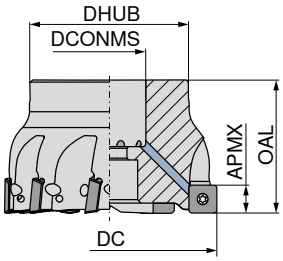
50 703 ...

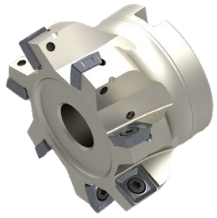
ISO-规格型号	DC mm	ZNF	APMX mm	DCONMS mm	OAL mm	LH mm	扭矩 Nm	刀片	
C490.32.R.02	32	2	11	32	110	40	5	SD.. 1205..	032
C490.32.R.03-12-B-40	32	3	11	32	101	40	5	SD.. 1205..	13200
C490.40.R.03	40	3	11	32	115	45	5	SD.. 1205..	040
C490.40.R.04-12-B32-50	40	4	11	32	112	50	5	SD.. 1205..	14000

备件 DC	Torx 扳手®-可换接杆 80 950 ...	 扳手-D 80 950 ...	 润滑剂 70 950 ...	 刀片螺钉 70 950 ...	 扭力扳手 80 950 ...
32	037	114	303	01200	193
32	037			01200	193
40	037	114	303	01200	193
40	037			01200	193

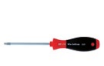
MaxiMill – 套式铣刀 A 490-12







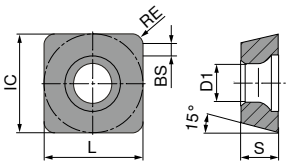
规格型号	DC mm	ZNF	APMX mm	DHUB mm	DCONMS mm	OAL mm	扭矩 Nm	刀片	50 703 ...
A490.40.R.04-12	40	4	11	38	16	40	5	SD.. 1205..	**54000**
A490.50.R.05-12	50	5	11	43	22	40	5	SD.. 1205..	**550**
A490.63.R.06-12	63	6	11	48	22	40	5	SD.. 1205..	**563**
A490.80.R.07-12	80	7	11	58	27	50	5	SD.. 1205..	**580**
A490.100.R.08-12	100	8	11	75	32	50	5	SD.. 1205..	**600**
A490.125.R.10-12	125	10	11	88	40	63	5	SD.. 1205..	**625**

	Torx 扭手®-可换接杆	 夹紧扭手-T	 扭手-D	 强力螺钉	 润滑剂	 刀片螺钉	 扭力扭手
	80 950 ...	**80 397 ...**	**80 950 ...**	**70 950 ...**	**70 950 ...**	**70 950 ...**	**80 950 ...**
备件							
DC							
40	**037**	**040**	**114**	**151**	**303**	**01200**	**193**
50	**037**	**040**	**114**	**154**	**303**	**01200**	**193**
63 - 125	**037**	**040**	**114**		**303**	**01200**	**193**

15

SDHW / SDMT / SDHT

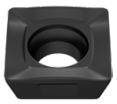
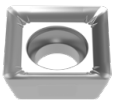
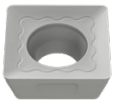
规格型号	IC mm	D1 mm	L mm	BS mm	S mm
SDH. 120508..	12.7	5.5	12.7	2.2	5.00
SDHT 120512..	12.7	5.5	12.7	1.8	5.00
SDHT 120520..	12.7	5.5	12.7	1.0	5.00
SDHT 120525..	12.7	5.5	12.7	1.5	5.00
SDMT 120508..	12.7	5.5	12.7	3.0	5.00
SDMT 1205ZZ..	12.7	5.5	12.7	0.9	5.00



SDHW / SDMT / SDHT

		TCM10	-29 CTCP230	-29 CTPP235	-29 CTPM240	-33 CTPM240	-F50 CTPM245	NEW -F50 CTCM245
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		CERMET						
		SDHW	SDMT	SDMT	SDMT	SDHT	SDMT	SDMT
		50 428 ...	51 081 ...	51 081 ...	51 081 ...	51 028 ...	51 110 ...	51 110 ...
ISO	RE mm							
120508ER	0.8						458	90801
120508SR	0.8	901						
120512SR	1.2					412		
120520SR	2.0					421		
1205ZZSN	0.8		020	120	420			
P		●	●	●	○	○	●	●
M				○	●	●	●	●
K		○	○	○				
N								
S								○
H								
O								

SDMT / SDHT

		-31 CTCK215	-27P H216T	-27P AMZ	-M31 CTC5240	-F50 CTCS245
		DRAGONSKIN			DRAGONSKIN	DRAGONSKIN
						
		SDMT	SDHT	SDHT	SDMT	SDMT
		51 059 ...	50 426 ...	50 426 ...	50 580 ...	51 110 ...
ISO	RE mm					
120508ER	0.8				**508**	**55800**
120508FR	0.8		**555**	**655**		
120525FR	2.5		**559**			
1205ZZSN	0.8	**521**				
P						
M						
K		●	○	○		
N			●	●		
S					●	●
H						
O			○	○		

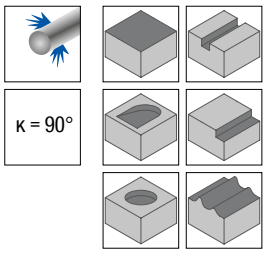
铣削指南

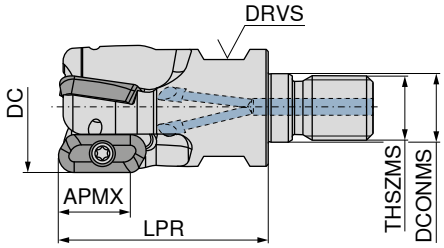
切削参数推荐值	→ 141-144	起始推荐参数	→ 160
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

15

MaxiMill – Screw in 铣刀 90° G HSC-11

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。

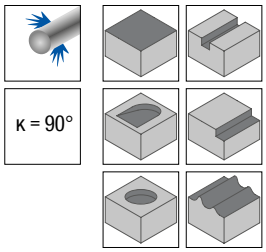


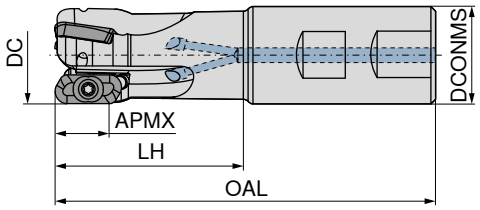


规格型号	DC mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS	RPMX 1/min.	DRVS mm	扭矩 Nm	刀片	55 107 ...
GHSC.16.R.02-11	16	2	10	8.5	27	M8	56000	10	1,8	XDHT 11T3..	016
GHSC.18.R.02-11	18	2	10	8.5	27	M8	53100	10	1,8	XDHT 11T3..	018
GHSC.20.R.02-11	20	2	10	10.5	33	M10	50100	15	1,8	XDHT 11T3..	020
GHSC.25.R.03-11	25	3	10	12.5	35	M12	45000	17	1,8	XDHT 11T3..	025
GHSC.32.R.03-11	32	3	10	17.0	35	M16	39800	24	1,8	XDHT 11T3..	032
GHSC.40.R.03-11	40	3	10	17.0	35	M16	35500	24	1,8	XDHT 11T3..	040

MaxiMill – 立铣刀 90° C HSC-11

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。

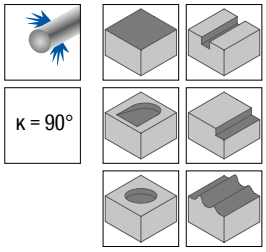


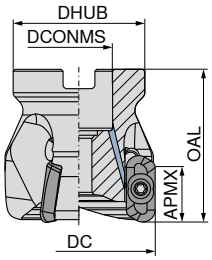


规格型号	DC mm	ZNF	APMX mm	DCONMS h6 mm	OAL mm	LH mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 675 ...	B 50 675 ...
CHSC.16.R.02-11-B/A-25	16	2	10	16	75	25	56200	1,8	XDHT 11T3..	016	416
CHSC.16.R.02-11-A-32	16	2	10	16	165	32	18800	1,8	XDHT 11T3..	116	
CHSC.18.R.02-11-A-25	18	2	10	20	78	25	56100	1,8	XDHT 11T3..	018	
CHSC.18.R.02-11-A-32	18	2	10	20	165	32	23900	1,8	XDHT 11T3..	118	
CHSC.19.R.02-11-A-25	19	2	10	20	78	25	51700	1,8	XDHT 11T3..	019	
CHSC.19.R.02-11-A-32	19	2	10	20	165	32	25400	1,8	XDHT 11T3..	119	
CHSC.20.R.02-11-A-32	20	2	10	20	84	32	50100	1,8	XDHT 11T3..	020	
CHSC.20.R.03-11-B-32	20	3	10	20	84	32	50100	1,8	XDHT 11T3..		420
CHSC.20.R.02-11-A-40	20	2	10	20	165	40	26700	1,8	XDHT 11T3..	120	
CHSC.22.R.02-11-A-32	22	2	10	25	91	32	47800	1,8	XDHT 11T3..	022	
CHSC.22.R.02-11-A-40	22	2	10	25	165	40	30200	1,8	XDHT 11T3..	122	
CHSC.25.R.02-11-A-40	25	2	10	25	98	40	45000	1,8	XDHT 11T3..	025	
CHSC.25.R.03-11-A-40	25	3	10	25	98	40	45000	1,8	XDHT 11T3..	225	
CHSC.25.R.04-11-B-40	25	4	10	25	98	40	45000	1,8	XDHT 11T3..		425
CHSC.25.R.02-11-A-50	25	2	10	25	165	50	31700	1,8	XDHT 11T3..	125	
CHSC.25.R.03-11-A-50	25	3	10	25	165	50	31700	1,8	XDHT 11T3..	325	
CHSC.32.R.03-11-A-50	32	3	10	32	112	50	39800	1,8	XDHT 11T3..	032	
CHSC.32.R.05-11-B-50	32	5	10	25	112	50	39800	1,8	XDHT 11T3..		432
CHSC.32.R.03-11-A-63	32	3	10	32	165	63	33400	1,8	XDHT 11T3..	132	

MaxiMill – 套式铣刀 90° A HSC-11

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。





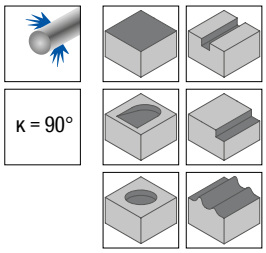
50 718 ...

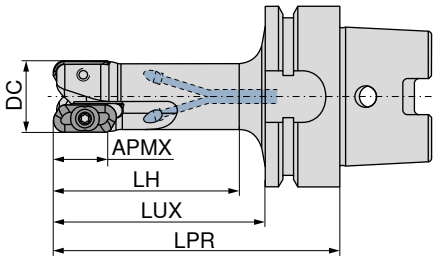
规格型号	DC mm	ZNF	APMX mm	DCONMS H6 mm	DHUB mm	OAL mm	RPMX 1/min.	扭矩 Nm	刀片	
AHSC.40.R.04-11	40	4	10	16	38	50	35500	1,8	XDHT 11T3..	040
AHSC.50.R.04-11	50	4	10	22	43	50	31800	1,8	XDHT 11T3..	050
AHSC.63.R.05-11	63	5	10	22	43	50	28300	1,8	XDHT 11T3..	063
AHSC.80.R.05-11	80	5	10	27	58	50	25100	1,8	XDHT 11T3..	080
AHSC.100.R.05-11	100	5	10	32	78	50	22400	1,8	XDHT 11T3..	100

MaxiMill – 铣刀 90° M HSC-11，刀柄 HSK 63-A

▲ 动平衡等级 G 6.3

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。





50 722 ...

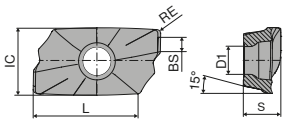
规格型号	DC mm	ZNF	APMX mm	LPR mm	LH mm	LUX mm	RPMX 1/min.	扭矩 Nm	刀片	
MHSC.25.R.03-11-H63A-50	25	3	10	90	50	64	45000	1,8	XDHT 11T3..	025
MHSC.25.R.03-11-H63A-63	25	3	10	100	63	74	42000	1,8	XDHT 11T3..	125
MHSC.32.R.03-11-H63A-63	32	3	10	100	63	74	39800	1,8	XDHT 11T3..	032
MHSC.32.R.03-11-H63A-80	32	3	10	120	80	94	37200	1,8	XDHT 11T3..	132
MHSC.40.R.04-11-H63A-63	40	4	10	100	63	74	35500	1,8	XDHT 11T3..	040
MHSC.40.R.04-11-H63A-80	40	4	10	120	80	94	35500	1,8	XDHT 11T3..	140
MHSC.50.R.04-11-H63A-63	50	4	10	100	63	74	31800	1,8	XDHT 11T3..	050
MHSC.50.R.04-11-H63A-100	50	4	10	140	100	114	31800	1,8	XDHT 11T3..	150

备件 DC	Torx 扭手®-可换接杆	夹紧扭手-T	扭手-D	强力螺钉	润滑剂	刀片螺钉	扭力扭手
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
16 - 25	043		125		303	128	192
32	043		125		303	131	192
40	043	040	125	151	303	131	192
50 - 63	043	050	125	154	303	131	192
80 - 100	043		125		303	131	192

15

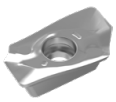
XDKT / XDHT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XD.T 11T302FR	6.8	2.8	10.6	2	3.80
XD.T 11T304FR	6.8	2.8	10.6	1.8	3.80
XD.T 11T308FR	6.8	2.8	10.6	1.4	3.80
XD.T 11T320FR	6.8	2.8	10.6	1.4	3.80
XD.T 11T325FR	6.8	2.8	10.6	1.4	3.80
XDHT 11T312FR	6.8	2.8	10.6	1.4	3.80
XDHT 11T316FR	6.8	2.8	10.6	1.4	3.80
XDHT 11T332FR	6.8	2.8	10.6	0.8	3.80
XDHT 11T340FR	6.8	2.8	10.6	-	3.80
XDHT 11T350FR	6.8	2.8	10.6	-	3.80



XDKT

XDKT / XDHT

		-F20 CTWN215	-27P H216T
			
		XDKT	XDHT
		50 478 ...	50 477 ...
ISO	RE mm		
11T302FR	0.2	502	502
11T304FR	0.4	504	504
11T308FR	0.8	508	508
11T312FR	1.2		512
11T316FR	1.6		516
11T320FR	2.0	520 1)	520 1)
11T325FR	2.5	525 1)	525 1)
11T332FR	3.2		532 1)
11T340FR	4.0		540 1)
11T350FR	5.0		550 1)
P			
M			
K		○	○
N		●	●
S			
H			
O		○	○

1) 当刀片圆角半径>1.6mm时，请进行合理的刀盘改制。

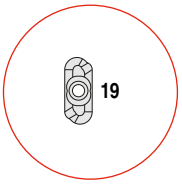
铣削指南

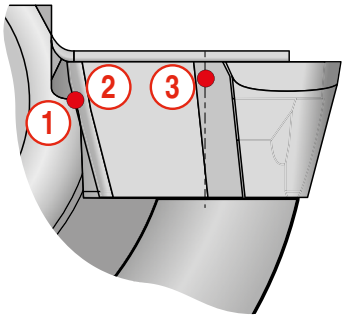
安全须知	→ 161	切削参数推荐值	→ 162
加工方式	→ 163+164	技术信息	→ 189-194
断屑槽型描述及概览	→ 195-197	牌号描述及概览	→ 198-201

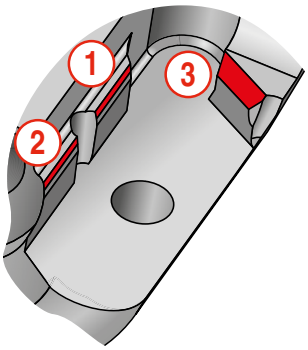
HSC-19

适用于中、高转速

n_{max} = 34400 min^{-1}
$a_{p\,max}$ = 18 mm







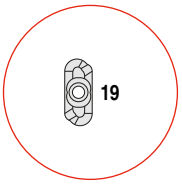
(1)(2) 径向接触点
- 保证 90° 刀尖角和精确的径向跳动精度

(3) 轴向接触点
- 保证精确的端面跳动精度

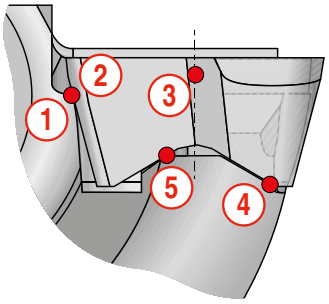
HPC-19

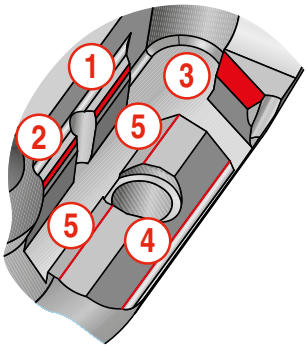
可实现最大转速

n_{max} = 45200 min^{-1}
$a_{p\,max}$ = 18 mm



V型接触面，夹角 140°
- 更高的稳定性和安全性
- 保证刀片和刀具之间的正向连接





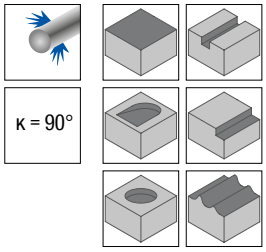
(1)(2) 径向接触点
- 保证 90° 刀尖角和精确的径向跳动精度

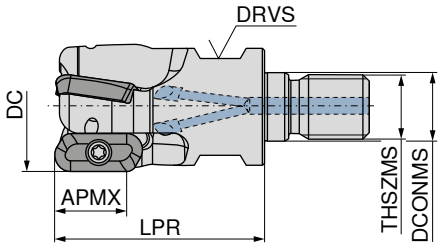
(3) 轴向接触点
- 保证精确的端面跳动精度

(4)(5) 接触点
- 承受侧向切削压力和离心力

MaxiMill – Screw in 铣刀 90° G HSC-19

▲ 当刀片圆角半径>4.0 mm，时请进行合理的刀盘改制。

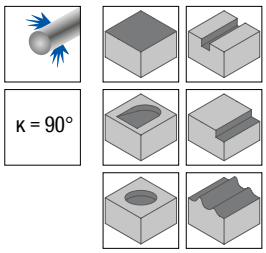


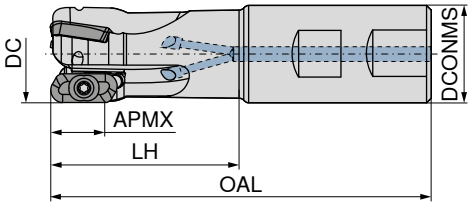


规格型号	DC mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	55 108 ...
GHSC.25.R.02-19	25	2	18	12.5	45	M12	17	34400	5	XDHT 1904..	025
GHSC.32.R.03-19	32	3	18	17.0	52	M16	24	29100	5	XDHT 1904..	032
GHSC.40.R.03-19	40	3	18	17.0	52	M16	24	24900	5	XDHT 1904..	040

MaxiMill – 立铣刀 90° C HSC-19

▲ 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。

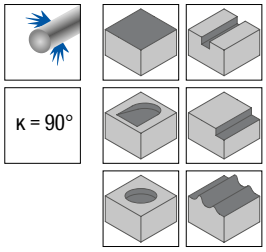


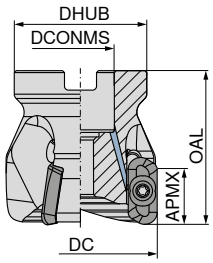


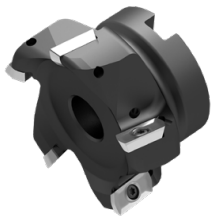
规格型号	DC mm	ZNF	APMX mm	DCONMS h5 mm	OAL mm	LH mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 679 ...	B 50 679 ...
CHSC.25.R.02-19-A-50	25	2	18	25	121	50	32400	5	XDHT 1904..	225	
CHSC.25.R.02-19	25	2	18	25	121	65	32400	5	XDHT 1904..		025
CHSC.25.R.02-19-A-63	25	2	18	25	165	63	24700	5	XDHT 1904..	325	
CHSC.32.R.02-19-A-63	32	2	18	32	125	63	28900	5	XDHT 1904..	232	
CHSC.32.R.03-19-A-63	32	3	18	32	125	63	28900	5	XDHT 1904..	432	
CHSC.32.R.03-19	32	3	18	32	125	65	28900	5	XDHT 1904..		033
CHSC.32.R.02-19	32	2	18	32	125	65	28900	5	XDHT 1904..		032
CHSC.32.R.02-19-A-80	32	2	18	32	165	80	24400	5	XDHT 1904..	332	
CHSC.32.R.03-19-A-80	32	3	18	32	165	80	24400	5	XDHT 1904..	532	

MaxiMill – 套式铣刀 90° A HSC-19

▲ 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。





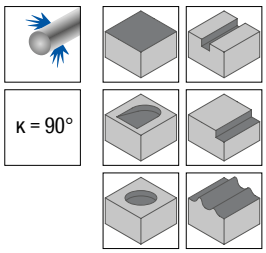


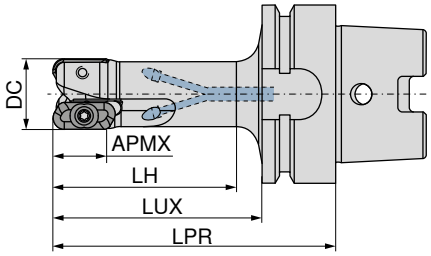
50 716 ...

规格型号	DC mm	ZNF	APMX mm	DCONMS H6 mm	DHUB mm	OAL mm	RPMX 1/min.	扭矩 Nm	刀片	
AHSC.40.R.03-19	40	3	18	16	38	50	24900	5	XDHT 1904..	040
AHSC.50.R.04-19	50	4	18	22	43	50	21600	5	XDHT 1904..	050
AHSC.63.R.04-19	63	4	18	22	48	50	18800	5	XDHT 1904..	163
AHSC.63.R.05-19	63	5	18	22	48	50	18800	5	XDHT 1904..	063
AHSC.80.R.04-19	80	4	18	27	58	50	16400	5	XDHT 1904..	180
AHSC.80.R.05-19	80	5	18	27	58	50	16400	5	XDHT 1904..	080
AHSC.100.R.04-19	100	4	18	32	78	50	14500	5	XDHT 1904..	200
AHSC.100.R.05-19	100	5	18	32	78	50	14500	5	XDHT 1904..	100
AHSC.125.R.05-19	125	5	18	40	88	63	12800	5	XDHT 1904..	125
AHSC.125.R.06-19	125	6	18	40	88	63	12800	5	XDHT 1904..	225

MaxiMill – 铣刀 90° M HSC-19，刀柄 HSK 63-A

▲ 动平衡等级 G 6.3
▲ 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。





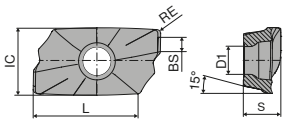
50 720 ...

规格型号	DC mm	ZNF	APMX mm	LPR mm	LH mm	LUX mm	RPMX 1/min.	扭矩 Nm	刀片	
MHSC.25.R.02-19-H63A-50	25	2	18	90	50	64	35000	5	XDHT 1904..	525
MHSC.25.R.02-19-H63A-63	25	2	18	100	63	74	32700	5	XDHT 1904..	625
MHSC.32.R.02-19-H63A-63	32	2	18	100	63	74	29100	5	XDHT 1904..	532
MHSC.32.R.02-19-H63A-80	32	2	18	120	80	94	27200	5	XDHT 1904..	632
MHSC.32.R.03-19-H63A-63	32	3	18	100	63	74	29100	5	XDHT 1904..	732
MHSC.32.R.03-19-H63A-80	32	3	18	120	80	94	27200	5	XDHT 1904..	832
MHSC.40.R.03-19-H63A-63	40	3	18	100	63	74	24900	5	XDHT 1904..	540
MHSC.40.R.03-19-H63A-80	40	3	18	120	80	94	24900	5	XDHT 1904..	640
MHSC.50.R.03-19-H63A-100	50	3	18	140	100	114	21600	5	XDHT 1904..	550

备件 DC	Torx 扭手®-可换接杆	夹紧扭手-T	扭手-D	强力螺钉	润滑剂	刀片螺钉	扭力扭手
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
25	036		113		303	172	193
32	036		113		303	173	193
40	036	040	113	151	303	173	193
50 - 63	036	050	113	154	303	174	193
80 - 125	036		113		303	174	193

XDHT

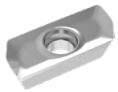
规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDHT 190402..	9.52	4.65	19	2	4.76
XDHT 190404..	9.52	4.65	19	2	4.76
XDHT 190408..	9.52	4.65	19	2	4.76
XDHT 190412..	9.52	4.65	19	2	4.76
XDHT 190416..	9.52	4.65	19	2	4.76
XDHT 190420..	9.52	4.65	19	2	4.76
XDHT 190425..	9.52	4.65	19	1.4	4.76
XDHT 190432..	9.52	4.65	19	1	4.76
XDHT 190440..	9.52	4.65	19	1	4.76
XDHT 190450..	9.52	4.65	19	-	4.76



XDKT

XDHT

-27P
H216T



XDHT
50 487 ...

ISO	RE mm	
190402FR	0.2	552
190404FR	0.4	554
190408FR	0.8	556
190412FR	1.2	557
190416FR	1.6	558
190420FR	2.0	560
190425FR	2.5	562
190432FR	3.2	564
190440FR	4.0	566
190450FR	5.0	568 [1]

P	
M	
K	○
N	●
S	
H	
O	○

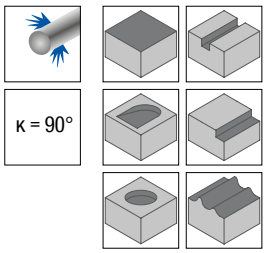
1) 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。

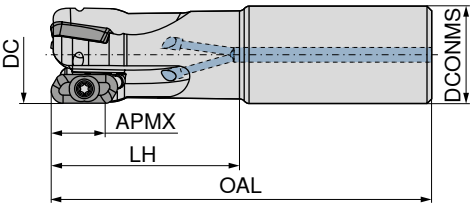
铣削指南

切削参数推荐值	→ 141–144	安全须知	→ 161
加工方式	→ 165–167	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

MaxiMill – C HPC-19 立铣刀 90°杆

▲ 刀柄类型符合 DIN 1835-A
▲ 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。





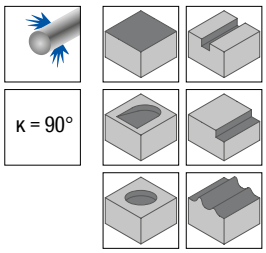
A

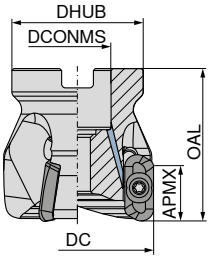
50 680 ...

ISO-规格型号	DC mm	ZNF	APMX mm	DCONMS h5 mm	OAL mm	LH mm	RPMX 1/min.	扭矩 Nm	刀片	
CHPC.22.R.02-19-A-40	22	2	18	22	165	40	31900	5	XDHX 1904..	**122**
CHPC.25.R.02-19-A-50	25	2	18	25	121	50	41800	5	XDHX 1904..	**125**
CHPC.25.R.02-19-A-63	25	2	18	25	165	63	31900	5	XDHX 1904..	**225**
CHPC.32.R.02-19-A-63	32	2	18	32	125	63	39800	5	XDHX 1904..	**132**
CHPC.32.R.02-19-A-80	32	2	18	32	165	80	33500	5	XDHX 1904..	**232**
CHPC.32.R.03-19-A-63	32	3	18	32	125	63	39800	5	XDHX 1904..	**332**
CHPC.32.R.03-19-A-80	32	3	18	32	165	80	33500	5	XDHX 1904..	**432**

MaxiMill – 套式铣刀 90° A HPC-19

▲ 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。



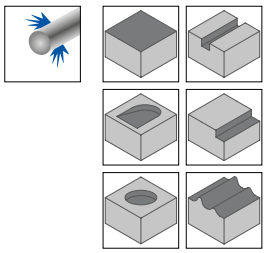


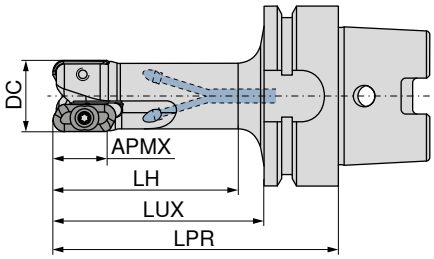
50 717 ...

规格型号	DC mm	ZNF	APMX mm	DCONMS H6 mm	DHUB mm	OAL mm	RPMX 1/min.	扭矩 Nm	刀片	
AHPC.40.R.03-19	40	3	18	16	38	50	35700	5	XDHX 1904..	**040**
AHPC.50.R.03-19	50	3	18	22	43	50	31900	5	XDHX 1904..	**050**
AHPC.63.R.03-19	63	3	18	22	48	50	28500	5	XDHX 1904..	**063**
AHPC.63.R.04-19	63	4	18	22	48	50	28500	5	XDHX 1904..	**163**

MaxiMill – 铣刀 90° M HPC-19, 刀柄 HSK 63-A

▲ 动平衡等级 G 6.3
▲ 当刀片圆角半径>4.0mm时, 请进行合理的刀盘改制。



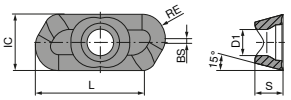


规格型号	DC mm	ZNF	APMX mm	LPR mm	LH mm	LUX mm	RPMX 1/min.	扭矩 Nm	刀片	50 721 ...
MHPC.25.R.02-19-H63A-50	25	2	18	90	50	64	45200	5	XDHX 1904..	025
MHPC.25.R.02-19-H63A-63	25	2	18	100	63	74	42300	5	XDHX 1904..	125
MHPC.25.R.02-19-H63A-80	25	2	18	120	80	94	38400	5	XDHX 1904..	225
MHPC.25.R.02-19-H63A-100	25	2	18	140	100	114	33900	5	XDHX 1904..	325
MHPC.32.R.02-19-H63A-63	32	2	18	100	63	74	40000	5	XDHX 1904..	032
MHPC.32.R.03-19-H63A-63	32	3	18	100	63	74	40000	5	XDHX 1904..	532
MHPC.32.R.02-19-H63A-80	32	2	18	120	80	94	37500	5	XDHX 1904..	132
MHPC.32.R.03-19-H63A-80	32	3	18	120	80	94	37500	5	XDHX 1904..	632
MHPC.32.R.02-19-H63A-100	32	2	18	140	100	114	34300	5	XDHX 1904..	232
MHPC.40.R.03-19-H63A-63	40	3	18	100	63	74	35700	5	XDHX 1904..	040
MHPC.40.R.03-19-H63A-80	40	3	18	120	80	94	35700	5	XDHX 1904..	140
MHPC.40.R.03-19-H63A-100	40	3	18	140	100	114	33500	5	XDHX 1904..	240
MHPC.50.R.03-19-H63A-63	50	3	18	100	63	74	31900	5	XDHX 1904..	050
MHPC.50.R.03-19-H63A-80	50	3	18	120	80	94	31900	5	XDHX 1904..	150
MHPC.50.R.03-19-H63A-100	50	3	18	140	100	114	31900	5	XDHX 1904..	250

备件 DC	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
22 - 25	036		113		303	172	193
32	036		113		303	173	193
40	036	040	113	151	303	173	193
50 - 63	036	050	113	154	303	174	193

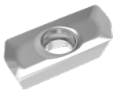
XDHX

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
XDHX 190402..	9.52	4.65	19	2	4.76
XDHX 190404..	9.52	4.65	19	2	4.76
XDHX 190408..	9.52	4.65	19	2	4.76
XDHX 190412..	9.52	4.65	19	2	4.76
XDHX 190416..	9.52	4.65	19	2	4.76
XDHX 190420..	9.52	4.65	19	2	4.76
XDHX 190425..	9.52	4.65	19	1.4	4.76
XDHX 190432..	9.52	4.65	19	1	4.76
XDHX 190440..	9.52	4.65	19	1	4.76
XDHX 190450..	9.52	4.65	19	-	4.76



XDHX

-27P
H216T



ISO	RE mm	XDHX 50 488 ...
190402FR	0.2	552
190404FR	0.4	554
190408FR	0.8	556
190412FR	1.2	557
190416FR	1.6	558
190420FR	2.0	560
190425FR	2.5	562
190432FR	3.2	564
190440FR	4.0	566
190450FR	5.0	568 1)

P	
M	
K	○
N	●
S	
H	
O	○

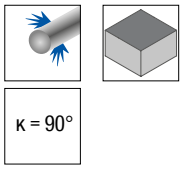
1) 当刀片圆角半径>4.0mm时，请进行合理的刀盘改制。

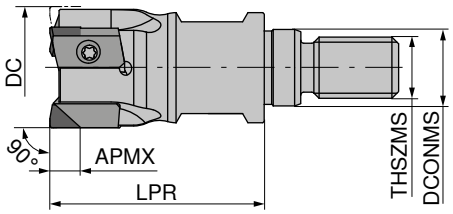
铣削指南

切削参数推荐值	→ 141–144	安全须知	→ 161
加工方式	→ 165–167	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

15

MaxiMill – Screw-in 铣刀 G HPC 04

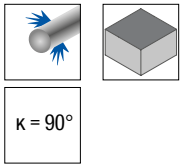


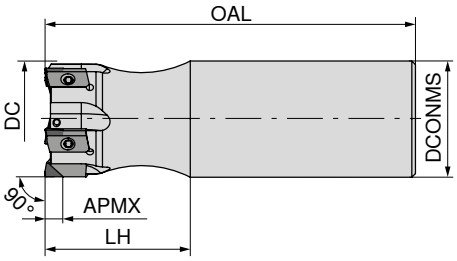


50 785 ...

规格型号	DC mm	ZNF	APMX mm	THSZMS	DCONMS mm	LPR mm	RPMX 1/min.	扭矩 Nm	刀片	
GHPC.20.R.03-04	20	3	4	M10	10.5	35	52000	1,6	ZNHW 04T3..	20003
GHPC.25.R.04-04	25	4	4	M12	12.5	35	45000	1,6	ZNHW 04T3..	25004
GHPC.32.R.05-04	32	5	4	M16	17.0	35	38000	1,6	ZNHW 04T3..	32005
GHPC.40.R.06-04	40	6	4	M16	17.0	35	34000	1,6	ZNHW 04T3..	40006

MaxiMill – 立铣刀 C HPC 04





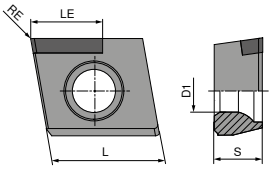
50 680 ...

规格型号	DC mm	ZNF	APMX mm	DCONMS mm	OAL mm	LH mm	RPMX 1/min.	扭矩 Nm	刀片	
CHPC.20.R.03-04-A-25	20	3	4	20	77	25	52000	1,6	ZNHW 04T3..	02003
CHPC.25.R.04-04-A-32	25	4	4	25	90	32	45000	1,6	ZNHW 04T3..	02504
CHPC.32.R.05-04-A-40	32	5	4	32	102	40	38000	1,6	ZNHW 04T3..	03205
CHPC.40.R.06-04-A-50	40	6	4	32	112	50	34000	1,6	ZNHW 04T3..	04006

备件 DC	Torx 扳手®-可换接杆	扳手-D	润滑剂	刀片螺钉	扭力扳手
					
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
20 - 40	043	125	303	131	191

ZNHW

规格型号	LE mm	D1 mm	L mm	S mm
ZNHW 04T3..	4	2.8	11	3.97



ZNHW

ISO	RE mm	CTD4205 DIAMOND ZNHW 51 137 ...	CTL3215 CBN ZNHW 51 137 ...
04T304ER	0.4	75400	
04T305ER	0.5		85500
04T308ER	0.8	75800	
04T3POER		77000	
P			
M			
K			●
N		●	
S			
H			○
O		○	

铣削指南

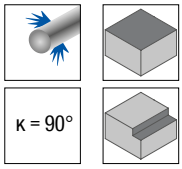
切削参数推荐值	→ 141-144	加工方式	→ 168
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

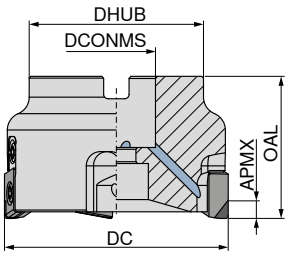
15

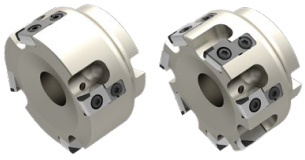
MaxiMill – 套式铣刀 HPC 12

▲ 50 723 ... 标准齿
▲ 50 724 ... 密齿

供货详情:
刀具、调节楔和设置扳手, 包括木盒







规格型号	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 723 ...	50 724 ...
AHPC.40.R.04-12	40	4	11	40	34	16	32000	5	ZNHW 1205..	040	
AHPC.50.R.04-12	50	4	11	40	49	22	32000	5	ZNHW 1205..	050	
AHPC.50.R.05-12	50	5	11	40	49	22	32000	5	ZNHW 1205..		050
AHPC.63.R.04-12	63	4	11	40	49	22	29000	5	ZNHW 1205..	063	
AHPC.63.R.07-12	63	7	11	40	49	22	29000	5	ZNHW 1205..		063
AHPC.80.R.09-12	80	9	11	50	60	27	26000	5	ZNHW 1205..		080
AHPC.80.R.05-12	80	5	11	50	60	27	26000	5	ZNHW 1205..	080	
AHPC.100.R.06-12	100	6	11	50	70	32	24000	5	ZNHW 1205..	100	
AHPC.100.R.12-12	100	12	11	50	70	32	24000	5	ZNHW 1205..		100
AHPC.125.R.08-12	125	8	11	63	72	40	22000	5	ZNHW 1205..	125	
AHPC.125.R.14-12	125	14	11	63	72	40	22000	5	ZNHW 1205..		12514
AHPC.160.R.10-12	160	10	11	63	118	40	18000	5	ZNHW 1205..	16010 1)	
AHPC.160.R.16-12	160	16	11	63	118	40	18000	5	ZNHW 1205..		16016 1)
AHPC.200.R.12-12	200	12	11	63	153	60	16000	5	ZNHW 1205..	20000 1)	
AHPC.250.R.14-12	250	14	11	63	200	60	14000	5	ZNHW 1205..	25014 1)	
AHPC.315.R.18-12	315	18	11	80	265	60	12000	5	ZNHW 1205..	31518 1)	

1) 无内冷却液供应

备件

DC	Torx 扳手®-可换接杆	润滑剂	刀片螺钉	夹紧楔块	扭力扳手
	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
40 - 315	036	303	174	199	193

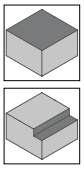
MaxiMill – 整体式 铣刀 HPC 12

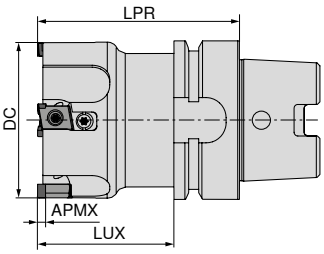
▲ 动平衡等级 G 6.3

供货详情:

刀具、调节楔和设置扳手, 包括木盒

κ = 90°





规格型号	DC mm	ZNF	APMX mm	LPR mm	LUX mm	RPMX 1/min.	扭矩 Nm	刀片	50 721 ...	50 721 ...
MHPC.40.R.04-12-H63A-70	40	4	11	70	44	32000	5	ZNHW 1205..		04004
MHPC.50.R.04-12-H63A-80	50	4	11	80	54	32000	5	ZNHW 1205..		05004
MHPC.50.R.05-12-H63A-80	50	5	11	80	54	32000	5	ZNHW 1205..	05005	
MHPC.63.R.04-12-H63A-80	63	4	11	80	54	29000	5	ZNHW 1205..		06304
MHPC.63.R.07-12-H63A-80	63	7	11	80	54	29000	5	ZNHW 1205..	06307	
MHPC.80.R.05-12-H63A-90	80	5	11	90	64	26000	5	ZNHW 1205..		08005
MHPC.80.R.09-12-H63A-90	80	9	11	90	64	26000	5	ZNHW 1205..	08009	
MHPC.100.R.06-12-H63A-90	100	6	11	90	64	24000	5	ZNHW 1205..		10006
MHPC.100.R.12-12-H63A-90	100	12	11	90	64	24000	5	ZNHW 1205..	10012	
MHPC.125.R.08-12-H63A-123	125	8	11	123	97	22000	5	ZNHW 1205..		12508
MHPC.160.R.10-12-H63A-123	160	10	11	123	97	18000	5	ZNHW 1205..		16010 1)

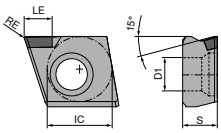
1) 无内冷却液供应

备件 DC	Torx 扳手®-可换接杆	润滑剂	刀片螺钉	夹紧楔块	扭力扳手
					
	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
40 - 160	036	303	174	199	193

15

ZNHW

规格型号	LE mm	D1 mm	L mm	S mm
ZNHW 120504ER-1503	3	4.85	12.7	5.40
ZNHW 120504FR-0007	7	4.85	12.7	5.40
ZNHW 120508ER-1503	3	4.85	12.7	5.40
ZNHW 120508SR-0003	3	4.85	12.7	5.40
ZNHW 1205EOER-1002	2	4.85	12.7	5.40
ZNHW 1205POER-1511	11	4.85	12.7	5.40
ZNHW 1205POFR-1003	3	4.85	12.7	5.40
ZNHW 1205POSR-1503	3	4.85	12.7	5.40
ZNHW 1205POSR-1506	6	4.85	12.7	5.40
ZNHW 1205POSR-3003	3	4.85	12.7	5.40
ZNHW 1205ZZSR-5003	3	4.85	12.7	5.40



ZNHW

		CTL3215	CTD4205	-R CTD4205	CTD4205	-Q CTD4205
		CBN ZNHW	DIAMOND ZNHW	DIAMOND ZNHW	DIAMOND ZNHW	DIAMOND ZNHW
		50 515 ...	50 467 ...	50 517 ...	50 468 ...	50 466 ...
ISO	RE mm					
120504ER-1503	0.4				906	
120504FR-0007	0.4				904	
120508ER-1503	0.8				910	
120508SR-0003	0.8				908	
1205EOER-1002		952				
1205POER-1511			902			
1205POFR-1003			90600			
1205POSR-1503			900			
1205POSR-1506			90800	90800		
1205POSR-3003			904			
1205ZZSR-5003						900 [1]
P						
M						
K		●				
N			●	●	●	●
S						
H		○				
O			○	○	○	○

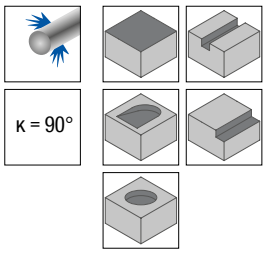
1) -Q = 修光刃刀片

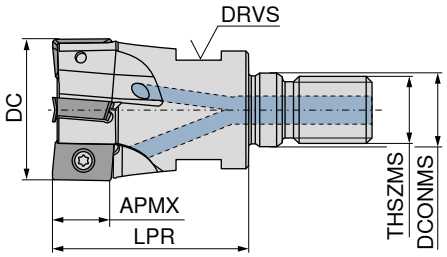
铣削指南

切削参数推荐值 → 141–144
加工方式 → 168
技术信息 → 189–194
断屑槽型描述及概览 → 195–197
牌号描述及概览 → 198–201

MaxiMill – Screw in 铣刀 G 141

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。



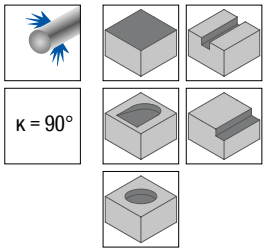


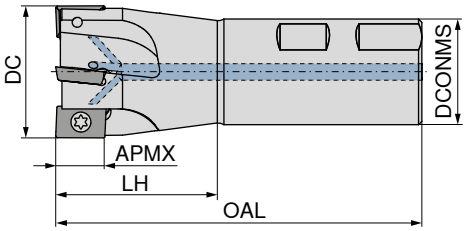
50 770 ...

ISO-规格型号	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	扭矩 Nm	刀片	
G141.25.R.02.IK	25	2	14	35	M12	12.5	17	3,2	LD.. 1504..	025
G141.32.R.03.IK	32	3	14	40	M16	17.0	24	3,2	LD.. 1504..	032
G141.40.R.04.IK	40	4	14	40	M16	17.0	24	3,2	LD.. 1504..	040

MaxiMill – 立铣刀 C 141

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。





B

50 771 ...

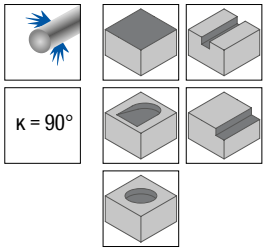
ISO-规格型号	DC mm	ZNF	APMX mm	DCONMS mm	OAL mm	LH mm	扭矩 Nm	刀片	
C141.20.R.01	20	1	14	25	95	39	3,2	LD.. 1504..	020
C141.25.R.02	25	2	14	25	100	44	3,2	LD.. 1504..	025
C141.32.R.03	32	3	14	32	108	48	3,2	LD.. 1504..	032

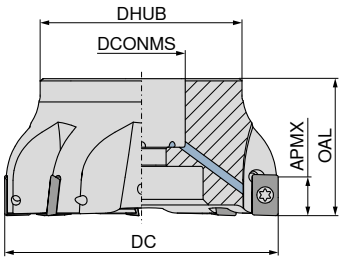
备件 DC	Torx 扭手®-可换接杆	扭手-D	润滑剂	刀片螺钉	扭力扭手
					
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
20 - 40	036	113	303	01100	192

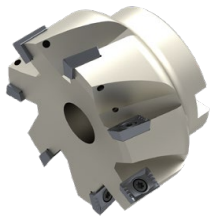
15

MaxiMill – 套式铣刀 A 241

▲ 当刀片圆角半径>3.2mm时，请进行合理的刀盘改制。







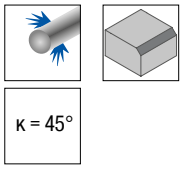
50 769 ...

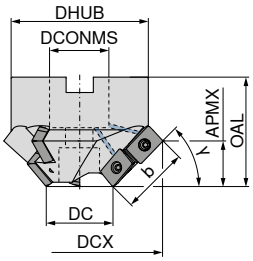
ISO-规格型号	DC mm	ZNF	APMX mm	DHUB mm	DCONMS mm	OAL mm	扭矩 Nm	刀片	
A241.40.R.04	40	4	14	33	16	40	3,2	LD.. 1504..	**040**
A241.50.R.05	50	5	14	43	22	40	3,2	LD.. 1504..	**050**
A241.52.R.05	52	5	14	43	22	40	3,2	LD.. 1504..	**052**
A241.63.R.06	63	6	14	48	22	40	3,2	LD.. 1504..	**063**
A241.66.R.06	66	6	14	58	27	50	3,2	LD.. 1504..	**066**
A241.80.R.07	80	7	14	58	27	50	3,2	LD.. 1504..	**080**
A241.100.R.08	100	8	14	75	32	50	3,2	LD.. 1504..	**100**

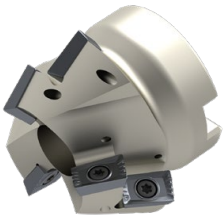
备件 DC	Torx 扳手®-可换接杆	扳手-D	润滑剂	刀片螺钉	扭力扳手
	80 950 ...	**80 950 ...**	**70 950 ...**	**70 950 ...**	**80 950 ...**
40	**036**	**113**	**303**	**110**	**192**
50 - 100	**036**	**113**	**303**	**304**	**192**

MaxiMill – 倒角铣刀 A 242

▲ 注意: 仅可使用刀尖半径小于 1.6 mm 的刀片
▲ ZEFP = 刀片数量
▲ ZNP = 齿排数







50 768 ...

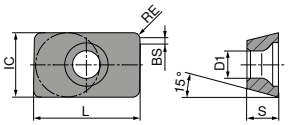
KAPR °	DC mm	DCX ±0,3 mm	ZNF	APMX ±0,3 mm	ZEFP	b ±0,3 mm	OAL mm	DCONMS mm	DHUB mm	ZNP	扭矩 Nm	刀片	
15	35	92.2	3	7.6	6	29.6	50	27	62.5	2	3,2	LD.. 1504..	**015**
30	35	86.3	3	14.8	6	29.6	50	27	62.5	2	3,2	LD.. 1504..	**030**
45	35	76.9	3	20.9	6	29.6	50	27	62.5	2	3,2	LD.. 1504..	**045**
60	35	64.6	3	25.6	6	29.6	50	22	62.5	2	3,2	LD.. 1504..	**060** [1]
75	35	50.3	3	28.5	6	29.6	60	22	49.0	2	3,2	LD.. 1504..	**075** [1]

1) 带强力螺钉的型号

备件 KAPR	Torx 扳手®-可换接杆	夹紧扳手-T	扳手-D	强力螺钉	润滑剂	刀片螺钉	扭力扳手	紧固螺钉
	80 950 ...	**80 397 ...**	**80 950 ...**	**70 950 ...**	**70 950 ...**	**70 950 ...**	**80 950 ...**	**83 950 ...**
15 - 45	**036**		**113**		**303**	**304**	**192**	**125**
60 - 75	**036**	**050**	**113**	**154**	**303**	**304**	**192**	

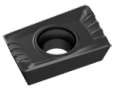
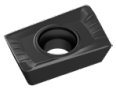
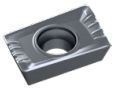
LDFW / LDFT / LDMT

规格型号	IC mm	D1 mm	L mm	BS mm	S mm
LD.. 1504PD..	9.52	4.4	15	1.2	4.76
LDFT 150408..	9.52	4.4	15	1.2	4.76
LDFT 150416..	9.52	4.4	15	0.9	4.76
LDFT 150432..	9.52	4.4	15	1.0	4.76
LDFT 1504PD..	9.52	4.4	15	0.8	4.76

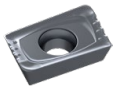
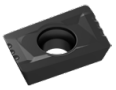
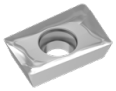


L...

LDFW / LDFT / LDMT

		CTCP230	-29 CTCP230	-29 CTCP230	-29 CTPP235	-29 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		LDFW	LDFT	LDMT	LDFT	LDMT
		51 043 ...	51 079 ...	51 080 ...	51 079 ...	51 080 ...
ISO	RE mm					
1504PDSR	0.8	020	020	020	120	120
P		●	●	●	●	●
M					○	○
K		○	○	○	○	○
N						
S						
H						
O						

LDFT / LDFW

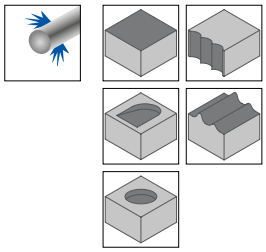
		-33 CTPM240	CTCK215	-27P H216T
		DRAGONSKIN	DRAGONSKIN	
				
		LDFT	LDFW	LDFT
		51 042 ...	51 043 ...	50 409 ...
ISO	RE mm			
150408FR	0.8			550
150416SR	1.6	41600		
150432SR	3.2	43200		
1504PDSR	1.2	420		
1504PDSR	0.8		520	
P		○		
M		●		
K			●	○
N				●
S				
H				
O				○

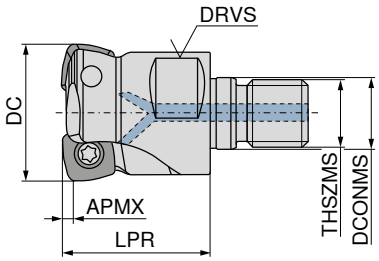
15

铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 170
技术信息	→ 189–194	断屑槽型描述及概览	→ 195–197
牌号描述及概览	→ 198–201		

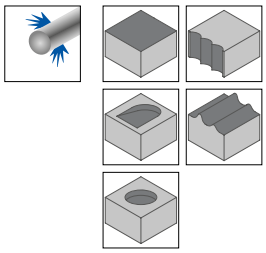
MaxiMill – Screw in 铣刀 G HFC

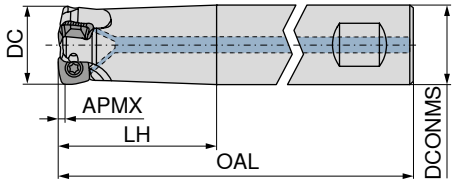




规格型号	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	50 682 ...
GHFC.16.R.02-06	16	2	0.8	27	8.5	M8	10	20800	1,2	XPLX 0603..	616
GHFC.20.R.03-06	20	3	0.8	33	10.5	M10	15	19800	1,2	XPLX 0603..	620
GHFC.25.R.04-06	25	4	0.8	35	12.5	M12	17	18700	1,2	XPLX 0603..	625
GHFC.32.R.05-06	32	5	0.8	35	17.0	M16	24	22000	1,2	XPLX 0603..	632
GHFC.42.R.07-06	42	7	0.8	35	17.0	M16	24	15000	1,2	XPLX 0603..	04207
GHFC.25.R.02-09	25	2	1.0	35	12.5	M12	17	30000	3,2	XDLX 09T3..	025
GHFC.25.R.03-09	25	3	1.0	35	12.5	M12	17	30000	3,2	XDLX 09T3..	125
GHFC.32.R.03-09	32	3	1.0	35	17.0	M16	24	27000	3,2	XDLX 09T3..	032
GHFC.42.R.05-09	42	5	1.0	35	17.0	M16	24	26100	3,2	XDLX 09T3..	04205
GHFC.32.R.02-12	32	2	2.0	35	17.0	M16	24	21600	5	XOLX 1204..	132
GHFC.35.R.03-12	35	3	2.0	35	17.0	M16	24	21360	5	XOLX 1204..	035
GHFC.42.R.04-12	42	4	2.0	35	17.0	M16	24	20800	5	XOLX 1204..	04204

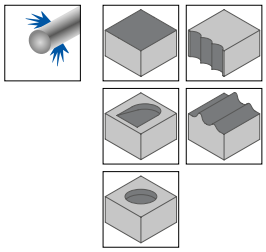
MaxiMill – 立铣刀 C HFC

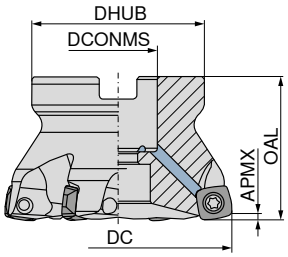


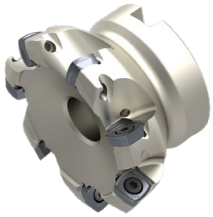


规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	RPMX 1/min.	扭矩 Nm	刀片	A 50 681 ...	B 50 681 ...
CHFC.16.R.02-06-A-40-200	16	2	0.8	200	40	16	4600	1,2	XPLX 0603..	716	
CHFC.16.R.02-06-B-40	16	2	0.8	89	40	16	17300	1,2	XPLX 0603..		616
CHFC.20.R.03-06-B-50	20	3	0.8	101	50	20	14500	1,2	XPLX 0603..		620
CHFC.20.R.03-06-A-50-225	20	3	0.8	225	50	20	4200	1,2	XPLX 0603..	720	
CHFC.25.R.04-06-B-50	25	4	0.8	107	50	25	15600	1,2	XPLX 0603..		625
CHFC.25.R.04-06-A-50-225	25	4	0.8	225	50	25	4600	1,2	XPLX 0603..	725	
CHFC.32.R.05-06-B-25-60	32	5	0.8	117	60	25	11000	1,2	XPLX 0603..		632
CHFC.32.R.05-06-A-25-60-225	32	5	0.8	225	60	25	3900	1,2	XPLX 0603..	732	
CHFC.25.R.02-09-A-50-225	25	2	1.0	225	50	25	9000	3,2	XDLX 09T3..	025	
CHFC.25.R.03-09-A-50-225	25	3	1.0	225	50	25	9000	3,2	XDLX 09T3..	125	
CHFC.32.R.03-09-A-63-250	32	3	1.0	250	63	32	8100	3,2	XDLX 09T3..	032	
CHFC.32.R.02-12-A-63-250	32	2	2.0	250	63	32	6480	5	XOLX 1204..	132	
CHFC.35.R.03-12-A-63-250	35	3	2.0	250	63	32	6480	5	XOLX 1204..	035	

MaxiMill – 套式铣刀 A HFC







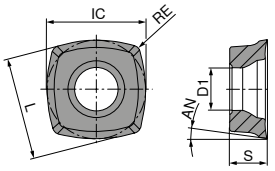
规格型号	DC mm	ZNF	APMX mm	OAL mm	DCONMS H6 mm	DHUB mm	RPMX 1/min.	扭矩 Nm	刀片	50 683 ...
AHFC.32.R.03-09	32	3	1.0	40	16	38	27700	3,2	XDLX 09T3..	032
AHFC.35.R.04-09	35	4	1.0	40	16	38	26700	3,2	XDLX 09T3..	035
AHFC.40.R.04-09	40	4	1.0	40	16	38	26400	3,2	XDLX 09T3..	140
AHFC.42.R.05-09	42	5	1.0	40	16	38	26100	3,2	XDLX 09T3..	142
AHFC.50.R.05-09	50	5	1.0	40	22	43	23500	3,2	XDLX 09T3..	150
AHFC.52.R.06-09	52	6	1.0	40	22	43	23000	3,2	XDLX 09T3..	152
AHFC.63.R.06-09	63	6	1.0	40	22	48	20500	3,2	XDLX 09T3..	163
AHFC.66.R.07-09	66	7	1.0	40	22	48	20000	3,2	XDLX 09T3..	16600
AHFC.40.R.03-12	40	3	2.0	40	16	38	21120	5	XOLX 1204..	040
AHFC.42.R.04-12	42	4	2.0	40	16	38	20880	5	XOLX 1204..	042
AHFC.50.R.04-12	50	4	2.0	40	22	43	18800	5	XOLX 1204..	050
AHFC.52.R.05-12	52	5	2.0	40	22	43	18400	5	XOLX 1204..	052
AHFC.63.R.05-12	63	5	2.0	40	22	48	16400	5	XOLX 1204..	063
AHFC.66.R.06-12	66	6	2.0	40	22	48	16000	5	XOLX 1204..	066
AHFC.80.R.07-12	80	7	2.0	50	27	58	14000	5	XOLX 1204..	080
AHFC.100.R.08-12	100	8	2.0	50	32	78	12000	5	XOLX 1204..	100
AHFC.63.R.05-19	63	5	3.3	40	22	48	5500	5	XOLX 1906..	263
AHFC.80.R.06-19	80	6	3.3	50	27	58	4700	5	XOLX 1906..	280
AHFC.100.R.08-19	100	8	3.3	52	32	78	4100	5	XOLX 1906..	300
AHFC.125.R.10-19	125	10	3.3	63	40	88	3600	5	XOLX 1906..	325
AHFC.160.R.11-19	160	11	3.3	63	40	98	3100	5	XOLX 1906..	360 [1]

1) 带 M12 螺栓 安装孔, 节圆直径 = 66.7 mm / 无内冷却液供应

备件	Torx 扳手®-可换接杆 80 950 ...	夹紧扳手-T 80 397 ...	扳手-D 80 950 ...	强力螺钉 70 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
XDLX 09T3..	036		113		303	110	192
XDLX 09T3.. (Ø32 – Ø42)	036	040	113	151	303	110	192
XOLX 1204..	037		114		303	01200	193
XOLX 1204.. (Ø40 – Ø42)	037	040	114	151	303	01200	193
XOLX 1906..	037		114		303	302	193
XPLX 0603..	033		110		303	116	192

XPLX / XDLX / XOLX / XOHX

规格型号	IC mm	D1 mm	L mm	BS mm	S mm	AN °
XPLX 0603..	6.35	2.8	6	1	2.75	11
XDLX 09T3..	9.52	4.4	9	1.9	3.97	15
XO.X 1204..	12.70	5.5	12	1.3	4.76	10
XOLX 1906..	19.14	6.0	19	-	6.35	10



XPLX

		-M50 CTCP220	-M50 CTPP225	-M50 CTPP235	-M50 CTPM225	-M50 CTPM240	-F40 CTPM245	NEW -F40 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		XPLX	XPLX	XPLX	XPLX	XPLX	XPLX	XPLX
		51 019 ...	51 019 ...	51 019 ...	51 019 ...	51 019 ...	51 116 ...	51 116 ...
ISO	RE mm							
060305ER	0.5						455	90501
060305SR	0.5	255	055	105	205	405		
P		●	●	●	●	○	●	●
M				○	●	●	●	●
K				○				
N								
S								○
H								
O								

XPLX

		-M50 CTCK215	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
		XPLX	XPLX	XPLX
		51 019 ...	50 518 ...	51 116 ...
ISO	RE mm			
060305ER	0.5		558	55500
060305SR	0.5	505		
P				
M				
K		●		
N				
S			●	●
H				
O				

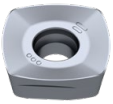
XDLX

		-M50 CTCP220	-M50 CTPP225	-M50 CTCP230	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		XDLX	XDLX	XDLX	XDLX
		51 016 ...	51 016 ...	51 016 ...	51 016 ...
ISO	RE mm				
09T308SR	0.8	258	058	008	108
P		●	●	●	●
M					○
K				○	○
N					
S					
H					
O					

XDLX

		-M50 CTPM225	-M50 CTCM235	-M50 CTPM240	-F40 CTPM245	-M50 CTPM245	NEW -M50 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		XDLX	XDLX	XDLX	XDLX	XDLX	XDLX
		51 016 ...	51 016 ...	51 016 ...	51 115 ...	51 016 ...	51 016 ...
ISO	RE mm						
09T308ER	0.8				458		
09T308SR	0.8	208	308	408		458	90801
P		●	●	○	●	●	●
M		●	●	●	●	●	●
K							
N							
S							○
H							
O							

XDLX / XOLX

		-M50 CTCK215	NEW -M50 CTPK220	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		XDLX	XOLX	XDLX	XDLX
		51 016 ...	51 017 ...	50 503 ...	51 115 ...
ISO	RE mm				
09T308ER	0.8			558	558
09T308SR	0.8	508			
190615SR	1.5		61500		
P					
M					
K		●	●		
N					
S				●	●
H					
O					

XOLX

		-M50 CTCP220	-M50 CTPP225	-M50 CTCP230	-M50 CTPP235	-R50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		XOLX	XOLX	XOLX	XOLX	XOLX
		51 017 ...	51 017 ...	51 017 ...	51 017 ...	51 018 ...
ISO	RE mm					
120410SR	1.0	260	060	010	110	110
P		●	●	●	●	●
M					○	○
K				○	○	○
N						
S						
H						
O						

XOLX

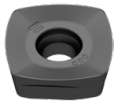
		-M50 CTPM225	-M50 CTCM235	-M50 CTPM240	-F40 CTPM245	-M50 CTPM245	NEW -F40 CTCM245	NEW -M50 CTCM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		XOLX	XOLX	XOLX	XOLX	XOLX	XOLX	XOLX
		51 017 ...	51 017 ...	51 017 ...	51 022 ...	51 017 ...	51 022 ...	51 017 ...
ISO	RE mm							
120410ER	1.0				460		91001	
120410SR	1.0	210	310	410		460		91001
P		●	●	○	●	●	●	●
M		●	●	●	●	●	●	●
K								
N								
S							○	○
H								
O								

XOLX / XOHX

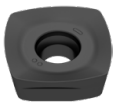
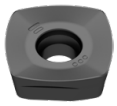
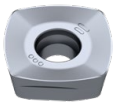
		-M50 CTCK215	-F40 CTC5240	-F50 CTC5240	-F40 CTCS245	-F50 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		XOLX	XOLX	XOHX	XOLX	XOHX
		51 017 ...	50 504 ...	51 124 ...	51 022 ...	51 124 ...
ISO	RE mm					
120410ER	1.0		558		560	
120410SR	1.0	510		16000		56000
P						
M						
K		●				
N						
S			●	●	●	●
H						
O						

15

XOLX

		-M50 CTCP230	-M50 CTPP235	-M50 CTPM240	-F40 CTPM245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		XOLX	XOLX	XOLX	XOLX
		51 017 ...	51 017 ...	51 017 ...	51 022 ...
ISO	RE mm				
190615ER	1.5				465
190615SR	1.5	015	115	415	
P		●	●	○	●
M			○	●	●
K		○	○		
N					
S					
H					
O					

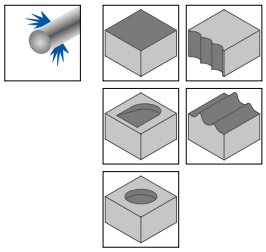
XOLX

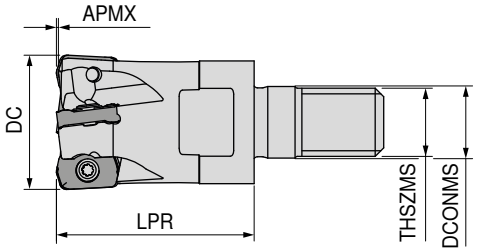
		NEW -F40 CTCM245	-M50 CTCK215	NEW -M50 CTPK220	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		XOLX	XOLX	XOLX	XOLX	XOLX
		51 022 ...	51 017 ...	51 017 ...	50 504 ...	51 022 ...
ISO	RE mm					
190615ER	1.5	91501			515	56500
190615SR	1.5		515	61500		
P		●				
M		●				
K			●	●		
N						
S		○			●	●
H						
O						

铣削指南

切削参数推荐值	→ 141–144	加工方式	→ 172–175
起始推荐参数	→ 172–175	技术信息	→ 189–194
断屑槽型描述及概览	→ 195–197	牌号描述及概览	→ 198–201

MaxiMill – Screw in 铣刀 G DHFC

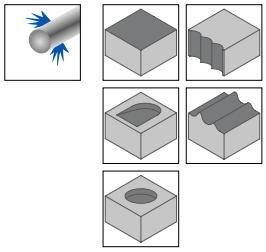


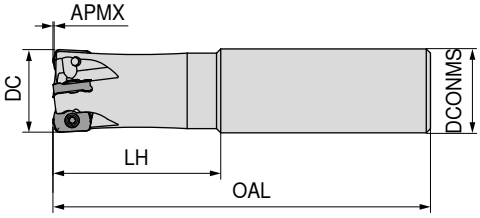


56 411 ...

规格型号	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	扭矩 Nm	刀片	
GDHFC.16.R.02-09	16	2	0.75	29	8.5	M8	0,65	LNKX 0925..	01602
GDHFC.16.R.03-09	16	3	0.75	29	8.5	M8	0,65	LNKX 0925..	01603
GDHFC.20.R.04-09	20	4	0.75	29	10.5	M10	0,65	LNKX 0925..	02004
GDHFC.25.R.05-09	25	5	0.75	33	12.5	M12	0,65	LNKX 0925..	02505
GDHFC.32.R.05-09	32	5	0.75	42	17.0	M16	0,65	LNKX 0925..	03205
GDHFC.35.R.06-09	35	6	0.75	42	17.0	M16	0,65	LNKX 0925..	03506
GDHFC.42.R.06-09	42	6	0.75	42	17.0	M16	0,65	LNKX 0925..	04206

MaxiMill – 立铣刀 C HFC





A

56 417 ...

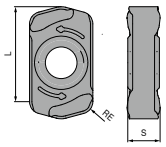
规格型号	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS h6 mm	扭矩 Nm	刀片	
CDHFC.16.R.05-09-A-32	16	3	0.75	80	32	16	0,65	LNKX 0925..	01603
CDHFC.20.R.04-09-A-40	20	4	0.75	90	40	20	0,65	LNKX 0925..	02004

备件 DC	Torx 扭手®-可换接杆	扭手-D	润滑剂	刀片螺钉	扭力扭手
					
	80 950 ...	80 950 ...	70 950 ...	56 950 ...	80 950 ...
16 - 42	051	117	303	15000	191

15

LNKX

规格型号	L mm	S mm
LNKX 0925..	9	2.50



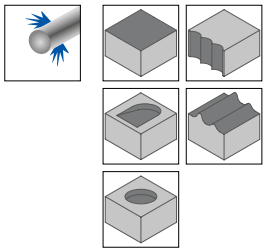
LNKX

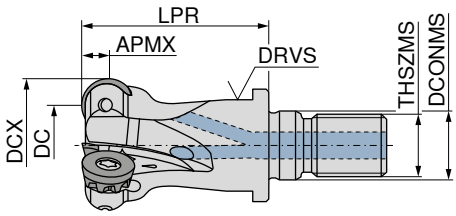
		-R50 CTPP231	-M50 CTPP236	-R50 CTPP236	-M50 CTPM241	-R50 CTPK221
						
		LNKX	LNKX	LNKX	LNKX	LNKX
		56 353 ...	56 355 ...	56 353 ...	56 355 ...	56 353 ...
ISO	RE mm					
0925ZSR	1	12000	02500	02000	42500	27000
P		●	●	●	○	○
M		○	○	○	●	
K		○	○	○		●
N						
S					○	
H						
O						

铣削指南

切削参数推荐值	→ 141-144	加工方式	→ 176
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

MaxiMill – Screw in 铣刀 G 251

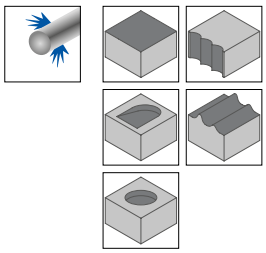


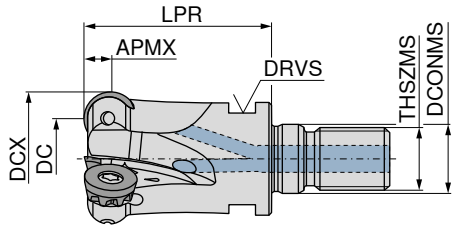


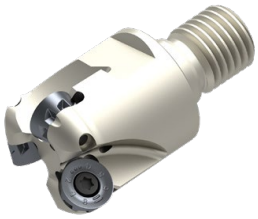
55 112 ...

规格型号	DC mm	DCX mm	ZNF	APMX mm	THSZMS	LPR mm	DCONMS mm	DRVS mm	扭矩 Nm	刀片	
G251.10.R.02-05	5	10	2	2.5	M8	20	8.5	10	0,7	RDHX 0501..	110
G251.12.R.03-05	7	12	3	2.5	M8	20	8.5	10	0,7	RDHX 0501..	112
G251.15.R.04-05	10	15	4	2.5	M8	20	8.5	10	0,7	RDHX 0501..	115
G251.16.R.04-05	11	16	4	2.5	M8	20	8.5	10	0,7	RDHX 0501..	216
G251.20.R.05-05	15	20	5	2.5	M10	25	10.5	15	0,7	RDHX 0501..	320
G251.20.R.03-08	12	20	3	4.0	M10	28	10.5	15	1,2	RDHX 0802..	420
G251.25.R.04-08	17	25	4	4.0	M12	28	12.5	17	1,2	RDHX 0802..	425
G251.32.R.06-08	24	32	6	4.0	M16	28	17.0	24	1,2	RDHX 0802..	432
G251.35.R.06-08	27	35	6	4.0	M16	28	17.0	24	1,2	RDHX 0802..	435
G251.20.R.02-10	10	20	2	5.0	M10	33	10.5	15	2	RP.X 10T3..	220
G251.32.R.04-10	22	32	4	5.0	M16	35	17.0	24	2	RP.X 10T3..	232
G251.35.R.05-10	25	35	5	5.0	M16	35	17.0	24	2	RP.X 10T3..	235
G251.25.R.02-12.IK	13	25	2	6.0	M12	35	12.5	17	3,2	RP.X 1204..	525
G251.32.R.03-12.IK	20	32	3	6.0	M16	35	17.0	24	3,2	RP.X 1204..	532
G251.35.R.03-12.IK	23	35	3	6.0	M16	35	17.0	24	3,2	RP.X 1204..	535
G251.42.R.04-12.IK	30	42	4	6.0	M16	42	17.0	24	3,2	RP.X 1204..	542

MaxiMill – Screw in 铣刀 G 251 RS



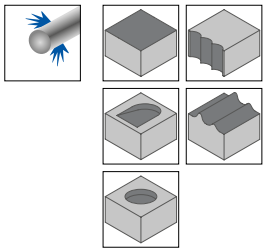


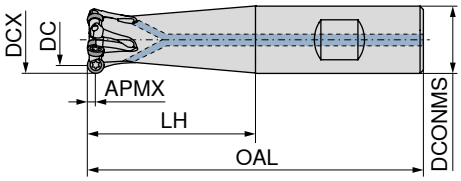


50 684 ...

规格型号	DC mm	DCX mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS	DRVS mm	RPMX 1/min.	扭矩 Nm	刀片	
G251.20.R.05-05-RS	15	20	5	2.5	10.5	33	M10	15	31800	0,7	RDHX 0501..	220
G251.25.R.06-05-RS	20	25	6	2.5	12.5	35	M12	17	24450	0,7	RDHX 0501..	225
G251.32.R.07-05-RS	27	32	7	2.5	17.0	35	M16	24	19850	0,7	RDHX 0501..	232
G251.20.R.03-08-RS	12	20	3	4.0	10.5	33	M10	15	25000	1,2	RDHX 0802..	120
G251.25.R.04-08-RS	17	25	4	4.0	12.5	35	M12	17	19000	1,2	RDHX 0802..	125
G251.32.R.05-08-35-RS	24	32	5	4.0	17.0	35	M16	24	19000	1,2	RDHX 0802..	132
G251.20.R.02-10-RS	10	20	2	5.0	10.5	33	M10	15	30000	2	RP.X 10T3..	020
G251.25.R.03-10-RS	15	25	3	5.0	12.5	35	M12	17	30000	2	RP.X 10T3..	025
G251.32.R.04-10-RS	22	32	4	5.0	17.0	35	M16	24	25000	2	RP.X 10T3..	032
G251.25.R.02-12-35-RS	13	25	2	6.0	12.5	35	M12	17	25000	3,2	RP.X 1204..	525
G251.32.R.03-12-35-RS	20	32	3	6.0	17.0	35	M16	24	19850	3,2	RP.X 1204..	532
G251.35.R.03-12-35-RS	23	35	3	6.0	17.0	35	M16	24	15900	3,2	RP.X 1204..	535
G251.42.R.04-12-42-RS	30	42	4	6.0	17.0	42	M16	24	15000	3,2	RP.X 1204..	542

MaxiMill – 立铣刀 C 251 RS

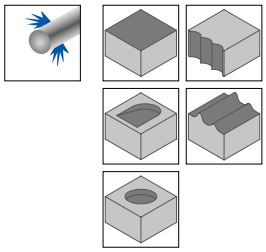


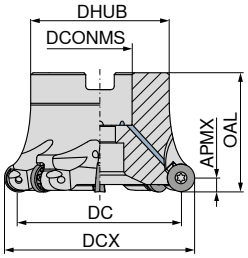


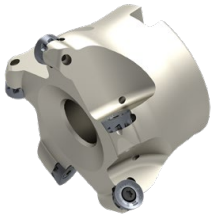
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	刀片	A 50 685 ...	B 50 685 ...
C251.10.R-02-05-B-12-20-RS	5	10	2	2.5	67	21.5	12	40000	RDHX 0501..		010
C251.10.R-02-05-A-25-165-RS	5	10	2	2.5	165	25.0	10	12000	RDHX 0501..	110	
C251.12.R-03-05-B-16-25-RS	7	12	3	2.5	75	25.0	16	40000	RDHX 0501..		012
C251.12.R-03-05-A-32-165-RS	7	12	3	2.5	165	32.0	12	16000	RDHX 0501..	112	
C251.16.R-04-05-B-32-RS	11	16	4	2.5	81	32.0	16	40000	RDHX 0501..		316
C251.16.R-04-05-A-40-165-RS	11	16	4	2.5	165	40.0	16	18000	RDHX 0501..	016	
C251.20.R-05-05-B-40-RS	15	20	5	2.5	91	40.0	20	31800	RDHX 0501..		620
C251.20.R-05-05-A-50-165-RS	15	20	5	2.5	165	50.0	20	18000	RDHX 0501..	120	
C251.16.R-02-08-B-32-RS	8	16	2	4.0	81	32.0	16	40000	RDHX 0802..		116
C251.16.R-02-08-A-40-165-RS	8	16	2	4.0	165	40.0	16	18000	RDHX 0802..	216	
C251.20.R-03-08-B-40-RS	12	20	3	4.0	91	40.0	20	31800	RDHX 0802..		220
C251.20.R-03-08-A-60-RS	12	20	3	4.0	110	50.0	20	30000	RDHX 0802..	020	
C251.20.R-03-08-A-50-200-RS	12	20	3	4.0	200	50.0	20	25000	RDHX 0802..	320	
C251.25.R-04-08-B-50-RS	17	25	4	4.0	107	50.0	25	25500	RDHX 0802..		625
C251.25.R-04-08-A-60-RS	17	25	4	4.0	116	60.0	25	19000	RDHX 0802..	125	
C251.25.R-04-08-A-60-225-RS	17	25	4	4.0	225	60.0	25	18000	RDHX 0802..	225	
C251.20.R-02-10-A-50-RS	10	20	2	5.0	102	50.0	20	25000	RP.X 10T3..	420	
C251.20.R-02-10-A-50-200-RS	10	20	2	5.0	200	50.0	20	25000	RP.X 10T3..	520	
C251.25.R.03-10-A-60-RS	15	25	3	5.0	116	60.0	25	25000	RP.X 10T3..	025	
C251.25.R-03-10-B-60-RS	15	25	3	5.0	116	60.0	25	20000	RP.X 10T3..		325
C251.25.R-03-10-A-60-225-RS	15	25	3	5.0	225	60.0	25	18000	RP.X 10T3..	425	
C251.32.R.04-10-A-70-RS	22	32	4	5.0	130	70.0	32	25000	RP.X 10T3..	032	
C251.25.R-02-12-B-30-RS	13	25	2	6.0	86	30.0	25	25000	RP.X 1204..		525
C251.32.R-03-12-A-RS	20	32	3	6.0	100	40.0	32	19000	RP.X 1204..	232	
C251.32.R-03-12-B-40-RS	20	32	3	6.0	100	40.0	32	19000	RP.X 1204..		132

备件 刀片	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
RDHX 0501..	031	108	303	149	191
RDHX 0802..	033	110	303	116	191
RP.X 10T3..	035	112	303	840	192
RP.X 1204..	036	113	303	304	192

MaxiMill – 套式铣刀 A 251 RS





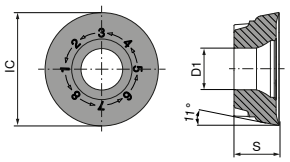


规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	扭矩 Nm	刀片	50 686 ...
A251.40.R.03-10-RS	30	40	3	5	40	38	16	15900	2	RP.X 10T3..	240
A251.40.R.05-10-RS	30	40	5	5	40	38	16	16000	2	RP.X 10T3..	140
A251.42.R.06-10-RS	32	42	6	5	40	38	16	16000	2	RP.X 10T3..	142
A251.50.R.04-10-RS	40	50	4	5	40	43	22	12700	2	RP.X 10T3..	350
A251.50.R.06-10-RS	40	50	6	5	40	43	22	12500	2	RP.X 10T3..	150
A251.52.R.06-10-RS	42	52	6	5	40	43	22	12500	2	RP.X 10T3..	152
A251.40.R.04-12-RS	28	40	4	6	40	38	16	15900	3,2	RP.X 1204..	340
A251.50.R.04-12-RS	38	50	4	6	40	43	22	12700	3,2	RP.X 1204..	250
A251.50.R.05-12-RS	38	50	5	6	40	43	22	12500	3,2	RP.X 1204..	050
A251.52.R.05-12-RS	40	52	5	6	40	43	22	12500	3,2	RP.X 1204..	052
A251.63.R.06-12-RS	51	63	6	6	40	48	22	10000	3,2	RP.X 1204..	063
A251.66.R.07-12-RS	54	66	7	6	40	48	22	9000	3,2	RP.X 1204..	166
A251.80.R.05-12-RS	68	80	5	6	50	58	27	7950	3,2	RP.X 1204..	180
A251.80.R.07-12-RS	68	80	7	6	50	58	27	8000	3,2	RP.X 1204..	080
A251.100.R.06-12-RS	88	100	6	6	50	78	32	6350	3,2	RP.X 1204..	100
A251.100.R.10-12-RS	88	100	10	6	50	78	32	6350	3,2	RP.X 1204..	200
A251.50.R.04-16-RS	34	50	4	8	40	48	22	12700	5	RP.X 1605..	450
A251.52.R.04-16-RS	36	52	4	8	40	48	22	10100	5	RP.X 1605..	452
A251.63.R.05-16-RS	47	63	5	8	40	48	22	10100	5	RP.X 1605..	163
A251.66.R.05-16-RS	50	66	5	8	40	48	22	7950	5	RP.X 1605..	466
A251.80.R.06-16-RS	64	80	6	8	50	58	27	7950	5	RP.X 1605..	280
A251.100.R.07-16-RS	84	100	7	8	50	78	32	6350	5	RP.X 1605..	300
A251.125.R.08-16-RS	109	125	8	8	63	88	40	5050	5	RP.X 1605..	225
A251.80.R.05-20-RS	60	80	5	10	50	58	27	7950	5	RP.X 2006..	380
A251.100.R.06-20-RS	80	100	6	10	50	78	32	6350	5	RP.X 2006..	400
A251.125.R.06-20-RS	105	125	6	10	63	88	40	5050	5	RP.X 2006..	125

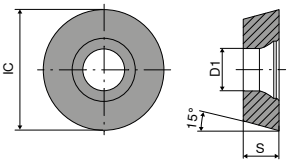
备件 刀片	Torx 扭手®-可换接杆 80 950 ...	 夹紧扳手-T 80 397 ...	 扳手-D 80 950 ...	 强力螺钉 70 950 ...	 润滑剂 70 950 ...	 刀片螺钉 70 950 ...	 扭力扳手 80 950 ...
RP.X 10T3..	035	040	112	151	303	840	192
RP.X 1204..	036	040	113	151	303	304	192
RP.X 1605..	037	050	114	154	303	01200	193
RP.X 2006..	037		114		303	302	193

RDHX / RPHX / RPNX

规格型号	IC mm	D1 mm	S mm
RDHX 0501..	5	2.5	1.59
RDHX 0802..	8	2.8	2.38
RP.X 10T3..	10	3.4	3.97
RP.X 1204..	12	4.4	4.76
RP.X 1605..	16	5.5	5.56
RP.X 2006..	20	6.0	6.35



RP.X 10T3.. / RP.X 1204.. / RP.X 1605.. / RPNX 2006..

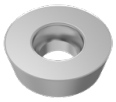


RDHX 0501.. / RDHX0802..

RDHX

	-SN CTCP230	-SN CTPP235	-F50 CTPM240	-F50 CTPM245	NEW -F50 CTCM245
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
	RDHX	RDHX	RDHX	RDHX	RDHX
	51 048 ...	51 048 ...	51 083 ...	51 083 ...	51 083 ...
ISO					
0501M0SN	020	120		465	
0802M0SN	025	125	420	470	92001
0802M4SN				471	92101
P	●	●	○	●	●
M		○	●	●	●
K	○	○			
N					
S					○
H					
O					

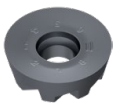
RDHX

	-EN CTCK215	-FN H216T	-M31 CTC5240	-F50 CTCS245
	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN
				
	RDHX	RDHX	RDHX	RDHX
	51 048 ...	50 481 ...	50 481 ...	51 083 ...
ISO				
0501M0FN		600		
0802M0EN			500	
0802M0FN		602		
0802M0SN				570
0802M4EN	520		50100	
P				
M				
K	●	○		
N		●		
S			●	●
H				
O		○		

RPHX / RPNX

	-SN TCM10	-F50 CTCP230 DRAGONSKIN	-M50 CTCP230 DRAGONSKIN	-SN CTCP230 DRAGONSKIN	-SN CTCP230 DRAGONSKIN
					
	CERMET RPHX	RPNX	RPNX	RPHX	RPNX
	50 483 ...	51 055 ...	51 054 ...	51 052 ...	51 057 ...
ISO					
10T3M0SN	900				
10T3M8SN		020	020	020	
1204M0SN	902				
1204M8SN		025	025	025	025
1605M8SN			030	030	030
2006M8SN					035
P	●	●	●	●	●
M					
K	○	○	○	○	○
N					
S					
H					
O					

RPHX / RPNX

	-F50 CTPP235 DRAGONSKIN	-F50 CTPP235 DRAGONSKIN	-M30 CTPP235 DRAGONSKIN	-M30 CTPP235 DRAGONSKIN
				
	RPHX	RPNX	RPHX	RPNX
	51 051 ...	51 055 ...	51 049 ...	51 053 ...
ISO				
10T3M8EN			120	
10T3M8SN	12000	120		
1204M8SN	125	125		
1605M0SN		130		
2006M8EN				120
P	●	●	●	●
M	○	○	○	○
K	○	○	○	○
N				
S				
H				
O				

15

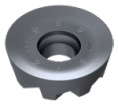
RPNX / RPHX

	-M50 CTPP235 DRAGONSKIN	-M50 CTPP235 DRAGONSKIN	-SN CTPP235 DRAGONSKIN	-SN CTPP235 DRAGONSKIN
				
	RPNX	RPHX	RPHX	RPNX
	51 054 ...	51 050 ...	51 052 ...	51 057 ...
ISO				
10T3M8SN	12000	12000	120	
1204M8SN	125		125	125
1605M8SN	130		130	130
2006M8SN				135
P	●	●	●	●
M	○	○	○	○
K	○	○	○	○
N				
S				
H				
O				

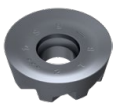
RPHX

	-F50 CTPM225 DRAGONSKIN	-M30 CTPM225 DRAGONSKIN	-SN CTPM225 DRAGONSKIN	-F50 CTCM235 DRAGONSKIN	-M30 CTCM235 DRAGONSKIN
					
	RPHX	RPHX	RPHX	RPHX	RPHX
	51 051 ...	51 049 ...	51 052 ...	51 051 ...	51 049 ...
ISO					
1204M8EN		225			325
1204M8SN	225		225	325	
P	●	●	●	●	●
M	●	●	●	●	●
K					
N					
S					
H					
O					

RPHX / RPNX

	-F50 CTPM240 DRAGONSKIN	-F50 CTPM240 DRAGONSKIN	-M30 CTPM240 DRAGONSKIN	-M30 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN
					
	RPHX	RPNX	RPHX	RPNX	RPHX
	51 051 ...	51 055 ...	51 049 ...	51 053 ...	51 050 ...
ISO					
10T3M8EN			420		
10T3M8SN	420				420
1204M8EN			425		
1204M8SN	425				425
1605M8EN			430		
1605M8SN	430				
2006M8EN				420	
2006M8SN		435			
P	○	○	○	○	○
M	●	●	●	●	●
K					
N					
S					
H					
O					

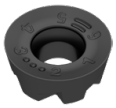
RPHX / RPNX

	CTPM245 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-M32 CTPM245 DRAGONSKIN	-M50 CTPM245 DRAGONSKIN
					
	RPHX	RPHX	RPNX	RPHX	RPHX
	51 052 ...	51 051 ...	51 055 ...	51 108 ...	51 050 ...
ISO					
10T3M4SN		470 [1]	470 [1]		470 [1]
10T3M8SN		471	471		471
1204M4EN	475 [1]			475 [1]	
1204M4SN		475 [1]	475 [1]		475 [1]
1204M6SN		476			476
1204M8SN		477	476		477
1605M8SN		480			
2006M4SN		485 [1]			
2006M8SN			485		
P	●	●	●	●	●
M	●	●	●	●	●
K					
N					
S					
H					
O					

1) 4次转位刀片

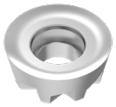
15

RPNX / RPHX

	NEW	NEW	NEW	NEW
	-F50 CTCM245	-M50 CTCM245	-F50 CTCM245	-M50 CTCM245
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	RPNX	RPNX	RPHX	RPHX
	51 055 ...	51 054 ...	51 051 ...	51 050 ...
ISO				
10T3M4SN	92001 1)		92001 1)	92001 1)
10T3M8SN	92101		92101	
1204M4SN	92501 1)		92501 1)	92501 1)
1204M6SN		92601	92601	92601
1204M8SN	92601			92701
1605M8SN	93001		93001	
2006M8SN	93501	93501		
P	●	●	●	●
M	●	●	●	●
K				
N				
S	○	○	○	○
H				
O				

1) 4次转位刀片

RPNX / RPHX

	-R30 CTCK215	-SN CTCK215	-SN CTCK215	-SN CTPK220	-27P H216T
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
					
	RPNX	RPHX	RPNX	RPNX	RPHX
	51 056 ...	51 052 ...	51 057 ...	51 057 ...	50 483 ...
ISO					
10T3M8EN	520				
10T3M8FN					600
10T3M8SN		520		620	
1204M8EN	525				
1204M8FN					602
1204M8SN		525	525	625	
1605M8FN					604
1605M8SN		530	530	630	
2006M8SN			535	635	
P					
M					
K	●	●	●	●	○
N					●
S					
H					
O					○

RPNX / RPHX

	NEW				
	-M31 CTC5240	-M31 CTC5240	-F50 CTCS245	-F50 CTCS245	-R60 CTP6215
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
					
	RPNX	RPHX	RPHX	RPNX	RPNX
	51 149 ...	50 493 ...	51 051 ...	51 055 ...	50 508 ...
ISO					
10T3M4EN		550 [1]			
10T3M4SN			570 [1]		
10T3M8EN		551			
10T3M8SN			571		
1204M4EN		552 [1]			
1204M4SN			575		
1204M6EN		56200	57800		
1204M8EN		582			300
1204M8SN			577		
1605M8EN		555	58100		
2006M8EN	12001				
2006M8SN				585	
P					
M					
K					●
N					
S	●	●	●	●	
H					●
O					

1) 4次转位刀片

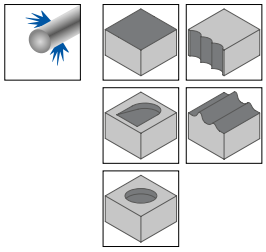
铣削指南

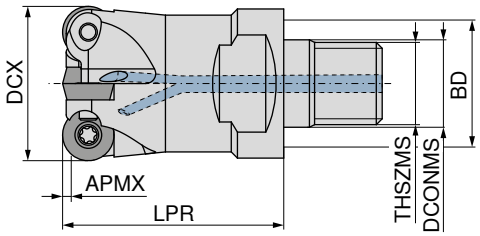
切削参数推荐值	→ 141-144	加工方式	→ 177
技术信息	→ 189-194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

15

R 1000 G Screw in 圆刀片铣刀

▲ 刀片座前角 0°





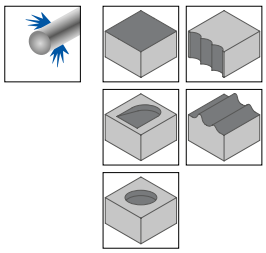
56 403 ...

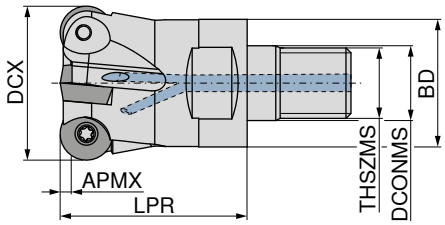
规格型号	DCX mm	ZNF	APMX mm	THSZMS	LPR mm	DCONMS mm	BD mm	扭矩 Nm	刀片	
R1000G.15.4.M8-05.IK	15	4	1.3	M8	20.5	8.5	13.8	0,43	RDHX 0501..	151
R1000G.20.5.M10-05.IK	20	5	1.3	M10	25.5	10.5	18.0	0,43	RDHX 0501..	201
R1000G.12.2.M8-07.IK	12	2	1.5	M8	28.5	8.5	11.8	0,75	RD.X 07T1..	123
R1000G.15.3.M8-07.IK	15	3	1.5	M8	28.5	8.5	13.8	0,75	RD.X 07T1..	152
R1000G.20.4.M10-07.IK	20	4	1.5	M10	28.5	10.5	18.0	0,75	RD.X 07T1..	202
R1000G.25.5.M12-07.IK	25	5	1.5	M12	28.5	10.5	21.0	0,75	RD.X 07T1..	251
R1000G.15.2.M8-07.IK	15	2	1.5	M8	28.5	8.5	13.8	0,9	RD.X 0702..	153
R1000G.16.3.M8-07.IK	16	3	1.5	M8	28.5	8.5	13.8	0,9	RD.X 0702..	161
R1000G.20.4.M10-07.IK	20	4	1.5	M10	28.5	10.5	18.0	0,9	RD.X 0702..	203
R1000G.25.5.M12-07.IK	25	5	1.5	M12	28.5	12.5	21.0	0,9	RD.X 0702..	252
R1000G.30.5.M16-07.IK	30	5	1.5	M16	28.5	17.0	29.0	0,9	RD.X 0702..	301
R1000G.35.6.M16-07.IK	35	6	1.5	M16	28.5	17.0	29.0	0,9	RD.X 0702..	351
R1000G.42.7.M16-07.IK	42	7	1.5	M16	42.5	17.0	29.0	0,9	RD.X 0702..	421
R1000G.20.2.M10-10.IK	20	2	2.8	M10	29.0	10.5	18.0	2,4	RD.X 1003..	204
R1000G.25.2.M12-10.IK	25	2	2.8	M12	33.0	12.5	21.0	2,4	RD.X 1003..	253
R1000G.25.3.M12-10.IK	25	3	2.8	M12	33.0	12.5	21.0	2,4	RD.X 1003..	254
R1000G.30.4.M12-10.IK	30	4	2.3	M12	33.0	12.5	21.0	2,4	RD.X 1003..	302
R1000G.30.4.M16-10.IK	30	4	2.8	M16	43.0	17.0	23.0	2,4	RD.X 1003..	303
R1000G.35.5.M16-10.IK	35	5	2.8	M16	43.0	17.0	29.0	2,4	RD.X 1003..	352
R1000G.42.5.M16-10.IK	42	5	2.8	M16	43.0	17.0	29.0	2,4	RD.X 1003..	422
R1000G.42.6.M16-10.IK	42	6	2.8	M16	43.0	17.0	29.0	2,4	RD.X 1003..	423
R1000G.24.2.M12-12.IK	24	2	3.0	M12	33.0	12.5	21.0	2,4	RD.X 12T3..	241
R1000G.35.3.M16-12.IK	35	3	3.0	M16	43.0	17.0	29.0	2,4	RD.X 12T3..	353
R1000G.35.4.M16-12.IK	35	4	3.0	M16	43.0	17.0	29.0	2,4	RD.X 12T3..	354
R1000G.42.4.M16-12.IK	42	4	3.0	M16	43.0	17.0	29.0	2,4	RD.X 12T3..	424
R1000G.42.5.M16-12.IK	42	5	3.0	M16	43.0	17.0	29.0	2,4	RD.X 12T3..	425
R1000G.32.2.M16-16.IK	32	2	4.0	M16	43.5	17.0	29.0	4,3	RD.X 1604..	321
R1000G.35.3.M16-16.IK	35	3	4.0	M16	43.5	17.0	29.0	4,3	RD.X 1604..	355
R1000G.40.2.M16-20.IK	40	2	7.0	M16	53.5	17.0	29.0	4,3	RD.X 2006..	401

	Torx 扳手®-可换接杆	 锁紧螺钉	 过度夹紧	 扳手-D	 润滑剂	 刀片螺钉	 扭力扳手
	80 950 ...	**56 950 ...**	**56 950 ...**	**80 950 ...**	**70 950 ...**	**56 950 ...**	**80 950 ...**
备件							
刀片							
RD.X 0702..	032			109	303	006	191
RD.X 07T1..	032			109	303	004	191
RD.X 1003..	036			113	303	010	192
RD.X 12T3..	036	022		113	303	010	192
RD.X 1604..	037		210	114	303	012	192
RD.X 2006..	037		210	114	303	012	192
RDHX 0501..				108	303	002	191

R 1007 G Screw in 圆刀片铣刀

▲ 刀片座前角 7°
▲ 用于铬含量 < 10% 合金钢



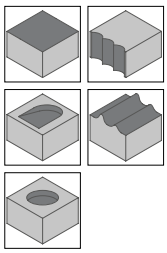


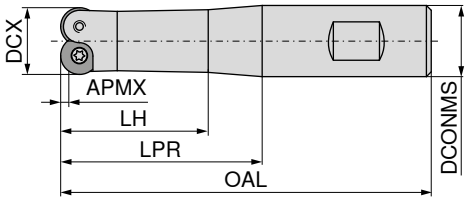
56 405 ...

规格型号	DCX mm	ZNF	APMX mm	THSZMS	LPR mm	DCONMS mm	BD mm	扭矩 Nm	刀片	
R1007G.25.3.M12-10.IK	25	3	2.5	M12	32.5	12.5	21	2,4	RD.X 1003..	251
R1007G.42.6.M16-10.IK	42	6	2.5	M16	42.5	17.0	29	2,4	RD.X 1003..	421
R1007G.35.3.M16-12.IK	35	3	3.0	M16	42.5	17.0	29	2,4	RD.X 12T3..	351
R1007G.35.4.M16-12.IK	35	4	3.0	M16	42.5	17.0	29	2,4	RD.X 12T3..	352

R 1000 C 圆刀片铣刀

▲ 刀片座前角 0°





A

56 441 ...

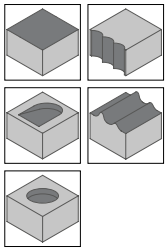
规格型号	DCX mm	ZNF	APMX mm	OAL mm	LPR mm	LH mm	DCONMS mm	扭矩 Nm	刀片	
R1000C.8.1.30-05	8	1	1.3	75	30	18	10	0,43	RDHX 0501..	081
R1000C.10.2.30-05	10	2	1.3	75	30	23	10	0,43	RDHX 0501..	101
R1000C.12.3.30-05	12	3	1.3	81	30	23	12	0,43	RDHX 0501..	121
R1000C.12.2.30-07	12	2	1.5	76	30	23	12	0,75	RD.X 07T1..	122

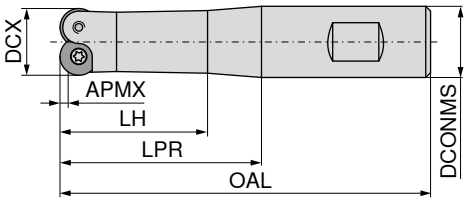
备件	Torx 扭手®-可换接杆	扭手-D	润滑剂	刀片螺钉	扭力扭手
	80 950 ...	80 950 ...	70 950 ...	56 950 ...	80 950 ...
刀片					
RD.X 07T1..	032	109	303	004	191
RDHX 0501..		108	303	002	191

15

R 1002 C 圆刀片铣刀

▲ 刀片座前角 0°





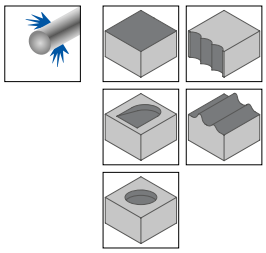
B

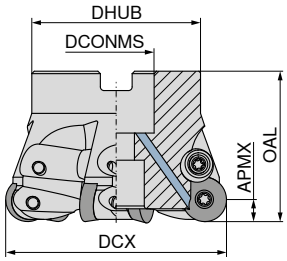
56 443 ...

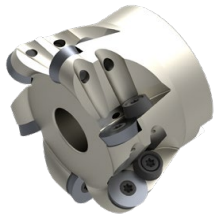
规格型号	DCX mm	ZNF	APMX mm	OAL mm	LPR mm	LH mm	DCONMS mm	刀片	
R1002C.12.2.40-07	12	2	1.5	89	40	19.5	16	RD.X 07T1..	**121**
R1002C.12.2.60-07	12	2	1.5	110	60	19.5	16	RD.X 07T1..	**122**
R1002C.12.2.80-07	12	2	1.5	129	80	19.5	16	RD.X 07T1..	**123**
R1002C.15.2.40-07	15	2	2.6	89	40	23.0	16	RD.X 0702..	**151**
R1002C.15.2.60-07	15	2	2.6	109	60	23.0	16	RD.X 0702..	**152**
R1002C.15.2.80-07	15	2	2.6	131	80	22.0	20	RD.X 0702..	**153**
R1002C.15.2.100-07	15	2	2.6	151	100	22.0	20	RD.X 0702..	**154**
R1002C.20.2.40-10	20	2	4.0	91	40	23.0	20	RD.X 1003..	**201**
R1002C.20.2.60-10	20	2	4.0	111	60	23.0	20	RD.X 1003..	**202**
R1002C.20.2.80-10	20	2	4.0	137	80	23.0	25	RD.X 1003..	**203**
R1002C.20.2.100-10	20	2	4.0	157	100	23.0	25	RD.X 1003..	**204**
R1002C.20.2.120-10	20	2	4.0	177	125	23.0	25	RD.X 1003..	**205**

R 1000 A 圆刀片铣刀

▲ 刀片座前角 0°







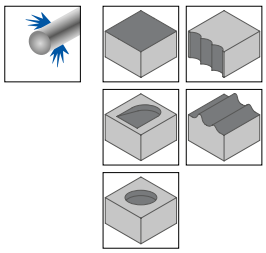
56 407 ...

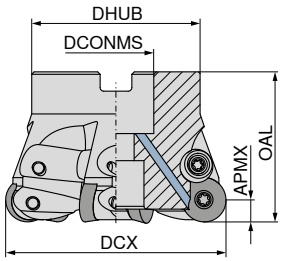
规格型号	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	扭矩 Nm	刀片	
R1000A.42.6.43-10.IK	42	6	2.8	43.0	16	35	2,4	RD.X 1003..	**420**
R1000A.42.4.43-12.IK	42	4	3.0	43.0	16	35	2,4	RD.X 12T3..	**421**
R1000A.42.5.43-12.IK	42	5	3.0	43.0	16	35	2,4	RD.X 12T3..	**422**
R1000A.52.5.53-12.IK	52	5	3.5	53.0	22	40	2,4	RD.X 12T3..	**521**
R1000A.52.4.53,5-16.IK	52	4	4.7	53.5	22	40	4,3	RD.X 1604..	**522**
R1000A.66.5.53,5-16.IK	66	5	5.1	53.5	27	48	4,3	RD.X 1604..	**661**
R1000A.80.6.53,5-16.IK	80	6	5.8	53.5	27	60	4,3	RD.X 1604..	**801**

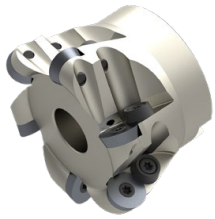
	Torx 扭手®-可换接杆	 锁紧螺钉	 过度夹紧	 扭手-D	 润滑剂	 刀片螺钉	 扭力扭手
	80 950 ...	**56 950 ...**	**56 950 ...**	**80 950 ...**	**70 950 ...**	**56 950 ...**	**80 950 ...**
备件							
刀片							
RD.X 1003..	**036**			**113**	**303**	**010**	**192**
RD.X 12T3..	**036**	**022**		**113**	**303**	**010**	**192**
RD.X 1604..	**037**		**210**	**114**	**303**	**012**	**192**

R 1007 A 圆刀片铣刀

▲ 刀片座前角 7°
▲ 用于铬含量 < 10% 合金钢 + 低功率铣床







规格型号	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	扭矩 Nm	刀片	56 409 ...
R1007A.42.6.42,5-10.IK	42	6	3.5	42.5	16	35	2,4	RD.X 1003..	421
R1007A.52.7.52,5-10.IK	52	7	3.5	52.5	22	40	2,4	RD.X 1003..	521
R1007A.52.5.52,5-12.IK	52	5	3.5	52.5	22	40	2,4	RD.X 12T3..	522
R1007A.66.6.52,5-12.IK	66	6	3.5	52.5	27	48	2,4	RD.X 12T3..	661
R1007A.80.7.54,5-12.IK	80	7	3.5	54.5	27	60	2,4	RD.X 12T3..	801
R1007A.52.5.53-16.IK	52	5	4.1	53.0	22	40	4,3	RD.X 1604..	523
R1007A.66.5.53-16.IK	66	5	4.6	53.0	27	48	4,3	RD.X 1604..	662
R1007A.66.6.53-16.IK	66	6	5.1	53.0	27	48	4,3	RD.X 1604..	663
R1007A.80.6.53-16.IK	80	6	5.1	53.0	27	60	4,3	RD.X 1604..	802
R1007A.100.7.53-16	100	7	5.1	53.0	32	70	4,3	RD.X 1604..	910 1)
R1007A.125.8.53-16	125	8	5.2	53.0	40	90	4,3	RD.X 1604..	925 1)
R1007A.160.9.53-16	160	9	5.1	53.0	40	120	4,3	RD.X 1604..	960 1)
R1007A.66.5.53-20.IK	66	5	7.0	53.0	27	48	4,3	RD.X 2006..	664
R1007A.80.5.53-20.IK	80	5	7.4	53.0	27	60	4,3	RD.X 2006..	803

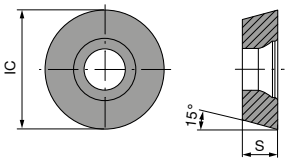
1) 无内冷却液供应

备件	Torx 扳手®-可换接杆	 锁紧螺钉	 过度夹紧	 扳手-D	 润滑剂	 刀片螺钉	 扭力扳手
	80 950 ...	56 950 ...	56 950 ...	80 950 ...	70 950 ...	56 950 ...	80 950 ...
刀片							
RD.X 1003..	036			113	303	010	192
RD.X 12T3..	036	022		113	303	010	192
RD.X 1604..	037		210	114	303	012	192
RD.X 2006..	037		210	114	303	012	192

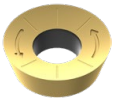
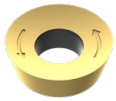
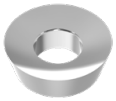
15

RDHX / RDMX / RDEX / RDPX

规格型号	IC mm	S mm
RDHX 0501..	5	1.50
RD.X 07T1..	7	1.99
RD.X 0702..	7	2.38
RD.X 1003..	10	3.18
RD.X 12T3..	12	3.97
RD.X 1604..	16	4.76
RDHX 2006..	20	6.00



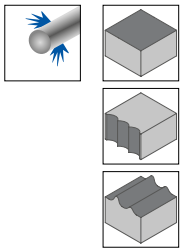
RDHX / RDMX / RDEX / RDPX

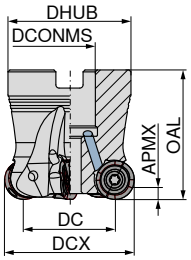
	WTN1205	WAN1240	WAX1240	-HP WAN2225	-F30P WUN4210
					
	RDHX	RDMX	RDEX	RDPX	RDHX
	56 302 ...	56 309 ...	56 314 ...	56 348 ...	56 304 ...
ISO					
0501M0T	100				
0702M0E					611
0702M0T	111		611		
07T1M0E					621
07T1M0T	121		621		
1003M0S				231	
1003M0T	131	731	631		631
12T3M0S				241	
12T3M0T	141	741	641		641
1604M0S				251	
1604M0T	151	751	651		651
2006M0T	161				661
P	●	●	●		
M	●	○	○	●	
K	●	○	○		○
N					●
S				●	
H	●				
O					○

铣削指南

切削参数推荐值 → 178–180
加工方式 → 181+182
技术信息 → 189–194
牌号描述 → 195–197
编码规则 → 198–201

MaxiMill – 套式铣刀 A 252





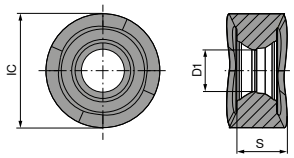
规格型号	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS mm	扭矩 Nm	刀片	50 689 ...
A252.40.R.05-10	30	40	5	2.5	40	38	16	2	RNHU 1004..	**140**
A252.42.R.05-10	32	42	5	2.5	40	38	16	2	RNHU 1004..	**142**
A252.50.R.06-10	40	50	6	2.5	40	43	22	2	RNHU 1004..	**150**
A252.52.R.07-10	42	52	7	2.5	40	43	22	2	RNHU 1004..	**152**
A252.63.R.08-10	53	63	8	2.5	40	48	22	2	RNHU 1004..	**16300**
A252.80.R.10-10	70	80	10	2.5	50	58	27	2	RNHU 1004..	**18000**
A252.40.R.04-12	28	40	4	3.0	40	38	16	3,2	RNHU 1205..	**240**
A252.50.R.05-12	38	50	5	3.0	40	43	22	3,2	RNHU 1205..	**250**
A252.52.R.05-12	40	52	5	3.0	40	43	22	3,2	RNHU 1205..	**252**
A252.63.R.06-12	51	63	6	3.0	40	48	22	3,2	RNHU 1205..	**263**
A252.66.R.07-12	54	66	7	3.0	40	48	22	3,2	RNHU 1205..	**266**
A252.80.R.08-12	68	80	8	3.0	50	58	27	3,2	RNHU 1205..	**280**
A252.100.R.10-12	88	100	10	3.0	50	78	32	3,2	RNHU 1205..	**30000**
A252.125.R.12-12	113	125	12	3.0	63	88	40	3,2	RNHU 1205..	**32500**

备件	Torx 扭手®-可换接杆 80 950 ...	 夹紧扭手-T 80 397 ...	 扭手-D 80 950 ...	 强力螺钉 70 950 ...	 润滑剂 70 950 ...	 刀片螺钉 70 950 ...	 扭力扭手 80 950 ...
RNHU 1004.. (Ø40 – Ø80)	**053**		**127**		**303**	**710**	**192**
RNHU 1205.. (Ø40)	**054**	**040**	**128**	**151**	**303**	**839**	**192**
RNHU 1205.. (Ø50 – Ø125)	**054**		**128**		**303**	**839**	**192**

15

RNHU

规格型号	IC mm	D1 mm	S mm
RNHU 1004..	10	3.4	4.60
RNHU 1205..	12	4.4	5.30



RNHU

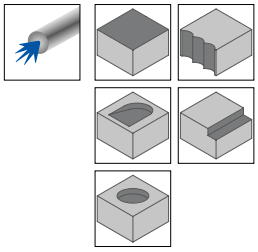
	-M50 CTPP235	-F50 CTPM240	-M31 CTPM245	-M32 CTPM245	-M31 CTC5240	-M31 CTC5240
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
	RNHU	RNHU	RNHU	RNHU	RNHU	RNHU
	51 130 ...	51 129 ...	51 106 ...	51 107 ...	50 520 ...	50 521 ...
ISO						
1004M4ER	12000	42000	470	470	550	
1205M4ER		42500	475	475		552
1205M4SR	12500					
P	●	○	●	●		
M	○	●	●	●		
K	○					
N						
S					●	●
H						
O						

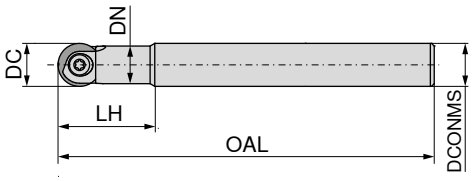
铣削指南

切削参数推荐值	→ 141-144	加工方式	→ 183
技术信息	→ 189+194	断屑槽型描述及概览	→ 195-197
牌号描述及概览	→ 198-201		

K 2000C / K 2001C 仿形铣刀

▲ 硬质合金刀杆





规格型号	DC mm	DN mm	LH mm	OAL mm	DCONMS h6 mm	扭矩 Nm	56 100 ...	56 101 ...
K2000C.6.16.100	6	5.3	16	100	8	0,5	060 1)	
K2000C.6.20.100	6	5.8	20	100	6	0,5	061 1)	
K2000C.6.70.150	6	5.8	70	150	6	0,5	062 1)	
K2000C.6.100.200	6	5.8	100	200	6	0,5	063 1)	
K2000C.8.25.80	8	7.0	25	80	8	1	081 1)	
K2000C.8.25.100	8	7.0	25	100	8	1	082 1)	
K2000C.8.25.150	8	7.0	40	150	8	1	083 1)	
K2000C.10.35.80	10	8.8	35	80	10	3	101 1)	
K2000C.10.35.120	10	8.8	35	120	10	3	102 1)	
K2000C.10.50.150	10	8.8	50	150	10	3	103 1)	
K2000C/K2001C.12.35.80	12	10.5	35	80	12	4	121 1)	121
K2000C/K2001C.12.35.120	12	10.5	35	120	12	4	122 1)	122
K2000C/K2001C.12.50.160	12	10.5	50	160	12	4	123 1)	123
K2001C.16.40.100	16	14.0	40	100	16	5		161
K2001C.16.40.140	16	14.0	40	140	16	5		162
K2001C.16.55.175	16	14.0	55	175	16	5		163
K2001C.20.50.100	20	18.0	50	100	20	5		201
K2001C.20.50.140	20	18.0	50	140	20	5		202
K2001C.20.75.190	20	18.0	75	190	20	5		203
K2001C.25.60.160	25	22.4	60	160	25	8		252
K2001C.25.90.210	25	22.4	90	210	25	8		253

1) 无内冷却液供应

适用的刀片

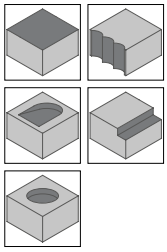
ROHX-FM3, ROHX-FM4, ROHX-FM6,
ROHX-MR5, ROGX-MR4

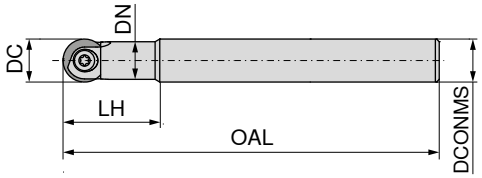
XOHX06.. -MR2, XOHX-FM1

15

K 2002C 仿形铣刀

▲ 钢制圆柄





56 102 ...

规格型号	DC mm	DN mm	LH mm	OAL mm	DCONMS h6 mm	扭矩 Nm	
K2002C.12.32.90	12	10.5	32	90	12	4	121
K2002C.12.32.130	12	10.5	32	130	12	4	122
K2002C.12.46.150	12	10.5	46	150	12	4	123
K2002C.16.36.100	16	14.0	36	100	16	5	161
K2002C.16.36.140	16	14.0	36	140	16	5	162
K2002C.16.53.160	16	14.0	53	160	16	5	163
K2002C.20.45.160	20	18.0	45	160	20	5	202
K2002C.20.61.175	20	18.0	61	175	20	5	203
K2002C.25.45.160	25	22.4	45	160	25	8	252
K2002C.25.70.190	25	22.4	70	190	25	8	253
K2002C.32.56.175	32	28.6	56	175	32	8	322
K2002C.32.80.210	32	28.6	80	210	32	8	323

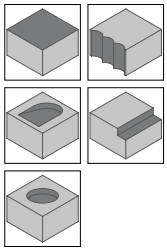
适用的刀片

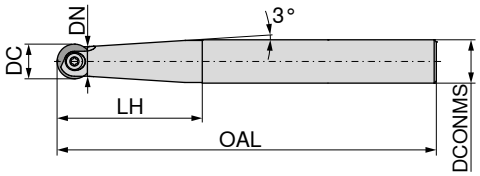
ROHX-FM3, ROHX-FM4, ROHX-FM6,
ROHX-MR5, ROGX-MR4

XOHX-FM1

K 2003 C 仿形铣刀

▲ 锥形





56 104 ...

规格型号	DC mm	DN mm	LH mm	OAL mm	DCONMS h6 mm	扭矩 Nm	
K2003C.6.16.90	6	5.3	40	90	10	0,5	061
K2003C.8.50.85	8	7.5	50	85	12	1	081
K2003C.8.50.140	8	7.5	50	140	12	1	082
K2003C.10.35.85	10	9.0	35	85	12	3	101
K2003C.10.35.150	10	9.0	35	150	12	3	102
K2003C.12.60.110	12	10.5	60	110	16	4	121
K2003C.12.60.160	12	10.5	60	160	16	4	122
K2003C.16.67.120	16	14.0	67	120	20	5	161
K2003C.16.67.175	16	14.0	67	175	20	5	162
K2003C.20.80.190	20	18.0	80	190	25	5	201
K2003C.25.100.210	25	22.4	100	210	32	8	251
K2003C.32.123.240	32	28.6	123	240	40	8	321

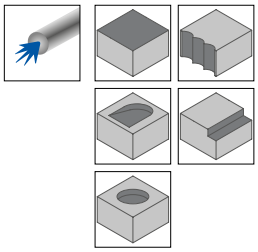
适用的刀片

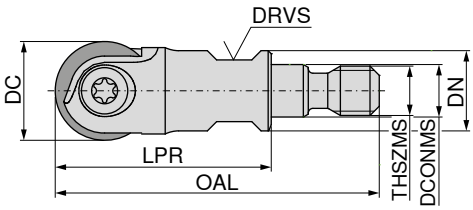
ROHX-FM3, ROHX-FM4, ROHX-FM6,
ROHX-MR5, ROGX-MR4

XOHX-FM1

15

K 2000G Screw in 仿形铣刀





56 120 ...

规格型号	DC mm	LPR mm	DN mm	OAL mm	DCONMS mm	THSZMS	DRVS mm	扭矩 Nm	
K2000G.8.25.M6	8	25	10	39.5	6.5	M6	8	1	081 1)
K2000G.10.25.M6	10	25	10	39.5	6.5	M6	8	3	101 1)
K2000G.12.25.M6	12	25	10	39.5	6.5	M6	8	4	121 1)
K2000G.12.26.M8	12	26	13	43.5	8.5	M8	10	4	122
K2000G.16.26.M8	16	26	13	43.5	8.5	M8	10	5	161
K2000G.20.30.M10	20	30	18	49.5	10.5	M10	15	5	201
K2000G.25.40.M12	25	40	21	62.0	12.5	M12	17	8	251
K2000G.32.45.M16	32	45	30	69.0	17.0	M16	26	8	321

1) 无内冷却液供应

适用的刀片

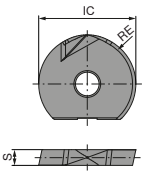
ROHX-FM3, ROHX-FM4, ROHX-FM6,
ROHX-MR5, ROGX-MR4

XOHX-FM1

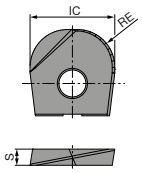
备件 DC	Torx 扳手®-可换接杆	扳手-D	润滑剂	刀片螺钉	扭力扳手
	80 950 ...	80 950 ...	70 950 ...	56 950 ...	80 950 ...
6	031	108	303	041	191
8	033	110	303	042	191
10	036	113	303	043	193
12	037	114	303	044	193
16	037	114	303	045	193
20	037	114	303	046	193
25		131	303	047	
32		131	303	048	

ROHX / XOHX / ROGX

规格型号	IC mm	S mm
ROHX0616R..	6	1.60
ROHX0820R..	8	2.00
ROHX1025R..	10	2.50
XOHX10254..	10	2.50
XOHX12255..	12	2.50
RO.X1225R..	12	2.50
RO.X1630R..	16	3.00
XOHX16307..	16	3.00
XOHX20309..	20	3.00
RO.X2030R..	20	3.00
RO.X2540R..	25	4.00
RO.X3250R..	32	5.00



RO.X



XOHX

ROHX / XOHX / ROGX

		-MR5 CTPP211	-FM1 CTPP216	-FM3 CTPP216	-FM4 CTPP216	-FM4 CTPK226	-MR4 CTPK231	-FM6 CTCN211
								
		ROHX	XOHX	ROHX	ROHX	ROHX	ROGX	ROHX
		56 149 ...	56 169 ...	56 147 ...	56 141 ...	56 141 ...	56 143 ...	56 145 ...
ISO	RE mm							
0616 R3	3.0			30200	90200			602 1)
0820 R4	4.0	71300		31300	71300	11300		613 1)
1025 R5	5.0	72400		32400	72400	12400		624 1)
102540	4.0		92400					
1225 R6	6.0			33500	73500	13500	53500	635 1)
122550	5.0		93500					
1630 R8	8.0			34600	74600	14600	54600	646 1)
163070	7.0		94700					
2030 R10	10.0			35700	75700	15700	55700	
203090	9.0		95900					
2540 R12,5	12.5			36800	76800	16800	56800	
3250 R16	16.0			37900	77900	17900	57900	
P		●	●	●	●	●	●	
M		○	○	○	○	●	●	
K		○	●	●	●	●	●	
N		○	○	○	○		○	○
S		○	○	○	○		○	
H		○	●	●	●	○	○	
O		○	○	○	○			●

1) 专门用于加工石墨!

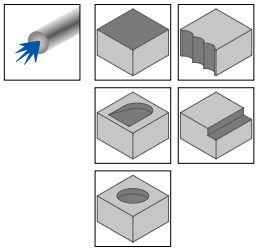
铣削指南

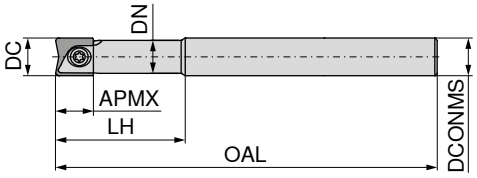
切削参数推荐值 → 184+185
切深 → 186
技术信息 → 189–194
断屑槽型描述及概览 → 195–197
牌号描述及概览 → 198–201

15

K 2005C / K 2006C 仿形铣刀杆

▲ 硬质合金刀杆





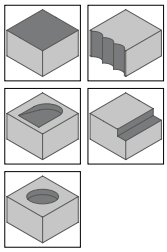
规格型号	DC mm	APMX mm	DN mm	LH mm	OAL mm	DCONMS h6 mm	扭矩 Nm	56 110 ...	56 111 ...
K2005C.8.27.82	8	9.5	7.0	27	82	8	1	081 1)	
K2005C.8.27.102	8	9.5	7.0	27	102	8	1	082 1)	
K2005C.8.42.152	8	9.5	7.0	42	152	8	1	083 1)	
K2005C.10.37.82	10	11.5	8.8	37	82	10	3	101 1)	
K2005C.10.37.122	10	11.5	8.8	37	122	10	3	102 1)	
K2005C.10.52.152	10	11.5	8.8	52	152	10	3	103 1)	
K2005C/K2006C.12.37.82	12	14.0	10.5	37	82	12	4	121 1)	121
K2005C/K2006C.12.37.122	12	14.0	10.5	37	122	12	4	122 1)	122
K2005C/K2006C.12.52.162	12	14.0	10.5	52	162	12	4	123 1)	123
K2006C.16.42.102	16	16.0	14.0	42	102	16	5		161
K2006C.16.42.142	16	16.0	14.0	42	142	16	5		162
K2006C.16.57.177	16	16.0	14.0	57	177	16	5		163
K2006C.20.52.102	20	18.0	18.0	52	102	20	5		201
K2006C.20.52.142	20	18.0	18.0	52	142	20	5		202
K2006C.20.77.192	20	18.0	18.0	77	192	20	5		203
K2006C.25.62.162	25	23.5	22.4	62	162	25	8		252
K2006C.25.92.212	25	23.5	22.4	92	212	25	8		253

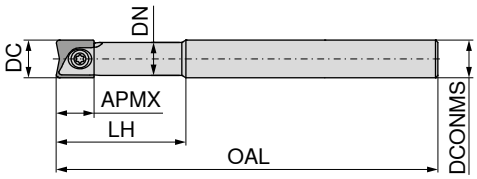
1) 无内冷却液供应

适用的刀片

	XOHX-FM2 / -FM5 / -MR2 / -MR3 / -MR6
	XOGX-MF4

K 2007C 仿形铣刀杆





56 112 ...

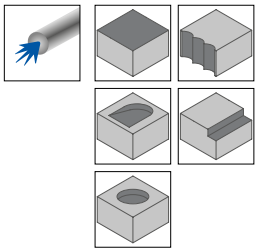
规格型号	DC mm	APMX mm	DN mm	LH mm	OAL mm	DCONMS h6 mm	扭矩 Nm	
K2007C.12.34.92	12	14.0	10.5	34	92	12	4	121
K2007C.12.34.132	12	14.0	10.5	34	132	12	4	122
K2007C.12.48.152	12	14.0	10.5	48	152	12	4	123
K2007C.16.38.102	16	16.0	14.0	38	102	16	5	161
K2007C.16.38.142	16	16.0	14.0	38	142	16	5	162
K2007C.16.55.162	16	16.0	14.0	55	162	16	5	163
K2007C.20.47.162	20	18.0	18.0	47	162	20	5	202
K2007C.20.63.177	20	18.0	18.0	63	177	20	5	203
K2007C.25.47.162	25	23.5	22.4	47	162	25	8	252
K2007C.25.72.192	25	23.5	22.4	72	192	25	8	253
K2007C.32.58.177	32	28.0	28.6	58	177	32	8	322
K2007C.32.82.212	32	28.0	28.6	82	212	32	8	323

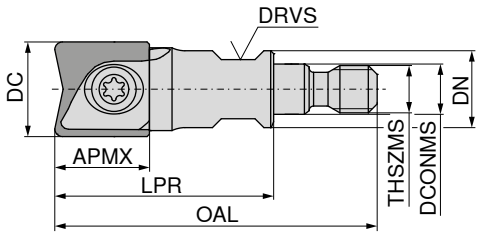
适用的刀片

	XOHX-FM2 / -FM5 / -MR2 / -MR3 / -MR6
	XOGX-MF4

15

K 2005G 仿形铣刀头





56 130 ...

规格型号	DC mm	APMX mm	DN mm	LPR mm	OAL mm	DCONMS mm	THSZMS	DRVS mm	扭矩 Nm	
K2005G.8.25.M6	8	9.5	10	25	39.5	6.5	M6	8	1	081 1)
K2005G.10.25.M6	10	11.5	10	25	39.5	6.5	M6	8	3	101 1)
K2005G.12.25.M6	12	14.0	10	25	39.5	6.5	M6	8	4	121 1)
K2005G.12.28.M8	12	14.0	13	28	45.5	8.5	M8	8	4	122
K2005G.16.28.M8	16	16.0	13	28	45.5	8.5	M8	10	5	161
K2005G.20.32.M10	20	18.0	18	32	51.5	10.5	M10	15	5	201
K2005G.25.42.M12	25	23.5	21	42	64.0	12.5	M12	17	8	251
K2005G.32.47.M16	32	28.0	30	47	71.0	17.0	M16	26	8	321

1) 无内冷却液供应

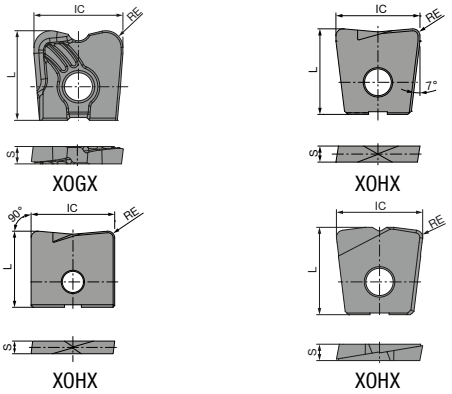
适用的刀片

	XOHX-FM2 / -FM5 / -MR2 / -MR3 / -MR6
	XOGX-MF4

备件 DC	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 56 950 ...	扭力扳手 80 950 ...
8	033	110	303	042	191
10	036	113	303	043	193
12	037	114	303	044	193
16	037	114	303	045	193
20	037	114	303	046	193
25		131	303	047	
32		131	303	048	

XOHX / XOGX

规格型号	IC mm	S mm	L mm
XO.X10251..	10	2.50	11.5
XO.X12251..	12	2.50	14.0
XO.X16301..	16	3.00	16.0
XO.X16303..	16	3.00	16.0
XO.X20301..	20	3.00	18.0
XO.X20304..	20	3.00	18.0
XOGX12252..	12	2.50	14.0
XOHX06160..	6	1.60	8.0
XOHX08200..	8	2.00	9.5
XOHX08201..	8	2.00	9.5
XOHX10250..	10	2.50	11.5
XOHX12252..	12	3.00	14.0
XOHX20302..	20	3.00	18.0
XOHX25401..	25	4.00	23.5
XOHX25402..	25	4.00	23.5
XOHX25405..	25	4.00	23.5
XOHX32502..	32	5.00	28.0



XOHX / XOGX

ISO	RE mm	-MR2 CTPP211 XOHX 56 167 ...	-MR6 CTPP211 XOHX 56 163 ...	-FM2 CTPP216 XOHX 56 165 ...	-FM5 CTPP216 XOHX 56 159 ...	-MF4 CTPP216 XOGX 56 161 ...	-MR3 CTPK231 XOHX 56 171 ...	-MR2 CTCN211 XOHX 56 168 ...
061605	0.5	71000						610 1)
082006	0.6		71000	71000	71000			
082010	1.0	71200		71200				612 1)
102508	0.8		72100	72100	72100		32100	
102510	1.0	72200		72200		92200		622 1)
122510	1.0	73200	73200	73200	73200	93200	53200	632 1)
122520	2.0	73500		73500		93500		
163010	1.0	74200		74200		94200		642 1)
163013	1.3		74300	74300	74300			
163015	1.5						54400	
163030	3.0	74700		74500		94700		
203010	1.0	75200		75200		95200		
203016	1.6		75400	75400	75400			
203020	2.0						55500	
203040	4.0	75800		75800		95800		
254010	1.0	76200		76200				
254020	2.0		76500	76500	76500			
254050	5.0	76900		76900				
325025	2.5		77600		77600			
P		●	●	●	●	●	●	
M		○	○	○	○	○	●	
K		○	○	●	●	●	●	
N		○	○	○	○	○	○	○
S		○	○	○	○	○	○	
H		○	○	●	●	●	○	
O		○	○	○	○	○		●

1) 专门用于加工石墨!

15

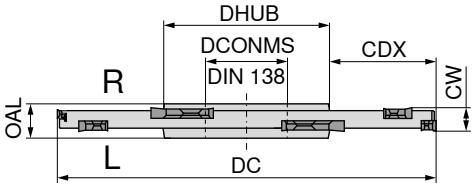
铣削指南

切削参数推荐值 → 184+185
切深 → 186
技术信息 → 189-194
断屑槽型描述及概览 → 195-197
牌号描述及概览 → 198-201

锯片铣刀 TX

▲ 注意：侧铣与面铣刀具 TX 为交叉齿并配备右旋和左旋两种型号的可转位刀片。
▲ ZEFP = 刀片数量

供货详情:
侧铣与面铣刀具，2 个备用夹紧螺钉和 1 个梅花扳手



规格型号	DC mm	CW mm	ZNF	CDX mm	DCONMS mm	DHUB mm	OAL mm	ZEFP	刀片	扭矩 Nm	50 730 ...
TX.STF.80X27.03.Z4	80	3	4	18.0	27	40	8	8	TX. 161702	0,7	083
TX.STF.100X32.03.Z5	100	3	5	25.0	32	46	8	10	TX. 161702	0,7	103
TX.STF.125X40.03.Z6	125	3	6	32.0	40	54	10	12	TX. 161702	0,7	123
TX.STF.160X40.03.Z8	160	3	8	50.0	40	54	10	16	TX. 161702	0,7	163 1)
TX.STF.80X27.04.Z4	80	4	4	18.0	27	40	8	8	TX. 162302	1,3	084
TX.STF.100X32.04.Z5	100	4	5	25.0	32	46	8	10	TX. 162302	1,3	104
TX.STF.125X40.04.Z6	125	4	6	32.0	40	54	10	12	TX. 162302	1,3	124
TX.STF.160X40.04.Z8	160	4	8	50.0	40	54	10	16	TX. 162302	1,3	164 1)
TX.STF.80X27.06.Z4	80	6	4	21.0	27	36	10	8	TX. 223202	2	086
TX.STF.80X22.06.Z4	80	6	4	22.0	22	33	10	8	TX. 223202	2	080
TX.STF.100X32.06.Z5	100	6	5	25.5	32	47	10	10	TX. 223202	2	106
TX.STF.125X40.06.Z6	125	6	6	32.5	40	58	10	12	TX. 223202	2	136
TX.STF.160X40.06.Z8	160	6	8	50.0	40	58	10	16	TX. 223202	2	166 1)
TX.STF.80X27.08.Z4	80	8	4	21.0	27	36	12	8	TX. 224302	2,8	088
TX.STF.100X32.08.Z5	100	8	5	25.5	32	47	12	10	TX. 224302	2,8	108
TX.STF.125X40.08.Z6	125	8	6	32.5	40	58	12	12	TX. 224302	2,8	138
TX.STF.160X40.08.Z8	160	8	8	50.0	40	58	12	16	TX. 224302	2,8	168 1)
TX.STF.80X27.10.Z4	80	10	4	21.0	27	36	12	8	TX. 225402	3	090
TX.STF.100X32.10.Z5	100	10	5	25.5	32	47	12	10	TX. 225402	3	110
TX.STF.125X40.10.Z6	125	10	6	32.5	40	58	14	12	TX. 225402	3	140
TX.STF.160X40.10.Z8	160	10	8	50.0	40	58	14	16	TX. 225402	3	170 1)

1) 无内冷却液供应

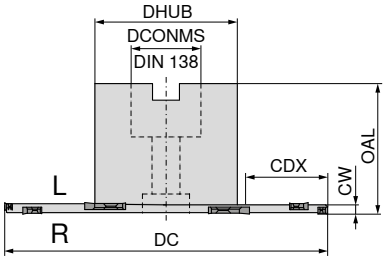



备件 CW	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
3	032	109	303	858	191
4	033	110	303	218	191
6	036	113	303	101	192
8	037	114	303	135	192
10	037	114	303	146	192

TX 套式 / 三面刃铣刀

▲ 注意：三面刃铣刀 TX 为交叉齿并配备右旋和左旋两种型号的可转位刀片。
▲ ZEFP = 刀片数量

供货详情:
三面刃铣刀，2 个备用夹紧螺钉和 1 个梅花扳手



规格型号	DC mm	CW mm	ZNF	CDX mm	DCONMS mm	DHUB mm	OAL mm	ZEFP	扭矩 Nm	刀片	50 734 ...
TX.ASF.100.R.03.Z5	100	3	5	25.0	27	48	50	10	0,7	TX. 161702	300
TX.ASF.125.R.03.Z6	125	3	6	37.5	27	48	50	12	0,7	TX. 161702	225
TX.ASF.160.R.03.Z8	160	3	8	44.0	40	70	50	16	0,7	TX. 161702	260 1)
TX.ASF.100.R.04.Z5	100	4	5	25.0	27	48	50	10	3,2	TX. 162302	100
TX.ASF.125.R.04.Z6	125	4	6	37.5	27	48	50	12	3,2	TX. 162302	025
TX.ASF.125.R.04.Z6	125	4	6	26.5	40	70	50	12	3,2	TX. 162302	125
TX.ASF.160.R.04.Z8	160	4	8	55.0	27	48	50	16	3,2	TX. 162302	060 1)
TX.ASF.160.R.04.Z8	160	4	8	44.0	40	70	50	16	3,2	TX. 162302	160 1)
TX.ASF.180.R.04.Z9	180	4	9	54.0	40	70	50	18	3,2	TX. 162302	180 1)
TX.ASF.200.R.04.Z10	200	4	10	64.0	40	70	50	20	3,2	TX. 162302	200 1)

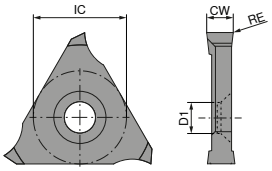
1) 无内冷却液供应

备件

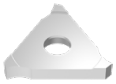
CW	DCONMS	垫片 70 950 ...	Torx 扳手®-可换接杆 80 950 ...	锁紧螺钉 70 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
3	27	221	032	219	109	303	858	191
3	40	222	032	220	109	303	858	191
4	27	221	033	219	110	303	218	192
4	40	222	033	220	110	303	218	192

TX-L / TX-R

规格型号	IC mm	D1 mm	CW mm
TX . 1617..	10	3.95	1.7
TX . 1623..	10	3.95	2.3
TX . 2232..	13	5.50	3.2
TX . 2243..	13	5.50	4.3
TX . 2254..	13	5.50	5.4



TX-L / TX-R

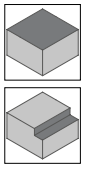
		CWX500	CWX500	CWK10	CWK10
					
		TX-L	TX-R	TX-L	TX-R
		50 382 ...	50 381 ...	50 382 ...	50 381 ...
ISO	RE mm				
TX 161702	0.15	217	217		
TX 162302	0.15	223	223		
TX 223202	0.15	232	232		
TX 223202	0.20			532	532
TX 224302	0.15	243	243		
TX 224302	0.20			543	543
TX 225402	0.15	254	254		
TX 225402	0.20			554	554
P		●	●		
M		●	●		
K		●	●		
N		●	●	●	●
S		○	○		
H					
O		○	○	○	○

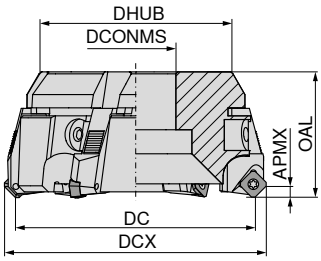
铣削指南

切削参数推荐值 → 187
断屑槽型描述及概览 → 195–197
技术信息 → 189–194
牌号描述及概览 → 198–201

MaxiMill – 260 刀夹铣刀系统 刀盘基座

▲ 刀盘带夹紧楔，无刀夹





DC mm	ZNF	DCONMS mm	DHUB mm	OAL mm	WT kg	50 715 ...
80	5	27	66	52	1	080
100	6	32	86	52	2	100
125	7	40	95	63	3	125
160	10	40	130	63	6	160 1)
200	12	60	172	63	9	200 1)
250	14	60	222	63	17	250 1)
315	18	60	280	80	31	315 1)
400	22	60	365	80	52	400 1)

1) 无内冷却液供应

有关轴向跳动设置的信息，参见 → **第 188 页**

备件 DC	楔块夹紧螺钉	夹紧楔	T 型扳手	润滑剂	偏心扳手
					
	70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
80 - 400	297	296	317	303	298

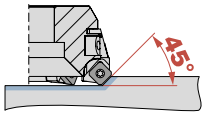
刀片相关直径

刀片	公称直径-Ø (mm) 80 DC mm	80 DCX mm	100 DC mm	100 DCX mm	120 DC mm	120 DCX mm	160 DC mm	160 DCX mm	200 DC mm	200 DCX mm	250 DC mm	250 DCX mm	315 DC mm	315 DCX mm	400 DC mm	400 DCX mm
SD.. 0903..	80	88,4	100	108,4	123	131,4	158	166,4	198	206,4	248	256,4	313	321,4	398	406,4
SD.. 1204..	80	94,5	100	114,5	123	137,5	158	172,5	198	212,5	248	262,5	313	327,5	398	412,5
SE.. 1204..	80	93	100	113	123	136	158	171	198	211	248	261	313	326	398	411
SD.. 1504..	75	94	95	114	118	137	153	172	193	212	243	262	308	327	393	412
SP.. 1204..	82	88	102	108	125	131	160	166	200	206	250	256	315	321	400	406
OA.. 0605..	80	85,6	100	105,6	123	128,6	158	163,6	198	203,6	248	253,6	313	318,6	398	403,6
RP.X 1204..	80	92	100	112	123	135	158	170	198	210	248	260	313	325	398	410
RP.X 16..	76	92	96	112	119	135	154	170	194	210	244	260	309	325	394	410
SD.. 1205..	89		109		132		167		207		257		322		407	
SD.. 09T3	89		109		132		167		207		257		322		407	
LD..1504..	89		109		132		167		207		257		322		407	
XD.T 11T3	89		109		132		167		207		257		322		407	
XDKT 1505	89		109		132		167		207		257		322		407	
AP.. 1003..	89		109		132		167		207		257		322		407	
TPKW 2204..	89		109		132		167		207		257		322		407	

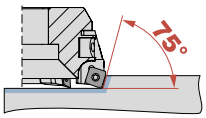
MaxiMill 260/组合铣刀系统

刀夹

面铣

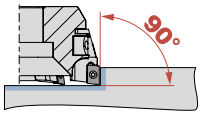


		SD.. 0903..	SD.. 1204.. XD.. 1204..	SE.. 1204..	SD.. 1504..	SA.. 1706..	OA.. 0605..
刀夹编号		041	031	029	032	058	057
订货编号:	70 950 ...	329	411	306	412	30800	338



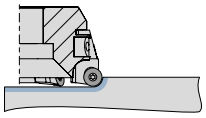
		SP.. 1204..
刀夹编号		018
订货编号:	70 950 ...	310

方肩铣削



		AP.. 1003..	LD.. 1504..	XD.T 11T3..	XDKT 1505..	SD.. 1205..	SD.. 09T3..	TPKW 2204..
刀夹编号		042	051	054	056	039	055	025
订货编号:	70 950 ...	307	300	336	339	311	337	313

面铣/仿形铣削



		RP.X 1204..	RP.X 16....
刀夹编号		052	053
订货编号:	70 950 ...	333	707

刀片	APMX mm	刀夹 70 950 ...
AP.. 1003..	8.0	307
LD.. 1504..	14.0	300
OA.. 0605..	3.5	338
RP.X 1204..	6.0	333
RP.X 16..	8.0	707
SAKU 1706	8.4	30800
SD.. 0903..	4.0	329
SD.. 09T3..	8.0	337
SD.. 1204..	6.0	411
SD.. 1205..	6.0	311
SD.. 1504..	9.0	412
SE.. 1204..	6.0	306
SP.. 1204..	9.0	310
TPKW 2204..	18.0	313
XD.T 11T3	10.0	336
XDKT 1505..	14.0	339

备件 刀片	Torx 扳手®-可换接杆 80 950 ...	扳手-D 80 950 ...	润滑剂 70 950 ...	刀片螺钉 70 950 ...	扭力扳手 80 950 ...
AP.. 1003..	033	110	303	112	191
OA.. 0605..	037	114	303	302	193
RP.X 1204.. / LD.. 1504..	036	113	303	304	192
SD.. 0903..	033	110	303	115	191
SD.. 09T3..	036	113	303	110	192
SD.. 1204.. / SE.. 1204.. / SP.. 1204.. / SD.. 1205.. / SD.. 1504.. / RP.X 16.. / TPKW 2204..	037	114	303	280	193
XD.T.. 11T3..	043	125	303	131	191
XDKT 1505..	054	128	303	839	192

切削参数推荐表材料示例

	子材料组	索引	成分/结构/热处理		抗拉强度 N/mm² / HB / HRC	物料编号	材料命名体系	物料编号	材料命名体系
P	非合金钢	P.1.1	≤ 0.15 % C	退火	420 N/mm² / 125 HB	1.0401	C15	1.1141	Ck15
		P.1.2	≤ 0,45 % C	退火	640 N/mm² / 190 HB	1.1191	C45E	1.0718	9SMnPb28
		P.1.3		调质	840 N/mm² / 250 HB	1.1191	C45E	1.0535	C55
		P.1.4	≤ 0,75 % C	退火	910 N/mm² / 270 HB	1.1223	C60R	1.0535	C55
		P.1.5		调质	1010 N/mm² / 300 HB	1.1223	C60R	1.0727	45S20
	低合金钢	P.2.1		退火	610 N/mm² / 180 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.2		调质	930 N/mm² / 275 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.3		调质	1010 N/mm² / 300 HB	1.7225	42CrMo4	1.3505	100Cr6
		P.2.4		调质	1200 N/mm² / 375 HB	1.7225	42CrMo4	1.3505	100Cr6
	高合金钢及高合金工具钢	P.3.1		退火	680 N/mm² / 200 HB	1.4021	X20Cr13	1.4034	X46Cr13
		P.3.2		淬火和调质	1100 N/mm² / 300 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
		P.3.3		淬火和调质	1300 N/mm² / 400 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
	不锈钢	P.4.1	铁素体/马氏体	退火	680 N/mm² / 200 HB	1.4016	X6Cr17	1.2316	X36CrMo16
		P.4.2	马氏体	调质	1010 N/mm² / 300 HB	1.4112	X90CrMoV18	1.2316	X36CrMo16
M	不锈钢	M.1.1	奥氏体/奥氏体-铁素体	淬火	610 N/mm² / 180 HB	1.4301	X5CrNi18-10	1.4571	X6CrNiMoTi17-12-2
		M.2.1	奥氏体	调质	300 HB	1.4841	X15CrNiSi25-21	1.4539	X1NiCrMoCu25-20-5
		M.3.1	奥氏体/铁素体（双相）		780 N/mm² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501	X2CrNiMoCuWN25-7-4
K	灰铸铁	K.1.1	珠光体/铁素体		350 N/mm² / 180 HB	0.6010	GG-10	0.6025	GG-25
		K.1.2	珠光体（马氏体）		500 N/mm² / 260 HB	0.6030	GG-30	0.6045	GG-45
	球墨铸铁	K.2.1	铁素体		540 N/mm² / 160 HB	0.7040	GGG-40	0.7060	GGG-60
		K.2.2	珠光体		845 N/mm² / 250 HB	0.7070	GGG-70	0.7080	GGG-80
	可锻铸铁	K.3.1	铁素体		440 N/mm² / 130 HB	0.8035	GTW-35-04	0.8045	GTW-45
		K.3.2	珠光体		780 N/mm² / 230 HB	0.8165	GTS-65-02	0.8170	GTS-70-02
N	锻造铝合金	N.1.1	不可硬化材料		60 HB	3.0255	Al99,5	3.3315	AlMg1
		N.1.2	可硬化材料	时效硬化	340 N/mm² / 100 HB	3.1355	AlCuMg2	3.2315	AlMgSi1
	铸造铝合金	N.2.1	≤ 12 % Si, 不可硬化		250 N/mm² / 75 HB	3.2581	G-AlSi12	3.2163	G-AlSi9Cu3
		N.2.2	≤ 12 % Si, 硬化	时效硬化	300 N/mm² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373	G-AlSi9Mg
		N.2.3	> 12 % Si, 不可硬化		440 N/mm² / 130 HB		G-AlSi17Cu4Mg		G-AlSi18CuNiMg
	铜和铜合金（青铜、黄铜）	N.3.1	易切削合金, PB > 1 %		375 N/mm² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410	CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm² / 90 HB	2.0331	CuZn15	2.4070	CuZn28Sn1As
		N.3.3	CuSn，无铅铜和电解铜		340 N/mm² / 100 HB	2.0060	E-Cu57	2.0590	CuZn40Fe
	镁合金	N.4.1	镁、镁合金		70 HB	3.5612	MgAl6Zn	3.5312	MgAl3Zn
S	耐热合金	S.1.1	铁基耐热合金	退火	680 N/mm² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865	G-X40NiCrSi38-18
		S.1.2		时效硬化	950 N/mm² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876	X10NiCrAlTi32-20
		S.2.1	镍基或钴基耐热合金	退火	840 N/mm² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856	NiCr22Mo9Nb
		S.2.2		时效硬化	1180 N/mm² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
		S.2.3		铸造	1080 N/mm² / 320 HB	2.4765	CoCr20W15Ni	1.3401	G-X120Mn12
	钛合金	S.3.1	纯钛		400 N/mm²	3.7025	Ti99,8	3.7034	Ti99,7
		S.3.2	α+β合金	时效硬化	1050 N/mm² / 320 HB	3.7165	TiAl6V4	Ti-6246	Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	β合金		1400 N/mm² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr	R56410	Ti-10V-2Fe-3Al
H	淬硬钢	H.1.1		淬火和调质	46–55 HRC				
		H.1.2		淬火和调质	56-60 HRC				
		H.1.3		淬火和调质	61-65 HRC				
		H.1.4		淬火和调质	66-70 HRC				
	冷硬铸铁	H.2.1		铸造	400 HB				
	硬化铸铁	H.3.1		淬火和调质	55 HRC				
O	非金属材料	O.1.1	硬质塑料		≤ 150 N/mm²				
		O.1.2	热塑性塑料		≤ 100 N/mm²				
		O.2.1	芳纶纤维增强		≤ 1000 N/mm²				
		O.2.2	玻璃/碳纤维增强		≤ 1000 N/mm²				
		O.3.1	石墨						

* 抗拉强度

15

切削参数推荐值

切削材料**硬质** (v_c↑) → **韧性** (v_c↓)

材料组	CTEP210 (DRAGONSKIN, CERMET)		TCM10 (DRAGONSKIN, CERMET)		CTCP220 (DRAGONSKIN)		CTPP225 (DRAGONSKIN)		CTCP230 (DRAGONSKIN)		CTPP231 (DRAGONSKIN)		CTPP235 (DRAGONSKIN)		CTPP236	
P.1.1	344		292		339	170	263	157	286	150	200	100	246	137	300	180
P.1.2	302		257		308	154	234	143	242	133	170	90	208	121	270	160
P.1.3	263		224		280	140	207	129	202	118	140	80	172	106	225	130
P.1.4	250		214		270	135	198	125	189	112	170	90	160	101	270	160
P.1.5	230		197		256	128	185	118	169	105	160	90	143	94	240	140
P.2.1	308		262		313	157	238	145	249	136	170	90	214	123	270	160
P.2.2	246		211		268	134	196	124	185	111	130	70	157	100	200	120
P.2.3	230		197		256	128	185	118	169	105	170	90	143	94	270	160
P.2.4	181		157		220	110	151	102	118	85	120	60	98	76	180	110
P.3.1					140	70	130	65	140	87	170	90	121	97	270	160
P.3.2					95	50	100	50	90	55	140	80	108	83	180	140
P.3.3					50	30	70	35	40	22	120	70	96	69	150	120
P.4.1					140	70	130	65	140	87	140	80	121	97	180	140
P.4.2					118	60	115	58	115	71	130	70	114	90	170	130
M.1.1											170	90	121	97	270	160
M.2.1													108	83		
M.3.1													117	93		
K.1.1									310	190	150	110	160	110	360	90
K.1.2	300		240						160	100	150	110	150	110	360	90
K.2.1	350		280						200	120	150	110	150	110	230	170
K.2.2	300		240						130	80	150	110	150	110	160	110
K.3.1	300		240						190	115					210	160
K.3.2									160	100					210	160
N.1.1																
N.1.2																
N.2.1																
N.2.2																
N.2.3																
N.3.1																
N.3.2																
N.3.3																
N.4.1																
S.1.1																
S.1.2																
S.2.1																
S.2.2																
S.2.3																
S.3.1																
S.3.2																
S.3.3																
H.1.1																
H.1.2																
H.1.3																
H.1.4																
H.2.1																
H.3.1																
O.1.1																
O.1.2																
O.2.1																
O.2.2																
O.3.1																

切削参数受外部条件影响较为明显，例如：刀具和工件夹持的稳定性、材料和机床类型！根据实际使用情况切削参数可以依据推荐值进行大约**±20%** 调整。

切削参数推荐值

	切削材料硬质 (v_c↑) → 韧性 (v_c↓)															
	DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN					
	CTPM225		CTCM235		CTPM240		CTPM241		CTPM245		CTCM245		CERAMIC CTN3105		CBN CTL3215	
材料组																
P.1.1	272	191	251	184	226	141	200	100	244	139	279	134				
P.1.2	231	163	210	152	188	126	170	90	207	124	242	119				
P.1.3	193	137	172	123	152	112	140	70	173	109	208	104				
P.1.4	180	129	160	113	140	107	170	90	161	104	196	99				
P.1.5	161	116	141	99	123	100	150	80	144	97	179	92				
P.2.1	237	167	217	157	194	128	170	90	212	126	247	121				
P.2.2	177	127	157	111	137	106	120	60	158	103	193	98				
P.2.3	161	116	141	99	123	100	170	90	144	97	179	92				
P.2.4	114	84	94	62	78	83	110	60	101	78	136	73				
P.3.1	148	121	136	115	126	105	210	100	155	107	175	122				
P.3.2	121	101	128	110	112	95	180	100	143	93	163	108				
P.3.3	95	81	120	105	98	85	160	90	131	79	151	94				
P.4.1	148	121	136	115	126	105	140	90	155	107	175	122				
P.4.2	134	111	132	113	119	100	130	80	149	100	169	115				
M.1.1	**148**	**121**	**136**	**115**	**126**	**105**	**210**	**100**	**155**	**107**	**175**	**122**				
M.2.1	**121**	**101**	**128**	**110**	**112**	**95**	**180**	**90**	**143**	**93**	**163**	**108**				
M.3.1	**140**	**115**	**134**	**114**	**121**	**102**	**210**	**100**	**152**	**103**	**172**	**118**				
K.1.1													**800**		**800**	
K.1.2													**600**		**600**	
K.2.1																
K.2.2															**450**	
K.3.1																
K.3.2																
N.1.1																
N.1.2																
N.2.1																
N.2.2																
N.2.3																
N.3.1																
N.3.2																
N.3.3																
N.4.1																
S.1.1								60				80				
S.1.2								60				70				
S.2.1								60				35				
S.2.2								60				25				
S.2.3								60				30				
S.3.1								60				80				
S.3.2								60				50				
S.3.3								60				40				
H.1.1																
H.1.2															150	
H.1.3																
H.1.4																
H.2.1															280	
H.3.1																
O.1.1																
O.1.2																
O.2.1																
O.2.2																
O.3.1																

15

切削参数受外部条件影响较为明显，例如：刀具和工件夹持的稳定性、材料和机床类型！根据实际使用情况切削参数可以依据推荐值进行大约**±20%** 调整。

切削参数推荐值

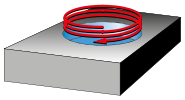
	切削材料硬质 (v_c↑) → 韧性 (v_c↓)																	
	DRAGONSKIN		DRAGONSKIN										DRAGONSKIN					
	CTCK215		CTPK220		CTPK221		AMZ		H216T		CTWN215		CTC5240		CTCS245		CTP6215	
材料组					190	120												
P.1.2					180	100												
P.1.3					150	80												
P.1.4					180	100												
P.1.5					170	90												
P.2.1					180	100												
P.2.2					140	80												
P.2.3					180	100												
P.2.4					130	80												
P.3.1					210	120												
P.3.2					160	90												
P.3.3					130	80												
P.4.1					210	120												
P.4.2					190	100												
M.1.1																		
M.2.1																		
M.3.1																		
K.1.1	360	210	320	190	270	200	200		130	130	130	130					280	250
K.1.2	220	130	170	100	270	200	160		110	110	110	110					190	160
K.2.1	230	140	210	130	250	180	185		130	130	130	130					180	150
K.2.2	160	100	140	90	180	120	150		120	120	120	120					180	150
K.3.1	250	150	200	120	220	170	200		130	130	130	130					250	220
K.3.2	210	130	170	100	220	170	175		110	120	110	110					190	160
N.1.1								1500		1500		1500						
N.1.2								1000		1000		1000						
N.2.1								1200		1100		1100						
N.2.2								1200		1000		1000						
N.2.3								300		280		280						
N.3.1								350		350		350						
N.3.2								350		350		350						
N.3.3								320		320		320						
N.4.1								320		320		320						
S.1.1														80		64		
S.1.2														70		56		
S.2.1														35		28		
S.2.2														25		20		
S.2.3														30		24		
S.3.1														80		64		
S.3.2														50		40		
S.3.3														40		32		
H.1.1																	50	
H.1.2																	40	
H.1.3																		
H.1.4																		
H.2.1																		
H.3.1																		
O.1.1								160	160	160	160	160						
O.1.2																		
O.2.1								180	240	240	240	240						
O.2.2																		
O.3.1																		

切削参数受外部条件影响较为明显，例如：刀具和工件夹持的稳定性、材料和机床类型！根据实际使用情况切削参数可以依据推荐值进行大约**±20%** 调整。

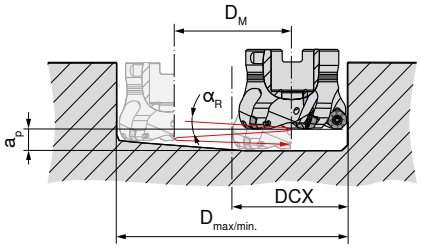
MaxiMill 274-04/-09 系统

加工方式

螺旋插补铣



$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径
D_M = D_{max} – DCX 即 D_{min} –DCX



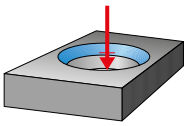
OF..04

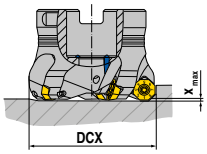
DCX mm	D_{max} mm	D_{min} mm	$\alpha_{R\,max}$ °
25,6	45	39	2,3
30,7	55	49	1,9
37,7	69	63	1,4
45,7	85	79	1,2
55,7	105	99	0,9
68,7	131	125	0,7
85,7	165	159	0,6
105,7	205	199	0,5
130,7	255	249	0,4

SF..09

DCX mm	D_{max} mm	D_{min} mm	$\alpha_{R\,max}$ °
27,4	45,00	42,0	1,9
32,5	55,00	52,0	1,5
39,2	69,00	66,0	1,1
47,6	85,00	82,0	0,9
57,6	105,00	102,0	0,7
70,5	131,00	128,0	0,5
87,5	165,00	162,0	0,4
107,5	205,00	202,0	0,3
132,5	255,00	252,0	0,3

轴向插铣





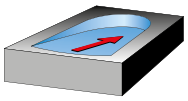
OF..04

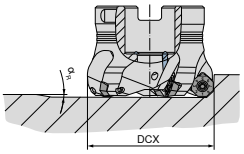
DCX mm	x_{max} mm
25,6	2,5
30,7	2,5
37,7	2,5
45,7	2,5
55,7	2,5
68,7	2,5
85,7	2,5
105,7	2,5
130,7	2,5

SF..09

DCX mm	x_{max} mm
27,4	3,7
32,5	3,5
39,2	3,2
47,6	3,1
57,6	3,1
70,5	3,0
87,5	2,9
107,5	2,7
132,5	2,7

坡铣





OF..04

DCX mm	$\alpha_{R\,max}$ °
25,6	14,2
30,7	9,5
37,7	6,5
45,7	4,7
55,7	3,5
68,7	2,7
85,7	2,0
105,7	1,6
130,7	1,2

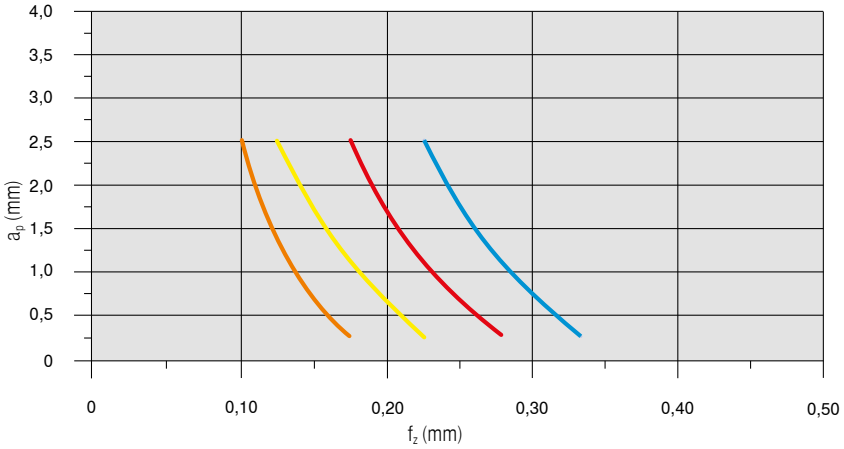
SF..09

DCX mm	$\alpha_{R\,max}$ °
27,4	20,4
32,5	13,0
39,2	8,0
47,6	5,8
57,6	4,3
70,5	3,2
87,5	2,3
107,5	1,7
132,5	1,3

MaxiMill 274-04 系统

起始推荐参数

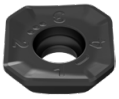
OF.. 04



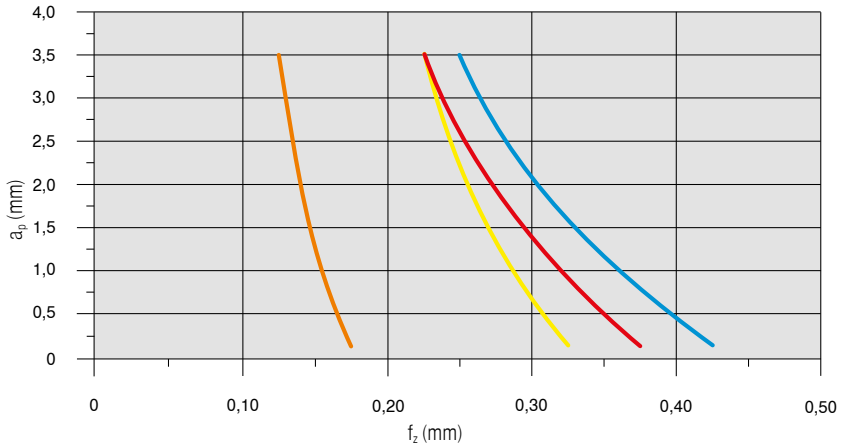
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**OFHT040305SN-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**OFHT040305SN-F50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**OFHT040305SN-M50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**OFHT040305SN-F50**	**CTC5240**	35	乳化液

MaxiMill 274-09 系统

起始推荐参数



SF.. 09



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SFKT0903AFSR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SFHT0903AFSR-F50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**SFKT0903AFSR-R50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SFHT0903AFSR-F50**	**CTC5240**	35	乳化液

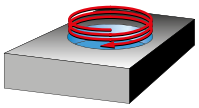
详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

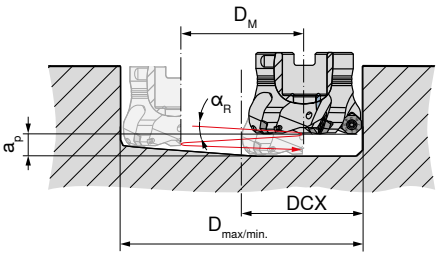
MaxiMill 274-05/-12 系统

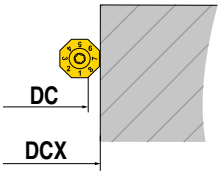
加工方式

螺旋插补铣



$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径
D_M = D_{max} – DCX 即 D_{min} –DCX





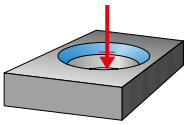
OF..05

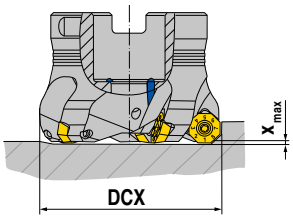
DC mm	DCX mm	D_{max} mm	D_{min} mm	$\alpha_{R\,max}$ °
50	**58**	107	99	1,1
63	**71**	133	125	0,9
80	**88**	167	159	0,7
100	**107,9**	207	199	0,5
125	**132,9**	257	249	0,4

SF..12

DC mm	DCX mm	D_{max} mm	D_{min} mm	$\alpha_{R\,max}$ °
47,0	**61,0**	107	105	0,5
59,9	**74,0**	133	131	0,4
76,9	**90,9**	167	165	0,3
96,9	**110,9**	207	205	0,25
121,9	**135,9**	257	255	0,2

轴向插铣





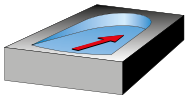
OF..05

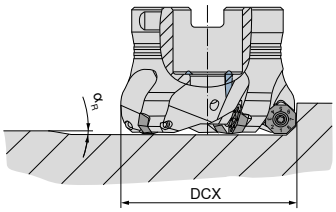
DC mm	DCX mm	X_{max} mm
50	**58**	2,2
63	**71**	1,9
80	**88**	1,8
100	**107,9**	1,1
125	**132,9**	1,4

SF..12

DC mm	DCX mm	X_{max} mm
47,0	**61,0**	3,4
59,9	**74,0**	3,2
76,9	**90,9**	3,0
96,9	**110,9**	2,5
121,9	**135,9**	2,6

坡铣





OF..05

DC mm	DCX mm	$\alpha_{R\,max}$ °
50	**58**	3,2
63	**71**	2,0
80	**88**	1,5
100	**107,9**	0,7
125	**132,9**	0,7

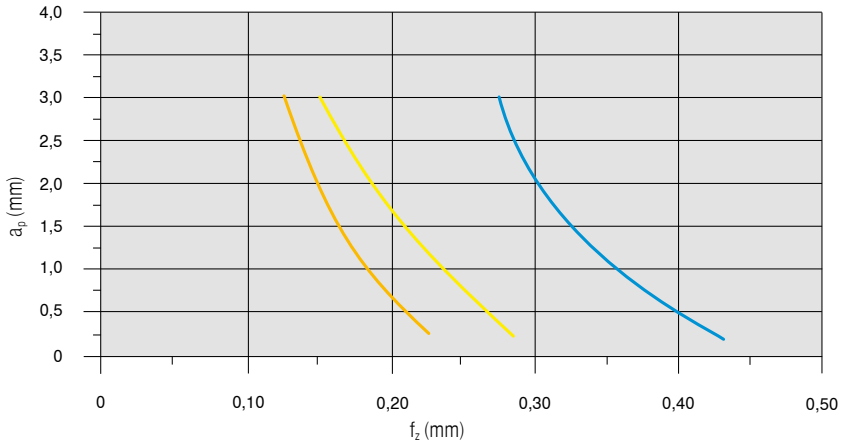
SF..12

DC mm	DCX mm	$\alpha_{R\,max}$ °
47,0	**61,0**	4,9
59,9	**74,0**	3,4
76,9	**90,9**	2,4
96,9	**110,9**	1,6
121,9	**135,9**	1,3

MaxiMill 274-05 系统

起始推荐参数

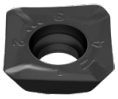
OF.. 05



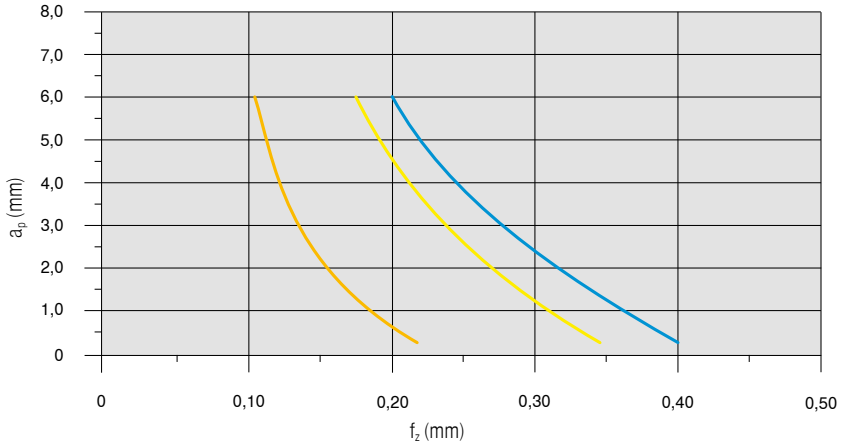
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**OFHT050410SN-M50**	**CTCP230**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**OFHT050410SN-F50**	**CTPM240**	180	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**OFHT050410SN-F50**	**CTC5240**	35	乳化液

MaxiMill 274-12 系统

起始推荐参数



SF.. 12



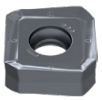
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SFKT1204AFSR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SFKT1204AFSR-M50**	**CTPM240**	180	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SFHT1204AFER-F40**	**CTC5240**	35	乳化液

详细的切削速度值请参见 → 页码 142–144

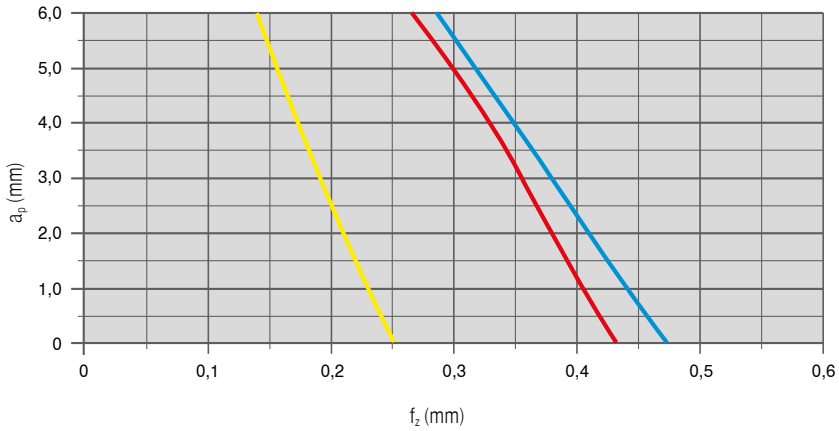
v_c > 400 m/min 时必须做刀具动平衡!

MaxiMill 271-12 系统

起始推荐参数



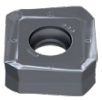
SOHU 12



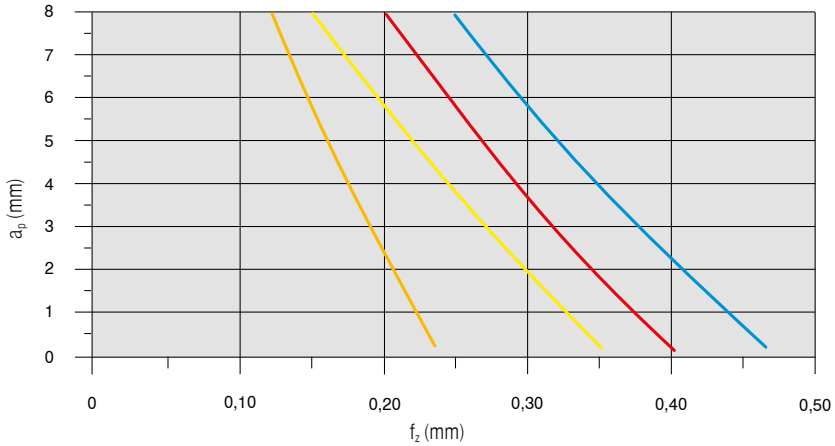
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SOHU 1204ABSR-M50**	**CTPP230**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SOHU 1204ABSR**	**CTPM240**		干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**SOHU 1204ABSR-R50**	**CTCK215**	300	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SOHU 1204ABSR-F50**	**CTC5240**	30	乳化液

MaxiMill 271-17 系统

起始推荐参数



SAKU 17



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SAKU 1706ABSR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SAKU 1706ABSR-F50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**SAKU 1706ABSR-R50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SAKU 1706ABSR-F50**	**CTC5240**	35	乳化液

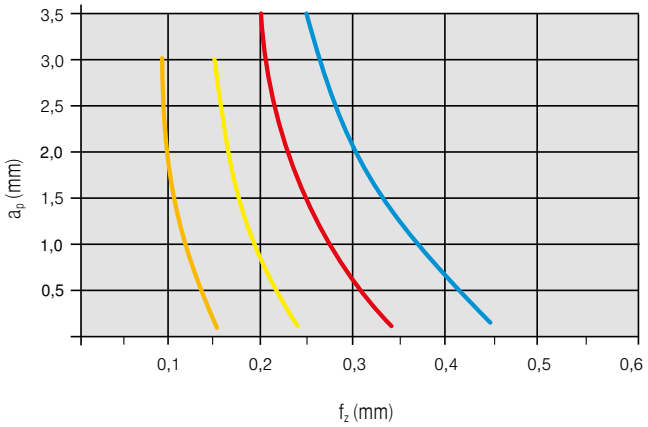
详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

MaxiMill 273 系统

起始推荐参数

OAKU



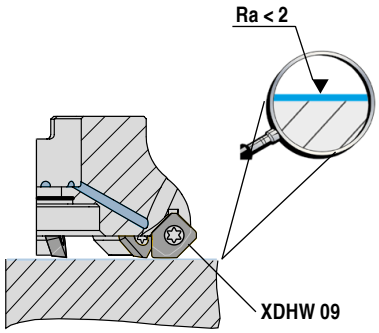
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**OAKU 060508SR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**OAKU 060508SR-F50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**OAKU 060508SR-R50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**OAKU 060508ER-F40**	**CTC5240**	35	乳化液

详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

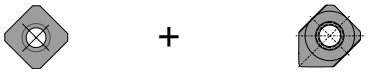
MaxiMill 270 系统

加工方式



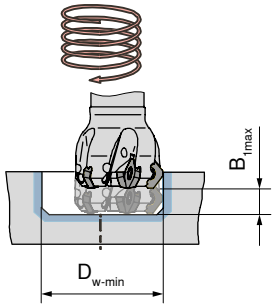
精铣 使用修光刃刀片

每个刀头装夹一个修光刃刀片，从直径 Ø 125 mm起，装夹两个刀片。



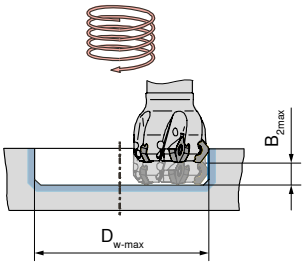
钢	SDNT	0903AESN-29	CTPP235	+	XDHW	0903AESN	CTPP235
	SDNT	0903AESN-29	CTCP230	+	XDHW	0903AESN	CTCP230
	SDHT	0903AESN-33	CTCP230	+	XDHW	0903AESN	CTCP230
	SDHW	0903AESN	TCM10	+	XDHW	0903AESN	TCM10
铸铁	SDNT	0903AESN-31	CTCK215	+	XDHW	0903AEEN	CTCK215
有色金属	SDHT	0903AEFN-ALP	-27P H216T	+	XDHW	0903AEFN	-27P H216T

螺旋插补铣（无初始孔）



C 270-09

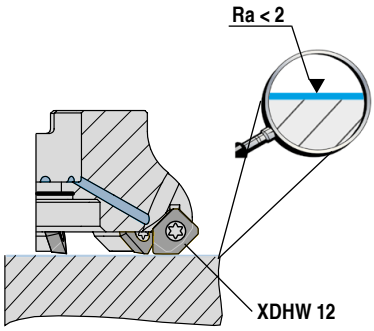
DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm
6	14,4	1,5	19,0	1,5
12	28,5	1,5	31,0	1,5
16	36,5	1,5	39,0	1,5
20	44,5	1,5	47,0	1,5
25	54,5	1,5	57,0	1,5
32	68,5	1,5	71,0	1,5



A 270-09

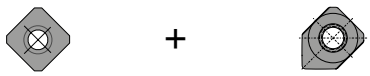
DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm
32	68,5	1,5	71,0	1,5
40	84,5	1,5	87,0	1,5
50	104,5	1,5	107,0	1,5
63	130,5	1,5	133,0	1,5
80	164,5	1,5	167,0	1,5
100	204,5	1,5	207,0	1,5
125	254,5	1,5	257,0	1,5
160	324,5	1,5	327,0	1,5

MaxiMill 270-12 系统



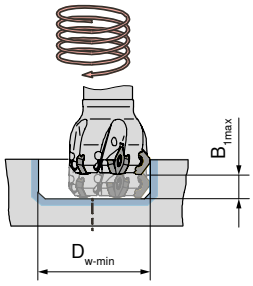
精铣 使用修光刃刀片

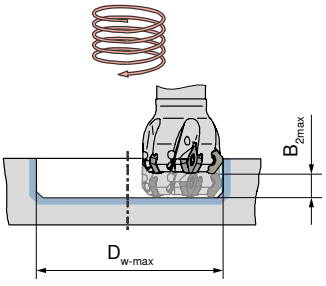
每个刀头装夹一个修光刃刀片，从直径 Ø 125 mm起，装夹两个刀片。



钢	SDMT	1204AESN-29R	CTPP235	+	XDHW	1204AESN	CTPP235
	SDMT	1204AESN-29R	CTCP230	+	XDHW	1204AESN	CTCP230
	SDHW	1204AESN-R	TCM10	+	XDHW	1204AESN	TCM10
铸铁	SDMT	1204AEEN-31	CTCK215	+	XDHW	1204AEEN	CTCK215
	SDHW	1204AESN-R	CTCK215	+	XDHW	1204AEEN	CTCK215
有色金属	SDHT	1204AEFN-ALP	-27P H216T	+	XDHW	1204AEFN	-27P H216T

螺旋插补铣（无初始孔）



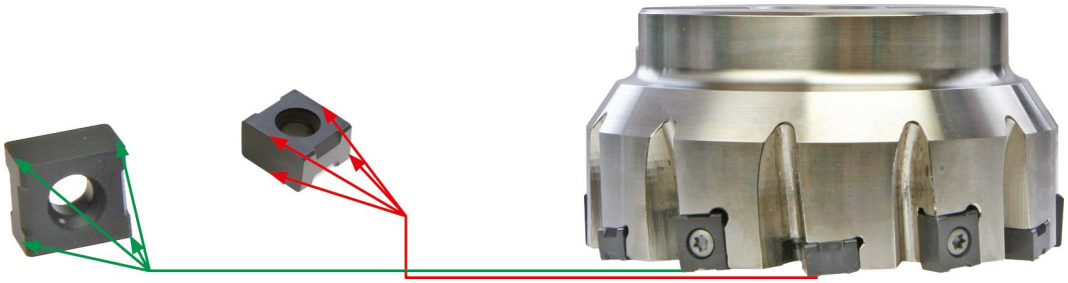


DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm
32	74,5	1,5	78,0	1,5
40	90,5	1,5	94,0	1,5
50	110,5	1,5	114,0	1,5
63	136,5	1,5	140,0	1,5
80	170,5	1,5	174,0	1,5
100	210,5	1,5	214,0	1,5
125	260,5	1,5	264,0	1,5
160	330,5	1,5	334,0	1,5

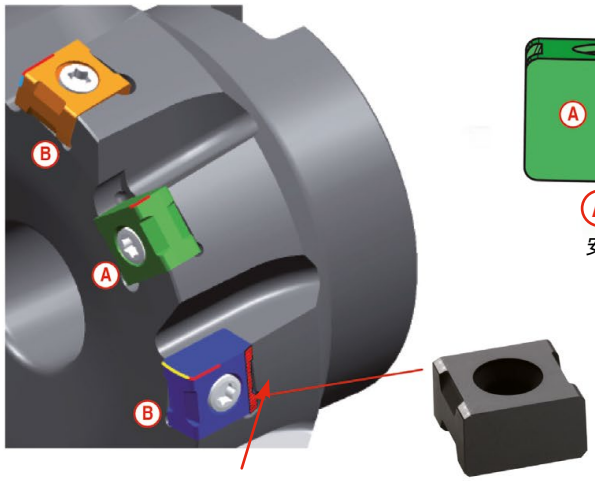
v_c > 400 m/min 时必须做刀具动平衡!

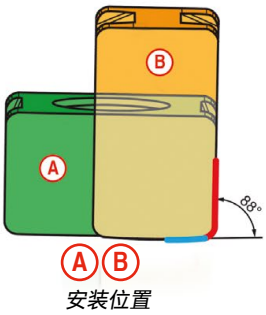
MaxiMill HEC 11 / HEC 12 系统

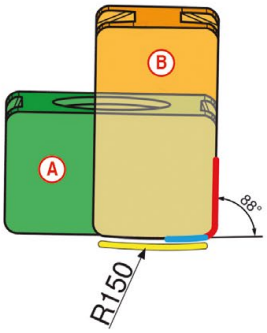
每个安装位置有4个切削刃



正确安装标准刀片和修光刃刀片







底部切削刃-标准刀片	B
主切削刃-刀片	A B
修光刃刀片	B

轴向调节

- 将楔块安装到刀体中，稍稍紧固夹紧螺钉，但不要夹紧。
- 如图所示安装刀片并拧紧至 1.0 Nm 扭矩。
- 使用预设装置来标记最高切削刃。
- 对调整螺钉进行小幅节，使所有切削刃的高度均为 0.005 mm 或更佳。
- 以 3.2 Nm 扭矩夹紧刀片。

平均切屑厚度 [h_m] - 选择步骤

面铣

1 从下表中选择合适的平均切屑厚度 [h_m] 对应于相应的钢材料。

材料	抗拉强度 N/mm²	h_m mm
钢	...-800	0,2
钢	800-1000	0,18
钢	1000-1200	0,16
钢	1200-...	0,14
不锈钢	... -750	0,21
不锈钢	750-900	0,19
不锈钢	900-1150	0,17
不锈钢	1150- ...	0,15

2 根据所选的平均切屑厚度 [h_m] 和相应的切削宽度 [ae]，从下表中选出进给校正值。

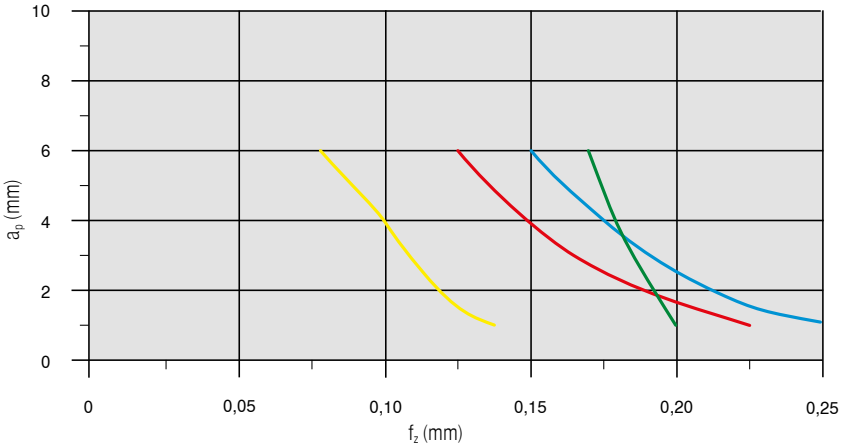
h_m mm	进给校正值 f_z 适用于 h_m			
0,20	0,40 **	0,40 **	0,33	0,28
0,18	0,40 **	0,40 **	0,29	0,25
0,16	0,40 **	0,36	0,26	0,23
0,14	0,36	0,31	0,23	0,20
0,21	0,40 **	0,40 **	0,34	0,30
0,19	0,40 **	0,40 **	0,31	0,27
0,17	0,40 **	0,38	0,28	0,24
0,15	0,39	0,34	0,24	0,21
a_e =	**0,3 x DC**	**0,4 x DC**	**0,75 x DC**	**1 x DC**

f_z > 0.4 mm: 危险，带来过大后角接触

MaxiMill 491-09 系统

起始推荐参数

SNHU 09

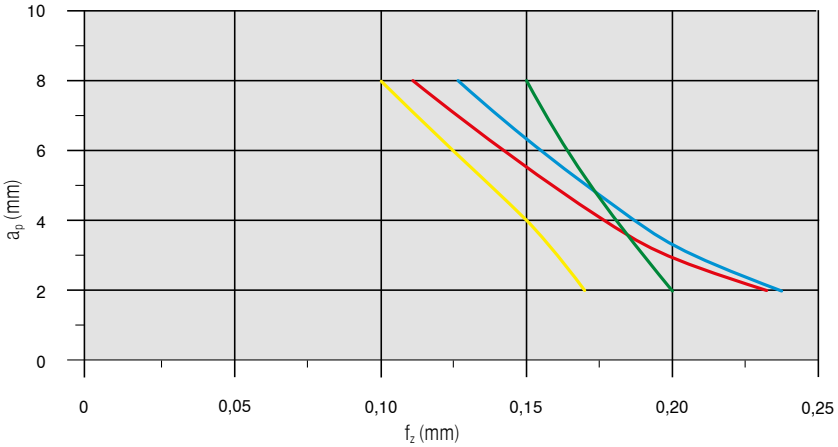


材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	SNHU09T308SR-M50	CTPP235	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	SNHU09T308SR-F50	CTPM240	180	干式
铸铁	K.1.1	EN-GJL-250 (GG25)	SNHU09T308SR-R50	CTCK215	250	干式
有色金属	N.1.2	AlMgSi1	SNHU09T308FR-F10	CTWN215	500	乳化液

MaxiMill 491-12 系统

起始推荐参数

SNHU 12



材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	SNHU120408SR-M50	CTPP235	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	SNHU120408SR-F50	CTPM240	180	干式
铸铁	K.1.1	EN-GJL-250 (GG25)	SNHU120408SR-R50	CTCK215	250	干式
有色金属	N.1.2	AlMgSi1	SNHU120408FR-F10	CTC5240	500	乳化液

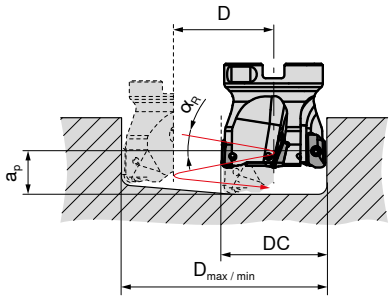
详细的切削速度值请参见 → 页码 142–144

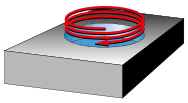
v_c > 400 m/min 时必须做刀具动平衡!

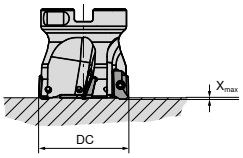
MaxiMill 211-07 系统

加工方式

螺旋插铣





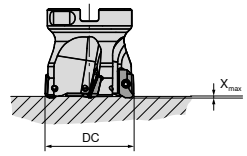


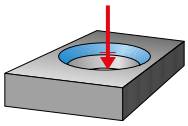
DC mm	D_{max} / RE 0,4 mm	D_{min} mm	$\alpha_{R\,max}$ °
10	19	13	5,5
12	23	17	6,0
16	31	25	3,0
20	39	33	2,0
25	49	43	1,5
32	63	57	1,2
40	79	73	0,8
50	99	93	0,7

DC mm	D mm	$\alpha_{R\,max\,360°}$ °
10	13	5,5
12	17	6,0
16	25	3,0
20	33	2,0
25	43	1,5
32	57	1,2
40	73	0,8
50	93	0,7

a_p (mm) = $D * \pi * \tan \alpha_R$

轴向插铣

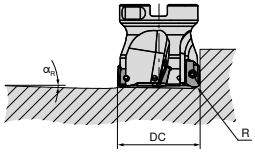


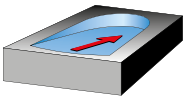


DC mm	X_{max} mm
10	0,8
12	0,8
16	0,8
20	0,8
25	0,8
32	0,8
40	0,8
50	0,8

$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径

坡铣

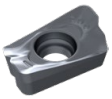




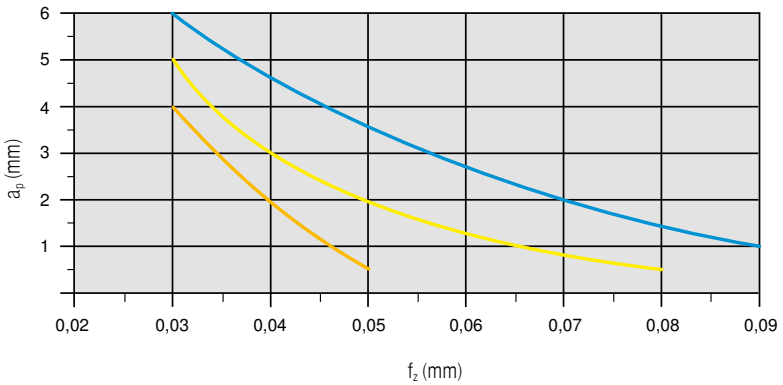
DC mm	α °
10	11,0
12	7,9
16	4,3
20	3,0
25	2,5
32	1,6
40	1,2
50	1,0

$D = D_{max} - DC / D_{min} - DC$

起始推荐参数



XDKT 07



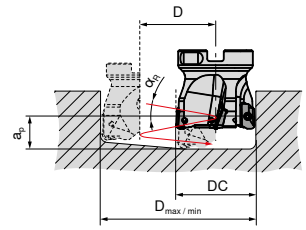
材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XDKT070308SR-M50	CTCP230	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XDKT070308SR-F50	CTPM240	180	干式
高温合金/钛合金	S.2.2	Inconel 718	XDKT070308ER-F50	CTC5240	35	乳化液

详细的切削速度值请参见 → 页码 142–144

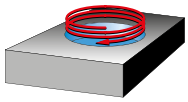
v_c > 400 m/min 时必须做刀具动平衡!

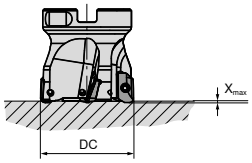
MaxiMill 211-11 系统

加工方式

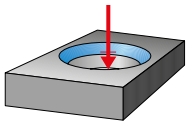


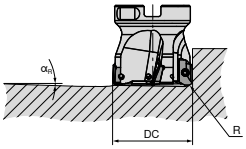
① 螺旋插铣



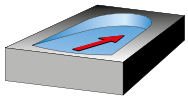


② 轴向插铣





③ 坡铣

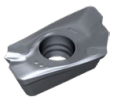


DC mm	① 螺旋插铣 RE = 0,8 mm	② 轴向插铣 X_{max}	③ 坡铣 α_R
12	α_R 16 ° $D_{max.}$ 21 mm $D_{min.}$ 14 mm	1,3 mm	18 °
16	α_R 9,5 ° $D_{max.}$ 29 mm $D_{min.}$ 21 mm	1,5 mm	10,8 °
20	α_R 7 ° $D_{max.}$ 37 mm $D_{min.}$ 30 mm	2,0 mm	9,8 °
25	α_R 4,5 ° $D_{max.}$ 47 mm $D_{min.}$ 40 mm	2,0 mm	7,5 °
32	α_R 3,2 ° $D_{max.}$ 61 mm $D_{min.}$ 53 mm	1,0 mm	4,8 °
40	α_R 2,2 ° $D_{max.}$ 77 mm $D_{min.}$ 72 mm	1,6 mm	2,9 °
50	α_R 1,7 ° $D_{max.}$ 98 mm $D_{min.}$ 93 mm	1,6 mm	2,2 °
63	α_R 1,5 ° $D_{max.}$ 123 mm $D_{min.}$ 116 mm	1,6 mm	1,8 °
80	α_R 1,0 ° $D_{max.}$ 157 mm $D_{min.}$ 153 mm	1,6 mm	1,4 °
100	α_R 0,8 ° $D_{max.}$ 107 mm $D_{min.}$ 101 mm	1,6 mm	1,1 °

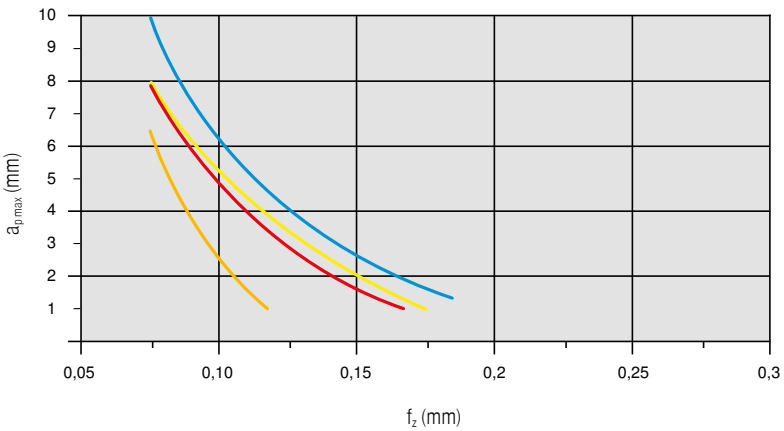
$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径
a_p (mm) = D x π x tan (α_R) = 螺距
l_a (mm) = 悬伸长度

DC mm	最大速度取决于悬伸长度 n_{max} in min^{-1} l_a = 1–2 x Ø mm	l_a = 2,5 x Ø mm	l_a = 3 x Ø mm	l_a = 4 x Ø mm	l_a = 5 x Ø mm
12	55000	51500	47000	42000	37000
16	42000	38500	34100	28900	24200
20	36900	33000	28500	23900	19500
25	33200	29000	24400	19900	15400
32	30200	26000	20900	16600	11900
40	27700	23000	18000	13500	9000
50	25400	20400	15400	10800	6100
63	23300	18300	12900	8300	3700
80	21300	16100	10600	5800	
100	19600	14100	8400		

起始推荐参数



XDKT 11

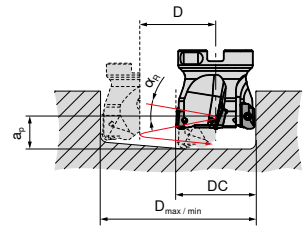


材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XDKT11T308SR-M50	CTCP230	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XDKT11T308SR-F50	CTPM240	180	干式
铸铁	K.1.1	EN-GJL-250 (GG25)	XDKT11T308SR-R50	CTCK215	250	干式
高温合金/钛合金	S.2.2	Inconel 718	XDKT11T308ER-F50	CTC5240	35	乳化液

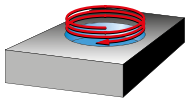
详细的切削速度值请参见 → 页码 142–144
v_c > 400 m/min 时必须做刀具动平衡!

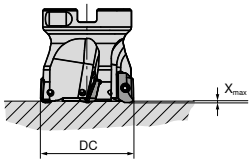
MaxiMill 211-15 系统

加工方式

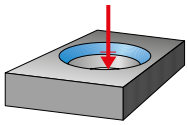


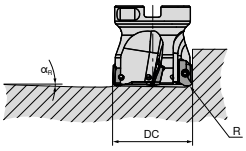
① 螺旋插铣



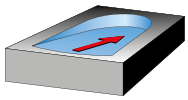


② 轴向插铣





③ 坡铣

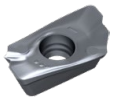


DC mm		① 螺旋插铣 RE = 0,8 mm	② 轴向插铣 X_{max}	③ 坡铣 α_R
25	α_R	7,5 °		
	$D_{max.}$	48 mm	2,7 mm	9,5 °
	$D_{min.}$	37 mm		
32	α_R	5 °		
	$D_{max.}$	62 mm	2,5 mm	6,8 °
	$D_{min.}$	47 mm		
40	α_R	3,2 °		
	$D_{max.}$	78 mm	2,5 mm	5,1 °
	$D_{min.}$	63 mm		
50	α_R	2,5 °		
	$D_{max.}$	98 mm	2,5 mm	2,5 °
	$D_{min.}$	86 mm		
63	α_R	1,5 °		
	$D_{max.}$	124 mm	2,5 mm	2,5 °
	$D_{min.}$	111 mm		
80	α_R	1,3 °		
	$D_{max.}$	158 mm	2,5 mm	2,0 °
	$D_{min.}$	147 mm		
100	α_R	1,1 °		
	$D_{max.}$	198 mm	2,5 mm	1,5 °
	$D_{min.}$	190 mm		
125	α_R	0,9 °		
	$D_{max.}$	248 mm	2,5 mm	0,9 °
	$D_{min.}$	240 mm		
160	α_R	0,6 °		
	$D_{max.}$	318 mm	2,5 mm	0,7 °
	$D_{min.}$	310 mm		
100	α_R	0,8 °		
	$D_{max.}$	107 mm	1,6 mm	1,1 °
	$D_{min.}$	101 mm		

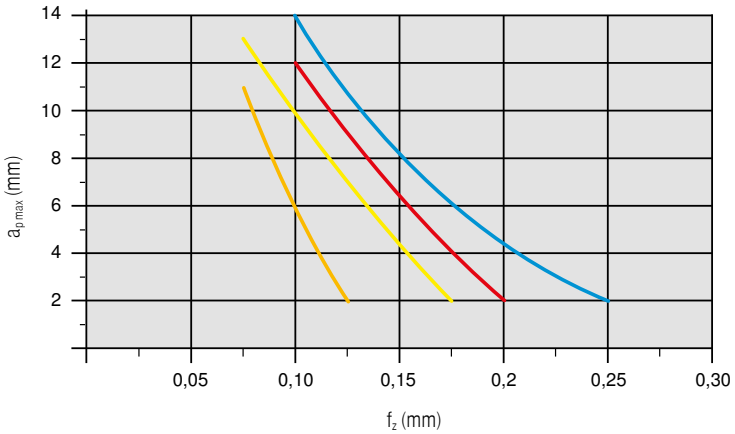
最大速度取决于悬伸长度 n_{max} in min^{-1}			
DC mm	l_a = 2 x Ø mm	l_a = 3 x Ø mm	l_a = 5 x Ø mm
25	26560	19520	13320
32	24160	16720	9520
40	22160	14400	7200
50	20320	12320	4880
63	18640	10320	2960
80	17040	8480	
100	15680	6720	
125	14320		
160	13200		

$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径
a_p (mm) = D x π x tan (α_R) = 螺距
l_a (mm) = 悬伸长度

起始推荐参数



XDKT 15



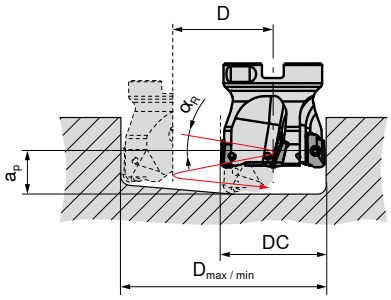
材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XDKT150508SR-M50	CTCP230	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XDKT150508SR-F50	CTPM240	180	干式
铸铁	K.1.1	EN-GJL-250 (GG25)	XDKT150508SR-R50	CTCK215	250	干式
高温合金/钛合金	S.2.2	Inconel 718	XDKT150508ER-F40	CTC5240	35	乳化液

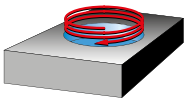
详细的切削速度值请参见 → 页码 142–144
v_c > 400 m/min 时必须做刀具动平衡!

MaxiMill 211-20 系统

加工方式

螺旋插铣

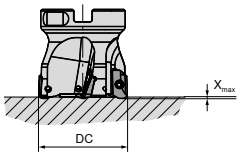




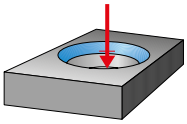
DC mm	D_{max} / RE 0,4 mm	D_{min} mm	$\alpha_{R\,max}$ °
63	124	107	2,2
80	158	143	1,7
100	198	183	1,3

a_p (mm) $= D * \pi * \tan \alpha_R$

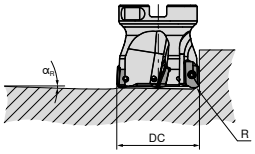
轴向插铣



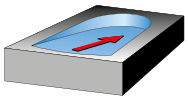
DC mm	X_{max} mm
63	2,0
80	2,0
100	2,0



坡铣



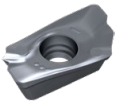
DC mm	α °
63	2,2
80	1,7
100	1,3



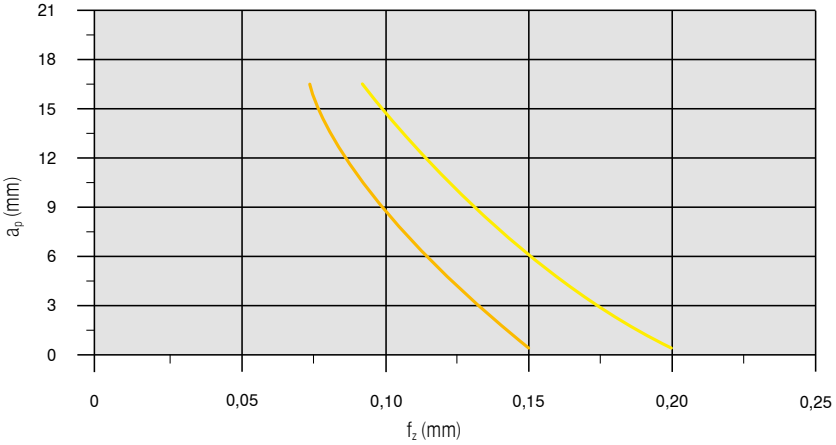
$D = D_{max} - DC / D_{min} - DC$

$D_{max.}$ (mm) = 平底孔最大直径
$D_{min.}$ (mm) = 平底孔最小孔径

起始推荐参数



XDKT 20



材料名称			刀片		v_c (m/min)	冷却
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XDKT200708ER-F40	CTPM240	180	干式
高温合金/钛合金	S.2.2	Inconel 718	XDKT200708ER-F40	CTC5240	35	乳化液

详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

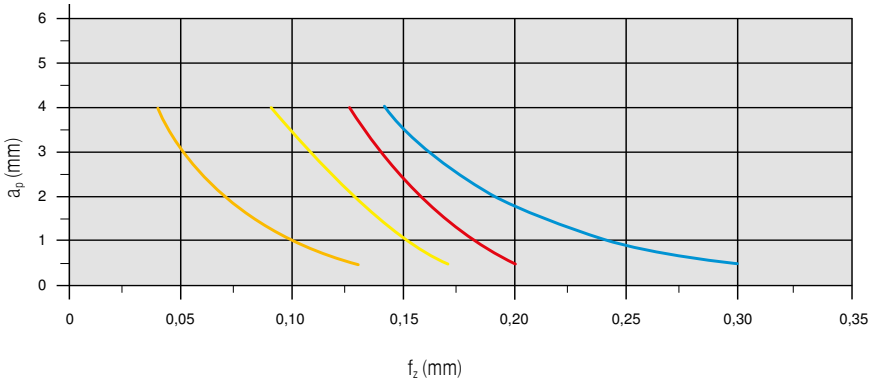
MaxiMill 490-09 系统

加工方式

MaxiMill 490-09 系统不适用于插铣!

起始推荐参数

SDNT 09



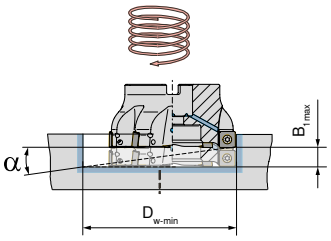
材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SDNT09T308SR-29**	**CTCP230**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SDNT09T308SR-33**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**SDNT09T308SR-31**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SDNT09T308ER-M31**	**CTC5240**	35	乳化液

详细的切削速度值请参见 → 页码 142–144

MaxiMill 490-12 系统

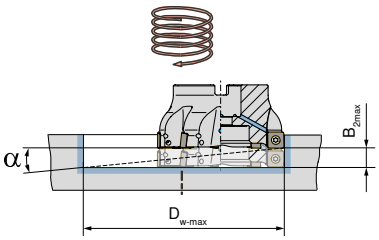
加工方式

螺旋插铣（无起始孔）



$$B = (D_W - DC) \times \pi \times \tan \alpha$$

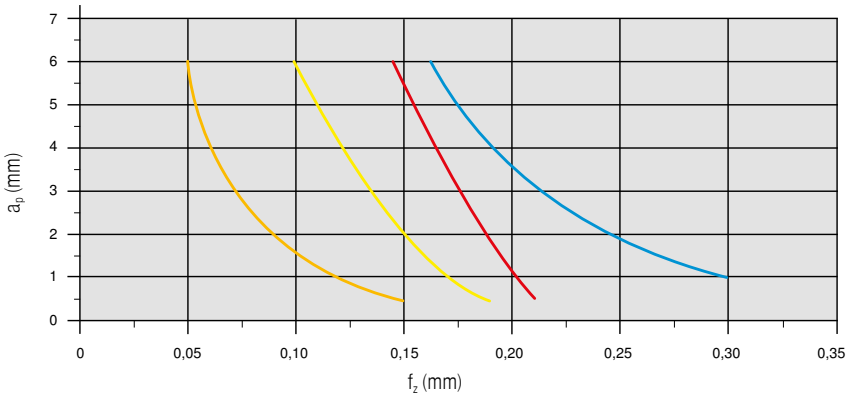
D_w = 待加工孔径
DC = 铣刀公称直径
B = 轴向进给 360° 圆周运动



DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm	α °
50	77	2,5	98	4,8	2,0
63	103	1,8	124	3,0	1,0
80	137	2,1	158	3,0	0,8
100	177	2,1	198	2,9	0,6
125	227	1,8	248	2,4	0,4

起始推荐参数

SDMT 12



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**SDMT1205ZZSN-29**	**CTCP230**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**SDMT120512SR-33**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**SDMT1205ZZSN-31**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**SDMT120508ER-M31**	**CTC5240**	35	乳化液

详细的切削速度值请参见 → 页码 142–144

HSC高速/HPC高效-铣削

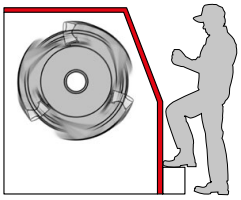
安全须知

HSC 加工刀具的适用性

CERATIZIT 的 HSC 刀具专为此加工策略而开发，可最大限度确保运行可靠性。

遵守机床制造商的安全预防措施

确保遵守机床制造商的所有安全预防措施（例如封闭式机床防护罩）。

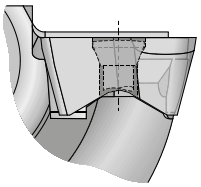


HSC 加工转接件的适用性

根据铣削情况，选择最佳刀具/夹紧装置组合。对于高速铣削应用，必须对刀具和刀具转接件一并执行动平衡（参见 ISO 1940 指令）。

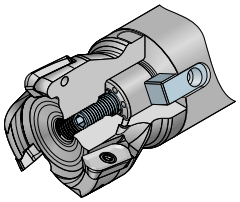
安装具有离心力保护的可转位刀片

刀片夹紧：EURO-专利 EP 1083017A1
确保刀片凹槽清洁，夹紧螺钉的螺纹孔处于良好状态。
检查凹槽中刀片的轴向和径向接触点。
用于正角刀片夹紧的夹紧螺钉须以相应扭矩
（XDHT11 = 1.8 Nm；XDH.19 = 6.0 Nm）拧紧。



将 HSC 铣刀 (DC = Ø 40–63)
安装到铣刀轴上的最佳方式为使用强力螺钉

强力螺钉可确保刀具和铣削转接件的稳定连接，并且易于使用。



强力螺钉

最大允许转速

请注意刀具上注明的最大转速。该编号专门用于特定刀具，必须根据所选刀具转接件、总悬伸长度和相应的加工情况进行调整。

刀具的最佳应用范围（a_e、a_p、f_zn）

为保证高效铣削，请遵守有关切削参数的建议。

15

如未遵守这些安全规定，CERATIZIT 不承担任何责任

MaxiMill HSC-11 系统

切削参数推荐值

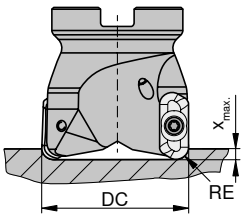
工件材料		处理方式/合金		VDI 3323 组别	硬度 HB	H216T (CWK26) v_c (m/min)	H216T (CWK26) v_c (m/min)
N	铝合金,	不可硬化材料		21	60		200-3000
		可硬化材料		22	100		200-2000
	铸造铝合金	不可硬化材料	< 12 % Si	23	80		200-2000
		可硬化材料	< 12 % Si	24	90		200-1800
		不可硬化材料	> 12 % Si	25	130		200-1000
	铜和铜合金（青铜、黄铜）		易切削合金（1% Pb）	26			200-600
			黄铜、红色黄铜	27	90	250-1000	250-1000
			青铜	28	100		150-400
			无铅铜和电解铜	29	100		300-800
O	非金属材料		热固性塑料	29		80-1000	80-1000
			纤维增强复合塑料	29		70-500	70-500
			硬橡胶	30		80-300	80-300

= 高压喷射冷却　= 微量润滑　= 干式切削

MaxiMill HSC-11 系统

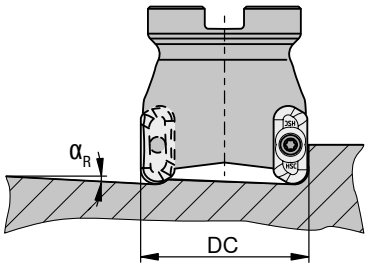
加工方式

插铣



DC mm	11 RE 0,2–4,0 $x_{max.}$ mm
16	1,70
18	2,11
19	2,24
20	2,39
22	2,70
25	2,55
32	2,40
40	2,28
50	2,26
63	2,10
80	1,75
100	1,79

线性坡走铣



DC mm	α_R °
16	18,8
18	16,3
19	15,3
20	14,8
22	13,8
25	10,3
32	6,8
40	4,8
50	3,5
63	2,5
80	1,8
100	1,3

粗-精/铣削方法

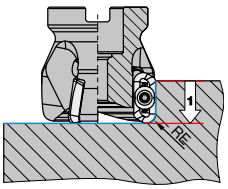
单位时间最大金属切除量

刀片	RE mm	1 a_p mm	2 3 4 $a_{p\,max.}$ mm
XDHT 11T302FR-ALP	0,2	10	9,8
XDHT 11T304FR-ALP	0,4	10	9,6
XDHT 11T308FR-ALP	0,8	10	9,2
XDHT 11T312FR-ALP	1,2	10	8,8
XDHT 11T316FR-ALP	1,6	10	8,4
XDHT 11T320FR-ALP	2,0	10	8,0
XDHT 11T325FR-ALP	2,5	10	7,5
XDHT 11T332FR-ALP	3,2	10	6,8
XDHT 11T340FR-ALP	4,0	10	6,0
XDHT 11T350FR-ALP	5,0	10	5,0

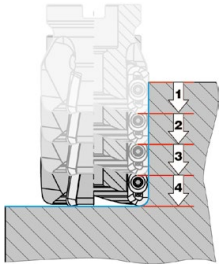
最佳侧壁质量

刀片	RE mm	2 3 4 $a_{p\,max.}$ mm
XDHT 11T302FR-ALP	0,2	7,8
XDHT 11T304FR-ALP	0,4	7,6
XDHT 11T308FR-ALP	0,8	7,2
XDHT 11T312FR-ALP	1,2	6,5
XDHT 11T316FR-ALP	1,6	6,8
XDHT 11T320FR-ALP	2,0	6,4
XDHT 11T325FR-ALP	2,5	5,5
XDHT 11T332FR-ALP	3,2	4,8
XDHT 11T340FR-ALP	4,0	4,0
XDHT 11T350FR-ALP	5,0	3,0

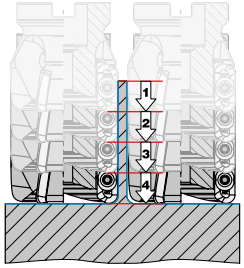
方肩铣削



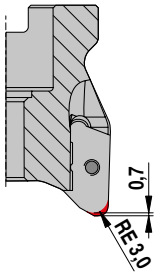
槽铣

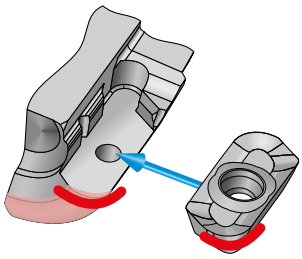


薄壁槽铣



顶端轮廓精车



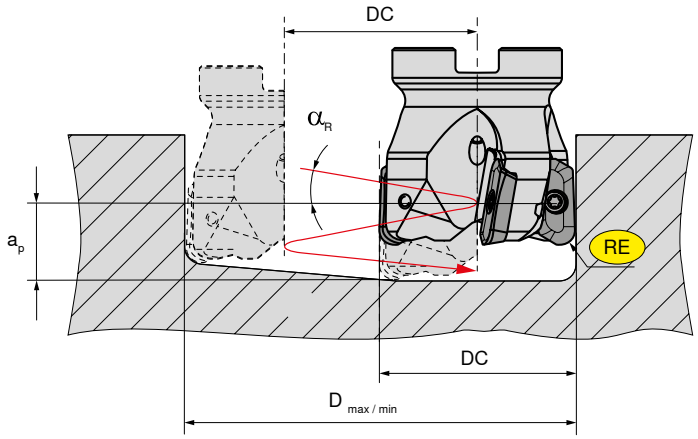


对于刀尖半径大于 3.2 mm 的刀片，必须根据上图修改刀具基体。

MaxiMill HSC-11 系统

加工方式

螺旋坡走铣



RE = 刀片半径
α_R (mm) = 最大插入角（与刀具中心相关）

a_p (mm) = 齿距 → D x π x tan (α_R)

D (mm) = → D_{max} – DC 和/或 D_{min} – DC

平底孔

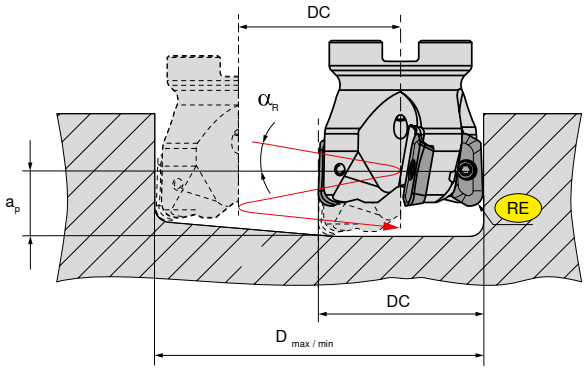
$D_{max.}$ (mm) = 最大孔径
$D_{min.}$ (mm) = 最小孔径
$DN_{max.}$ (mm) = 最大孔径适用于非平底孔

DC mm		XDHT-11 (HSC-11)								
(DN_{max})		RE = 0,2	RE = 0,4	RE = 0,8	RE = 1,2	RE = 1,6	RE = 2,0	RE = 2,5	RE = 3,2	RE = 4,0
16	α_R	9,7°	10,0°	9,9°	9,4°	8,9°	8,4°	7,9°	7,0°	6,1°
	$D_{max..}$	30	30	29	28	27	27	26	24	23
(31)	$D_{min..}$	18	18	18	18	18	18	18	18	18
18	α_R	9,4°	9,1°	8,7°	8,3°	7,9°	7,5°	6,9°	6,2°	5,3°
	$D_{max.}$	34	34	33	32	31	31	30	28	27
(35)	$D_{min.}$	22	22	22	22	22	22	22	22	22
19	α_R	8,8°	8,6°	8,3°	7,9°	7,5°	7,5°	6,5°	5,9°	5,1°
	$D_{max..}$	36	36	35	34	33	33	32	30	29
(37)	$D_{min..}$	24	24	24	24	24	24	24	24	24
20	α_R	8,4°	8,2°	7,8°	7,4°	7,7°	6,7°	6,2°	5,5°	4,8°
	$D_{max.}$	38	38	37	36	35	35	34	32	31
(39)	$D_{min.}$	26	26	26	26	26	26	26	26	26
22	α_R	7,6°	7,4°	7,8°	6,7°	6,4°	6,5°	5,6°	5,2°	4,3°
	$D_{max..}$	42	42	41	40	39	39	38	36	35
(43)	$D_{min..}$	30	30	30	30	30	30	30	30	30
25	α_R	6,7°	6,5°	6,2°	5,9°	5,6°	5,3°	4,9°	4,4°	3,8°
	$D_{max.}$	48	48	47	46	45	45	44	42	41
(49)	$D_{min.}$	36	36	36	36	36	36	36	36	36
32	α_R	4,7°	4,7°	4,8°	4,6°	4,3°	4,1°	3,8°	3,4°	2,9°
	$D_{max.}$	62	62	61	60	59	59	58	56	55
(63)	$D_{min.}$	50	50	50	50	50	50	50	50	50
40	α_R	3,3°	3,3°	3,4°	3,4°	3,5°	3,3°	3,0°	2,7°	2,3°
	$D_{max.}$	78	78	77	76	75	75	74	72	71
(79)	$D_{min.}$	66	66	66	66	66	66	66	66	66
50	α_R	2,4°	2,5°	2,5°	2,5°	2,6°	2,6°	2,4°	2,2°	1,9°
	$D_{max.}$	98	98	97	96	95	95	94	92	91
(99)	$D_{min.}$	86	86	86	86	86	86	86	86	86
63	α_R	1,7°	1,7°	1,7°	1,8°	1,8°	1,8°	1,8°	1,7°	1,5°
	$D_{max.}$	124	124	123	122	121	121	120	118	117
(125)	$D_{min.}$	112	112	112	112	112	112	112	112	112
80	α_R	1,1°	1,1°	1,1°	1,1°	1,1°	1,1°	1,1°	1,2°	1,2°
	$D_{max.}$	158	158	157	156	155	155	154	152	151
(159)	$D_{min.}$	146	146	146	146	146	146	146	146	146
100	α_R	0,8°	0,8°	0,9°	0,9°	0,9°	0,9°	0,9°	0,9°	0,9°
	D_{max}	198	198	197	196	195	195	194	192	191
(199)	$D_{min.}$	186	186	186	186	186	186	186	186	186

MaxiMill HSC/HPC-19 系统

加工方式

螺旋坡走铣



RE = 刀片半径
α_R (mm) = 最大插入角（与刀具中心相关）

a_p (mm) = 齿距 → D x π x tan (α_R)

D (mm) = → D_{max} – DC 和/或 D_{min} – DC

平底孔

$D_{max.}$ (mm) = 最大孔径
$D_{min.}$ (mm) = 最小孔径
$DN_{max.}$ (mm) = 最大孔径适用于非平底孔

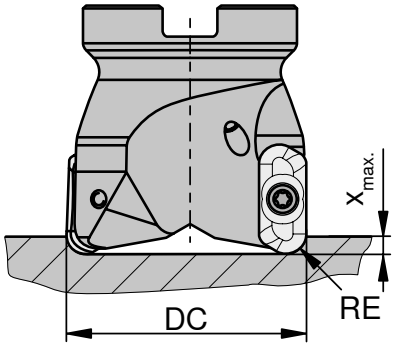
	DC mm	DN_{max} mm	α_R °	D_{max} mm	D_{min} mm
RE = 0,2 mm	**25**	49	7°02‘	48	32
	32	63	4°34‘	62	46
	40	79	3°47‘	78	62
	50	99	3°01‘	97	81
	63	125	2°17‘	124	107
	80	159		158	141
	100	199		198	181
RE = 0,8 mm	**25**	49	7°21‘	47	32
	32	63	4°44‘	61	46
	40	79	3°53‘	77	62
	50	99	3°05‘	97	81
	63	125	2°20‘	123	107
	80	159		157	141
	100	199		197	181
RE = 2,5 mm	**25**	49	8°24‘	44	32
	32	63	5°13‘	58	46
	40	79	4°12‘	74	62
	50	99	3°17‘	94	81
	63	125	2°27‘	120	107
	80	159		154	141
	100	199		194	181
RE = 4,0 mm	**25**	49	9°32‘	41	32
	32	63	5°42‘	55	46
	40	79	4°30‘	71	62
	50	99	3°28‘	91	81
	63	125	2°33‘	117	107
	80	159		151	141
	100	199		191	181

	DC mm	DN_{max} mm	α_R °	D_{max} mm	D_{min} mm
RE = 0,4 mm	**25**	49	7°08‘	48	32
	32	63	4°37‘	62	46
	40	79	3°49‘	78	62
	50	99	3°02‘	98	81
	63	125	2°18‘	124	107
	80	159		158	141
	100	199		198	181
RE = 2,0 mm	**25**	49	8°40‘	45	32
	32	63	5°04‘	59	46
	40	79	4°06‘	75	62
	50	99	3°13‘	95	81
	63	125	2°25‘	121	107
	80	159		155	141
	100	199		195	181
RE = 3,2 mm	**25**	49	8°54‘	42	32
	32	63	5°26‘	56	46
	40	79	4°20‘	72	62
	50	99	3°21‘	92	81
	63	125	2°30‘	118	107
	80	159		152	141
	100	199		192	181
RE = 5,0 mm	**25**	49	6°49‘	39	32
	32	63	3°59‘	53	46
	40	79	3°20‘	69	62
	50	99	2°13‘	89	81
	63	125	1°52‘	115	107
	80	159		149	141
	100	199		189	181

MaxiMill HSC/HPC-19 系统

加工方式

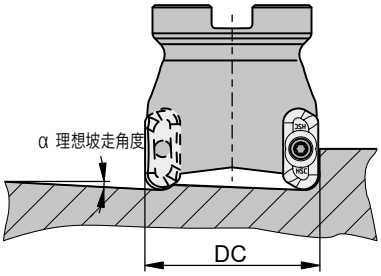
插铣



HSC 19	DC mm	19 RE 0,2–4,0 $x_{max.}$ mm	19 RE 5,0 $x_{max.}$ mm
CHSC 19 / GHSC 19 / MHSC 19	25	5,0	4,0
CHSC 19 / GHSC 19 / MHSC 19	32–40	4,0	3,0
AHSC 19	40–100	4,0	3,0

HPC 19	DC mm	19 RE 0,2–4,0 $x_{max.}$ mm	19 RE 5,0 $x_{max.}$ mm
CHPC 19 / MHPC 19	22–25	5,0	4,0
CHPC 19 / MHPC 19	32–50	6,0	5,0
AHPC 19	40–63	6,0	5,0

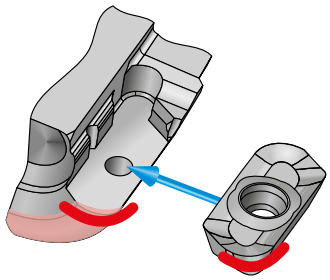
线性坡走铣

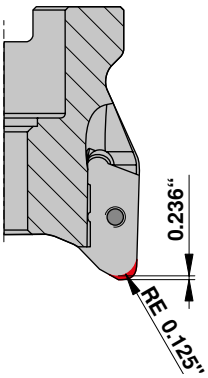


DC mm	α 理想坡走角度 HSC 19	α 理想坡走角度 HPC 19
25	11°	11°
32	7°	7°
40	5°	5°
50	4°	4°
63	3°	3°
80	2°	
100	2°	

刀盘改制

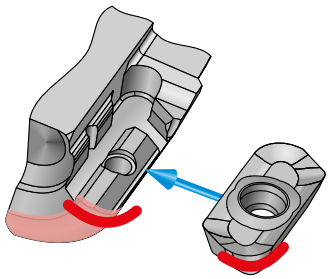
HSC 19





顶端轮廓精车

HPC 19

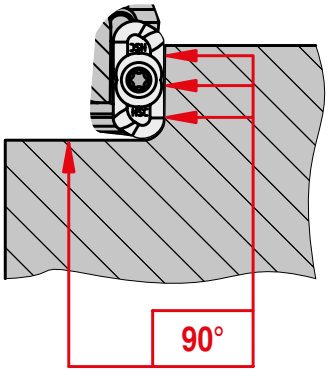


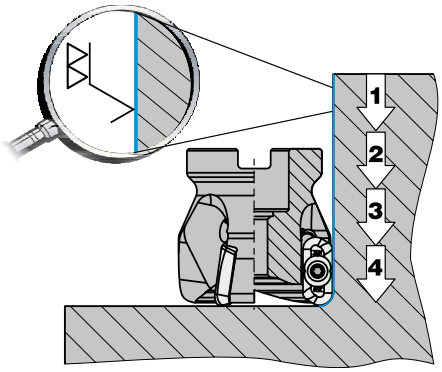
当刀片圆角半径>4.0 mm，必须按照上图进行合理的刀盘改制。

MaxiMill HSC/HPC-19 系统

加工方式

粗加工后卓越的侧壁质量
不必再进行精加工





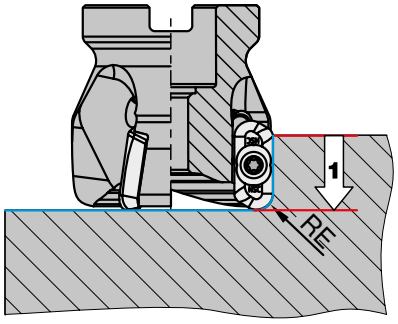
单位时间最大金属切除量

刀片	RE mm	a_p mm	$a_{p\ max.}$ mm
XDH. 190402FR-ALP	0,2	18,0	17,8
XDH. 190404FR-ALP	0,4	18,0	17,6
XDH. 190408FR-ALP	0,8	18,0	17,2
XDH. 190420FR-ALP	2,0	18,0	16,0
XDH. 190425FR-ALP	2,5	18,0	15,0
XDH. 190432FR-ALP	3,2	18,0	14,8
XDH. 190440FR-ALP	4,0	18,0	14,0
XDH. 190450FR-ALP	5,0	17,0	13,0

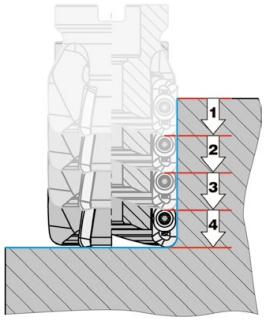
最佳侧壁质量

方肩铣削	RE mm	$a_{p\ max.}$ mm
XDH. 190402FR-ALP	0,2	11,8
XDH. 190404FR-ALP	0,4	11,6
XDH. 190408FR-ALP	0,8	11,2
XDH. 190420FR-ALP	2,0	10,0
XDH. 190425FR-ALP	2,5	9,5
XDH. 190432FR-ALP	3,2	8,8
XDH. 190440FR-ALP	4,0	8,0
XDH. 190450FR-ALP	5,0	7,0

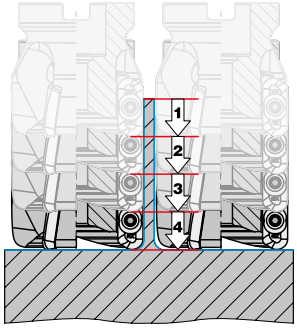
方肩铣削



槽铣



薄壁槽铣



15

上述数据适用于刀片XDHT 19 和 XDHX 19.

MaxiMill HPC-04/12 系统

加工方式

需要考虑的事项

- ▲ 机床稳定性。
- ▲ 稳定的工件夹紧和刀具转接件。
- ▲ 一般不需冷却液，但其有利于材料去除，亦可改善表面质量。
- ▲ 考虑热应力和 600 °C 的临界温度！
  如果材料需要，请使用冷却液。
- ▲ 避免振动。
- ▲ 遵守质量平衡等级。
- ▲ 注意金刚石对硬质合金形成元素（Fe、Ti、Ta、Co、Ni）的化学反应

优异的适用性

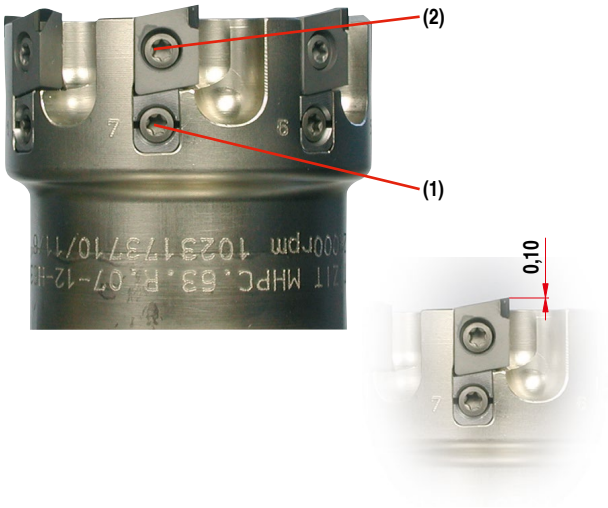
- ▲ 可用于由轻金属和有色金属、塑料、纤维复合材料、石墨等制成的部件。
- ▲ 通过最大限度简化设置方法，可节约刀具预置成本。
- ▲ 可用于大批量生产。
- ▲ 可实现出色的工件表面质量。
- ▲ 具有较长刀具寿命，可减少换刀次数及昂贵的机床停机时间。
- ▲ 适合现场已有刀具的情况（预设等）

质量检查

组装完成后，应检查刀片夹紧和轴向跳动调整，以及刀具平衡质量等级。在应用套式铣刀时，必须在组装后完成动平衡。

设置修光刃刀片

如前述设置程序所述，将标准刀片调节至径向跳动 = 0.02 mm，然后将带有修光刃的刀片置于最高切削刃上方 0.02-0.03 mm 处。



调整操作步骤

1 把调整楔块安装到刀体上(已经安好) 锁紧调整螺钉(1)，轻轻地保证楔块没有变形。

2 安装上PCD刀片并用1.0 Nm的扭矩拧紧夹紧螺钉(2) 。

3 在对刀仪上找出最高的刃并做好记号。

4 顺时针调整螺钉(1)，保证刀片刃高差在 0.02 mm内。必须达到预加载。需使用TORX梅花螺丝刀

5 用这种方法设置其它的刀片，最大偏差 0.005 mm。最大调整量 = 0.10 mm。

6 使用 5.0 Nm扭矩锁紧所有的螺钉(2)。

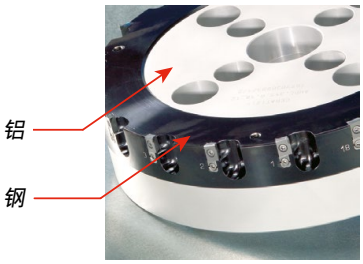
7 检查所有的刀片的轴向跳动 → 目标 = 0.005 mm

MaxiMill HPC-12 完美精度

可调式高性能刀具，铝合金工件精加工完美系统

钢制刀体

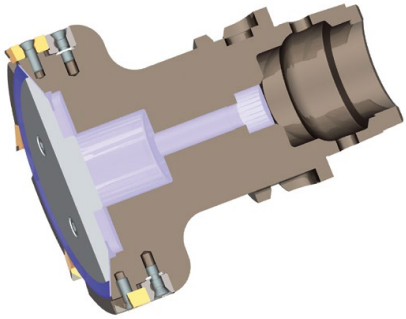
- 可实现最高稳定性
- 极高耐磨性
- 最小直径 160 mm 的双金属型号，更易操作，可为采用大型刀具的主轴提供保护



图示为双金属型号

作为套式铣刀和整体式类型提供

- 整体式类型采用直接 HSK63 连接
- 整体式刀具在 n=20,000 min^{-1} 的转速下于 G2.5 达到平衡 (ISO1940)



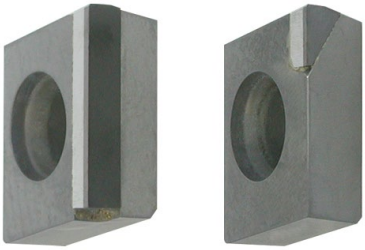
特别适用于具有内部冷却液供应的 HSC 应用

- 优化排屑
- 表面质量高
- 最佳应用条件
- 适用于微量润滑

时间就是金钱 – 系统 MaxiMill HPC-12 可简单快速进行调整!

+25° 大正前角

- 较小的切削力
- 提高表面平行度
- 最大限度减少部件变形



切向设计理念

- PCD 刀片可稳定定位，具有极高的加工安全性

适合的 PCD 切削刃

- 铣削时冲击强度高
- 极高的刃口稳定性
- 减少工件上的积屑瘤
- 可以完全顺畅无碍地加工硅含量超过 12% 的 Al-Si 合金

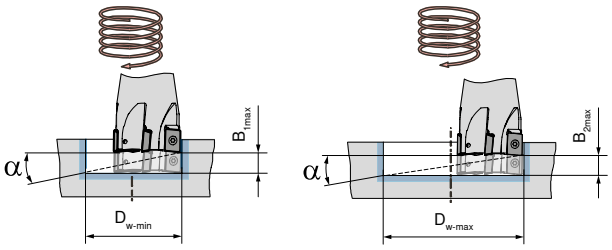
刀片选型

- 标准刀片
- 刀片带刀尖圆角
- 带修光刃的刀片

MaxiMill 141 / 241 系统

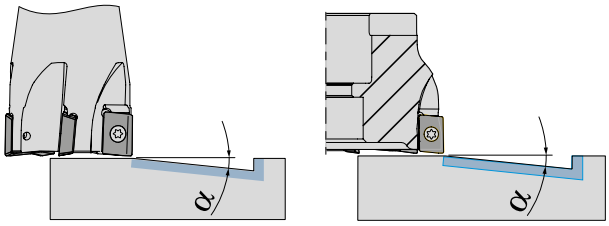
加工方式

螺旋插铣 (无起始孔)



D_w = 待加工孔径
DC = 铣刀公称直径
B = 计算 360° 螺旋运动的切削深度

坡铣



$$B = (D_w - DC) \times \pi \times \tan \alpha$$

C 141

DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm	α °
16	20,0	0,4	30,0	1,5	2,0
20	24,0	0,4	38,0	1,9	2,0
25	34,0	0,9	48,0	2,5	2,0
32	48,0	1,7	62,0	3,2	2,0
40	64,0	1,9	78,0	3,1	1,5

A 241

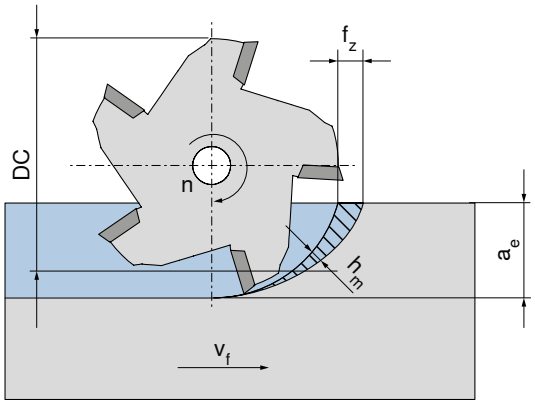
DC mm	$D_{w\text{-}min}$ mm	$B_{1\,max}$ mm	$D_{w\text{-}max}$ mm	$B_{2\,max}$ mm	α °
40	64,0	1,9	78,0	3,1	1,5
50	84,0	1,8	98,0	2,6	1,0
63	110,0	1,2	124,0	1,6	0,5
80	144,0	1,4	158,0	1,7	0,4
100	184,0	1,3	198,0	1,6	0,3
125	234,0	1,2	248,0	1,3	0,2

平均切屑厚度 [h_m] - 选择步骤

方肩铣削

1 从下表中选择合适的平均切屑厚度 [h_m] 对应于相应的钢材料。

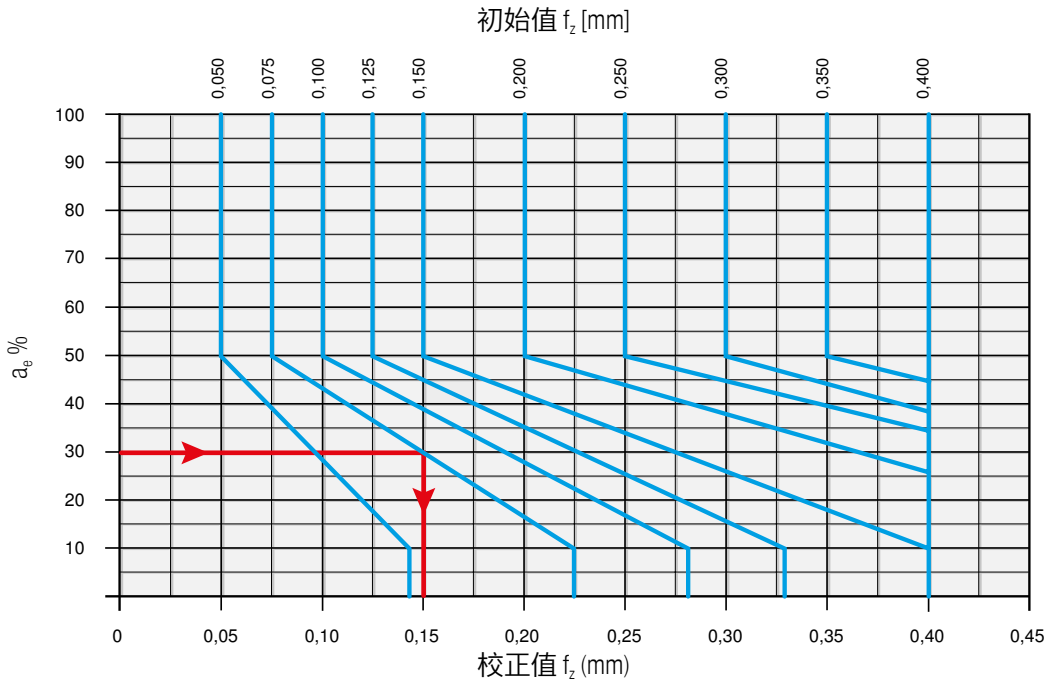
材料	抗拉强度 N/mm²	h_m mm
钢	...-800	0,16
钢	800-1000	0,14
钢	1000-1200	0,12
钢	1200-...	0,10
不锈钢	...-750	0,15
不锈钢	750-900	0,13
不锈钢	900-1150	0,11
不锈钢	1150-...	0,09 *



2 根据所选的平均切屑厚度 [h_m] 和相应的切削宽度 [ae]，从下表中选出进给校正值。

h_m mm	进给校正值 f_z 适用于 h_m				
0,16	0,36	0,29	0,25	0,18	0,16
0,14	0,31	0,26	0,22	0,16	0,14
0,12	0,27	0,22	0,19	0,14	0,12
0,10	0,22	0,18	0,16	0,12	0,10
0,15	0,34	0,27	0,24	0,17	0,15
0,13	0,29	0,24	0,21	0,15	0,13
0,11	0,25	0,20	0,17	0,13	0,11
0,09 *	0,20	0,16	0,14	0,10	0,09 *
a_e =	**0,2 x DC**	**0,3 x DC**	**0,4 x DC**	**0,75 x DC**	**1 x DC**

* f_z < 0.08 mm: 危险，因为刀具无法正常作业和切削



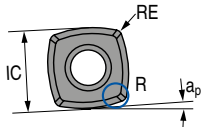
示例:
起始值 (f_z) = 0.075 mm
a_e = 30%
修正值 (f_z) = 0.15 mm

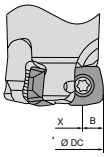
15

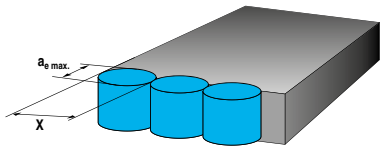
MaxiMill HFC-06 系统

加工方式

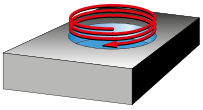
编程半径 R = 1.2 mm

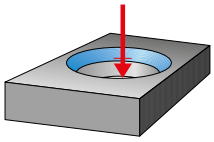


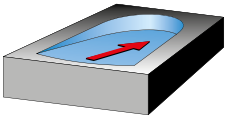




切削深度和残留余量			平面切削宽度			插铣				
IC (mm)	RE (mm)	$a_{P\,max.}$ (mm)	DC (mm)	X (mm)	B (mm)	$a_{e\,max.}$ (mm)	f_z (mm)			X
							初始	min.	max.	
6,35	0,5	0,8	16–32	DC–(2 x B)	4,3	5,3	0,10	0,08	0,15	<0,7 x DC

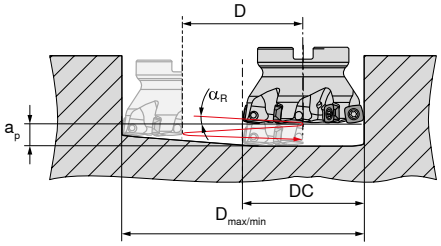






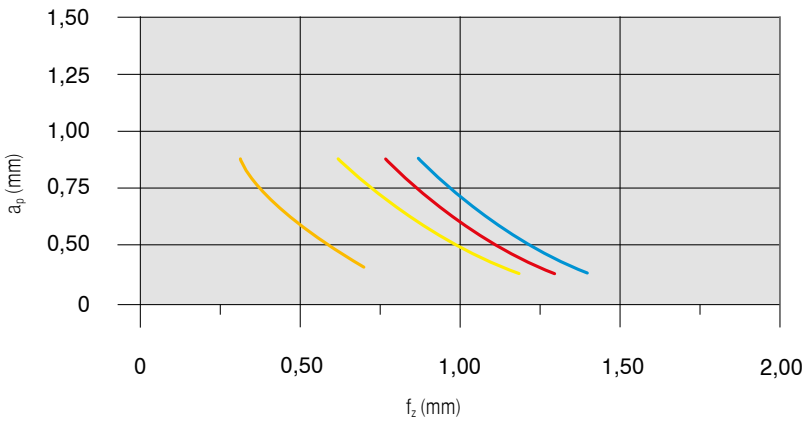
	螺旋插补铣		
	铣孔 (实心螺旋插补铣)		
DC mm	$D_{min.}$ mm	$D_{max.}$ mm	$\alpha_{R\,max.}$ °
16	31	22	4,5°
20	39	30	2,3°
25	49	40	1,3°
32	63	54	0,9°

	轴向插铣	坡铣
	插铣	
DC mm	$X_{max.}$ mm	$\alpha_{R\,max.}$ °
16	0,5	5,9°
20		3,2°
25		2°
32		1,3°



起始推荐参数

XPLX 06



材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XPLX 060305SR-M50	CTPP235	200	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XPLX 060305ER-M40	CTPM240	180	干式
铸铁	K.1.1	EN-GJL-250 (GG25)	XPLX 060305ER-M50	CTCK215	250	干式
高温合金/钛合金	S.2.2	Inconel 718	XPLX 060305SR-F40	CTC5240	35	乳化液

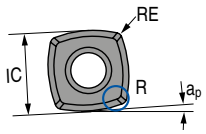
详细的切削速度值请参见 → 页码 142–144

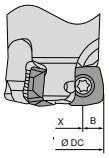
v_c > 400 m/min 时必须做刀具动平衡!

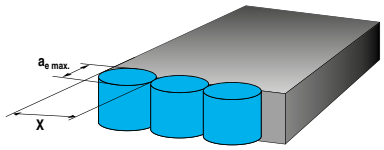
MaxiMill HFC-09 系统

加工方式

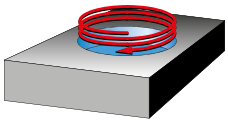
编程半径 R = 2 mm

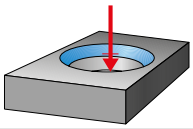


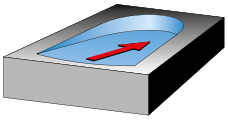




切削深度和残留余量			平面切削宽度			插铣				
IC (mm)	RE (mm)	$a_{P\,max.}$ (mm)	DC (mm)	X (mm)	B (mm)	$a_{e\,max.}$ (mm)	f_z (mm)			X
							初始	min.	max.	
9	0,8	1	25–66	DC–(2 x B)	5,9	7,5	0,10	0,08	0,15	<0,7 x DC

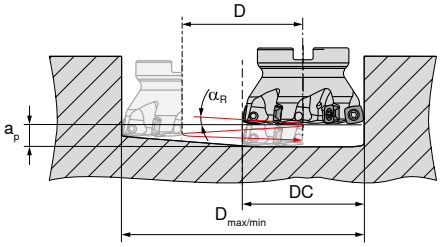






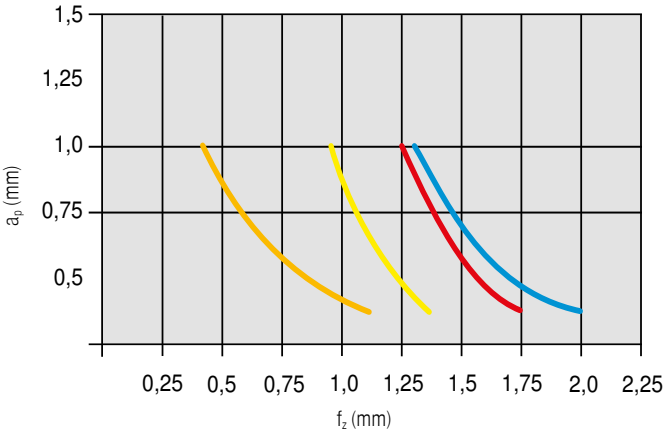
	螺旋插补铣		
	铣孔 (实心螺旋插补铣)		
DC mm	$D_{min.}$ mm	$D_{max.}$ mm	$\alpha_{R\,max.}$ °
25	48	35	3,1°
32	62	49	1,7°
35	68	55	1,4°
40	78	65	1,0°
42	82	69	0,9°
50	98	85	0,8°
52	102	89	0,7°
63	124	111	0,7°
66	130	117	0,6°

	轴向插铣	坡铣
	插铣	
DC mm	$X_{max.}$ mm	$\alpha_{R\,max.}$ °
25		3,6°
32		2,0°
35		1,6°
40		1,2°
42	0,75	1,1°
50		0,9°
52		0,8°
63		0,8°
66		0,7°



起始推荐参数

XDLX 09



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**XDLX09T308SR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**XDLX09T308SR-M50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**XDLX09T308SR-M50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**XDLX09T308ER-F40**	**CTC5240**	35	乳化液

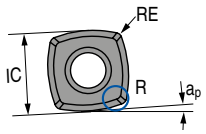
详细的切削速度值请参见 → 页码 142–144

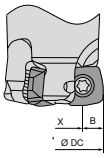
v_c > 400 m/min 时必须做刀具动平衡!

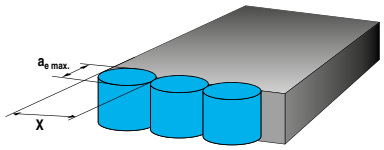
MaxiMill HFC-12 系统

加工方式

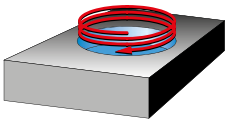
编程半径 R = 3 mm

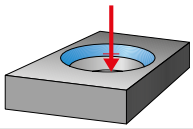


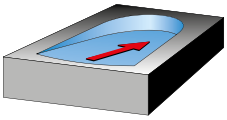




切削深度和残留余量			平面切削宽度			插铣				
IC (mm)	RE (mm)	$a_{P\,max.}$ (mm)	DC (mm)	X (mm)	B (mm)	$a_{e\,max.}$ (mm)	f_z (mm)			X
							初始	min.	max.	
12	1,0	2	32–100	DC–(2 x B)	8,3	10	0,15	0,10	0,20	<0,7 x DC

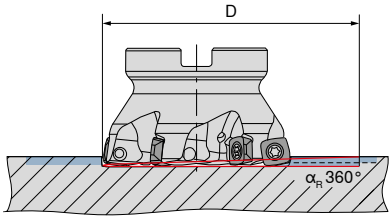






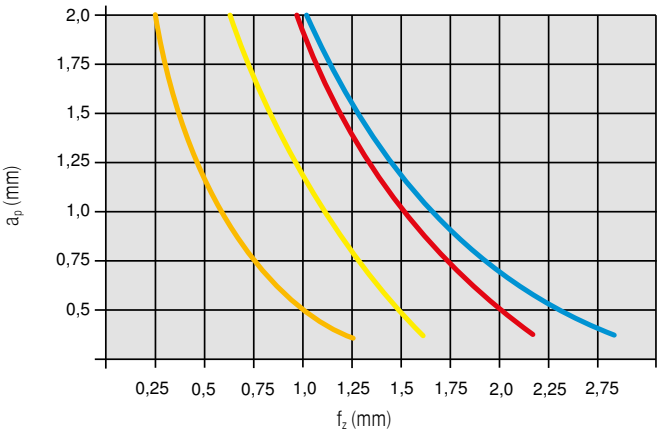
DC mm	螺旋插补铣 铣孔 (实心螺旋插补铣) $D_{min.}$ mm	$D_{max.}$ mm	$\alpha_{R\,max.}$ °
32	62	44	6,1°
35	68	50	3,7°
40	78	60	2,5°
42	82	64	2,3°
50	98	80	1,3°
52	102	84	1,3°
63	124	106	0,9°
66	130	112	0,9°
80	158	140	1,1°
100	198	180	0,6°

DC mm	轴向插铣 插铣 $X_{max.}$ mm	坡铣 $\alpha_{R\,max.}$ °
32	1,15	7,2°
35		4,4°
40		2,9°
42		2,7°
50 + 52		1,5°
63 + 66		1,1°
80		1,3°
100		0,7°



起始推荐参数

XOLX 12



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**XOLX120410SR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**XOLX120410ER-M50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**XOLX120410ER-M50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**XOLX120410ER-F40**	**CTC5240**	35	乳化液

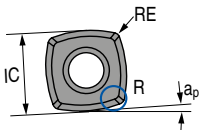
详细的切削速度值请参见 → 页码 142–144

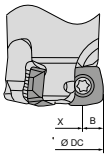
v_c > 400 m/min 时必须做刀具动平衡!

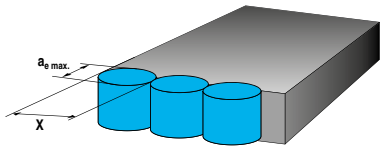
MaxiMill HFC-19 系统

加工方式

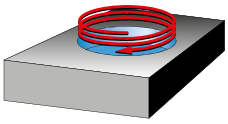
编程半径 R = 5 mm

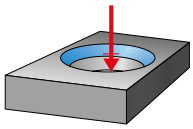


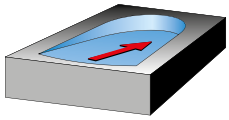




切削深度和残留余量			平面切削宽度			插铣				
IC (mm)	RE (mm)	$a_{P\,max.}$ (mm)	DC (mm)	X (mm)	B (mm)	$a_{e\,max.}$ (mm)	f_z (mm)			X
							初始	min.	max.	
19,14	1,5	3,3	63–160	DC–(2 x B)	13,1	12	0,2	0,10	0,25	<0,65 x DC

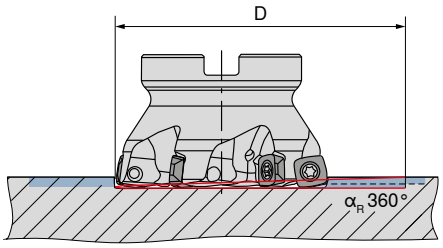






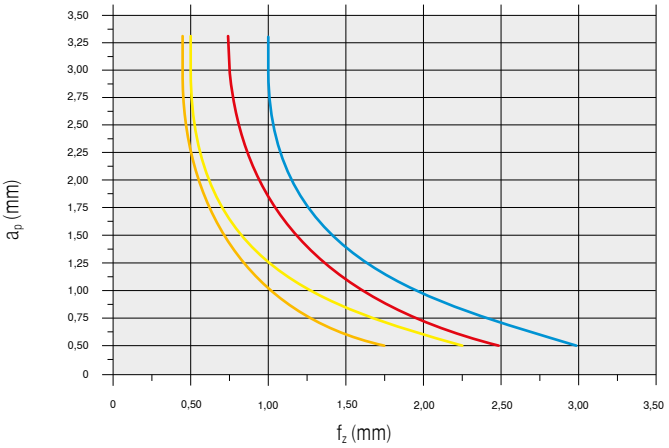
	螺旋插补铣		
	铣孔 (实心螺旋插补铣)		
DC mm	$D_{min.}$ mm	$D_{max.}$ mm	$\alpha_{R\,max.}$ °
63	97	123	2,5
80	131	157	1,4
100	171	197	1,0
125	221	247	0,7
160	291	317	0,5

	轴向插铣	坡铣	
		插铣	
DC mm	$X_{max.}$ mm	$\alpha_{R\,max.}$ °	$a_{p\,max}$ mm
63		2,9	
80		1,8	
100	1,7	1,3	3,3
125		1,0	
160		0,7	



起始推荐参数

XOLX 19



材料名称			刀片		v_c (m/min)	冷却
钢	**P.4.1**	40CrMnMoS 8-6	**XOLX190615SR-M50**	**CTPP235**	200	干式
不锈钢	**M.1.1**	X6CrNiMoTi 1712 2	**XOLX190615SR-M50**	**CTPM240**	180	干式
铸铁	**K.1.1**	EN-GJL-250 (GG25)	**XOLX190615SR-M50**	**CTCK215**	250	干式
高温合金/钛合金	**S.2.2**	Inconel 718	**XOLX190615ER-F40**	**CTC5240**	35	乳化液

详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

DHFC 系统

切削参数推荐值

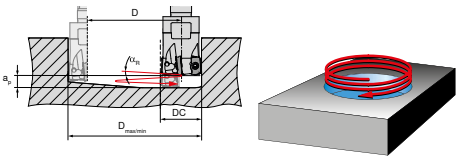
适用于标准刀片

材料名称	F			M			R		
	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm
钢	130-300	0,25-1,0	0,70	130-300	0,25-1,0	0,75			
不锈钢				90-210	0,25-1,0	0,60			
铸铁				120-270	0,2-1,1	0,70	120-270	0,2-1,2	0,75
有色金属									
高温合金/钛合金				40-80	0,15-0,75	0,60			
淬硬钢									
非金属材料									

加工方式

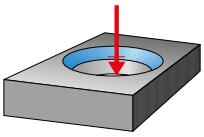
编程半径 R = 1,4 mm

圆形铣削



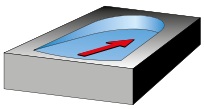
DC mm	D_{min} mm	D_{max} mm
16	23	31
20	31	39
25	41	49
32	55	63
35	61	69
42	75	83

实心轴向插铣



DC mm	X_{max} mm
16	0,35
20	0,40
25	0,45
32-35	0,50
40	0,55

坡铣



DC mm	α°	y mm
16	<2,5	7
20	<1,9	11
25	<1,5	16
32	<1,2	23
35	<1,0	26
42	<0,9	33

详细的切削速度值请参见 → 页码 142-144

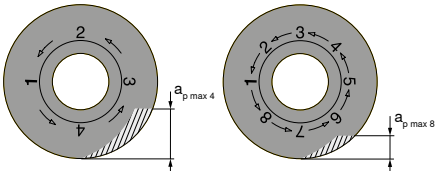
MaxiMill 251/251 RS 系统

技术参数

推荐的切深

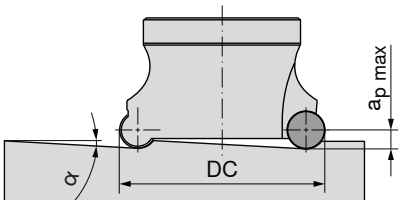
Ø mm	4工位 $a_{p\,max.}$ mm	4工位 $a_{p\,max}$ 理论值 mm	8次 $a_{p\,max.}$ mm
5	1,0	2,0	0,7
8	1,5	3,5	1,1
10	2,5	4,5	1,4
12	3,0	5,5	1,7
16	4,0	7,5	2,3
20	4,0	9,5	2,9

4转位/8转位刀片的切削深度

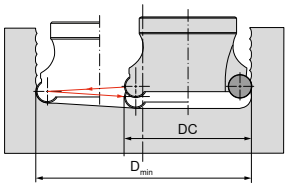


详细的切削速度值请参见 → 页码 142–144

线性坡走铣

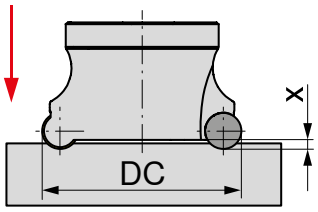


Ø DC mm	05 α °	08 α °	10 α °	12 α °	16 α °	20 α °
10	3,4					
12	16,0					
16	8,0	5,0				
20	5,5	20,0	1,3			
25	4,0	13,0	2,0	6,0		
32	3,0	8,0	3,0	4,0		
40			3,3	2,8		
42			3,1			
50			2,4	2,6	4,0	
52			2,2	2,3		
63				1,9	2,8	
66				1,6		
80				1,3	2,0	3,2
100				1,0	1,5	2,3
125						1,7

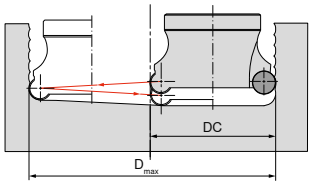


$D_{min.}$ = 最小钻削直径
取决于刀具直径

插铣



Ø DC mm	05 $X_{max.}$ mm	08 $X_{max.}$ mm	10 $X_{max.}$ mm	12 $X_{max.}$ mm	16 $X_{max.}$ mm	20 $X_{max.}$ mm
10	0,5					
12	1,3					
16	1,3	0,5				
20	1,3	2,7	0,2			
25	1,3	2,7	0,4	1,0		
32	1,3	2,7	0,8	1,1		
40			1,5	1,2		
42			1,5	1,5		
50			1,5	1,5	2,0	
52			1,5	1,5	2,0	
63				1,5	2,0	
66				1,5	2,0	
80				1,5	2,0	3,0
100				1,5	2,0	3,0
125						3,0



$D_{max.}$ = 最大孔径
取决于刀具直径

最大可能孔径 = 2 x DC – 1 mm

Ø DC mm	05 D_{min} mm	05 D_{max} mm	05 α_R °	08 D_{min} mm	08 D_{max} mm	08 α_R °	10 D_{min} mm	10 D_{max} mm	10 α_R °	12 D_{min} mm	12 D_{max} mm	12 α_R °	16 D_{min} mm	16 D_{max} mm	16 α_R °	20 D_{min} mm	20 D_{max} mm	20 α_R °
10	12	15	2,5															
12	16	19	2,1															
16	24	27	1,5	21	24	2,4												
20	32	35	1,2	27	32	1,9	26	30	1,3									
25	42	45	1,0	37	42	1,5	37	40	1,8	31	38	2,2						
32	56	59	0,7	51	56	1,2	50	54	1,5	46	52	1,7						
40							64	70	1,1	62	68	1,4						
42							68	74	1,1									
50							84	90	0,9	81	88	1,1	75	84	1,5			
52							88	94	0,9	86	92	1,0						
63										107	114	0,9	101	110	1,1			
66										113	120	0,8						
80										142	148	0,7	135	144	0,9	128	140	1,1
100										181	188	0,5	175	184	0,7	168	180	0,9
125																218	230	0,7

15

R100. 系统

切削参数推荐值

Index	WTN1205	WTN1205	WAN2225	WAN2225	WAN1240	WAN1240	WAX1240	WAX1240	WUN4210	WUN4210
P.1.1	**275**	150			**300**	180	**200**	100		
P.1.2	**230**	130			**270**	160	**170**	90		
P.1.3	**190**	100			**225**	130	**140**	80		
P.1.4	**230**	130			**270**	160	**170**	90		
P.1.5	**210**	110			**240**	140	**160**	90		
P.2.1	**230**	130			**270**	160	**170**	90		
P.2.2	**170**	100			**200**	120	**130**	70		
P.2.3	**230**	130			**270**	160	**170**	90		
P.2.4	**160**	90			**180**	110	**120**	60		
P.3.1	**230**	130			**270**	160	**170**	90		
P.3.2	**150**	110			**180**	140	**140**	80		
P.3.3	**130**	90			**150**	120	**120**	70		
P.4.1	**150**	110			**180**	140	**140**	80		
P.4.2	**150**	100			**170**	130	**130**	70		
M.1.1	**230**	130	**230**	**140**	270	160	170	90		
M.2.1			**200**	**120**						
M.3.1										
K.1.1	**275**	200			360	90	150	110	200	150
K.1.2	**150**	100			360	90	150	110	150	120
K.2.1	**180**	100			230	170	150	110	200	150
K.2.2	**150**	100			160	110	150	110	160	130
K.3.1	**180**	100			210	160			200	150
K.3.2	**180**	100			210	160			150	120
N.1.1										**1200**
N.1.2										**800**
N.2.1										**880**
N.2.2										**800**
N.2.3										**230**
N.3.1										**280**
N.3.2										**280**
N.3.3										**160**
N.4.1										**260**
S.1.1				**50**						
S.1.2				**45**						
S.2.1				**24**						
S.2.2				**16**						
S.2.3				**20**						
S.3.1				**50**						
S.3.2				**32**						
S.3.3				**25**						
H.1.1	**140**	80								
H.1.2	**120**	70								
H.1.3	80	40								
H.1.4										
H.2.1										
H.3.1										
O.1.1									180	150
O.1.2										
O.2.1									260	230
O.2.2										
O.3.1									450	

切削参数受外部条件影响较为明显，例如：刀具和工件夹持的稳定性、材料和机床类型！根据实际使用情况切削参数可以依据推荐值进行大约**±20%** 调整。

R 1000、1002、1007 系统

切削参数推荐值

	f_z / a_p mm	WTN1205	WAN2225	WAN1240	WAX1240	WUN4210
钢						
0501	f_z	**0,1–0,3**				
	a_p	**0,1–0,3**				
07T1	f_z	**0,1–0,3**			**0,1–0,3**	0,1–0,2
	a_p	**0,1–0,3**			**0,1–0,7**	0,1–0,2
0702	f_z	**0,1–0,7**			**0,2–0,5**	0,1–0,2
	a_p	**0,1–0,7**			**0,1–0,75**	0,1–0,2
1003	f_z	**0,1–0,3**		**0,2–0,9**	**0,2–0,7**	0,15–0,3
	a_p	**0,1–1,0**		**0,2–1,5**	**0,2–1,5**	0,1–0,3
12T3	f_z	**0,1–0,3**		**0,25–1,0**	**0,–0,8**	0,15–0,3
	a_p	**0,1–1,5**		**0,2–2,0**	**0,2–2,0**	0,1–0,3
1604	f_z	**0,2–0,3**		**0,3–1,2**	**0,25–1,0**	0,15–0,3
	a_p	**0,2–1,5**		**0,25–3,0**	**0,2–3,0**	0,1–0,4
2006	f_z	**0,25–0,4**				0,15–0,4
	a_p	**0,2–2,0**				0,1–0,3

不锈钢						
0501	f_z	0,1–0,15				
	a_p	0,1–0,15				
07T1	f_z	0,1–0,2			0,1–0,3	0,1–0,2
	a_p	0,1–0,2			0,1–0,7	0,1–0,2
0702	f_z	0,1–0,2			0,2–0,5	0,1–0,2
	a_p	0,1–0,2			0,1–0,75	0,1–0,2
1003	f_z	0,15–0,3	**0,15–0,6**		0,2–0,7	0,15–0,3
	a_p	0,1–0,3	**0,4–1,0**		0,2–1,5	0,1–0,3
12T3	f_z	0,15–0,3	**0,2–0,8**		0,–0,8	0,15–0,3
	a_p	0,1–0,3	**0,5–2,0**		0,2–2,0	0,1–0,3
1604	f_z	0,15–0,3	**0,3–1,0**		0,25–1,0	0,15–0,3
	a_p	0,1–0,3	**0,6–3,0**		0,2–3,0	0,1–0,3
2006	f_z	0,15–0,4				0,15–0,4
	a_p	0,1–0,4				0,1–0,4

铸铁						
0501	f_z	**0,1–0,2**				
	a_p	**0,1–0,3**				
07T1	f_z	**0,1–0,3**			0,1–0,3	0,1–0,3
	a_p	**0,1–0,5**			0,1–0,5	0,1–0,5
0702	f_z	**0,1–0,3**			0,1–0,3	0,1–0,3
	a_p	**0,1–0,7**			0,1–0,7	0,1–0,7
1003	f_z	**0,15–0,3**		0,1–0,3	0,1–0,3	0,15–0,3
	a_p	**0,1–1,0**		0,1–1,0	0,1–1,0	0,1–1,0
12T3	f_z	**0,15–0,4**		0,1–0,4	0,1–0,4	0,15–0,4
	a_p	**0,1–1,5**		0,1–1,15	0,1–1,5	0,1–1,5
1604	f_z	**0,2–0,5**		0,2–0,5	0,2–0,5	0,2–0,5
	a_p	**0,2–3,0**		0,2–2,0	0,2–3,0	0,2–3,0
2006	f_z	**0,25–0,6**				0,25–0,6
	a_p	**0,2–4,0**				0,2–4,0

R 1000、1002、1007 系统

切削参数推荐值

	f_z / a_p mm	WTN1205	WAN2225	WAN1240	WAX1240	WUN4210
有色金属						
07T1	f_z					**0,1–0,3**
	a_p					**0,1–0,7**
0702	f_z					**0,1–0,3**
	a_p					**0,1–1,0**
1003	f_z					**0,1–0,3**
	a_p					**0,1–1,5**
12T3	f_z					**0,1–0,4**
	a_p					**0,1–2,0**
1604	f_z					**0,2–0,5**
	a_p					**0,2–4,0**
2006	f_z					**0,25–0,6**
	a_p					**0,2–5,0**
高温合金/钛合金						
1003	f_z		**0,1–0,4**			
	a_p		**0,2–1,0**			
12T3	f_z		**0,15–0,5**			
	a_p		**0,3–1,5**			
1604	f_z		**0,15–0,5**			
	a_p		**0,3–2,0**			
淬硬钢						
0501	f_z	**0,1–0,15**				
	a_p	**0,1–0,2**				
07T1	f_z	**0,1–0,15**				
	a_p	**0,1–0,2**				
0702	f_z	**01–0,2**				
	a_p	**0,1–0,3**				
1003	f_z	**0,1–0,2**				
	a_p	**0,1–0,5**				
12T3	f_z	**0,1–0,25**				
	a_p	**0,1–0,7**				
1604	f_z	**0,15–0,3**				
	a_p	**0,2–1,0**				
2006	f_z	**0,2–0,4**				
	a_p	**0,2–1,0**				
非金属材料						
07T1	f_z					0,1–0,3
	a_p					0,1–0,7
0702	f_z					0,1–0,3
	a_p					0,1–1,0
1003	f_z					0,1–0,3
	a_p					0,1–1,5
12T3	f_z					0,1–0,4
	a_p					0,1–2,0
1604	f_z					0,2–0,5
	a_p					0,2–4,0
2006	f_z					0,25–0,6
	a_p					0,2–5,0

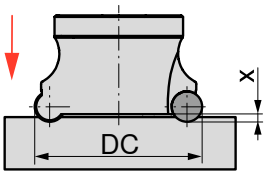
WTN 1205

最高 48 HRC: a_p 范围如表中所示:
最高 55 HRC: 最大值 a_p x 0.7
最高 65 HRC: 最大值 a_p x 0.5

R 1000、1002、1007 系统

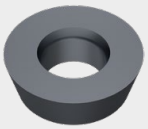
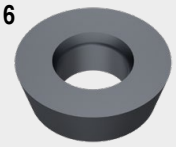
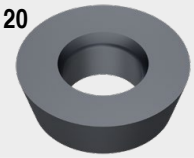
加工方式

插铣

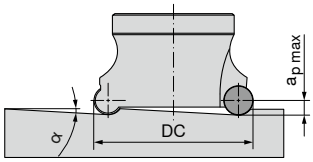


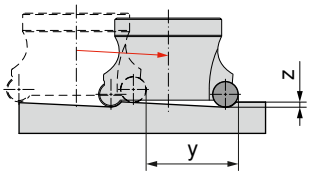
如表中所示将 f_z 降低 30%

→ vc 请参见页码 178–180

	05	07	10	12	16	20
						
ØDC mm	$X_{max.}$ mm	$X_{max.}$ mm	$X_{max.}$ mm	$X_{max.}$ mm	$X_{max.}$ mm	$X_{max.}$ mm
8–160	1,0	1,2	2,5	3,0	4,0	5,0

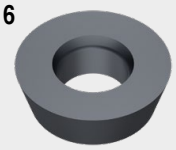
线性坡走铣





y = 最小刀具运动
z = 最小刀具运动
a_p / f_z 应用表中所示值

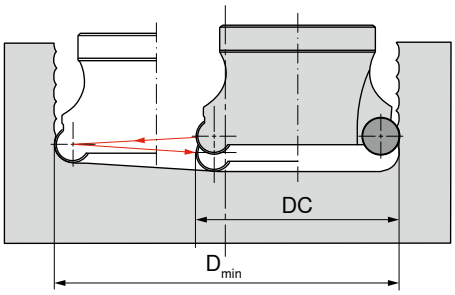
→ vc 请参见页码 178–180

	05			07			10			12			16			20		
																		
ØDC mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm
8	26,5	2	< 1,0															
10																		
12	14,0	4	< 1,0															
14	9,5	6	< 1,0															
15	8,1	7	< 1,0	26,5	2	< 1,2												
16	7,1	8	< 1,0	14,0	4	< 1,2												
18	5,7	10	< 1,0	11,3	6	< 1,2												
20	4,7	12	< 1,0	8,5	8	< 1,2												
22																		
24																		
25				5,3	13	< 1,2	19,7	7	< 2,5									
30				3,8	18	< 1,2	11,7	12	< 2,5									
32																		
35				3,0	23	< 1,2	8,4	17	< 2,5	13,0	13	< 3,0	38,7	5	< 4,0			
40																		
42				2,3	30	< 1,2	5,9	24	< 2,5	8,5	20	< 3,0						
50																22,6	12	< 5,0
52							4,2	34	< 2,5	5,7	30	< 3,0	10,3	22	< 4,0			
66										3,9	44	< 3,0	6,4	36	< 4,0	10,1	28	< 5,0
80										3,0	58	< 3,0	4,6	50	< 4,0	6,8	42	< 5,0
100													3,3	70	< 4,0	4,6	62	< 5,0
125													2,4	95	< 4,0	3,3	87	< 5,0
160													1,8	130	< 4,0	2,3	122	< 5,0

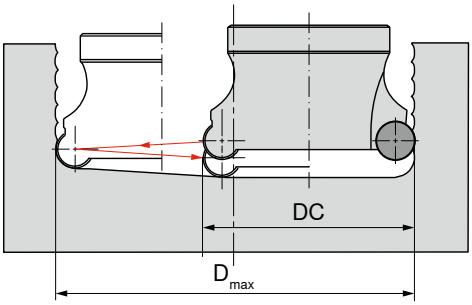
R 1000、1002、1007 系统

加工方式

螺旋坡走铣



D_{min} = 最小钻削直径，取决于刀具直径



D_{max} = 最大钻削直径，取决于刀具直径

a_p / f_z 如表中所示

→ vc 请参见页码 178–180

	05			07			10			12			16			20		
ØDC mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm	α°	y mm	z mm
8	10	16																
10	12	20																
12	16	24	14	24														
14	20	28	16	28														
15	22	30	17	30														
16	24	30	20	32														
18	28	36	24	36	20	36												
20	32	40	28	40	22	40												
22							24	44										
24							26	48										
25			38	50	32	50												
30			48	60	42	60												
32									34	64								
35			58	80	72	70	48	70	40	70			38,7	5	< 4,0			
40											42	80						
42			72	84	66	84	62	84										
50											62	100				22,6	12	< 5,0
52					86	104	82	104	74	104			10,3	22	< 4,0			
66							110	132	102	132	94	132	6,4	36	< 4,0	10,1	28	< 5,0
80							138	160	130	160	122	160	4,6	50	< 4,0	6,8	42	< 5,0
100									170	200	162	200	3,3	70	< 4,0	4,6	62	< 5,0
125									220	250	212	250	2,4	95	< 4,0	3,3	87	< 5,0
160									290	320	282	320	1,8	130	< 4,0	2,3	122	< 5,0

MaxiMill 252 系统

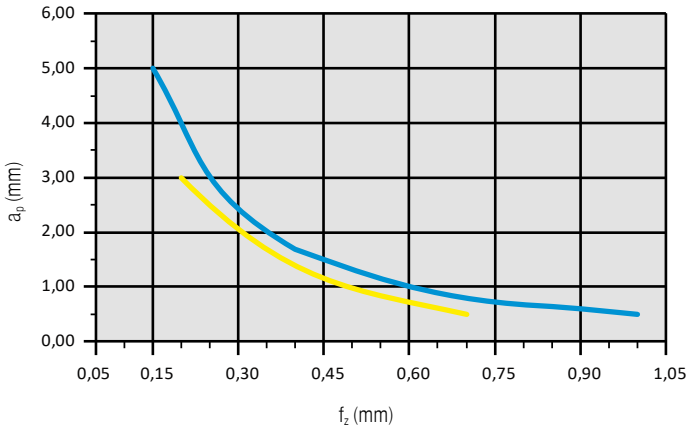
加工方式

推荐的切深

Ø mm	4工位 $a_{p\,max}$ mm	mm
10	2,5	4,5
12	3,0	5,5

起始推荐参数

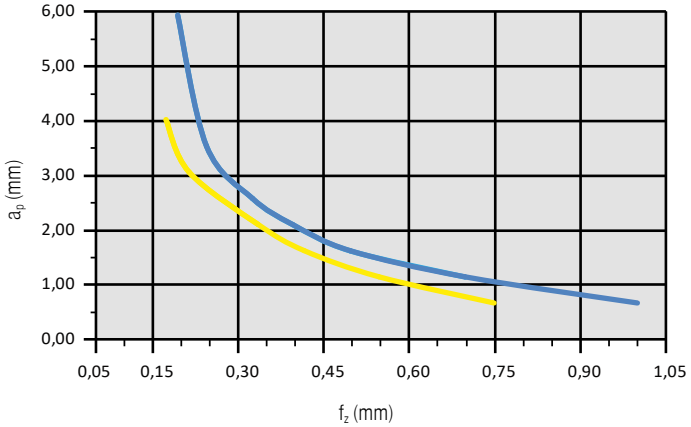
RNHU 10



材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XOLX120410SR-M50	CTPP235	180	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XOLX120410ER-M50	CTPM240	180	干式

起始推荐参数

RNHU 12



材料名称			刀片		v_c (m/min)	冷却
钢	P.4.1	40CrMnMoS 8-6	XOLX120410SR-M50	CTPP235	180	干式
不锈钢	M.1.1	X6CrNiMoTi 1712 2	XOLX120410ER-M50	CTPM240	180	干式

详细的切削速度值请参见 → 页码 142–144

v_c > 400 m/min 时必须做刀具动平衡!

K200. 切削参数推荐值

	R	F	R	F	R	F	R	F	R	F	● 首选	○ 备选	
	CTPK226		CTPP211		CTPK231		CTCN211		CTPP216		乳化液	压缩空气	微量润滑
材料组	v_c m/min		v_c m/min		v_c m/min		v_c m/min		v_c m/min				
P.1.1		280–300	180–220	220–280	160–200				220–300	280–300	○	●	●
P.1.2		220–240	180–220	220–280	160–200				220–300	280–300	○	●	●
P.1.3		220–240	180–220	220–280	160–200				220–300	280–300	○	●	
P.1.4		220–240	180–220	220–280	160–200				220–300	280–300	○	●	
P.1.5		220–240	180–220	220–280	160–200				220–300	280–300	○	●	
P.2.1		280–300	180–220	220–280	160–200				220–300	280–300	○	●	●
P.2.2		280–300	180–220	220–300	160–200				220–300	280–300	○	●	●
P.2.3		280–300	180–220	240–320	160–200				250–360	240–320	○	●	
P.2.4		280–300	180–220	240–320	160–200				250–360	240–320	○	●	
P.3.1		280–300	180–220	220–280	160–200				220–300	280–300	○	●	
P.3.2		280–320	180 – 220	240–320	160–200				250–360	240–320	○	●	●
P.3.3		280–320	180 – 220	240–320	160–200				250–360	240–320	○	●	●
P.4.1		220–220	140–180	200–240	120–180				140–180	200–240	○	●	
P.4.2		220–220	140–180	200–240	120–180				140–180	200–240	○	●	
M.1.1		180–200	140-160	180-200	120–160				220-250	220-240	●	○	
M.2.1		180–200	140-160	180-240	120–160				220-250	220-240	●		
M.3.1		220–220	140-180	200-240	120–180				140-180	200-240	●		
K.1.1		280–300	160-200	200-300	120–200				240–350	240–260		●	○
K.1.2		280–300	160-200	200-300	120–200				240–350	240–260		●	○
K.2.1		280–300	160-200	200-300	120–200				240–350	240–260		●	○
K.2.2		300–350	180-220	240-350	180–200				340–400	240–360		●	○
K.3.1		300–350	180-220	240-350	180–200				340–400	240–360		●	○
K.3.2		240–260	160-200	220-260	160–200				280–340	220–300		●	○
N.1.1			240-280	300-600	300-600					400-450	●		
N.1.2			240-280	300-600	300-600					400-450	●		
N.2.1			240-280	300-600	300-600					400-450	●		
N.2.2			240-280	300-600	300-600					400-450	●		
N.2.3										300-400	●		
N.3.1			240-280	280-320	240-280					300-400	●		
N.3.2			240-280	280-320	240-280					300-400	●		
N.3.3			240-280	280-320	240-280					300-400	●		
N.4.1			300-400	300-400				300-400			●		
S.1.1				80-120	80-120					60-80	●		
S.1.2				80-120	80-120					60-80	●		
S.2.1				80-120	80-120					60-80	●		
S.2.2				80-120	80-120					60-80	●		
S.2.3				80-120	80-120					60-80	●		
S.3.1				60-80	80-120					60-80	●		
S.3.2				60-80	60-80					60-80	●	○	
S.3.3				60-80	60-80					60-80	●	○	
H.1.1		240-260		280-300	140-160				240–260	240–260		●	
H.1.2		240-260		280-300	80-100				220–240	160–240		●	○
H.1.3		200-220		240-260					120–140	100–140		●	○
H.1.4		120-140		160-200								●	○
H.2.1		240-260		280-300	80-100				220–240	160–240		●	○
H.3.1		240-260		280-300	80-100				220–240	160–240		●	
O.1.1			300-400	300-400						300-350		●	
O.1.2			500-600	500-600						600-800		●	
O.2.1			300-400	300-400								●	
O.2.2			300-400	300-400								●	
O.3.1							400–600	600–800				●	

K200. 切削参数推荐值

	粗加工 (R)		精加工 (F)		仅用于 -MR3 粗加工 (R)		● 首选	○ 备选	
	Ø 6-16	Ø 20-32	Ø 6-16	Ø 20-32	Ø 6-16	Ø 20-32	乳化液	压缩空气	微量润滑
材料组	f_z (mm)		f_z (mm)		f_z (mm)				
P.1.1	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○	●	●
P.1.2	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○	●	●
P.1.3	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○		●
P.1.4	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○		●
P.1.5	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○		●
P.2.1	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○	●	●
P.2.2	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○	●	●
P.2.3	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○		●
P.2.4	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○		●
P.3.1	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○		●
P.3.2	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○	●	●
P.3.3	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,6**	**0,8–1,25**	○	●	●
P.4.1	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○		●
P.4.2	0,08–0,04	**0,25–0,5**	**0,08–0,3**	**0,2–0,8**	**0,3–0,8**	**1,2–1,5**	○		●
M.1.1	0,08–0,4	**0,25–0,5**	0,08–0,3	0,2–0,5	**0,3–0,6**	0,8–1,5	●	○	
M.2.1	0,08–0,4	**0,25–0,5**	0,08–0,4	0,2–0,6	**0,3–0,6**	0,8–1,25	●		
M.3.1	0,08–0,4	**0,25–0,5**	0,08–0,5	0,2–0,7	**0,3–0,6**	0,8–1,25	●		
K.1.1	0,08–0,4	**0,25–0,5**	0,08–0,3	0,2–0,5	**0,3–0,8**	1,0–1,5		●	○
K.1.2	0,08–0,5	**0,25–0,6**	0,08–0,4	0,2–0,6	**0,3–0,8**	1,0–1,5		●	○
K.2.1	0,08–0,6	**0,25–0,7**	0,08–0,5	0,2–0,7	**0,3–0,8**	1,0–1,5		●	○
K.2.2	0,08–0,7	**0,25–0,8**	0,08–0,6	0,2–0,8	**0,3–0,6**	0,8–1,25		●	○
K.3.1	0,08–0,8	**0,25–0,9**	0,08–0,7	0,2–0,9	**0,3–0,6**	0,8–1,25		●	○
K.3.2	0,08–0,9	**0,25–0,10**	0,08–0,8	0,2–0,10	**0,3–0,6**	0,8–1,25		●	○
N.1.1	0,08–0,35	0,25–0,45	0,06–0,25	0,025–0,45			●		
N.1.2	0,08–0,36	0,25–0,46	0,06–0,26	0,025–0,46			●		
N.2.1	0,08–0,37	0,25–0,47	0,06–0,27	0,025–0,47			●		
N.2.2	0,08–0,38	0,25–0,48	0,06–0,28	0,025–0,48			●		
N.2.3	0,08–0,39	0,25–0,49	0,06–0,29	0,025–0,49			●		
N.3.1	0,08–0,40	0,25–0,50	0,06–0,30	0,025–0,50			●		
N.3.2	0,08–0,41	0,25–0,51	0,06–0,31	0,025–0,51			●		
N.3.3	0,08–0,42	0,25–0,52	0,06–0,32	0,025–0,52			●		
N.4.1	0,08–0,43	0,25–0,53	0,06–0,33	0,025–0,53			●		
S.1.1	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.1.2	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.2.1	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.2.2	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.2.3	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.3.1	0,08–0,3	0,15–0,4	0,05–0,2	0,15–0,25	0,25–0,5	0,6–1,0	●		
S.3.2	0,08–0,35	0,4–0,5	0,08–0,3	0,25–0,5	0,25–0,5	0,6–1,0	●	○	
S.3.3	0,08–0,35	0,4–0,5	0,08–0,3	0,25–0,5	0,25–0,5	0,6–1,0	●	○	
H.1.1								●	
H.1.2								●	○
H.1.3								●	○
H.1.4								●	○
H.2.1								●	○
H.3.1								●	
O.1.1								●	
O.1.2								●	
O.2.1								●	
O.2.2								●	
O.3.1								●	

K200. 的最大切削深度 $_p$

球头刀片									
工件直径 (mm)		6	8	10	12	16	20	25	32
		$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$
ROHX-FM3	**R**	0,8	1,0	1,5	2,0	3,0	4,0	5,0	6,0
	F	0,4	0,8	1,0	1,2	1,5	1,5	2,0	2,0
ROHX-FM4	**R**	0,8	1,0	2,0	3,0	4,0	5,0	6,0	8,0
	F	0,4	0,8	1,0	1,2	1,5	1,5	2,0	2,0
ROHX-FM6	**R**	0,8	1,0	1,5	2,0	3,0	4,0	5,0	6,0
	F	0,4	0,8	1,0	1,2	1,5	1,5	2,0	2,0
ROGX-MR4	**R***				4,0	6,0	8,0	12,0	16,0
	F				2,0	3,0	4,0	5,0	6,0
ROHX-MR5	**R**		1,5	2,0					
	F		0,8	1,0					

*a_p 完全干涉最大值为直径 DC 的 25%!

牛鼻刀片									
工件直径 (mm)		6	8	10	12	16	20	25	32
		$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$	$a_{p\ max.}$
XOHX-FM5	**R**		2,0	3,0	3,0	4,0	5,0	6,0	8,0
	F		0,6	2,0	2,4	3,2	4,0	5,0	6,4
XOHX-MR6	**R**		2,0	3,0	3,0	4,0	5,0	6,0	8,0
	F		0,6	2,0	2,4	3,2	4,0	5,0	6,4
XOHX-FM1	**R**			1,5	2,0	3,0	4,0		
	F			0,8	0,8	1,0	1,0		
XOHX-FM2	**R**		1,0	1,5	2,0	3,0	4,0	5,0	
	F		0,5	0,7	0,8	1,0	1,0	1,5	
XOHX-MR2	**R**	0,8	1,0	1,5	2,0	3,0	4,0	5,0	
	F	0,5	0,5	0,7	0,8	1,0	1,0	1,5	
XOGX-MF4	**R**			1,5	2,0	3,0	4,0		
	F			0,7	0,8	1,0	1,0		
XOHX-MR3	**R**			0,5	0,6	0,8	1,0		
	F								

几何设计应用范围

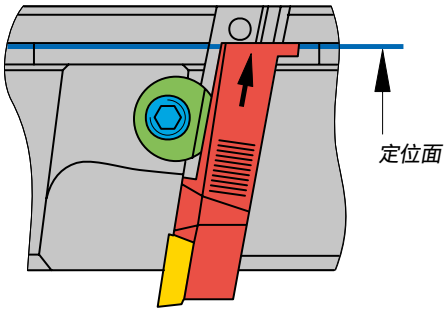
刀片	F	M	R	主要应用
XOHX-FM1	●	●		钢、铸钢、耐热钢、淬硬钢，最高 63 HRc
XOHX-FM2	●	●		钢、铸钢、耐热钢、淬硬钢，最高 60 HRc
ROHX-FM3	●	●		钢、铸钢、耐热钢
ROHX-FM4	●	●		钢、铸钢、耐热钢、淬硬钢，最高 60 HRc
XOHX-FM5	●	●		钢、铸钢、耐热钢、淬硬钢，最高 60 HRc
ROHX-FM6	●	●	●	有色金属、塑料、石墨
XOHX-MR2		●	●	长切屑黑色金属
XOHX-MR3		●	●	钢、铸钢、耐热钢
ROGX-MR4		●	●	钢、铸钢、耐热钢
XOGX-MF4	●	●		钢、铸钢、耐热钢
ROHX-MR5		●	●	长切屑黑色金属
XOHX-MR6		●	●	长切屑黑色金属

TX 切削参数推荐值

材料组	CWX500 v_c m/min	CWK10 v_c m/min
P.1.1	160	
P.1.2	140	
P.1.3	110	
P.1.4	110	
P.1.5	90	
P.2.1	110	
P.2.2	90	
P.2.3	90	
P.2.4	80	
P.3.1	80	
P.3.2	60	
P.3.3	50	
P.4.1	100	
P.4.2	90	
M.1.1	110	
M.2.1	90	
M.3.1	70	
K.1.1	140	
K.1.2	100	
K.2.1	90	
K.2.2	80	
K.3.1	140	
K.3.2	120	
N.1.1	600	250
N.1.2	400	230
N.2.1	220	210
N.2.2	180	190
N.2.3	140	120
N.3.1	240	200
N.3.2	200	180
N.3.3	180	160
N.4.1	180	160
S.1.1	60	
S.1.2	50	
S.2.1	60	
S.2.2	50	
S.2.3	40	
S.3.1	60	
S.3.2	40	
S.3.3	30	
H.1.1		
H.1.2		
H.1.3		
H.1.4		
H.2.1		
H.3.1		
O.1.1	180	160
O.1.2	180	160
O.2.1	150	120
O.2.2	110	100
O.3.1	170	160

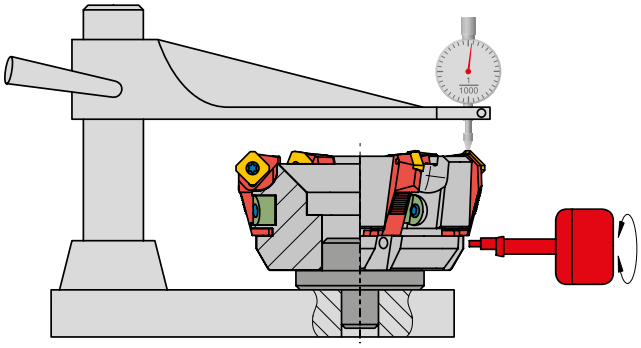
MaxiMill 260 系统

粗加工轴向跳动设置



组装时，只需将刀夹压到径向槽的定位面上即可。在主刀片上测量的轴向跳动量为 0.03 mm。

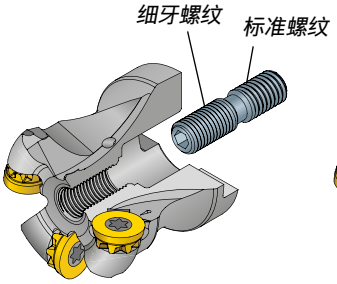
使用千分表或对刀仪进行轴向跳动设置



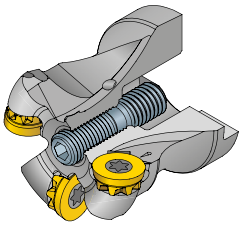
轴向跳动设置最高精度为 0.002 mm

- 清洁刀具
- 将刀具安装在适当的设置装置上。
- 松开夹紧楔，将刀夹推向正面并轻轻拧紧楔块。
- 将偏心扳手插入孔内并转动，直到刀夹处于所需位置。
- 保持偏心扳手与刀夹接触，使其保持在原位。
  拧紧楔块（扭矩 10 Nm）。
- 刀具随即可以使用。

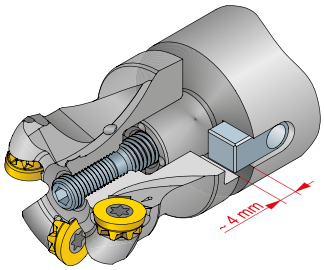
安全轻松装夹 – 使用CERATIZIT-强力螺钉



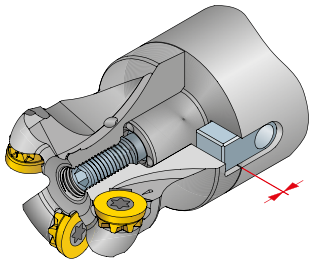
把强力螺钉的细牙部分旋入铣刀盘。



把强力螺钉小心拧进，直到到底（此时螺钉已完全旋入）。



为保证刀具和刀柄的最佳扭矩传递，驱动块必须大于4 mm。使用标准化刀柄可自动保证该值。重新调整时，可以通过0.5 mm/rev 速度调整。



锁紧强力螺钉。

铣刀锁紧扭矩

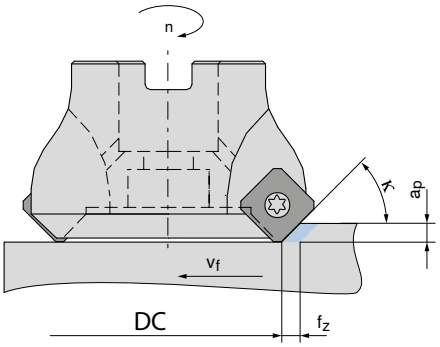
	10				12				16			
铣刀直径 Ø mm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm
40			70 950 151	10			70 950 151	10				
42			70 950 151	10			70 950 151	10				
50	M10x25	80			M10x25	80					70 950 154	15
52					M10x25	80					70 950 154	15
63					M10x25	80			M10x25	80		
66					M10x25	80			M10x25	80		

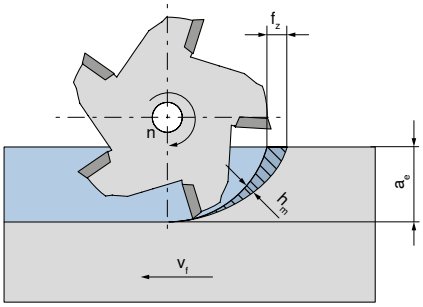
	12				16				20			
铣刀直径 Ø mm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm	ISK-螺钉 DIN 912	M_d Nm	紧固螺钉 订货编号:	M_d Nm
80	M12x30	140			M12x30	140			M12x30	140		
100	M16x35	180			M16x35	180			M16x35	180		
125					M16x35	180			M16x35	180		

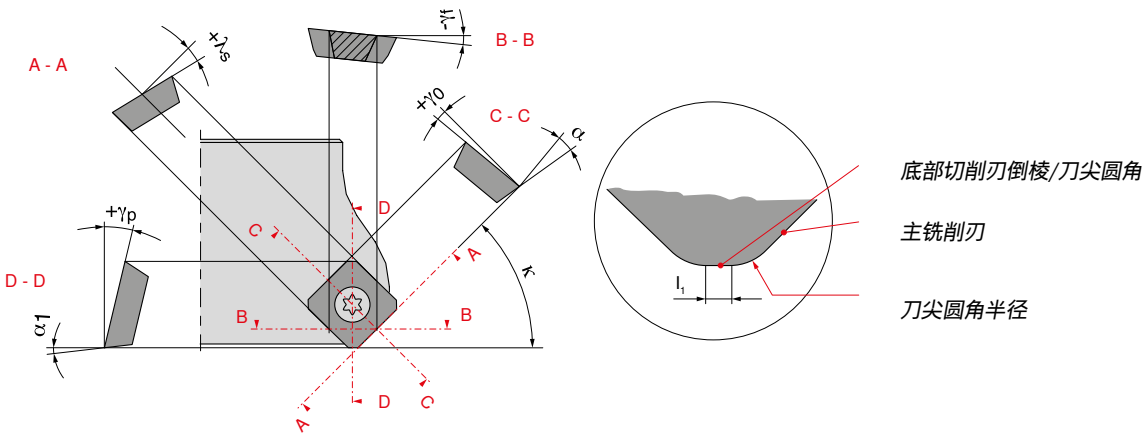
名称代码及单位

a_e	切削宽度	mm
a_p	切削深度	mm
DC	铣刀直径	mm
D_w	工件直径	mm
f_z	每齿进给量	mm
h_m	平均切屑厚度	mm
k	刀片行数	
k_c	切削力	N/mm²
$k_{c1.1}$	1 mm² 切屑横切面的切削力	N/mm²
BS	底部切削刃倒棱长度	mm
m_c	增加的切削力	
n	主轴转速	rpm
Q	金属去除率	(cm³min)
v_c	切削速度	(m/min)
v_f	进给率	(mm/min)
ZNF	有效刃数	

γ_0	有效前角（复合前角）	[°]
γ_f	径向前角	[°]
γ_p	轴向前角	[°]
κ	主偏角	[°]
λ_s	斜角	[°]
α	后角	[°]
α_1	底部切削刃倒棱后角	[°]



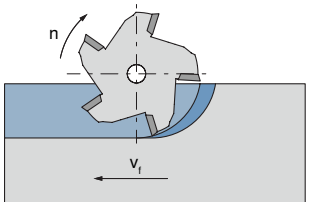




铣削方式

有利加工

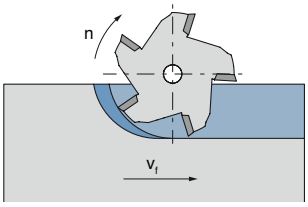
顺铣



工件的进给方向与切削区域中铣刀的旋转方向相同。切屑在开始时具有最大厚度，随后切屑厚度逐渐减小，至切削结束时变为零。

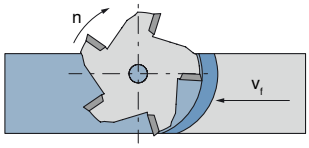
不利加工

逆铣

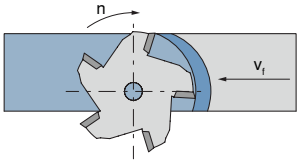


工件的进给方向与切削区域中铣刀的旋转方向相反。切屑厚度在开始时为零，随后逐渐增加，至切削结束时达到最大值。

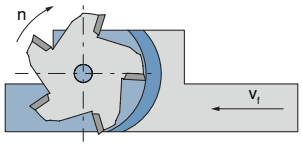
刀具位置



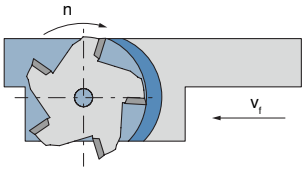
刀具应尽可能切向退出工件。



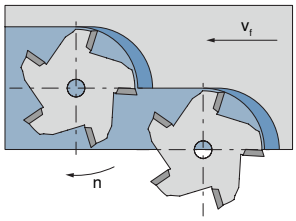
工件位置



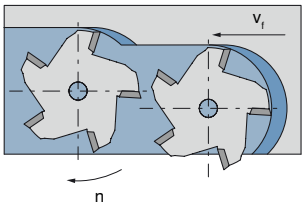
工件的夹紧方式应使刀具沿整个加工长度切向出现在工件上。



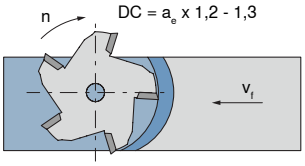
重合



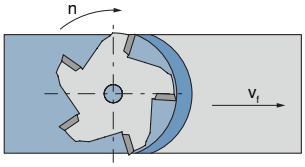
采用顺铣或确保刀具切向退出工件，如左图所示。



铣刀尺寸



面铣时，刀具直径应比工件大20-30%。



ISO-编码规则 – 铣削刀片

X	D	K	T	11	T3	08	S	R	-	F50
1	2	3	4	5	6	7	8	9		10

Z	N	H	W	12	05	PO	S	R	-	15	06	-	R
1	2	3	4	5	6	7	8	9		11	12		13

1 刀片形状

A	85°	
B	82°	
K	55°	
H	120°	
L	90°	
O	135°	
P	108°	
C	80°	
D	55°	
E	75°	
M	86°	
V	35°	
R		
S	90°	
T	60°	
W	80°	
X	特殊形式	
Z		

2 后角

	α
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
O	特殊形式

3 公差

	IC ±mm	BS ±mm	S ±mm	IC = 6,35 / 9,52	IC = 12,7	IC = 15,8 / 19,05
A	0,025	0,005	0,025	●	●	●
C	0,025	0,013	0,025	●	●	●
E	0,025	0,025	0,025	●	●	●
F	0,013	0,005	0,025	●	●	●
G	0,025	0,025	0,13	●	●	●
H	0,013	0,013	0,025	●	●	●
J	0,05	0,005	0,025	●		
	0,08	0,005	0,025		●	
	0,10	0,005	0,025			●
K	0,05	0,013	0,025	●		
	0,08	0,013	0,02		●	
	0,10	0,013	0,02			●

	IC ±mm	BS ±mm	S ±mm	IC = 6,35 / 9,52	IC = 12,7	IC = 15,8 / 19,05
M	0,05	0,08	0,13	●		
	0,08	0,13	0,13		●	
	0,10	0,15	0,13			●
N	0,05	0,08	0,025	●		
	0,08	0,13	0,025		●	
	0,10	0,15	0,025			●
U	0,08	0,13	0,13	●		
	0,13	0,20	0,13		●	
	0,18	0,27	0,13			●

7 底部切削刃倒棱 / 刀尖圆角半径

倒圆

	RE (mm)
M0*	
02	0,2
04	0,4
08	0,8
12	1,2

* 仅形状"R"

第1符号

	K_r
A	45°
D	60°
E	75°
F	85°
P	90°
Z	其他

第2符号

	α'_n
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
Z	其他
O	

8 切削刃

F 锋利

E 倒圆

S 倒圆与倒棱

T 倒棱

9 切削方向

R

L

N

4

刀片锁紧形式

A	
F	
G	
M	
N	
Q	
R	
T	
U	
W	
X	特殊形式

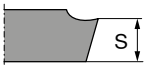
5

切削刃长度

IC mm	A	T	C/S	H	L	R	V	W	O	X	Z
4,90										07	
5,00						05					
5,56			05		08			03			
6,00											
6,35		11	06		10			04		06	
6,65	10										
6,80										11	
7,00											04
7,94			07								
8,00						08					
9,00					12						
9,30										15	
9,52	16	16	09		15			06	04		
9,57	15										
9,60										09	
10,00			10		11	10					12
12,00						12					
12,50										20	
12,70		12/22	12		20		22	08		12	
15,81			15		22			10			
16,00						16					
16,20				09							
16,74			16								
17,00			17								
17,18									06		
18,18									07		
19,05			19					13			
20,00						20					

6

刀片厚度



	S mm
01	1,59
T1	1,98
02	2,38
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
07	7,94
09	9,52

10

断屑槽型

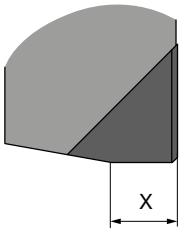
断屑槽型号
F..= 精加工
M..= 半精加工
R.. 粗加工

其他特性:
R = 主/副切削刃过渡圆弧
Q = 修光刃

11

制造商规格

精加工切削刃长度

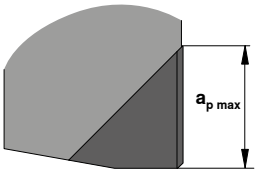


00 = 0,0 mm
10 = 1,0 mm
12 = 1,2 mm
15 = 1,5 mm
30 = 3,0 mm
50 = 5,0 mm

12

制造商规格

$a_{p\,max}$



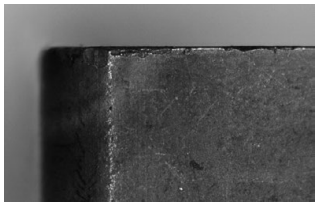
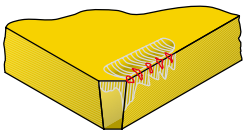
02 = 2,0 mm
03 = 3,0 mm
04 = 4,0 mm
06 = 6,0 mm
07 = 7,0 mm
11 = 11,0 mm

13

制造商规格

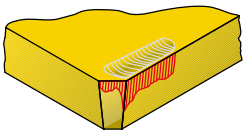
F = 精加工
M = 半精加工
R = 粗加工

问题 / 原因 / 解决方案

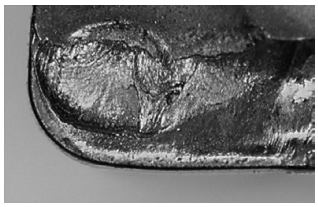
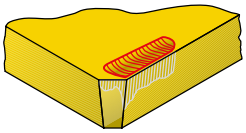
刃口破损

切削速度 ↑
每齿进给量 ↓
切削材料韧性 ↑
切削刃倒棱 ↑

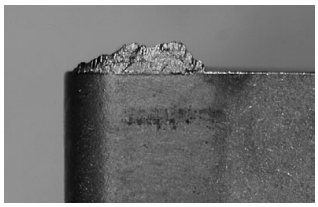
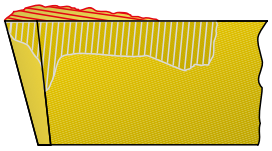
后刀面磨损

切削速度 ↓
每齿进给量 ↑
切削材料耐磨性 ↑

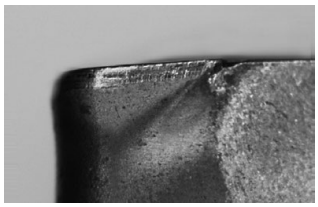
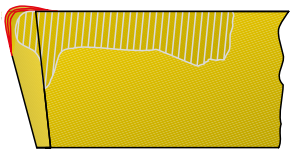
前刀面月牙洼磨损

切削速度 ↓
每齿进给量 ↓
切削材料耐磨性 ↑

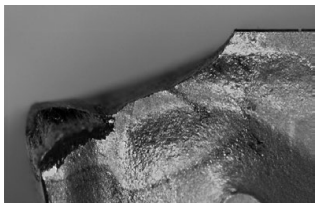
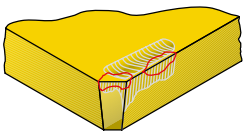
前刀面积屑瘤

切削速度 ↑
每齿进给量 ↑
耐磨性 ↑

切削刃缺口

切削速度 ↓
每齿进给量 ↓
切削材料耐磨性 ↑

崩刃

切削速度 ↓
切削材料韧性 ↑

刀片槽型

切削刃

楔角增大			锋利 ●		半精加工 ●●		稳定 ●●●	
			10	20	30	40	50	60
精加工	F	▮	-F10 -27 -27P	-F20		-F40	-F50	-ER -FN -33P -33
半精加工	M	▮▮			-M31 -M30 -M32		-M50 -31	-EN -29
粗加工	R	▮▮▮			-R30		-R50	-SN -R60 -SR

槽型代码

切削等级			切削刃 锋利 10-20	切削刃 半精加工 30-40	切削刃 稳定 50-60
容易	F	▮	●	●●	●●●
通用	M	▮▮	●	●●	●●●
困难	R	▮▮▮	●	●●	●●●

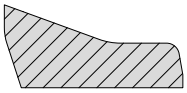
例: 槽型 -M50

●●● = 50-60 ▬ = M

断屑槽型描述

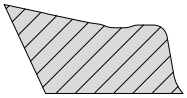
-27P

- 大正角几何设计
- 锋利的切削刃
- 减少积屑瘤
- 有色金属的首选



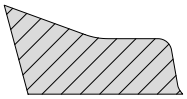
-F10

- 正角
- 锋利的切削刃
- 抑制黏附和积屑瘤发生
- 有色金属的首选



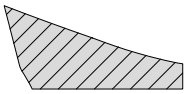
-27

- 大正角几何设计
- 锋利的切削刃
- 有色金属的首选



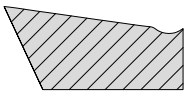
-F20

- 极其锋利的正前角槽型
- 切削刃轻微倒圆
- 加工有色金属的首选



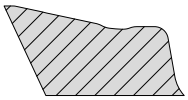
-F40

- 正前角槽型
- 切削刃倒圆
- 精加工和粗加工
- 用于夹紧不稳定的工况
- 用于耐热材料、钛和超级合金材料的加工



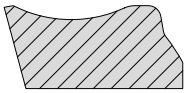
-F50

- 带有刃口轻微倒角保护的正前角槽型
- 切削刃倒圆
- 切削力较小且稳定性出色
- 用于夹紧不稳定的工况
- 轻度粗加工
- 不锈钢加工的首选



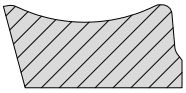
-33P

- 带有刃口倒角保护的正前角槽型
- 低附着力
- 切削刃倒圆
- 切削力较小且稳定性出色
- 用于夹紧不稳定的工况
- 轻度粗加工
- 不锈钢加工的首选



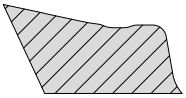
-33

- 带有刃口倒角保护的正前角槽型
- 切削刃倒圆
- 切削力较小且稳定性出色
- 用于夹紧不稳定的工况
- 轻度粗加工
- 不锈钢加工的首选



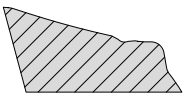
-M30

- 正前角槽型
- 切削刃倒圆
- 中度粗加工
- 马氏体不锈钢材料加工的首选



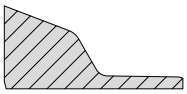
-M31

- 正前角槽型
- 切削刃倒圆
- 精加工和粗加工
- 用于夹紧不稳定的工况
- 用于耐热材料、钛和超级合金材料加工



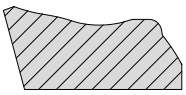
-M32

- 正前角槽型
- 切削刃倒圆
- 切削力较小且稳定性出色
- 中度粗加工
- 马氏体不锈钢材料加工的首选



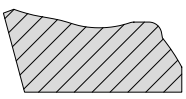
-M50

- 带有刃口轻微倒棱保护的正前角槽型
- 切削刃倒圆
- 切削力较小且稳定性出色
- 轻度到中度粗加工
- 通用钢加工的首选



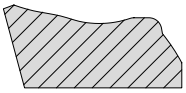
-31

- 带有刃口倒角保护的正前角槽型
- 切削刃倒圆
- 重度粗加工
- 高强度断续切削
- 铸铁材料加工的首选



-29

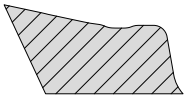
- 带有刃口轻微倒棱保护的正前角槽型
- 切削刃倒圆
- 切削力较小且稳定性出色
- 轻度到中度粗加工
- 通用钢加工的首选



断屑槽型描述

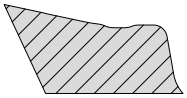
-29R

- 带有刃口轻微倒棱保护的正前角槽型
- 切削刃大的倒圆
- 切削力较小且稳定性出色
- 轻度到中度粗加工
- 通用钢加工的首选



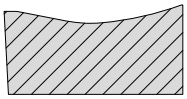
-R30

- 带有刃口轻微倒棱保护的正前角槽型
- 切削刃大的倒圆
- 切削力较小且稳定性出色
- 轻度到中度粗加工
- 通用钢加工的首选



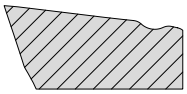
-R50

- 极其锋利的正前角槽型
- 切削刃倒圆
- 中度粗加工
- 高强度断续切削
- 铸铁材料加工的首选



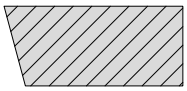
-R60

- 带有刃口倒角保护的正前角槽型
- 切削刃大的倒圆
- 用于稳定的加工条件
- 重度断续切削的首选
- 重度粗加工
- 铸铁材料加工的首选



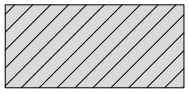
-FN

- 负角且极其稳定的槽型
- 切削刃大的倒圆
- 用于稳定的加工条件
- 硬度高达 50 HRC 材料加工的首选



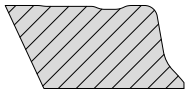
-ER

- 负角槽型
- 切削刃倒圆
- 应用范围广泛
- 端面倒角可确保较高的表面质量
- 铸铁和有色金属加工的首选



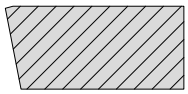
-EN

- 负角槽型
- 切削刃倒圆
- 端面倒角（可转位刀片上的径向保护倒角）可确保较高的表面质量
- 铸铁和有色金属加工的首选



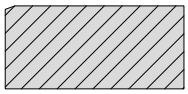
-SN

- 负角槽型
- 切削刃倒圆
- 端面倒角（可转位刀片上的径向保护倒角）可确保较高的表面质量
- 切削力低
- 实现良好平面度的首选



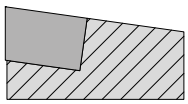
-SR

- 带有刃口轻微倒棱保护的负前角槽型
- 切削刃倒圆
- 坚固的可转位刀片
- 可用于恶劣的加工条件
- 铸铁和钢件加工的首选



-FR

- 负角槽型
- 轻微倒圆的坚固刃口
- 与陶瓷和 CBN 材料相关。
- 用于稳定的加工情况
- 铸铁加工的首选



刀片材质

ISO-应用范围: 01 05 10 15 20 25 30 35 40 45 50

材质牌号	合金标号	钢 P	不锈钢 M	铸铁 K	有色金属 N	高温合金/钛合金 S	淬硬钢 H	非金属材料 O
CTEP210	HE-P10	●		●				
	HE-K05							
TCM10 (CWC10)	HT-P15	●		○				
	HT-K10							
WTN1205	HC-P10	●	○	●			●	
	HC-M15							
	HC-K05							
	HC-H10							
CTPP211	HC-P10	●	○	○	○	○	○	○
	HC-K10							
	HC-M15							
	HC-N10							
	HC-S15							
	HC-H10							
	HC-O10							
CTPP216	HC-P15	●	○	●	○	○	●	○
	HC-M20							
	HC-K15							
	HC-N15							
	HC-S20							
	HC-H15							
	HC-O15							
CTCP220	HC-P20	●		●				
	HC-K20							
CTPP225	HC-P25	●		●				
	HC-K25							
CTCP230	HC-P30	●		●				
	HC-K25							
CTPP231	HC-P30	●		○				
	HC-K25							
CTPP235	HC-P35	●	○	○				
	HC-M30							
	HC-K30							
CTPP236	HC-P35	●	○	○				
	HC-M35							
	HC-K30							
WAN1240	HC-P40	●	○	○				
	HC-M35							
	HC-K30							
WAX1240	HC-P30	●	○	○				
	HC-M25							
	HC-K25							
CTPM225	HC-P25	●	●					
	HC-M25							
WAN2225	HC-M25		●			●		
	HC-S30							
CTCM235	HC-P40	●	●					
	HC-M35							
CTPM240	HC-P40	○	●					
	HC-M40							
CWK10	HC-N10				●			○
	HC-O10							

● 主要应用
○ 扩展应用

高耐磨性 v_c+ ⟷ v_c− 高韧性

刀片材质

材质牌号	合金标号	ISO-应用范围	钢 P	不锈钢 M	铸铁 K	有色金属 N	高温合金/钛合金 S	淬硬钢 H	非金属材料 O
CTPM241	HC-P40								
	HC-M40		●	●			○		
	HC-S40								
CTPM245	HC-P45								
	HC-M50		●	●					
CTCM245	HC-P45								
	HC-M50		●	●			○		
	HC-S35								
CTN3105	CN-K05				●				
CTL3215	BC-K10								
	BC-H10				●			○	
CTCK215	HC-K15				●				
CTPK220	HC-K20				●				
CTPK221	HC-P15								
	HC-K10		○		●				
CTPK226	HC-P15								
	HC-M20								
	HC-K15		●	●	●			○	
	HC-H15								
CTPK231	HC-P30								
	HC-M35								
	HC-K30								
	HC-N30		●	●	●	○	○	○	
	HC-S35								
	HC-H30								
CTD4205	DP-N05								
	DP-O05					●			○
AMZ	HC-K10								
	HC-N10				○	●			○
	HC-O10								
WUN4210	HT-K10								
	HT-N15				○	●			
CTCN211	HC-N10								
	HC-O10					○			●
CTWN215	HC-K15								
	HC-N10				○	●			○
	HC-O10								
H216T	HW-K15								
	HW-N15				○	●			○
	HW-O15								
CTC5240	HC-S35						●		
CTCS245	HC-S45						●		
CTP6215	HC-K15								
	HC-H15				●			●	
CWX500	HC-P15								
	HC-M15								
	HC-K15								
	HC-N15		●	●	○	●	○		○
	HC-S15								
	HC-O15								

● **主要应用**
○ 扩展应用

高耐磨性 V_c+ ⬡ ⟷ ⬡ V_c− 高韧性

15

牌号描述

AMZ
- 硬质合金，TiAlN 涂层
- ISO | K10 | **N10** | O10
- 涂层硬质合金牌号，用于铝合金加工工

CTC5240
- 硬质合金，TiN-TiB_2 涂层
- ISO | **S35**
- 专用牌号，用于钛和钛合金加工

CTCK215
- 硬质合金，TiCN-Al_2O_3 涂层
- ISO | **K15**
- 在高切削速度下加工铸铁材料时的首选

CTCN211
- 涂层硬质合金
- ISO | N10 | **O10**
- 金刚石涂层硬质合金牌号，特别适用于石墨和有色金属加工

CTCM235
- 硬质合金，TiCN-Al_2O_3 涂层
- ISO | **P40** | **M35**
- 高韧性替代牌号，用于一般钢加工
- 非常适合马氏体钢材料

CTCM245
- 硬质合金，TiCN-Al_2O_3 涂层
- ISO **M45/P50**; S35
- 高合金钢加工专用牌号

CTCP220
- 硬质合金，TiCN-Al_2O_3 涂层
- ISO | **P20** | **K20**
- 耐磨牌号，用于钢材干式加工

CTCP225
- 硬质合金，TiAlTaN 涂层
- ISO | **P25** | **K25**
- 耐磨牌号，用于钢材湿式加工

CTCP230
- 硬质合金，TiCN-Al_2O_3 涂层
- ISO | **P30** | K25
- 在高切削速度下进行干式钢加工的首选

CTD4205
- 无涂层硬质合金
- ISO | **N05** | O05
- PCD牌号，有色金属和非金属材料加工

CTEP210
- 金属陶瓷，TiCN-Al_2O_3 涂层
- ISO | **P10** | **K05**
- 具有较高韧性的涂层金属陶瓷标号，可在高切削速度下进行精加工

CTP6215
- 硬质合金，TiAlN 涂层
- ISO | **K15** | **H15**
- 涂层硬质合金牌号硬质材料切削

CTPK220
- 硬质合金，TiAlTaN 涂层
- ISO | **K20**
- 适用于在更严苛的应用范围内加工高强度铸铁材料

CTPK221
- 硬质合金，TiAlN 涂层
- ISO | P15 | **K10**
- 涂层标准牌号，用于中等切削速度下铸铁和有色金属的精加工

CTPK226
- 涂层硬质合金
- ISO | **P15** | **M20** | **K15** | H15
- 极其耐磨的超细粒度硬质合金牌号，用于加工铸铁材料和最高 62 HRC 的淬硬钢

CTPK231
- 涂层硬质合金
- ISO | **P30** | **M35** | **K30** | N30 | S35 | H30
- 高韧性硬质合金牌号，用于钢和铸铁材料的半精加工和粗加工
- 非常适合干式加工

CTPM225
- 硬质合金，TiAlTaN 涂层
- ISO | **P25** | **M25**
- 耐磨牌号，用于奥氏体钢加工

CTPM240
- 硬质合金，TiAlTaN 涂层
- ISO | P40 | **M40**
- 奥氏体钢加工的首选

CTPM241
- 硬质合金，AlTiN 涂层
- ISO | **P40** | **M40** | S40
- 高韧性硬质合金牌号，用于不锈钢和耐热钢加工

CTPM245
- 硬质合金，TiAlTaN 涂层
- ISO | **M45** | **P50**
- 马氏体钢加工的首选

牌号描述

CTPP211
- 涂层硬质合金
- ISO | **P10** | M15 | K10 | N10 | S15 | H10 | O10
- 耐磨硬质合金牌号，用于钢和不锈钢的半精加工和粗加工
- 非常适合干式加工

CTPP216
- 硬质合金，TiAlN 涂层
- ISO | **P10** | M20 | **K15** | N15 | S20 | **H15** | O15
- 高耐磨性硬质合金牌号，具有高切削刃稳定性，用于硬度最高 54 HRC 的高强度材料、非合金工具钢、铸铁和淬硬钢的精加工

CTPP231
- 涂层硬质合金
- ISO | **P30** | K25
- 超高韧性特殊牌号，用于以中等切削速度和极高每齿进给量对钢材料进行半精加工和粗加工

CTPP235
- 硬质合金，TiAlTaN 涂层
- ISO | **P35** | M30 | K30
- 耐磨牌号，用于钢材湿式加工

CTPP236
- 硬质合金，TiAlN-TiN 涂层
- ISO | **P35** | M35 | K30
- 高韧性特殊牌号，用于在高切削速度下对钢材料进行半精加工和粗加工
- 该牌号也适用于铸铁和不锈钢加工

CTWN215
- 无涂层硬质合金
- ISO | K15 | **N10** | O10
- 无涂层硬质合金牌号，用于加工铝和其他有色金属

H216T
- 无涂层硬质合金
- ISO | K15 | **N15** | O15
- 无涂层硬质合金牌号，用于加工铝和其他有色金属
- 非常适合 HSC 加工

TCM10
- 无涂层金属陶瓷
- ISO | **P15** | **M10** | K10
- 无涂层金属陶瓷牌号，用于不锈钢和淬硬钢的精加工
- 由于高度耐热，因此具有极高的耐磨性

WAN1240
- 涂层硬质合金
- ISO | **P40** | M35 | K30
- 带涂层高韧性特殊牌号，用于中高切削速度下的钢加工
- 也作为扩展应用用于铸铁加工

WAN2225
- 涂层硬质合金
- ISO | **M25** | **S25**
- 细颗粒牌号，具有高韧性和耐温性
- 用于不锈钢和耐酸钢的粗加工和精加工，包括湿式和干式切削

WAX1240
- 涂层硬质合金
- ISO | **P40** | M25 | K30
- 高强度特殊牌号，用于以中等切削速度和极高每齿进给量对钢材料进行半精加工和粗加工

WTN1205
- 涂层硬质合金
- ISO | **P10** | M15 | **K05** | **H10**
- 带涂层特殊牌号，用于钢、淬硬钢、铸铁、石墨和塑料加工

WUN4210
- 无涂层硬质合金
- ISO | K15 | **N10** | O10
- 无涂层标准牌号，用于有色金属和石墨的半精加工

CTCS245
- Carbide, CVD TiN-TiB2 coated
- ISO | **S45**
- 镍基合金加工的专用牌号

牌号描述

C T C P 2 2 0 例:

硬度等级

05	ISO 05
10	ISO 10
15	ISO 15
...	

加工方式

1	车削
2	铣削
3	切槽
4	钻削
5	螺纹加工
6	其他
7	多道工序

主要应用 – 工件材料

1|P	钢
2|M	不锈钢
3|K	铸铁
4|N	轻金属/有色金属
5|S	高温合金/钛合金
6|H	淬硬钢
7|X	应用范围广泛