

New products for machining technicians

NEW

MaxiMill Slot-SX



New side and face milling system with SX inserts from SX grooving system

NEW

MaxiMill 242



Update to chamfer milling cutter

NEW

MaxiMill 490



Update to adjustable single angle milling cutter

NEW

CTPX715



New multi-range grade

NEW

MaxiMill 273-08



NEW

MaxiMill 252





Solid drilling and bore machining	Metric Catalog	HSS drilling	1
	Metric Catalog	Solid carbide drilling	2
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		Indexable Boring	5
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	Metric Catalog	Circular and Thread Milling	7
	Metric Catalog	Thread turning	8
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


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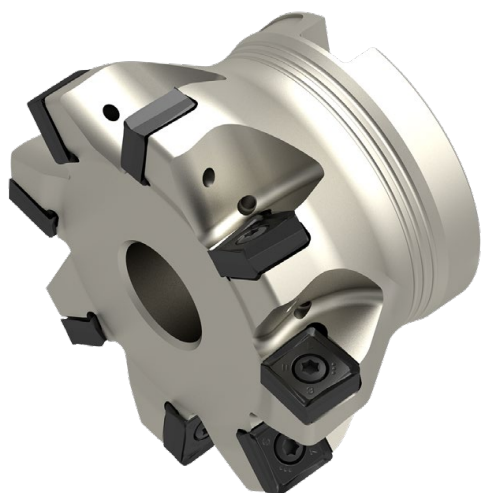
CERATIZIT \ Performance

Premium quality tools for high performance.











The premium quality tools from the **CERATIZIT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

Symbol explanation


	central internal coolant
	lateral internal coolant
	Cutting edge angle



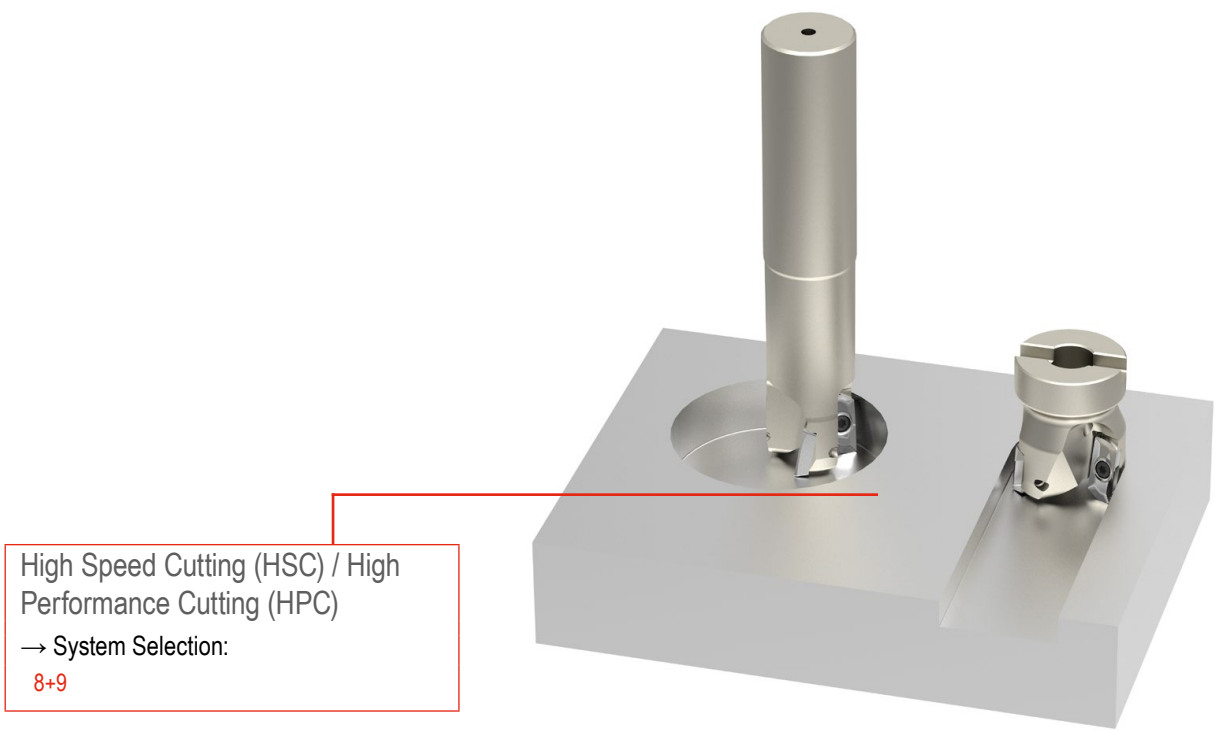
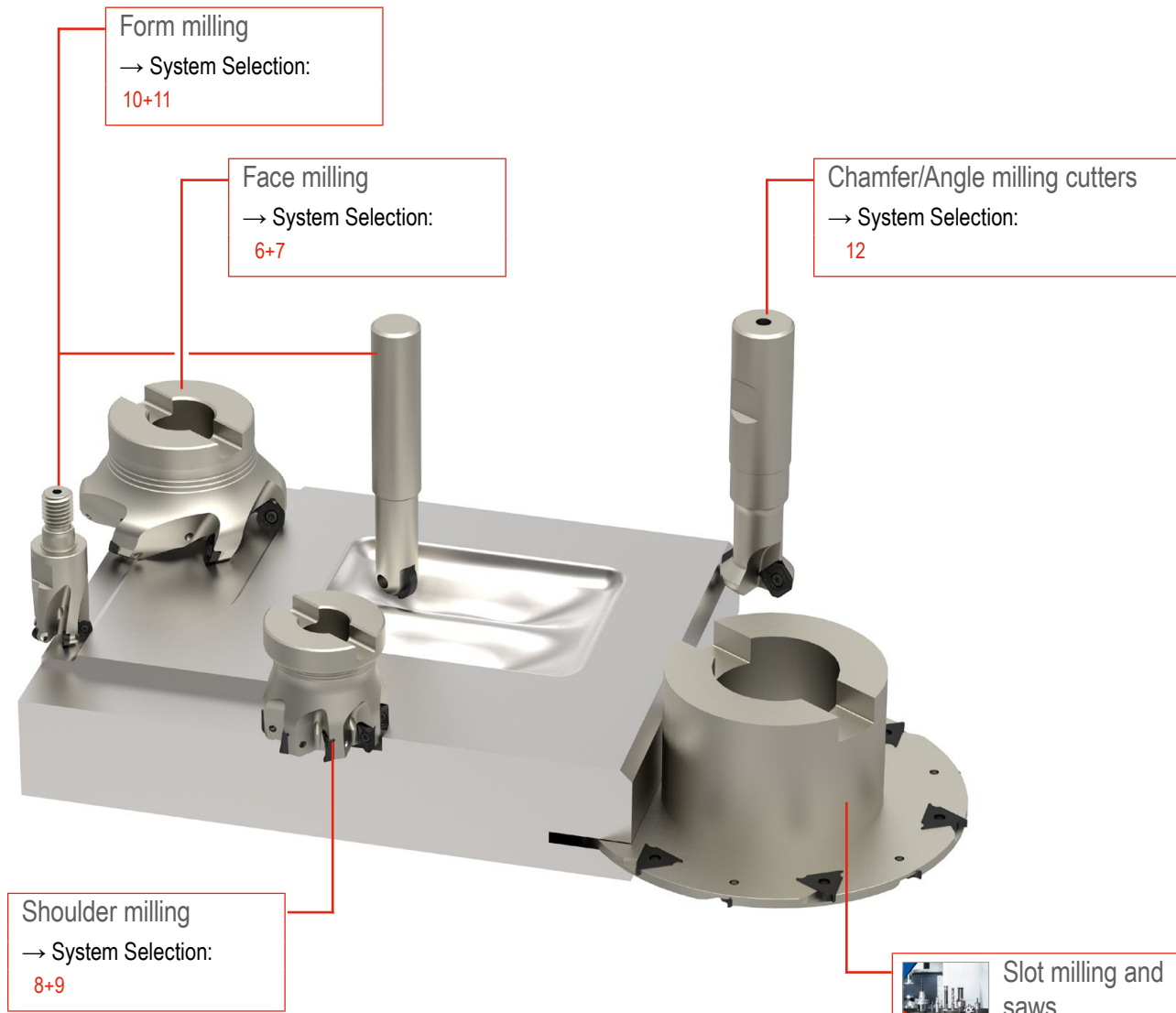
Application symbols

	Face milling
	Angled ramping
	Circular drill milling
	plunge milling
	Slot milling
	Shoulder milling
	Slot milling (45°)
	Chamfer milling
	Free form milling
	T-slot milling

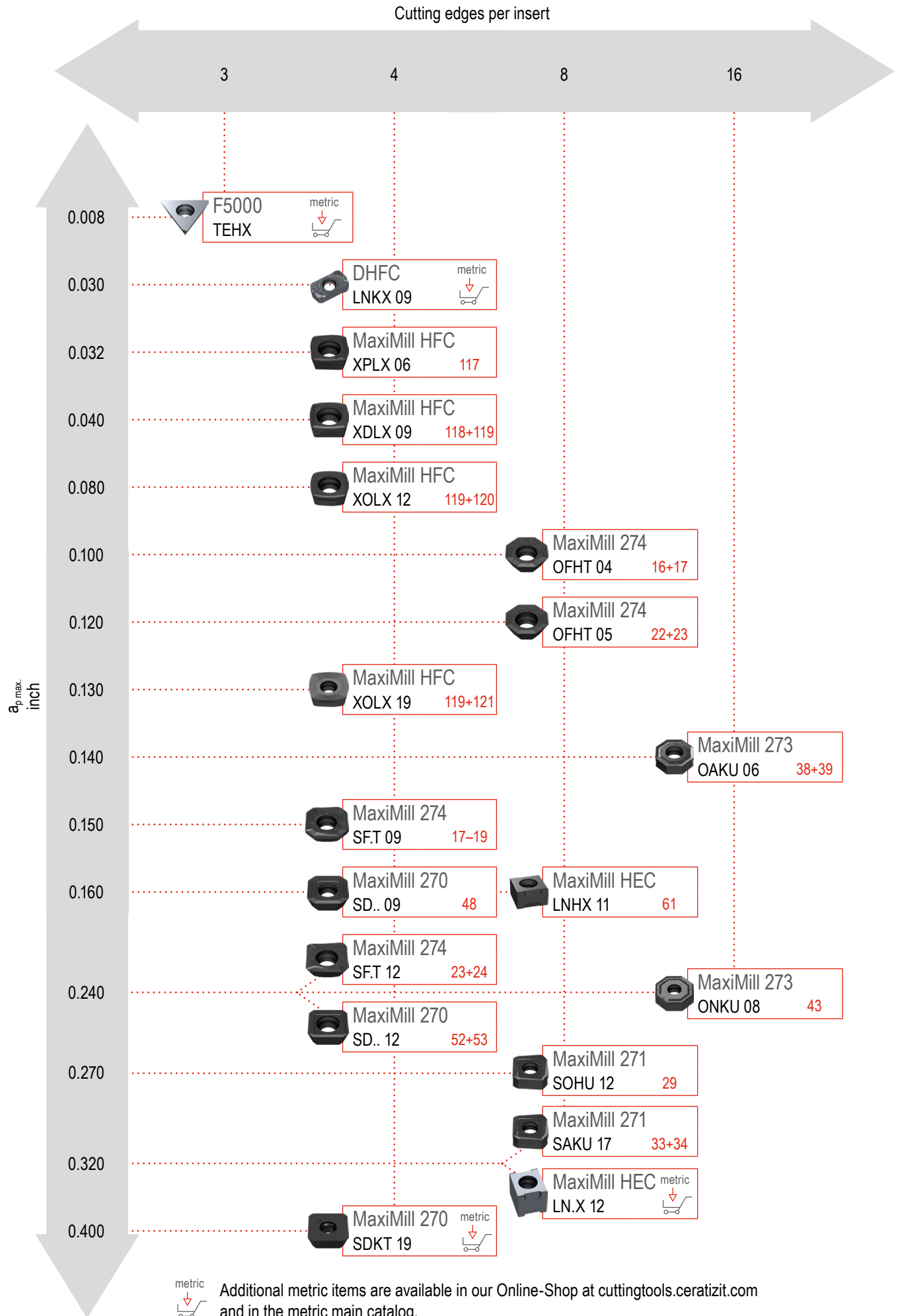
- ZNF = Number of flutes
- = Main application
- = Extended application

metric  Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.



















Toolfinder – Application Selection Guide




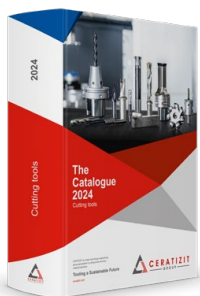
Toolfinder – Face Milling Cutters



Overview – Face Milling Cutters

System	Inserts	Cutting edges per insert	$\varnothing_{p,max.}$ inch	\varnothing -range inch		Page No.
MaxiMill 274	OFH. 04.. / 05.. SFT.09.. / 12..	8 4	0.100 – 0.240"	  Ø 1.000–1.250" Ø 1.500–6.000"		13–24
MaxiMill 271	SOHU 1204.. SAKU 1706..	8	0.270 – 0.330"	  Ø 1.250–1.500" Ø 1.500–10.000"		25–34
MaxiMill 273	OAKU 0605.. ONKU 0806..	16	0.137 – 0.197"	  Ø 1.500–1.500" Ø 2.000–10.000"		35–43
MaxiMill 270	SD.. 0903.. / 1204.. / 19..	4	0.160 – 0.400"	  Ø 0.500–1.500" Ø 2.000–6.000"		44–57
MaxiMill HEC	LNHX 1106..	8	0.160 – 0.320"	 Ø 2.000–8.000"		58–61
MaxiMill HFC	X..X 06.. / 09.. / 12.. / 19..	4	0.032 – 0.129"	   Ø 0.625–1.250" Ø 0.625–1.500" Ø 1.500–5.000"		113–121

 Additional diameters are available upon request.



Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.

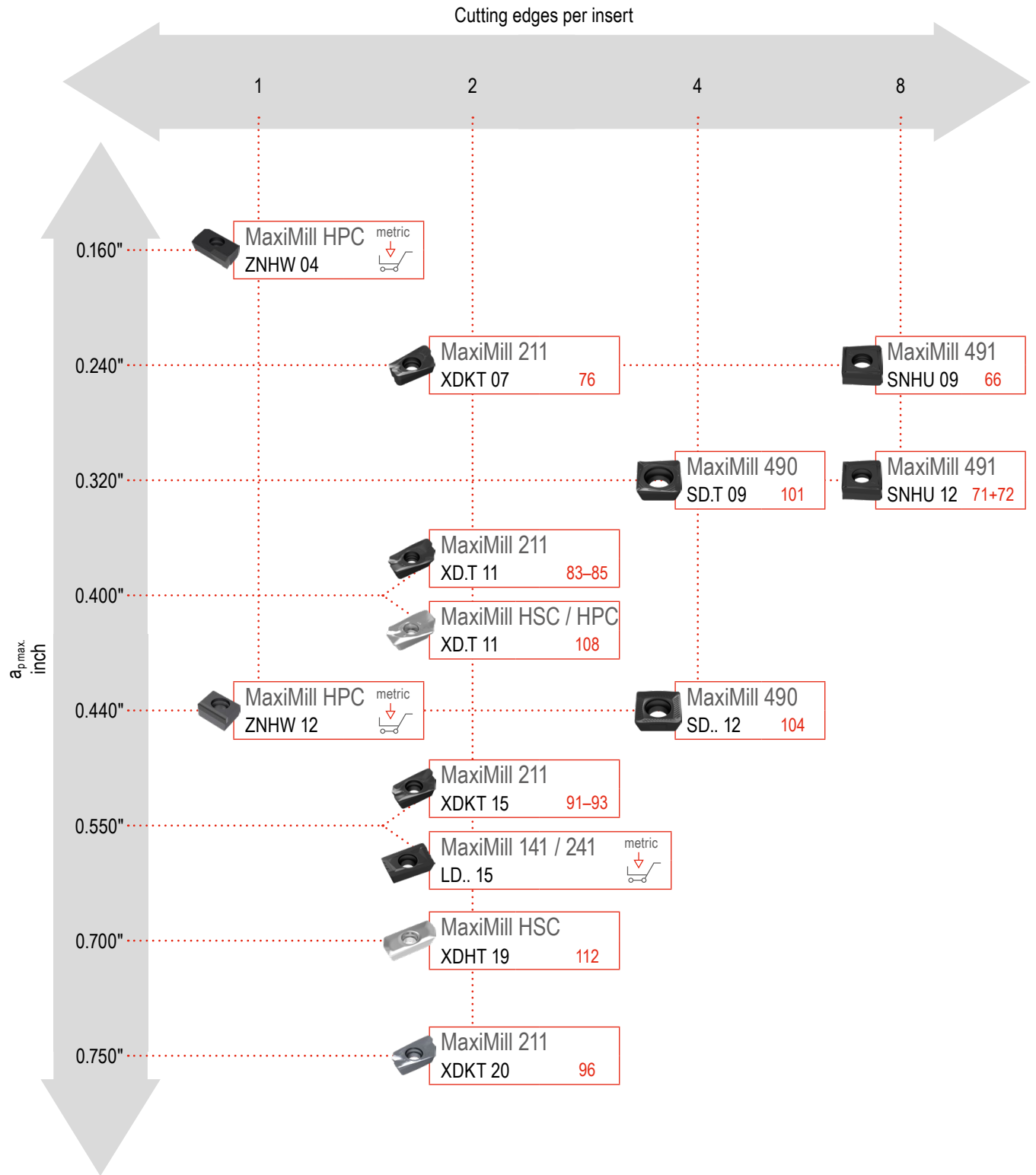


F 5000


















DHFC


Toolfinder – shoulder milling

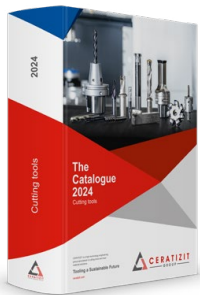


Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.

Overview – Shoulder Milling Cutters

System	Inserts	Cutting edges per insert	$\phi_{p,max.}$ inch	ϕ -range inch			Page No.
MaxiMill 491	SNHU 09T3.. / 1204..	8	0.240 – 0.320"				62–72
MaxiMill 211	XD.T 0703.. / 11T3.. / 1505.. / 2007..	2	0.240 – 0.750"				74–96
MaxiMill 211KN	XD.T 11T3.. / 1505.. / 2007..	2	1.00 – 3.00"				82+90
MaxiMill 490	SD.. 09T3.. / 1205..	4	0.320 – 0.430"				97–104
MaxiMill HSC	XD.. 11T3.. / 1904..	2	0.400 – 0.700"				105–112

 Additional diameters are available upon request.



Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.

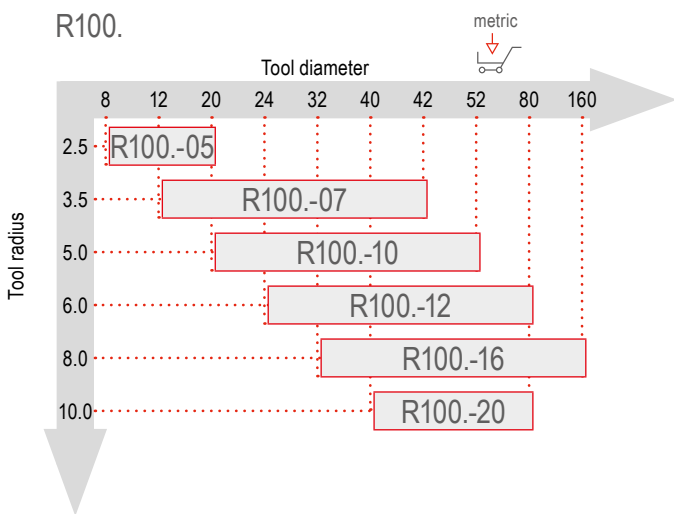
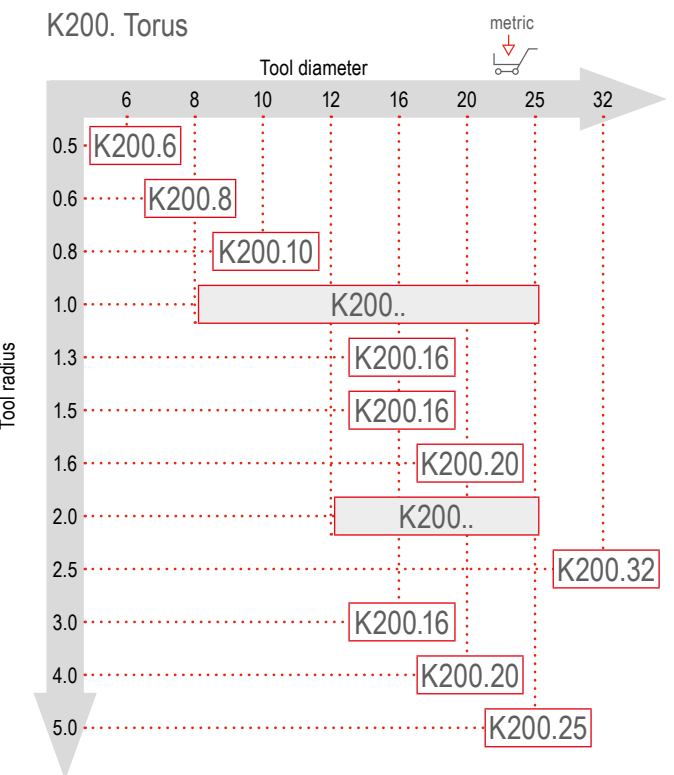
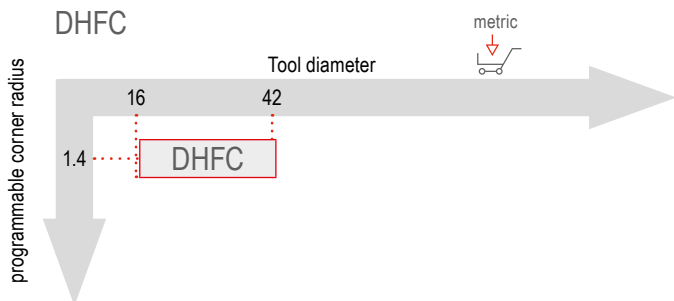
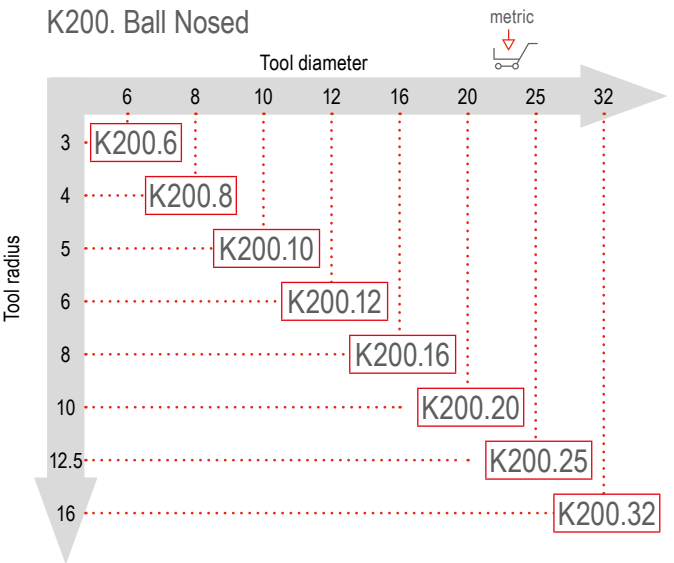
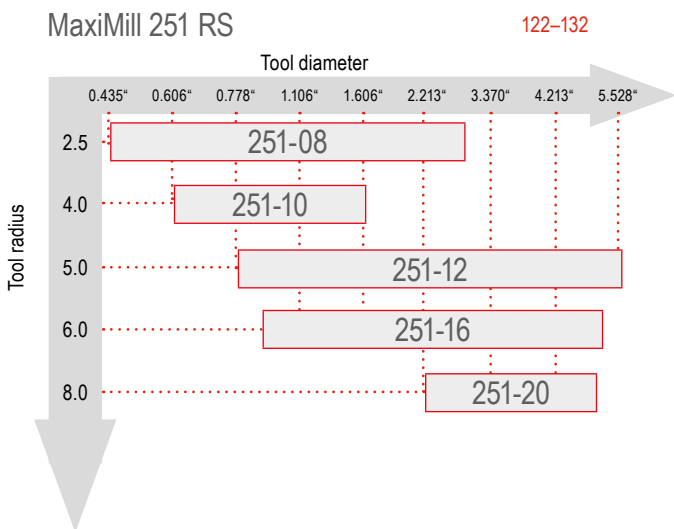
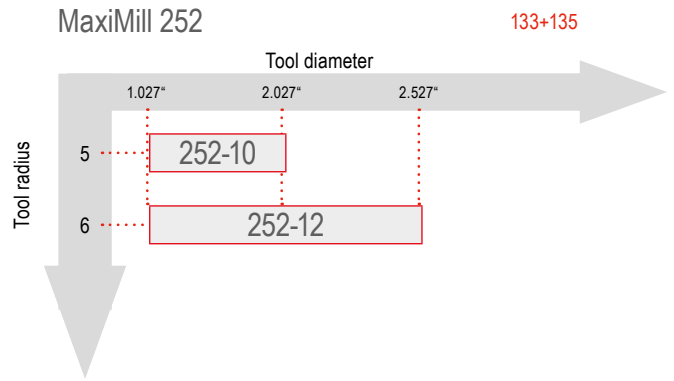
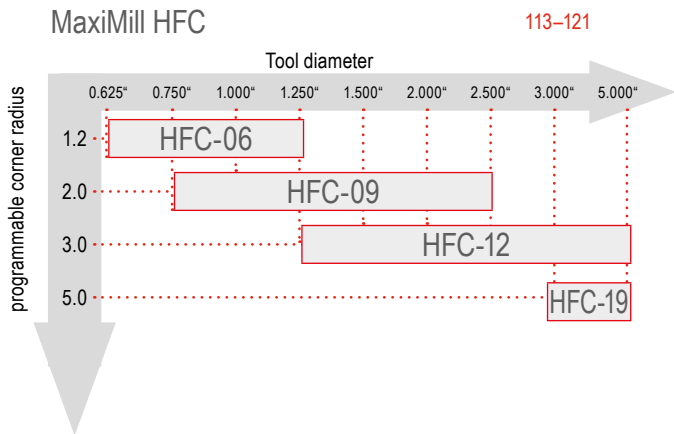


MaxiMill 209 / 210



MaxiMill HPC

Toolfinder – form milling



Application range
 Tool diameter

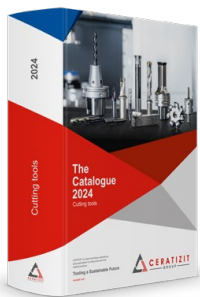


Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.

Overview – form milling

System	Inserts	Cutting edges per insert	$\varnothing_{p,max.}$ inch	\varnothing -range inch		Page No.
MaxiMill HFC	X.LX 06.. / 09.. / 12.. / 19..	4	0.032–0.130"	\varnothing 0.625–1.250"		113–121
MaxiMill 251 RS	R..X 05.. / 08.. / 10.. / 12.. / 16.. / 20..	8	0.100–0.400"	\varnothing 0.606–1.106"		122–132
MaxiMill 252	RNHU 10.. / 12..	8	0.120"	\varnothing 1.027–2.527"		133+135

Additional diameters are available upon request.



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K200. Ball Nosed



R100.






DHFC




K200. Torus


Overview – Chamfer / Angle Milling Cutters

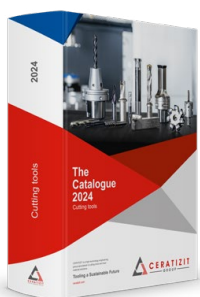
System	Inserts	Cutting edges per insert	a_p max. inch	\emptyset -range inch		Page No.
MaxiMill 272	SD.. 0903..	4	0.160"	 \emptyset 0.500"		46–48
Insert countersink 90°	TOHX 090204 / 140305	2		 \emptyset 0.748–1.457"		152+153

 Additional diameters are available upon request.

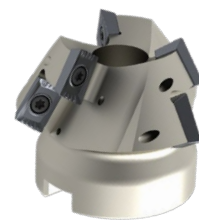
Overview – Saw cutters

System	Inserts	Cutting edges per insert	a_p max. mm	\emptyset -range mm		Page No.
MaxiMill Slot-SX	SX E...	1	115	 \emptyset 63–100 \emptyset 80–315		136–151

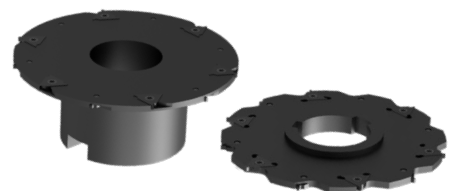
 Additional diameters are available upon request.



Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.

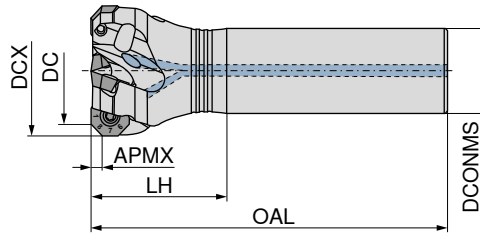
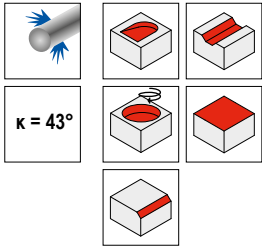


MaxiMill 242



TX

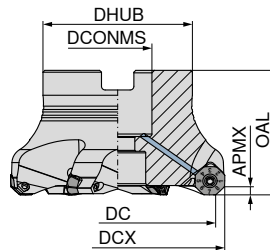
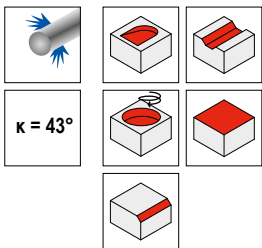
MaxiMill – 274-04/-09 End milling cutter



Designation	DC inch	DCX inch	ZNF	OAL inch	LH inch	DCONMS inch	torque moment Nm	Insert
C274.100.R.04-09-A075-125-EF	1.000	1.228	4	3.350	1.250	0.750	1.2	OF.. 0403 / SF.. 0903
C274.100.R.04-09-B075-125-EF	1.000	1.228	4	3.350	1.250	0.750	1.2	OF.. 0403 / SF.. 0903
C274.125.R.05-09-A100-150-EF	1.250	1.479	5	3.900	1.500	1.000	1.2	OF.. 0403 / SF.. 0903
C274.125.R.05-09-B100-150-EF	1.250	1.479	5	3.900	1.500	1.000	1.2	OF.. 0403 / SF.. 0903

58 743 ...	58 743 ...
	10004
30004	
	12505
32505	

MaxiMill – 274-04/-09 Shell mill



Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert
A274.150.R.05-09-A050-175-EF	1.500	1.740	5	0.098	1.420	1.420	0.500	29200	1.2	OF.. 0403 / SF.. 0903
A274.200.R.07-09-A075-175-EF	2.000	2.230	7	0.098	1.750	1.750	0.750	25000	1.2	OF.. 0403 / SF.. 0903
A274.300.R.09-09-A100-200-EF	3.000	3.230	9	0.098	2.250	2.250	1.000	20100	1.2	OF.. 0403 / SF.. 0903
A274.400.R.11-09-B125-200-EF	4.000	4.230	11	0.098	2.750	2.750	1.250	17300	1.2	OF.. 0403 / SF.. 0903

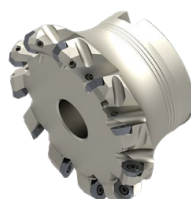
58 744 ...

Spare parts

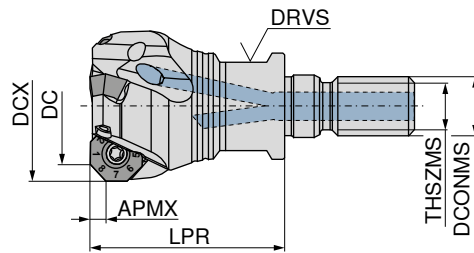
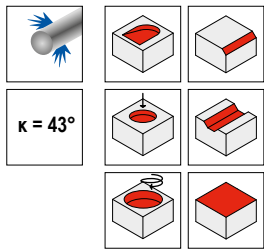
DC	80 950 ...	70 950 ...	70 950 ...
1.000	039	303	133
1.250	039	303	133
1.500	039	303	133
2.000	039	303	133
3.000	039	303	133
4.000	039	303	133

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...

Two insert types – ONE Cutter



MaxiMill – 274-04/-09 Screw in cutter

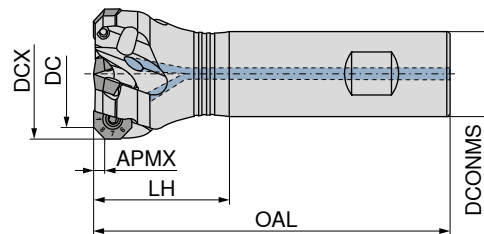
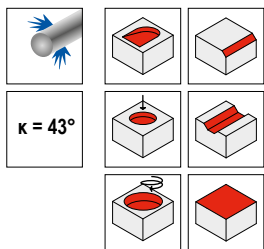


50 742 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	torque moment Nm	Insert
G274.20.R.03-09	20	25.8	3	3.8	35	M12	12.5	17	1.2	OF.. 0403 / SF.. 0903
G274.25.R.04-09	25	30.8	4	3.8	35	M12	12.5	17	1.2	OF.. 0403 / SF.. 0903
G274.32.R.05-09	32	37.9	5	3.8	35	M16	17.0	24	1.2	OF.. 0403 / SF.. 0903

020
025
032

MaxiMill – 274-04/-09 End milling cutter

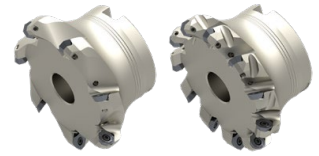
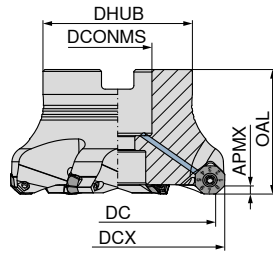
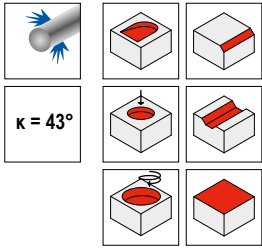


50 743 ... 50 743 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	torque moment Nm	Insert
C274.20.R.03-09-A/B20-25	20	25.8	3	3.8	77	25	20	1.2	OF.. 0403 / SF.. 0903
C274.25.R.04-09-A/B20-32	25	30.8	4	3.8	84	32	20	1.2	OF.. 0403 / SF.. 0903
C274.32.R.05-09-A/B25-40	32	37.9	5	3.8	98	40	25	1.2	OF.. 0403 / SF.. 0903

020 120
025 125
032 132

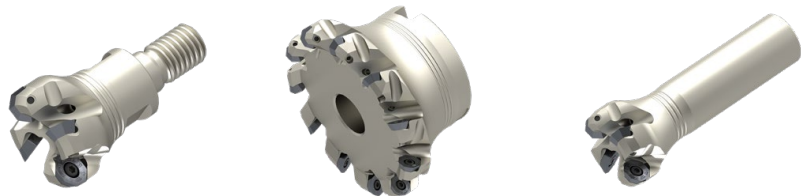
MaxiMill – 274-04/-09 Shell mill



Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	torque moment Nm	Insert	50 744 ...	
										040	032
A274.32.R.05-09	32	37.9	5	3.8	40	38	16	1.6	OF.. 0403 / SF.. 0903		032
A274.40.R.04-09	40	46.0	4	3.8	40	38	16	1.6	OF.. 0403 / SF.. 0903	040	
A274.40.R.06-09	40	46.0	6	3.8	40	38	16	1.6	OF.. 0403 / SF.. 0903		140
A274.50.R.05-09	50	55.9	5	3.8	40	48	22	1.6	OF.. 0403 / SF.. 0903	050	
A274.50.R.07-09	50	55.9	7	3.8	40	48	22	1.6	OF.. 0403 / SF.. 0903		150
A274.63.R.06-09	63	68.9	6	3.8	40	48	22	1.6	OF.. 0403 / SF.. 0903	063	
A274.63.R.09-09	63	68.9	9	3.8	40	48	22	1.6	OF.. 0403 / SF.. 0903		163
A274.80.R.07-09	80	85.9	7	3.8	50	58	27	1.6	OF.. 0403 / SF.. 0903	080	
A274.80.R.11-09	80	85.9	11	3.8	50	58	27	1.6	OF.. 0403 / SF.. 0903		180
A274.100.R.09-09	100	105.9	9	3.8	50	78	32	1.6	OF.. 0403 / SF.. 0903	100	
A274.100.R.13-09	100	105.9	13	3.8	50	78	32	1.6	OF.. 0403 / SF.. 0903		200
A274.125.R.12-09	125	130.9	12	3.8	63	88	40	1.6	OF.. 0403 / SF.. 0903	125	

Spare parts DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
20 - 32			125		303	133	191
32 - 40	043	040	125	151	303	133	191
50 - 125	043		125		303	133	191

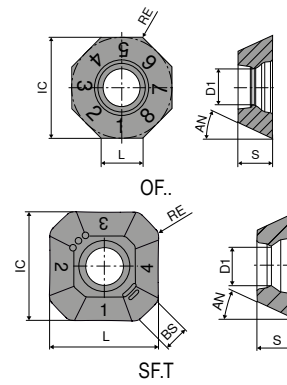
Two insert types – ONE Cutter



Spare parts DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
20 - 32			125		303	133	191
32 - 40	043	040	125	151	303	133	191
50 - 125	043		125		303	133	191

OFHT / OFHW / SFHT / SFKT

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
OFH. 0403..	0.375	0.132	0.155	-	0.125	25
SF.T 0903..	0.386	0.132	0.354	0.089	0.138	25



OFHT

-F50 CTCP230 DRAGONSKIN	-M50 CTCP230 DRAGONSKIN	-F50 CTPP235 DRAGONSKIN	-M50 CTPP235 DRAGONSKIN
F OFHT	M OFHT	F OFHT	M OFHT
51 002 ...	51 003 ...	51 002 ...	51 003 ...
005	005	105	105

ISO	RE inch
040305SN	0.020

P	●	●	●	●
M			○	○
K	○	○	○	○
N				
S				
H				
O				





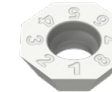

OFHT / OFHW

-F50 CTCM235 DRAGONSKIN	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	CTPM245 DRAGONSKIN	-F50 CTCM245 DRAGONSKIN	CTCM245 DRAGONSKIN
F OFHT	F OFHT	M OFHT	F OFHT	F OFHW	F OFHT	F OFHW
51 002 ...	51 002 ...	51 003 ...	51 002 ...	51 105 ...	51 002 ...	51 105 ...
305	405	405	455	452	90501	90201

ISO	RE inch
040302EN	0.008
040305SN	0.020

P	●	○	○	●	●	●
M	●	●	●	●	●	●
K						
N						
S					○	○
H						
O						

OFHT / OFHW

ISO	RE inch							
			-M50 CTCK215	NEW -F10 CTPX715	-F10 CTWN215	-F50 CTC5240	CTC5240	-F50 CTCS245
			DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
			M	F	F	F	F	F
			OFHT	OFHT	OFHT	OFHT	OFHW	OFHT
			51 003 ...	51 122 ...	50 459 ...	51 002 ...	50 457 ...	51 002 ...
040302EN	0.008		505	00502	505	15500	504	555
040305FN	0.020							
040305SN	0.020							
P				○				
M				○				
K			●	●	○			
N				●	●			
S				○		●	●	●
H								
O				○	○			

SFHT / SFKT

ISO	RE inch		
			-F50 CTPP225
			DRAGONSKIN
			
			F
			SFHT
			51 012 ...
			070
			-M50 CTPP225
			DRAGONSKIN
			
			M
			SFKT
			51 013 ...
			070
0903AFSR	0.039		
P			●
M			
K			
N			
S			
H			
O			

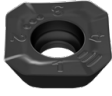
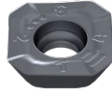


SFHT / SFKT

ISO	RE inch	-F50 CTCP230 DRAGONSKIN F SFHT 51 012 ... 020	-M50 CTCP230 DRAGONSKIN M SFKT 51 013 ... 020	-F50 CTPP235 DRAGONSKIN F SFHT 51 012 ... 120	-M50 CTPP235 DRAGONSKIN M SFKT 51 013 ... 120
0903AFSR	0.039				
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

SFHT / SFKT

ISO	RE inch	-F50 CTCM235 DRAGONSKIN F SFHT 51 012 ... 320	-F50 CTPM240 DRAGONSKIN F SFHT 51 012 ... 420	-M50 CTPM240 DRAGONSKIN M SFKT 51 013 ... 42000	-F50 CTPM245 DRAGONSKIN F SFHT 51 012 ... 470	-F50 CTCM245 DRAGONSKIN F SFHT 51 012 ... 92001
0903AFSR	0.039					
P		●	○	○	●	●
M		●	●	●	●	●
K						
N						
S						○
H						
O						

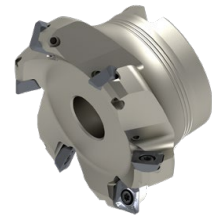
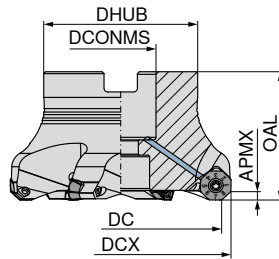
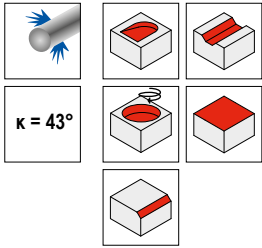
SFKT / SFHT

		-R50		NEW	-F10		-F40		
		CTCK215	CTPK220	CTPX715	CTWN215	CTC5240			
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
									
		R		F	F		F		
		SFKT		SFHT	SFHT		SFHT		
		51 065 ...		51 123 ...	50 514 ...		50 514 ...		
ISO	RE								
	inch								
0903AFFR	0.039			01502	505				
0903AFSR	0.039	520		620			504		
P				○					
M				○					
K		●		●	○				
N				●	●				
S				○			●		
H									
O				○	○				

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 158
Starting Parameter	→ 159	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – 274-05/-12 Shell mill



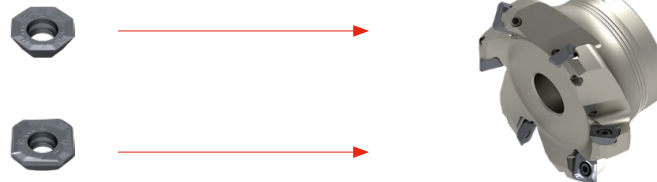
58 772 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	
A274.200.R.04-12-A075-175-EF	2.000	2.320	4	0.126	1.750	1.750	0.750	18900	3.2	OFHT 0504 / SFKT 1204	20004
A274.250.R.05-12-A100-200-EF	2.500	2.820	5	0.126	2.190	2.190	1.000	16700	3.2	OFHT 0504 / SFKT 1204	25005
A274.300.R.06-12-A100-200-EF	3.000	3.320	6	0.126	2.190	2.190	1.000	15200	3.2	OFHT 0504 / SFKT 1204	30006
A274.400.R.07-12-A125-200-EF	4.000	4.320	7	0.126	2.750	2.750	1.250	13000	3.2	OFHT 0504 / SFKT 1204	40007
A274.500.R.08-12-B150-200-EF	5.000	5.320	8	0.126	3.810	3.810	1.500	11600	3.2	OFHT 0504 / SFKT 1204	50008
A274.600.R.10-12-B200-200-EF	6.000	6.320	10	0.126	4.880	4.880	2.000	10500	3.2	OFHT 0504 / SFKT 1204	60010

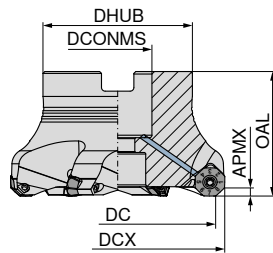
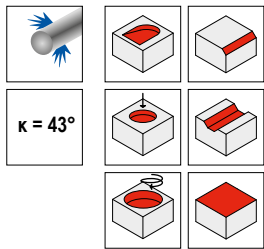
Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
120	303	340

Spare parts
DC
2.000 - 6.000

Two insert types – ONE Cutter


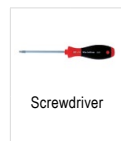





MaxiMill – 274-05/-12 Shell mill



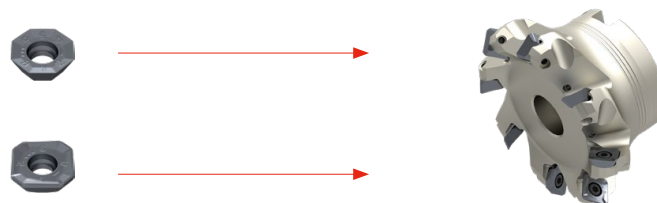
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	torque moment Nm	Insert	50 772 ...	50 772 ...
										24000	04000
A274.40.R.03-12	40	48.0	3	6	40	38	16	3.2	OFHT 0504 / SFKT 1204		
A274.40.R.04-12	40	48.0	4	6	40	38	16	3.2	OFHT 0504 / SFKT 1204		
A274.50.R.04-12	50	58.0	4	6	40	43	22	3.2	OFHT 0504 / SFKT 1204	25000	050
A274.50.R.05-12	50	58.0	5	6	40	43	22	3.2	OFHT 0504 / SFKT 1204		
A274.63.R.05-12	63	71.1	5	6	40	48	22	3.2	OFHT 0504 / SFKT 1204	26300	063
A274.63.R.06-12	63	71.1	6	6	40	48	22	3.2	OFHT 0504 / SFKT 1204		
A274.80.R.06-12	80	88.0	6	6	50	58	27	3.2	OFHT 0504 / SFKT 1204	28000	080
A274.80.R.08-12	80	88.0	8	6	50	58	27	3.2	OFHT 0504 / SFKT 1204		
A274.100.R.08-12	100	108.0	8	6	50	78	32	3.2	OFHT 0504 / SFKT 1204	30000	100
A274.100.R.10-12	100	108.0	10	6	50	78	32	3.2	OFHT 0504 / SFKT 1204		
A274.125.R.09-12	125	133.0	9	6	63	88	40	3.2	OFHT 0504 / SFKT 1204	32500	125
A274.125.R.12-12	125	133.0	12	6	63	88	40	3.2	OFHT 0504 / SFKT 1204		
A274.160.R.11-12	160	168.0	11	6	63	98	40	3.2	OFHT 0504 / SFKT 1204	36000 ¹⁾	16000 ¹⁾
A274.160.R.14-12	160	168.0	14	6	63	98	40	3.2	OFHT 0504 / SFKT 1204		

1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

				
TORX® blade	Screwdriver	Molykote	Clamping screw	Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
054	128	303	340	193

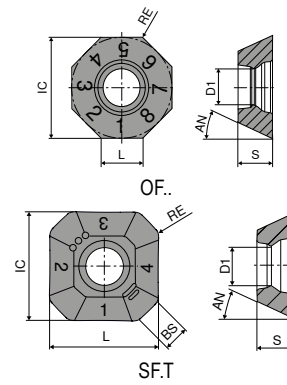
Spare parts
DC
40 - 160

Two insert types – ONE Cutter



OFHT / SFHT / SFKT

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
OFHT 0504..	0.500	0.189	0.177	-	0.187	25
SF.T 1204..	0.500	0.189	0.500	0.056	0.187	25



OFHT

-F50 CTCP230 DRAGONSKIN	-M50 CTCP230 DRAGONSKIN	-F50 CTPP235 DRAGONSKIN	-M50 CTPP235 DRAGONSKIN
F OFHT	M OFHT	F OFHT	M OFHT
51 002 ...	51 003 ...	51 002 ...	51 003 ...
010	01000	110	11000

ISO	RE inch
050410SN	0.039

P	●	●	●	●
M	○	○	○	○
K	○	○	○	○
N				
S				
H				
O				

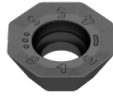


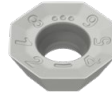
OFHT

-F50 CTCM235 DRAGONSKIN	-F50 CTPM240 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN
F OFHT	F OFHT	M OFHT	F OFHT
51 002 ...	51 002 ...	51 003 ...	51 002 ...
310	410	41000	460

ISO	RE inch
050410SN	0.039

P	●	○	○	●
M	●	●	●	●
K				
N				
S				
H				
O				

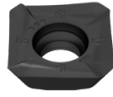
OFHT

	NEW		
-F50 CTCM245	-F10 CTPX715	-F10 CTWN215	-F50 CTC5240
DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
			
F OFHT	F OFHT	F OFHT	F OFHT
51 002 ...	51 122 ...	51 122 ...	51 002 ...
	91001	01002	36000
			16000

ISO	RE inch
050410FN	0.039
050410SN	0.039

P	●	○		
M	●	○		
K		●	○	
N		●	●	
S	○	○		●
H				
O		○	○	

SFHT / SFKT

-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
			
F SFHT	M SFKT	F SFHT	M SFKT
51 012 ...	51 013 ...	51 012 ...	51 013 ...
	02500	025	12500
			125

ISO	RE inch
1204AFSR	0.039

P	●	●	●	●
M			○	○
K	○	○	○	○
N				
S				
H				
O				

SFHT / SFKT

ISO	RE inch	-F50 CTCM235 DRAGONSKIN F SFHT 51 012 ... 325	-M50 CTCM235 DRAGONSKIN M SFKT 51 013 ... 325	-F50 CTPM240 DRAGONSKIN F SFHT 51 012 ... 42500	-M50 CTPM240 DRAGONSKIN M SFKT 51 013 ... 425
P		●	●	○	○
M		●	●	●	●
K					
N					
S					
H					
O					

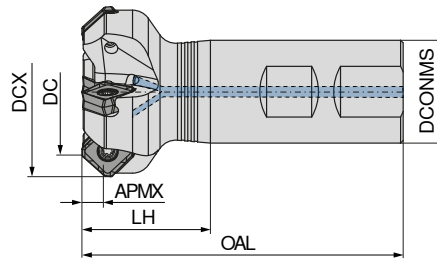
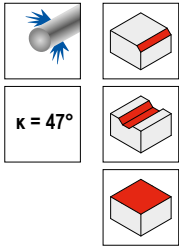
SFHT

ISO	RE inch	-F50 CTPM245 DRAGONSKIN F SFHT 51 012 ... 47500	-F50 CTCM245 DRAGONSKIN F SFHT 51 012 ... 92501	NEW -F10 CTPX715 DRAGONSKIN F SFHT 51 123 ... 02502	-F10 CTWN215 DRAGONSKIN F SFHT 51 123 ... 37000	-F40 CTC5240 DRAGONSKIN F SFHT 50 514 ... 50900
P		●	●	○	○	○
M		●	●	○	○	○
K				●	○	○
N				●	●	○
S			○	○	○	●
H						
O				○	○	

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 160
Starting Parameter	→ 161	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – 271-12 End milling cutter



58 786 ...

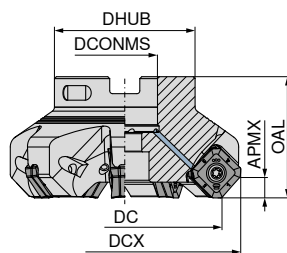
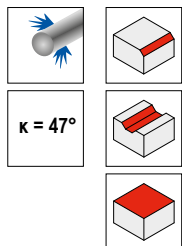
Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS _{h6} inch	Insert	
C271.0125.R.03-12-B-150-EF	1.250	1.763	3	0.267	4.000	1.500	1.250	SOHU 1204.. / XOHU 1204..	01203
C271.0150.R.04-12-B125-150-EF	1.500	2.013	4	0.267	4.000	1.500	1.250	SOHU 1204.. / XOHU 1204..	01504

Spare parts
DC
1.250 - 1.500

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
128	303	859

MaxiMill – 271-12 Face mill

▲ 8 cutting edges per insert



NEW

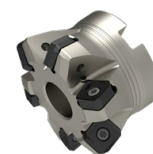
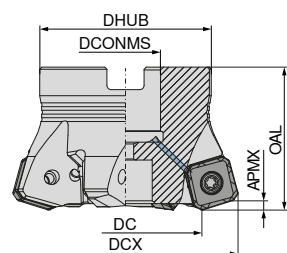
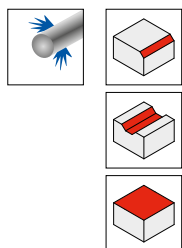
NEW

58 787 ...

58 787 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	
A271.150.R.04-12-A050-175-EF	1.500	2.013	4	0.267	1.750	1.421	0.500	18500	3.2	SOHU 1204.. / XOHU 1204..	15004
A271.200.R.05-12-A075-175-EF	2.000	2.512	5	0.267	1.750	1.750	0.750	15100	3.2	SOHU 1204.. / XOHU 1204..	20005
A271.250.R.07-12-A100-200-EF	2.500	3.011	7	0.267	2.000	2.250	1.000	13000	3.2	SOHU 1204.. / XOHU 1204..	25007
A271.300.R.06-12-A100-200-EF	3.000	3.511	6	0.267	2.000	2.250	1.000	11600	3.2	SOHU 1204.. / XOHU 1204..	30006
A271.300.R.08-12-A100-200-EF	3.000	3.511	8	0.267	2.000	2.250	1.000	9800	3.2	SOHU 1204.. / XOHU 1204..	30008
A271.400.R.07-12-A125-200-EF	4.000	4.510	7	0.267	2.000	2.750	1.250	9800	3.2	SOHU 1204.. / XOHU 1204..	40007
A271.400.R.10-12-A125-200-EF	4.000	4.510	10	0.267	2.000	2.750	1.250	9800	3.2	SOHU 1204.. / XOHU 1204..	40010
A271.500.R.08-12-B150-200-EF	5.000	5.509	8	0.267	2.000	3.750	1.500	8700	3.2	SOHU 1204.. / XOHU 1204..	50008
A271.500.R.12-12-B150-200-EF	5.000	5.509	12	0.267	2.000	3.750	1.500	8700	3.2	SOHU 1204.. / XOHU 1204..	50012
A271.600.R.09-12-B150-200-EF	6.000	6.509	9	0.267	2.000	3.750	1.500	7800	3.2	SOHU 1204.. / XOHU 1204..	60009
A271.600.R.14-12-B150-200-EF	6.000	6.509	14	0.267	2.000	3.750	1.500	7800	3.2	SOHU 1204.. / XOHU 1204..	60014

MaxiMill – 271-12 HFC Face mill



NEW

58 787 ...

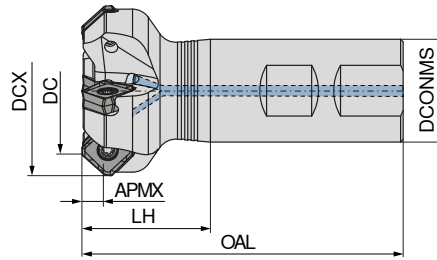
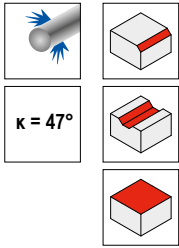
Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	
A271.200.R.04-12-A075-175-HFC-EF	2.000	2.513	4	0.102	1.750	1.750	0.750	15100	3.2	SOHU 1204..	20004
A271.250.R.06-12-A100-200-HFC-EF	2.500	3.013	6	0.102	2.000	2.250	1.000	13000	3.2	SOHU 1204..	25006
A271.300.R.07-12-A100-200-HFC-EF	3.000	3.513	7	0.102	2.000	2.250	1.000	11600	3.2	SOHU 1204..	30007

Spare parts

DC
1.500 - 6.000






Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
128	303	859

MaxiMill – 271-12 End milling cutter



50 786 ...

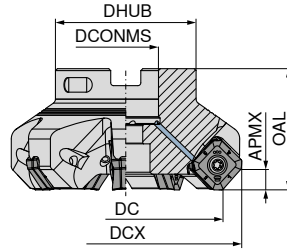
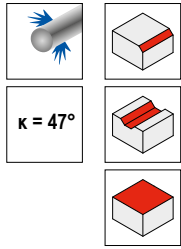
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS _{ns} mm	RPMX 1/min.	torque moment Nm	Insert	
C271.32.R.03-12-B-40	32	45	3	6.8	100	40	32	18400	3.2	SOHU 1204.. / XOHU 1204..	03203
C271.40.R.04-12-B32-40	40	53	4	6.8	100	40	32	16800	3.2	SOHU 1204.. / XOHU 1204..	04004

 TORX® blade	 Screwdriver	 Molykote	 Clamping screw	 Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
054	120	303	859	193

Spare parts
DC
32 - 40

MaxiMill – 271-12 Face mill

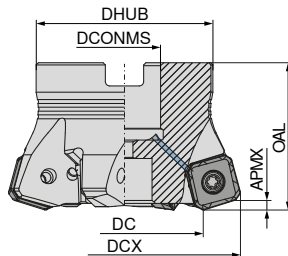
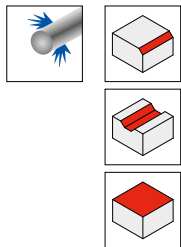
▲ 8 cutting edges per insert



Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	50 787 ...	
											04004	05005
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 ²⁾	
A271.200.R.17-12	200	213	17	6.8	63	132	60	6700	3.2	SOHU 1204.. / XOHU 1204..		20017 ²⁾
A271.250.R.13-12	250	263	13	6.8	63	132	60	6000	3.2	SOHU 1204.. / XOHU 1204..	25013 ²⁾	
A271.250.R.21-12	250	263	21	6.8	63	132	60	6000	3.2	SOHU 1204.. / XOHU 1204..		25021 ²⁾

- 1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant
- 2) With threaded holes M16 on the front face, pitch circle diameter = 101.6 mm / Without Through Coolant

MaxiMill – 271-12 HFC Face mill

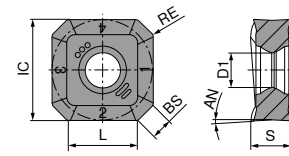


Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	50 788 ...	
											05004	06306
A271.50.R.04-12-HFC	30	50	4	2.6	40	43	22	14600	3.2	SOHU 1204..		05004
A271.63.R.06-12-HFC	43	63	6	2.6	40	48	22	12500	3.2	SOHU 1204..		06306
A271.80.R.07-12-HFC	60	80	7	2.6	50	58	27	10800	3.2	SOHU 1204..		08007

Spare parts DC	80 950 ...									
	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver	Torque screwdriver		
40 (5078704004)			054	040	120	151	303	859	030	193
50 - 250			054		120		303	859	030	193
50 - 250			054		120		303	859		193
50 (5078805004)			054	050	120	154	303	859	030	193

SOHU

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
SOHU 1204..	0.526	0.173	0.346	0.067	0.197	7.4



SOHU

SOHU

	-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	1204ABSR					
RE	0.031					
	02000	12000	32000	42000	47000	92001

P	●	●	●	○	●	●
M	○	○	●	●	●	●
K	○	○				
N						
S						○
H						
O						

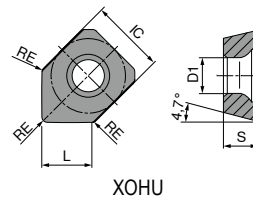
SOHU

	-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	1204ABSR			
RE	0.031			
	52000	62000	12001	17000

P				
M				
K		●	●	
N				
S				●
H				●
O				

XOHU

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XOHU 1204..	0.526	0.173	0.346	0.072	0.197

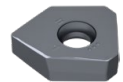


XOHU

▲ Masterfinish indexable insert (wiper insert)

-M50
CTPP235

DRAGONSKIN



XOHU

51 141 ...

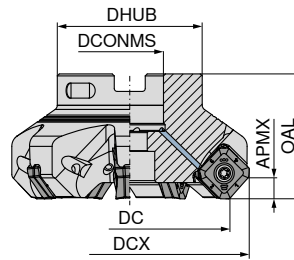
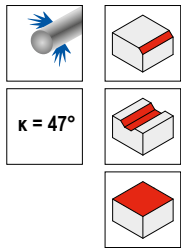
ISO	RE inch	
1204ABSR	0.031	12000
P		●
M		○
K		○
N		
S		
H		
O		

Milling guide

Cutting data standard values	→ 154-157	Starting Parameter	→ 162
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – 271-17 Face mill

▲ 8 cutting edges per insert



58 767 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DCONMS inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	
A271.200.R.04-17-A075-175-EF	2.000	2.660	4	0.330	1.750	0.750	1.750	14300	5	SAKU 1706	20004
A271.250.R.06-17-A100-200-EF	2.500	3.160	6	0.330	2.250	1.000	2.250	12700	5	SAKU 1706	25006
A271.300.R.07-17-A100-200-EF	3.000	3.660	7	0.330	2.250	1.000	2.250	11500	5	SAKU 1706	30007
A271.400.R.08-17-B125-200-EF	4.000	4.660	8	0.330	2.750	1.250	2.750	9800	5	SAKU 1706	40008
A271.500.R.10-17-B150-200-EF	5.000	5.660	10	0.330	3.750	1.500	3.750	8700	5	SAKU 1706	50010
A271.600.R.11-17-B200-250-EF	6.000	6.660	11	0.334	2.500	2.000	3.750	8100	5	SAKU 1706	60011
A271.650.R.12-17-C250-250-EF	6.500	7.160	12	0.330	5.120	2.500	5.120	7600	5	SAKU 1706	65012

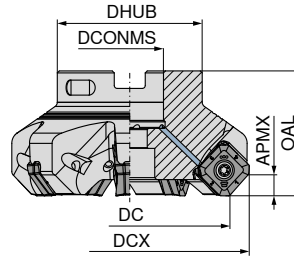
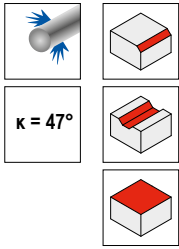
Spare parts

DC
2.000 - 6.500

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
106	303	302

MaxiMill – 271-17 Face mill






▲ 8 cutting edges per insert



50 767 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	torque moment Nm	Insert	
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	8.4	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) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant
- 2) With threaded holes M16 on the front face, pitch circle diameter = 101.6 mm / Without Through Coolant

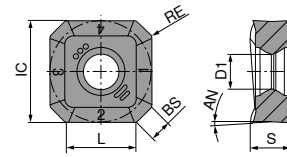
 TORX® blade	 Screwdriver	 Molykote	 Clamping screw	 Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
037	114	303	302	193

Spare parts

DC
50 - 250

SAKU

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
SAKU 1706..	0.669	0.228	0.467	0.146	0.250	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 ...
270	270	070	070

ISO	RE inch
1706ABSR	0.031

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 ...
020	020	120	120

ISO	RE inch
1706ABSR	0.031

P	•	•	•	•
M			○	○
K	○	○	○	○
N				
S				
H				
O				

SAKU

ISO		RE	-F50		-M50		-F50		-M50		-F50	
		inch	CTPM225	CTPM225	CTCM235	CTCM235	CTPM240	CTPM240	CTPM240	CTPM240	CTPM245	CTPM245
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
			SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU
			51 004 ...	51 005 ...	51 004 ...	51 005 ...	51 004 ...	51 005 ...	51 004 ...	51 005 ...	51 004 ...	51 004 ...
1706ABSR	0.031		220	220	320	320	420	420	420	420	470	470
P			•	•	•	•	○	○	○	○	•	•
M			•	•	•	•	•	•	•	•	•	•
K												
N												
S												
H												
O												

SAKU

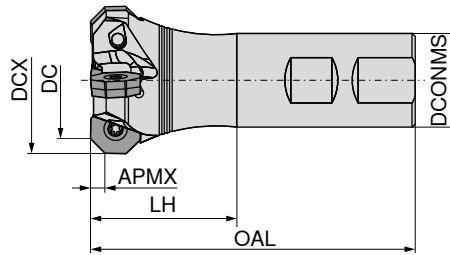
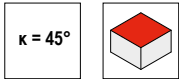
ISO		RE	-F50		-M50		-R50		-M50		-R50		-F50		-F50	
		inch	CTCM245	CTCK215	CTCK215	CTPK220	CTPK220	CTPK220	CTPK220	CTPK220	CTC5240	CTC5240	CTCS245	CTCS245	CTCS245	CTCS245
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
			SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU	SAKU
			51 004 ...	51 005 ...	51 058 ...	51 005 ...	51 058 ...	51 058 ...	51 058 ...	51 058 ...	50 306 ...	50 306 ...	51 004 ...	51 004 ...	51 004 ...	51 004 ...
1706ABSR	0.031		92001	520	520	620	620	620	620	620	520	520	570	570	570	570
P			•													
M			•													
K				•	•	•	•	•	•	•						
N																
S			○								•	•	•	•	•	•
H																
O																

Milling guide

Cutting data standard values	→ 154–157	Starting Parameter	→ 162
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		

MaxiMill – 273-06 End milling cutter

▲ 16 cutting edges per insert

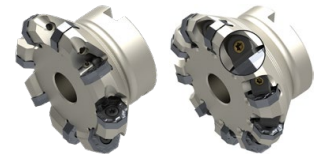
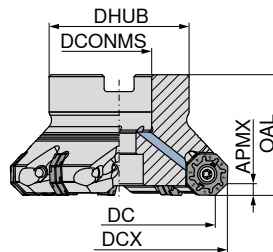
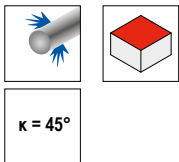


58 762 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	DCONMS _{H6} inch	LH inch	OAL inch	torque moment Nm	Insert	
C273.150.R.04-06-B125-125-EF	1.500	1.911	4	0.138	1.250	1.250	3.600	5	OAKU / XAHT 0605	15004
C273.200.R.05-06-B150-125-EF	2.000	2.421	5	0.138	1.500	1.250	4.500	5	OAKU / XAHT 0605	20005

MaxiMill – 273-06 Shell mill

▲ 16 cutting edges per insert



58 741 ...

58 741 ...

Designation	DC inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	
A273.200.R.05-06-A075-175-EF	2.000	5	0.138	1.750	0.750	1.750	14800	5	OAKU / XAHT 0605	20005
A273.250.R.07-06-A100-200-EF	2.500	7	0.138	2.250	1.000	2.250	13000	5	OAKU / XAHT 0605	25007
A273.300.R.08-06-A100-200-EF	3.000	8	0.138	2.250	1.000	2.250	11800	5	OAKU / XAHT 0605	30008
A273.400.R.10-06-B125-200-EF - IC	4.000	10	0.138	2.750	1.250	2.750	10100	5	OAKU / XAHT 0605	40010
A273.500.R.12-06-B150-200-EF	5.000	12	0.138	3.750	1.500	3.750	8900	5	OAKU / XAHT 0605	50012
A273.600.R.13-06-B150-250-EF	6.000	13	0.138	3.750	1.500	3.750	7900	5	OAKU / XAHT 0605	60013
A273.800.R.25-06-C250-250-EF	8.000	25	0.138	6.500	2.500	6.500	2900	5	OAKU / XAHT 0605	80025

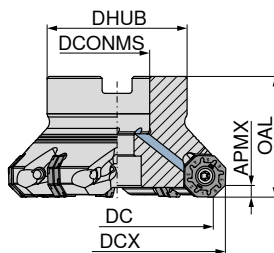
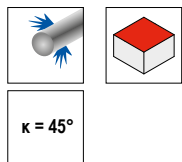
Clamping wedge screw	Clamping wedge Face mill	Screwdriver	Molykote	Clamping screw
70 950 ...	70 950 ...	80 950 ...	70 950 ...	70 950 ...
DC 1.500 - 6.000 8.000	844	845	106 105	303 303

Spare parts
DC

1.500 - 6.000
8.000

MaxiMill – 273-06 Shell mill

▲ 16 cutting edges per insert



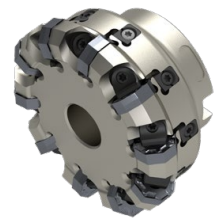
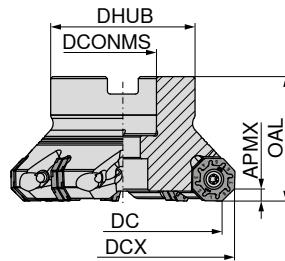
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	torque moment Nm	Insert	50 741 ...	
										040	140 ⁵⁾
A273.40.R.03-06	40	50.2	3	3.5	40	16	38	5	OAKU / XAHT 0605	040	
A273.40.R.04-06	40	50.2	4	3.5	40	16	38	5	OAKU / XAHT 0605	140 ⁵⁾	
A273.50.R.05-06	50	60.2	5	3.5	40	22	43	5	OAKU / XAHT 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	4	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	4	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	4	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	4	OAKU / XAHT 0605		260 ²⁾
A273.200.R.25-06	200	210.2	25	3.5	63	60	153	4	OAKU / XAHT 0605		300 ³⁾
A273.250.R.31-06	250	260.2	31	3.5	63	60	153	4	OAKU / XAHT 0605		25031 ³⁾

- 1) Version with Wedge, without internal coolant supply
- 2) Version with Wedge, without internal coolant supply / With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm
- 3) Version with Wedge, without internal coolant supply / With threaded holes M16 on the front face, pitch circle diameter = 101.6 mm
- 4) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant
- 5) Without Through Coolant

Spare parts DC	TORX® blade	Clamping key – T	Clamping wedge screw	Clamping wedge Face mill	Screwdriver	Power Screw	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	70 950 ...	70 950 ...	80 950 ...	70 950 ...	70 950 ...	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		113			193
100 - 125			037	844	845		302	193
125			036	844	845			193
160			037		114		302	193
160 - 250			036	844	845	113		193

MaxiMill – 273-06 Shell mill







- ▲ 16 cutting edges per indexable insert
- ▲ Axially adjustable



50 777 ...

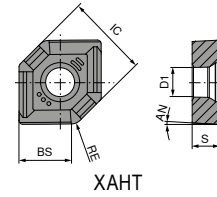
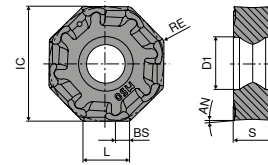
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	torque moment Nm	Insert	
A273.80.R.10A10-06	80	90.2	10	3.5	50	27	58	4	OAKU / XAHT 0605	08010 ¹⁾
A273.100.R.14A14-06	100	110.2	14	3.5	50	32	78	4	OAKU / XAHT 0605	10014 ¹⁾
A273.125.R.17A17-06	125	135.2	17	3.5	63	40	88	4	OAKU / XAHT 0605	12517 ¹⁾
A273.160.R.20A20-06	160	170.2	20	3.5	63	40	104	4	OAKU / XAHT 0605	16020 ²⁾
A273.200.R.25A25-06	200	210.2	25	3.5	63	60	153	4	OAKU / XAHT 0605	20025 ³⁾
A273.250.R.31A31-06	250	260.2	31	3.5	63	60	153	4	OAKU / XAHT 0605	25031 ³⁾

- 1) Version with Wedge
- 2) Version with Wedge / With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm
- 3) Version with Wedge / With threaded holes M16 on the front face, pitch circle diameter = 101.6 mm

							
	TORX® blade	Clamping wedge screw	Clamping wedge Face mill	Screwdriver	Molykote	Wedge	Torque screwdriver
	80 950 ...	70 950 ...	70 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
Spare parts							
DC							
80 - 250	036	844	845	113	303	199	193

OAKU / XAHT

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
XAHT 0605..	0.672	0.236	-	0.470	0.219	3
OAKU 0605..	0.673	0.228	0.236	0.079	0.223	3



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 ...
258	258	058	058

ISO	RE inch
060508SR	0.031

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 ...
008	008	108	108

ISO	RE inch
060508SR	0.031

P	•	•	•	•
M				
K	○	○	○	○
N				
S				
H				
O				

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 inch							
060508ER	0.031							458
060508SR	0.031	208	208	308	308	408	408	
P		•	•	•	•	○	○	•
M		•	•	•	•	•	•	•
K								
N								
S								
H								
O								

OAKU

		-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 inch							
060508ER	0.031	90801					550	50801
060508SR	0.031		508	508	608	608		
P		•						
M		•						
K			•	•	•	•		
N								
S		○					•	•
H								
O								

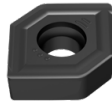
XAHT

▲ Masterfinish indexable insert (wiper insert)

ISO	RE inch				
060525SR	0.098				
			275	075	025
P		●	●	●	●
M					○
K				○	○
N					
S					
H					
O					

-M50
CTCP220

DRAGONSKIN

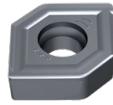


XAHT

51 014 ...

-M50
CTPP225

DRAGONSKIN

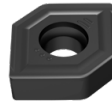


XAHT

51 014 ...

-M50
CTCP230

DRAGONSKIN

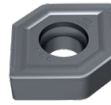


XAHT

51 014 ...

-M50
CTPP235

DRAGONSKIN



XAHT

51 014 ...

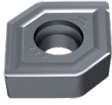
XAHT

▲ Masterfinish indexable insert (wiper insert)

ISO	RE inch					
060525SR	0.098					
			225	325	425	525
P		●	●	○		
M		●	●	●		
K					●	●
N						
S						
H						
O						

-M50
CTPM225

DRAGONSKIN

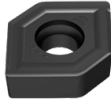


XAHT

51 014 ...

-M50
CTCM235

DRAGONSKIN

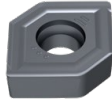


XAHT

51 014 ...

-M50
CTPM240

DRAGONSKIN

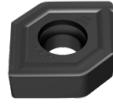


XAHT

51 014 ...

-M50
CTCK215

DRAGONSKIN

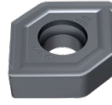


XAHT

51 014 ...

-M50
CTPK220

DRAGONSKIN



XAHT

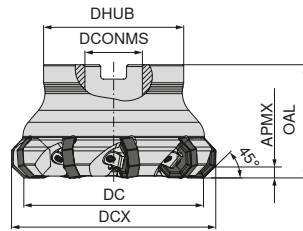
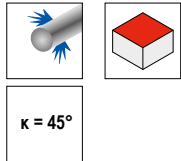
51 014 ...

Milling guide

Cutting data standard values	→ 154–157	Starting Parameter	→ 163
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		

MaxiMill – 273-08 Shell mill

▲ 16 cutting edges per insert



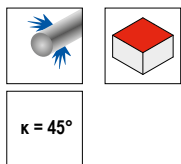
Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	torque moment Nm	Insert	58 783 ...	58 783 ...
										25005	25006
A273.250.R.05-08-A100-200-EF	2.500	3.039	5	0.197	2.000	1.000	2.250	5	ONKU 0806	25005	25006
A273.250.R.06-08-A100-200-EF	2.500	3.039	6	0.197	2.000	1.000	2.250	4	ONKU 0806	30006	30008
A273.300.R.06-08-A100-200-EF	3.000	3.539	6	0.197	2.000	1.000	2.250	5	ONKU 0806	40007	40009
A273.300.R.08-08-A100-200-EF	3.000	3.539	8	0.197	2.000	1.000	2.250	4	ONKU 0806	50008 ¹⁾	50011 ¹⁾
A273.400.R.07-08-A125-200-EF	4.000	4.539	7	0.197	2.500	1.250	2.750	5	ONKU 0806	60010	60014
A273.400.R.09-08-A125-200-EF	4.000	4.539	9	0.197	2.500	1.250	2.750	4	ONKU 0806		
A273.500.R.08-08-A150-250-EF	5.000	5.539	8	0.197	2.500	1.500	3.750	5	ONKU 0806		
A273.500.R.11-08-A150-250-EF	5.000	5.539	11	0.197	2.500	1.500	3.750	4	ONKU 0806		
A273.600.R.10-08-A150-250-EF	6.000	6.539	10	0.197	2.500	1.500	3.750	5	ONKU 0806		
A273.600.R.14-08-A150-250-EF	6.000	6.539	14	0.197	2.500	1.500	3.750	4	ONKU 0806		

1) Not in stock

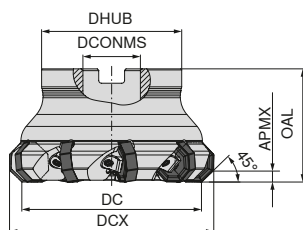
Spare parts for Article no.	TORX® blade	Clamping wedge screw	Clamping wedge Face mill	Screwdriver	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	70 950 ...	70 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
58 783 25005		055		129	303	821	193
58 783 25006		036	844	113	303		193
58 783 30006		055		129	303	821	193
58 783 30008		036	844	113	303		193
58 783 40007		055		129	303	821	193
58 783 40009		036	844	113	303		193
58 783 50008		055		129	303	821	193
58 783 50011		036	844	113	303		193
58 783 60010		055		129	303	821	193
58 783 60014		036	844	113	303		193

MaxiMill – 273-08 Shell mill

▲ 16 cutting edges per insert



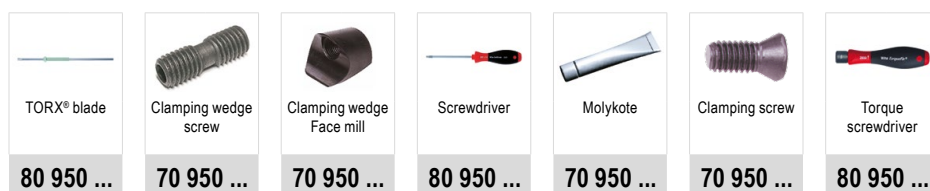
$\kappa = 45^\circ$



NEW **NEW**

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	torque moment Nm	Insert	50 779 ...	50 779 ...
A273.63.R.05-08	63	76.7	5	5	50	22	48	5	ONKU 0806	06300	
A273.63.R.06-08	63	76.7	6	5	50	22	48	5	ONKU 0806		16300 ¹⁾
A273.80.R.06-08	80	93.7	6	5	50	27	58	5	ONKU 0806	08000	
A273.80.R.08-08	80	93.7	8	5	50	27	58	4	ONKU 0806		18000 ¹⁾
A273.100.R.07-08	100	113.7	7	5	63	32	78	5	ONKU 0806	10000	
A273.100.R.09-08	100	113.7	9	5	63	32	78	4	ONKU 0806		20000 ¹⁾
A273.125.R.08-08	125	138.7	8	5	63	40	88	5	ONKU 0806	12500	
A273.125.R.11-08	125	138.7	11	5	63	40	88	4	ONKU 0806		22500 ¹⁾
A273.160.R.10-08	160	173.7	10	5	63	40	98	5	ONKU 0806	16000 ³⁾	
A273.160.R.14-08	160	173.7	14	5	63	40	98	4	ONKU 0806		26000 ²⁾

- 1) Version with Wedge
- 2) Version with Wedge, without internal coolant supply / With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm
- 3) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

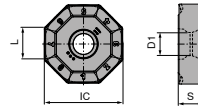


Spare parts for Article no.

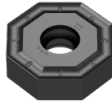
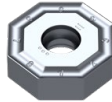
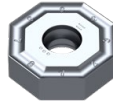
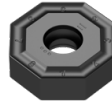
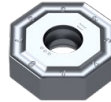
Article no.	TORX® blade	Clamping wedge screw	Clamping wedge Face mill	Screwdriver	Molykote	Clamping screw	Torque screwdriver
50 779 06300	055			129	303	821	193
50 779 16300	036	844	845	113	303		193
50 779 08000	055			129	303	821	193
50 779 18000	036	844	845	113	303		193
50 779 10000	055			129	303	821	193
50 779 20000	036	844	845	113	303		193
50 779 12500	055			129	303	821	193
50 779 22500	036	844	845	113	303		193
50 779 16000	055			129	303	821	193
50 779 26000	036	844	845	113	303		193

ONKU

Designation	IC inch	D1 inch	L inch	S inch
ONKU 0806..	0.866	0.228	0.333	0.254

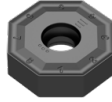
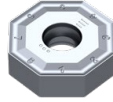
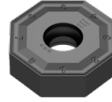
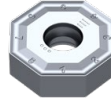


ONKU

	NEW	NEW	NEW	NEW	NEW
	-M50 CTCP230	-M50 CTPP235	-M50 CTPM240	-M50 CTCK215	-M50 CTPK220
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
	ONKU	ONKU	ONKU	ONKU	ONKU
	51 163 ...	51 163 ...	51 163 ...	51 163 ...	51 163 ...
ISO	RE				
080608SN	0.031	00800	10800	20800	50800
		60800			

ISO	RE	00800	10800	20800	50800	60800
P		●	●	○		
M			○	●		
K		○	○		●	●
N						
S						
H						
O						

ONKU

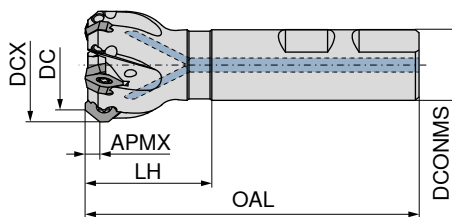
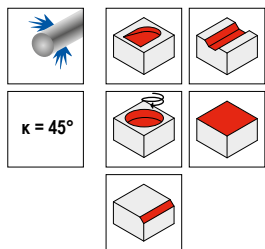
	NEW	NEW	NEW	NEW
	-R50 CTCP230	-R50 CTPP235	-R50 CTCK215	-R50 CTPK220
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	ONKU	ONKU	ONKU	ONKU
	51 164 ...	51 164 ...	51 164 ...	51 164 ...
ISO	RE			
080608SN	0.031	00800	10800	50800
		60800		

ISO	RE	00800	10800	50800	60800
P			●	●	
M				○	
K		○	○		●
N					
S					
H					
O					

Milling guide

Cutting data standard values	→ 154–157	Starting Parameter	→ 163
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		

MaxiMill – 270-09 End milling cutter 45°

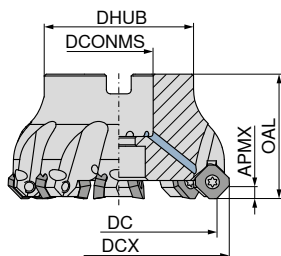
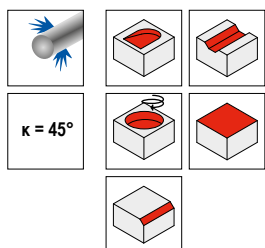


58 666 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	torque moment Nm	Insert	
C270.0500.R.01-09-B0625-125-EF	0.500	0.830	1	0.157	3.250	1.250	0.625	1.2	SD.. 0903..	05001
C270.0500.R.01-09-B075-125-EF	0.500	0.830	1	0.157	3.250	1.250	0.750	1.2	SD.. 0903..	05101
C270.0750.R.03-09-B075-150-EF	0.750	1.080	3	0.157	3.500	1.500	0.750	1.8	SD.. 0903..	07503 ¹⁾
C270.0750.R.03-09-B100-150-EF	0.750	1.080	3	0.157	3.500	1.500	1.000	1.8	SD.. 0903..	07603
C270.100.R.04-09-B075-150-EF	1.000	1.330	4	0.157	3.500	1.500	0.750	1.8	SD.. 0903..	10004
C270.100.R.04-09-B100-150-EF	1.000	1.330	4	0.157	3.500	1.500	1.000	1.8	SD.. 0903..	10104
C270.125.R.05-09-B075-175-EF	1.250	1.580	5	0.157	3.750	1.750	0.750	1.8	SD.. 0903..	12505
C270.125.R.05-09-B100-175-EF	1.250	1.580	5	0.157	3.750	1.750	1.000	1.8	SD.. 0903..	12605
C270.150.R.05-09-B075-200-EF	1.500	1.830	5	0.157	4.000	2.000	0.750	1.8	SD.. 0903..	15005
C270.150.R.05-09-B100-200-EF	1.500	1.830	5	0.157	4.000	2.000	1.000	1.8	SD.. 0903..	15105

1) Not in stock

MaxiMill – 270-09 Shell mill 45°



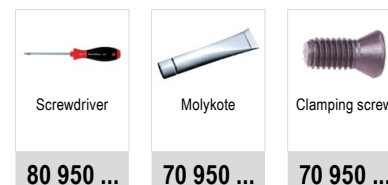
right

58 705 ...

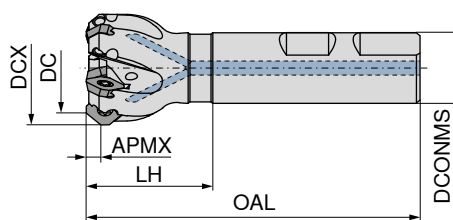
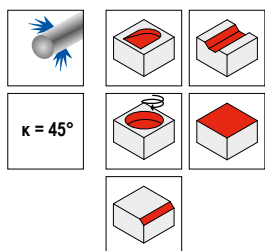
Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	
A270.200.R.06-09-A075-175-EF	2.000	2.330	6	0.157	1.750	1.750	0.750	10700	1.8	SD.. 0903..	20006
A270.250.R.08-09-A100-200-EF	2.500	2.830	8	0.157	2.250	2.250	1.000	8500	1.8	SD.. 0903..	25008
A270.300.R.10-09-A100-200-EF	3.000	3.330	10	0.157	2.250	2.250	1.000	6700	1.8	SD.. 0903..	30010

Spare parts

DC	80 950 ...	70 950 ...	70 950 ...
0.500	102	303	365
0.750 - 3.000	102	303	115



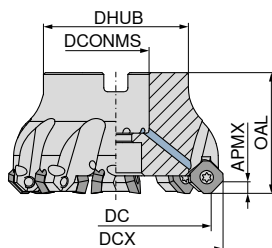
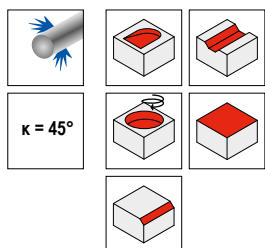
MaxiMill – 270-09 End milling cutter



50 666 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	torque moment Nm	Insert	
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 – 270-09 Shell mill



50 705 ... 50 706 ...






Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	torque moment Nm	Insert	50 705 ...	50 706 ...
A270.32.R.05-09	32	40.4	5	4	40	34	16	1.8	SD../XD.. 0903..		532
A270.40.R.04-09	40	48.4	4	4	40	38	16	1.8	SD../XD.. 0903..	540	
A270.40.R.06-09	40	48.4	6	4	40	38	16	1.8	SD../XD.. 0903..		540
A270.50.R.06-09	50	58.4	6	4	40	43	22	1.8	SD../XD.. 0903..	550	
A270.50.R.08-09	50	58.4	8	4	40	43	22	1.8	SD../XD.. 0903..		550
A270.63.R.08-09	63	71.4	8	4	40	48	22	1.8	SD../XD.. 0903..	563	
A270.63.R.10-09	63	71.4	10	4	40	48	22	1.8	SD../XD.. 0903..		563
A270.80.R.10-09	80	88.4	10	4	50	58	27	1.8	SD../XD.. 0903..	580	
A270.80.R.12-09	80	88.4	12	4	50	58	27	1.8	SD../XD.. 0903..		580
A270.100.R.12-09	100	108.4	12	4	50	78	32	1.8	SD../XD.. 0903..	600	
A270.100.R.14-09	100	108.4	14	4	50	78	32	1.8	SD../XD.. 0903..		600
A270.125.R.12-09	125	133.4	12	4	63	88	40	1.8	SD../XD.. 0903..	625	



- ▲ 50 705 ... Normal pitch for a broad spectrum of use on aluminum alloys, non-ferrous metals, and soft steel materials
- ▲ 50 706 ... Fine pitch for highest feed rates, predominantly used on steel and cast materials

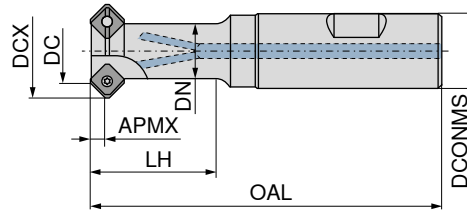
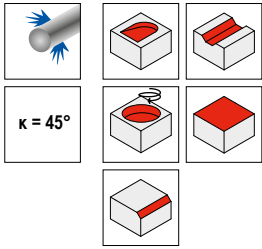
Spare parts

DC	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
6 - 12	033	110	303	365	191
16 - 125	033	110	303	115	191

 TORX® blade 80 950 ...	 Screwdriver 80 950 ...	 Molykote 70 950 ...	 Clamping screw 70 950 ...	 Torque screwdriver 80 950 ...
--	---	---	---	---

MaxiMill – 272-09 Chamfer milling cutter

▲ Usable on front and rear cutting edges



58 669 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	torque moment Nm	Insert	
C272.0500.R.01-09-B-100-EF	0.500	0.830	1	0.157	3.250	1.000	0.625	1.2	SD..0903..	05001

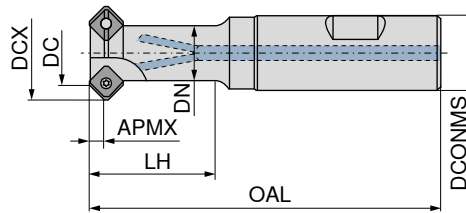
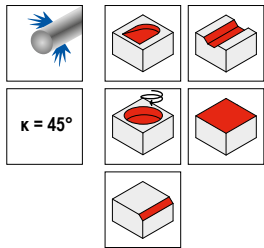
Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
102	303	365

Spare parts

DC
0.500

MaxiMill – 272-09 Chamfer milling cutter

▲ Usable on front and rear cutting edges








50 669 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	DN mm	OAL mm	LH mm	DCONMS mm	torque moment Nm	Insert	
C272.06.R.01-09	6	14.4	1	4	10	91	24.0	16	1.2	SD.. 0903..	10600
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

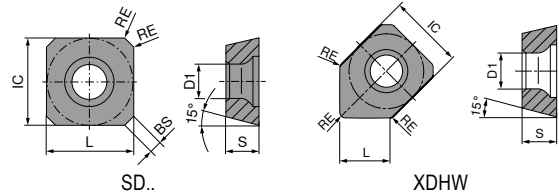
Spare parts
DC

6 - 12	033	110	303	365	191
16 - 25	033	110	303	115	191

 TORX® blade	 Screwdriver	 Molykote	 Clamping screw	 Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...

SDHW / SDNT / SDHT / XDHW

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XDHW 0903..	0.375	0.134	0.217	0.066	0.125
SD.. 0903..	0.375	0.134	0.375	0.066	0.125



SDHW / SDNT / SDHT

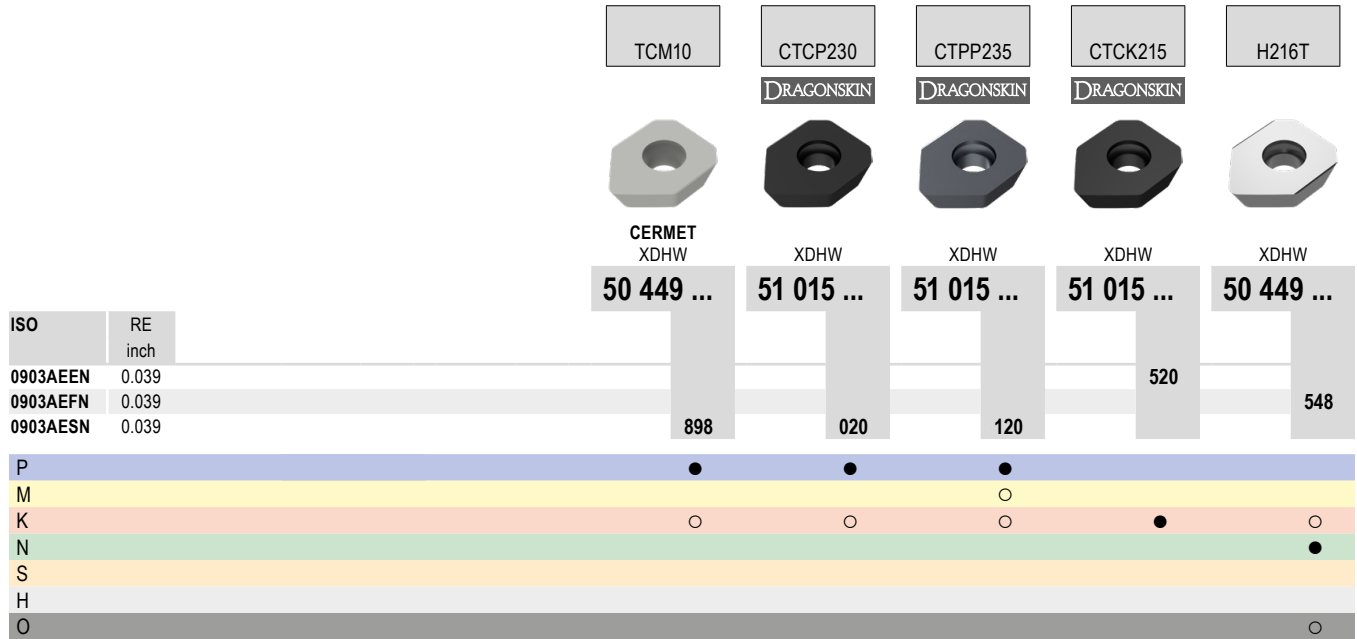
ISO	RE inch	TCM10	-29 CTCP230 DRAGONSKIN	-29 CTPP235 DRAGONSKIN	-33 CTPM240 DRAGONSKIN	-33P CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-F50 CTCM245 DRAGONSKIN
		CERMET SDHW	SDNT	SDNT	SDHT	SDHT	SDHT	SDHT
		50 428 ...	51 011 ...	51 011 ...	51 028 ...	51 086 ...	51 109 ...	51 109 ...
0903AESN	0.039	898	020	120	420	420	470	92001
P		●	●	●	○	○	●	●
M				○	●	●	●	●
K		○	○	○				
N								
S								○
H								
O								

SDNT / SDHT

ISO	RE inch	-31 CTCK215 DRAGONSKIN	NEW -F10 CTPX715 DRAGONSKIN	-27P H216T	-M31 CTC5240 DRAGONSKIN	-F50 CTCS245 DRAGONSKIN
		SDNT	SDHT	SDHT	SDHT	SDHT
		51 029 ...	51 160 ...	50 426 ...	50 421 ...	51 109 ...
0903AEFN	0.039		02002	548		
0903AESN	0.039	520			509	57100
P				○		
M				○		
K		●	●	○		
N			●	●		
S			○		●	●
H						
O			○	○		

XDHW

▲ Masterfinish indexable insert (wiper insert)

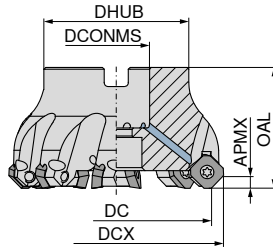
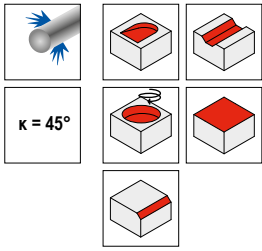


Milling guide

Cutting data standard values	→ 154–157	Machining strategy	→ 164
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		

MaxiMill – 270-12 Shell mill 45°

- ▲ 50 705 ... Normal pitch for a broad spectrum of use on aluminum alloys, non-ferrous metals, up to soft steel materials
- ▲ 50 706 ... Predominantly fine pitch for highest feed rates, use on steel and cast materials



58 705 ...

Designation	DC	DCX	ZNF	APMX	DCONMS _{H6}	OAL	DHUB	RPMX	torque moment	Insert	
	inch	inch		inch	inch	inch	inch	1/min.	Nm		
A270.200.R.04-12-A075-175-EF	2.000	2.550	4	0.236	0.750	1.750	1.750	10700	5	SD.. 1204..	20104
A270.250.R.05-12-A100-200-EF	2.500	3.050	5	0.236	1.000	2.250	2.250	8500	5	SD.. 1204..	25105
A270.300.R.06-12-A100-200-EF	3.000	3.550	6	0.236	1.000	2.250	2.250	6700	5	SD.. 1204..	30106
A270.400.R.06-12-B125-200-EF	4.000	4.550	6	0.236	1.250	2.750	2.750	5400	5	SD.. 1204..	40106
A270.500.R.07-12-B150-200-EF	5.000	5.550	7	0.236	1.500	3.750	3.750	4300	5	SD.. 1204..	50107
A270.600.R.08-12-B150-200-EF	6.000	6.660	8	0.236	1.500	3.750	3.750	3500	5	SD.. 1204..	60108



80 950 ...



70 950 ...



70 950 ...

Spare parts

DC
2.000 - 6.000

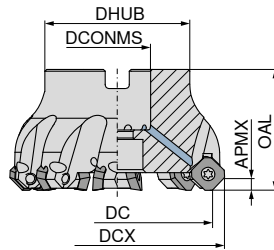
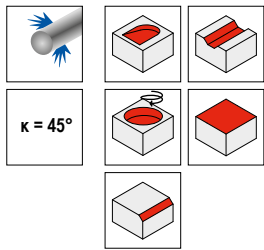
106

303

01200

MaxiMill – 270-12 Shell mill

- ▲ 50 705 ... Normal pitch for a broad spectrum of use on aluminum alloys, non-ferrous metals, up to soft steel materials
- ▲ 50 706 ... Predominantly fine pitch for highest feed rates, use on steel and cast materials



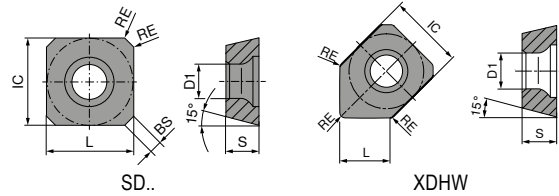
Designation	DC mm	DCX mm	ZNF	APMX mm	DCONMS _{H6} mm	OAL mm	DHUB mm	torque moment Nm	Insert	Series	
										50 705 ...	50 706 ...
A270.40.R.03-12	40	54	3	6	16	40	38	5	SD../XD.. 1204..	040	
A270.40.R.04-12	40	54	4	6	16	40	38	5	SD../XD.. 1204..		040
A270.50.R.04-12	50	64	4	6	22	40	43	5	SD../XD.. 1204..	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) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

Spare parts	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver	
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...	
DC								
40		037	040	114	151	303	01200	193
50 - 160		037	114			303	01200	193

SDHT / SDHW / SDMT / XDHW

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XDHW 1204..	0.500	0.217	0.295	0.069	0.187
SD.. 1204..	0.500	0.217	0.500	0.069	0.187



SDHT / SDHW / SDMT

ISO	RE inch	TCM10	-R TCM10	-29R CTCP230 DRAGONSKIN	-R CTCP230 DRAGONSKIN	CTCP230 DRAGONSKIN
1204AESN	0.008	900	899	020	020	020
1204AESN	0.039					
P		●	●	●	●	●
M		○	○	○	○	○
K		○	○	○	○	○
N						
S						
H						
O						

SDMT / SDHT / SDHW

ISO	RE inch	-29R CTPP235 DRAGONSKIN	-R CTPP235 DRAGONSKIN	-R CTPP235 DRAGONSKIN	-33 CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-F50 CTCM245 DRAGONSKIN
1204AESN	0.039	120	120	120	425	475	92501
P		●	●	●	○	●	●
M		○	○	○	●	●	●
K		○	○	○			
N							
S							○
H							
O							

SDMT / SDHW / SDHT

ISO	RE inch	51 059 ...	51 008 ...	50 426 ...	51 160 ...	50 426 ...	50 428 ...
1204AEEN	0.039	520	520				
1204AEFN	0.008			504	02502		
1204AEFN	0.039					554	
1204AESN	0.008						600

P					○		
M					○		
K		●	●	○	●	○	○
N				●	●	●	●
S					○		
H							
O				○	○	○	○

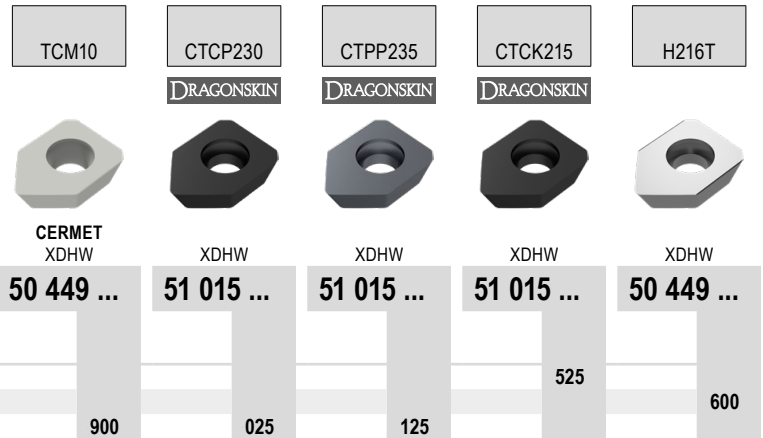
SDHT

ISO	RE inch	50 421 ...	51 109 ...
1204AESN	0.039	512	57600

P			
M			
K			
N			
S			●
H			●
O			

XDHW

▲ Masterfinish indexable insert (wiper insert)

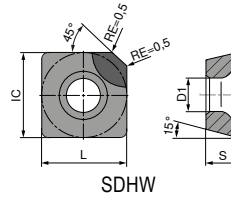


ISO	RE inch
1204AEEN	0.039
1204AEFN	0.039
1204AESN	0.039

P	●	●	●		
M			○		
K	○	○	○	●	○
N					●
S					
H					
O					○

SDHW

Designation	IC inch	D1 inch	L inch	S inch
SDHW 1204..	0.500	0.217	0.500	0.187



SDHW

	CTDPS30	CTBS10U
	DIAMOND SDHW	CBN SDHW
	51 900 ...	51 900 ...
ISO		
1204AEFN-2	100 ¹⁾	
1204AEFN-3	102 ²⁾	
1204AETN-2		300 ¹⁾

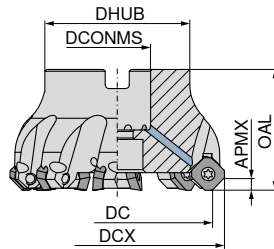
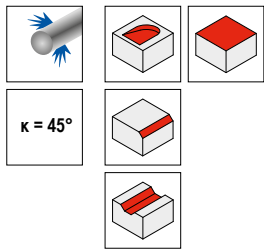
P		
M		
K		●
N	●	
S		
H		○
O		

- 1) $a_{p\ max.} = 2.0\ mm$
- 2) $a_{p\ max.} = 3.5\ mm$

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 164
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – 270-19 Shell mill



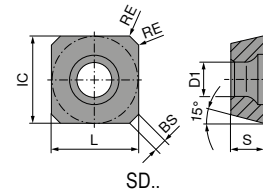
Designation	DC mm	DCX mm	ZNF	APMX mm	DCONMS _{HE} mm	OAL mm	DHUB mm	torque moment Nm	Insert	Left-hand	Right-hand
										50 698 ...	50 698 ...
A270.125.R.07-19	125	146.4	7	10	40	63	88	5	SD.. 1907..		12507
A270.160.R.09-19	160	181.4	9	10	40	63	104	5	SD.. 1907..		16009 ¹⁾
A270.200.R.11-19	200	221.1	11	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) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant
- 2) With threaded holes M16 on the front face, pitch circle diameter = 101.6 mm / Without Through Coolant
- 3) With 4 threaded holes M16 on the front face, pitch circle diameter = 101.6 mm and with 4 threaded holes M20 on the front face, pitch circle diameter = 177.8 mm / Without Through Coolant
- 4) With 4 threaded holes M16 on the front face, pitch circle diameter = 101.6 mm and with 4 threaded holes M20 on the front face, pitch circle diameter = 177.8 mm

Spare parts	TORX® blade	Screwdriver	Molykote	Clamping screw	Solid Carbide support S	Threaded sleeve	Torque screwdriver
DC	80 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
125 - 315	037	114	303	302	01500	01400	193

SDKT

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
SDKT 1907..	0.754	0.236	0.754	0.059	0.281	15



SDKT

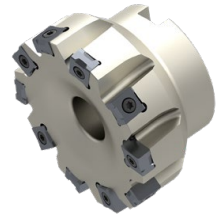
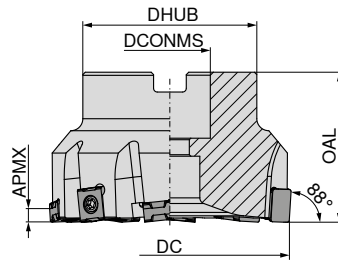
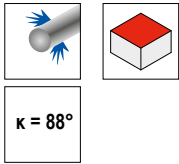
ISO	RE inch	-M50 CTCP220	-R50 CTPP225	-R50 CTCP230	-M50 CTPP235	-R50 CTPP235	-R50 CTPM225	-R50 CTCK215
1907AESN	0.063	22001	07000	02100	12000	12300	22200	52000
P		●	●	●	●	●	●	●
M					○	○	●	
K				○	○	○		●
N								
S								
H								
O								

Milling guide

Cutting data standard values	→ 154-157	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – HEC 11 Shell mill






▲ not adjustable



58 725 ...

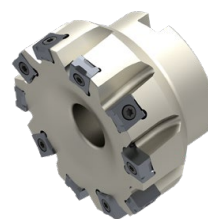
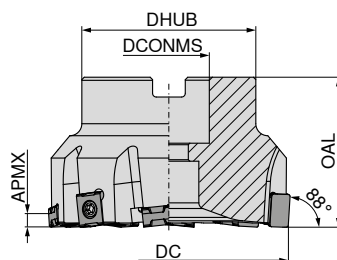
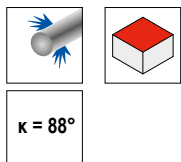
Designation	DC inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	
AHEC.200.R.06-11-A075-175-EF	2.000	6	0.157	1.750	1.750	0.750	12700	3.2	20006
AHEC.250.R.08-11-A100-175-EF	2.500	8	0.157	2.250	2.250	1.000	10100	3.2	25008
AHEC.300.R.10-11-A100-200-EF	3.000	10	0.157	2.250	2.250	1.000	8000	3.2	30010
AHEC.400.R.12-11-B150-200-EF	4.000	12	0.157	3.750	3.750	1.500	6400	3.2	40012
AHEC.500.R.16-11-B150-225-EF	5.000	16	0.157	3.750	3.750	1.500	5100	3.2	50016
AHEC.600.R.14-11-B150-250-EF	6.000	14	0.157	3.750	3.750	1.500	4000	3.2	60014
AHEC.600.R.20-11-A200-250-EF	6.000	20	0.157	2.500	4.882	2.000	4000	3.2	60020
AHEC.800.R.20-11-A250-250-EF	8.000	20	0.157	6.890	6.890	2.500	2600	3.2	80020

Spare parts
DC
2.000 - 8.000

 TORX® blade	 Molykote	 Clamping screw	 Wedge	 Torque screwdriver
80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
036	303	113	199	193

MaxiMill – HEC 11 Shell mill

▲ not adjustable



50 725 ...

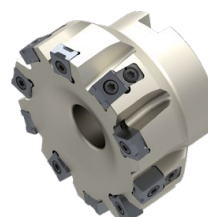
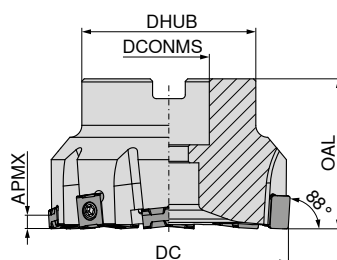
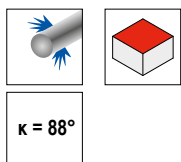
Designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert
AHEC.50.R.06-11	50	6	6	40	48	22	12700	3.2	LNHX 1106
AHEC.63.R.08-11	63	8	6	40	48	22	10100	3.2	LNHX 1106
AHEC.80.R.10-11	80	10	6	50	58	27	8000	3.2	LNHX 1106
AHEC.100.R.12-11	100	12	6	50	78	32	6400	3.2	LNHX 1106
AHEC.125.R.12-11	125	12	6	63	88	40	5100	3.2	LNHX 1106
AHEC.125.R.16-11	125	16	6	63	88	40	5100	3.2	LNHX 1106
AHEC.160.R.20-11	160	20	6	63	100	40	4000	3.2	LNHX 1106

050
063
080
100
125
12516
160 ¹⁾

1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

MaxiMill – HEC 11 Shell mill

▲ Axially adjustable with same tooth pitch



50 733 ...

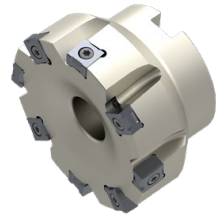
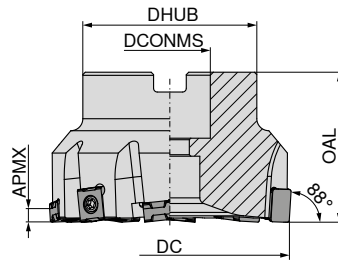
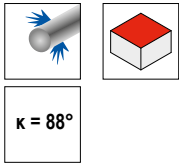
Designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert
AHEC.50.R.06A03-11	50	6	6	40	48	22	12700	3.2	LNHX 1106
AHEC.63.R.08A04-11	63	8	6	40	48	22	10100	3.2	LNHX 1106
AHEC.80.R.10A05-11	80	10	6	50	58	27	8000	3.2	LNHX 1106
AHEC.100.R.12A06-11	100	12	6	50	78	32	6400	3.2	LNHX 1106
AHEC.125.R.16A08-11	125	16	6	63	88	40	5100	3.2	LNHX 1106
AHEC.160.R.20A10-11	160	20	6	63	100	40	4000	3.2	LNHX 1106

050
063
080
100
125
160 ¹⁾

1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

MaxiMill – HEC 11 Shell mill

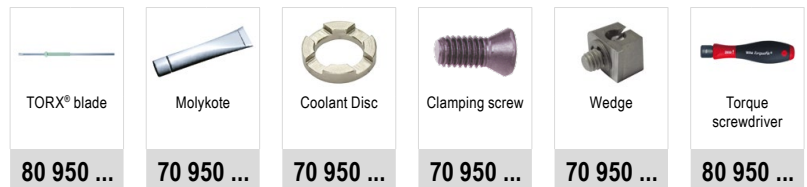
▲ with irregular pitch, non adjustable



50 733 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	
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) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

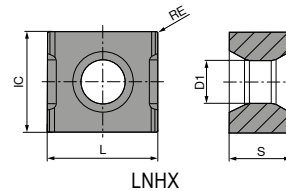


**Spare parts
for Article no.**

	80 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
50 725 050 / 50 725 063	036	303	852	113		193
50 725 080	036	303	853	113		193
50 725 100 / 50 733 600	036	303	854	113		193
50 725 125 / 50 725 12516	036	303	855	113		193
50 725 160 / 50 733 660	036	303		113		193
50 733 080 / 50 733 580	036	303	853	113	199	193
50 733 160	036	303		113	199	193
50 733 063 / 50 733 050	036	303	852	113	199	193
50 733 100	036	303	854	113	199	193
50 733 125	036	303	855	113	199	193
50 733 550 / 50 733 563	036	303	852	113		193
50 733 625	036	303	855	113		193

LNHX

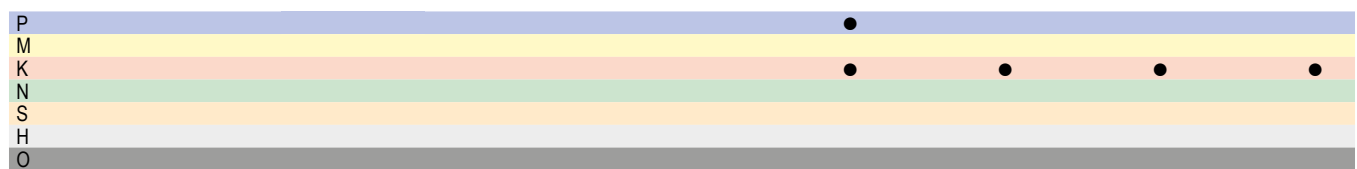
Designation	IC inch	D1 inch	L inch	S inch
LNHX 1106..	0.394	0.168	0.433	0.250



LNHX

CTEP210	CTCK215	-R50 CTCK215	-Q CTCK215
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
CERMET LNHX	LNHX	LNHX	LNHX
51 046 ...	51 046 ...	51 024 ...	51 045 ...
	520	520	520 ¹⁾
820	51600		

ISO	RE inch
1106PNER	0.020
1106ZZER	0.020
1106PNER	0.031
110616EN	0.063

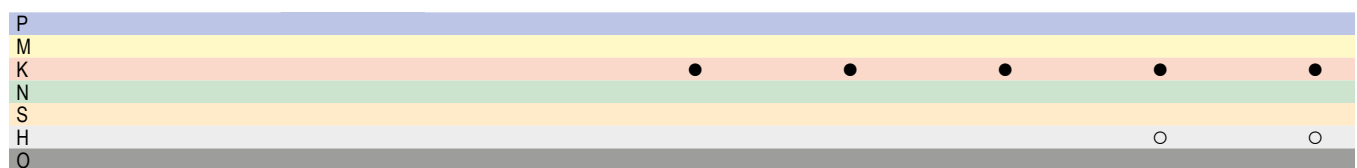


1) -Q = trailing edge insert

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 ...
620	608 620	904	87200	87000 ¹⁾

ISO	RE inch
110608EN	0.031
1106PNER	0.020
1106PNSR	0.020
1106ZZER	0.020

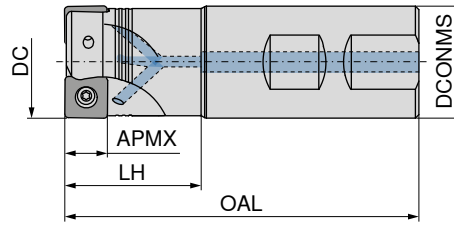
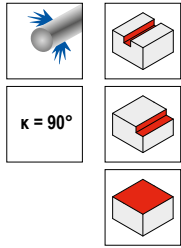


1) -Q = trailing edge insert

Milling guide

Cutting data standard values	→ 154-157	Assembly instructions	→ 165
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – 491-09 End milling cutter



Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS _{h6} inch	RPMX 1/min.	torque moment Nm	Insert
C491.100.R.03-09-B-125-EF	1.000	3	0.236	3.600	1.250	1.000	17125	2	SNHU 09T3
C491.100.R.03-09-A-200-EF-800	1.000	3	0.236	8.000	2.000	1.000	17125	2	SNHU 09T3
C491.125.R.03-09-B-150-EF	1.250	3	0.236	4.000	1.500	1.250	13700	2	SNHU 09T3
C491.125.R.04-09-B-150-EF	1.250	4	0.236	4.000	1.500	1.250	13700	2	SNHU 09T3
C491.125.R.03-09-A-250-EF-1000	1.250	3	0.236	10.000	2.500	1.250	13700	2	SNHU 09T3
C491.125.R.04-09-A-250-EF-1000	1.250	4	0.236	10.000	2.500	1.250	13700	2	SNHU 09T3

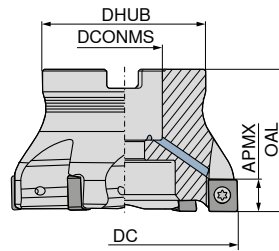
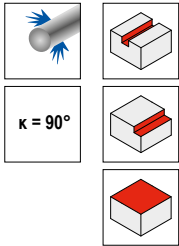
58 774 ...	58 774 ...
10003	30003
12503	32503
12504	32504

Spare parts
DC

1.000 - 1.250

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
127	303	710

MaxiMill – 491-09 Shell mill



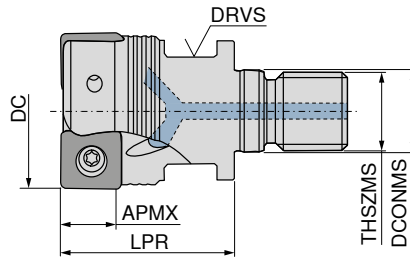
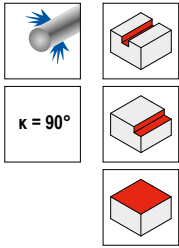
Designation	DC inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	58 776 ...		58 775 ...	
										15003			15005
A491.150.R.03-09-A050-175-EF	1.500	3	0.236	1.750	1.421	0.500	11900	2	SNHU 09T3	15003			15005
A491.150.R.05-09-A050-175-EF	1.500	5	0.236	1.750	1.421	0.500	11900	2	SNHU 09T3				
A491.200.R.04-09-A075-175-EF	2.000	4	0.236	1.750	1.750	0.750	9700	2	SNHU 09T3	20004			
A491.200.R.06-09-A075-175-EF	2.000	6	0.236	1.750	1.750	0.750	9700	2	SNHU 09T3				20006
A491.250.R.05-09-A100-200-EF	2.500	5	0.236	2.000	2.250	1.000	8500	2	SNHU 09T3	25005			
A491.250.R.08-09-A100-200-EF	2.500	8	0.236	2.000	2.250	1.000	8500	2	SNHU 09T3				25008
	3.000	6	0.236	2.000	2.250	1.000	7600	2	SNHU 09T3	30006			
A491.300.R.10-09-A100-200-EF	3.000	10	0.236	2.000	2.250	1.000	7600	2	SNHU 09T3				30010
A491.400.R.07-09-A125-200-EF	4.000	7	0.236	2.000	2.750	1.250	6400	2	SNHU 09T3	40007			
A491.400.R.12-09-A125-200-EF	4.000	12	0.236	2.000	2.750	1.250	6400	2	SNHU 09T3				40012
A491.500.R.08-09-B150-200-EF	5.000	8	0.236	2.000	3.750	1.500	5700	2	SNHU 09T3	50008			
A491.500.R.15-09-B150-200-EF	5.000	15	0.236	2.000	3.750	1.500	5700	2	SNHU 09T3				50015

Spare parts

DC
1.500 - 5.000

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
119	303	710

MaxiMill – 491-09 Screw in cutter

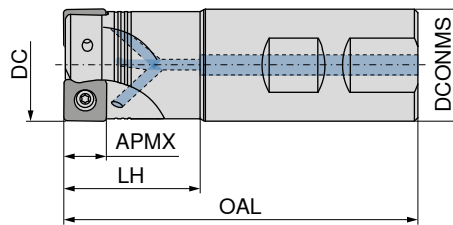
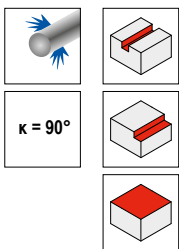


50 773 ...

Designation	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	RPMX 1/min.	torque moment Nm	Insert
G491.25.R.03-09	25	3	6	35	M12	12.5	17	23500	2	SNHU 09T3
G491.32.R.03-09	32	3	6	35	M16	17.0	24	19600	2	SNHU 09T3
G491.32.R.04-09	32	4	6	35	M16	17.0	24	19600	2	SNHU 09T3

125
132
232

MaxiMill – 491-09 End milling cutter



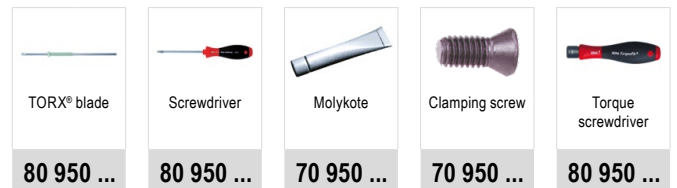
50 774 ... 50 774 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS _{h6} mm	RPMX 1/min.	torque moment Nm	Insert
C491.25.R.03-09-B-32	25	3	6	89	32	25	23500	2	SNHU 09T3
C491.25.R.03-09-A-50-225	25	3	6	225	50	25	23500	2	SNHU 09T3
C491.32.R.03-09-B-40	32	3	6	101	40	32	19600	2	SNHU 09T3
C491.32.R.04-09-B-40	32	4	6	101	40	32	19600	2	SNHU 09T3
C491.32.R.03-09-A-63-250	32	3	6	250	63	32	19600	2	SNHU 09T3
C491.32.R.04-09-A-63-250	32	4	6	250	63	32	19600	2	SNHU 09T3

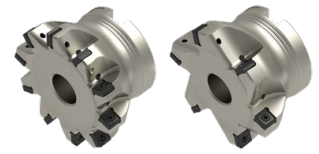
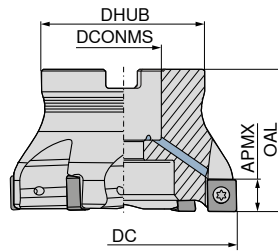
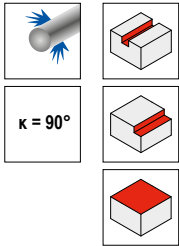
325
632
432
532
332

Spare parts

DC	503	119	303	710	193
25 - 32					



MaxiMill – 491-09 Shell mill

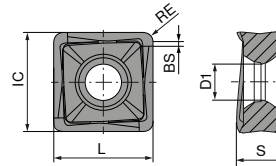


Designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	50 776 ...		50 775 ...	
A491.40.R.03-09	40	3	6	40	38	16	16800	2	SNHU 09T3				240
A491.40.R.05-09	40	5	6	40	38	16	16800	2	SNHU 09T3	240			
A491.50.R.04-09	50	4	6	40	43	22	14600	2	SNHU 09T3				250
A491.50.R.06-09	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			

Spare parts								
	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver	
DC	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...	
40		053	040	119	151	303	710	193
50 - 125		053		119		303	710	193

SNHU

Designation	IC inch	L inch	S inch	D1 inch
SNHU 09T3..	0.360	0.360	0.146	0.152



SNHU

ISO	RE inch	-M50 CTCP230	-M50 CTPP235	-F50 CTPM240	-M50 CTPM240	-F40 CTPM245	-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 ...
09T308ER	0.031					45800	90801
09T308SR	0.031	008	108	408	408		
09T312SR	0.047	01200	11200	41200	41200		
09T316SR	0.063	01600	11600	41600	41600		
P		●	●	○	○	●	●
M			○	●	●	●	●
K		○	○				
N							
S							○
H							
O							

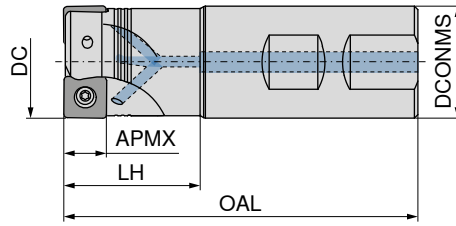
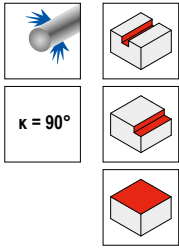
SNHU

ISO	RE inch	-R50 CTCK215	-R50 CTPK220	NEW -F10 CTPX715	-F10 CTWN215	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		SNHU	SNHU	SNHU	SNHU	SNHU	SNHU
		51 121 ...	51 121 ...	51 118 ...	51 118 ...	51 126 ...	51 126 ...
09T308ER	0.031			00802	358	15800	55800
09T308FR	0.031		60800				
09T308SR	0.031	508					
09T312FR	0.047						
09T312SR	0.047	51200					
09T316FR	0.063						
09T316SR	0.063	51600					
P				○			
M				○			
K		●	●	●	○		
N				●	●		
S				○		●	●
H							
O				○	○		

Milling guide

Cutting data standard values	→ 154–157	Starting Parameter	→ 167
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		




MaxiMill – 491-12 End milling cutter



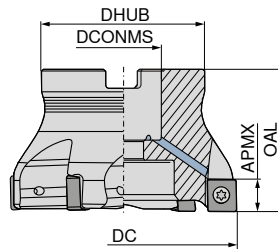
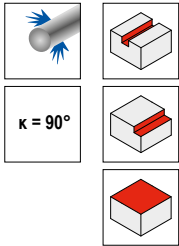
Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS _{ns} inch	RPMX 1/min.	torque moment Nm	Insert	58 774 ...	58 774 ...
C491.125.R.02-12-B-150-EF	1.250	2	0.315	4.000	1.500	1.250	13700	3.2	SNHU 1204		52502
C491.125.R.02-12-A-250-EF-1000	1.250	2	0.315	10.000	2.500	1.250	13700	3.2	SNHU 1204	42502	

Spare parts
DC

1.250

 Screwdriver	 Molykote	 Clamping screw
80 950 ...	70 950 ...	70 950 ...
128	303	859

MaxiMill – 491-12 Shell mill



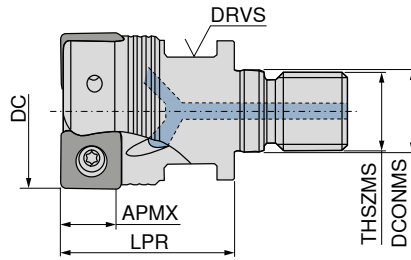
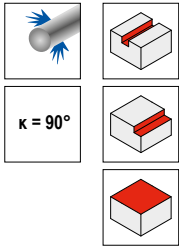
Designation	DC inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert
A491.150.R.03-12-A050-175-EF	1.500	3	0.315	1.420	1.420	0.500	11900	3.2	SNHU 1204
A491.200.R.04-12-A075-175-EF	2.000	4	0.315	1.750	1.750	0.750	9700	3.2	SNHU 1204
A491.200.R.05-12-A075-175-EF	2.000	5	0.315	1.750	1.750	0.750	9700	3.2	SNHU 1204
A491.250.R.05-12-A100-200-EF	2.500	5	0.315	2.250	2.250	1.000	8500	3.2	SNHU 1204
A491.250.R.06-12-A100-200-EF	2.500	6	0.315	2.250	2.250	1.000	8500	3.2	SNHU 1204
A491.300.R.06-12-A100-200-EF	3.000	6	0.315	2.250	2.250	1.000	7600	3.2	SNHU 1204
A491.300.R.08-12-A100-200-EF	3.000	8	0.315	2.250	2.250	1.000	7600	3.2	SNHU 1204
A491.400.R.07-12-A125-200-EF	4.000	7	0.315	2.750	2.750	1.250	6400	3.2	SNHU 1204
A491.400.R.10-12-A125-200-EF	4.000	10	0.315	2.750	2.750	1.250	6400	3.2	SNHU 1204
A491.500.R.08-12-B150-200-EF	5.000	8	0.315	3.750	3.750	1.500	5700	3.2	SNHU 1204
A491.500.R.12-12-B150-200-EF	5.000	12	0.315	3.750	3.750	1.500	5700	3.2	SNHU 1204
A491.600.R.09-12-B150-200-EF	6.000	9	0.315	3.750	3.750	1.500	5100	3.2	SNHU 1204
A491.600.R.13-12-B150-200-EF	6.000	13	0.315	3.750	3.750	1.500	5100	3.2	SNHU 1204

58 776 ...	58 775 ...
15103	
20104	
	20105
25105	
	25106
30106	
	30108
40107	
	40110
50108	
	50112
60109	
	60113

Spare parts
DC
1.500 - 6.000

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
128	303	859

MaxiMill – 491-12 Screw in cutter

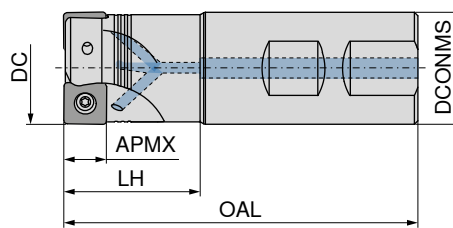
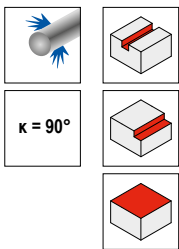


50 773 ...

Designation	DC mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	RPMX 1/min.	torque moment Nm	Insert
G491.32.R.02-12	32	2	8	35	M16	17	24	13600	3.2	SNHU 1204

032

MaxiMill – 491-12 End milling cutter



50 774 ... 50 774 ...






Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS _{h6} mm	RPMX 1/min.	torque moment Nm	Insert
C491.32.R.02-12-B-40	32	2	8	102	40	32	13600	3.2	SNHU 1204
C491.32.R.02-12-A-63-250	32	2	8	250	63	32	10200	3.2	SNHU 1204

232

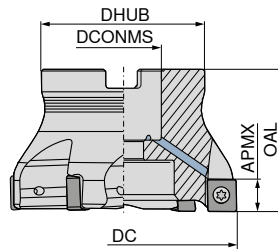
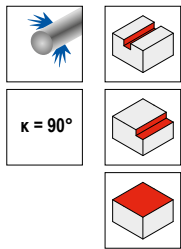
032

Spare parts

DC	054	128	303	859	193
32					

 TORX® blade	 Screwdriver	 Molykote	 Clamping screw	 Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...

MaxiMill – 491-12 Shell mill



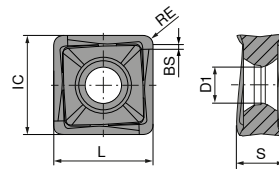
Designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	50 776 ...		50 775 ...	
A491.40.R.03-12	40	3	8	40	38	16	11500	3.2	SNHU 1204				040
A491.40.R.04-12	40	4	8	40	38	16	11500	3.2	SNHU 1204	040			050
A491.50.R.04-12	50	4	8	40	43	22	9800	3.2	SNHU 1204				050
A491.50.R.05-12	50	5	8	40	43	22	9800	3.2	SNHU 1204	050			063
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			080
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			100
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			125
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			160 ¹⁾
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) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

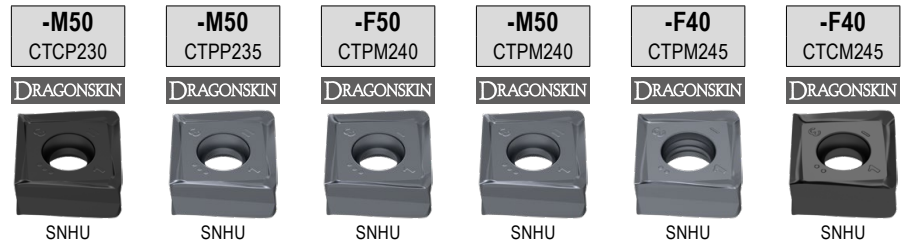
Spare parts DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
40	054	040	128	151	303	859	193
50 - 160	054		128		303	859	193

SNHU

Designation	IC inch	L inch	S inch	D1 inch
SNHU 1204..	0.480	0.480	0.197	0.173

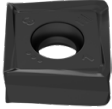







SNHU



ISO	RE inch	51 100 ...	51 100 ...	51 102 ...	51 100 ...	51 128 ...	51 128 ...
120408ER	0.031						
120408SR	0.031	008	108	408	408	45800	90801
120412SR	0.047		112	412			
120416SR	0.063		116	416			
120420SR	0.079		120	420			
P		●	●	○	○	●	●
M			○	●	●	●	●
K		○	○				
N							
S							○
H							
O							

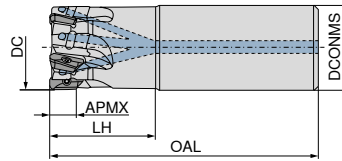
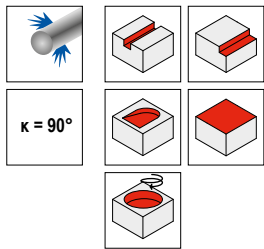
SNHU

		-R50 CTCK215	-R50 CTPK220	NEW -F10 CTPX715	-F10 CTWN215	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN
							
		SNHU	SNHU	SNHU	SNHU	SNHU	SNHU
		51 103 ...	51 103 ...	51 101 ...	51 101 ...	51 128 ...	51 128 ...
ISO	RE inch			00802	358	15800	55800
120408ER	0.031						
120408FR	0.031						
120408SR	0.031	508	608				
120412FR	0.047				362		
120412SR	0.047	512					
120416FR	0.063				366		
120416SR	0.063	516					
120420FR	0.079				370		
120420SR	0.079	520					
P				○			
M				○			
K		●	●	●	○		
N				●	●		
S				○		●	●
H							
O				○	○		

Milling guide

Cutting data standard values	→ 154–157	Starting Parameter	→ 167
Technical Information	→ 191–197	Chip groove description and overview	→ 198–200
Grade description and overview	→ 202–207		

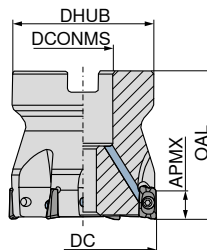
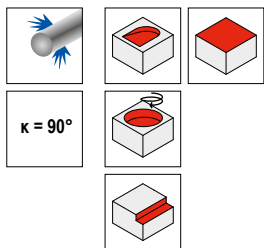
MaxiMill – 211-07 End milling cutter



58 752 ...

Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	RPMX 1/min.	torque moment Nm	Insert	
C211.0375.R.01-07-A-0750-EF	0.375	1	0.236	3.000	0.750	0.375	68000	1	XD.T 0703	03701
C211.0500.R.02-07-A-0750-EF	0.500	2	0.236	3.000	0.750	0.500	66600	1	XD.T 0703	05002
C211.0625.R.03-07-A-125-EF-650	0.625	3	0.236	6.500	1.250	0.625	17760	1	XD.T 0703	06203
C211.0750.R.04-07-A-150-EF-800	0.750	4	0.236	8.000	1.500	0.750	12600	1	XD.T 0703	07504
C211.100.R.06-07-A0875-125-EF	1.000	6	0.236	3.500	1.250	0.875	39840	1	XD.T 0703	10006
C211.125.R.08-07-A100-150-EF	1.250	8	0.236	3.500	1.500	1.000	36240	1	XD.T 0703	12508

MaxiMill – 211-07 Shell mill



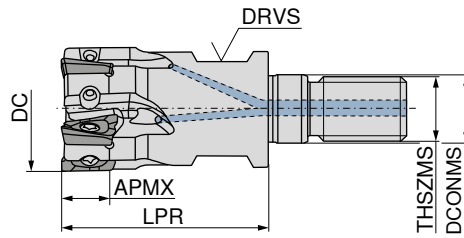
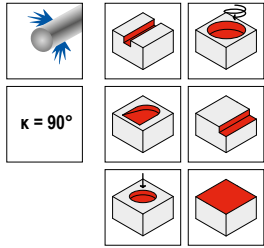
58 753 ...

Designation	DC inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	Insert	
A211.150.R.08-07-A050-175-EF	1.500	8	0.236	1.420	0.500	1.420	33240	XD.T 0703	15008
A211.200.R.10-07-A075-175-EF	2.000	10	0.236	1.750	0.750	1.750	30480	XD.T 0703	20010

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
117	303	137

Spare parts
DC
0.375 - 2.000

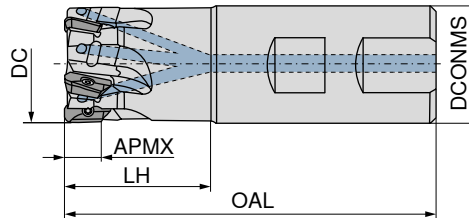
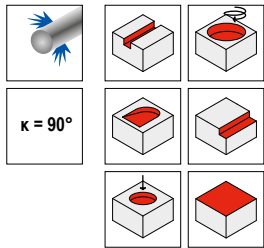
MaxiMill – 211-07 Screw in cutter



50 751 ...

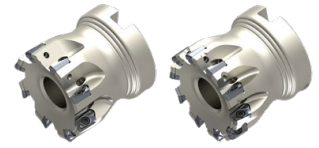
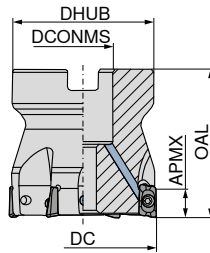
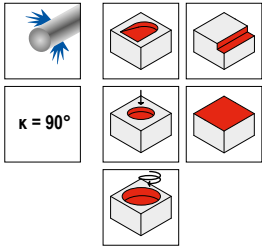
Designation	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	
G211.16.R.04-07	16	4	6	27	8.5	M8	10	50400	1	XD.T 0703	016
G211.20.R.05-07	20	5	6	33	10.5	M10	15	44280	1	XD.T 0703	020
G211.25.R.06-07	25	6	6	35	12.5	M12	17	39480	1	XD.T 0703	025
G211.32.R.08-07	32	8	6	35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

MaxiMill – 211-07 End milling cutter



Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	torque moment Nm	Insert	50 752 ...	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 – 211-07 Shell mill

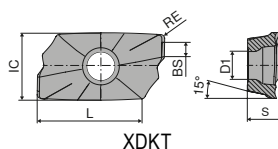


Designation	DC mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	50 753 ...		50 754 ...	
A211.32.R.06-07	32	6	6	40	16	38	36240	1	XD.T 0703	032			
A211.32.R.08-07	32	8	6	40	16	38	36240	1	XD.T 0703			032	
A211.40.R.08-07	40	8	6	40	16	38	33240	1	XD.T 0703	040			
A211.40.R.10-07	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	

Spare parts DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
10 - 25	051		124		303	137	191
32	051	040	124	151	303	137	191
32 - 50	051		124		303	137	191

XDKT

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XDKT 0703..	0.193	0.098	0.307	0.047	0.125



XDKT

Grade	Material	ISO	RE
-F50 CTCP230	DRAGONSKIN	51 033 ...	0.016
-M50 CTCP230	DRAGONSKIN	51 036 ...	0.016
-F50 CTPP235	DRAGONSKIN	51 033 ...	0.031
-M50 CTPP235	DRAGONSKIN	51 036 ...	0.031

ISO	RE inch	004	008	104	108
070304SR	0.016	004	008	104	108
070308SR	0.031	004	008	104	108

Material	004	008	104	108
P	●	●	●	●
M	○	○	○	○
K	○	○	○	○
N				
S				
H				
O				

XDKT

Grade	Material	ISO	RE
-F50 CTPM240	DRAGONSKIN	51 033 ...	0.016
-M50 CTPM240	DRAGONSKIN	51 036 ...	0.016
-F40 CTPM245	DRAGONSKIN	51 112 ...	0.016
-F40 CTCM245	DRAGONSKIN	51 112 ...	0.016
-F20 CTWN215		50 507 ...	0.016
-F40 CTC5240	DRAGONSKIN	50 498 ...	0.016
-F40 CTCS245	DRAGONSKIN	51 112 ...	0.016

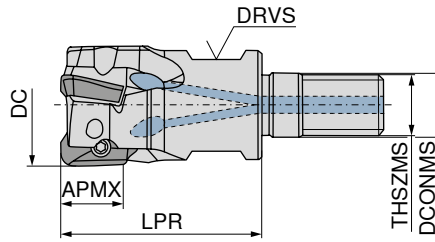
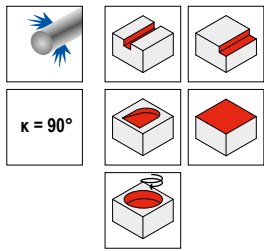
ISO	RE inch	404	408	454	458	90401	90801	504	508	544	548	558
070304ER	0.016			454		90401				544		
070304FR	0.016							504				
070304SR	0.016	404										
070308ER	0.031			458		90801				548		
070308FR	0.031							508				
070308SR	0.031	408										558

Material	404	408	454	458	90401	90801	504	508	544	548	558
P	○	○	●	●	●	●					
M	●	●	●	●	●	●					
K							○				
N							●				
S					○			●			●
H											
O							○				

Milling guide

Cutting data standard values	→ 154–157	Machining strategy	→ 168
Starting Parameter	→ 168	Technical Information	→ 191–197
Chip groove description and overview	→ 198–200	Grade description and overview	→ 202–207

MaxiMill – 211-11 Screw in cutter



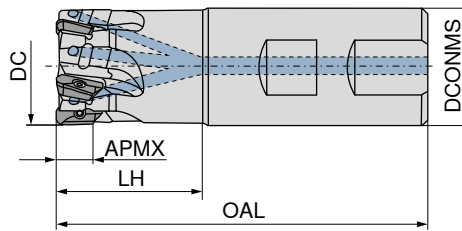
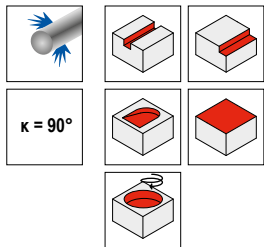
58 736 ...

Designation	DC inch	ZNF	APMX inch	LPR inch	DCONMS inch	THSZMS	RPMX 1/min.	torque moment Nm	Insert	
G211.0625.R.02-11-125-F	0.625	2	0.394	1.250	0.335	M8	42000	1.6	XD.T 11T3	06202 ¹⁾
G211.0750.R.03-11-118-F	0.750	3	0.394	1.118	0.492	M10	36900	1.6	XD.T 11T3	07503
G211.100.R.04-11-150-F	1.000	4	0.394	1.500	0.492	M12	33200	1.6	XD.T 11T3	10004
G211.125.R.05-11-150-F	1.250	5	0.394	1.500	0.669	M16	30200	1.6	XD.T 11T3	12505

1) Not in stock

MaxiMill – 211-11 End milling cutter

▲ Insert radius > 0.063": Modify cutter body



58 737 ...

58 737 ...

Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS _{ns} inch	RPMX 1/min.	torque moment Nm	Insert		
C211.0625.R.02-11-B-100-EF	0.625	2	0.394	3.250	1.000	0.625	42000	1.6	XD.T 11T3		26202
C211.0625.R.02-11-A-125-EF-650	0.625	2	0.394	6.500	1.250	0.625	14800	1.6	XD.T 11T3	06202	
C211.0750.R.03-11-B-100-EF	0.750	3	0.394	3.500	1.000	0.750	36900	1.6	XD.T 11T3		27503
C211.0750.R.03-11-A-125-EF-650	0.750	3	0.394	6.500	1.250	0.750	15800	1.6	XD.T 11T3	07503	
C211.100.R.04-11-B-125-EF	1.000	4	0.394	3.500	1.250	1.000	33200	1.6	XD.T 11T3		30004
C211.100.R.04-11-A-150-EF-650	1.000	4	0.394	6.500	1.500	1.000	19900	1.6	XD.T 11T3	10004	
C211.125.R.05-11-B100-150-EF	1.250	5	0.394	3.750	1.500	1.000	30200	1.6	XD.T 11T3		32505
C211.125.R.05-11-A100-200-EF-650	1.250	5	0.394	6.500	2.000	1.000	20900	1.6	XD.T 11T3	12505	
C211.150.R.06-11-B-200-EF	1.500	6	0.394	4.000	2.000	1.250	27700	1.6	XD.T 11T3		35006

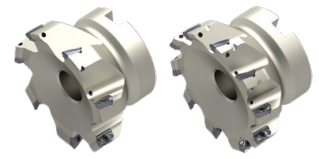
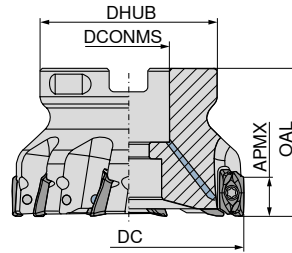
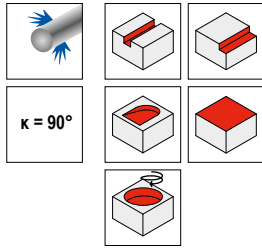
Spare parts

DC	039	303	128
0.625 - 1.250	039	303	128
1.500	039	303	131

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...

MaxiMill – 211-11 Shell mill

▲ Insert radius > 0.063": Modify cutter body



Designation	DC inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	58 738 ...		58 739 ...	
										15004			15006
A211.150.R.04-11-A050-175-EF	1.500	4	0.394	1.420	0.500	1.420	27700	1.6	XD.T 11T3				
A211.150.R.06-11-A050-175-EF	1.500	6	0.394	1.420	0.500	1.420	27700	1.6	XD.T 11T3				15006
A211.200.R.05-11-A075-175-EF	2.000	5	0.394	1.750	0.750	1.750	25400	1.6	XD.T 11T3		20005		
A211.200.R.08-11-A075-175-EF	2.000	8	0.394	1.750	0.750	1.750	25400	1.6	XD.T 11T3				20008
A211.250.R.06-11-A100-200-EF	2.500	6	0.394	2.250	1.000	2.250	23300	1.6	XD.T 11T3		25006		
A211.250.R.10-11-A100-200-EF	2.500	10	0.394	2.250	1.000	2.250	23300	1.6	XD.T 11T3				25010
A211.300.R.07-11-A100-200-EF	3.000	7	0.394	2.250	1.000	2.250	21300	1.6	XD.T 11T3		30007		
A211.300.R.12-11-A100-200-EF	3.000	12	0.394	2.250	1.000	2.250	21300	1.6	XD.T 11T3				30012
A211.400.R.08-11-B125-200-EF	4.000	8	0.394	2.750	1.250	2.750	19600	1.6	XD.T 11T3		40008		
A211.400.R.14-11-B125-200-EF	4.000	14	0.394	2.750	1.250	2.750	19600	1.6	XD.T 11T3				40014
A211.500.R.10-11-B150-200-EF	5.000	10	0.394	3.750	1.500	3.750	17900	1.6	XD.T 11T3		50010		
A211.600.R.12-11-B150-200-EF	6.000	12	0.394	3.750	1.500	3.750	16500	1.6	XD.T 11T3		60012		

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
039	303	128
039	303	131

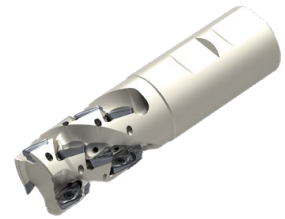
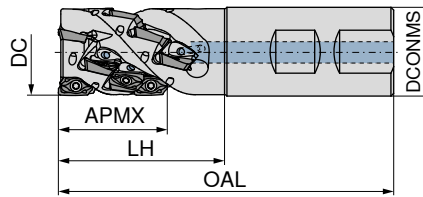
Spare parts

DC
0.625 - 1.250
1.500 - 6.000

MaxiMill – 211-11K Extended flute cutter

▲ ZEFP = Number of inserts

▲ ZNP = Number of teeth



58 758 ...

Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	ZEFP	ZNP	torque moment Nm
C211.100.R.02K3-11-B-150-EF	1.000	2	1.060	3.750	1.500	1.000	6	3	1.6
C211.125.R.02K4-11-B-200-EF	1.250	2	1.430	4.500	2.000	1.250	8	4	1.6
C211.150.R.03K4-11-A-225-EF	1.500	3	1.420	5.100	2.250	1.500	12	4	1.6

10002

12502

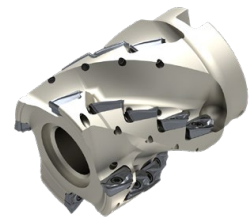
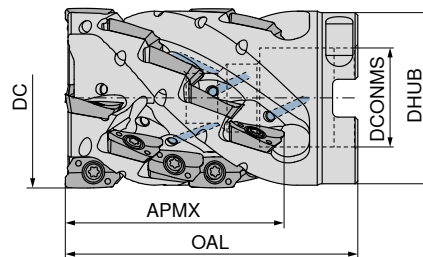
15003¹⁾

1) DIN 1835 A Shank

MaxiMill – 211-11K Extended flute cutter

▲ ZEFP = Number of inserts

▲ ZNP = Number of teeth



58 757 ...

Designation	DC inch	ZNF	APMX inch	ZEFP	ZNP	OAL inch	DCONMS _{H6} inch	DHUB inch	torque moment Nm	Insert
A211.200.R.04K5-11-A075-EF	2.000	4	1.800	20	5	2.500	0.750	1.750	1.6	XD.T 11T3
A211.250.R.05K7-11-A100-EF	2.500	5	2.500	35	7	3.250	1.000	2.250	1.6	XD.T 11T3
A211.300.R.06K9-11-A125-EF	3.000	6	3.200	54	9	4.000	1.250	2.750	1.6	XD.T 11T3



20004

25005

30006

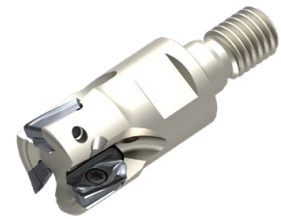
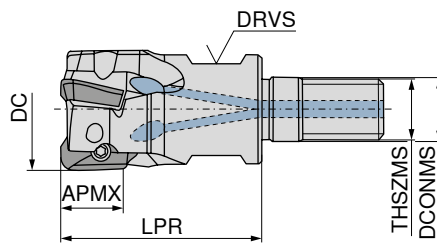
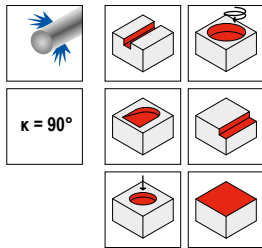
Spare parts

DC	70 950 ...	80 950 ...	70 950 ...	70 950 ...
1.000 - 1.500		039	303	131
2.000	002	039	303	131
2.500	003	039	303	131
3.000	004	039	303	131

 Cap screw 70 950 ...	 Screwdriver 80 950 ...	 Molykote 70 950 ...	 Clamping screw 70 950 ...
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MaxiMill – 211-11 Screw in cutter

▲ Insert radius >1.6 mm: Modify cutter body

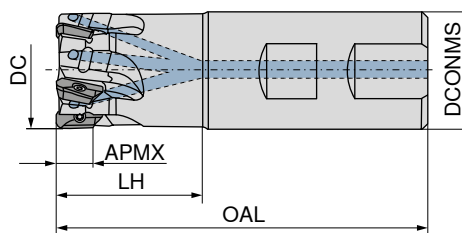
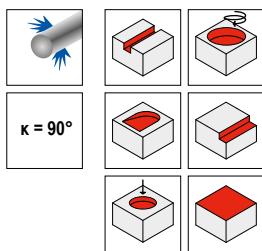


50 736 ...

Designation	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS mm	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	
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 – 211-11 End milling cutter

▲ Insert radius >1.6 mm: Modify cutter body

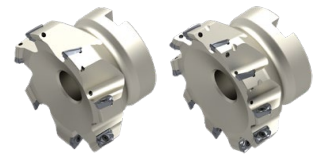
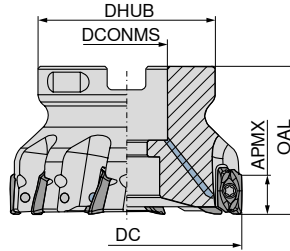
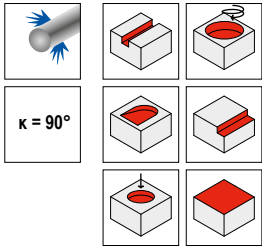


50 737 ... 50 737 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS _{h6} mm	RPMX 1/min.	torque moment Nm	Insert	50 737 ...	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.03-11-B-25	20	3	10	77	25	20	36900	1.6	XD.T 11T3		020
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-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.03-11-A24-50-225	25	3	10	225	50	24	9400	1.6	XD.T 11T3	825	
C211.25.R.02-11-A-50-225	25	2	10	225	50	25	9400	1.6	XD.T 11T3	02502	
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-A/B-40	32	5	10	102	40	32	30200	1.6	XD.T 11T3	132	032
C211.32.R.04-11-B-25	32	4	10	102	40	32	30200	1.6	XD.T 11T3		83200
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-A25-40	32	4	10	102	40	25	30200	1.6	XD.T 11T3	53204	
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 – 211-11 Shell mill

▲ Insert radius >1.6 mm: Modify cutter body



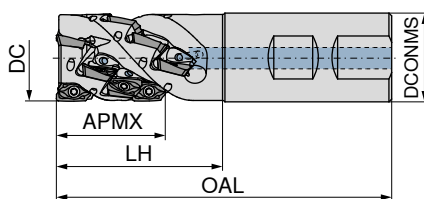
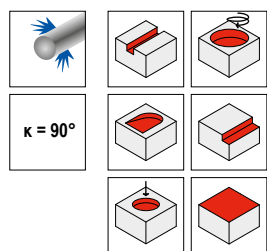
Designation	DC mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	50 738 ...		50 739 ...	
A211.40.R.04-11	40	4	10	40	16	38	27700	1.6	XD.T 11T3	040			
A211.40.R.06-11	40	6	10	40	16	38	27700	1.6	XD.T 11T3				040
A211.50.R.05-11	50	5	10	40	22	43	25400	1.6	XD.T 11T3	050			
A211.50.R.08-11	50	8	10	40	22	43	25400	1.6	XD.T 11T3				050
A211.63.R.06-11	63	6	10	40	22	48	23300	1.6	XD.T 11T3	063			
A211.63.R.10-11	63	10	10	40	22	48	23300	1.6	XD.T 11T3				063
A211.80.R.07-11	80	7	10	50	27	58	21300	1.6	XD.T 11T3	080			
A211.80.R.10-11	80	10	10	50	27	58	21300	1.6	XD.T 11T3				180
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			

Spare parts DC							
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
12	043		125		303		191
16 - 32	043		125		303		191
40	043	040	125	151	303	128	191
50	043	050	125	154	303	131	191
63 - 125	043		125		303	131	191

MaxiMill – 211-11KN shell end mill shank

▲ ZEFP = Number of inserts

▲ ZNP = Number of teeth



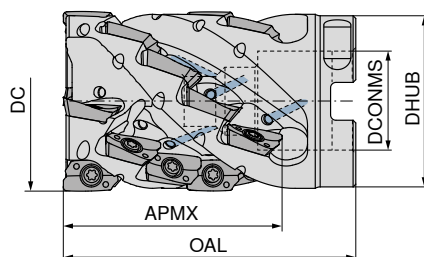
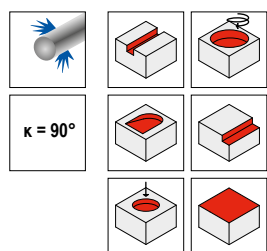
50 784 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	ZEFP	ZNP	RPMX 1/min.	torque moment Nm	Insert	
C211.25.R.02KN3-11-B-40	25	2	28	97	40	25	6	3	19800	1.6	XD.T 11T3	02523
C211.25.R.02KN4-11-B-50	25	2	37	107	50	25	8	4	19800	1.6	XD.T 11T3	02524
C211.25.R.02KN5-11-B-60	25	2	46	117	60	25	10	5	19800	1.6	XD.T 11T3	02525
C211.32.R.02KN4-11-B-50	32	2	37	111	50	32	8	4	19200	1.6	XD.T 11T3	03224
C211.32.R.03KN5-11-B-60	32	3	46	121	60	32	15	5	19200	1.6	XD.T 11T3	03235
C211.40.R.03KN4-11-B32-50	40	3	37	111	50	32	12	4	18300	1.6	XD.T 11T3	04034
C211.40.R.04KN5-11-B32-60	40	4	46	121	60	32	20	5	18300	1.6	XD.T 11T3	04045

MaxiMill – 211-11KN shell end face mill

▲ ZEFP = Number of inserts

▲ ZNP = Number of teeth



50 794 ...

Designation	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	
A211.40.R.03KN4-11	40	3	37	12	4	65	22	38	18300	1.6	XD.T 11T3	04034
A211.40.R.04KN4-11	40	4	37	16	4	65	22	38	18300	1.6	XD.T 11T3	04044
A211.40.R.04KN5-11	40	4	46	20	5	74	22	38	18300	1.6	XD.T 11T3	04045
A211.50.R.04KN5-11	50	4	46	20	5	75	27	48	17100	1.6	XD.T 11T3	05045
A211.50.R.05KN5-11	50	5	46	25	5	75	27	48	17100	1.6	XD.T 11T3	05055
A211.50.R.05KN6-11	50	5	55	30	6	85	27	48	17100	1.6	XD.T 11T3	05056

Cap screw	TORX® blade	Screwdriver	Molykote	Clamping screw	Socket head screw	Torque screwdriver
70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...

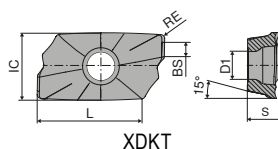
Spare parts

Designation

A211.40.R.03KN4-11		043	125	303	20400	20900	191
A211.40.R.04KN4-11		043	125	303	20400	20900	191
A211.40.R.04KN5-11		043	125	303	20400	21000	191
A211.50.R.04KN5-11	002	043	125	303	20400	181	191
A211.50.R.05KN5-11	002	043	125	303	20400	181	191
A211.50.R.05KN6-11	002	043	125	303	20400	181	191
C211.25.R.02KN3-11-B-40		043	125	303	20700		191
C211.25.R.02KN4-11-B-50		043	125	303	20700		191
C211.25.R.02KN5-11-B-60		043	125	303	20700		191
C211.32.R.02KN4-11-B-50		043	125	303	20700		191
C211.32.R.03KN5-11-B-60		043	125	303	20700		191
C211.40.R.03KN4-11-B32-50		043	125	303	20400		191
C211.40.R.04KN5-11-B32-60		043	125	303	20400		191

XDKT / XDHT

Designation	IC	D1	L	BS	S
	inch	inch	inch	inch	inch
XD.T 11T302..	0.268	0.110	0.417	0.079	0.150
XD.T 11T304..	0.268	0.110	0.417	0.071	0.150
XD.T 11T308..	0.268	0.110	0.417	0.055	0.150
XD.T 11T312..	0.268	0.110	0.417	0.055	0.150
XD.T 11T316..	0.268	0.110	0.417	0.055	0.150
XD.T 11T320..	0.268	0.110	0.417	0.055	0.150
XD.T 11T325..	0.268	0.110	0.417	0.055	0.150
XD.T 11T332..	0.268	0.110	0.417	0.031	0.150
XD.T 11T340..	0.268	0.110	0.417	-	0.150
XDHT 11T350..	0.268	0.110	0.417	-	0.150
XDKT 11T332..	0.268	0.110	0.417	0.055	0.150



XDKT

-F50	-M50	-F50	-M50
CTCP220	CTCP220	CTPP225	CTPP225
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
F	M	F	M
XDKT	XDKT	XDKT	XDKT
51 034 ...	51 037 ...	51 034 ...	51 037 ...
258	258	058	058

ISO	RE
	inch
11T308SR	0.031

P	•	•	•	•
M				
K				
N				
S				
H				
O				

XDKT

-F50	-M50	-R50	-F50	-M50	-R50
CTCP230	CTCP230	CTCP230	CTPP235	CTPP235	CTPP235
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
F	M	R	F	M	R
XDKT	XDKT	XDKT	XDKT	XDKT	XDKT
51 034 ...	51 037 ...	51 039 ...	51 034 ...	51 037 ...	51 039 ...

ISO	RE
	inch
11T304SR	0.016
11T308SR	0.031
11T312SR	0.047
11T320SR	0.079
11T325SR	0.098

P	•	•	•	•	•
M					
K	○	○	○	○	○
N					
S					
H					
O					

1) Insert radius > 0.063". Modify cutter body

XDKT

ISO	RE inch	-F50 CTPM225 DRAGONSKIN F XDKT 51 034 ... 208	-M50 CTPM225 DRAGONSKIN M XDKT 51 037 ... 208	-R50 CTPM225 DRAGONSKIN R XDKT 51 039 ... 208	-F50 CTCM235 DRAGONSKIN F XDKT 51 034 ... 308	-M50 CTCM235 DRAGONSKIN M XDKT 51 037 ... 308	-R50 CTCM235 DRAGONSKIN R XDKT 51 039 ... 308
P		•	•	•	•	•	•
M		•	•	•	•	•	•
K							
N							
S							
H							
O							

XDKT

ISO	RE inch	-F50 CTPM240 DRAGONSKIN F XDKT 51 034 ... 408	-M50 CTPM240 DRAGONSKIN M XDKT 51 037 ... 404	-R50 CTPM240 DRAGONSKIN R XDKT 51 039 ... 408	-F40 CTPM245 DRAGONSKIN F XDKT 51 113 ... 454	-F50 CTPM245 DRAGONSKIN F XDKT 51 034 ... 458	-F40 CTCM245 DRAGONSKIN F XDKT 51 113 ... 90401	-F50 CTCM245 DRAGONSKIN F XDKT 51 034 ... 90801
11T304ER	0.016							
11T304SR	0.016							
11T308ER	0.031							
11T308SR	0.031	408	408	408		458		90801
11T312ER	0.047							
11T312SR	0.047	412	412	412				91201
11T316ER	0.063							
11T320ER	0.079							
11T320SR	0.079	420 ¹⁾	420 ¹⁾	420 ¹⁾				91601 92001 ¹⁾
11T325ER	0.098							
11T332ER	0.126							
11T332SR	0.126	432 ¹⁾	432 ¹⁾	432 ¹⁾				92501 ¹⁾ 93201 ¹⁾
11T340ER	0.157							
					490 ¹⁾			94001 ¹⁾
P		○	○	○	•	•	•	•
M		•	•	•	•	•	•	•
K								
N								
S							○	○
H								
O								

1) Insert radius > 0.063". Modify cutter body

XDKT / XDHT

		-M50 CTCK215 DRAGONSKIN	-R50 CTCK215 DRAGONSKIN	-M50 CTPK220 DRAGONSKIN	-F20 CTWN215	NEW -F10 CTPX715 DRAGONSKIN	-27P H216T
		M	R	M	F	F	F
		XDKT	XDKT	XDKT	XDKT	XDHT	XDHT
		51 037 ...	51 039 ...	51 037 ...	50 478 ...	51 155 ...	50 477 ...
ISO	RE inch						
11T302FR	0.008						
11T304FR	0.016						
11T304SR	0.016	504				00202 00402	502 504
11T308FR	0.031						
11T308SR	0.031	508				00802	508
11T312FR	0.047		508				
11T316FR	0.063			608		01202 01602	512 516
11T320FR	0.079				520 ¹⁾ 525 ¹⁾	02002 ¹⁾ 02502 ¹⁾	520 ¹⁾ 525 ¹⁾
11T325FR	0.098					03202 ¹⁾ 04002 ¹⁾	532 ¹⁾ 540 ¹⁾
11T332FR	0.126					05002 ¹⁾	550 ¹⁾
11T340FR	0.157						
11T350FR	0.197						
P						○	
M						○	
K		●	●	●	○	●	○
N					●	●	●
S						○	
H							
O					○	○	○

1) Insert radius > 0.063": Modify cutter body

XDKT

		-F40 CTC5240 DRAGONSKIN	-F40 CTCS245 DRAGONSKIN	-R60 CTP6215
		F	F	R
		XDKT	XDKT	XDKT
		50 463 ...	51 113 ...	50 464 ...
ISO	RE inch			
11T304ER	0.016			
11T308ER	0.031			
11T308SR	0.031			
11T312ER	0.047			
11T316ER	0.063			
11T320ER	0.079			
11T325ER	0.098			
11T332ER	0.126			
11T340ER	0.157			
P				
M				
K				●
N				
S		●	●	
H				●
O				

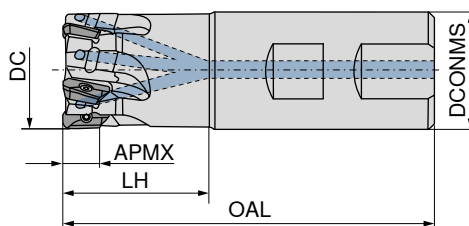
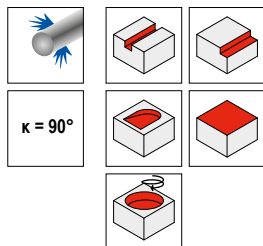
1) Insert radius > 0.063": Modify cutter body

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 169
Starting parameters	→ 169	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – 211-15 End milling cutter

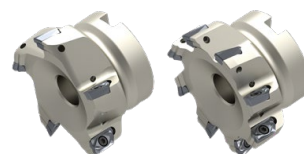
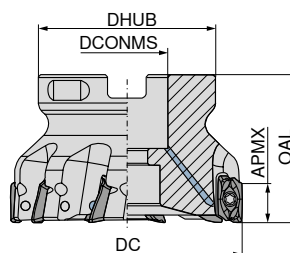
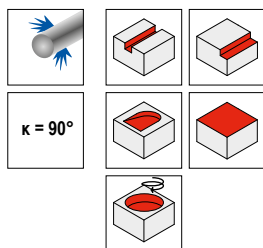
▲ Insert radius > 0.098": Modify cutter body



Designation	DC inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	RPMX 1/min.	torque moment Nm	Insert	58 747 ...	
										10002	58 747 ...
C211.100.R.02-15-A-200-EF-800	1.000	2	0.551	8.000	2.000	1.000	7520	3.2	XD.T 1505	10002	
C211.125.R.03-15-B-150-EF-400	1.250	3	0.551	4.000	1.500	1.250	24160	3.2	XD.T 1505		32503
C211.125.R.03-15-A-250-EF-1000	1.250	3	0.551	10.000	2.500	1.250	6800	3.2	XD.T 1505	12503	
C211.150.R.03-15-B125-200-EF-450	1.500	3	0.551	4.500	2.000	1.250	22160	3.2	XD.T 1505		35003
C211.150.R.04-15-B125-200-EF-450	1.500	4	0.551	4.500	2.000	1.250	22160	3.2	XD.T 1505		35004
C211.150.R.03-15-A125-300-EF-1000	1.500	3	0.551	10.000	3.000	1.250	6120	3.2	XD.T 1505	15003	

MaxiMill – 211-15 Shell mill

▲ Insert radius > 0.098": Modify cutter body



Designation	DC inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	58 748 ...	
										15003	58 749 ...
A211.150.R.03-15-A050-175-EF	1.500	3	0.551	1.420	0.500	1.420	22160	3.2	XD.T 1505	15003	
A211.200.R.05-15-A075-175-EF	2.000	5	0.551	1.750	0.750	1.750	20320	3.2	XD.T 1505	20005	
A211.250.R.06-15-A100-200-EF	2.500	6	0.551	2.250	1.000	2.250	18640	3.2	XD.T 1505	25006	
A211.300.R.05-15-A100-200-EF	3.000	5	0.551	2.250	1.000	2.250	17040	3.2	XD.T 1505	30005	
A211.300.R.08-15-A100-200-EF	3.000	8	0.551	2.250	1.000	2.250	17040	3.2	XD.T 1505		30008
A211.400.R.06-15-A125-200-EF	4.000	6	0.551	2.750	1.250	2.750	16000	3.2	XD.T 1505	40006	
A211.400.R.09-15-A125-200-EF	4.000	9	0.551	2.750	1.250	2.750	16000	3.2	XD.T 1505		40009
A211.500.R.10-15-B150-250-EF	5.000	10	0.551	3.750	1.500	3.750	14320	3.2	XD.T 1505	50010	
A211.600.R.08-15-B150-250-EF	6.000	8	0.551	2.500	1.500	3.750	13200	3.2	XD.T 1505	60008	
A211.600.R.10-15-B150-250-EF	6.000	10	0.551	3.750	1.500	3.750	13200	3.2	XD.T 1505		60010

Spare parts DC

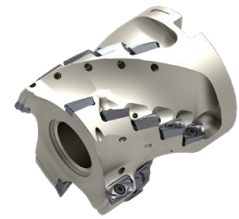
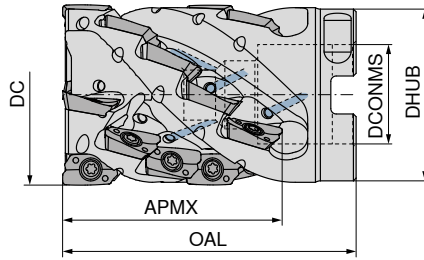
1.000 - 6.000

Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
120	303	839

MaxiMill – 211-15K Extended flute cutter

▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



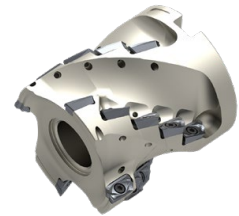
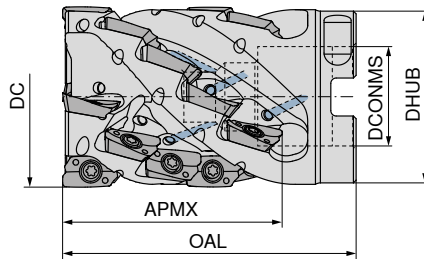
58 759 ...

Designation	DC inch	ZNF	APMX inch	ZEFP	ZNP	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	
A211.200.R.03K4-15-A075-EF	2.000	3	2.000	12	4	3.000	0.750	1.750	13600	3.2	XD.T 1505	20003
A211.250.R.04K5-15-A100-EF	2.500	4	2.500	20	5	3.500	1.000	2.250	12500	3.2	XD.T 1505	25004
A211.300.R.04K6-15-A125-EF	3.000	4	3.000	24	6	4.000	1.250	2.750	11360	3.2	XD.T 1505	30104

MaxiMill – 211-15K Extended flute cutter

▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



58 759 ...

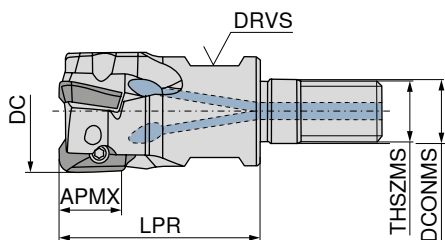
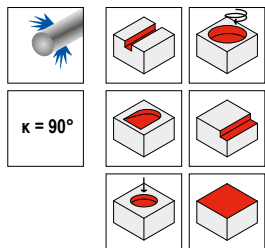
Designation	DC inch	ZNF	APMX inch	ZEFP	ZNP	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	
A211.400.R.05KN6-15-A150-EF	4.000	5	3.091	30	6	4.250	1.500	3.750	10100	3.2	XD.T 1505	40005

Spare parts

DC	Cap screw	Screwdriver	Molykote	Clamping screw
2.000	70 950 ...	80 950 ...	70 950 ...	70 950 ...
2.500 - 3.000	002	120	303	839
4.000	003	120	303	839
	004	128	303	20500

MaxiMill – 211-15 Screw in cutter

▲ Insert radius >2.5 mm: Modify cutter body



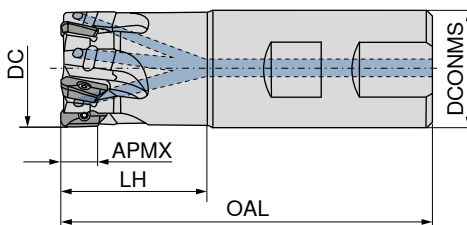
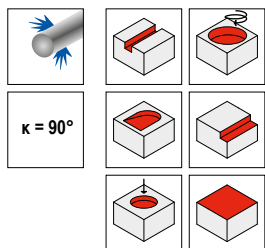
50 746 ...

Designation	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS mm	DRVS mm	RPMX 1/min.	torque moment Nm	Insert
G211.25.R.02-15	25	2	14	35	12.5	M12	17	26560	3.2	XD.T 1505
G211.32.R.03-15	32	3	14	35	17.0	M16	24	30200	3.2	XD.T 1505
G211.40.R.04-15	40	4	14	40	17.0	M16	27	27700	3.2	XD.T 1505

025
032
040

MaxiMill – 211-15 End milling cutter

▲ Insert radius >2.5 mm: Modify cutter body



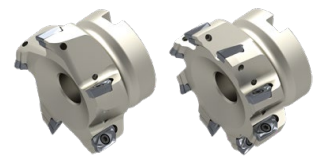
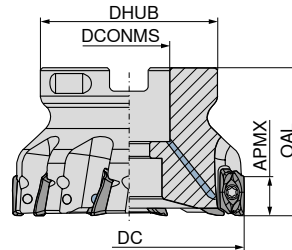
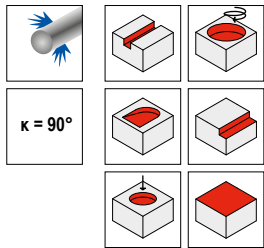
50 747 ... 50 747 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	torque moment Nm	Insert
C211.25.R.02-15-B20-32	25	2	14	83	32	20	26560	3.2	XD.T 1505
C211.25.R.02-15-B/A-32	25	2	14	90	32	25	26560	3.2	XD.T 1505
C211.25.R.02-15-A-50-225	25	2	14	225	50	25	7520	3.2	XD.T 1505
C211.32.R.03-15-B25-40	32	3	14	96	40	25	22160	3.2	XD.T 1505
C211.32.R.03-15-A-40	32	3	14	103	40	32	24160	3.2	XD.T 1505
C211.32.R.03-15-B-40	32	3	14	103	40	32	24160	3.2	XD.T 1505
C211.32.R.03-15-A-63-250	32	3	14	250	63	32	6800	3.2	XD.T 1505
C211.40.R.04-15-A-50	40	4	14	110	50	32	22160	3.2	XD.T 1505
C211.40.R.04-15-B32-50	40	4	14	110	50	32	22160	3.2	XD.T 1505
C211.40.R.03-15-A-50-275	40	3	14	275	50	32	6120	3.2	XD.T 1505

125
025
132
032
340
040

MaxiMill – 211-15 Shell mill

▲ Insert radius >2.5 mm: Modify cutter body



Designation	DC mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	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⁾

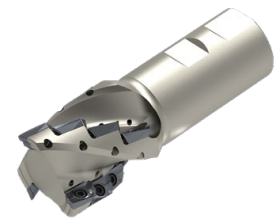
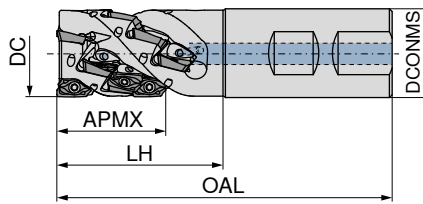
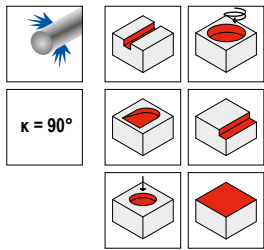
1) Without Through Coolant

Spare parts DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	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 – 211-15KN shell end mill shank

▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



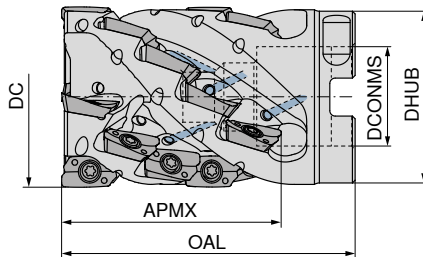
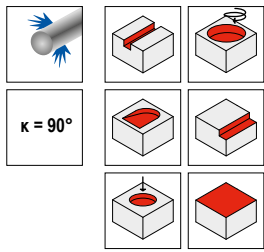
50 783 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	ZEFP	ZNP	RPMX 1/min.	torque moment Nm	Insert	
C211.40.R.03KN3-15-B32-60	40	3	39.6	121	60	32	9	3	14800	3.2	XD.T 1505	04033
C211.50.R.03KN4-15-B40-68	50	3	52.6	138	67	40	12	4	13600	3.2	XD.T 1505	05034

MaxiMill – 211-15KN shell end face mill

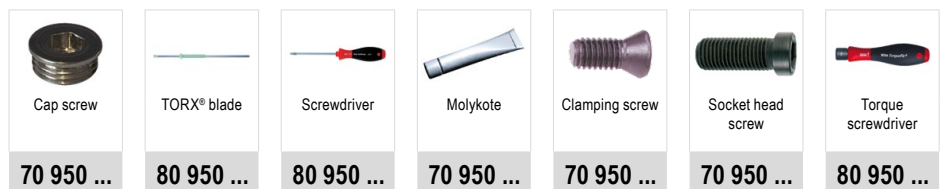
▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



50 781 ...

Designation	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	
A211.50.R.03KN4-15	50	3	52.6	12	4	87	27	48	13600	3.2	XD.T 1505	05034
A211.50.R.03KN5-15	50	3	65.8	15	5	100	27	48	13600	3.2	XD.T 1505	05035
A211.50.R.04KN5-15	50	4	65.8	20	5	100	27	48	13600	3.2	XD.T 1505	05045
A211.63.R.03KN4-15	63	3	52.6	12	4	76	27	58	12500	3.2	XD.T 1505	06334
A211.63.R.03KN5-15	63	3	65.8	15	5	90	27	58	12500	3.2	XD.T 1505	06335
A211.63.R.04KN6-15	63	4	78.5	24	6	102	27	58	12500	3.2	XD.T 1505	06346
A211.63.R.05KN5-15	63	5	65.8	25	5	90	27	58	12500	3.2	XD.T 1505	06355
A211.80.R.04KN5-15	80	4	65.8	20	5	90	32	78	11360	3.2	XD.T 1505	08045
A211.80.R.05KN6-15	80	5	78.5	30	6	102	32	78	11360	3.2	XD.T 1505	08056

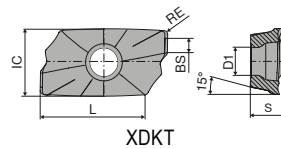


Spare parts

Designation	70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
A211.50.R.03KN4-15	002	054	128	303	20800	181	193
A211.50.R.03KN5-15	002	054	128	303	20800	181	193
A211.50.R.04KN5-15	002	054	128	303	20800	181	193
A211.63.R.03KN4-15	002	054	128	303	20500	181	193
A211.63.R.03KN5-15	002	054	128	303	20500	181	193
A211.63.R.04KN6-15	002	054	128	303	20500	181	193
A211.63.R.05KN5-15	002	054	128	303	20500	181	193
A211.80.R.04KN5-15	004	054	128	303	20500	234	193
A211.80.R.05KN6-15	004	054	128	303	20500	234	193
C211.40.R.03KN3-15-B32-60		054	128	303	20800		193
C211.50.R.03KN4-15-B40-68		054	128	303	20800		193

XDKT

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XDKT 150508..	0.366	0.173	0.583	0.063	0.219
XDKT 150512..	0.366	0.173	0.583	0.063	0.219
XDKT 150516..	0.366	0.173	0.583	0.063	0.219
XDKT 150520..	0.366	0.173	0.583	0.063	0.219
XDKT 150525..	0.366	0.173	0.583	0.063	0.219
XDKT 150530..	0.366	0.173	0.583	0.063	0.219
XDKT 150532..	0.366	0.173	0.583	0.075	0.219
XDKT 150540..	0.366	0.173	0.583	0.047	0.219
XDKT 150560..	0.366	0.173	0.583	-	0.219



XDKT

-F50 CTCP220	-M50 CTCP220	-F50 CTPP225	-M50 CTPP225
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
F XDKT	M XDKT	F XDKT	M XDKT
51 035 ...	51 038 ...	51 035 ...	51 038 ...
258	258	058	058

ISO	RE inch
150508SR	0.031

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
F XDKT	M XDKT	R XDKT	F XDKT	M XDKT	R XDKT
51 035 ...	51 038 ...	51 040 ...	51 035 ...	51 038 ...	51 040 ...
008	008	008	108	108	108
	012			112	
	016			116	
		020		120	120
	030 ¹⁾			130 ¹⁾	
	040 ¹⁾			140 ¹⁾	

ISO	RE inch
150508SR	0.031
150512SR	0.047
150516SR	0.063
150520SR	0.079
150530SR	0.118
150540SR	0.157

P	•	•	•	•	•
M				○	○
K	○	○	○	○	○
N					
S					
H					
O					

1) Insert radius > 0.098": Modify cutter body

XDKT

ISO	RE inch	-F50 CTPM225 DRAGONSKIN F XDKT 51 035 ... 208	-M50 CTPM225 DRAGONSKIN M XDKT 51 038 ... 208	-F50 CTCM235 DRAGONSKIN F XDKT 51 035 ... 308	-M50 CTCM235 DRAGONSKIN M XDKT 51 038 ... 308
150508SR	0.031				
P		•	•	•	•
M		•	•	•	•
K					
N					
S					
H					
O					

XDKT

ISO	RE inch	-F50 CTPM240 DRAGONSKIN F XDKT 51 035 ... 408	-M50 CTPM240 DRAGONSKIN M XDKT 51 038 ... 408	-R50 CTPM240 DRAGONSKIN R XDKT 51 040 ... 408	-F40 CTPM245 DRAGONSKIN F XDKT 51 114 ... 458	-F40 CTCM245 DRAGONSKIN F XDKT 51 114 ... 90801
150508ER	0.031					
150508SR	0.031					
150512ER	0.047					91201
150512SR	0.047					
150516ER	0.063					91601
150516SR	0.063					
150520ER	0.079					92001
150525ER	0.098					92501
150530SR	0.118					
150532ER	0.126					93201 ¹⁾
150540ER	0.157					94001 ¹⁾
150540SR	0.157					
150560ER	0.236					96001 ¹⁾
P		○	○	○	•	•
M		•	•	•	•	•
K						
N						
S						
H						○
O						

1) Insert radius > 0.098". Modify cutter body

XDKT

ISO	RE inch	-M50 CTCK215 DRAGONSKIN M XDKT 51 038 ...	-R50 CTCK215 DRAGONSKIN R XDKT 51 040 ...	-M50 CTPK220 DRAGONSKIN M XDKT 51 038 ...	-R50 CTPK220 DRAGONSKIN R XDKT 51 040 ...	-F20 CTWN215 F XDKT 50 479 ...
150508FR	0.031					508
150508SR	0.031	508	508	608	608	

P	
M	
K	•
N	•
S	•
H	
O	○

XDKT

ISO	RE inch	-F40 CTC5240 DRAGONSKIN F XDKT 50 473 ...	-F40 CTCS245 DRAGONSKIN F XDKT 51 114 ...	-R60 CTP6215 R XDKT 50 469 ...
150508ER	0.031			
150508SR	0.031	508	558	300
150532ER	0.126	532 ¹⁾		
150540ER	0.157	540 ¹⁾	59000 ¹⁾	

P	
M	
K	
N	
S	•
H	•
O	

1) Insert radius > 0.098": Modify cutter body

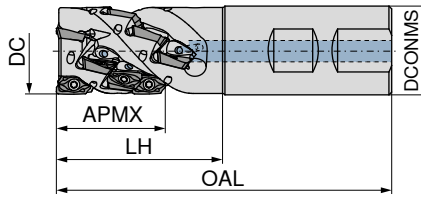
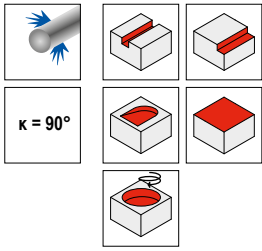
Milling guide

Cutting data standard values	→ 154–157	Machining strategy	→ 170
Starting Parameter	→ 170	Technical Information	→ 191–197
Chip groove description and overview	→ 198–200	Grade description and overview	→ 202–207

MaxiMill – 211-20K End milling cutter

▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



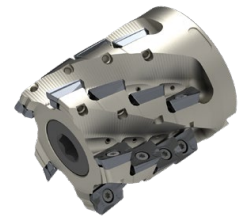
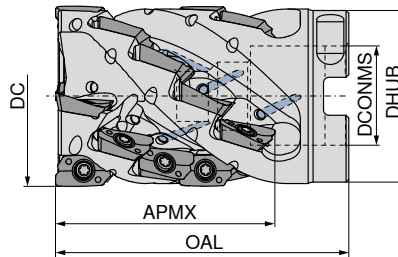
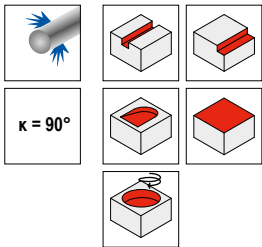
58 779 ...

Designation	DC inch	ZNF	APMX inch	ZNP	ZEFP	OAL inch	LH inch	DCONMS inch	torque moment Nm	Insert	
C211.200.R.03K10-20-B200-EF	2.000	3	6.500	10	30	11.000	6.690	2.000	5	XD.. 2007..	20003

MaxiMill – 211-20K Extended flute cutter

▲ ZEFP = Number of Inserts





▲ ZNP = Number of rows



NEW

58 780 ...

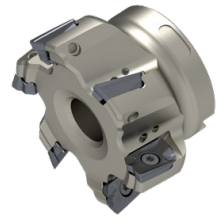
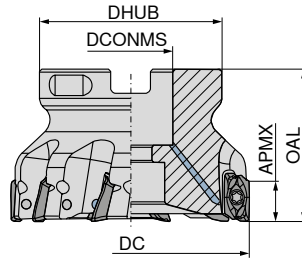
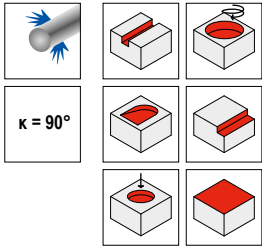
Designation	DC inch	ZNF	APMX inch	ZNP	ZEFP	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	Insert	
A211.250.R.04K4-20-A100-EF	2.500	4	2.650	4	16	3.750	1.000	2.250	14300	XD.. 2007..	25004
A211.300.R.05K5-20-A125-EF	3.000	5	3.250	5	20	4.250	1.250	2.750	12800	XD.. 2007..	30005
A211.400.R.05K5-20-A150-EF	4.000	5	3.340	5	20	4.250	1.500	3.750	10100	XD.. 2007..	40005

 Cap screw	 Screwdriver	 Molykote	 Clamping screw
70 950 ...	80 950 ...	70 950 ...	70 950 ...

Spare parts

DC				
2.000			106	01200
2.500	003		106	01200
3.000	004		106	01200
4.000	004	106	303	01200

MaxiMill – 211-20 Shell mill

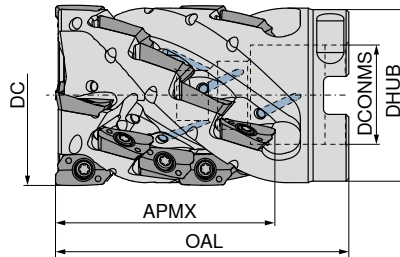
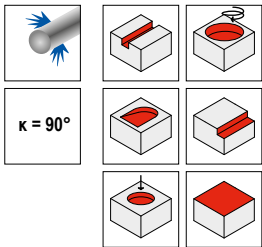


50 778 ...

Designation	DC mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	
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 – 211-20K shell end face mill

▲ ZEFP = Number of Inserts
▲ ZNP = Number of rows

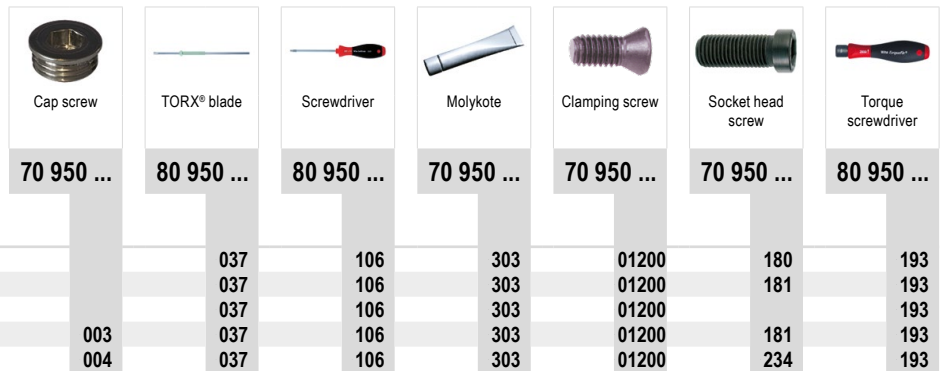


50 780 ...

Designation	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS _{H6} mm	DHUB mm	torque moment Nm	Insert	
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

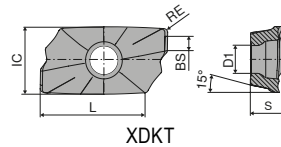
Spare parts

	70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
50 778 06305		037	106	303	01200	180	193
50 778 08006		037	106	303	01200	181	193
50 778 10007		037	106	303	01200		193
50 780 06304	003	037	106	303	01200	181	193
50 780 08005	004	037	106	303	01200	234	193



XDKT

Designation	IC inch	D1 inch	L inch	S inch
XDKT 200708..	0.492	0.217	0.740	0.273
XDKT 200716..	0.492	0.217	0.740	0.271
XDKT 200732..	0.492	0.217	0.740	0.269
XDKT 200740..	0.492	0.217	0.740	0.268
XDKT 200760..	0.492	0.217	0.740	0.268



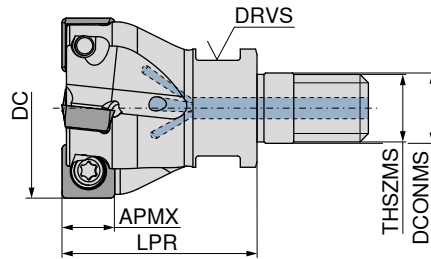
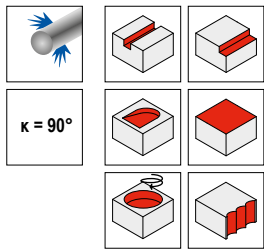
XDKT

ISO	RE inch	-M50 CTPP235 DRAGONSKIN M XDKT 51 145 ...		-M50 CTCP230 DRAGONSKIN M XDKT 51 145 ...		-F40 CTPM245 DRAGONSKIN F XDKT 51 127 ...		-F40 CTCM245 DRAGONSKIN F XDKT 51 127 ...		-M50 CTPK220 DRAGONSKIN M XDKT 51 145 ...		-F40 CTC5240 DRAGONSKIN F XDKT 51 127 ...		-F40 CTCS245 DRAGONSKIN F XDKT 51 127 ...	
		200708ER	0.031	10800	00800	45800	90801	60800	15800	55800					
200716ER	0.063	11600	01600	46600	91601	61600	16600	56600							
200732ER	0.126			48200	93201		18200	58200							
200740ER	0.157				94001		19000								
200760ER	0.236				96001		19200								
P		●	●	●	●										
M		○													
K		○	○												
N															
S					○		●	●							
H															
O															

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 171
Starting Parameter	→ 171	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – 490-09 Screw in cutter

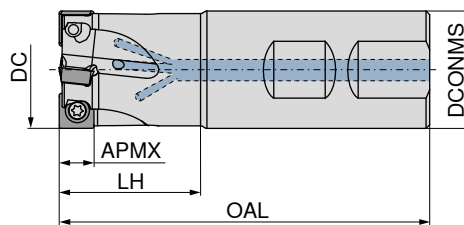
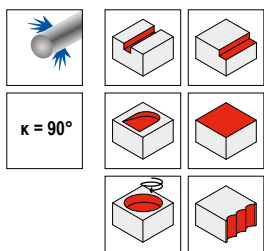


58 726 ...

Designation	DC inch	ZNF	APMX inch	LPR inch	THSZMS	DCONMS inch	RPMX 1/min.	torque moment Nm	Insert	
G490.100.R.03-09-125-F	1.000	3	0.315	1.250	M12	0.492	23700	3.2	SD..09T3..	10003 ¹⁾
G490.125.R.04-09-150-F	1.250	4	0.315	1.500	M16	0.669	19700	3.2	SD..09T3..	12504 ¹⁾

1) Not in stock

MaxiMill – 490-09 End milling cutter



58 727 ... 58 727 ...

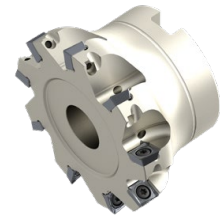
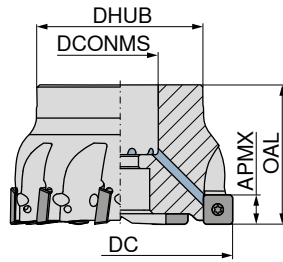
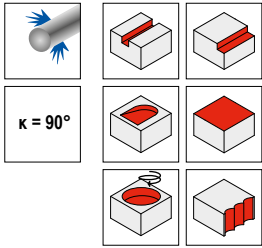
Designation	DC inch	ZNF	APMX inch	DCONMS inch	OAL inch	LH inch	RPMX 1/min.	torque moment Nm	Insert		
C490.100.R.03-09-B-125-EF	1.000	3	0.315	1.000	3.500	1.250	23700	3.2	SD..09T3..		30003
C490.100.R.02-09-A-150-EF-800	1.000	2	0.315	1.000	8.000	1.500	19700	3.2	SD..09T3..	10002	
C490.125.R.04-09-B-150-EF	1.250	4	0.315	1.250	3.750	1.500	22000	3.2	SD..09T3..		32504
C490.125.R.03-09-A-200-EF-1000	1.250	3	0.315	1.250	10.000	2.000	14700	3.2	SD..09T3..	12503	

Spare parts
DC

1.000 - 1.250




Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
105	303	110

MaxiMill – 490-09 Shell mill



58 728 ...

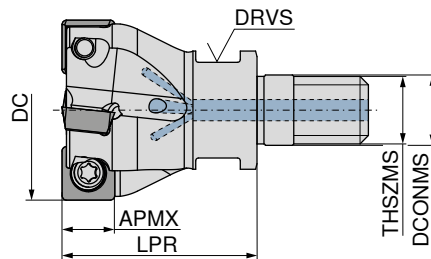
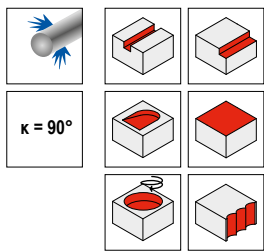
Designation	DC inch	ZNF	APMX inch	DHUB inch	DCONMS _{H6} inch	OAL inch	RPMX 1/min.	torque moment Nm	Insert	
A490.150.R.05-09-A050-175-EF	1.500	5	0.315	1.250	0.500	1.750	17000	3.2	SD.. 09T3..	15005
A490.200.R.06-09-A075-175-EF	2.000	6	0.315	1.750	0.750	1.750	14800	3.2	SD.. 09T3..	20006
A490.250.R.07-09-A100-200-EF	2.500	7	0.315	2.000	1.000	2.000	12850	3.2	SD.. 09T3..	25007
A490.300.R.09-09-A100-200-EF	3.000	9	0.315	2.130	1.000	2.000	11250	3.2	SD.. 09T3..	30009
A490.400.R.10-09-B125-200-EF	4.000	10	0.315	2.870	1.250	2.000	9900	3.2	SD.. 09T3..	40010
A490.500.R.11-09-B200-200-EF	5.000	11	0.315	3.750	2.000	2.000		3.2	SD.. 09T3..	50011
A490.600.R.12-09-B200-200-EF	6.000	12	0.315	3.750	2.000	2.000		3.2	SD.. 09T3..	60012

 Screwdriver	 Molykote	 Clamping screw
80 950 ...	70 950 ...	70 950 ...
105	303	110

Spare parts

DC
1.500 - 6.000

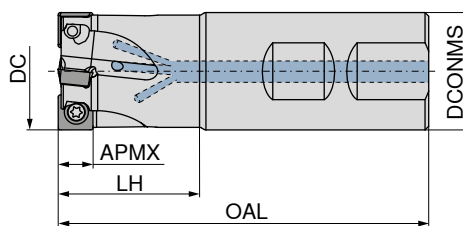
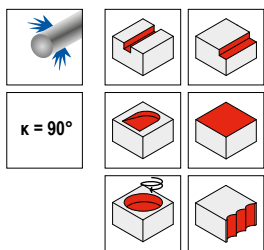
MaxiMill – 490-09 Screw in cutter



50 726 ...

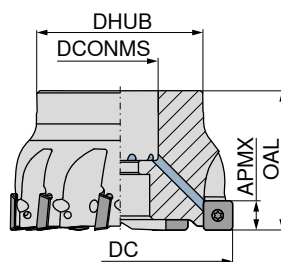
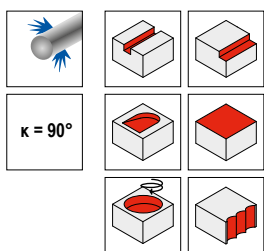
Designation	DC mm	ZNF	APMX mm	LPR mm	THSZMS mm	DCONMS mm	DRVS mm	torque moment Nm	Insert	
G490.25.R.03-09	25	3	8	35	M12	12.5	17	3.2	SD..09T3..	025
G490.32.R.04-09	32	4	8	35	M16	17.0	24	3.2	SD..09T3..	032

MaxiMill – 490-09 End milling cutter



Designation	DC mm	ZNF	APMX mm	DCONMS mm	OAL mm	LH mm	torque moment Nm	Insert	
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 – 490-09 Shell mill



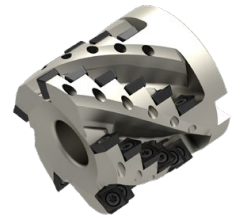
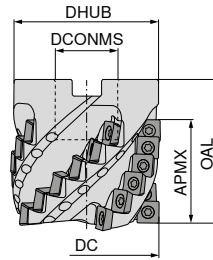
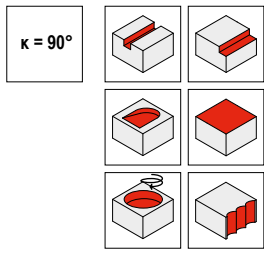
50 728 ...

Designation	DC mm	ZNF	APMX mm	DHUB mm	DCONMS _{H6} mm	OAL mm	torque moment Nm	Insert	
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

MaxiMill – 490-09K shell end face mill

▲ ZEFP = Number of Inserts

▲ ZNP = Number of rows



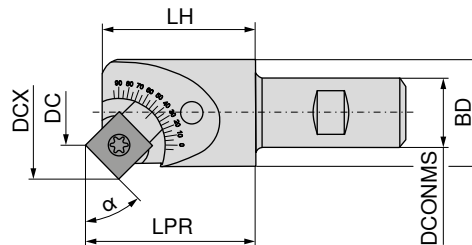
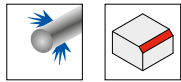
50 761 ...

Designation	DC mm	ZNF	APMX mm	ZEFP	ZNP	OAL mm	DCONMS _{H6} mm	DHUB mm	torque moment Nm	Insert	
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

Spare parts

DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
25 - 32							
40 - 42			036	113	151	110	192
50 - 100		036	040	113		110	192

MaxiMill – 490-09 Adjustable single angle milling cutter



NEW



50 690 ...

Designation	DC mm	DCX mm	LH mm	BD mm	LPR mm	ZNF	DCONMS mm	torque moment Nm	Insert	
C490.20.R.01	1.6 - 11.1	20.1 - 23.6	32	18.65	32.9 - 34.6	1	16	3.2	SD..09T3..	01600

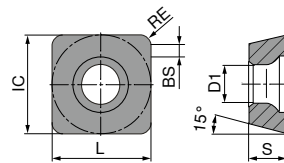
Spare parts for Article no. 50 690 01600

Cylindrical screw	Adjustment wedge	TORX® blade	Screwdriver	Molykote	Clamping screw	Torque screwdriver
70 950 ...	70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
87500	87200	036	113	303	110	192

→ Page 172
Here you will find the angle-dependent dimensions.

SDHT / SDNT

Designation	IC inch	D1 inch	L inch	BS inch	S inch
SD.T 09T3..	0.375	0.173	0.375	0.098	0.156



SDHT / SDNT

ISO	RE inch	TCM10	-29 CTCP230 DRAGONSKIN	CTPP235 DRAGONSKIN	-29 CTPP235 DRAGONSKIN	-33 CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-F50 CTCM245 DRAGONSKIN
50 424 ...	900	CERMET SDHT	SDNT	SDNT	SDNT	SDNT	SDNT	SDNT
51 011 ...	008							
51 082 ...	108							
51 011 ...	108							
51 030 ...	408							
51 111 ...	458							
51 111 ...	90801							
09T308ER	0.031							
09T308SR	0.031							
P		●	●	●	●	○	●	●
M				○	○	●	●	●
K		○	○	○	○			
N								
S								○
H								
O								

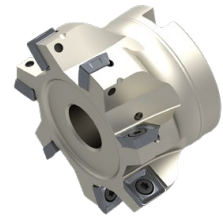
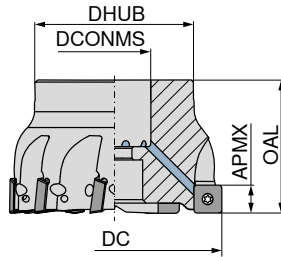
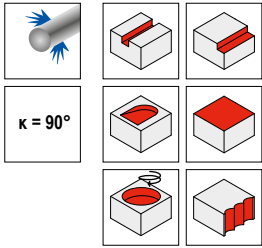
SDNT / SDHT

ISO	RE inch	-31 CTCK215 DRAGONSKIN	NEW -F10 CTPX715 DRAGONSKIN	-27P H216T	-27 CTC5240 DRAGONSKIN	-M31 CTC5240 DRAGONSKIN	-F10 CTCS245 DRAGONSKIN
51 029 ...	508	SDNT	SDHT	SDHT	SDHT	SDNT	SDHT
51 125 ...	00802						
50 424 ...	550						
50 496 ...	508						
50 425 ...	508						
51 125 ...	55800						
09T308ER	0.031						
09T308FR	0.031						
09T308SR	0.031						
P			○				
M			○				
K		●	●	○			
N			●	●			
S			○		●	●	●
H							
O			○	○			

Milling guide

Cutting data standard values	→ 154-157	Starting Parameter	→ 172
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – 490-12 Shell mill






58 703 ...

Designation	DC inch	ZNF	APMX inch	DHUB inch	DCONMS inch	OAL inch	torque moment Nm	Insert
A490.200.R.05-12-A075-175-EF	2.000	5	0.393	1.750	0.750	1.750	5	SD.. 1205..

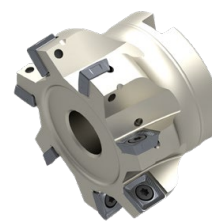
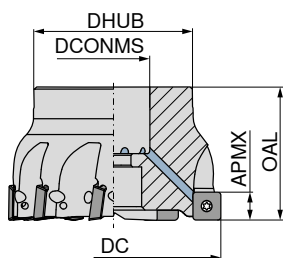
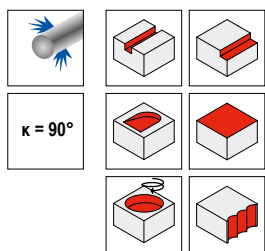
20005

Spare parts

DC
2.000

 Screwdriver	 Molykote	 Clamping screw
80 950 ...	70 950 ...	70 950 ...
106	303	01200

MaxiMill – 490-12 Shell mill



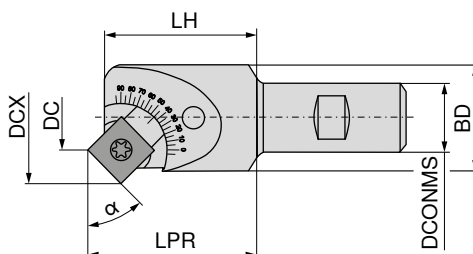
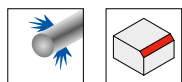
50 703 ...

Designation	DC mm	ZNF	APMX mm	DHUB mm	DCONMS mm	OAL mm	torque moment Nm	Insert	
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

Spare parts

DC	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
40	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
50							
63 - 125							
		037	114	151	303	01200	193
		037	114	154	303	01200	193
		037	114		303	01200	193

MaxiMill – 490-12 Adjustable single angle milling cutter



NEW



50 690 ...

Designation	DC mm	DCX mm	LH mm	BD mm	LPR mm	ZNF	DCONMS mm	torque moment Nm	Insert	
C490.26.R.01	1.1 - 14.1	26.6 - 31.5	37	25	38.2 - 40.6	1	20	5	SD.. 1205..	02000

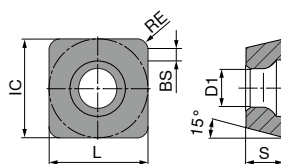
Spare parts

DC	Cylindrical screw	Adjustment wedge	TORX® blade	Screwdriver	Molykote	Clamping screw	Torque screwdriver
50 690 02000	70 950 ...	70 950 ...	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
		87400	037	114	303	01200	193
		87300					

→ Page 173
Here you will find the angle-dependent dimensions.

SDHW / SDMT / SDHT

Designation	IC inch	D1 inch	L inch	BS inch	S inch
SDH. 120508..	0.500	0.217	0.500	0.087	0.197
SDHT 120512..	0.500	0.217	0.500	0.071	0.197
SDHT 120520..	0.500	0.217	0.500	0.039	0.197
SDHT 120525..	0.500	0.217	0.500	0.059	0.197
SDMT 120508..	0.500	0.217	0.500	0.118	0.197
SDMT 1205ZZ..	0.500	0.217	0.500	0.035	0.197



SDHW / SDMT / SDHT

ISO	RE inch	TCM10	-29 CTCP230 DRAGONSKIN	-29 CTPP235 DRAGONSKIN	-29 CTPM240 DRAGONSKIN	-33 CTPM240 DRAGONSKIN	-F50 CTPM245 DRAGONSKIN	-F50 CTCM245 DRAGONSKIN
		CERMET SDHW	SDMT	SDMT	SDMT	SDHT	SDMT	SDMT
		50 428 ...	51 081 ...	51 081 ...	51 081 ...	51 028 ...	51 110 ...	51 110 ...
120508ER	0.031						458	90801
120508SR	0.031	901						
120512SR	0.047					412		
120520SR	0.079		020		420			
1205ZZSN	0.031			120				
P		●	●	●	○	○	●	●
M				○	●	●	●	●
K		○	○	○				
N								
S								○
H								
O								

SDMT / SDHT

ISO	RE inch	-31 CTCK215 DRAGONSKIN	NEW -F10 CTPX715 DRAGONSKIN	-27P H216T	-M31 CTC5240 DRAGONSKIN	-F50 CTCS245 DRAGONSKIN
		SDMT	SDHT	SDHT	SDMT	SDMT
		51 059 ...	51 161 ...	50 426 ...	50 580 ...	51 110 ...
120508ER	0.031				508	55800
120508FR	0.031		00802	555		
120525FR	0.098			559		
1205ZZSN	0.031	521				
P				○		
M				○		
K			●	●	○	
N				●	●	
S				○		●
H						●
O				○	○	

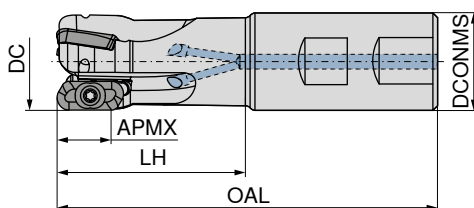
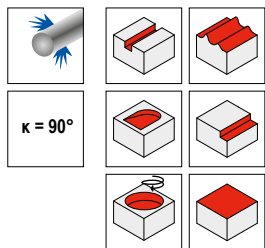
Milling guide

Cutting data standard values	→ 154-157	Starting Parameter	→ 173
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – HSC-11 End milling cutter 90°

▲ Insert radius > 0.125": Modify cutter body

▲ High Speed Cutter (HSC)



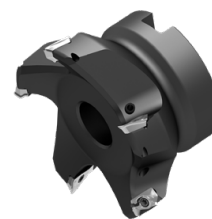
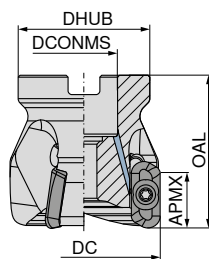
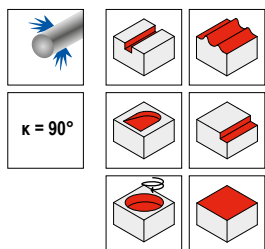
58 675 ...

Designation	DC inch	ZNF	APMX inch	DCONMS _{H6} inch	OAL inch	LH inch	torque moment Nm	Insert	
CHSC.0625.R.02-11-A-100-EF	0.625	2	0.393	0.625	3.000	1.000	1.8	XDHT 11T3..	06202
CHSC.0625.R.02-11-A-125-EF	0.625	2	0.393	0.625	3.250	1.250	1.8	XDHT 11T3..	06302
CHSC.0750.R.02-11-A-150-EF	0.750	2	0.393	0.750	3.600	1.500	1.8	XDHT 11T3..	07502
CHSC.100.R.03-11-A-200-EF	1.000	3	0.393	1.000	4.350	2.000	1.8	XDHT 11T3..	10003

MaxiMill – HSC-11 Shell mill 90°

▲ Insert radius > 0.125": Modify cutter body

▲ High Speed Cutter (HSC)

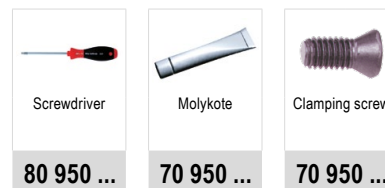


58 718 ...

Designation	DC inch	ZNF	APMX inch	DCONMS _{H6} inch	DHUB inch	OAL inch	torque moment Nm	Insert	
AHSC.150.R.04-11-A050-175-EF	1.500	4	0.393	0.500	1.421	1.750	1.8	XDHT 11T3..	15004
AHSC.200.R.04-11-A075-175-EF	2.000	4	0.393	0.750	1.750	1.750	1.8	XDHT 11T3..	20004
AHSC.250.R.05-11-A100-200-EF	2.500	5	0.393	1.000	2.250	2.000	1.8	XDHT 11T3..	25005
AHSC.300.R.05-11-A100-200-EF	3.000	5	0.393	1.000	2.250	2.000	1.8	XDHT 11T3..	30005

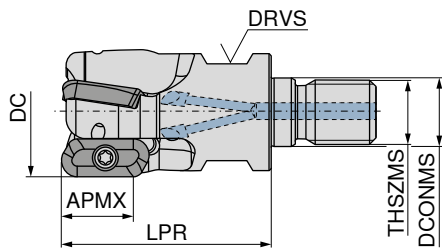
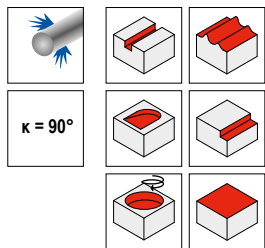
Spare parts

DC	80 950 ...	70 950 ...	70 950 ...
0.625 - 1.000	039	303	128
1.500 - 3.000	039	303	131



MaxiMill – HSC-11 Screw in cutter

▲ Insert radius >3.2 mm: Modify cutter body

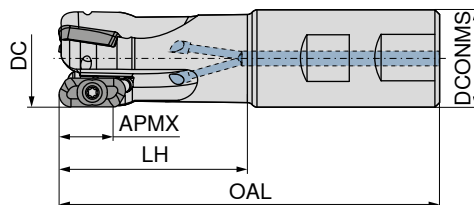
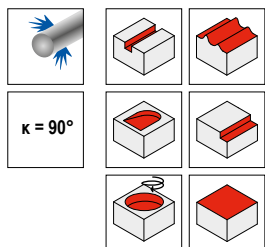


55 107 ...

Designation	DC mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS mm	RPMX 1/min.	DRVS mm	torque moment Nm	Insert	
GHSC.16.R.02-11	16	2	10	8.5	27	M8	56000	10	1.8	XDHT 11T3..	016
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 – HSC-11 End milling cutter

▲ Insert radius >3.2 mm: Modify cutter body

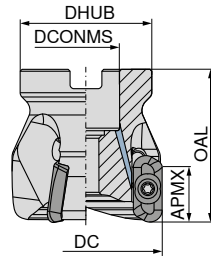
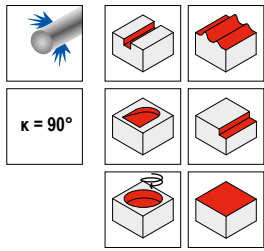


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Designation	DC mm	ZNF	APMX mm	DCONMS _{h6} mm	OAL mm	LH mm	RPMX 1/min.	torque moment Nm	Insert		
CHSC.16.R.02-11-B/A-25	16	2	10	16	75	25	56200	1.8	XDHT 11T3..	016	416
CHSC.16.R.02-11-A-32	16	2	10	16	165	32	18800	1.8	XDHT 11T3..	116	
CHSC.20.R.02-11-A-32	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.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	

MaxiMill – HSC-11 Shell mill

▲ Insert radius >3.2 mm: Modify cutter body



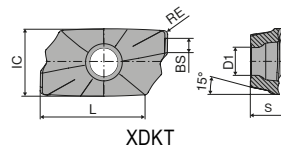
50 718 ...

Designation	DC mm	ZNF	APMX mm	DCONMS ^{H6} mm	DHUB mm	OAL mm	RPMX 1/min.	torque moment Nm	Insert	
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

Spare parts							
	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
DC	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

XDKT / XDHT

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XD.T 11T302FR	0.268	0.110	0.417	0.079	0.150
XD.T 11T304FR	0.268	0.110	0.417	0.071	0.150
XD.T 11T308FR	0.268	0.110	0.417	0.055	0.150
XD.T 11T320FR	0.268	0.110	0.417	0.055	0.150
XD.T 11T325FR	0.268	0.110	0.417	0.055	0.150
XDHT 11T312FR	0.268	0.110	0.417	0.055	0.150
XDHT 11T316FR	0.268	0.110	0.417	0.055	0.150
XDHT 11T332FR	0.268	0.110	0.417	0.031	0.150
XDHT 11T340FR	0.268	0.110	0.417	-	0.150
XDHT 11T350FR	0.268	0.110	0.417	-	0.150



XDKT / XDHT

ISO	RE inch
11T302FR	0.008
11T304FR	0.016
11T308FR	0.031
11T312FR	0.047
11T316FR	0.063
11T320FR	0.079
11T325FR	0.098
11T332FR	0.126
11T340FR	0.157
11T350FR	0.197

-F20 CTWN215		-27P H216T	
F XDKT		F XDHT	
50 478 ...		50 477 ...	
502		502	
504		504	
508		508	
		512	
		516	
520 ¹⁾		520 ¹⁾	
525 ¹⁾		525 ¹⁾	
		532 ¹⁾	
		540 ¹⁾	
		550 ¹⁾	

P		
M		
K		○
N		●
S		
H		
O		○

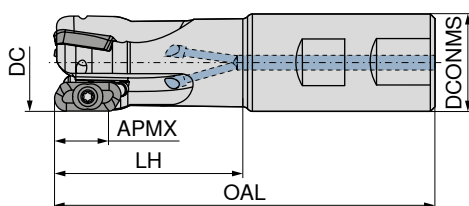
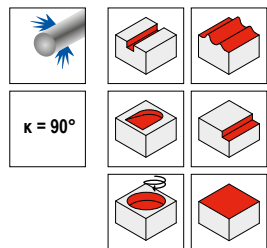
1) Insert radius > 0.063": Modify cutter body

Milling guide

Safety advice	→ 174	Cutting data standard values	→ 175
Machining strategy	→ 176+177	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

MaxiMill – HSC-19 End milling cutter 90°

- ▲ Insert radius > 0.157": Modify cutter body
- ▲ High Speed Cutter (HSC)

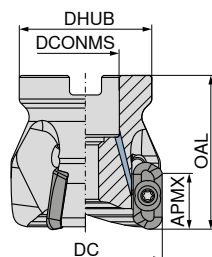
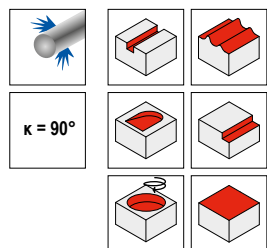


58 679 ...

Designation	DC inch	ZNF	APMX inch	DCONMS _{H5} inch	OAL inch	LH inch	RPMX 1/min.	torque moment Nm	Insert	
CHSC.100.R.02-19-A-200-EF	1.000	2	0.709	1.000	4.500	2.000	35000	5	XDHT 1904..	10002
CHSC.100.R.02-19-A-250-EF	1.000	2	0.709	1.000	6.500	2.500	32800	5	XDHT 1904..	10102
CHSC.125.R.02-19-A-250-EF	1.250	2	0.709	1.250	5.000	2.500	29100	5	XDHT 1904..	12502
CHSC.125.R.02-19-A-325-EF	1.250	2	0.709	1.250	6.500	3.250	27200	5	XDHT 1904..	12602
CHSC.150.R.03-19-A125-325-EF	1.500	3	0.709	1.250	5.750	3.250	23800	5	XDHT 1904..	15003
CHSC.150.R.03-19-A125-400-EF	1.500	3	0.709	1.250	6.500	4.000	21900	5	XDHT 1904..	15103

MaxiMill – HSC-19 Shell mill 90°

- ▲ Insert radius > 0.157": Modify cutter body
- ▲ High Speed Cutter (HSC)



58 716 ...

Designation	DC inch	ZNF	APMX inch	DCONMS _{H6} inch	DHUB inch	OAL inch	RPMX 1/min.	torque moment Nm	Insert	
AHSC.200.R.03-19-A075-175-EF	2.000	3	0.709	0.750	1.750	1.750	21600	5	XDHT 1904..	20003
AHSC.250.R.03-19-A100-200-EF	2.500	3	0.709	1.000	2.250	2.250	18800	5	XDHT 1904..	25003
AHSC.250.R.04-19-A100-200-EF	2.500	4	0.709	1.000	2.250	2.250	18800	5	XDHT 1904..	25004
AHSC.300.R.03-19-A100-200-EF	3.000	3	0.709	1.000	2.250	2.250	16400	5	XDHT 1904..	30003
AHSC.300.R.04-19-A100-200-EF	3.000	4	0.709	1.000	2.250	2.250	16400	5	XDHT 1904..	30004
AHSC.400.R.04-19-B125-200-EF	4.000	4	0.709	1.250	2.750	2.750	14500	5	XDHT 1904..	40004
AHSC.500.R.05-19-B150-200-EF	5.000	5	0.709	1.500	3.750	3.750	12800	5	XDHT 1904..	50005
AHSC.600.R.05-19-B150-200-EF	6.000	5	0.709	1.500	3.750	3.750	11500	5	XDHT 1904..	60005

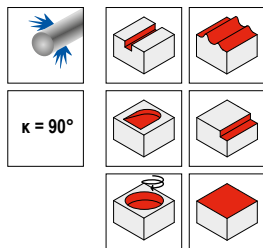
Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...

Spare parts

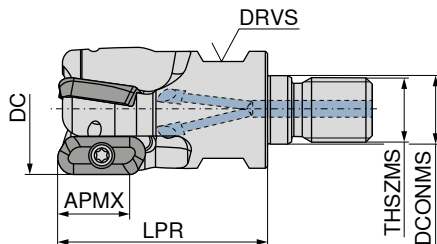
DC	80 950 ...	70 950 ...	70 950 ...
1.000	105	303	172
1.250	039	303	128
1.250 - 1.500	105	303	173
2.000 - 6.000	105	303	174

MaxiMill – HSC-19 Screw-in cutter

▲ Insert radius >4.0 mm: Modify cutter body



$\kappa = 90^\circ$

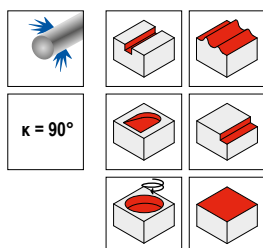


55 108 ...

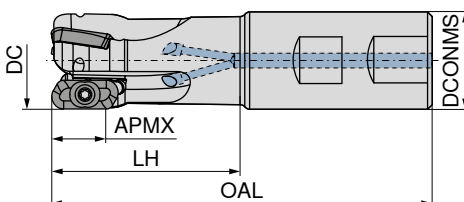
Designation	DC mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS mm	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	
GHSC.25.R.02-19	25	2	18	12.5	45	M12	17	34400	5	XDHT 1904..	025
GHSC.32.R.03-19	32	3	18	17.0	52	M16	24	29100	5	XDHT 1904..	032
GHSC.40.R.03-19	40	3	18	17.0	52	M16	24	24900	5	XDHT 1904..	040

MaxiMill – HSC-19 End milling cutter

▲ Insert radius >4.0 mm: Modify cutter body



$\kappa = 90^\circ$



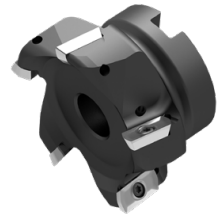
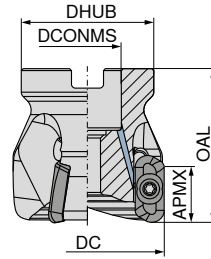
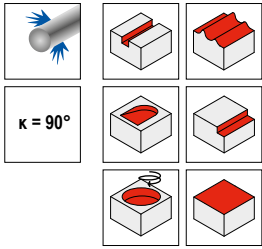
50 679 ...

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Designation	DC mm	ZNF	APMX mm	DCONMS _{h5} mm	OAL mm	LH mm	RPMX 1/min.	torque moment Nm	Insert		
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 – HSC-19 Shell mill

▲ Insert radius >4.0 mm: Modify cutter body



50 716 ...

Designation	DC mm	ZNF	APMX mm	DCONMS _{HS} mm	DHUB mm	OAL mm	RPMX 1/min.	torque moment Nm	Insert	
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

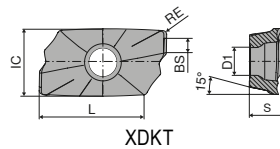
Spare parts
DC

25
32
40
50 - 63
80 - 125

	TORX® blade 80 950 ...	Clamping key – T 80 397 ...	Screwdriver 80 950 ...	Power Screw 70 950 ...	Molykote 70 950 ...	Clamping screw 70 950 ...	Torque screwdriver 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

Designation	IC inch	D1 inch	L inch	BS inch	S inch
XDHT 190402..	0.375	0.183	0.748	0.079	0.187
XDHT 190404..	0.375	0.183	0.748	0.079	0.187
XDHT 190408..	0.375	0.183	0.748	0.079	0.187
XDHT 190412..	0.375	0.183	0.748	0.079	0.187
XDHT 190416..	0.375	0.183	0.748	0.079	0.187
XDHT 190420..	0.375	0.183	0.748	0.079	0.187
XDHT 190425..	0.375	0.183	0.748	0.055	0.187
XDHT 190432..	0.375	0.183	0.748	0.039	0.187
XDHT 190440..	0.375	0.183	0.748	0.039	0.187
XDHT 190450..	0.375	0.183	0.748	-	0.187



XDHT

ISO	RE inch
190402FR	0.008
190404FR	0.016
190408FR	0.031
190412FR	0.047
190416FR	0.063
190420FR	0.079
190425FR	0.098
190432FR	0.126
190440FR	0.157
190450FR	0.197

	F XDHT 51 159 ...	F XDHT 50 487 ...
P	○	○
M	○	○
K	●	○
N	●	●
S	○	○
H		
O	○	○

1) Insert radius > 0.157": Modify cutter body

Milling guide

Cutting data standard values	→ 154–157	Safety advice	→ 174
Machining strategy	→ 178–180	Technical Information	→ 191–197
Chip groove description and overview	→ 198–200	Grade description and overview	→ 202–207

NEW

-F10
CTPX715

-27P
H216T

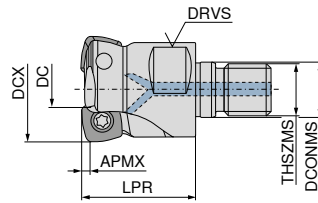
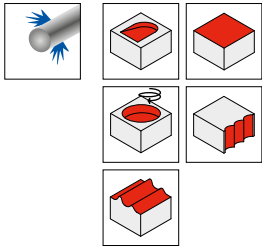
DRAGONSKIN

F
XDHT
51 159 ...

F
XDHT
50 487 ...

MaxiMill – HFC Screw in cutter

▲ High Feed Cutter (HFC)



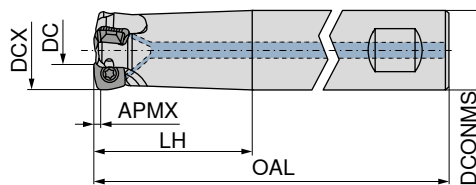
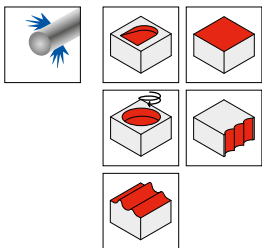
58 682 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	LPR inch	DCONMS inch	THSZMS	DRVS inch	RPMX 1/min.	torque moment Nm	Insert	
GHFC.0625.R.02-06-125-F	0.287	0.625	2	0.031	1.250	0.335	M8	0.394	17800	1.2	XPLX 0603..	06202 ¹⁾
GHFC.0750.R.03-06-125-F	0.412	0.750	3	0.031	1.250	0.413	M10	0.591	21400	1.2	XPLX 0603..	07503 ¹⁾
GHFC.100.R.04-06-150-F	0.662	1.000	4	0.031	1.500	0.492	M12	0.669	17000	1.2	XPLX 0603..	10004 ¹⁾
GHFC.125.R.05-06-150-F	0.912	1.250	5	0.031	1.500	0.669	M16	0.945	20300	1.2	XPLX 0603..	12505 ¹⁾

1) Not in stock

MaxiMill – HFC End milling cutter

▲ High Feed Cutter (HFC)

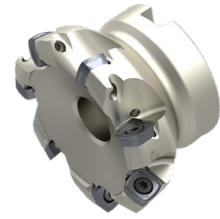
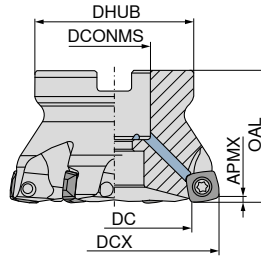
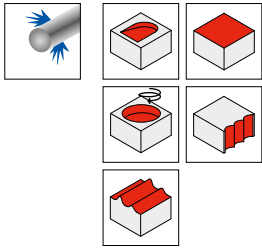


58 681 ... 58 681 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS _{h6} inch	RPMX 1/min.	torque moment Nm	Insert	58 681 ...	58 681 ...
CHFC.0625.R.02-06-B-150-EF	0.287	0.625	2	0.031	3.500	1.500	0.625	18100	1.2	XPLX 0603..		26202
CHFC.0625.R.02-06-A-150-EF-800	0.287	0.625	2	0.031	8.000	1.500	0.625	18100	1.2	XPLX 0603..	06202	
CHFC.0750.R.03-06-B-200-EF	0.412	0.750	3	0.031	4.200	2.000	0.750	14100	1.2	XPLX 0603..		27503
CHFC.0750.R.03-06-A-200-EF-900	0.412	0.750	3	0.031	9.000	2.000	0.750	14100	1.2	XPLX 0603..	07503	
CHFC.100.R.04-06-B-200-EF	0.662	1.000	4	0.031	4.400	2.000	1.000	15400	1.2	XPLX 0603..		30004
CHFC.100.R.04-06-A-200-EF-900	0.662	1.000	4	0.031	9.000	2.000	1.000	15400	1.2	XPLX 0603..	10004	
CHFC.125.R.05-06-B100-250-EF	0.912	1.250	5	0.031	4.900	2.500	1.000	10700	1.2	XPLX 0603..		32505
CHFC.125.R.05-06-A100-250-EF-900	0.912	1.250	5	0.031	9.000	2.500	1.000	10700	1.2	XPLX 0603..	12505	
CHFC.100.R.03-09-B-200-EF	0.535	1.000	3	0.039	4.300	2.000	1.000	15400	3.2	XDLX 09T3..		60003
CHFC.100.R.03-09-A-200-EF-800	0.535	1.000	3	0.039	8.000	2.000	1.000	9000	3.2	XDLX 09T3..	50003	
CHFC.125.R.04-09-B100-250-EF	0.785	1.250	4	0.039	4.800	2.500	1.000	10700	3.2	XDLX 09T3..		62504
CHFC.125.R.03-09-A-250-EF-1000	0.785	1.250	3	0.039	10.000	2.500	1.250	8100	3.2	XDLX 09T3..	52503	
CHFC.125.R.02-12-A-250-EF-1000	0.596	1.250	2	0.079	10.000	2.500	1.250	6480	5	XOLX 1204..	82502	
CHFC.150.R.03-12-A125-250-EF-1000	0.846	1.500	3	0.079	10.000	2.500	1.250	6100	5	XOLX 1204..	85003	

MaxiMill – HFC Shell mill

▲ High Feed Cutter (HFC)



58 683 ...

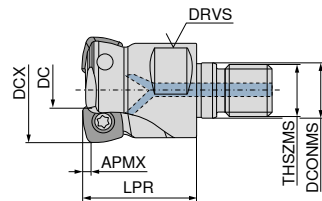
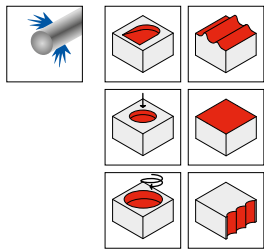
Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DCONMS _{H6} inch	DHUB inch	RPMX 1/min.	torque moment Nm	Insert	
AHFC.150.R.04-09-A050-175-EF	1.035	1.500	4	0.039	1.420	0.500	1.420	26400	3.2	XDLX 09T3..	15004
AHFC.200.R.05-09-A075-175-EF	1.535	2.000	5	0.039	1.750	0.750	1.750	23500	3.2	XDLX 09T3..	20005
AHFC.250.R.06-09-A075-200-EF	2.035	2.500	6	0.039	1.750	0.750	1.750	20500	3.2	XDLX 09T3..	25006
AHFC.200.R.04-12-A075-175-EF	1.346	2.000	4	0.079	1.750	0.750	1.750	18800	5	XOLX 1204..	20104
AHFC.250.R.05-12-A100-200-EF	1.846	2.500	5	0.079	2.250	1.000	2.250	16400	5	XOLX 1204..	25105
AHFC.300.R.07-12-A100-200-EF	2.346	3.000	7	0.079	2.250	1.000	2.250	14000	5	XOLX 1204..	30107
AHFC.400.R.08-12-A125-200-EF	3.346	4.000	8	0.079	2.750	1.250	2.750	12000	5	XOLX 1204..	40108
AHFC.500.R.10-12-B150-250-EF	4.346	5.000	10	0.079	3.750	1.500	3.750	9800	5	XOLX 1204..	50110
AHFC.300.R.06-19-A100-200-EF	1.970	3.000	6	0.130	2.250	1.000	2.250	4900	5	XOLX 1906..	30206
AHFC.400.R.08-19-A125-200-EF	2.970	4.000	8	0.130	2.750	1.250	2.750	4000	5	XOLX 1906..	40208
AHFC.500.R.10-19-B150-250-EF	3.970	5.000	10	0.130	3.750	1.500	3.750	3500	5	XOLX 1906..	50210

Screwdriver	Molykote	Clamping screw	
80 950 ...	70 950 ...	70 950 ...	
XDLX 09T3..	105	303	304
XDLX 09T3.. (Ø1.000)	105	303	110
XOLX 1204..	106	303	01200
XOLX 1906..	106	303	302
XPLX 0603..	102	303	116

Spare parts
Insert

XDLX 09T3..	105	303	304
XDLX 09T3.. (Ø1.000)	105	303	110
XOLX 1204..	106	303	01200
XOLX 1906..	106	303	302
XPLX 0603..	102	303	116

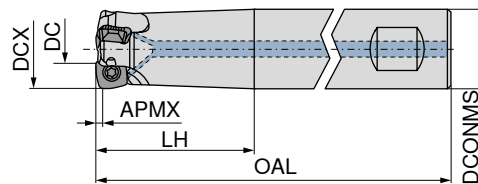
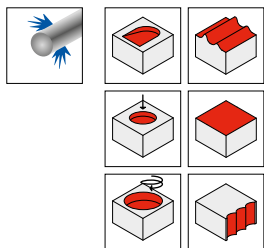
MaxiMill – HFC high-feed screw-in cutter



50 682 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	
GHFC.16.R.02-06	7	16	2	0.8	27	8.5	M8	10	20800	1.2	XPLX 0603..	616
GHFC.20.R.03-06	11	20	3	0.8	33	10.5	M10	15	19800	1.2	XPLX 0603..	620
GHFC.25.R.04-06	16	25	4	0.8	35	12.5	M12	17	18700	1.2	XPLX 0603..	625
GHFC.32.R.05-06	23	32	5	0.8	35	17.0	M16	24	22000	1.2	XPLX 0603..	632
GHFC.42.R.07-06	33	42	7	0.8	35	17.0	M16	24	15000	1.2	XPLX 0603..	04207
GHFC.25.R.02-09	12	25	2	1.0	35	12.5	M12	17	30000	3.2	XDLX 09T3..	025
GHFC.25.R.03-09	12	25	3	1.0	35	12.5	M12	17	30000	3.2	XDLX 09T3..	125
GHFC.32.R.03-09	19	32	3	1.0	35	17.0	M16	24	27000	3.2	XDLX 09T3..	032
GHFC.42.R.05-09	19	42	5	1.0	35	17.0	M16	24	26100	3.2	XDLX 09T3..	04205
GHFC.32.R.02-12	15	32	2	2.0	35	17.0	M16	24	21600	5	XOLX 1204..	132
GHFC.35.R.03-12	18	35	3	2.0	35	17.0	M16	24	21360	5	XOLX 1204..	035
GHFC.42.R.04-12	25	42	4	2.0	35	17.0	M16	24	20800	5	XOLX 1204..	04204

MaxiMill – HFC high-feed end mill

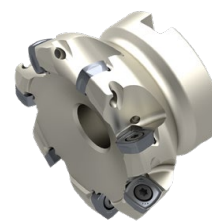
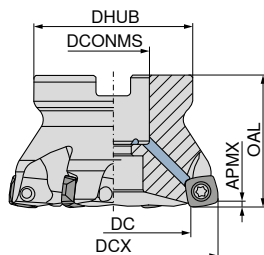
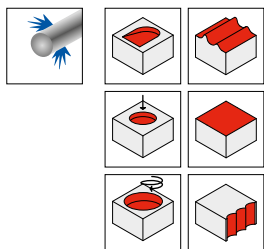


50 681 ...

50 681 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS _{h6} mm	RPMX 1/min.	torque moment Nm	Insert		
CHFC.16.R.02-06-B-40	7.0	16	2	0.8	89	40	16	17300	1.2	XPLX 0603..		616
CHFC.16.R.02-06-A-40-200	7.0	16	2	0.8	200	40	16	4600	1.2	XPLX 0603..	716	620
CHFC.20.R.03-06-B-50	11.0	20	3	0.8	101	50	20	14500	1.2	XPLX 0603..		625
CHFC.20.R.03-06-A-50-225	11.0	20	3	0.8	225	50	20	4200	1.2	XPLX 0603..	720	632
CHFC.25.R.04-06-B-50	16.0	25	4	0.8	107	50	25	15600	1.2	XPLX 0603..		625
CHFC.25.R.04-06-A-50-225	16.0	25	4	0.8	225	50	25	4600	1.2	XPLX 0603..	725	632
CHFC.32.R.05-06-B-25-60	23.0	32	5	0.8	117	60	25	11000	1.2	XPLX 0603..		632
CHFC.32.R.05-06-A-25-60-225	23.0	32	5	0.8	225	60	25	3900	1.2	XPLX 0603..	732	
CHFC.25.R.02-09-A-50-225	12.3	25	2	1.0	225	50	25	9000	3.2	XDLX 09T3..	025	
CHFC.25.R.03-09-A-50-225	12.3	25	3	1.0	225	50	25	9000	3.2	XDLX 09T3..	125	
CHFC.32.R.03-09-A-63-250	19.3	32	3	1.0	250	63	32	8100	3.2	XDLX 09T3..	032	
CHFC.32.R.02-12-A-63-250	14.8	32	2	2.0	250	63	32	6480	5	XOLX 1204..	132	
CHFC.35.R.03-12-A-63-250	17.8	35	3	2.0	250	63	32	6480	5	XOLX 1204..	035	

MaxiMill – HFC high-feed face mill



50 683 ...

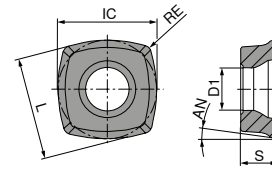
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS _{H6} mm	DHUB mm	RPMX 1/min.	torque moment Nm	Insert	
AHFC.32.R.03-09	19.3	32	3	1.0	40	16	38	27700	3.2	XDLX 09T3..	032
AHFC.35.R.04-09	19.3	35	4	1.0	40	16	38	26700	3.2	XDLX 09T3..	035
AHFC.40.R.04-09	27.3	40	4	1.0	40	16	38	26400	3.2	XDLX 09T3..	140
AHFC.42.R.05-09	29.3	42	5	1.0	40	16	38	26100	3.2	XDLX 09T3..	142
AHFC.50.R.05-09	37.3	50	5	1.0	40	22	43	23500	3.2	XDLX 09T3..	150
AHFC.52.R.06-09	39.3	52	6	1.0	40	22	43	23000	3.2	XDLX 09T3..	152
AHFC.63.R.06-09	50.3	63	6	1.0	40	22	48	20500	3.2	XDLX 09T3..	163
AHFC.66.R.07-09	53.3	66	7	1.0	40	22	48	20000	3.2	XDLX 09T3..	16600
AHFC.40.R.03-12	22.8	40	3	2.0	40	16	38	21120	5	XOLX 1204..	040
AHFC.42.R.04-12	24.8	42	4	2.0	40	16	38	20880	5	XOLX 1204..	042
AHFC.50.R.04-12	32.8	50	4	2.0	40	22	43	18800	5	XOLX 1204..	050
AHFC.52.R.05-12	34.8	52	5	2.0	40	22	43	18400	5	XOLX 1204..	052
AHFC.63.R.05-12	45.8	63	5	2.0	40	22	48	16400	5	XOLX 1204..	063
AHFC.66.R.06-12	48.8	66	6	2.0	40	22	48	16000	5	XOLX 1204..	066
AHFC.80.R.07-12	62.8	80	7	2.0	50	27	58	14000	5	XOLX 1204..	080
AHFC.100.R.08-12	82.8	100	8	2.0	50	32	78	12000	5	XOLX 1204..	100
AHFC.63.R.05-19	36.7	63	5	3.3	40	22	48	5500	5	XOLX 1906..	263
AHFC.80.R.06-19	53.7	80	6	3.3	50	27	58	4700	5	XOLX 1906..	280
AHFC.100.R.08-19	73.7	100	8	3.3	52	32	78	4100	5	XOLX 1906..	300
AHFC.125.R.10-19	98.7	125	10	3.3	63	40	88	3600	5	XOLX 1906..	325
AHFC.160.R.11-19	133.7	160	11	3.3	63	40	98	3100	5	XOLX 1906..	360 ¹⁾

1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm / Without Through Coolant

	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	80 950 ...
Spare parts							
Insert							
XDLX 09T3..	036		113		303	110	192
XDLX 09T3.. (Ø32 – Ø42)	036	040	113	151	303	304	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

Designation	IC inch	D1 inch	L inch	BS inch	S inch	AN °
XPLX 0603..	0.250	0.110	0.236	0.039	0.108	11.000
XDLX 09T3..	0.375	0.173	0.354	0.075	0.156	15.000
XOLX 1204..	0.500	0.217	0.472	0.051	0.187	10.000
XOLX 1906..	0.754	0.236	0.748	-	0.250	10.000



XPLX

ISO	RE inch	51 019 ...	51 019 ...	51 019 ...	51 019 ...	51 019 ...	51 116 ...	51 116 ...
060305ER	0.020						455	90501
060305SR	0.020	255	055	105	205	405		
P		•	•	•	•	○	•	•
M					○	•	•	•
K					○			
N								
S								○
H								
O								

-M50
CTCP220
DRAGONSKIN

XPLX
51 019 ...

-M50
CTPP225
DRAGONSKIN

XPLX
51 019 ...

-M50
CTPP235
DRAGONSKIN

XPLX
51 019 ...

-M50
CTPM225
DRAGONSKIN

XPLX
51 019 ...

-M50
CTPM240
DRAGONSKIN

XPLX
51 019 ...

-F40
CTPM245
DRAGONSKIN

XPLX
51 116 ...

-F40
CTCM245
DRAGONSKIN

XPLX
51 116 ...

XPLX

ISO	RE inch	51 019 ...	50 518 ...	51 116 ...
060305ER	0.020			
060305SR	0.020	505	558	55500
P				
M				
K				•
N				
S				•
H				•
O				

-M50
CTCK215
DRAGONSKIN

XPLX
51 019 ...

-F40
CTC5240
DRAGONSKIN





XPLX
50 518 ...

-F40
CTCS245
DRAGONSKIN

XPLX
51 116 ...







XDLX

ISO	RE inch				
09T308SR	0.031				
P			•	•	•
M					○
K					○
N					
S					
H					
O					

	-M50 CTCP220	-M50 CTPP225	-M50 CTCP230	-M50 CTPP235
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	XDLX	XDLX	XDLX	XDLX
	51 016 ...	51 016 ...	51 016 ...	51 016 ...
	258	058	008	108

XDLX

ISO	RE inch						
09T308ER	0.031						
09T308SR	0.031						
P			•	•	○	•	•
M			•	•	•	•	•
K							
N							
S							○
H							
O							

	-M50 CTPM225	-M50 CTCM235	-M50 CTPM240	-F40 CTPM245	-M50 CTPM245	-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 ...
	208	308	408	458	458	90801

XDLX / XOLX

ISO	RE inch				
09T308ER	0.031				
09T308SR	0.031				
190615SR	0.059				

	-M50 CTCK215 DRAGONSKIN XDLX 51 016 ... 508	-M50 CTPK220 DRAGONSKIN XOLX 51 017 ... 61500	-F40 CTC5240 DRAGONSKIN XDLX 50 503 ... 558	-F40 CTCS245 DRAGONSKIN XDLX 51 115 ... 558
P				
M				
K	•	•		
N				
S			•	•
H				
O				

XOLX

ISO	RE inch					
120410SR	0.039					

	-M50 CTCP220 DRAGONSKIN XOLX 51 017 ... 260	-M50 CTPP225 DRAGONSKIN XOLX 51 017 ... 060	-M50 CTCP230 DRAGONSKIN XOLX 51 017 ... 010	-M50 CTPP235 DRAGONSKIN XOLX 51 017 ... 110	-R50 CTPP235 DRAGONSKIN XOLX 51 018 ... 110
P	•	•	•	•	•
M				○	○
K			○	○	○
N					
S					
H					
O					

XOLX

ISO		RE							
		inch							
120410ER	0.039								
120410SR	0.039		210	310	410	460	460	91001	91001

P	•	•	○	•	•	•	•	•
M	•	•	•	•	•	•	•	•
K								
N								
S							○	○
H								
O								

XOLX / XOHX

ISO		RE					
		inch					
120410ER	0.039						
120410SR	0.039		510	558	16000	560	56000

P							
M							
K			•				
N							
S					•	•	•
H							
O							

XOLX

ISO	RE inch				
190615ER	0.059				
190615SR	0.059				

	-M50 CTCP230 DRAGONSKIN	-M50 CTPP235 DRAGONSKIN	-M50 CTPM240 DRAGONSKIN	-F40 CTPM245 DRAGONSKIN
	XOLX	XOLX	XOLX	XOLX
	51 017 ...	51 017 ...	51 017 ...	51 022 ...
	015	115	415	465

P	●	●	○	●
M		○	●	●
K	○	○		
N				
S				
H				
O				

XOLX

ISO	RE inch				
190615ER	0.059				
190615SR	0.059				

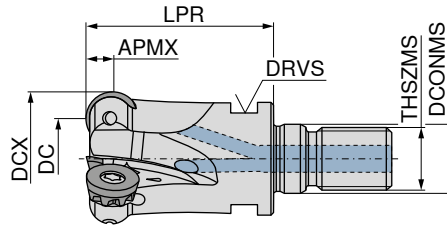
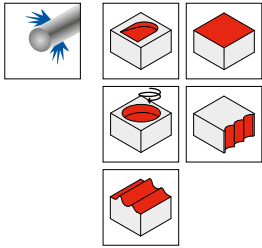
	-F40 CTCM245 DRAGONSKIN	-M50 CTCK215 DRAGONSKIN	-M50 CTPK220 DRAGONSKIN	-F40 CTC5240 DRAGONSKIN	-F40 CTCS245 DRAGONSKIN
	XOLX	XOLX	XOLX	XOLX	XOLX
	51 022 ...	51 017 ...	51 017 ...	50 504 ...	51 022 ...
	91501	515	61500	515	56500

P	●				
M	●				
K		●	●		
N					
S	○			●	●
H					
O					

Milling guide

Cutting data standard values	→ 154–157	Machining strategy	→ 184–187
Starting Parameter	→ 184–187	Technical Information	→ 191–197
Chip groove description and overview	→ 198–200	Grade description and overview	→ 202–207

MaxiMill – 251 RS Screw in cutter

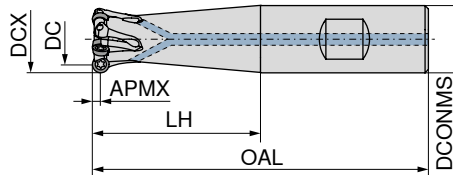
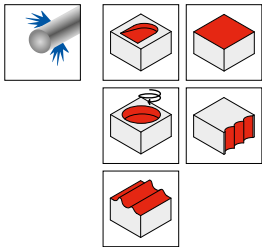


58 684 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	DCONMS inch	LPR inch	THSZMS	RPMX 1/min.	torque moment Nm	Insert	
G251.100.R.03-10-125-RS-F	0.606	1.000	3	0.197	0.492	1.250	M12	25450	2	RP.X 10T3..	10103
G251.125.R.04-10-125-RS-F	0.856	1.250	4	0.196	0.669	1.500	M16	25450	2	RP.X 10T3..	12604 ¹⁾
G251.150.R.05-10-175-RS-F	1.106	1.500	5	0.197	0.669	1.750	M16	15150	2	RP.X 10T3..	15105 ¹⁾
G251.125.R.03-12-125-RS-F	0.777	1.250	3	0.236	0.492	1.575	M12	25450	3.2	RP.X 1204..	22503 ¹⁾

1) Not in stock

MaxiMill – 251 RS End milling cutter



58 685 ...

58 685 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	LH inch	DCONMS inch	RPMX 1/min.	Insert		
C251.0750.R.03-08-B-125-RS-EF	0.435	0.750	3	0.157	3.500	1.250	0.750	31800	RDHX 0802..		27503
C251.0750.R.03-08-A-200-RS-EF-800	0.435	0.750	3	0.157	8.000	2.000	0.750	22260	RDHX 0802..	07503	
C251.100.R.04-08-B-225-RS-EF	0.685	1.000	4	0.157	4.500	2.250	1.000	25450	RDHX 0802..		30004
C251.100.R.04-08-A-300-RS-EF-800	0.685	1.000	4	0.157	8.000	3.000	1.000	18000	RDHX 0802..	10004	
C251.125.R.05-08-B-275-RS-EF	0.935	1.250	5	0.157	5.250	2.750	1.250	19850	RDHX 0802..		32505
C251.125.R.05-08-A-325-RS-EF-1000	0.935	1.250	5	0.157	10.000	3.250	1.250	18000	RDHX 0802..	12505	
C251.100.R.03-10-B-225-RS-EF	0.606	1.000	3	0.197	4.500	2.250	1.000	25450	RP.X 10T3..		50003
C251.100.R.03-10-A-300-RS-EF-800	0.606	1.000	3	0.197	8.000	3.000	1.000	20000	RP.X 10T3..	40003	
C251.125.R.04-10-B-275-RS-EF	0.857	1.250	4	0.197	5.250	2.750	1.250	19850	RP.X 10T3..		52504
C251.125.R.04-10-A-325-RS-EF-1000	0.857	1.250	4	0.197	10.000	3.250	1.250	18000	RP.X 10T3..	42504	
C251.150.R.05-10-B125-325-RS-EF	1.106	1.500	5	0.197	6.000	3.250	1.250	15100	RP.X 10T3..		55005
C251.150.R.05-10-A125-375-RS-EF-1000	1.106	1.500	5	0.197	10.000	3.750	1.250	10700	RP.X 10T3..	45005	
C251.125.R.02-12-A-325-RS-EF-1000	0.778	1.250	2	0.236	10.000	3.250	1.250	8500	RP.X 1204..	62502	
C251.150.R.03-12-A125-375-RS-EF-1000	1.028	1.500	3	0.236	10.000	3.750	1.250	12500	RP.X 1204..	65003	
C251.150.R.02-16-A125-375-RS-EF-1000	0.870	1.500	2	0.315	10.000	3.750	1.250	10500	RP.X 1605..	75002	



80 950 ...



70 950 ...

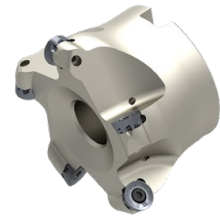
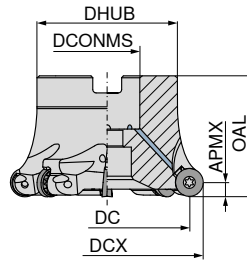
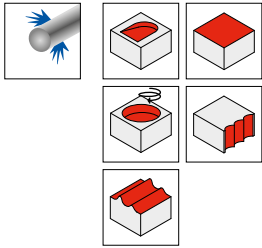


70 950 ...

Spare parts

Insert			
RDHX 0802..	102	303	116
RP.X 10T3..	104	303	840
RP.X 10T3..		303	
RP.X 1204..	105	303	304
RP.X 1605..	106	303	01200

MaxiMill – 251 RS Shell mill



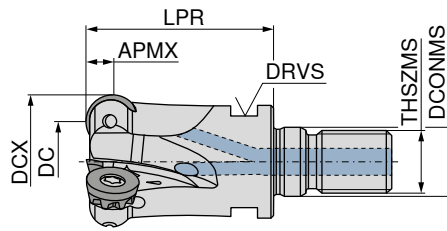
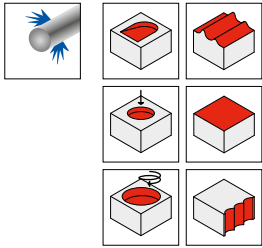
58 686 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS _{H6} inch	RPMX 1/min.	torque moment Nm	Insert	
A251.150.R.06-08-A050-175-RS-EF	1.185	1.500	6	0.157	1.420	1.420	0.500	15150	1.2	RDHX 0802..	15006
A251.300.R.12-08-A100-200-RS-IN-EF	2.685	3.000	12	0.157	2.250	2.250	1.000	7950	1.2	RDHX 0802..	30012
A251.150.R.05-10-A050-175-RS-EF	1.106	1.500	5	0.197	1.420	1.420	0.500	15900	2	RP.X 10T3..	15105
A251.200.R.06-10-A075-175-RS-EF	1.606	2.000	6	0.197	1.750	1.750	0.750	12700	2	RP.X 10T3..	20106
A251.200.R.05-12-A075-175-RS-EF	1.528	2.000	5	0.236	1.750	1.750	0.750	12700	3.2	RP.X 1204..	20205
A251.200.R.06-12-A075-175-RS-EF	1.528	2.000	6	0.236	1.750	1.750	0.750	12700	3.2	RP.X 1204..	20206
A251.250.R.06-12-A100-200-RS-EF	2.028	2.500	6	0.236	2.250	2.250	1.000	10100	3.2	RP.X 1204..	25206
A251.300.R.07-12-RS-A100-200-EF	2.528	3.000	7	0.236	2.250	2.250	1.000	7950	3.2	RP.X 1204..	30207
A251.400.R.10-12-B125-200-RS-EF	3.528	4.000	10	0.236	2.750	2.750	1.250	6350	3.2	RP.X 1204..	40210
A251.600.R.12-12-B150-200-RS-EF	5.528	6.000	12	0.236	3.750	3.750	1.500	8300	3.2	RP.X 1204..	60212 ¹⁾
A251.200.R.03-16-A075-175-RS-EF	1.370	2.000	3	0.315	1.750	1.750	0.750	12700	5	RP.X 1605..	20303
A251.250.R.05-16-A100-200-RS-EF	1.870	2.500	5	0.315	2.250	2.250	1.000	10100	5	RP.X 1605..	25305
A251.300.R.06-16-A100-200-RS-EF	2.370	3.000	6	0.315	2.250	2.250	1.000	7950	5	RP.X 1605..	30306
A251.400.R.07-16-B125-200-RS-EF	3.370	4.000	7	0.315	2.750	2.750	1.250	6350	5	RP.X 1605..	40307
A251.500.R.08-16-B150-200-RS-EF	4.370	5.000	8	0.315	3.750	3.750	1.500	5400	5	RP.X 1605..	50308
A251.600.R.10-16-B150-200-RS-EF	5.370	6.000	10	0.315	3.750	3.750	1.500	7200	5	RP.X 1605..	60310
A251.300.R.05-20-A100-200-RS-EF	2.213	3.000	5	0.394	2.250	2.250	1.000	8600	5	RP.X 2006..	30405
A251.400.R.06-20-A125-200-RS-EF	3.213	4.000	6	0.394	2.750	2.750	1.250	6350	5	RP.X 2006..	40406
A251.500.R.07-20-B150-200-RS-EF	4.213	5.000	7	0.394	3.750	3.750	1.500	5400	5	RP.X 2006..	50407
A251.600.R.08-20-B150-200-RS-EF	5.213	6.000	8	0.394	3.750	3.750	1.500	6500	1.2	RP.X 2006..	60408

1) Not in stock

	80 950 ...	70 950 ...	70 950 ...
Screwdriver			
Molykote			
Clamping screw			
Spare parts			
Insert			
RDHX 0802..	102	303	116
RP.X 10T3..	104	303	840
RP.X 1204..	105	303	304
RP.X 1605..	106	303	01200
RP.X 2006..	106	303	302

MaxiMill – 251 RS Screw in cutter

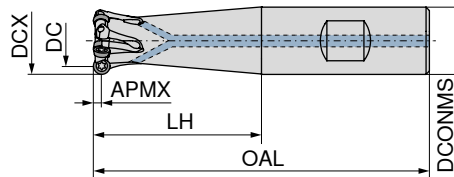
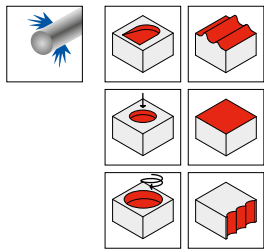


50 684 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	DCONMS mm	LPR mm	THSZMS	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	
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

	TORX® blade	Screwdriver	Molykote	Clamping screw	Torque screwdriver
	80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...
Spare parts					
Insert					
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 – 251 RS End milling cutter



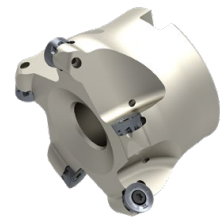
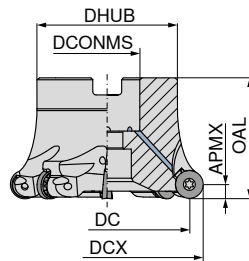
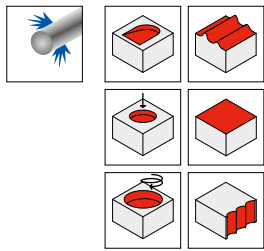
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	RPMX 1/min.	Insert	50 685 ...	
										50 685 ...	50 685 ...
C251.12.R-03-05-B-16-25-RS	7	12	3	2.5	75	25	16	40000	RDHX 0501..		012
C251.12.R-03-05-A-32-165-RS	7	12	3	2.5	165	32	12	16000	RDHX 0501..	112	
C251.16.R-04-05-B-32-RS	11	16	4	2.5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

Spare parts
Insert

Insert	80 950 ...	80 950 ...	70 950 ...	70 950 ...	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 10T3..		112	303	840	
RP.X 1204..	036	113	303	304	192

 TORX® blade	 Screwdriver	 Molykote	 Clamping screw	 Torque screwdriver
80 950 ...	80 950 ...	70 950 ...	70 950 ...	80 950 ...

MaxiMill – 251 RS Shell mill

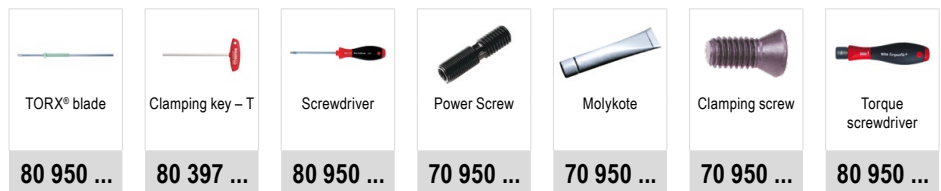


50 686 ...

Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS _{H6} mm	RPMX 1/min.	torque moment Nm	Insert	
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
A251.66.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

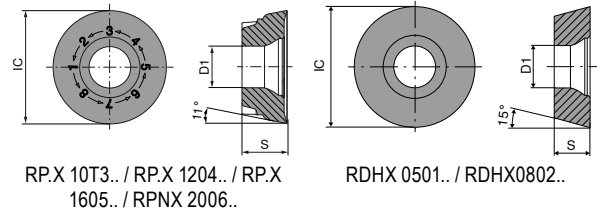
Spare parts
Insert

Insert	80 950 ...	80 397 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...	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

Designation	IC	D1	S
	inch	inch	inch
RDHX 0501..	0.197	0.098	0.063
RDHX 0802..	0.315	0.110	0.094
RP.X 10T3..	0.394	0.134	0.156
RP.X 1204..	0.472	0.173	0.187
RP.X 1605..	0.630	0.217	0.219
RP.X 2006..	0.787	0.236	0.250



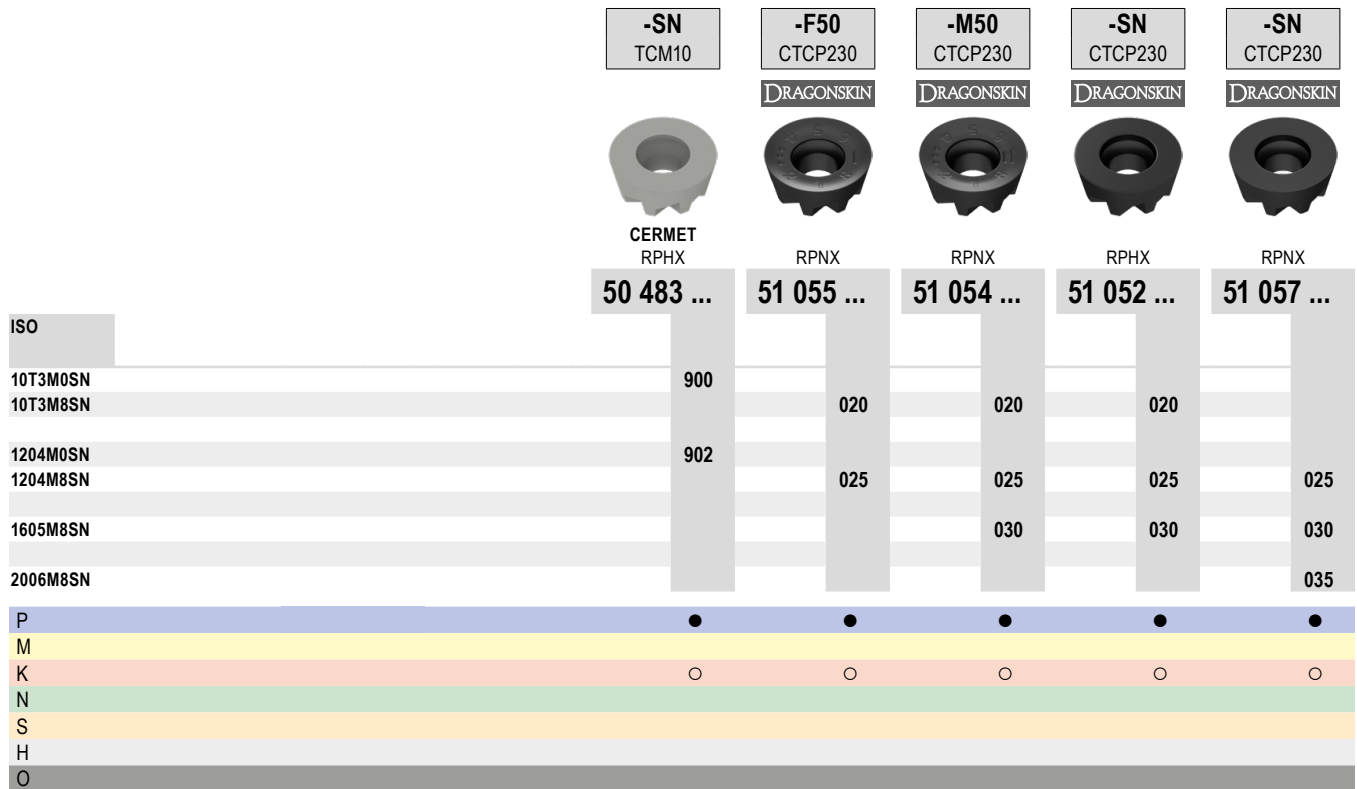
RDHX

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

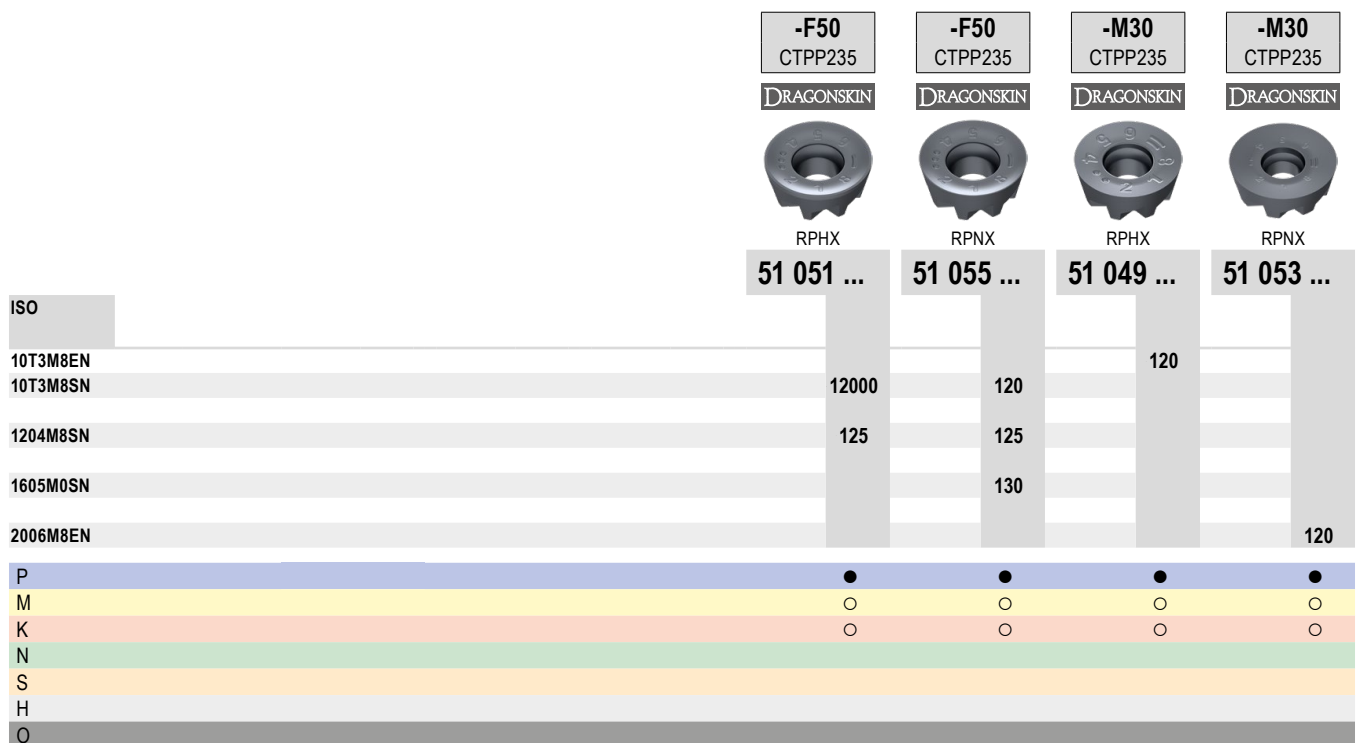
RDHX

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

RPHX / RPNX



RPHX / RPNX



RPNX / RPHX

	-M50 CTPP235 DRAGONSKIN RPNX 51 054 ...	-M50 CTPP235 DRAGONSKIN RPHX 51 050 ...	-SN CTPP235 DRAGONSKIN RPHX 51 052 ...	-SN CTPP235 DRAGONSKIN RPNX 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 RPHX 51 051 ...	-M30 CTPM225 DRAGONSKIN RPHX 51 049 ...	-SN CTPM225 DRAGONSKIN RPHX 51 052 ...	-F50 CTCM235 DRAGONSKIN RPHX 51 051 ...	-M30 CTCM235 DRAGONSKIN RPHX 51 049 ...
ISO					
1204M8EN		225			325
1204M8SN	225		225	325	
P	●	●	●	●	●
M	●	●	●	●	●
K					
N					
S					
H					
O					

RPHX / RPNX

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

RPHX / RPNX

	CTPM245 DRAGONSKIN RPHX 51 052 ...	-F50 CTPM245 DRAGONSKIN RPHX 51 051 ...	-F50 CTPM245 DRAGONSKIN RPNX 51 055 ...	-M32 CTPM245 DRAGONSKIN RPHX 51 108 ...	-M50 CTPM245 DRAGONSKIN RPHX 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) Insert with 4 indexes

RPNX / RPHX

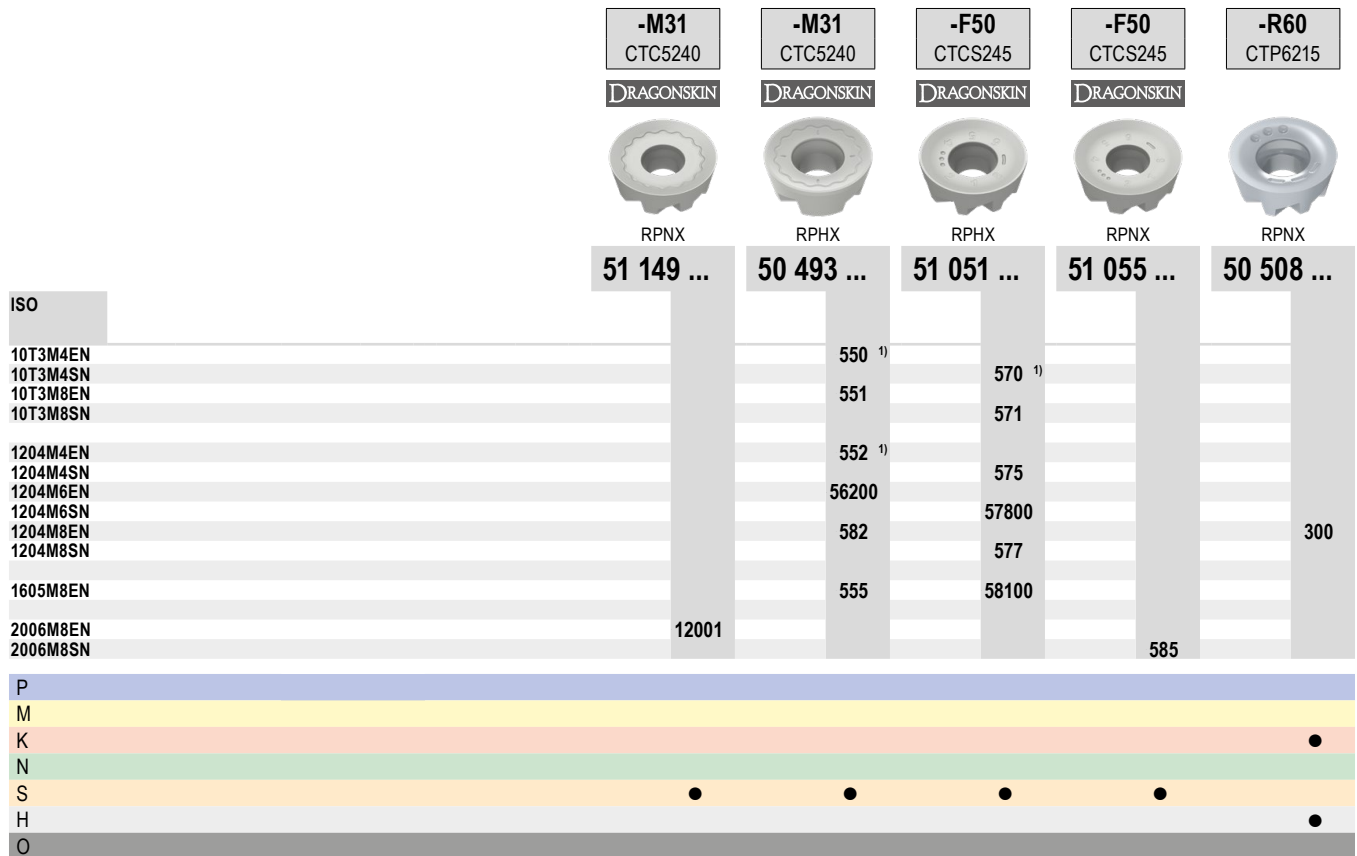
	-F50 CTCM245 DRAGONSKIN RPNX 51 055 ...	-M50 CTCM245 DRAGONSKIN RPNX 51 054 ...	-F50 CTCM245 DRAGONSKIN RPHX 51 051 ...	-M50 CTCM245 DRAGONSKIN RPHX 51 050 ...
ISO				
10T3M4SN	92001 ¹⁾		92001 ¹⁾	92001 ¹⁾
10T3M8SN	92101		92101	
1204M4SN	92501 ¹⁾		92501 ¹⁾	92501 ¹⁾
1204M6SN		92601	92601	92601
1204M8SN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

1) Insert with 4 indexes

RPHX / RPNX

	-SN CTCK215 DRAGONSKIN RPHX 51 052 ...	-SN CTCK215 DRAGONSKIN RPNX 51 057 ...	-SN CTPK220 DRAGONSKIN RPNX 51 057 ...	NEW -F10 CTPX715 DRAGONSKIN RPHX 51 156 ...	-27P H216T RPHX 50 483 ...
ISO					
10T3M8FN				02002	600
10T3M8SN	520		620		
1204M8FN				02502	602
1204M8SN	525	525	625		
1605M8FN				03002	604
1605M8SN	530	530	630		
2006M8SN		535	635		
P				○	
M				○	
K	•	•	•	•	○
N				•	•
S				○	
H					
O				○	○

RPNX / RPHX

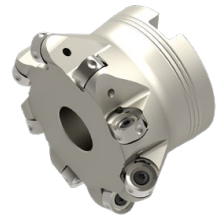
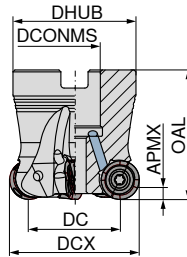
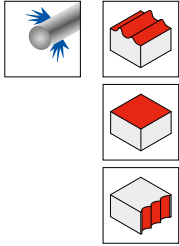


1) Insert with 4 indexes

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 188
Technical Information	→ 191-197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

MaxiMill – 252 Shell mill






58 689 ...

Designation	DC inch	DCX inch	ZNF	APMX inch	OAL inch	DHUB inch	DCONMS inch	RPMX 1/min.	torque moment Nm	Insert	
A252.150.R.04-12-A050-175-EF	1.027	1.500	4	0.118	1.500	1.500	0.500	15900	3.2	RNHU 1205..	15004
A252.200.R.05-12-A075-175-EF	1.527	2.000	5	0.118	1.750	1.750	0.750	12700	3.2	RNHU 1205..	20005
A252.250.R.06-12-A100-200-EF	2.027	2.500	6	0.118	2.250	2.250	1.000	10100	3.2	RNHU 1205..	25006
A252.300.R.07-12-A100-200-EF	2.527	3.000	7	0.118	2.250	2.250	1.000	7950	3.2	RNHU 1205..	30007

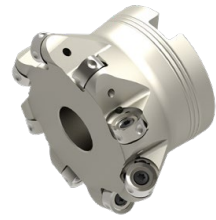
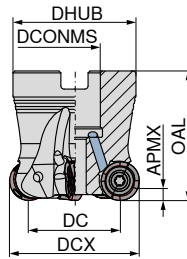
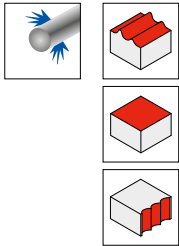
Spare parts

DCX

1.500 - 3.000

		
Screwdriver	Molykote	Clamping screw
80 950 ...	70 950 ...	70 950 ...
128	303	859

MaxiMill – 252 Shell mill



NEW

50 689 ...

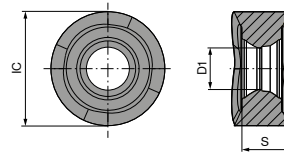
Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DCONMS mm	DHUB mm	torque moment Nm	Insert	
A252.40.R.05-10	30	40	5	2.5	40	16	38	2	RNHU 1004..	140
A252.42.R.05-10	32	42	5	2.5	40	16	38	2	RNHU 1004..	142
A252.50.R.06-10	40	50	6	2.5	40	22	43	2	RNHU 1004..	150
A252.52.R.07-10	42	52	7	2.5	40	22	43	2	RNHU 1004..	152
A252.63.R.08-10	53	63	8	2.5	40	22	48	2	RNHU 1004..	16300
A252.80.R.10-10	70	80	10	2.5	50	27	58	2	RNHU 1004..	18000
A252.40.R.04-12	28	40	4	3.0	40	16	38	3.2	RNHU 1205..	240
A252.50.R.05-12	38	50	5	3.0	40	22	43	3.2	RNHU 1205..	250
A252.52.R.05-12	40	52	5	3.0	40	22	43	3.2	RNHU 1205..	252
A252.63.R.06-12	51	63	6	3.0	40	22	48	3.2	RNHU 1205..	263
A252.66.R.07-12	54	66	7	3.0	40	22	48	3.2	RNHU 1205..	266
A252.80.R.08-12	68	80	8	3.0	50	27	58	3.2	RNHU 1205..	280
A252.100.R.10-12	88	100	10	3.0	50	32	78	3.2	RNHU 1205..	30000
A252.125.R.12-12	113	125	12	3.0	63	40	88	3.2	RNHU 1205..	32500

Spare parts
Insert

	TORX® blade	Clamping key – T	Screwdriver	Power Screw	Molykote	Clamping screw	Torque screw-driver
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

RNHU

Designation	IC inch	D1 inch	S inch
RNHU 1004..	0.394	0.134	0.181
RNHU 1205..	0.472	0.173	0.209



RNHU

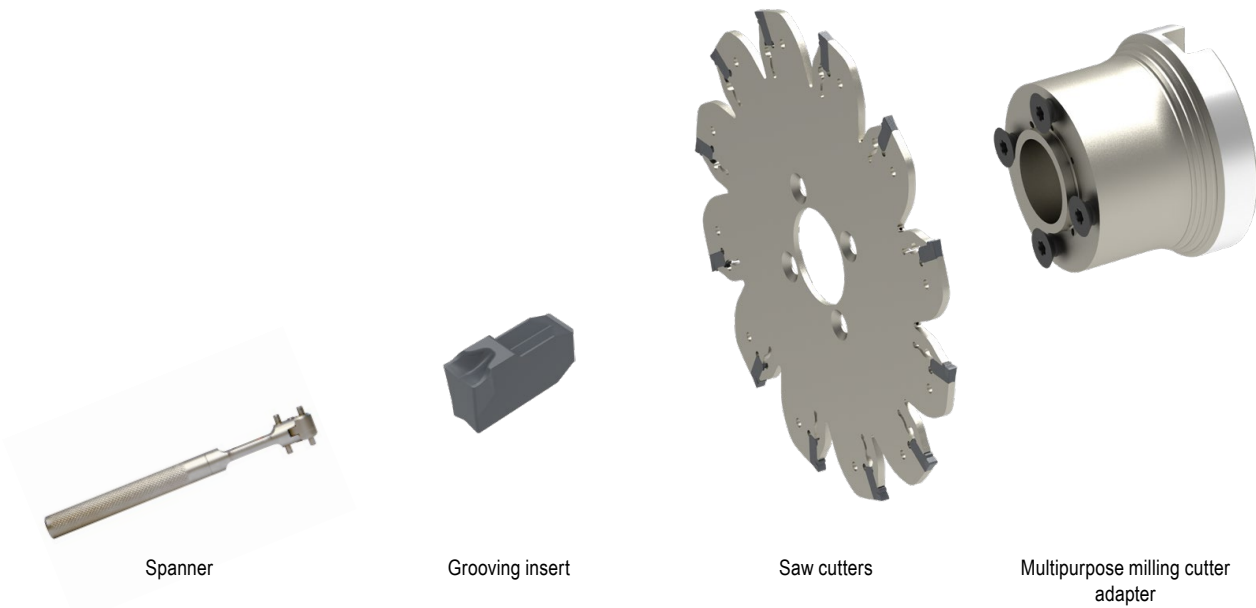
	NEW -M50 CTPP235 DRAGONSKIN	NEW -F50 CTPM240 DRAGONSKIN	NEW -M31 CTPM245 DRAGONSKIN	NEW -M32 CTPM245 DRAGONSKIN	NEW -M31 CTC5240 DRAGONSKIN	NEW -M31 CTC5240 DRAGONSKIN
	RNHU	RNHU	RNHU	RNHU	RNHU	RNHU
	51 130 ...	51 129 ...	51 106 ...	51 107 ...	50 520 ...	50 521 ...
ISO						
1004M4ER	12000	42000	470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

Milling guide

Cutting data standard values	→ 154-157	Machining strategy	→ 189
Technical Information	→ 191+197	Chip groove description and overview	→ 198-200
Grade description and overview	→ 202-207		

Application tips – MaxiMill – Slot-SX

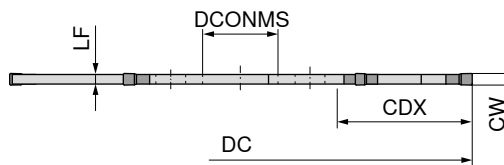
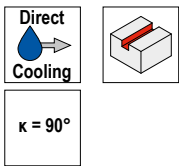
▲ The following components are required to complete the tool:



MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:



Slot milling and parting off cutters **without** assembly key, **without** clamping screws



NEW


50 383 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.80.R.6.13.DC-SX2	80	2	23	13	1.65	6	5000	SX E2 ..	AD.SLOT.13...	08002
ASLOT.80.R.6.13.DC-SX3	80	3	23	13	2.50	6	6700	SX E3 ..	AD.SLOT.13...	08003
ASLOT.80.R.4.13.DC-SX4	80	4	23	13	3.50	4	5200	SX E4 ..	AD.SLOT.13...	08004
ASLOT.80.R.4.13.DC-SX5	80	5	23	13	4.50	4	5000	SX E5 ..	AD.SLOT.13...	08005

	
Clamping screw	Insert mounting key SX
50 950 ...	70 950 ...
00100	836
00100	836
00100	837
00100	837

Spare parts
for Article no.

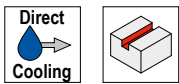
50 383 08002	00100	836
50 383 08003	00100	836
50 383 08004	00100	837
50 383 08005	00100	837

 → Page 146
Here you will find suitable multipurpose milling cutter adapters.

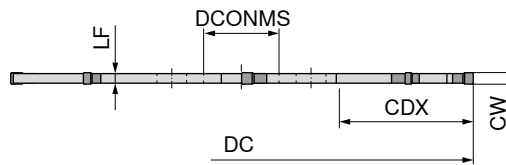
MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws




$\kappa = 90^\circ$



NEW

50 384 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.100.R.8.22.DC-SX2	100	2	29	22	1.65	8	4500	SX E2 ..	AD.SLOT.22...	10002
ASLOT.100.R.8.22.DC-SX3	100	3	29	22	2.50	8	6000	SX E3 ..	AD.SLOT.22...	10003
ASLOT.100.R.6.22.DC-SX4	100	4	29	22	3.50	6	5700	SX E4 ..	AD.SLOT.22...	10004
ASLOT.100.R.6.22.DC-SX5	100	5	29	22	4.50	6	4500	SX E5 ..	AD.SLOT.22...	10005
ASLOT.100.R.4.22.DC-SX6	100	6	29	22	5.40	4	3900	SX E6 ..	AD.SLOT.22...	10006



Clamping screw

50 950 ...




Insert mounting key SX

70 950 ...

Spare parts for Article no.

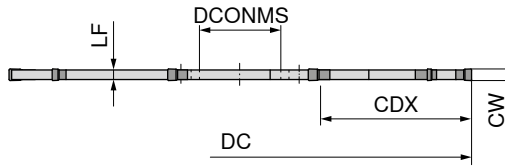
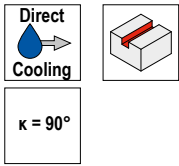
50 384 10002	00100	836
50 384 10003	00100	836
50 384 10004	00100	837
50 384 10005	00100	837
50 384 10006	00100	837

 → **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

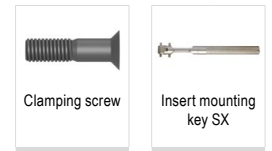
Slot milling and parting off cutters **without** assembly key, **without** clamping screws



NEW

50 385 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.125.R.10.22.DC-SX2	125	2	42	22	1.65	10	4000	SX E2 ..	AD.SLOT.22...	12502
ASLOT.125.R.10.22.DC-SX3	125	3	42	22	2.50	10	5300	SX E3 ..	AD.SLOT.22...	12503



50 950 ...

70 950 ...

Spare parts
for Article no.

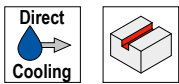
50 385 12502	00100	836
50 385 12503	00100	836

→ **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

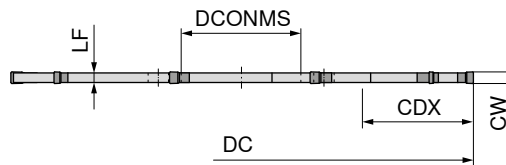
MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws



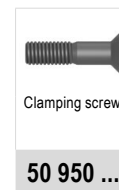
$\kappa = 90^\circ$



NEW

50 386 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.125.R.10.32.DC-SX2	125	2	30	32	1.65	10	4000	SX E2 ..	AD.SLOT.32...	12502
ASLOT.125.R.10.32.DC-SX3	125	3	30	32	2.50	10	5300	SX E3 ..	AD.SLOT.32...	12503
ASLOT.125.R.8.32.DC-SX4	125	4	30	32	3.50	8	4200	SX E4 ..	AD.SLOT.32...	12504
ASLOT.125.R.8.32.DC-SX5	125	5	30	32	4.50	8	4000	SX E5 ..	AD.SLOT.32...	12505
ASLOT.125.R.8.32.DC-SX6	125	6	30	32	5.40	8	3500	SX E6 ..	AD.SLOT.32...	12506



**Spare parts
for Article no.**

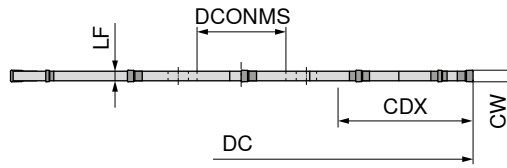
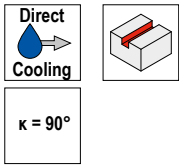
50 386 12502	00200	836
50 386 12503	00200	836
50 386 12504	00200	837
50 386 12505	00200	837
50 386 12506	00200	837

→ **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:



Slot milling and parting off cutters **without** assembly key, **without** clamping screws



NEW


50 387 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.160.R.12.32.DC-SX2	160	2	48	32	1.65	12	3500	SX E2 ..	AD.SLOT.32...	16002
ASLOT.160.R.12.32.DC-SX3	160	3	48	32	2.50	12	4700	SX E3 ..	AD.SLOT.32...	16003

	
Clamping screw	Insert mounting key SX
50 950 ...	70 950 ...
00200	836
00200	836

Spare parts
for Article no.

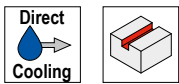
50 387 16002	00200	836
50 387 16003	00200	836

 → **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

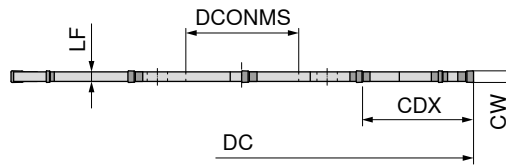
MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws



$\kappa = 90^\circ$



NEW

50 388 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.160.R.12.40.DC-SX2	160	2	39	40	1.65	12	3500	SX E2 ..	AD.SLOT.40...SK	16002
ASLOT.160.R.12.40.DC-SX3	160	3	39	40	2.50	12	4700	SX E3 ..	AD.SLOT.40...SK	16003
ASLOT.160.R.10.40.DC-SX4	160	4	39	40	3.50	10	3700	SX E4 ..	AD.SLOT.40...SK	16004
ASLOT.160.R.10.40.DC-SX5	160	5	39	40	4.50	10	3500	SX E5 ..	AD.SLOT.40...SK	16005
ASLOT.160.R.10.40.DC-SX6	160	6	39	40	5.40	10	3100	SX E6 ..	AD.SLOT.40...SK	16006



Clamping screw

50 950 ...



Insert mounting key SX

70 950 ...

Spare parts for Article no.

50 388 16002	00300	836
50 388 16003	00300	836
50 388 16004	00300	837
50 388 16005	00300	837
50 388 16006	00300	837

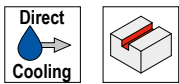
→ **Page 146**

Here you will find suitable multipurpose milling cutter adapters.

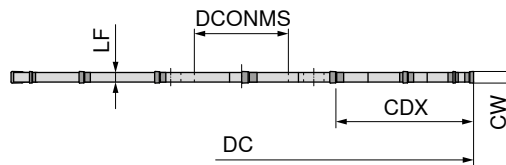
MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws



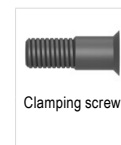
$\kappa = 90^\circ$



NEW

50 389 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.200.R.16.40.DC-SX2	200	2	59	40	1.65	16	3200	SX E2 ..	AD.SLOT.40...SK	20002
ASLOT.200.R.16.40.DC-SX3	200	3	59	40	2.50	16	4200	SX E3 ..	AD.SLOT.40...SK	20003
ASLOT.200.R.14.40.DC-SX4	200	4	59	40	3.50	14	3300	SX E4 ..	AD.SLOT.40...SK	20004
ASLOT.200.R.14.40.DC-SX5	200	5	59	40	4.50	14	3100	SX E5 ..	AD.SLOT.40...SK	20005
ASLOT.200.R.14.40.DC-SX6	200	6	59	40	5.40	14	2800	SX E6 ..	AD.SLOT.40...SK	20006



Clamping screw

50 950 ...



Insert mounting key SX

70 950 ...

Spare parts for Article no.

50 389 20002	00300	836
50 389 20003	00300	836
50 389 20004	00300	837
50 389 20005	00300	837
50 389 20006	00300	837

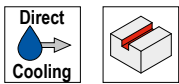
→ **Page 146**

Here you will find suitable multipurpose milling cutter adapters.

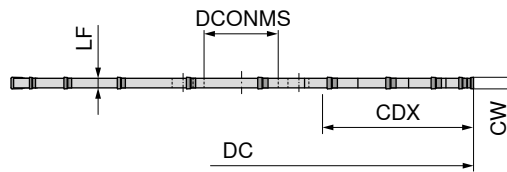
MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws



$\kappa = 90^\circ$




NEW

50 380 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.250.R.20.40.DC-SX3	250	3	84	40	2.5	20	3700	SX E3 ..	AD.SLOT.40...ZK	25003
ASLOT.250.R.18.40.DC-SX4	250	4	84	40	3.5	18	2900	SX E4 ..	AD.SLOT.40...ZK	25004
ASLOT.250.R.18.40.DC-SX5	250	5	84	40	4.5	18	2800	SX E5 ..	AD.SLOT.40...ZK	25005
ASLOT.250.R.18.40.DC-SX6	250	6	84	40	5.4	18	2500	SX E6 ..	AD.SLOT.40...ZK	25006¹⁾

1) Not in stock



Clamping screw

50 950 ...




Insert mounting key SX

70 950 ...

Spare parts for Article no.

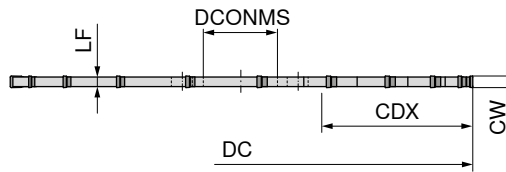
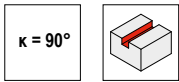
50 380 25003	00400	836
50 380 25004	00400	837
50 380 25005	00400	837
50 380 25006	00400	837

 → **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws

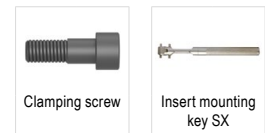


NEW

50 390 ...

Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.250.R.20.40-SX3	250	3	84	40	2.5	20	3700	SX E3 ..	AD.SLOT.40...ZK	25003
ASLOT.250.R.18.40-SX4	250	4	84	40	3.5	18	2900	SX E4 ..	AD.SLOT.40...ZK	25004
ASLOT.250.R.18.40-SX5	250	5	84	40	4.5	18	2800	SX E5 ..	AD.SLOT.40...ZK	25005
ASLOT.250.R.18.40-SX6	250	6	84	40	5.4	18	2500	SX E6 ..	AD.SLOT.40...ZK	25006¹⁾

1) Not in stock



50 950 ...

70 950 ...

**Spare parts
for Article no.**

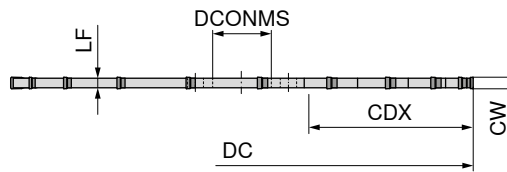
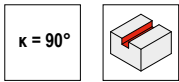
50 390 25003	00400	836
50 390 25004	00400	837
50 390 25005	00400	837
50 390 25006	00400	837

→ **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

MaxiMill – Slot-SX slot milling and parting off cutter

Scope of supply:

Slot milling and parting off cutters **without** assembly key, **without** clamping screws





NEW

50 391 ...


Designation	DC mm	CW mm	CDX mm	DCONMS _{H6} mm	LF mm	ZEFP	RPMX 1/min.	Insert	Adapter	
ASLOT.315.R.22.40-SX4	315	4	115	40	3.5	22	2600	SX E4 ..	AD.SLOT.40...ZK	31504
ASLOT.315.R.22.40-SX5	315	5	115	40	4.5	22	2500	SX E5 ..	AD.SLOT.40...ZK	31505
ASLOT.315.R.22.40-SX6	315	6	115	40	5.4	22	2200	SX E6 ..	AD.SLOT.40...ZK	31506¹⁾

1) Not in stock

	
Clamping screw	Insert mounting key SX
50 950 ...	70 950 ...
00400	837
00400	837
00400	837

Spare parts for Article no.

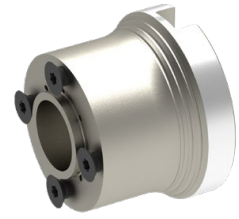
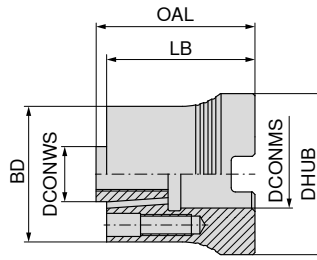
50 391 31504
50 391 31505
50 391 31506

 → **Page 146**
Here you will find suitable multipurpose milling cutter adapters.

MaxiMill – Slot-SX multipurpose milling cutter adapter

Scope of supply:

Multipurpose milling cutter adapter including screws



NEW

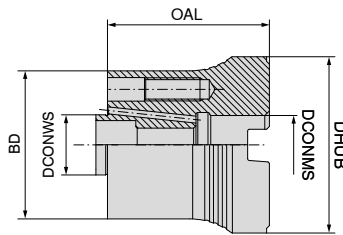
50 395 ...

Designation	DCONMS mm	DCONWS _{h6} mm	DHUB mm	LB mm	OAL mm	BD mm	
AD.SLOT.13.32.A16	16	13	38	35	37.5	32	01300
AD.SLOT.22.40.A22	22	22	48	35	37.5	40	02200
AD.SLOT.32.63.A27	27	32	58	45	47.5	63	03200
AD.SLOT.40.80.A32.SK	32	40	78	55	57.5	80	04000
AD.SLOT.40.80.A32.ZK	32	40	78	55	57.5	80	04100

MaxiMill – Slot-SX multipurpose INCH milling cutter adapter

Scope of supply:

Multipurpose milling cutter adapter including screws



NEW

58 395 ...

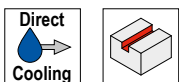
Designation	DCONMS inch	DCONWS _{h6} inch	DHUB inch	LB inch	OAL inch	BD inch	
AD.SLOT.13.32.A50-E	0.500	0.512	1.500	1.378	1.476	1.260	01300
AD.SLOT.22.40.A075-E	0.750	0.866	1.750	1.378	1.476	1.575	02200
AD.SLOT.32.63.A100-E	1.000	1.260	2.250	1.772	1.870	2.480	03200
AD.SLOT.40.80.A125.SK-E	1.250	1.575	2.750	2.165	2.264	3.150	04000
AD.SLOT.40.80.A125.ZK-E	1.250	1.575	2.750	2.165	2.264	3.150	04100

	50 950 ...	50 950 ...	50 950 ...	70 950 ...
Clamping screw				
Clamping screw				
Clamping screw				
Power Screw				
Spare parts for Article no.				
50 395 01300	00100			151
50 395 02200 / 58 395 01300	00100			
50 395 03200 / 58 395 03200	00200			
50 395 04000 / 58 395 04000			00300	
50 395 04100 / 58 395 04100		00400		
58 395 02200	00100			

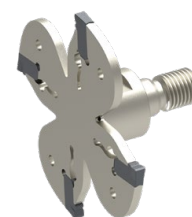
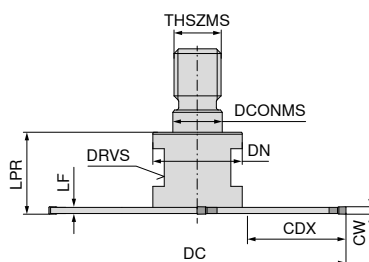
MaxiMill – Slot-SX screw-in multipurpose milling cutter

Scope of supply:

Screw-in multipurpose milling cutter **without** assembly key



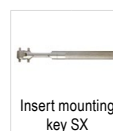
$\kappa = 90^\circ$



NEW

50 392 ...

Designation	DC mm	CW mm	CDX mm	DCONMS mm	THSZMS	LF mm	DN mm	LPR mm	DRVS mm	ZEFP	RPMX 1/min.	Insert	
GSLOT.63.R.4.M10.DC-SX2	63	2	21	10.5	M10	1.65	19	18	15	4	5700	SX E2 ..	06302
GSLOT.63.R.4.M10.DC-SX3	63	3	21	10.5	M10	2.50	19	18	15	4	7500	SX E3 ..	06303



Insert mounting
key SX

70 950 ...

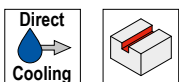
Spare parts
for Article no.

50 392 06302	836
50 392 06303	836

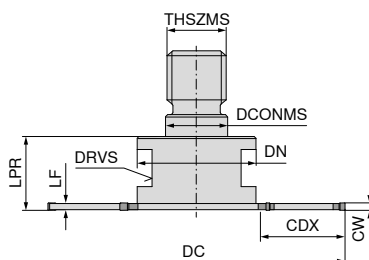
MaxiMill – Slot-SX screw-in multipurpose milling cutter

Scope of supply:

Screw-in multipurpose milling cutter **without** assembly key



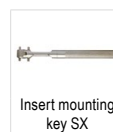
$\kappa = 90^\circ$



NEW

50 393 ...

Designation	DC mm	CW mm	CDX mm	DCONMS mm	THSZMS	LF mm	DN mm	LPR mm	DRVS mm	ZEFP	RPMX 1/min.	Insert	
GSLOT.80.R.6.M16.DC-SX2	80	2	23	17	M16	1.65	32	20	24	6	5000	SX E2 ..	08002
GSLOT.80.R.6.M16.DC-SX3	80	3	23	17	M16	2.50	32	20	24	6	6700	SX E3 ..	08003
GSLOT.80.R.4.M16.DC-SX4	80	4	23	17	M16	3.50	32	20	24	4	5200	SX E4 ..	08004



Insert mounting
key SX

70 950 ...

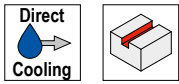
Spare parts
for Article no.

50 393 08002	836
50 393 08003	836
50 393 08004	837

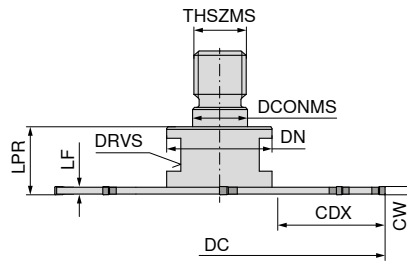
MaxiMill – Slot-SX screw-in multipurpose milling cutter

Scope of supply:

Screw-in multipurpose milling cutter **without** assembly key



$\kappa = 90^\circ$



NEW

50 394 ...

Designation	DC mm	CW mm	CDX mm	DCONMS mm	THSZMS	LF mm	DN mm	LPR mm	DRVS mm	ZEFP	RPMX 1/min.	Insert	
GSLOT.100.R.8.M16.DC-SX2	100	2	33	17	M16	1.65	32	20	24	8	4500	SX E2 ..	10002
GSLOT.100.R.8.M16.DC-SX3	100	3	33	17	M16	2.50	32	20	24	8	6000	SX E3 ..	10003
GSLOT.100.R.6.M16.DC-SX4	100	4	33	17	M16	3.50	32	20	24	6	4700	SX E4 ..	10004




Insert mounting
key SX

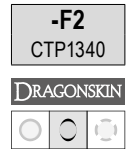
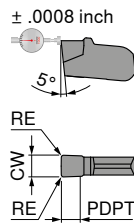
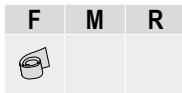
70 950 ...

**Spare parts
for Article no.**

50 394 10002	836
50 394 10003	836
50 394 10004	837

 Suitable adapters for screw-in cutters can be found in – Chapter 16 Adapters and accessories

Insert SX



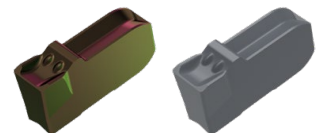
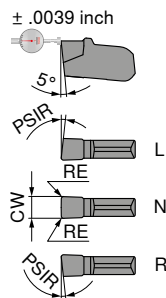
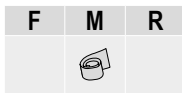
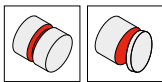
Designation	CW inch	RE inch	PDPT inch	for tool holder
SX E2.00 N 0.20	0.079	0.008	0.059	-SX2
SX E3.00 N 0.30	0.118	0.012	0.079	-SX3
SX E4.00 N 0.40	0.157	0.016	0.098	-SX4

70 346 ...

622
623
624

P	●
M	●
K	○
N	○
S	●
H	
O	

Insert SX



Designation	IH	CW inch	RE inch	for tool holder
SX E2.00 N 0.20	N	0.079	0.008	-SX2
SX E3.00 N 0.20	N	0.118	0.008	-SX3
SX E4.00 N 0.30	N	0.157	0.012	-SX4
SX E5.00 N 0.30	N	0.197	0.012	-SX5
SX E6.00 N 0.40	N	0.236	0.016	-SX6

70 342 ...

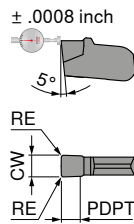
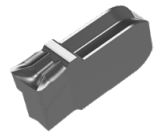
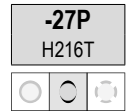
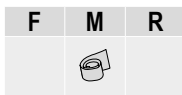
70 342 ...

52200
523
524
52500
52600

622
623
624
625
626

P	●	●
M	○	●
K	●	○
N		○
S		●
H		
O		

Insert SX

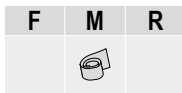
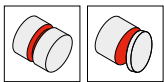


70 349 ...

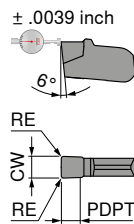
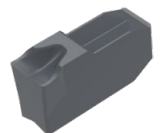
Designation	CW inch	RE inch	PDPT inch	for tool holder	
SX E2.00 N 0.20	0.079	0.008	0.079	-SX2	122
SX E3.00 N 0.30	0.118	0.012	0.098	-SX3	123
SX E4.00 N 0.40	0.157	0.016	0.118	-SX4	124

P	
M	
K	○
N	●
S	
H	
O	○

Insert SX



NEW

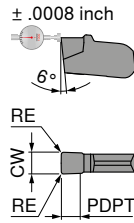
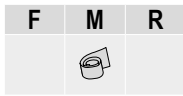
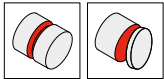


70 347 ...

Designation	CW inch	RE inch	PDPT inch	for tool holder	
SX E2.00 N 0.20	0.079	0.008	0.059	-SX2	62200
SX E3.00 N 0.20	0.118	0.008	0.079	-SX3	62300
SX E4.00 N 0.25	0.157	0.010	0.098	-SX4	62400
SX E5.00 N 0.30	0.197	0.012	0.106	-SX5	62500
SX E6.00 N 0.35	0.236	0.014	0.118	-SX6	62600

P	●
M	●
K	○
N	○
S	●
H	
O	

Insert SX



NEW

-M8
CTP1340

DRAGONSKIN



70 348 ...

Designation	CW inch	RE inch	PDPT inch	for tool holder	
SX E2.00 N 0.20	0.079	0.008	0.059	-SX2	62200
SX E3.00 N 0.20	0.118	0.008	0.079	-SX3	62300
SX E4.00 N 0.25	0.157	0.010	0.098	-SX4	62400
SX E5.00 N 0.30	0.197	0.012	0.106	-SX5	62500
SX E6.00 N 0.35	0.236	0.014	0.118	-SX6	62600

P	●
M	●
K	○
N	○
S	●
H	
O	

Milling guide

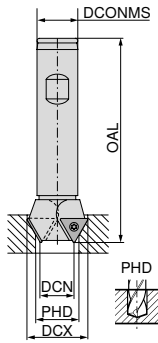
Cutting data standard values	→ 190	Technical Information	→ 191-197
Chip groove description and overview	→ 198-200	Grade description and overview	→ 202-207

Insert countersink 90°

Scope of supply:

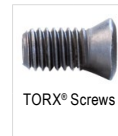
Indexable insert countersink including clamping screws

WPS



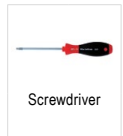
58 196 ...

DCX inch	DCN inch	PHD inch	ZEFP	ZNF	DCONMS inch	OAL inch	Insert	
0.748	0.276	0.374	2	2	0.625	3.940	TOHX 090204	19000
0.906	0.433	0.472	2	2	0.625	3.940	TOHX 090204	23000
1.024	0.433	0.472	1	2	0.625	3.940	TOHX 090204	26000
1.181	0.472	0.472	2	2	0.750	3.940	TOHX 140305	30000
1.339	0.630	0.669	2	2	0.750	3.940	TOHX 140305	34000
1.457	0.748	0.787	2	2	0.750	3.940	TOHX 140305	37000



TORX® Screws

62 950 ...



Screwdriver

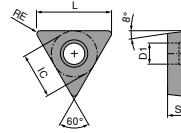
80 950 ...

**Spare parts
DCX**

0.748 - 1.024	09900	125
1.181 - 1.457	12600	127

TOHX

Designation	L inch	S inch	D1 inch	IC inch
140305EN	0.536	0.118	0.150	0.323



TOHX

-G06 BK8425	-U877 BK8425	-G12 BK8425
F TOHX	F TOHX	F TOHX
62 602 ...	62 604 ...	62 603 ...
33000	31400	31400

ISO	RE inch
090204EN	0.016
140305EN	0.020

P	●	●	●
M	●	●	●
K	●	●	●
N	○	○	○
S	●	●	●
H	○	○	○
O			

TOHX

-U877 K10
F TOHX
62 604 ...
51400

ISO	RE inch
090204EN	0.016

P	
M	
K	
N	
S	●
H	●
O	●

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment	Tensile strength lbf/in ² / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0.15 % C Annealed	60900 lbf/in ² / 125 HB	1.0401	1015	1.0301	1010
		P.1.2	< 0.45 % C Annealed	92800 lbf/in ² / 190 HB	1.1191	1045	1.0737	12L14
		P.1.3	< 0.45 % C Tempered	121800 lbf/in ² / 250 HB	1.1191	1045	1.0503	1043
		P.1.4	< 0.75 % C Annealed	132000 lbf/in ² / 270 HB	1.1223	1060	1.0535	1055
		P.1.5	< 0.75 % C Tempered	146500 lbf/in ² / 300 HB	1.1223	1060	1.1274	1095
	Low-alloy steel	P.2.1	Annealed	88500 lbf/in ² / 180 HB	1.7131	5115	1.6523	8620
		P.2.2	Tempered	134900 lbf/in ² / 275 HB	1.7131	5115	1.6582	4340
		P.2.3	Tempered	146500 lbf/in ² / 300 HB	1.7225	4142	1.7131	5115
		P.2.4	Tempered	174000 lbf/in ² / 375 HB	1.7225	4142	1.7223	4140
	High-alloy steel and high-alloy tool steel	P.3.1	Annealed	98600 lbf/in ² / 200 HB	1.4021	420	1.2379	D2
		P.3.2	Hardened and tempered	159500 lbf/in ² / 300 HB	1.2343	H11	1.3343	M2
		P.3.3	Hardened and tempered	188500 lbf/in ² / 400 HB	1.2343	H11	1.2363	A2
	Stainless steel	P.4.1	Ferritic / martensitic Annealed	98600 lbf/in ² / 200 HB	1.4016	430	1.4125	440C
		P.4.2	Martensitic Tempered	117500 lbf/in ² / 250 HB	1.4112	S44003	1.4021	420
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic Quenched	88500 lbf/in ² / 200 HB	1.4301	304	1.4401	316
		M.2.1	Austenitic Tempered	300 HB	1.4841	314	1.4568	17-7 PH
		M.3.1	Austenitic / ferritic (Duplex)	113100 lbf/in ² / 230 HB	1.4462	S32205	1.4410	S32750
K	Grey cast iron	K.1.1	Pearlitic / ferritic	88500 lbf/in ² / 180 HB	0.6010	A48-20B	0.6025	A48-40 B
		K.1.2	Pearlitic (martensitic)	127600 lbf/in ² / 260 HB	0.6030	A48-45B	0.6040	A48-60 B
	Spherulitic graphite cast iron	K.2.1	Ferritic	78300 lbf/in ² / 160 HB	0.7040	60-40-18	0.7050	65-45-12
		K.2.2	Pearlitic	122600 lbf/in ² / 250 HB	0.7070	100-70-03	0.7660	A439 Type D2
	Malleable iron	K.3.1	Ferritic	63800 lbf/in ² / 130 HB	0.8035	GTW-35-04		
		K.3.2	Pearlitic	113100 lbf/in ² / 230 HB	0.8170	70003		
N	Aluminium wrought alloy	N.1.1	Non-hardenable	60 HB	3.0255	A91060	3.0255	A91060
		N.1.2	Hardenable	49300 lbf/in ² / 100 HB	3.1355	2024	3.1355	2024
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable	36300 lbf/in ² / 75 HB	3.2581	A04130 / A413-0	3.2581	A04130 / A413-0
		N.2.2	≤ 12 % Si, hardenable	43500 lbf/in ² / 90 HB	3.2134	G-AlSi5Cu1Mg		
		N.2.3	> 12 % Si, non-hardenable	63800 lbf/in ² / 130 HB		G-AlSi17Cu4Mg		
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %	54400 lbf/in ² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0380	C37700
		N.3.2	CuZn, CuSnZn	43500 lbf/in ² / 90 HB	2.0331	CuZn15	2.0331	C34000
		N.3.3	CuSn, lead-free copper and electrolytic copper	49300 lbf/in ² / 100 HB	2.0060	E-Cu57		
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys	70 HB	3.5612	MgAl6Zn		
	S	Heat-resistant alloys	S.1.1	Fe - basis Annealed	98600 lbf/in ² / 200 HB	1.4864	X12NiCrSi 36-16	1.4864
S.1.2			137800 lbf/in ² / 280 HB		1.4980	X6NiCrTiMoVB25-15-2	1.4980	S66286
S.2.1			Ni or Co basis Annealed	121800 lbf/in ² / 250 HB	2.4856	Inconel 625	2.4812	Hastelloy C
S.2.2				171100 lbf/in ² / 350 HB	2.4952	Nimonic 80A	2.4668	Inconel 718
S.2.3				Cast	156600 lbf/in ² / 320 HB	2.4674	Nimocast PK24	2.4670
Titanium alloys		S.3.1	Pure titanium	5800 lbf/in ²	3.7025	Ti99,8		
		S.3.2	Alpha + beta alloys	152300 lbf/in ²	3.7165	TiAl6V4		
	S.3.3	Beta alloys	203100 lbf/in ² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr			
H	Hardened steel	H.1.1	Hardened and tempered	46-55 HRC				
		H.1.2	Hardened and tempered	56-60 HRC				
		H.1.3	Hardened and tempered	61-65 HRC				
		H.1.4	Hardened and tempered	66-70 HRC				
	Chilled iron	H.2.1	Cast	400 HB				
	Hardened cast iron	H.3.1	Hardened and tempered	55 HRC				
O	Non-metal materials	O.1.1	Plastics, duroplastic	≤ 21800 lbf/in ²				
		O.1.2	Plastics, thermoplastic	≤ 14500 lbf/in ²				
		O.2.1	Aramid fibre-reinforced	≤ 145000 lbf/in ²				
		O.2.2	Glass/carbon-fibre reinforced	≤ 145000 lbf/in ²				
		O.3.1	Graphite					

* Tensile Strength at Rupture (Rm)

Cutting data standard values

Index	CTEP210		TCM10		CTCP220		CTPP225		CTCP230		CTPP231		CTPP235		CTPP236	
	CERMET		CERMET		DRAGONSKIN											
	Cutting Material hard (v _{c↑}) → tough (v _{c↓})															
v _c (ft/min)																
P.1.1	1130		960		1120	560	870	520	940	500	660	330	810	450	990	590
P.1.2	1000		850		1020	510	770	470	800	440	560	300	690	400	890	530
P.1.3	870		740		920	460	680	430	670	390	460	260	570	350	740	430
P.1.4	820		710		890	450	650	410	620	370	560	300	530	330	890	530
P.1.5	760		650		840	420	610	390	560	350	530	300	470	310	790	460
P.2.1	1020		870		1030	520	790	480	820	450	560	300	700	410	890	530
P.2.2	810		700		880	440	650	410	610	370	430	230	520	330	660	400
P.2.3	760		650		840	420	610	390	560	350	560	300	470	310	890	530
P.2.4	600		520		730	360	500	340	390	280	400	200	320	250	590	360
P.3.1					460	230	430	210	460	290	560	300	400	320	890	530
P.3.2					310	170	330	170	300	180	460	260	360	270	590	460
P.3.3					170	100	230	120	130	70	400	230	320	230	500	400
P.4.1					460	230	430	210	460	290	460	260	400	320	590	460
P.4.2					390	200	380	190	380	230	430	230	380	300	560	430
M.1.1											560	300	400	320	890	530
M.2.1													360	270		
M.3.1													390	390		
K.1.1									1020	630	1190	300	530	360	500	360
K.1.2	990		790						530	330	1190	300	500	360	500	360
K.2.1	1160		920						660	400	760	560	500	360	500	360
K.2.2	990		790						430	260	530	360	500	360	500	360
K.3.1	990		790						630	380					690	500
K.3.2									530	330					690	500
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																
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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																

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. ±20% according to the usage conditions.

Cutting data standard values

Index	CTPM225		CTCM235		CTPM240		CTPM241		CTPM245		CTCM245		CTN3105		CTL3215			
	DRAGONSKIN												CERAMIC		CBN			
	Cutting Material hard (v _{c↑}) → tough (v _{c↓}) v _c (ft/min)																	
P.1.1	900	630	830	610	750	470	660	330	800	460	920	440						
P.1.2	760	540	690	500	620	420	560	300	680	410	800	390						
P.1.3	640	450	570	410	500	370	460	230	570	360	680	340						
P.1.4	600	430	530	370	460	350	560	300	530	340	650	330						
P.1.5	530	380	470	330	400	330	500	260	480	320	590	300						
P.2.1	780	550	710	520	640	420	560	300	700	420	820	400						
P.2.2	580	420	520	370	450	350	400	200	520	340	640	320						
P.2.3	530	380	470	330	400	330	560	300	480	320	590	300						
P.2.4	380	280	310	210	260	270	360	200	330	260	450	240						
P.3.1	490	400	450	380	410	350	690	330	510	350	580	400						
P.3.2	400	330	420	360	370	310	590	330	470	310	540	360						
P.3.3	310	270	400	350	320	280	530	300	430	260	500	310						
P.4.1	490	400	450	380	410	350	460	300	510	350	580	400						
P.4.2	440	370	440	370	390	330	430	260	490	330	560	380						
M.1.1	490	400	450	380	410	350	690	330	510	350	580	400						
M.2.1	400	330	420	360	370	310	590	300	470	310	540	360						
M.3.1	460	380	440	380	400	340	690	330	500	340	570	390						
K.1.1													2640			2 640		
K.1.2													1980			1980		
K.2.1																		
K.2.2																1490		
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								200				260						
S.1.2								200				230						
S.2.1								200				120						
S.2.2								200				80						
S.2.3								200				100						
S.3.1								200				270						
S.3.2								200				170						
S.3.3								200				130						
H.1.1																		
H.1.2																500		
H.1.3																		
H.1.4																		
H.2.1																920		
H.3.1																		
O.1.1																		
O.1.2																		
O.2.1																		
O.2.2																		
O.3.1																		

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. ±20% according to the usage conditions.

Cutting data standard values

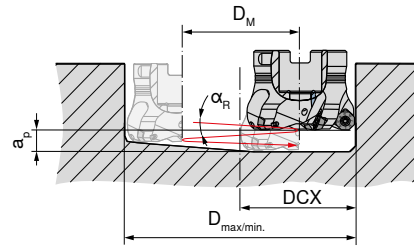
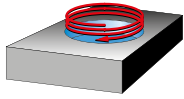
Index	CTCK215		CTPK220		CTPK221		AMZ		H216T		CTWN215		CTC5240		CTCS245		CTP6215	
	DRAGONSKIN		DRAGONSKIN										DRAGONSKIN					
	Cutting Material hard (v _{c↑}) → tough (v _{c↓}) v _c (ft/min)																	
P.1.1			630	400	630	400												
P.1.2			600	330	590	330												
P.1.3			500	270	500	260												
P.1.4			600	330	590	330												
P.1.5			560	300	560	300												
P.2.1			600	330	590	330												
P.2.2			460	270	460	260												
P.2.3			600	330	590	330												
P.2.4			430	270	430	260												
P.3.1			700	400	690	400												
P.3.2			530	300	530	300												
P.3.3			430	270	430	260												
P.4.1			700	400	690	400												
P.4.2			630	330	630	330												
M.1.1					400	330												
M.2.1					360	300												
M.3.1					400	330												
K.1.1	1190	690	1060	630	890	660	660	430	430	430	430	430					920	830
K.1.2	730	430	560	330	890	660	530	360	360	360	360	360					630	530
K.2.1	760	460	690	430	830	590	610	430	430	430	430	430					590	500
K.2.2	530	330	460	300	590	400	500	400	400	400	400	400					590	500
K.3.1	830	500	660	400	730	560	660	430	430	430	430	430					830	730
K.3.2	690	430	560	330	730	560	580	360	360	360	360	400					630	530
N.1.1								4950		4950		4950						
N.1.2								3300		3300		3300						
N.2.1								3960		3630		3630						
N.2.2								3960		3300		3300						
N.2.3								990		920		920						
N.3.1								1160		1160		1160						
N.3.2								1160		1160		1160						
N.3.3								1060		1060		1060						
N.4.1								1060		1060		1060						
S.1.1								200						260		210		
S.1.2								170						230		180		
S.2.1								100						120		90		
S.2.2								70						80		70		
S.2.3								70						100		80		
S.3.1								200						260		210		
S.3.2								130						170		130		
S.3.3								100						130		110		
H.1.1																		170
H.1.2																		130
H.1.3																		
H.1.4																		
H.2.1																		
H.3.1																		
O.1.1								530	530	530	530	530						
O.1.2																		
O.2.1								590	790	790	790	790						
O.2.2																		
O.3.1																		

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. ±20% according to the usage conditions.

System MaxiMill 274-04/-09

Machining strategy

Helical plunge milling



D_{max} in inch = largest diameter for flat bottom hole
 D_{min} in inch = smallest hole diameter for flat bottom surface
 $D_M = D_{max} - DCX$ and $D_{min} - DCX$

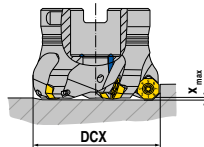
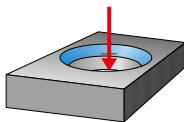
OF..04

DCX inch	D_{max} inch	D_{min} inch	α_{Rmax} °
1.01	1.77	1.54	2.3
1.21	2.17	1.93	1.9
1.48	2.72	2.48	1.4
1.80	3.35	3.11	1.2
2.19	4.13	3.90	0.9
2.70	5.16	4.92	0.7
3.37	6.50	6.26	0.6
4.16	8.07	7.83	0.5
5.15	10.04	9.80	0.4

SF..09

DCX inch	D_{max} inch	D_{min} inch	α_{Rmax} °
1.08	1.77	1.65	1.9
1.28	2.17	2.05	1.5
1.54	2.72	2.60	1.1
1.87	3.35	3.23	0.9
2.27	4.13	4.02	0.7
2.78	5.16	5.04	0.5
3.44	6.50	6.38	0.4
4.23	8.07	7.95	0.3
5.22	10.04	9.92	0.3

Axial plunging



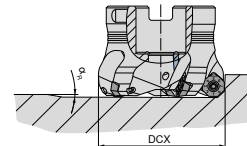
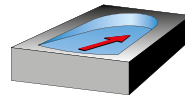
OF..04

DCX inch	X_{max} inch
1.01	0.10
1.21	0.10
1.48	0.10
1.80	0.10
2.19	0.10
2.70	0.10
3.37	0.10
4.16	0.10
5.15	0.10

SF..09

DCX inch	X_{max} inch
1.08	0.15
1.28	0.14
1.54	0.13
1.87	0.12
2.27	0.12
2.78	0.12
3.44	0.11
4.23	0.11
5.22	0.11

Angled ramping



OF..04

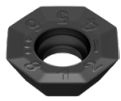
DCX inch	α_{Rmax} °
1.01	14.2
1.21	9.5
1.48	6.5
1.80	4.7
2.19	3.5
2.70	2.7
3.37	2.0
4.16	1.6
5.15	1.2

SF..09

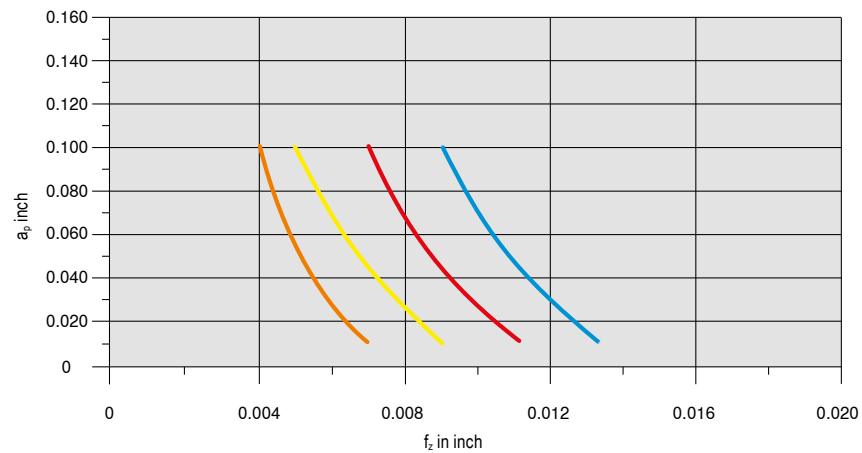
DCX inch	α_{Rmax} °
1.08	20.4
1.28	13.0
1.54	8.0
1.87	5.8
2.27	4.3
2.78	3.2
3.44	2.3
4.23	1.7
5.22	1.3

System MaxiMill 274-04

Starting Parameter



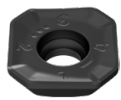
OF.. 04



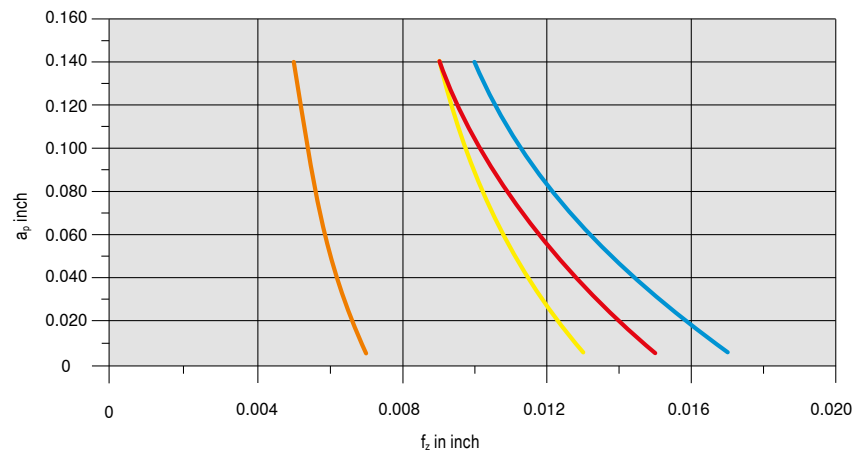
Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	OFHT040305SN-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	OFHT040305SN-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	OFHT040305SN-M50	CTCK215	825	Dry
Heat-resistant	S.2.2	Inconel 718	OFHT040305SN-F50	CTC5240	115	Emulsion

System MaxiMill 274-09

Starting Parameter



SF.. 09



Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	SFKT0903AFSR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	SFHT0903AFSR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	SFKT0903AFSR-R50	CTCK215	825	Dry
Heat-resistant	S.2.2	Inconel 718	SFHT0903AFSR-F50	CTC5240	115	Emulsion



→ Page 155–157

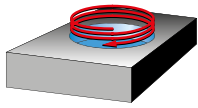
Here you will find detailed information on cutting speed.

From $v_c > 1300$ SFM, the tool must be balanced!

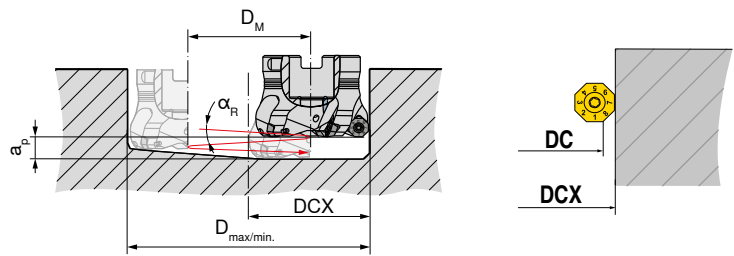
System MaxiMill 274-05/-12

Machining strategy

Helical plunge milling



D_{max} in inch = largest diameter for flat bottom hole
 D_{min} in inch = smallest hole diameter for flat bottom surface
 $D_M = D_{max} - DCX$ and $D_{min} - DCX$



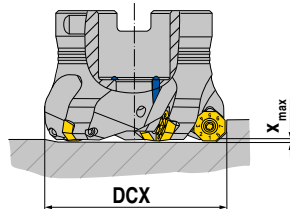
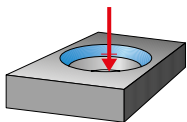
OF..05

DC inch	DCX inch	D_{max} inch	D_{min} inch	α_{Rmax} °
1.97	2.28	4.21	3.90	1.1
2.48	2.80	5.24	4.92	0.9
3.15	3.46	6.57	6.26	0.7
3.94	4.25	8.15	7.83	0.5
4.92	5.23	10.12	9.80	0.4

SF..12

DC inch	DCX inch	D_{max} inch	D_{min} inch	α_{Rmax} °
1.85	2.40	4.21	4.13	0.5
2.36	2.91	5.24	5.16	0.4
3.03	3.58	6.57	6.50	0.3
3.81	4.37	8.15	8.07	0.25
4.80	5.35	10.12	10.04	0.2

Axial plunging



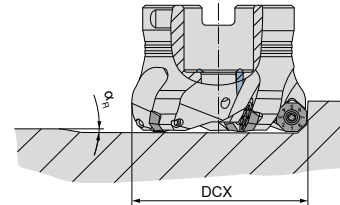
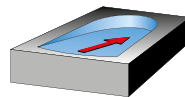
OF..05

DC inch	DCX inch	X_{max} inch
1.97	2.28	0.09
2.48	2.80	0.07
3.15	3.46	0.07
3.94	4.25	0.04
4.92	5.23	0.06

SF..12

DC inch	DCX inch	X_{max} inch
1.85	2.40	0.13
2.36	2.91	0.13
3.03	3.58	0.12
3.81	4.37	0.10
4.80	5.35	0.10

Angled ramping



OF..05

DC inch	DCX inch	α_{Rmax} °
1.97	2.28	3.2
2.48	2.80	2.0
3.15	3.46	1.5
3.94	4.25	0.7
4.92	5.23	0.7

SF..12

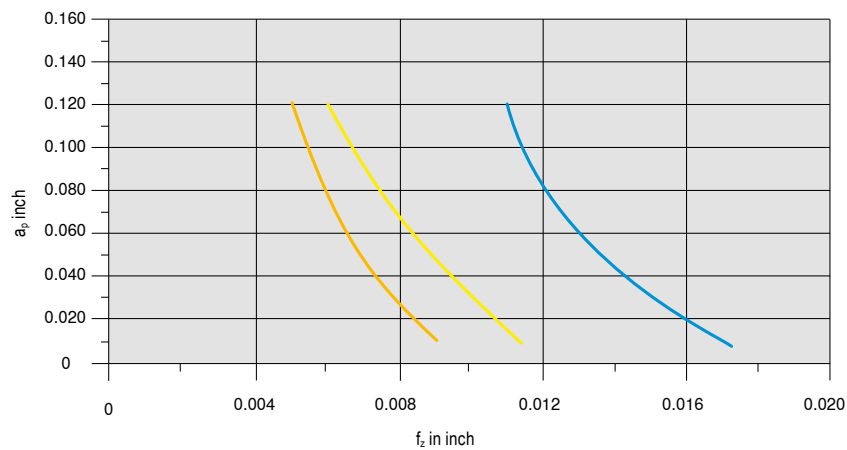
DC inch	DCX inch	α_{Rmax} °
1.85	2.40	4.9
2.36	2.91	3.4
3.03	3.58	2.4
3.81	4.37	1.6
4.80	5.35	1.3

System MaxiMill 274-05

Starting Parameter



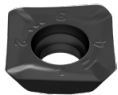
OF.. 05



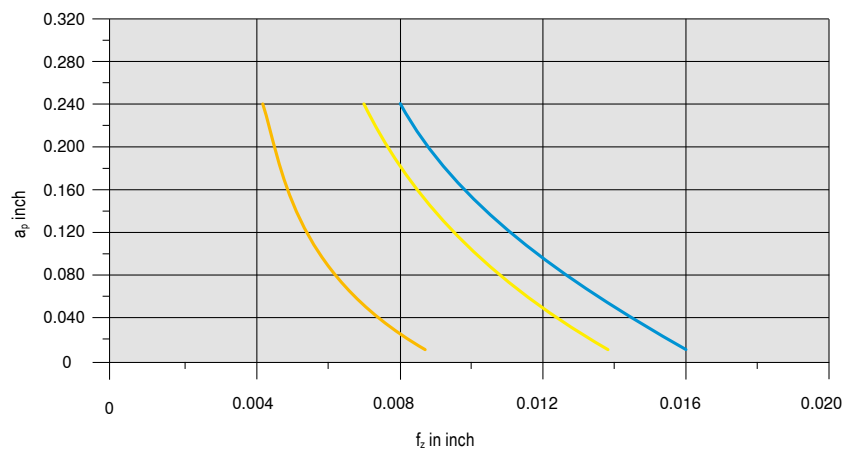
Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	OFHT050410SN-M50	CTCP230	660	Dry
Stainless steel	M.2.1	316Ti	OFHT050410SN-F50	CTPM240	320	Emulsion
Heat-resistant	S.2.2	Inconel 718	OFHT050410SN-F50	CTC5240	115	Emulsion

System MaxiMill 274-12

Starting Parameter



SF.. 12



Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	SFKT1204AFSR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	SFKT1204AFSR-M50	CTPM240	320	Emulsion
Heat-resistant	S.2.2	Inconel 718	SFHT1204AFER-F40	CTC5240	115	Emulsion

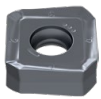


→ Page 155–157

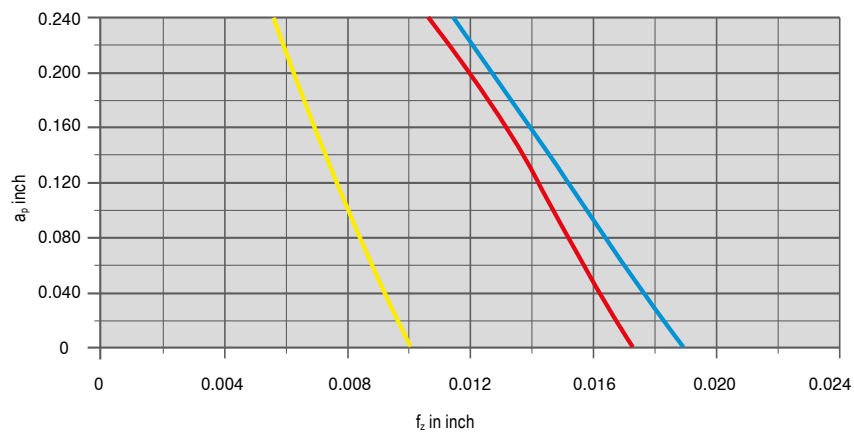
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill 271-12

Starting Parameter



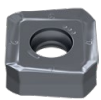
SOHU 12



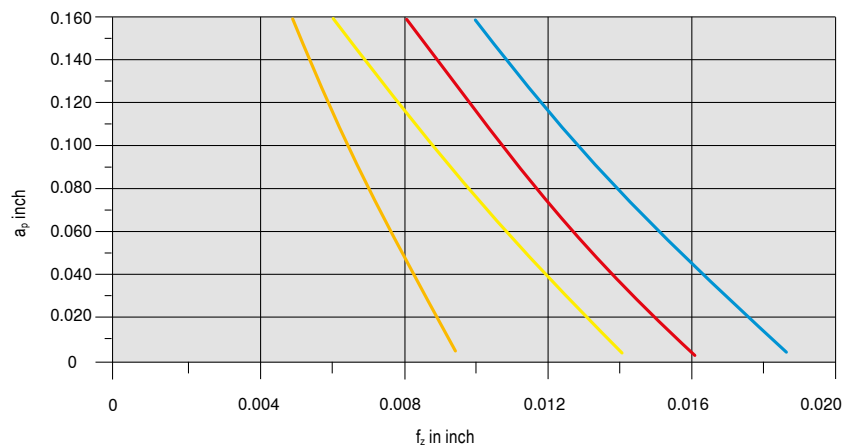
Material		Inserts		v_c in ft/min	Cooling
Steel	P.4.1 P20	SOHU 1204ABSR-M50	CTPP230	660	Dry
Stainless steel	M.2.1 316Ti	SOHU 1204ABSR	CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	SOHU 1204ABSR-R50	CTCK215	990	Dry
Heat-resistant	S.2.2 Inconel 718	SOHU 1204ABSR-F50	CTC5240	115	Emulsion

System MaxiMill 271-17

Starting Parameter



SAKU 17



Material		Inserts		v_c in ft/min	Cooling
Steel	P.4.1 P20	SAKU 1706ABSR-M50	CTPP235	660	Dry
Stainless steel	M.2.1 316Ti	SAKU 1706ABSR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	SAKU 1706ABSR-R50	CTCK215	990	Dry
Heat-resistant	S.2.2 Inconel 718	SAKU 1706ABSR-F50	CTC5240	115	Emulsion

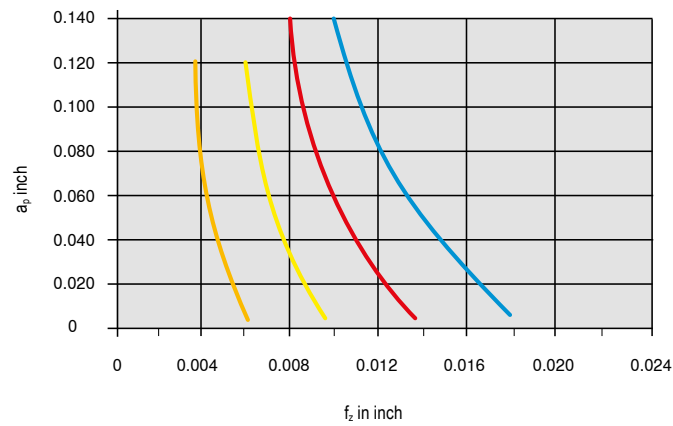
→ Page 155–157
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill 273

Starting Parameter



OAKU



Material			Inserts		v _c in ft/min	Cooling
Steel	P.4.1	P20	OAKU 060508SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	OAKU 060508SR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	OAKU 060508SR-R50	CTCK215	990	Dry
Heat-resistant	S.2.2	Inconel 718	OAKU 060508ER-F40	CTC5240	115	Emulsion



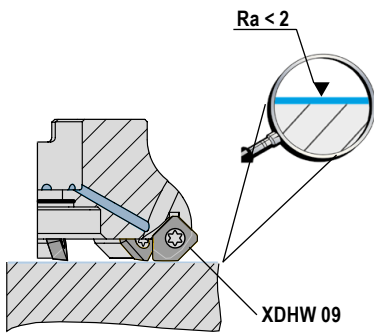
→ Page 155–157

Here you will find detailed information on cutting speed.

From v_c > 1300 SFM, the tool must be balanced!

System MaxiMill 270

Machining strategy



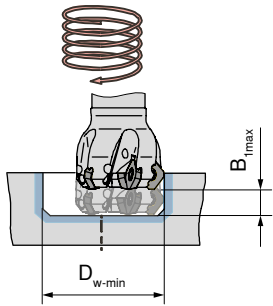
Finish milling with trailing edge inserts

Two wiper inserts are mounted in each 5.000" head



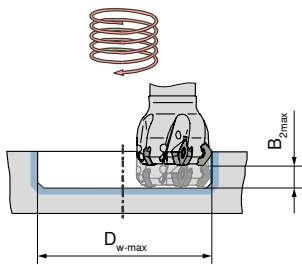
Steel	SDNT 0903AESN-29	CTPP235	+	XDHW 0903AESN	CTPP235
	SDNT 0903AESN-29	CTCP230	+	XDHW 0903AESN	CTCP230
	SDHT 0903AESN-33	CTCP230	+	XDHW 0903AESN	CTCP230
	SDHW 0903AESN	TCM10	+	XDHW 0903AESN	TCM10
Cast iron	SDNT 0903AESN-31	CTCK215	+	XDHW 0903AEEN	CTCK215
Non-ferrous metals	SDHT 0903AEFN-ALP	-27P H216T	+	XDHW 0903AEFN	-27P H216T

Helical plunge milling (without start hole)



C 270-09

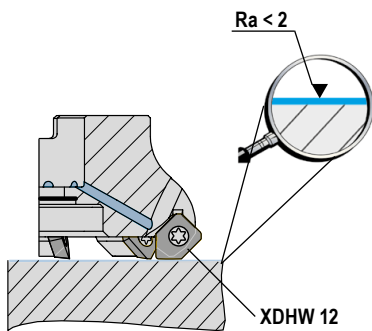
DC inch	D _{w-min} inch	B _{1max} inch	D _{w-max} inch	B _{2max} inch
0.25	0.57	0.06	0.75	0.06
0.50	1.12	0.06	1.22	0.06
0.63	1.44	0.06	1.54	0.06
0.75	1.75	0.06	1.85	0.06
1.00	2.15	0.06	2.24	0.06
1.25	2.70	0.06	2.80	0.06



A 270-09

DC inch	D _{w-min} inch	B _{1max} inch	D _{w-max} inch	B _{2max} inch
1.25	2.70	0.06	2.80	0.06
1.50	3.33	0.06	3.43	0.06
2.00	4.11	0.06	4.21	0.06
2.50	5.14	0.06	5.24	0.06
3.00	6.48	0.06	6.57	0.06
4.00	8.05	0.06	8.15	0.06
5.00	10.02	0.06	10.12	0.06
6.00	12.78	0.06	12.87	0.06

System MaxiMill 270-12



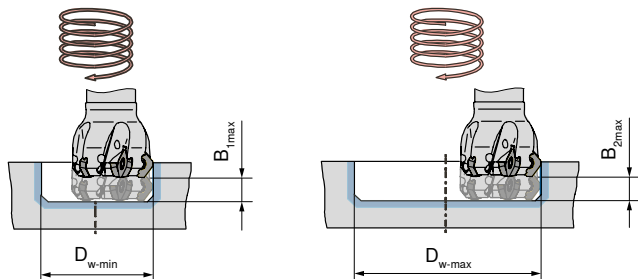
Finish milling with trailing edge inserts

Two wiper inserts are mounted in each 5.000" head



Steel	SDMT 1204AESN-29R	CTPP235	+	XDHW 1204AESN	CTPP235
	SDMT 1204AESN-29R	CTCP230	+	XDHW 1204AESN	CTCP230
	SDHW 1204AESN-R	TCM10	+	XDHW 1204AESN	TCM10
	SDMT 1204AEEN-31	CTCK215	+	XDHW 1204AEEN	CTCK215
Cast iron	SDHW 1204AESN-R	CTCK215	+	XDHW 1204AEEN	CTCK215
Non-ferrous metals	SDHT 1204AEFN-ALP	-27P H216T	+	XDHW 1204AEFN	-27P H216T

Helical plunge milling (without start hole)

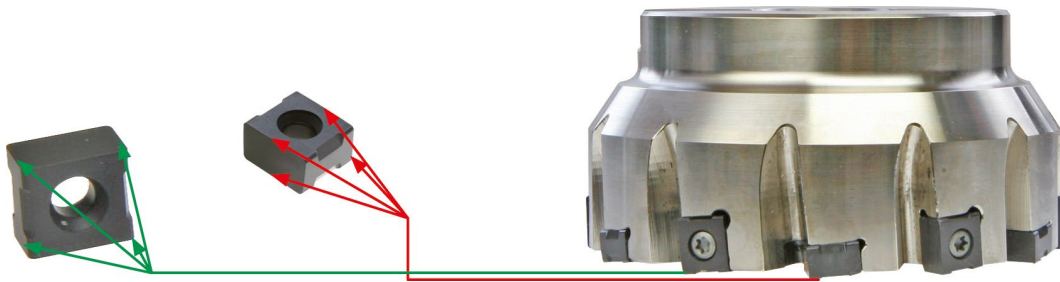


DC inch	D _{w-min} inch	B _{1max} inch	D _{w-max} inch	B _{2max} inch
1.25	2.93	0.06	3.07	0.06
1.50	3.56	0.06	3.70	0.06
2.00	4.35	0.06	4.49	0.06
2.50	5.37	0.06	5.51	0.06
3.00	6.71	0.06	6.85	0.06
4.00	8.29	0.06	8.43	0.06
5.00	10.26	0.06	10.39	0.06
6.00	13.01	0.06	13.15	0.06

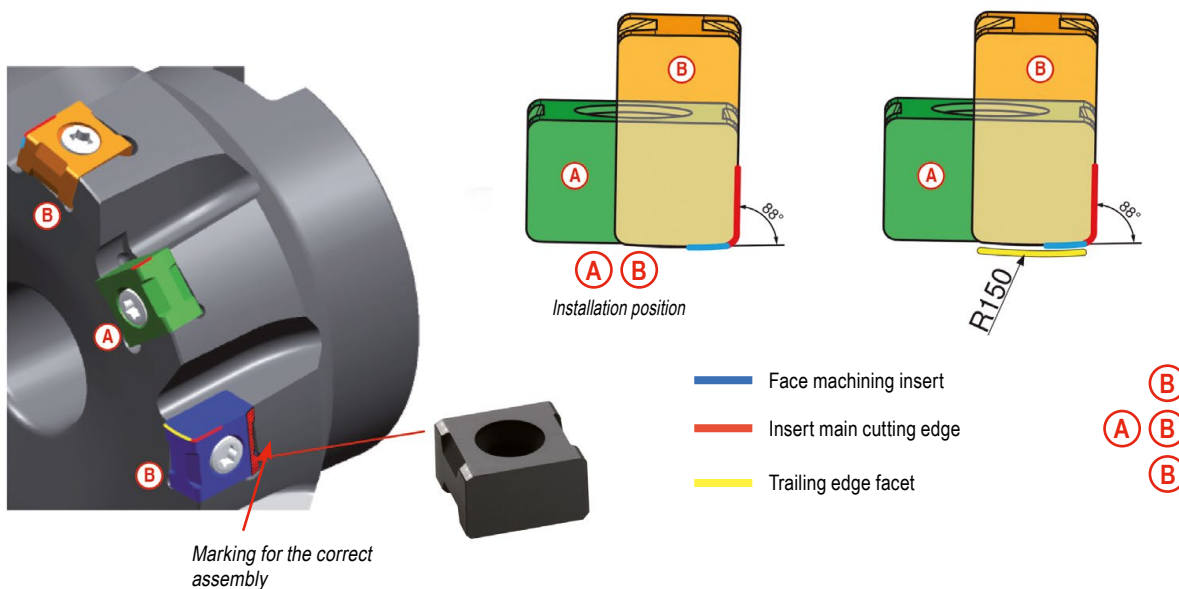
From v_c > 1300 SFM, the tool must be balanced!

System MaxiMill HEC 11 / HEC 12

4 cutting edges per installation position

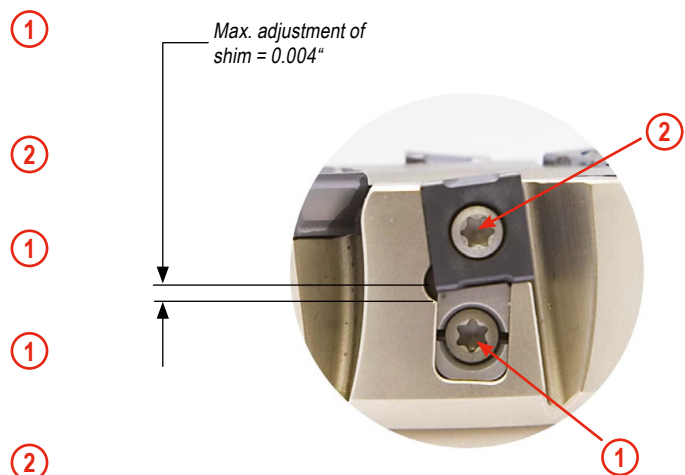


Correct assembly of standard and trailing edge inserts



Adjust the tools in axial direction

- ▲ Install the wedge into the cutter body and lightly clamp the clamping screw so as not to clamp.
- ▲ Install the inserts as shown and tighten to 1.0 Nm torque.
- ▲ Using pre-setting equipment, mark the highest cutting edge.
- ▲ With small adjustments of the setting screw set all cutting edges to the same height by 0.0002" or better.
- ▲ Clamp insert with 3.2 Nm torque.



Average chip thickness [h_m] – the approach

Face milling

1 Select appropriate average chip thickness [h_m] for the steel from the table.

Material	Tensile strength N/mm ²	h _m inch
for steel	...–800	0.008
for steel	800–1000	0.007
for steel	1000–1200	0.006
for steel	1200–...	0.006
for stainless steel	... –750	0.008
for stainless steel	750–900	0.007
for stainless steel	900–1150	0.007
for stainless steel	1150– ...	0.006

2 Select the corrected feed rate value from the table based on the appropriate chip thickness [h_m] and depth of cut [a_e].

h _m inch	Corrected feed value f _z for h _m			
	0.012 x DC	0.016 x DC	0.030 x DC	0.040 x DC
0.008	0.016 **	0.016 **	0.013	0.011
0.007	0.016 **	0.016 **	0.011	0.010
0.006	0.016 **	0.014	0.010	0.009
0.006	0.014	0.012	0.009	0.008
0.008	0.016 **	0.016 **	0.013	0.012
0.007	0.016 **	0.016 **	0.012	0.011
0.007	0.016 **	0.015	0.011	0.009
0.006	0.015	0.013	0.009	0.008
a _e =	0.012 x DC	0.016 x DC	0.030 x DC	0.040 x DC

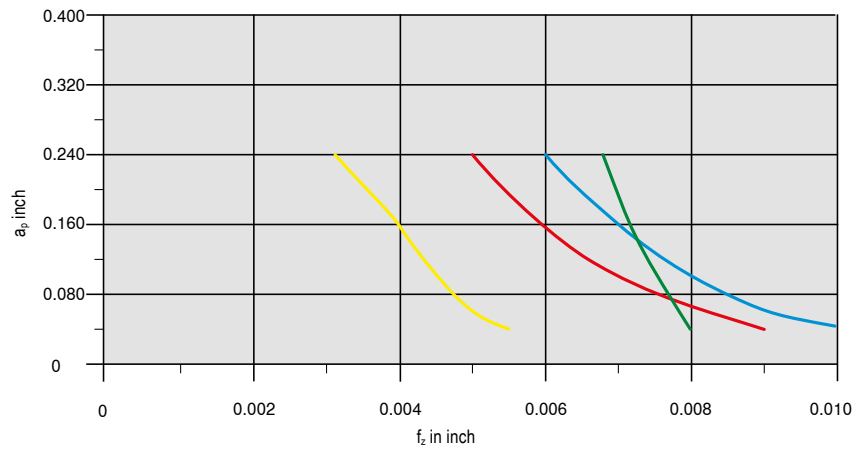
** f_z > 0.016": Danger of an open space contact

System MaxiMill 491-09

Starting Parameter



SNHU 09



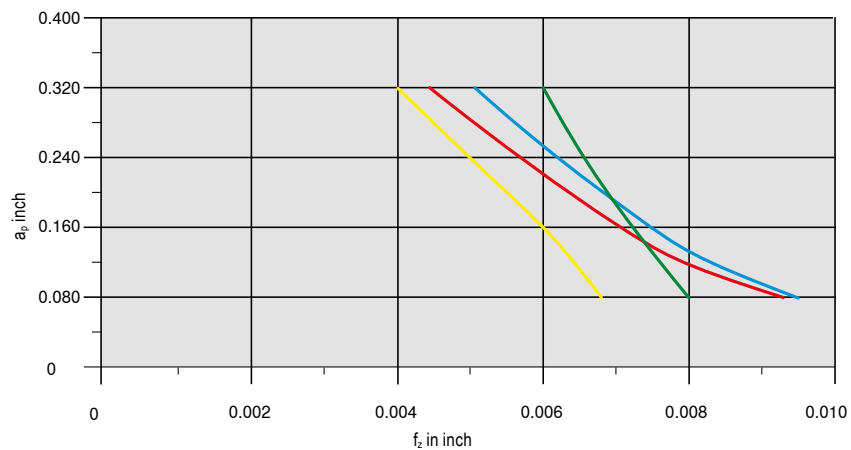
Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	SNHU09T308SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	SNHU09T308SR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	SNHU09T308SR-R50	CTCK215	825	Dry
Non-ferrous metals	N.1.2	Aluminum	SNHU09T308FR-F10	CTWN215	1650	Emulsion

System MaxiMill 491-12

Starting Parameter



SNHU 12



Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	SNHU120408SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	SNHU120408SR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	SNHU120408SR-R50	CTCK215	825	Dry
Non-ferrous metals	N.1.2	Aluminum	SNHU120408FR-F10	CTC5240	1650	Emulsion



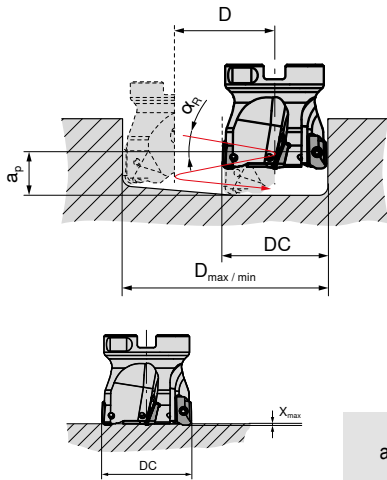
→ Page 155–157

Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill 211-07

Machining strategy

Helical plunge milling

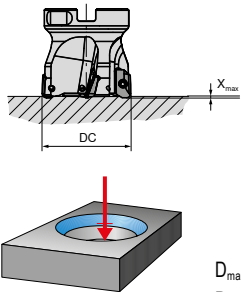


$$a_p \text{ inch} = D * \pi * \tan \alpha_R$$

DC inch	D _{max} / RE 0.4 inch	D _{min} inch	α _{R max} °
0.39	0.75	0.51	5.5
0.50	0.91	0.67	6.0
0.63	1.22	0.98	3.0
0.75	1.54	1.30	2.0
1.00	1.93	1.69	1.5
1.25	2.48	2.24	1.2
1.50	3.11	2.87	0.8
2.00	3.90	3.66	0.7

DC inch	D inch	α _{R max 360°} °
0.39	0.51	5.5
0.50	0.67	6.0
0.63	0.98	3.0
0.75	1.30	2.0
1.00	1.69	1.5
1.25	2.24	1.2
1.50	2.87	0.8
2.00	3.66	0.7

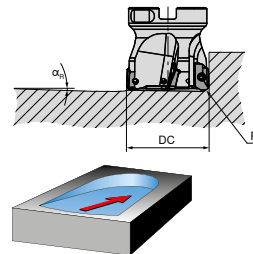
Axial plunging



DC inch	X _{max} inch
0.39	0.03
0.50	0.03
0.63	0.03
0.75	0.03
1.00	0.03
1.25	0.03
1.50	0.03
2.00	0.03

D_{max} in inch = largest diameter for flat bottom hole
D_{min} in inch = smallest hole diameter for flat bottom surface

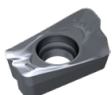
Angled ramping



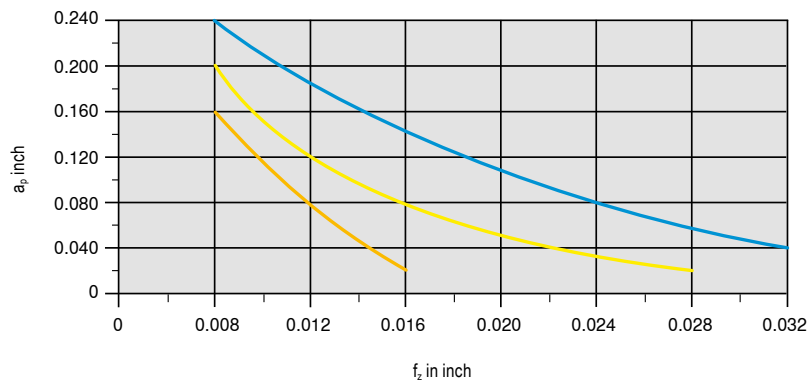
DC inch	α °
0.39	11.0
0.50	7.9
0.63	4.3
0.75	3.0
1.00	2.5
1.25	1.6
1.50	1.2
2.00	1.0

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

Starting Parameter



XDKT 07

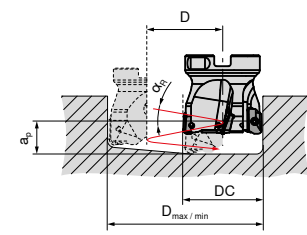


Material		Inserts		v _c in ft/min	Cooling
Steel	P.4.1 P20	XDKT070308SR-M50	CTCP230	660	Dry
Stainless steel	M.2.1 316Ti	XDKT070308SR-F50	CTPM240	320	Emulsion
Heat-resistant	S.2.2 Inconel 718	XDKT070308ER-F50	CTC5240	115	Emulsion

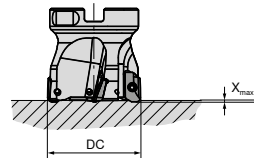
→ Page 155-157
Here you will find detailed information on cutting speed.
From v_c > 1300 SFM, the tool must be balanced!

System MaxiMill 211-11

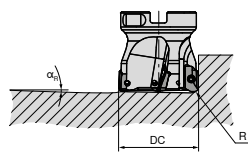
Machining strategy



① Helical plunge milling



② Axial plunging



③ Angled ramping



DC inch	Maximum speed related to projection length				
	$l_a = 1-2 \times \emptyset$ inch	$l_a = 2.5 \times \emptyset$ inch	$l_a = 3 \times \emptyset$ inch	$l_a = 4 \times \emptyset$ inch	$l_a = 5 \times \emptyset$ inch
0.50	55000	51500	47000	42000	37000
0.63	42000	38500	34100	28900	24200
0.75	36900	33000	28500	23900	19500
1.00	33200	29000	24400	19900	15400
1.25	30200	26000	20900	16600	11900
1.50	27700	23000	18000	13500	9000
2.00	25400	20400	15400	10800	6100
2.50	23300	18300	12900	8300	3700
3.00	21300	16100	10600	5800	
4.00	19600	14100	8400		

DC inch	Helical plunge milling		Axial plunging	Angled ramping
	α_R	RE = 0.032"	X_{max}	α_R
0.50	α_R	16 °	0.056"	18 °
	$D_{max.}$	0.83"		
	$D_{min.}$	0.55"		
0.63	α_R	9.5 °	0.060"	10.8 °
	$D_{max.}$	1.14"		
	$D_{min.}$	0.83"		
0.75	α_R	7 °	0.080"	9.8 °
	$D_{max.}$	1.45"		
	$D_{min.}$	1.18"		
1.00	α_R	4.5 °	0.080"	7.5 °
	$D_{max.}$	1.85"		
	$D_{min.}$	1.57"		
1.25	α_R	3.2 °	0.040"	4.8 °
	$D_{max.}$	2.40"		
	$D_{min.}$	2.08"		
1.50	α_R	2.2 °	0.064"	2.9 °
	$D_{max.}$	3.03"		
	$D_{min.}$	2.83"		
2.00	α_R	1.7 °	0.064"	2.2 °
	$D_{max.}$	3.85"		
	$D_{min.}$	3.66"		
2.50	α_R	1.5 °	0.064"	1.8 °
	$D_{max.}$	4.84"		
	$D_{min.}$	4.57"		
3.00	α_R	1.0 °	0.064"	1.4 °
	$D_{max.}$	6.18"		
	$D_{min.}$	6.03"		
4.00	α_R	0.8 °	0.064"	1.1 °
	$D_{max.}$	4.21"		
	$D_{min.}$	3.97"		

$D_{max.}$ in inch = largest diameter for flat bottom hole

$D_{min.}$ in inch = Smallest diameter for flat bottom surface

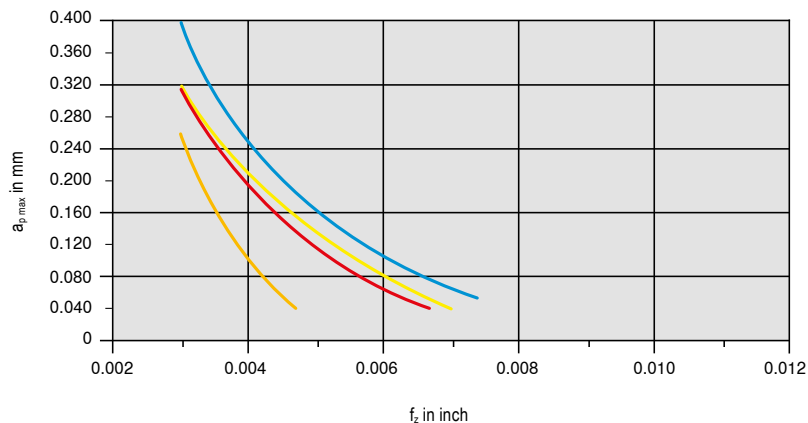
a_p in inch = $D \times \pi \times \tan(\alpha_R) =$ Pitch

l_a in mm = Overhang length

Starting Parameter



XDKT 11

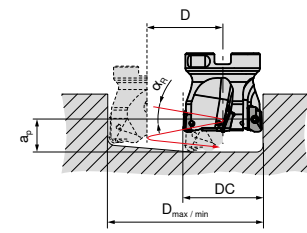


Material	Inserts		v_c in ft/min	Cooling		
Steel	P.4.1	P20	XDKT11T308SR-M50	CTCP230	660	Dry
Stainless steel	M.2.1	316Ti	XDKT11T308SR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	XDKT11T308SR-R50	CTCK215	825	Dry
Heat-resistant	S.2.2	Inconel 718	XDKT11T308ER-F50	CTC5240	115	Emulsion

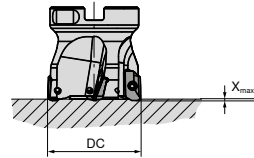
→ Page 155-157
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill 211-15

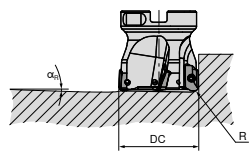
Machining strategy



① Helical plunge milling



② Axial plunging



③ Angled ramping



Maximum speed related to projection length			
DC inch	n_{max} in min^{-1}		
	$l_a = 2 \times \varnothing$ inch	$l_a = 3 \times \varnothing$ inch	$l_a = 5 \times \varnothing$ inch
1.00	26560	19520	13320
1.25	24160	16720	9520
1.50	22160	14400	7200
2.00	20320	12320	4880
2.50	18640	10320	2960
3.00	17040	8480	
4.00	15680	6720	
5.00	14320		
6.00	13200		

DC inch	Helical plunge milling		Axial plunging	Angled ramping
	α_R	RE = 0.032 ⁱⁿ	X_{max}	α_R
1.00	α_R	7.5 °		
	$D_{max.}$	1.89 ⁱⁿ	0.108 ⁱⁿ	9.5 °
	$D_{min.}$	1.45 ⁱⁿ		
1.25	α_R	5 °		
	$D_{max.}$	2.44 ⁱⁿ	0.060 ⁱⁿ	6.8 °
	$D_{min.}$	1.85 ⁱⁿ		
1.50	α_R	3.2 °		
	$D_{max.}$	3.07 ⁱⁿ	0.060 ⁱⁿ	5.1 °
	$D_{min.}$	2.48 ⁱⁿ		
2.00	α_R	2.5 °		
	$D_{max.}$	3.86 ⁱⁿ	0.060 ⁱⁿ	2.5 °
	$D_{min.}$	3.38 ⁱⁿ		
2.50	α_R	1.5 °		
	$D_{max.}$	4.88 ⁱⁿ	0.060 ⁱⁿ	2.5 °
	$D_{min.}$	4.37 ⁱⁿ		
3.00	α_R	1.3 °		
	$D_{max.}$	6.22 ⁱⁿ	0.060 ⁱⁿ	2.0 °
	$D_{min.}$	5.78 ⁱⁿ		
4.00	α_R	1.1 °		
	$D_{max.}$	7.80 ⁱⁿ	0.060 ⁱⁿ	1.5 °
	$D_{min.}$	7.48 ⁱⁿ		
5.00	α_R	0.9 °		
	$D_{max.}$	9.76 ⁱⁿ	0.060 ⁱⁿ	0.9 °
	$D_{min.}$	9.45 ⁱⁿ		
6.00	α_R	0.6 °		
	$D_{max.}$	12.52 ⁱⁿ	0.060 ⁱⁿ	0.7 °
	$D_{min.}$	12.20 ⁱⁿ		

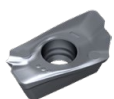
$D_{max.}$ in inch = largest diameter for flat bottom hole

$D_{min.}$ in inch = Smallest diameter for flat bottom surface

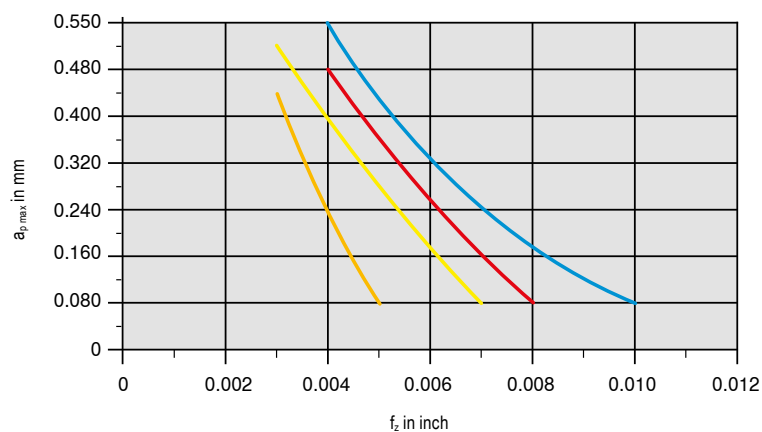
a_p inch = $D \times \pi \times \tan(\alpha_R) =$ Pitch

l_a in mm = Overhang length

Starting Parameter



XDKT 15



Material	Inserts		v_c in ft/min	Cooling	
Steel	P.4.1 P20	XDKT150508SR-M50	CTCP230	660	Dry
Stainless steel	M.2.1 316Ti	XDKT150508SR-F50	CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	XDKT150508SR-R50	CTCK215	825	Dry
Heat-resistant	S.2.2 Inconel 718	XDKT150508ER-F40	CTC5240	115	Emulsion



→ Page 155-157

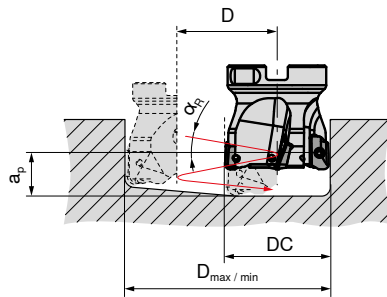
Here you will find detailed information on cutting speed.

From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill 211-20

Machining strategy

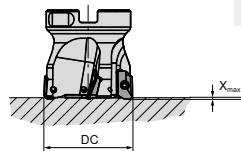
Helical plunge milling



DC inch	D _{max} / RE 0.016 inch	D _{min} inch	α _{R max} °
2.50	4.882	4.213	2.2
3.00	6.220	5.630	1.7
4.00	7.795	7.205	1.3

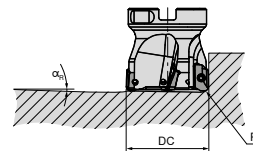
$$a_p \text{ inch} = D * \pi * \tan \alpha_R$$

Axial plunging



DC inch	X _{max} inch
2.50	0.80
3.00	0.80
4.00	0.80

Angled ramping



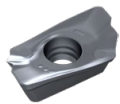
DC inch	α °
2.50	2.2
3.00	1.7
4.00	1.3

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

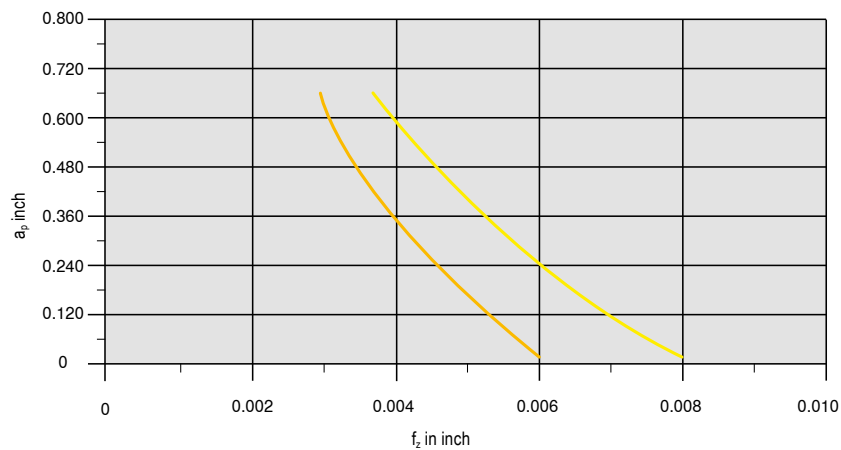
D_{max} in inch = largest diameter for flat bottom hole

D_{min} in inch = smallest hole diameter for flat bottom surface

Starting Parameter



XDKT 20



Material			Inserts		v _c in ft/min	Cooling
Stainless steel	M.2.1	316Ti	XDKT200708ER-F40	CTPM240	320	Emulsion
Heat-resistant	S.2.2	Inconel 718	XDKT200708ER-F40	CTC5240	115	Emulsion



→ Page 155-157

Here you will find detailed information on cutting speed.

From v_c > 1300 SFM, the tool must be balanced!

System MaxiMill 490-09

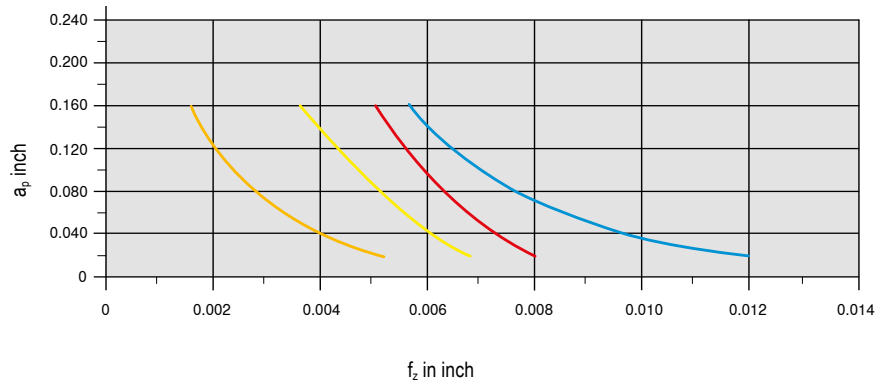
Machining strategy

1 System MaxiMill 490-09 is not suitable for plunging!

Starting Parameter



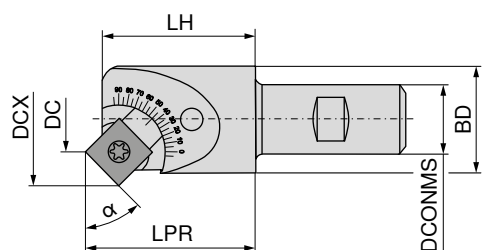
SDNT 09



Material		Inserts		v_c in ft/min	Cooling
Steel	P.4.1 P20	SDNT09T308SR-29	CTCP230	660	Dry
Stainless steel	M.2.1 316Ti	SDNT09T308SR-33	CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	SDNT09T308SR-31	CTCK215	825	Dry
Heat-resistant	S.2.2 Inconel 718	SDNT09T308ER-M31	CTC5240	115	Emulsion

i → Page 155–157
Here you will find detailed information on cutting speed.

MaxiMill 490-09 adjustable angle milling cutter – dimensions



Constant dimensions			Angle-dependent dimensions*			
BD	DCONMS	LH	α	DC*	DCX	LPR*
18.6	16	32	0°	9.35/1.60**	20.14	33.07
			5°	3.81	20.82	33.40
			10°	4.59	21.44	33.69
			15°	5.42	21.98	33.95
			20°	6.30	22.45	34.17
			25°	7.23	22.85	34.35
			30°	8.18	23.16	34.49
			35°	9.15	23.39	34.58
			40°	10.14	23.53	34.64
			45°	11.13	23.59	34.65
			50°	12.12	23.56	34.61
			55°	13.09	23.44	34.54
			60°	14.04	23.24	34.42
			65°	14.96	22.96	34.26
			70°	15.84	22.60	34.06
			75°	16.68	22.16	33.83
			80°	17.46	21.65	33.56
			85°	18.19	21.07	33.25
			90°	10.07/1.90**	20.44	32.93

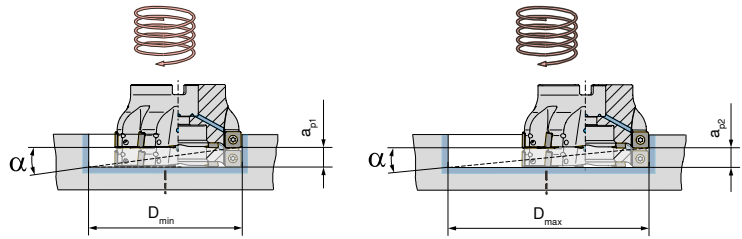
* Tangential cutting point at deepest engagement point

** Smallest diameter in centre

System MaxiMill 490-12

Machining strategy

Helical plunging (without pilot hole)



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

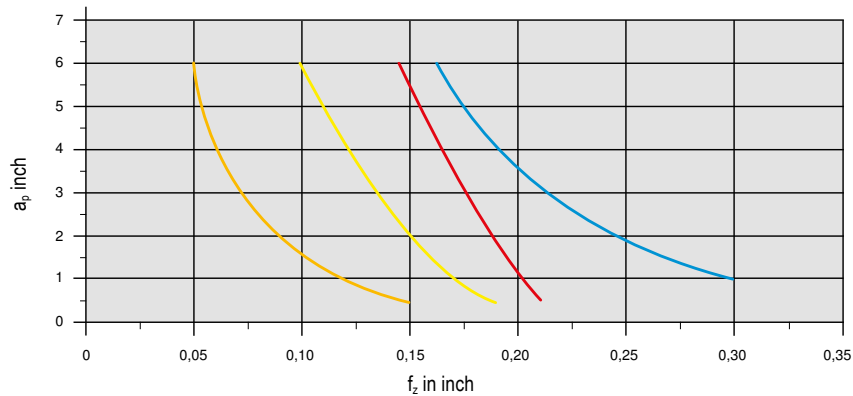
DC inch	D _{w-min} inch	B _{1max} inch	D _{w-max} inch	B _{2max} inch	α °
2.00	3.031	0.098	3.858	0.189	2.0

- D_w = Diameter of the hole to be produced
- DC = Nominal diameter of the milling tool
- B = Axial feed to 360° circular movement

Starting Parameter



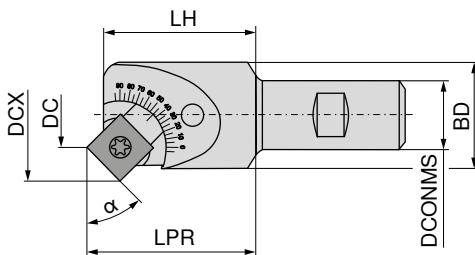
SDMT 12



Material	P.4.1	P20	Inserts	v _c in ft/min	Cooling
Steel	P.4.1	P20	SDMT1205ZZSN-29	660	Dry
Stainless steel	M.2.1	316Ti	SDMT120512SR-33	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	SDMT1205ZZSN-31	825	Dry
Heat-resistant	S.2.2	Inconel 718	SDMT120508ER-M31	115	Emulsion

→ Page 155–157
Here you will find detailed information on cutting speed.

MaxiMill 490-12 adjustable angle milling cutter – dimensions



Constant dimensions			Angle-dependent dimensions*			
BD	DCONMS	LH	α	DC*	DCX	LPR*
25	20	37	0°	25.07/1.12**	26.64	38.36
			5°	3.72	27.61	38.79
			10°	4.84	28.48	39.21
			15°	6.03	29.25	39.58
			20°	7.27	29.92	39.90
			25°	8.57	30.48	40.16
			30°	9.91	30.92	40.37
			35°	11.28	31.25	40.51
			40°	12.67	31.45	40.60
			45°	14.08	31.54	40.62
			50°	15.48	31.50	40.58
			55°	16.86	31.34	40.48
			60°	18.23	31.06	40.33
			65°	19.56	30.66	40.11
			70°	20.85	30.15	39.83
			75°	22.08	29.52	39.51
			80°	23.26	28.79	39.12
			85°	24.35	27.95	38.69
			90°	25.37/1.42**	26.94	38.21

* Tangential cutting point at deepest engagement point
** Smallest diameter in centre

HSC/HPC machining

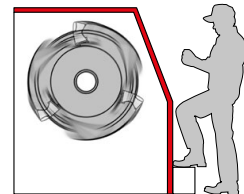
Safety advice

Suitability of the tool for HSC machining

HSC tools from CERATIZIT have been specially developed for this machining strategy and guarantee maximum operational reliability.

Observation of safety precautions of the machine manufacturer

Make sure that all safety precautions of the machine-manufacturer are observed (e.g.: closed machine guards).



Suitability of the adapters for HSC machining

According to the milling situation, choose the optimum tool/clamping device combination. For high speed milling applications it is necessary to dynamically balance tool and tool adapter together (see ISO 1940 directives).

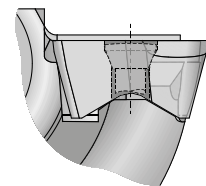
Mounting the indexable insert with centrifugal force protection

Insert clamping: EURO-patent EP 1083017A1

Make sure that the insert pocket is cleaned and the threading bore for the clamping screw is in good condition.

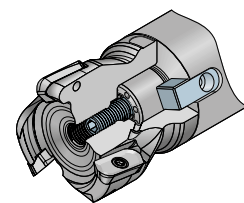
Check the axial and radial contact points of the insert in the pocket.

The clamping screws for positive insert clamping must be tightened with a torque of (XDHT11 = 1.8 Nm; XDH.19 = 6.0 Nm).



Optimum mounting of HSC milling cutters (DC = Ø 40–63) to milling arbors using power screw

The power screw guarantees a stable connection of tool and milling adapter and is easy to use.



Power Screw

Maximum admissible number of revolutions

Please note the maximum number of revolutions stated on the tool. This number is exclusively valid for the specific tool and must be adapted according to the selected tool adapter, total overhang length and the respective machining situation.



Optimum application range of the tool (a_e , a_p , f_z , n)


In order to guarantee productive milling, please observe the recommendations regarding the cutting parameters.





System MaxiMill HSC-11

Cutting data standard values

Workpiece material	Treatment / alloy	VDI 3323 Group	Hardness HB	H216T (CTWN215)	
				 v_c in ft/min	 v_c in ft/min
Aluminum alloys	non hardenable	21	60		660-9840
	hardenable	22	100		660-6560
Cast aluminum alloy	non hardenable < 12% Si	23	80		660-6560
	hardenable < 12% Si	24	90		660-5900
	non hardenable > 12% Si	25	130		660-3280
Copper and copper alloys (Bronze, Brass)	Free-cutting steel alloy (1% Pb)	26			660-1970
	brass, red bronze	27	90	820-3280	820-3280
	bronze	28	100		490-1310
	lead-free copper and electrolytic copper	29	100		980-2620
Non metal materials	Duroplastics	29		260-3280	260-3280
	Fibre-reinforced plastics	29		230-1640	230-1640
	hard rubber	30		260-1000	260-1000

 = full lubricant

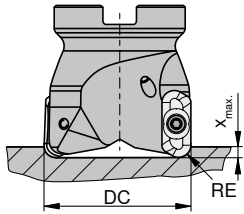
 = Minimum quantity lubrication

 = dry machining

System MaxiMill HSC-11

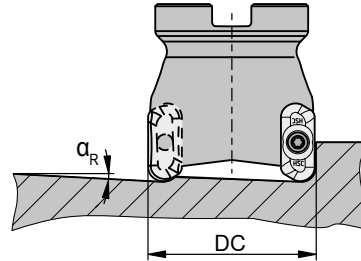
Machining strategy

Axial ramping



DC inch	X _{max.} inch
0.63	0.07
0.75	0.09
1.00	0.10
1.25	0.09
1.50	0.09
2.00	0.09
2.50	0.08
3.00	0.07
4.00	0.07
63	2.10
80	1.75
100	1.79

Linear ramping



DC inch	α _R °
0.63	18.8
0.75	15.3
1.00	10.3
1.25	6.8
1.50	4.8
2.00	3.5
2.50	2.5
3.00	1.8
4.00	1.3
63	2.5
80	1.8
100	1.3

Milling strategy for roughing and finishing

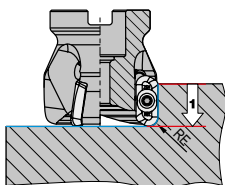
With maximum chip volume

Indexable Insert	RE inch	1	2,3,4
		a _p inch	a _{p max.} inch
XDHT 11T302FR-ALP	0.008	0.39	0.39
XDHT 11T304FR-ALP	0.016	0.39	0.38
XDHT 11T308FR-ALP	0.031	0.39	0.36
XDHT 11T312FR-ALP	0.047	0.39	0.35
XDHT 11T316FR-ALP	0.063	0.39	0.33
XDHT 11T320FR-ALP	0.079	0.39	0.31
XDHT 11T325FR-ALP	0.098	0.39	0.30
XDHT 11T332FR-ALP	0.126	0.39	0.27
XDHT 11T340FR-ALP	0.157	0.39	0.24
XDHT 11T350FR-ALP	0.197	0.39	0.20

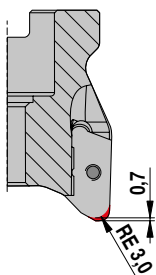
With maximum side wall quality

Indexable Insert	RE inch	2,3,4
		a _{p max.} inch
XDHT 11T302FR-ALP	0.008	0.31
XDHT 11T304FR-ALP	0.016	0.30
XDHT 11T308FR-ALP	0.031	0.28
XDHT 11T312FR-ALP	0.047	0.26
XDHT 11T316FR-ALP	0.063	0.27
XDHT 11T320FR-ALP	0.079	0.25
XDHT 11T325FR-ALP	0.098	0.22
XDHT 11T332FR-ALP	0.126	0.19
XDHT 11T340FR-ALP	0.157	0.16
XDHT 11T350FR-ALP	0.197	0.12

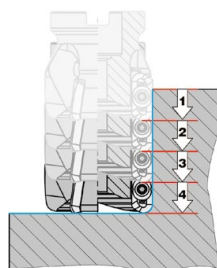
Shoulder milling



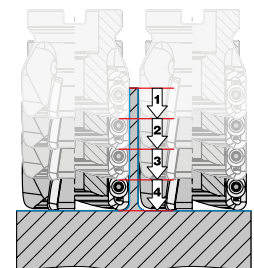
Modification to front profile



Pocket milling



Pocket milling with thin walled components

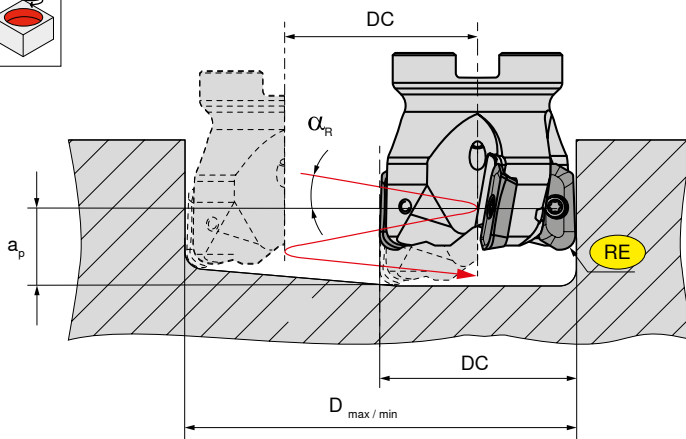


For inserts with a corner radius larger than 0.125" the basic body of the tool must be modified according to the drawing above.

System MaxiMill HSC-11

Machining strategy

Helical plunging



RE = Insert radius
 α_R in inch = Maximum ramping angle (related to centre of tool)

a_p in inch = $\text{pitch} \rightarrow D \times \pi \times \tan(\alpha_R)$

D in inch = $\rightarrow D_{max} - DC$ and/or $D_{min} - DC$

For flat bottom hole

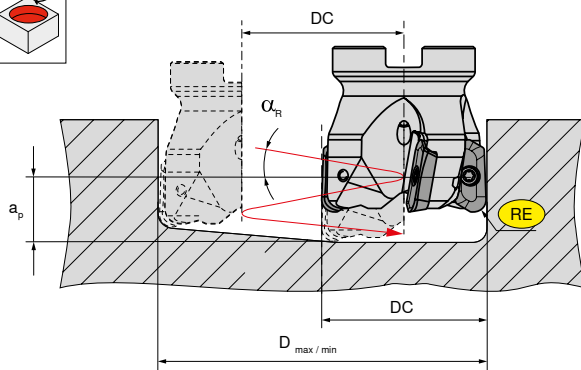
D_{max} in inch = largest drilling diameter
 D_{min} in inch = smallest drilling diameter
 DN_{max} in inch = Maximum hole diameter for non flat bottom

DC inch	(DN _{max})	XDHT-11 (HSC-11)								
		RE = 0.008	RE = 0.016	RE = 0.032	RE = 0.048	RE = 0.064	RE = 0.080	RE = 0.100	RE = 0.125	RE = 0.160
(1.22)	α_R	9.7°	10.0°	9.9°	9.4°	8.9°	8.4°	7.9°	7.0°	6.1°
	D_{max}	1.18	1.18	1.14	1.1	1.06	1.06	1.02	0.94	0.91
	D_{min}	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
.708	α_R	9.4°	9.1°	8.7°	8.3°	7.9°	7.5°	6.9°	6.2°	5.3°
	D_{max}	1.34	1.34	1.3	1.26	1.22	1.22	1.18	1.1	1.06
	D_{min}	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
.750	α_R	8.8°	8.6°	8.3°	7.9°	7.5°	7.5°	6.5°	5.9°	5.1°
	D_{max}	1.42	1.42	1.38	1.34	1.3	1.3	1.26	1.18	1.14
	D_{min}	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
.787	α_R	8.4°	8.2°	7.8°	7.4°	7.7°	6.7°	6.2°	5.5°	4.8°
	D_{max}	1.5	1.5	1.46	1.42	1.38	1.38	1.34	1.26	1.22
	D_{min}	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
.866	α_R	7.6°	1.65	7.4°	1.65	7.8°	1.61	6.7°	1.57	6.4°
	D_{max}	1.65	1.65	1.61	1.57	1.53	1.53	1.49	1.41	1.37
	D_{min}	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
1.00	α_R	6.7°	6.5°	6.2°	5.9°	5.6°	5.3°	4.9°	4.4°	3.8°
	D_{max}	1.89	1.89	1.85	1.81	1.77	1.77	1.73	1.65	1.61
	D_{min}	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
1.25	α_R	4.7°	2.44	4.7°	2.44	4.8°	2.40	4.6°	2.36	4.3°
	D_{max}	2.44	2.44	2.4	2.36	2.32	2.32	2.28	2.2	2.17
	D_{min}	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97
1.50	α_R	3.3°	3.3°	3.4°	3.4°	3.5°	3.3°	3.0°	2.7°	2.3°
	D_{max}	3.07	3.07	3.03	2.99	2.95	2.95	2.91	2.83	2.8
	D_{min}	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59
2.00	α_R	2.4°	3.86	2.5°	3.86	2.5°	3.82	2.5°	3.78	2.6°
	D_{max}	3.86	3.86	3.82	3.78	3.74	3.74	3.7	3.62	3.58
	D_{min}	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
2.50	α_R	1.7°	1.7°	1.7°	1.8°	1.8°	1.8°	1.8°	1.7°	1.5°
	D_{max}	4.88	4.88	4.84	4.8	4.76	4.76	4.72	4.65	4.61
	D_{min}	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41
3.00	α_R	1.1°	1.1°	1.1°	1.1°	1.1°	1.1°	1.1°	1.2°	1.2°
	D_{max}	6.22	6.22	6.18	6.14	6.1	6.1	6.06	5.98	5.94
	D_{min}	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
4.00	α_R	0.8°	0.8°	0.9°	0.9°	0.9°	0.9°	0.9°	0.9°	0.9°
	D_{max}	7.8	7.8	7.76	7.72	7.68	7.68	7.64	7.56	7.52
	D_{min}	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32

System MaxiMill HSC/HPC-19

Machining strategy

Helical plunging



RE = Insert radius
 α_R in inch = Maximum ramping angle (related to centre of tool)

a_p in inch = pitch $\rightarrow D \times \pi \times \tan(\alpha_R)$

D in inch = $\rightarrow D_{max} - DC$ and/or $D_{min} - DC$

For flat bottom hole

D_{max} in inch = largest drilling diameter

D_{min} in inch = smallest drilling diameter

DN_{max} in inch = Maximum hole diameter for non flat bottom

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.008"	1.00	1.93	7°02'	1.89	1.26
	1.25	2.48	4°34'	2.44	1.81
	1.50	3.11	3°47'	3.07	2.44
	2.00	3.90	3°01'	3.82	3.19
	2.50	4.92	2°17'	4.88	4.21
	3.00	6.26		6.22	5.55
	4.00	7.83		7.80	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.016"	1.00	0.98	7°08'	1.89	1.26
	1.25	1.26	4°37'	2.44	1.81
	1.50	1.57	3°49'	3.07	2.44
	2.00	1.97	3°02'	3.86	3.19
	2.50	2.48	2°18'	4.88	4.21
	3.00	3.15		6.22	5.55
	4.00	3.94		7.80	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.032"	1.00	1.93	7°21'	1.85	1.26
	1.25	2.48	4°44'	2.40	1.81
	1.50	3.11	3°53'	3.03	2.44
	2.00	3.90	3°05'	3.82	3.19
	2.50	4.92	2°20'	4.84	4.21
	3.00	6.26		6.18	5.55
	4.00	7.83		7.76	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.078"	1.00	0.98	8°40'	1.77	1.26
	1.25	1.26	5°04'	2.32	1.81
	1.50	1.57	4°06'	2.95	2.44
	2.00	1.97	3°13'	3.74	3.19
	2.50	2.48	2°25'	4.76	4.21
	3.00	3.15		6.10	5.55
	4.00	3.94		7.68	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.098"	1.00	1.93	8°24'	1.73	1.26
	1.25	2.48	5°13'	2.28	1.81
	1.50	3.11	4°12'	2.91	2.44
	2.00	3.90	3°17'	3.70	3.19
	2.50	4.92	2°27'	4.72	4.21
	3.00	6.26		6.06	5.55
	4.00	7.83		7.64	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.128"	1.00	0.98	8°54'	1.65	1.26
	1.25	1.26	5°26'	2.20	1.81
	1.50	1.57	4°20'	2.83	2.44
	2.00	1.97	3°21'	3.62	3.19
	2.50	2.48	2°30'	4.65	4.21
	3.00	3.15		5.98	5.55
	4.00	3.94		7.56	7.13

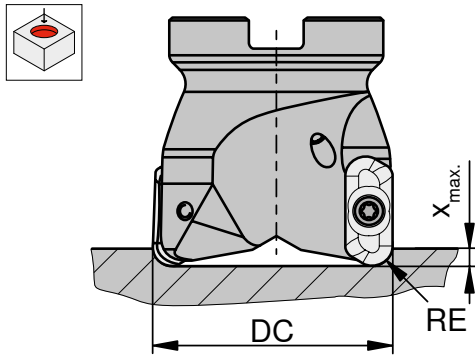
	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.157"	1.00	1.93	9°32'	1.61	1.26
	1.25	2.48	5°42'	2.17	1.81
	1.50	3.11	4°30'	2.80	2.44
	2.00	3.90	3°28'	3.58	3.19
	2.50	4.92	2°33'	4.61	4.21
	3.00	6.26		5.94	5.55
	4.00	7.83		7.52	7.13

	DC inch	DN_{max} inch	α_R °	D_{max} inch	D_{min} inch
RE = 0.196"	1.00	0.98	6°49'	1.54	1.26
	1.25	1.26	3°59'	2.09	1.81
	1.50	1.57	3°20'	2.72	2.44
	2.00	1.97	2°13'	3.50	3.19
	2.50	2.48	1°52'	4.53	4.21
	3.00	3.15		5.87	5.55
	4.00	3.94		7.44	7.13

System MaxiMill HSC/HPC-19

Machining strategy

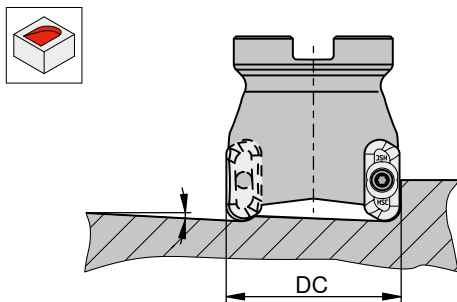
Axial ramping



HSC 19	DC mm	RE 0.008-0.157	RE 0.196
		X _{max.} mm	X _{max.} mm
CHSC 19 / GHSC 19 / MHSC 19	1.00	0.196	0.157
CHSC 19 / GHSC 19 / MHSC 19	1.25-1.50	0.157	0.118
AHSC 19	1.50-4.00	0.157	0.118

HPC 19	DC mm	RE 0.008-0.157	RE 0.196
		X _{max.} mm	X _{max.} mm
CHPC 19 / MHPC 19	1.00	0.196	0.157
CHPC 19 / MHPC 19	1.25-1.50	0.236	0.196
AHPC 19	1.50-2.50	0.236	0.196

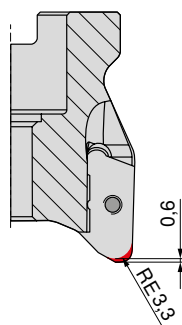
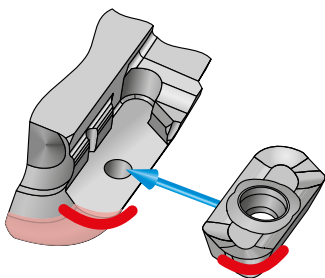
Linear ramping



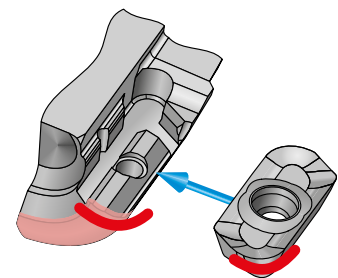
DC mm	α ideal	
	HSC 19	HPC 19
1.00	11°	11°
1.25	7°	7°
1.50	5°	5°
2.00	4°	4°
2.50	3°	3°
3.00	2°	
4.00	2°	

Modification to basic body

HSC 19



HPC 19




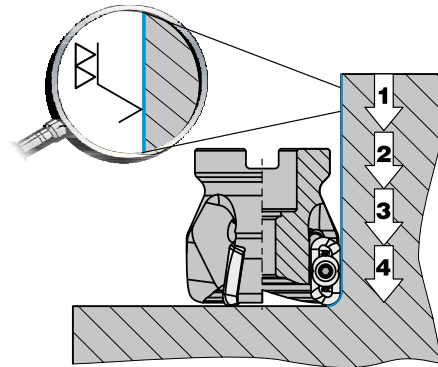
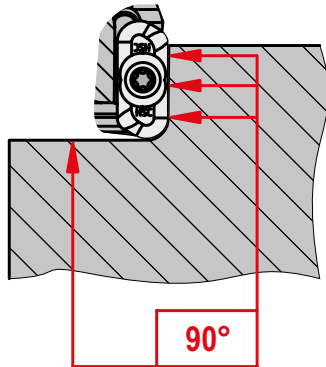
Modification to front profile

For inserts with a corner radius larger than 4.0 mm the basic body of the tool must be modified according to the drawing above.




System MaxiMill HSC/HPC-19

Machining strategy



 Excellent side wall quality after roughing operation.
Additional finishing operations minimized or no longer required.



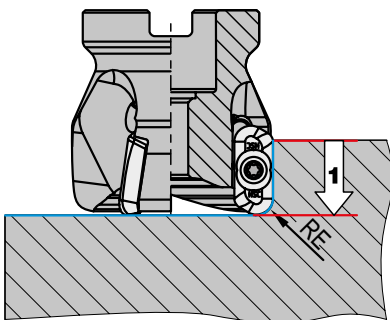
With maximum chip volume

Indexable Insert			
	RE inch	a_p inch	$a_{p \text{ max.}}$ inch
XDH. 190402FR-ALP	0.008	0.71	0.70
XDH. 190404FR-ALP	0.016	0.71	0.69
XDH. 190408FR-ALP	0.032	0.71	0.68
XDH. 190420FR-ALP	0.078	0.71	0.63
XDH. 190425FR-ALP	0.098	0.71	0.59
XDH. 190432FR-ALP	0.128	0.71	0.58
XDH. 190440FR-ALP	0.157	0.71	0.55
XDH. 190450FR-ALP	0.196	0.67	0.51

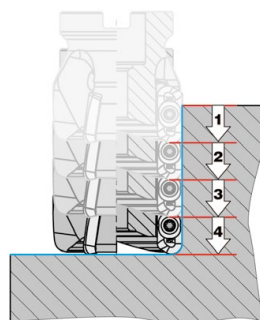
With maximum side wall quality

Indexable Insert		
	RE inch	$a_{p \text{ max.}}$ inch
XDH. 190402FR-ALP	0.008	0.46
XDH. 190404FR-ALP	0.016	0.46
XDH. 190408FR-ALP	0.032	0.44
XDH. 190420FR-ALP	0.078	0.39
XDH. 190425FR-ALP	0.098	0.37
XDH. 190432FR-ALP	0.128	0.35
XDH. 190440FR-ALP	0.157	0.31
XDH. 190450FR-ALP	0.196	0.28

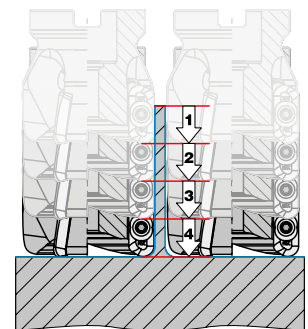
Shoulder milling



Pocket milling



Pocket milling with thin walled components



System MaxiMill HPC-04/12

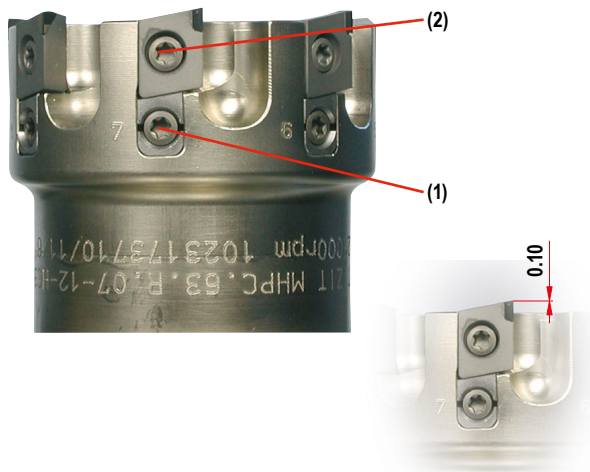
Machining strategy

What do you have to take into account?

- ▲ Machine stability.
- ▲ Stable work piece clamping and tool adapter.
- ▲ Use of coolant generally not necessary, however, this will facilitate the removal of the chips - also improved surface quality.
- ▲ Take into account thermal stress and critical temperature of 600°C!
If required for material, work with coolant.
- ▲ Avoid vibration.
- ▲ Observe balancing quality class.
- ▲ Observe chemical reactions of diamond to carbide forming elements (Fe, Ti, Ta, Co, Ni)

Quality class check

After assembly, clamping of the inserts and adjustment of the axial run-out the balancing quality class of the tools should be checked. When applying shell milling cutters, after assembly with an adapter balancing is necessary.



Excellent suitability

- ▲ for components made of light metals and non-ferrous metals, plastic, fibre composite materials, graphite ...
- ▲ when the simplest setting method saves cost for tool presetting.
- ▲ for high-volume production.
- ▲ for high surface quality of the work pieces.
- ▲ when long tool life is necessary to reduce tool changes and expensive machine downtime.
- ▲ when the tool is already on site (presetting, etc.)

Setting trailing edge inserts

As in the setting procedure described above the standard inserts are adjusted to a radial run-out of = 0.02 mm. The inserts with Masterfinish edge are then set to 0.02–0.03 mm above the highest cutting edge.

The adjustment procedure

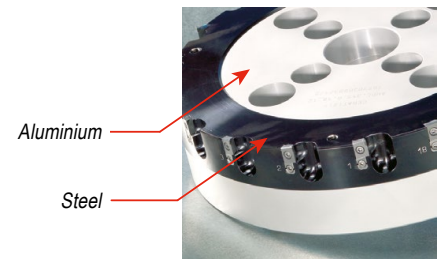
- 1 Mount Adjustment wedges in the tools (as delivered). Tighten adjustment screw (1) without deforming the wedges.
 - 2 Mount the PCD inserts and tighten the clamping screws (2) with 1.0 Nm.
 - 3 Mark "highest edge" with the help of pre-setting equipment.
 - 4 Adjust the PCD insert by 0.02 mm turning the clamping screw (1) clockwise.
- Pre-loading must be reached. Use the angled TORX screwdrivers
- 5 Set other cutting edges to this level, maximum deviation of 0.005 mm. Maximum length adjustment = 0.10 mm.
 - 6 Tighten all insert tightening screws (2) to 5.0 Nm.
 - 7 Check axial run-out of all inserts: Target = 0.005 mm.

Perfect precision – MaxiMill HPC-12

The adjustable high-performance tool for the finishing of aluminium components

Tool body made of steel

- ▲ For highest stability
- ▲ Maximum abrasion resistance
- ▲ Bimetallic version from diameter 160 mm easier handling and spindle protection with large tools



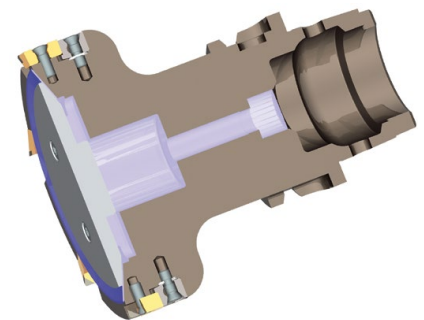
Picture shows bimetallic version

Available as shell milling cutters and monobloc type

- ▲ Direct HSK63 connection as monobloc type
- ▲ Monobloc tools balanced to G2.5 at $n=20,000 \text{ min}^{-1}$ (ISO1940)

Particularly for HSC applications with internal coolant supply

- ▲ Improved chip evacuation
- ▲ High surface quality
- ▲ Optimum application conditions
- ▲ Suitability for minimum quantity lubrication



Time is money – the system MaxiMill HPC-12 is simple and quick to adjust!

Highly positive rake angle of +25°

- ▲ Low cutting forces
- ▲ Increased parallelism of surfaces
- ▲ Minimised component deformation



Tangential concept

- ▲ Stable location for the PCD segment and maximum process security

Adapted PCD cutting edge

- ▲ High impact strength when milling!
- ▲ Maximum edge stability
- ▲ Reduced built-up edge on the work piece
- ▲ The machining of Al-Si alloys with over 12 % silicon is possible without problems

Inserts Selection

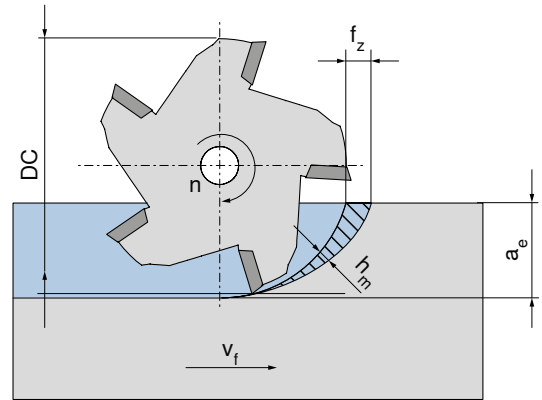
- ▲ Standard insert
- ▲ Insert with corner radius
- ▲ Insert with trailing edge

Average chip thickness [h_m] – the approach

Shoulder milling

1 Select appropriate average chip thickness [h_m] for the steel from the table.

Material	Tensile strength	h _m mm
	N/mm ²	
for steel	...-800	0.0063
for steel	800-1000	0.0055
for steel	1000-1200	0.0048
for steel	1200-...	0.0039
for stainless steel	...-750	0.0059
for stainless steel	750-900	0.0051
for stainless steel	900-1150	0.0043
for stainless steel	1150-...	0.0035*

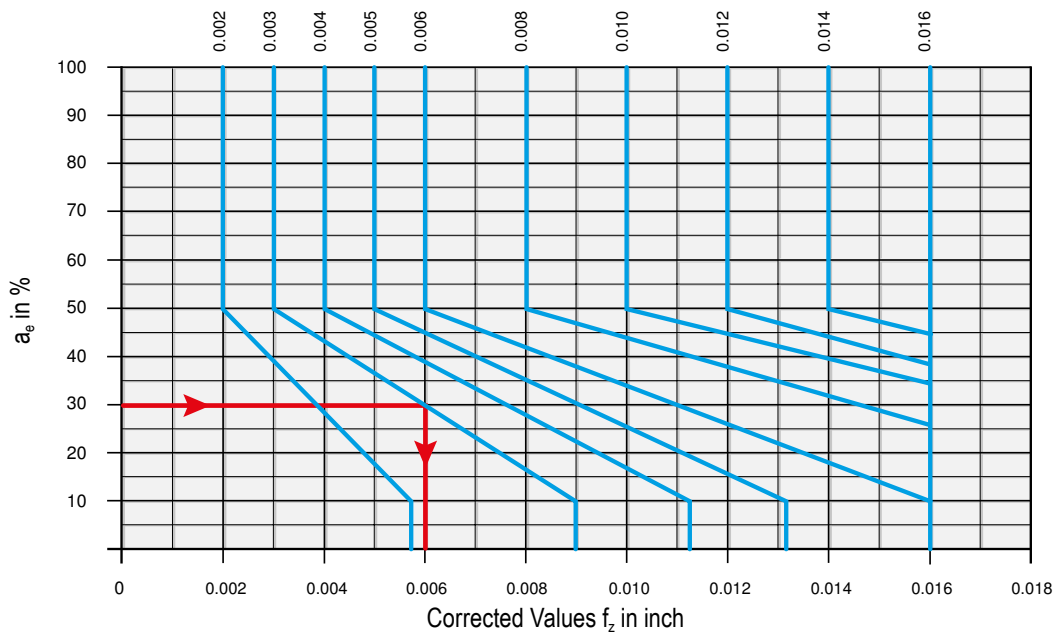


2 Select the corrected feed rate value from the table based on the appropriate chip thickness [h_m] and depth of cut [a_e].

h _m mm	Corrected feed value f _z for h _m				
	0.2 x DC	0.3 x DC	0.4 x DC	0.75 x DC	1 x DC
0.0063	0.0142	0.0114	0.0098	0.0071	0.0063
0.0055	0.0122	0.0102	0.0087	0.0060	0.0055
0.0048	0.0106	0.0087	0.0075	0.0055	0.0047
0.0039	0.0087	0.0071	0.0063	0.0047	0.0039
0.0059	0.0134	0.0106	0.0094	0.0067	0.0059
0.0051	0.0114	0.0094	0.0083	0.0059	0.0051
0.0043	0.0098	0.0079	0.0067	0.0051	0.0043
0.0035*	0.0079	0.0063	0.0055	0.0039	0.0035
a _e =	0.2 x DC	0.3 x DC	0.4 x DC	0.75 x DC	1 x DC

* f_z < 0.032": Danger, as tool is not working and cutting

Start values f_z in inch from starting parameter diagram

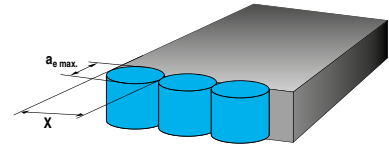
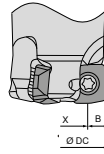
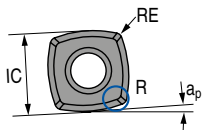


➔ **Example:**
Start value (f_z) = 0.003"
a_e = 30 %
corrected value (f_z) = 0.006"

System MaxiMill HFC-06

Machining strategy

Programmed radius R = 0.047"



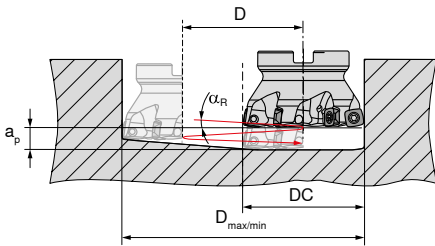
Cutting depth and remaining material			Cutting width for flat surfaces			Cutting depth when plunging				
IC in inch	RE in inch	ap max. in inch	DC in inch	X in inch	B in inch	ae max. in inch	f2 in inch		X	
							initial	min.	max.	
0.25	0.020	0.032	0.625-1.25	DC-(2 x B)	0.169	0.209	0.004	0.003	0.006	<0.7 x DC



DC inch	Helical plunging (helical plunging into solid material)		
	Dmin. inch	Dmax. inch	α R max. °
0.625	0.866	1.22	4.5°
0.750	1.18	1.53	2.3°
1.00	1.57	1.93	1.3°
1.25	2.12	2.48	0.9°



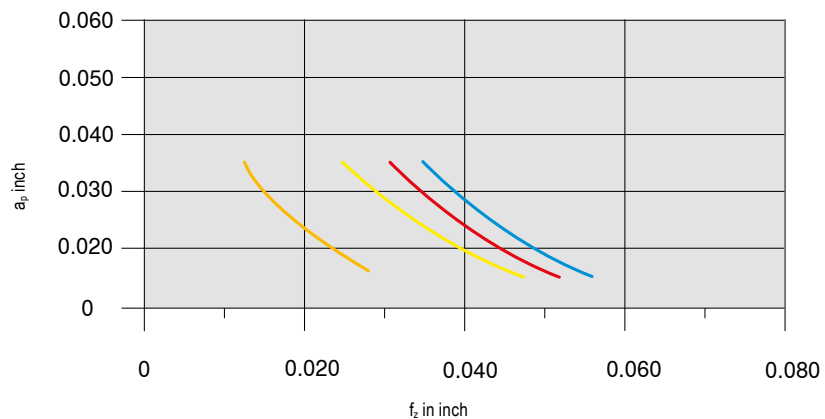
DC inch	axial	Angled
	Plunging	
	Xmax. inch	α R max. °
0.625		5.9°
0.750		3.2°
1.00	0.020	2.0°
1.25		1.3°



Starting Parameter



XPLX 06



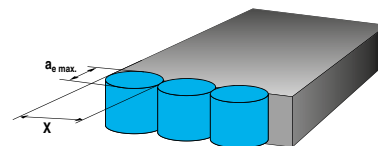
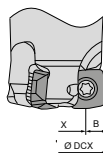
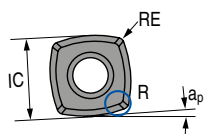
Material			Inserts		vc in ft/min	Cooling
Steel	P.4.1	P20	XPLX 060305SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	XPLX 060305ER-M40	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	XPLX 060305ER-M50	CTCK215	825	Dry
Heat-resistant	S.2.2	Inconel 718	XPLX 060305SR-F40	CTC5240	115	Emulsion

→ Page 155-157
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill HFC-09

Machining strategy

Programmed radius R = 0.078"

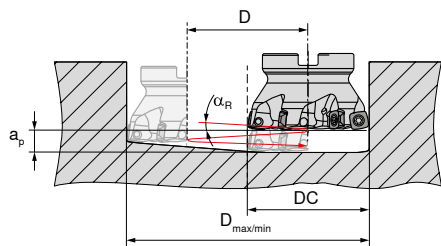


Cutting depth and remaining material			Cutting width for flat surfaces			Cutting depth when plunging				
IC in inch	RE in inch	ap max. in inch	DC in inch	X in inch	B in inch	ae max. in inch	fz in inch		X	
							initial	min.	max.	
0.354	0.032	0.040	1.00–2.50	DC–(2 x B)	0.232	0.295	0.004	0.003	0.006	<0.7 x DC



DC inch	circular Helical plunging (helical plunging into solid material)		
	Dmin. inch	Dmax. inch	αR max. °
1.00	1.37	1.89	3.1°
1.25	1.93	2.44	1.7°
1.37	2.16	2.67	1.4°
1.50	2.56	3.07	1.0°
1.62	2.71	4.01	0.9°
2.00	3.34	3.85	0.8°
2.12	3.50	4.01	0.7°
2.50	4.37	4.88	0.7°
2.62	4.60	5.11	0.6°

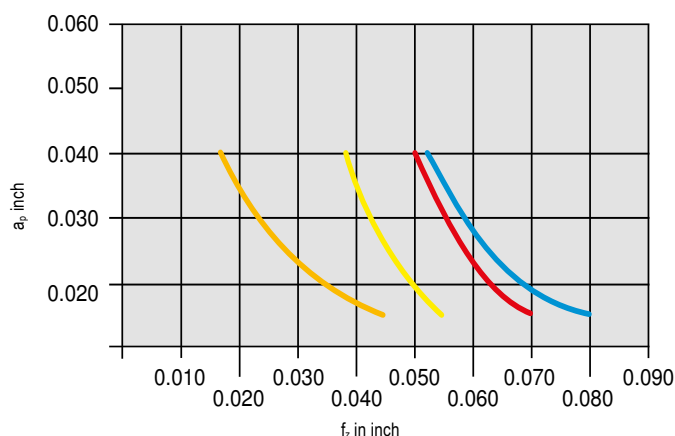
DC inch	axial		Angled	
	Plunging		Plunging	
	Xmax. inch		αR max. °	
1.00			3.6°	
1.25			2.0°	
1.37			1.6°	
1.50			1.2°	
1.62	0.030		1.1°	
2.00			0.9°	
2.12			0.8°	
2.50			0.8°	
2.62			0.7°	



Starting Parameter



XDLX 09



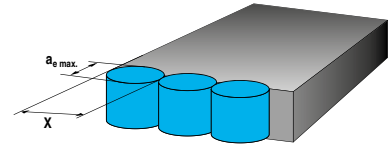
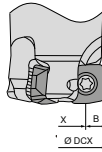
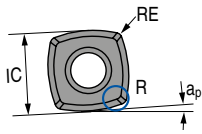
Material	Inserts		vc in ft/min	Cooling
Steel	P.4.1 P20	XDLX09T308SR-M50 CTPP235	660	Dry
Stainless steel	M.2.1 316Ti	XDLX09T308SR-M50 CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	XDLX09T308SR-M50 CTCK215	825	Dry
Heat-resistant	S.2.2 Inconel 718	XDLX09T308ER-F40 CTC5240	115	Emulsion

→ Page 155–157
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill HFC-12

Machining strategy

Programmed radius R = 0.118"

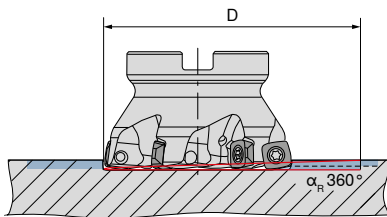


Cutting depth and remaining material			Cutting width for flat surfaces			Cutting depth when plunging				
IC in inch	RE in inch	ap max. in inch	DC in inch	X in inch	B in inch	ae max. in inch	fz in inch		X	
							initial	min.	max.	
0.472	0.040	0.080	1.25–4.00	DC–(2 x B)	0.326	0.393	0.006	0.004	0.008	<0.7 x DC



DC inch	circular		
	Helical plunging (helical plunging into solid material)		
	Dmin. inch	Dmax. inch	α R max. °
1.00	1.73	2.45	6.1°
1.25	1.97	2.67	3.7°
1.50	2.56	3.07	2.5°
1.62	2.52	3.22	2.3°
2.00	3.15	3.86	1.3°
2.12	3.30	4.01	1.3°
2.50	4.17	4.88	0.9°
2.62	4.41	5.12	0.9°
3.00	5.51	6.22	1.1°
4.00	7.09	7.79	0.6°

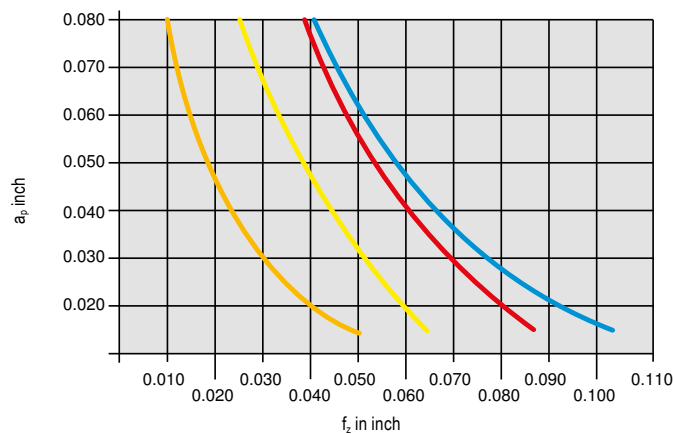
DC inch	axial		Angled	
	Plunging			
	Xmax. inch	α R max. °		
1.25	0.045		7.2°	
1.37			4.4°	
1.50			2.9°	
1.62			2.7°	
2.00 + 2.12			1.5°	
2.50 + 2.62			1.1°	
3.00			1.3°	
4.00			0.7°	



Starting Parameter



XOLX 12



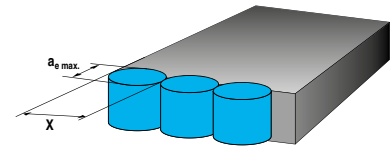
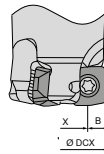
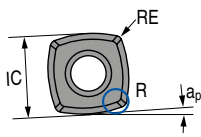
Material		Inserts		vc in ft/min	Cooling
Steel	P.4.1 P20	XOLX120410SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1 316Ti	XOLX120410ER-M50	CTPM240	320	Emulsion
Cast iron	K.1.1 GG25 Cast Iron	XOLX120410ER-M50	CTCK215	825	Dry
Heat-resistant	S.2.2 Inconel 718	XOLX120410ER-F40	CTC5240	115	Emulsion

→ Page 155–157
Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

System MaxiMill HFC-19

Machining strategy

Programmed radius R = 0.196"

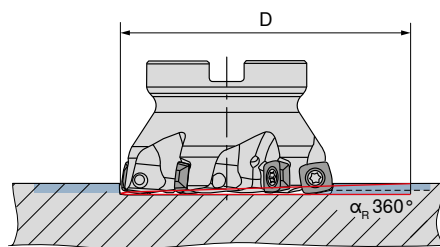


Cutting depth and remaining material			Cutting width for flat surfaces			Cutting depth when plunging				
IC in inch	RE in inch	ap max. in inch	DC in inch	X in inch	B in inch	ae max. in inch	fz in inch			X
							initial	min.	max.	
0.753	0.060	0.129	2.50–6.00	DC–(2 x B)	0.516	0.472	0.008	0.004	0.010	<0.65 x DC



DC inch	circular		
	Helical plunging (helical plunging into solid material)		
	Dmin. inch	Dmax. inch	α R max. °
2.50	3.82	4.84	2.5
3.00	5.15	6.18	1.4
4.00	6.73	7.75	1.0
5.00	8.70	9.72	0.7
6.00	11.45	12.48	0.5

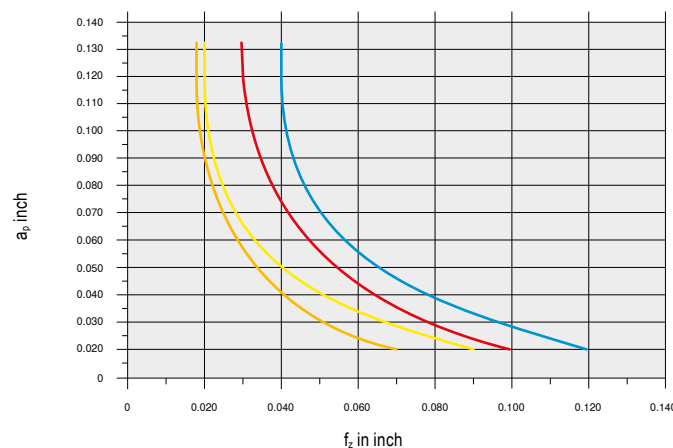
DC inch	axial	Angled	
	Plunging		
	Xmax. inch	α R max. °	ap max inch
2.50		2.9	
3.00		1.8	
4.00	0.067	1.3	0.129
5.00		1.0	
6.00		0.7	



Starting Parameter



XOLX 19



Material	Material		Inserts		vc in ft/min	Cooling
Steel	P.4.1	P20	XOLX190615SR-M50	CTPP235	660	Dry
Stainless steel	M.2.1	316Ti	XOLX190615SR-M50	CTPM240	320	Emulsion
Cast iron	K.1.1	GG25 Cast Iron	XOLX190615SR-M50	CTCK215	825	Dry
Heat-resistant	S.2.2	Inconel 718	XOLX190615ER-F40	CTC5240	115	Emulsion



→ Page 155–157

Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

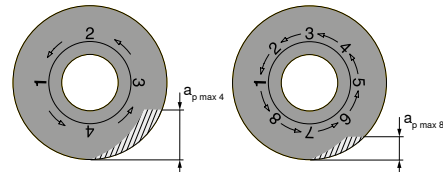
MaxiMill 251 RS system

Technical data

Recommended cutting depth

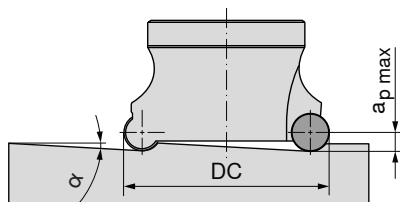
∅ inch	4-position		8-face
	a _{p max} inch	a _{p max} theoretical inch	a _{p max} inch
0.196	0.040	0.080	0.028
0.314	0.060	0.140	0.043
0.393	0.100	0.180	0.055
0.472	0.120	0.220	0.067
0.629	0.160	0.300	0.090
0.787	0.160	0.380	0.114

Average depth for the 4/8 index use of the insert



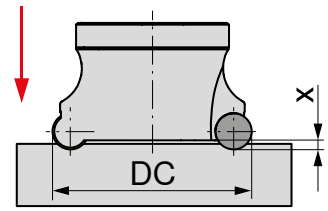
→ Page 155–157
Here you will find detailed information on cutting speed.

Linear ramping

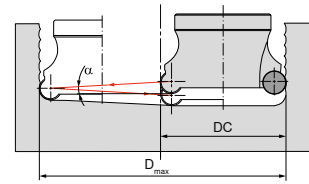
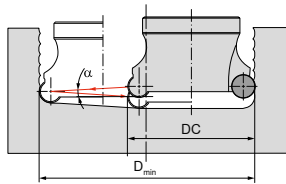


∅ DC inch	Inserts					
	05	08	10	12	16	20
	α °	α °	α °	α °	α °	α °
0.37	3.4					
0.50	16.0					
0.62	8.0	5.0				
0.75	5.5	20.0	1.3			
1.00	4.0	13.0	2.0	6.0		
1.25	3.0	8.0	3.0	4.0		
1.50			3.3	2.8		
1.62			3.1			
2.00			2.4	2.6	4.0	
2.12			2.2	2.3		
2.50				1.9	2.8	
2.62				1.6		
3.00				1.3	2.0	3.2
4.00				1.0	1.5	2.3
5.00						1.7

Axial ramping



∅ DC inch	Inserts					
	05	08	10	12	16	20
	X _{max} inch	X _{max} inch	X _{max} inch	X _{max} inch	X _{max} inch	X _{max} inch
0.37	0.020					
0.50	0.050					
0.62	0.050	0.020				
0.75	0.050	0.106	0.008			
1.00	0.050	0.106	0.016	0.040		
1.25	0.050	0.106	0.030	0.043		
1.50			0.060	0.047		
1.62			0.060	0.060		
2.00			0.060	0.060	0.080	
2.12			0.060	0.060	0.080	
2.50				0.060	0.080	
2.62				0.060	0.080	
3.00				0.060	0.080	0.120
4.00				0.060	0.080	0.120
5.00						0.120



D_{min.} = smallest drilling diameter
depending on the tool diameter

D_{max.} = Maximum hole diameter
Depending on the tool diameter


maximum possible hole diameter = 2 x DC - 0.040*

∅ DC inch	05			08			10			12			16			20		
	D _{min} inch	D _{max} inch	α _R °	D _{min} inch	D _{max} inch	α _R °	D _{min} inch	D _{max} inch	α _R °	D _{min} inch	D _{max} inch	α _R °	D _{min} inch	D _{max} inch	α _R °	D _{min} inch	D _{max} inch	α _R °
0.37	0.47	0.59	2.5															
0.50	0.63	0.75	2.1															
0.62	0.94	1.06	1.5	0.83	0.94	2.4												
0.75	1.26	1.38	1.2	1.06	1.26	1.9	1.02	1.18	1.3									
1.00	1.65	1.77	1.0	1.46	1.65	1.5	1.46	1.57	1.8	1.22	1.50	2.2						
1.25	2.20	2.32	0.7	2.01	2.20	1.2	1.97	2.13	1.5	1.81	2.05	1.7						
1.50							2.52	2.76	1.1	2.44	2.68	1.4						
1.62							2.68	2.91	1.1									
2.00							3.31	3.54	0.9	3.19	3.46	1.1	2.95	3.31	1.5			
2.12							3.46	3.70	0.9	3.39	3.62	1.0						
2.50										4.21	4.49	0.9	3.98	4.33	1.1			
2.62										4.45	4.72	0.8						
3.00										5.59	5.83	0.7	5.31	5.67	0.9	5.04	5.51	1.1
4.00										7.13	7.40	0.5	6.89	7.24	0.7	6.61	7.09	0.9
5.00																8.58	9.06	0.7

System MaxiMill 252

Machining strategy

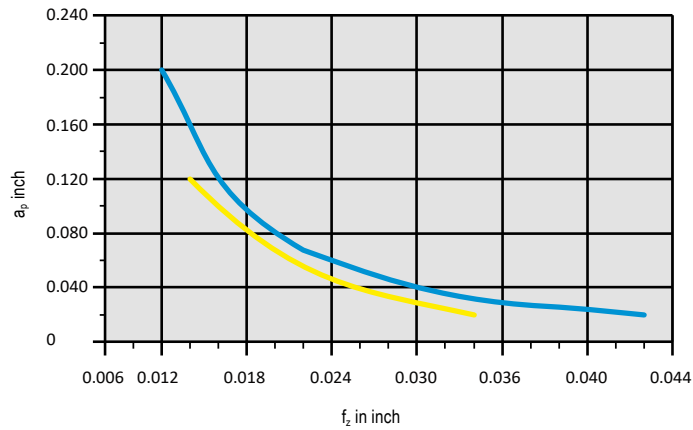
Recommended cutting depth

 \varnothing inch	4-position	
	a_p max inch	inch
0.393	0.100	0.180
0.472	0.120	0.220

Starting Parameter



RNHU 10

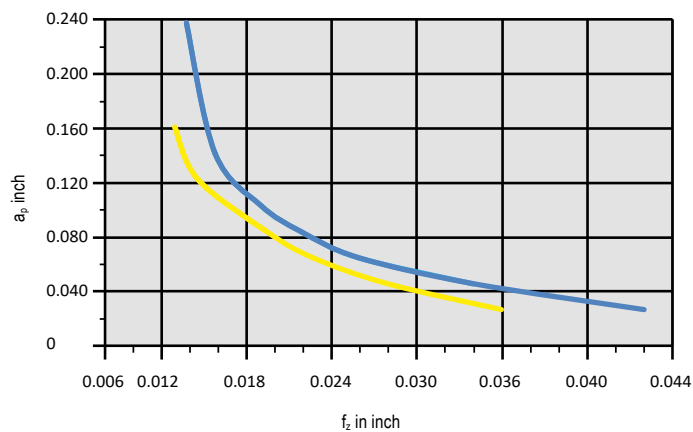


Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	XOLX120410SR-M50	CTPP235	600	Dry
Stainless steel	M.2.1	316Ti	XOLX120410ER-M50	CTPM240	320	Emulsion

Starting Parameter



RNHU 12



Material			Inserts		v_c in ft/min	Cooling
Steel	P.4.1	P20	XOLX120410SR-M50	CTPP235	600	Dry
Stainless steel	M.2.1	316Ti	XOLX120410ER-M50	CTPM240	320	Emulsion



→ Page 155–157

Here you will find detailed information on cutting speed.
From $v_c > 1300$ SFM, the tool must be balanced!

Cutting data standard values for MaxiMill Slot-SX saws

Index	CTCP335	CTP1340	H216T
	v _c in ft/min.		
P.1.1	240	190	
P.1.2	210	160	
P.1.3	180	140	
P.1.4	160	130	
P.1.5	140	120	
P.2.1	220	170	
P.2.2	160	130	
P.2.3	140	120	
P.2.4	100	80	
P.3.1	130	120	
P.3.2	110	100	
P.3.3	90	80	
P.4.1	140	120	
P.4.2	120	110	
M.1.1	110	130	
M.2.1	100	120	
M.3.1	80	100	
K.1.1	300	200	140
K.1.2	240	180	115
K.2.1	200	120	150
K.2.2	160	100	110
K.3.1	190	120	170
K.3.2	160	100	140
N.1.1		300	500
N.1.2		200	330
N.2.1		250	370
N.2.2		220	330
N.2.3		200	280
N.3.1		300	350
N.3.2		300	350
N.3.3		200	320
N.4.1		200	320
S.1.1		70	
S.1.2		60	
S.2.1		35	
S.2.2		25	
S.2.3		30	
S.3.1		60	
S.3.2		50	
S.3.3		40	
H.1.1			
H.1.2			
H.1.3			
H.1.4			
H.2.1			
H.3.1			
O.1.1			160
O.1.2			
O.2.1			240
O.2.2			
O.3.1			

average chip thickness

h_m in mm

$$h_m = f_z \sqrt{\frac{a_e}{DC}}$$

Feed per tooth

f_z in inch

$$f_z = h_m \sqrt{\frac{DC}{a_e}}$$

Feed rate

v_f in mm/min

$$v_f = f_z \times ZNF \times n$$

DC = Ø of the disc cutters

ZNF = Number of teeth of the cutter

Reference tool 50 386 12504 – ASLOT.125.R.8.32.DC-SX4

	SX4 -F2				SX4 -M1				SX4 -M7			
	a _e	10	20	30	a _e	10	20	30	a _e	10	20	30
	hm	f _z in inch			hm	f _z in inch			hm	f _z in inch		
P	0.0031	0.011	0.0079	0.0063	0.0039	0.0118	0.0098	0.0079	0.0035	0.0118	0.0091	0.0071
M	0.002	0.0071	0.0051	0.0039					0.0024	0.0083	0.0059	0.0047
K					0.0047	0.0118	0.0118	0.0094	0.0035	0.0118	0.0091	0.0071
N	0.0031	0.011	0.0079	0.0063								
S	0.0016	0.0055	0.0039	0.0031								
H												
O												

Reference tool 50 386 12504 – ASLOT.125.R.8.32.DC-SX4

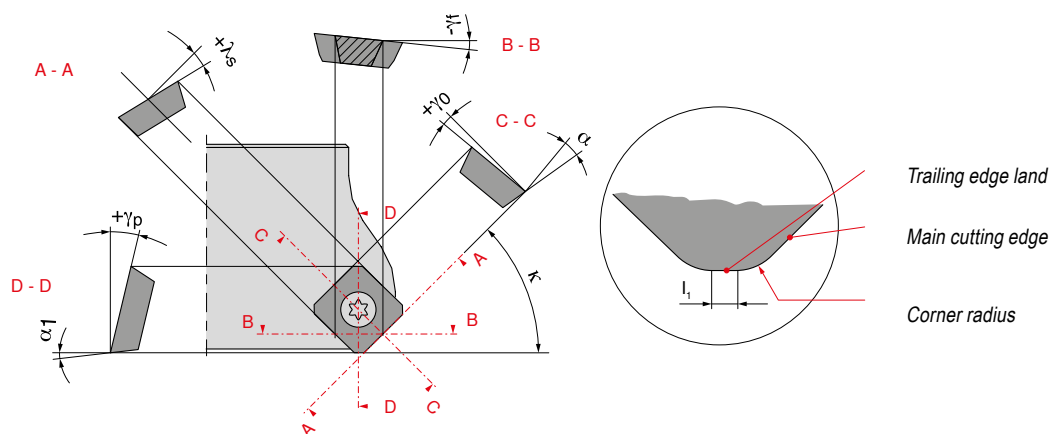
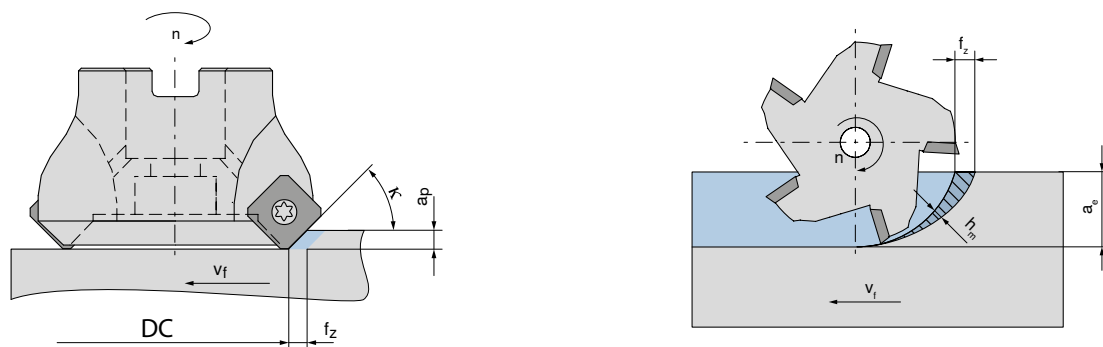
	SX4 -M8				SX4 -27P			
	a _e	10	20	30	a _e	10	20	30
	hm	f _z in inch			hm	f _z in inch		
P	0.0031	0.011	0.0079	0.0063				
M	0.002	0.0071	0.0051	0.0039				
K					0.0024	0.0083	0.0059	0.0047
N	0.0031	0.011	0.0079	0.0063	0.0035	0.0118	0.0091	0.0071
S	0.0016	0.0055	0.0039	0.0031				
H								
O					0.002	0.0071	0.0051	0.0039

Caution: For narrower and wider indexable inserts, reduce or increase the feed per tooth accordingly!

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. ±20% according to the usage conditions.

Abbreviations & dimensions

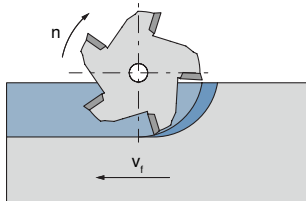
a_e	cutting width	inch
a_p	Cutting depth	inch
DC	Tool diameter	inch
D_w	Workpiece diameter	inch
f_z	Feed per tooth	inch
h_m	Average Chip Thickness	inch
k	Number of teeth	
k_c	Specific cutting force	N/inch ²
$k_{c1,1}$	Specific cutting force for 1 mm ² chip area	N/inch ²
BS	Length of trailing edge land	inch
m_c	Increase of specific cutting force	
n	rpm	rpm
Q	Chip volume	in ³ /min
v_c	Cutting speed	ft/min
v_f	Feed rate	in/min.
ZNF	Number of Effective Teeth	
γ_0	Effective cutting angle	degree
γ_f	Side clearance angle	degree
γ_p	Axial cutting angle	degree
κ	Cutting edge angle	degree
λ_s	Angle of inclination	degree
α	Clearance angle	degree
α_1	Side clearance angle	degree



Engagement conditions

Recommended

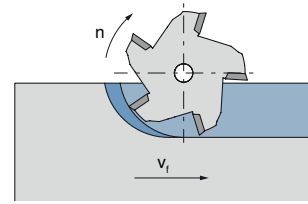
Climb milling



The feed direction of the workpiece is the same as the direction of rotation of the milling cutter in the cutting zone. The chips have maximum thickness at the beginning, chip thickness then decreases until it becomes zero at the end of the cut.

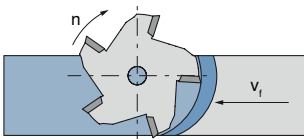
Unsuitable

Conventional milling

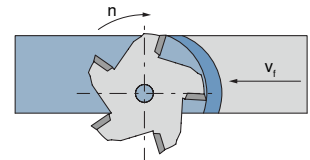


The feed direction of the workpiece is opposite to the direction of rotation of the milling cutter in the cutting zone. Chip thickness is zero at the beginning and increases until it reaches its maximum at the end of the cut.

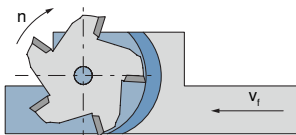
Cutter positioning



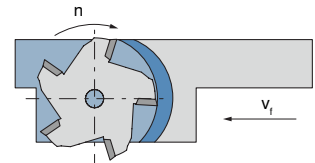
If possible the cutter should exit tangentially of the workpiece.



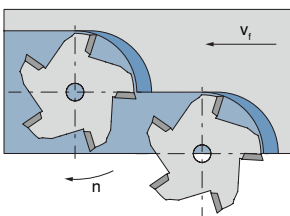
Workpiece situation



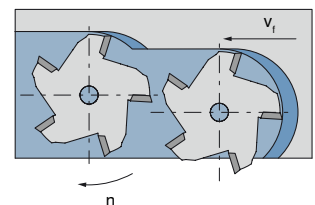
The workpiece should be clamped in such a way as to allow the cutter to emerge tangentially of the workpiece along the whole machining length.



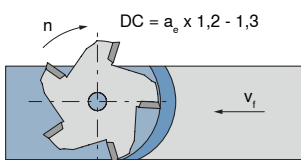
Overlapping



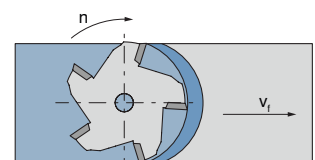
Either employ climb milling or ensure that the cutter comes out of the workpiece tangentially, as in the illustration on the left.



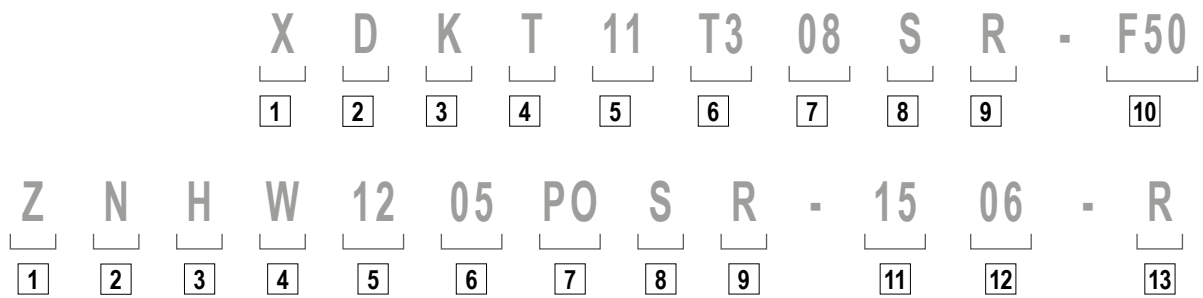
Cutter size



When face milling the diameter of the cutter should be 20–30 % larger than that of the workpiece.



ISO designation indexable milling inserts – inch



1

Insert shape

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		
Z	Special version	

2

Clearance angle

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

3

Tolerances

	IC ±inch	BS ±inch	S ±inch	IC = 1/4 / 3/8	IC = 1/2	IC = 5/8 / 3/4
A	0.0010	0.0002	0.0001	●	●	●
C	0.0010	0.0005	0.0001	●	●	●
E	0.0010	0.0010	0.0001	●	●	●
F	0.0005	0.0002	0.0001	●	●	●
G	0.0010	0.0010	0.0005	●	●	●
H	0.0005	0.0005	0.0010	●	●	●
J	0.0020 / 0.0031	0.0002 / 0.0002	0.0010 / 0.0010	●	●	●
K	0.0031 / 0.0039	0.0002 / 0.0002	0.0010 / 0.0010	●	●	●
M	0.0020 / 0.0031	0.0031 / 0.0051	0.0051 / 0.0051	●	●	●
N	0.0031 / 0.0039	0.0051 / 0.0059	0.0010 / 0.0010	●	●	●
U	0.0031 / 0.0051	0.0051 / 0.0079	0.0051 / 0.0051	●	●	●

7

Trailing edge land / corner radius

Radius	RE in inch	1. Designation	2. Designation
M0*		K _r	α'_n
02	0.008	A 45°	A 3°
04	0.016	D 60°	B 5°
08	0.031	E 75°	C 7°
12	0.047	F 85°	D 15°
		P 90°	E 20°
		Z Alternative	F 25°
			G 30°
			N 0°
			P 11°
			Z Alternative
			O

* Only with insert type "R"

8

Cutting edge

9

Direction of cut

ISO designation indexable milling inserts – inch

4

Characteristics

A	
F	
G	
M	
N	
Q	
R	
T	
U	
W	
X	Special version

5

Cutting length

IC inch	A	T	C/S	H	L	R	V	W	O	X	Z
0.193										07	
0.196						05					
0.219			05		08			03			
0.236											
1 / 4		11	06		10			04		06	
0.262	10										
0.267										11	
0.275											04
0.313			07								
0.315						08					
0.354					12						
0.366										15	
3 / 8	16	16	09		15			06	04		
0.376	15										
0.378										09	
0.394			10		11	10					12
0.472						12					
0.492										20	
1 / 2		12/22	12		20		22	08		12	
0.622			15		22			10			
0.630						16					
0.638				09							
0.659			16								
0.670			17								
0.676									06		
0.716									07		
3 / 4			19					13			
0.787						20					

6

Insert thickness

	S inch
01	0.063
T1	0.078
02	0.094
03	0.125
T3	0.156
04	0.187
05	0.219
06	0.250
07	0.312
09	0.375

10

Chip groove

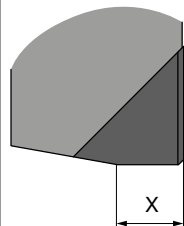
Chip breaker designation
F.. = fine
M.. = medium
R.. = roughing

Additional characteristics:
R = transition radius main/
secondary cutting edge
Q = Masterfinish

11

Manufacturer specification

Length of the finishing cutting edge

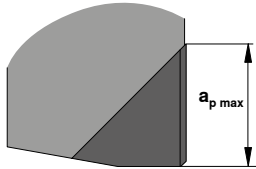


00	= 0.0 mm / 0.00 in
10	= 1.0 mm / 0.039 in
12	= 1.2 mm / 0.047 in
15	= 1.5 mm / 0.059 in
30	= 3.0 mm / 0.118 in
50	= 5.0 mm / 0.197 in

12

Manufacturer specification

$a_{p\ max}$



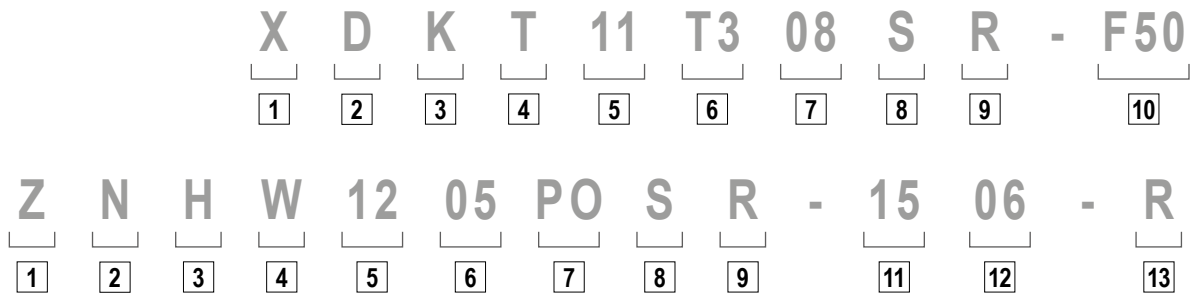
02	= 2.0 mm / 0.078 in
03	= 3.0 mm / 0.118 in
04	= 4.0 mm / 0.157 in
06	= 6.0 mm / 0.236 in
07	= 7.0 mm / 0.275 in
11	= 11.0 mm / 0.433 in

13

Manufacturer specification

F = Fine
M = Medium
R = Rough

ISO designation indexable milling inserts – metric



1

Insert shape

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	Special version	
Z	Special version	

2

Clearance angle

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

3

Tolerances

	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	●	●	●
K	0.08	0.005	0.025		●	
	0.10	0.005	0.025			●
M	0.05	0.013	0.025	●		
	0.08	0.013	0.025		●	
N	0.05	0.08	0.13			●
	0.08	0.13	0.13			●
U	0.08	0.13	0.13	●		
	0.13	0.20	0.13		●	
V	0.05	0.08	0.13			●
	0.08	0.13	0.13			●

7

Trailing edge land / corner radius

Radius	
	RE in inch
M0*	
02	0.2
04	0.4
08	0.8
12	1.2

* Only with insert type "R"

1. Designation	
	K _r
A	45°
D	60°
E	75°
F	85°
P	90°
Z	Alternative

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

8

Cutting edge

9

Direction of cut

ISO designation indexable milling inserts – metric

4

Characteristics

A	
F	
G	
M	
N	
Q	
R	
T	
U	
W	
X	Special version

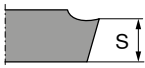
5

Cutting length

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

Insert thickness



	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

Chip groove

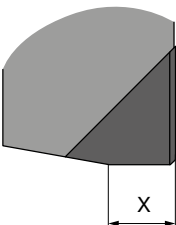
Chip breaker designation
F.. = fine
M.. = medium
R.. = roughing

Additional characteristics:
R = transition radius main/
secondary cutting edge
Q = Smoothing edge

11

Manufacturer specification

Length of the finishing cutting edge

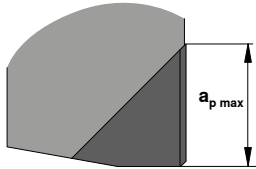


00 = 0.0 mm
10 = 1.0 mm
12 = 1.2 mm
15 = 1.5 mm
30 = 3.0 mm
50 = 5.0 mm

12

Manufacturer specification

$a_{p max}$



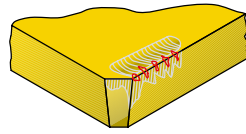
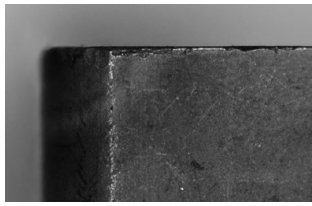
02 = 2.0 mm
03 = 3.0 mm
04 = 4.0 mm
06 = 6.0 mm
07 = 7.0 mm
11 = 11.0 mm

13

Manufacturer specification

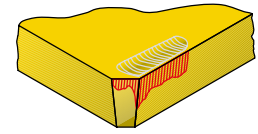
F = Fine
M = Medium
R = Rough

Cutting demands when milling



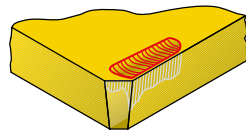
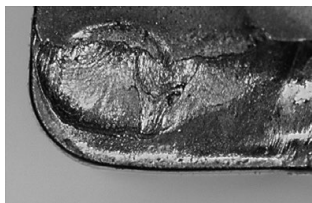
Edge chipping

Cutting speed
Feed per tooth
Toughness of grade
Cutting edge chamfer



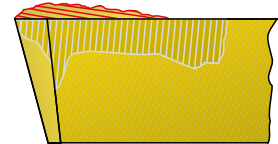
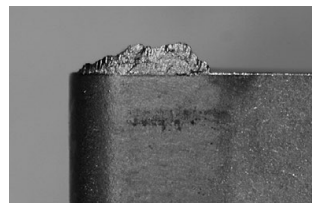
Wear on clearance face

Cutting speed
Feed per tooth
Abrasion resistant grade



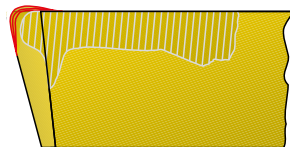
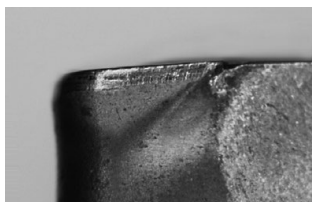
Cratering

Cutting speed
Feed per tooth
Abrasion resistant grade



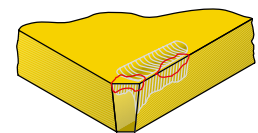
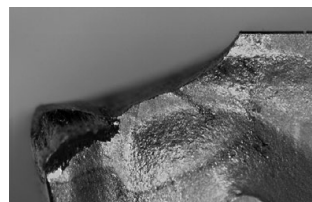
Built-up edge

Cutting speed
Feed per tooth
Wear resistance



Cutting-edge deformation

Cutting speed
Feed per tooth
Abrasion resistant grade

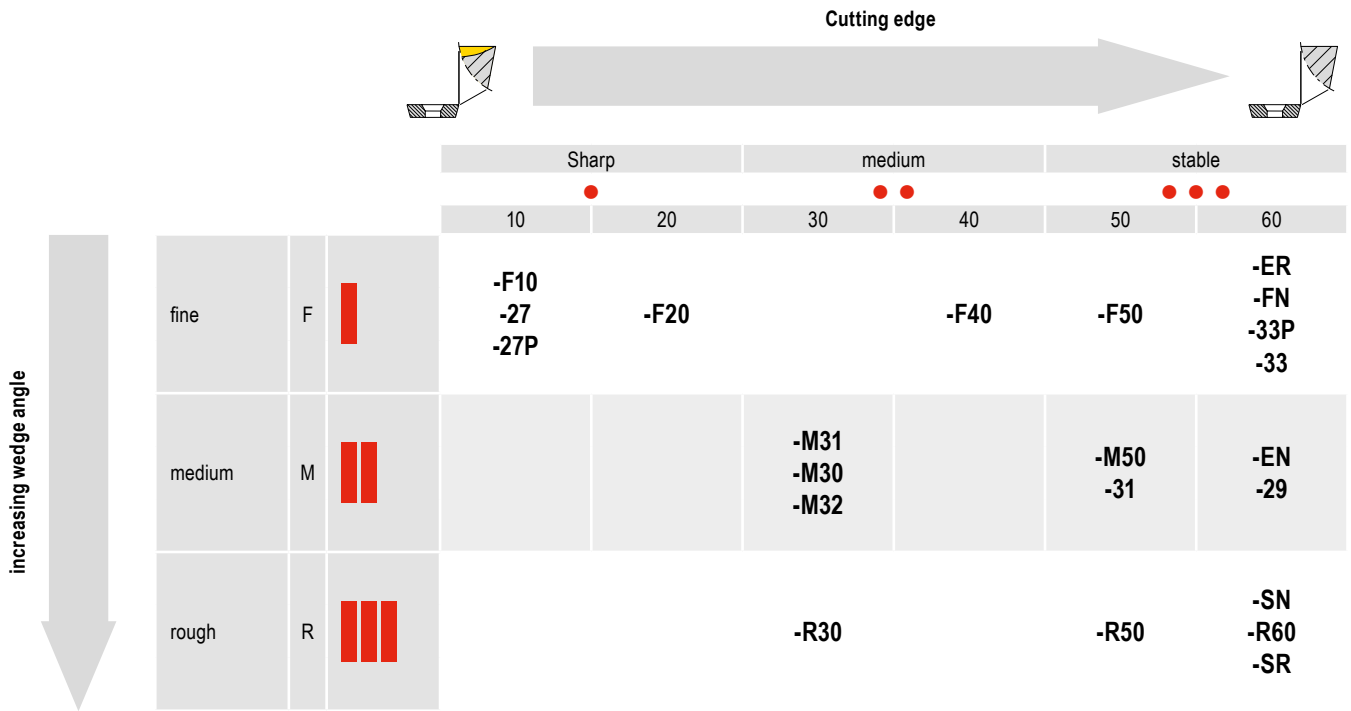


Cutting Edge Breakage

Cutting speed
Toughness of grade



Chip Breakers Overview



Chip breaker code

			Cutting edge		
			Sharp	medium	stable
			10-20	30-40	50-60
Application type	light	F	●	●●	●●●
	universal	M	●	●●	●●●
	difficult	R	●	●●	●●●

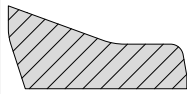
Example: Chip breaker -M50



Chip breaker description

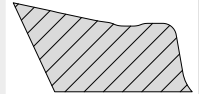
-27P

- ▲ Highly positive geometry
- ▲ Sharp cutting edges
- ▲ Reduced built up edge
- ▲ First choice for non-ferrous metals



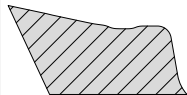
-M30

- ▲ Positive geometry
- ▲ Rounded cutting edge
- ▲ Medium rough machining
- ▲ First choice for martensitic stainless steels



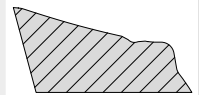
-F10

- ▲ Very positive geometry
- ▲ Sharp cutting edge
- ▲ Prevents sticking and edge build up
- ▲ First Choice for non-ferrous metal



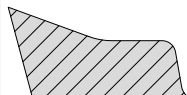
-M31

- ▲ Positive geometry
- ▲ Rounded cutting edge
- ▲ Finish and rough machining
- ▲ For unstable clamping situations
- ▲ For heat-resistant materials, titanium and super alloys



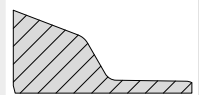
-27

- ▲ Highly positive geometry
- ▲ Sharp cutting edges
- ▲ First choice for non-ferrous metals



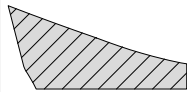
-M32

- ▲ Positive geometry
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ Medium rough machining
- ▲ First choice for martensitic stainless steels



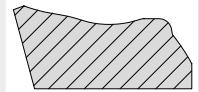
-F20

- ▲ Extremely positive geometry
- ▲ Lightly rounded cutting edge
- ▲ First choice for non-ferrous metals



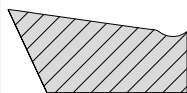
-M50

- ▲ Positive geometry with slightly negative protective chamfer
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ Light to medium rough machining
- ▲ First choice for general steels



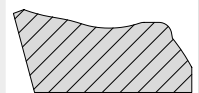
-F40

- ▲ Positive geometry
- ▲ Rounded cutting edge
- ▲ Finish and rough machining
- ▲ For unstable clamping situations
- ▲ For heat-resistant materials, titanium and super alloys



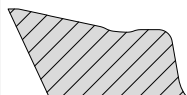
-31

- ▲ Positive geometry with neutral protective chamfer
- ▲ Rounded cutting edge
- ▲ Heavy rough machining
- ▲ Strongly interrupted cuts
- ▲ First choice for cast iron materials



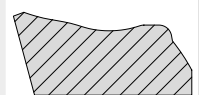
-F50

- ▲ Positive geometry with small positive protective chamfer
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ For unstable clamping situations
- ▲ Light rough machining
- ▲ First choice for stainless steels



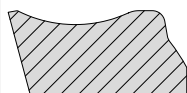
-29

- ▲ Positive geometry with slightly negative protective chamfer
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ Light to medium rough machining
- ▲ First choice for general steels



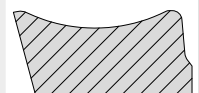
-33P

- ▲ Positive geometry with small neutral protective chamfer
- ▲ Low adhesion
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ For unstable clamping situations
- ▲ Light rough machining
- ▲ First choice for stainless steels



-33

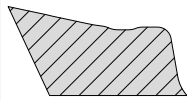
- ▲ Positive geometry with small neutral protective chamfer
- ▲ Rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ For unstable clamping situations
- ▲ Light rough machining
- ▲ First choice for stainless steels



Chip breaker description

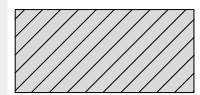
-29R

- ▲ Positive geometry with slightly negative protective chamfer
- ▲ Heavily rounded cutting edge
- ▲ Low cutting force and good stability
- ▲ Light to medium rough machining
- ▲ First choice for general steels



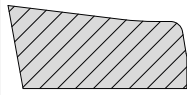
-ER

- ▲ Neutral Geometry
- ▲ Rounded cutting edge
- ▲ Universal application
- ▲ High surface quality due to face chamfer
- ▲ First choice for machining cast iron and non-ferrous metals



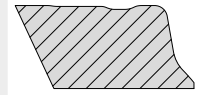
-R30

- ▲ Slightly positive geometry
- ▲ Rounded cutting edge
- ▲ Medium rough machining
- ▲ Strongly interrupted cuts
- ▲ First choice for cast iron materials



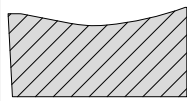
-EN

- ▲ Neutral geometry
- ▲ Rounded cutting edge
- ▲ High surface quality due to face chamfer (radial protective chamfer on indexable insert)
- ▲ First choice for machining cast iron and non-ferrous metals



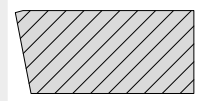
-R50

- ▲ Rugged geometry with protective chamfer
- ▲ Rounded cutting edge
- ▲ Rough machining
- ▲ Interrupted cuts
- ▲ Recommendation for cast iron materials



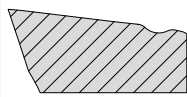
-SN

- ▲ Neutral geometry
- ▲ Rounded cutting edge
- ▲ High surface quality due to face chamfer (radial protective chamfer on indexable insert)
- ▲ Low cutting forces
- ▲ First choice for good flatness



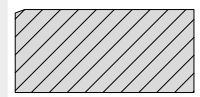
-R60

- ▲ Rugged geometry with protective chamfer
- ▲ Rounded cutting edge
- ▲ Rough machining
- ▲ For stable clamping situations
- ▲ Recommendation for high-strength steel materials



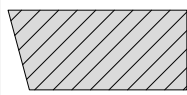
-SR

- ▲ Neutral geometry with negative protective chamfer
- ▲ Rounded cutting edge
- ▲ Robust indexable insert
- ▲ For poor machining conditions
- ▲ First choice for machining cast iron and steels



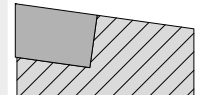
-FN

- ▲ Neutral and highly stable geometry
- ▲ Heavily rounded cutting edge
- ▲ For stable machining conditions
- ▲ First choice for hard machining up to approx. 50 HRC



-FR

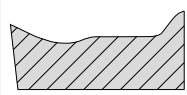
- ▲ Neutral Geometry
- ▲ Slightly rounded and stable cutting edge
- ▲ Associated with Ceramic and CBN cutting materials.
- ▲ For stable machining situations
- ▲ First choice for machining cast irons



Chip breaker description for MaxiMill Slot-SX

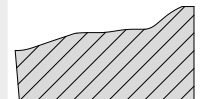
-27P

- ▲ Positive geometry
- ▲ Ground, sharp cutting edge
- ▲ Polished chip breaker
- ▲ Low cutting forces
- ▲ Fine to medium machining
- ▲ First choice for non-ferrous metals



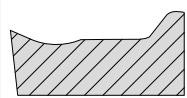
-M8

- ▲ Extremely positive geometry
- ▲ Ground cutting edge
- ▲ Low cutting forces
- ▲ Fine to medium machining
- ▲ First choice for difficult-to-machine and stainless materials
- ▲ Alternatively, can also be used for non-ferrous metals



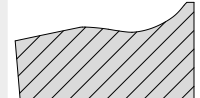
-F2

- ▲ Positive geometry
- ▲ Ground cutting edge
- ▲ Low cutting forces
- ▲ Fine to medium machining
- ▲ For stainless and steel materials



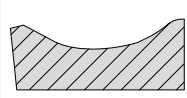
-M7

- ▲ Positive geometry
- ▲ Medium machining
- ▲ Universal application



-M1

- ▲ Stable cutting edge
- ▲ Medium to rough machining
- ▲ Best suited to steel materials



Grade description – Indexable insert countersink

BK8425

- ▲ Carbide, TiAlN/TiN-coated
- ▲ ISO | **P25** | **M25** | **K25**
- ▲ Universal grade with greater wear resistance thanks to innovative PVD multi-layer coating

K10

- ▲ Carbide, uncoated
- ▲ ISO | **K10**
- ▲ Uncoated carbide grade for machining grey cast iron or non-ferrous metals, depending on the cutting edge geometry

Chip breakers

-SM

- ▲ Rake angle 15°
- ▲ For universal use with medium machining
- ▲ Stable cutting edge

-U877

- ▲ Rake angle 6°
- ▲ circumferentially ground
- ▲ Three-ground chip breaker with second clearance angle for clearance with small tool diameters

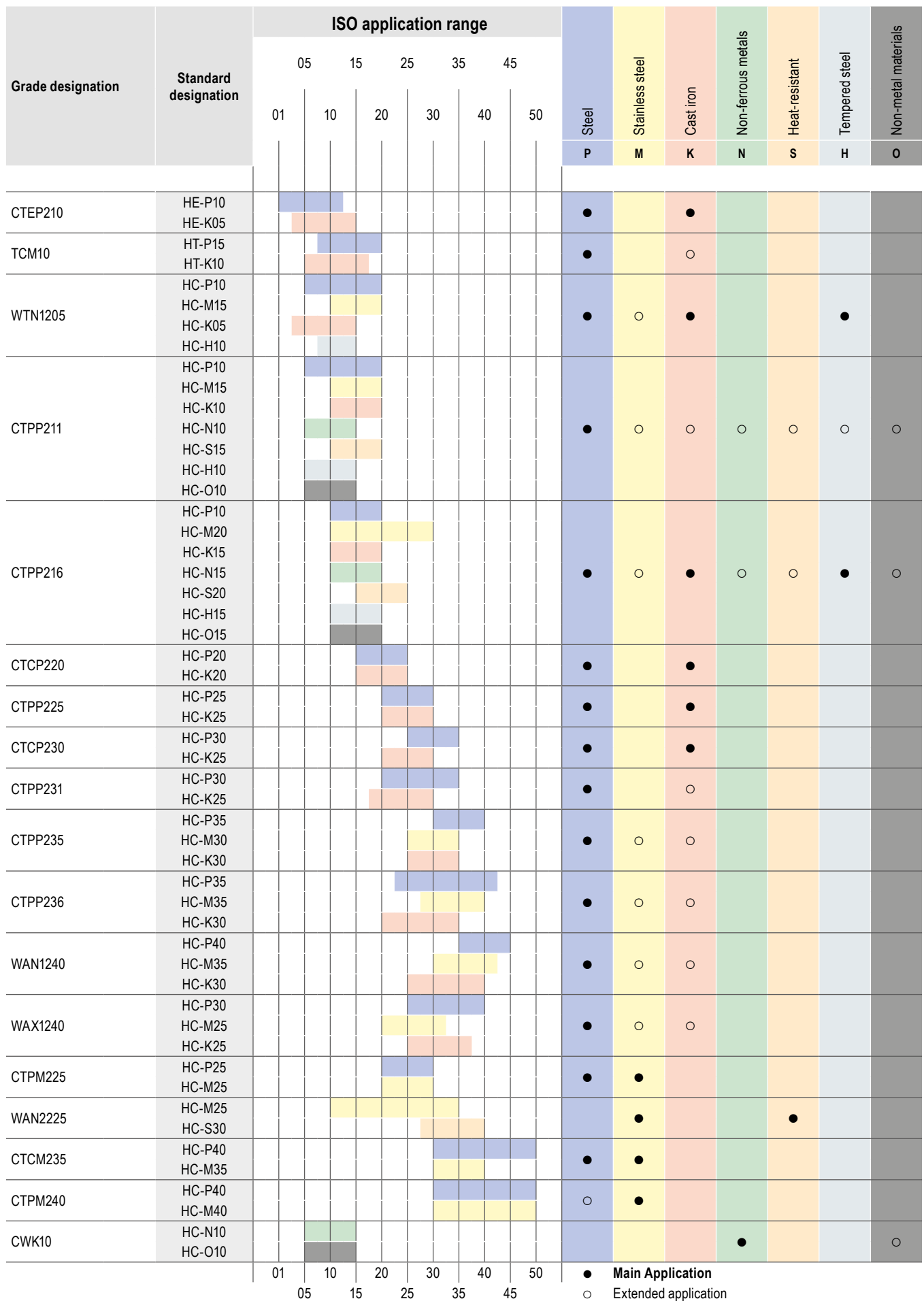
-G06

- ▲ Rake angle 6°
- ▲ Preferred application in P / M / K
- ▲ Characterized by a particularly stable wedge angle

-G12

- ▲ Rake angle 12°
- ▲ Preferred application in P / N / S
- ▲ is characterized by a particularly high cutting performance

Grades Overview

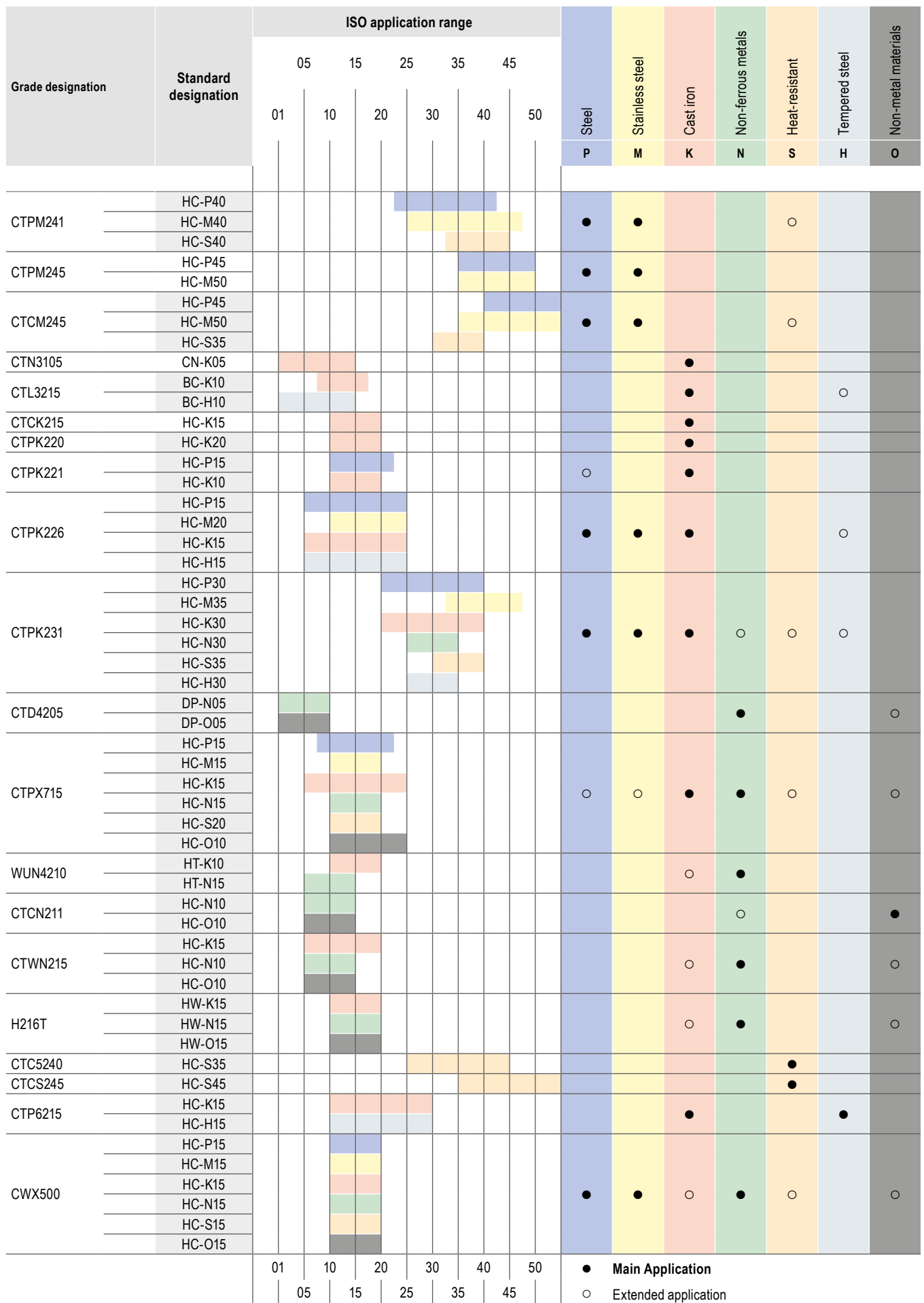


wear-resistant $v_c +$



$v_c -$ tough

Grades Overview

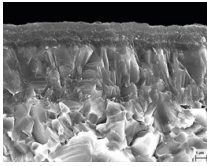
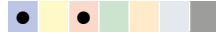


wear-resistant v_c+ v_c- tough

Grade description

CTEP210

P10 | K05



Specification:

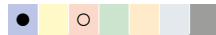
Composition: Cermet Co/Ni 12.2%; mixed carbide 71.4%; others; WC balance | Fine grain size | Hardness: HV₃₀ 1620 | Layer system: CVD TiCN-Al₂O₃

Application:

Coated Cermet grade with reserves of toughness for finish machining at high cutting speeds

TCM10

P15 | K10



Specification:

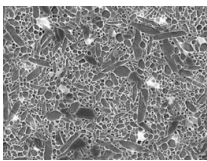
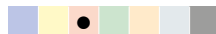
Composition: Co/Ni 12.2%; WC 15; TaNbC10.0%; TiCn balance | Hardness: HV₃₀ 1620 | Layer system: uncoated

Application:

Uncoated Cermet grade for the finishing of hardened steel

CTN3105

CN-K05



Specification:

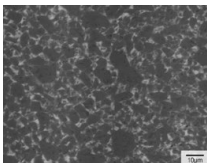
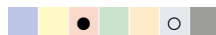
Composition: β - Si₃N₄ | Fine grain size | Hardness: HV₃₀ 1620 | Layer system: uncoated

Application:

Universal silicon nitride for the machining of cast iron materials

CTL3215

BC-K10 | BC-H10



Specification:

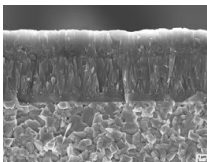
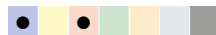
Composition: Cubic boron nitride (CBN) | 85 vol. + metallic binder phase | Cutting system: PVD

Application:

Coated cubic boron nitride with very good cutting toughness and good wear resistance for the machining of cast iron materials

CTCP220

HC-P20 | HC-K20



Specification:

Composition: Co 8.0%; mixed carbide 2.0%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1500 |

Layer system: CVD TiCN-Al₂O₃

Application:

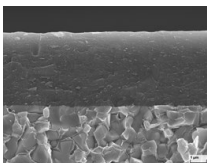
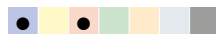
Dry machining, high cutting speed + more wear resistant grades to CTCP230

Material example:

Low material strength up to approx. 250 HB / 840 N/mm²

CTPP225

HC-P25 | HC-K25



Specification:

Composition: Co 8.0%; mixed carbide 2.0%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1500 | Layer system: PVD TiAlTaN

Application:

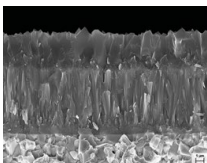
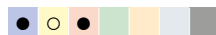
Dry or wet machining, face milling of steel materials, higher cutting speeds + more wear resistant grades to CTPP235

Material example:

Medium material strength up to approx. 300 HB / 1000 N/mm²

CTCP230

HC-P30 | HC-M25 | HC-K25



Specification:

Composition: Co 10.5%; mixed carbide 2.0%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1400 |

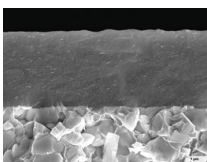
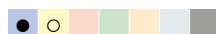
Layer system: CVD TiCN-Al₂O₃

Application:

Dry machining, universal grade for higher cutting speeds

CTPP235

HC-P35 | HC-M30



Specification:

Composition: Co 10.5%; mixed carbide 2.0%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1400 | Layer system: PVD TiAlTaN

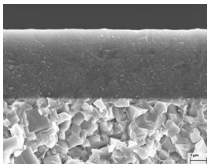
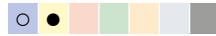
Application:

Wet machining, universal grade for medium cutting speeds

Grade description

CTPM225

HC-P25 | HC-M25



Specification:

Composition: Co 9.0%; mixed carbide 0.75%; WC balance | Fine grain size 0.7-1µm | Hardness: HV₃₀ 1590 | Layer system: PVD TiAlTaN

Application:

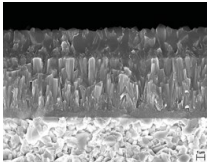
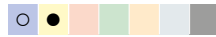
Dry or wet machining at medium cutting speeds

Material example:

Austenitic stainless steels

CTCM235

HC-P40 | HC-M35



Specification:

Composition: Co 12.5%; mixed carbide 2.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1380 | Layer system: CVD TiCN-Al₂O₃

Application:

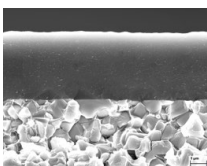
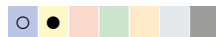
Dry machining for medium cutting speeds

Material example:

Martensitic stainless steels

CTPM240

HC-P40 | HC-M40



Specification:

Composition: Co 12.0%; mixed carbide 2.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1380 | Layer system: PVD TiAlTaN

Application:

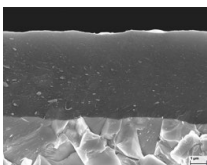
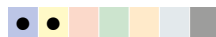
Wet machining, universal grade for higher cutting speeds

Material example:

Austenitic stainless steels

CTPM245

HC-P45 | HC-M45



Specification:

Composition: Co 10.0%; others 1.5%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1330 | Layer system: PVD TiAlTaN

Application:

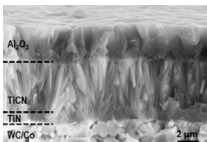
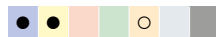
Dry or wet machining

Material example:

High-alloy martensitic and austenitic stainless steel

CTCM245

HC-P45 | HC-M50 | HC-S35



Specification:

Composition: Co 10.0%; others 1.5%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1330 | Layer system: CVD TiCN-Al₂O₃

Application:

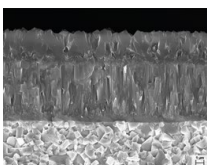
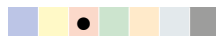
Dry machining

Material example:

High-alloy martensitic and austenitic stainless steel

CTCK215

HC-K15



Specification:

Composition: Co 6.0%; mixed carbide 2.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1630 | Layer system: CVD TiCN-Al₂O₃

Application:

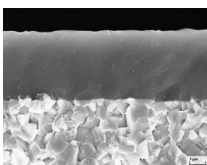
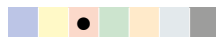
Special grade for the dry machining of cast iron materials at high cutting speeds

Material example:

Cast iron materials such as GG25 and GGG40

CTPK220

HC-K20



Specification:

Composition: Co 6.0%; mixed carbide 2.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1630 | Layer system: PVD TiAlTaN

Application:

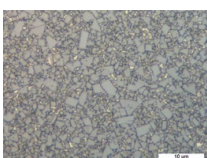
Special grade for the wet machining of cast iron materials in demanding application ranges

Material example:

High-strength cast iron materials such as GGG50 and GGG70

CTWN215 (H216T)

K15 | N15 | O15



Specification:

Composition: Co 6.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1650 | Layer system: uncoated

Application:


Uncoated carbide for the machining of aluminium and non-ferrous metals

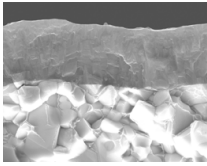
Material example:

Non-ferrous metals such as AlMgSi1

Grade description

CTPX715

ISO | P15 | M15 | K15 | N15 | S20 | O10 



Specification:

Composition: Co 6.0%; WC balance | Fine grain size 1µm | Hardness: HV₃₀ 1650 | Layer system: PVD AlTiN

Application:

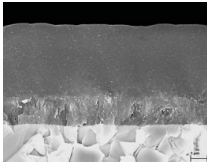
For the machining of aluminium and non-ferrous metals

Material example:

Non-ferrous metals such as AlMgSi1 or GGG30 cast iron

CTC5240

HC-S40 



Specification:

Composition: Co 10.0%; WC balance | Medium grain size 2µm | Hardness: HV₃₀ 1330 | Layer system: CVD TiN-TiB₂

Application:

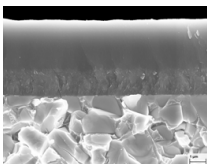
Special wet machining grade for the machining of titanium materials

Material example:

Titanium Ti6Al4V

CTCS245

HC-S45 



Specification:

Composition: Co 12.0%; mixed carbide 1.8%; WC balance | Medium grain size 1-2µm | Hardness: HV₃₀ 1260 | Layer system: CVD TiN-TiB₂

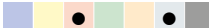
Application:

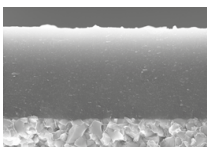
Wet machining special grade for the machining of nickel-based alloys or the dry machining of austenitic stainless steels

Material example:

Heat-resistant materials such as Inconel, Rene, Nimonic, etc.

CTP6215

HC-H15 | HC-K15 



Specification:

Composition: Co 12.0%; WC balance | Ultra-fine grain size 0.4µm | Hardness: HV₃₀ 1630 | Layer system: PVD TiAlN


Application:

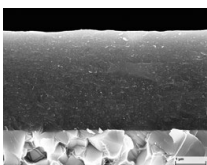
For the machining of high-strength martensitic tool steels 400HB / 1300 N/mm²

Material example:

Tool steel 1.2379, 1.2312

CTP1340

ISO | P30 | K30 | N30 | S30 | O30 



Specifications:

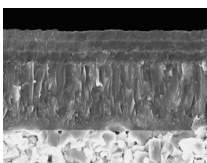
Composition: Co 9.0%; mixed carbide 0.75%; WC balance | grain size: 0.7–1 µm | Hardness: HV₃₀ 1590 | Layer system: PVD TiAlTaN

Recommended use:

The universal high-performance grade for steels, austenitic steel, cast iron materials and heat-resistant alloys

CTCP335

ISO | P35 | M30 | K35 



Specifications:

Composition: Co 10.5%; mixed carbide 1.9%; WC balance | grain size: 1 µm | Hardness: HV₃₀ 1370 |

Layer system: CVD TiCN-Al₂O₃ Multilayer

Recommended use:

The reliable choice for machining steel and cast iron materials.

Grade description

C T C P 2 2 0 (Example)

CT
CERATIZIT

Coating

W Uncoated carbide	S Mixed ceramic
C CVD-coated carbide	K Whisker ceramic
P PVD-coated carbide	I SiAlON
T Cermet, uncoated	D PDC
E Cermet, coated	B PcBN
N Silicon nitride, uncoated	L PcBN coated
M Silicon nitride, coated	H HSS sintered

Main application – material

P Steel
M Stainless steel
K Cast iron
N Non-ferrous metals
S Heat-resistant
H Tempered steel
O Non-metal materials
X Universal application

Application

1 Turning
2 Milling
3 Grooving
4 Drilling
5 Thread turning
6 Others
7 Several processes

Degree of hardness

