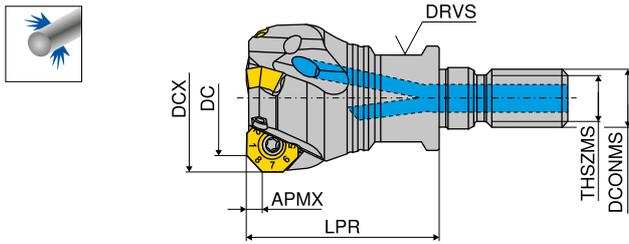
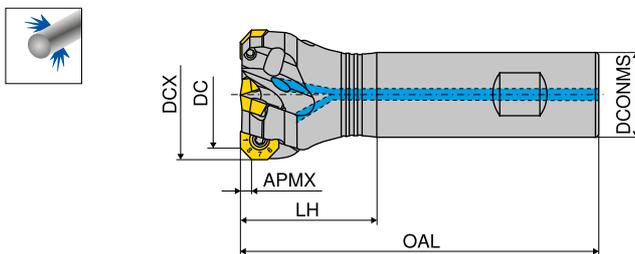


MaxiMill – Screw in cutter G 274-04/-09



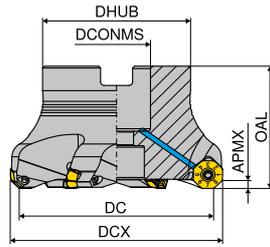
Designation	DC mm	DCX mm	ZNF	APMX mm	LPR mm	THSZMS	DCONMS mm	DRVS mm	torque moment Nm	Insert	2B/40	
											Article no. 50 742 ... EUR	
G274.20.R.03-09	20	25,5	3	3,8	35	M12	12,5	17	1,2	OF.. 0403 / SF.. 0903	268,10	020
G274.25.R.04-09	25	30,6	4	3,8	35	M12	12,5	17	1,2	OF.. 0403 / SF.. 0903	305,30	025
G274.32.R.05-09	32	37,6	5	3,8	35	M16	17,0	24	1,2	OF.. 0403 / SF.. 0903	342,70	032

MaxiMill – End milling cutter C 274-04/-09



Designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	LH mm	DCONMS mm	torque moment Nm	Insert	A  2B/40		B  2B/40	
										Article no. 50 743 ... EUR		Article no. 50 743 ... EUR	
C274.20.R.03-09-A/B20-25	20	25,5	3	3,8	77	25	20	1,2	OF.. 0403 / SF.. 0903	268,10	020	268,10	120
C274.25.R.04-09-A/B20-32	25	30,6	4	3,8	84	32	20	1,2	OF.. 0403 / SF.. 0903	305,30	025	305,30	125
C274.32.R.05-09-A/B25-40	32	37,6	5	3,8	98	40	25	1,2	OF.. 0403 / SF.. 0903	342,70	032	342,70	132

MaxiMill – Shell mill A 274-04/-09



Designation	DC	DCX	ZNF	APMX	OAL	DHUB	DCONMS _{H6}	torque moment Nm	Insert	2B/40		
										Article no. 50 744 ...	Article no. 50 744 ...	
	mm	mm		mm	mm	mm	mm			EUR	EUR	
A274.32.R.05-09	32	37,7	5	3,8	40	38	16	1,2	OF.. 0403 / SF.. 0903		342,70	032
A274.40.R.04-09	40	45,7	4	3,8	40	38	16	1,2	OF.. 0403 / SF.. 0903	342,70	040	
A274.40.R.06-09	40	45,7	6	3,8	40	38	16	1,2	OF.. 0403 / SF.. 0903		379,90	140
A274.50.R.05-09	50	55,7	5	3,8	40	48	22	1,2	OF.. 0403 / SF.. 0903	398,60	050	
A274.50.R.07-09	50	55,7	7	3,8	40	48	22	1,2	OF.. 0403 / SF.. 0903		417,40	150
A274.63.R.06-09	63	68,7	6	3,8	40	48	22	1,2	OF.. 0403 / SF.. 0903	454,70	063	
A274.63.R.09-09	63	68,7	9	3,8	40	48	22	1,2	OF.. 0403 / SF.. 0903		510,70	163
A274.80.R.07-09	80	85,7	7	3,8	50	58	27	1,2	OF.. 0403 / SF.. 0903	510,70	080	
A274.80.R.11-09	80	85,7	11	3,8	50	58	27	1,2	OF.. 0403 / SF.. 0903		585,30	180
A274.100.R.09-09	100	105,7	9	3,8	50	78	32	1,2	OF.. 0403 / SF.. 0903	629,80	100	
A274.100.R.13-09	100	105,7	13	3,8	50	78	32	1,2	OF.. 0403 / SF.. 0903		704,50	200
A274.125.R.12-09	125	130,7	12	3,8	63	88	40	1,2	OF.. 0403 / SF.. 0903	767,40	125	

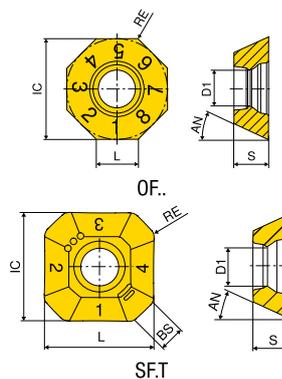
Spare parts DC	Y7		Y7		Y7		2A/28		2A/28		2A/28		Y7	
	Article no. 80 950 ...	EUR	Article no. 80 397 ...	EUR	Article no. 80 950 ...	EUR	Article no. 70 950 ...	EUR	Article no. 70 950 ...	EUR	Article no. 70 950 ...	EUR	Article no. 80 950 ...	EUR
20 - 25	4,76	043			10,20	125		4,38	303	4,09	133	118,90	191	
32 - 40	4,76	043	3,91	040	10,20	125	12,48	151	4,38	303	4,09	133	118,90	191
50 - 125	4,76	043			10,20	125		4,38	303	4,09	133	118,90	191	

Two insert types – ONE Cutter



OFHT / OFHW / SFHT / SFKT

Designation	IC	D1	L	BS	S	AN
	mm	mm	mm	mm	mm	°
OFH. 0403..	9,52	3,35	3,94	-	3,18	25
SF.T 0903..	9,80	3,35	9,00	2,25	3,50	25



OFHT

ISO	RE	-F50 CTCP220		-F50 CTPP225		-F50 CTCP230		-M50 CTCP230		-F50 CTPP235		-M50 CTPP235	
		Article no.	EUR										
040305SN	0,5	51 002 ...	15,76	51 002 ...	15,76	51 002 ...	15,76	51 003 ...	15,76	51 002 ...	15,76	51 003 ...	15,76
		255		055		005		005		105		105	
Steel		•		•		•		•		•		•	
Stainless steel						○		○		○		○	
Cast iron													
Non ferrous metals													
Heat resistant alloys													
hardened materials													

OFHT / OFHW

ISO	RE	-F50 CTPM225		-F50 CTCM235		-F50 CTPM240		-M50 CTPM240		-F50 CTPM245		CTPM245	
		Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR
040302EN	0,2	51 002 ...	15,76	51 002 ...	15,76	51 002 ...	51 003 ...	15,76	51 002 ...	17,37	51 105 ...	17,37	452
040305SN	0,5	205		305		405		405		455		452	
Steel		○		○		○		○		•		•	
Stainless steel										•		•	
Cast iron													
Non ferrous metals													
Heat resistant alloys													
hardened materials													

OFHT / OFHW

ISO	RE	-M50 CTCK215		-F10 CTWN215		-F50 CTC5240		CTC5240		-F50 CTCS245	
		-M50 DCX3215		-F10 CWK4615		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
		OFHT 1B/61		OFHT 1B/61		OFHT 1H/D4		OFHW 1H/D4		OFHT 1H/D4	
		Article no. 51 003 ...		Article no. 50 459 ...		Article no. 51 002 ...		Article no. 50 457 ...		Article no. 51 002 ...	
		EUR		EUR		EUR		EUR		EUR	
040302EN	0,2							17,37	504		
040305FN	0,5			16,71	505						
040305SN	0,5	15,76	505			17,37	15500			17,37	555
Steel			○								
Stainless steel											
Cast iron			●	○							
Non ferrous metals				●							
Heat resistant alloys						●		●			●
hardened materials											

SFHT / SFKT

ISO	RE	-F50 CTCP220		-M50 CTCP220		-F50 CTPP225		-M50 CTPP225	
		-F50 DCX1220		-M50 DCX1220		-F50 DPX1225		-M50 DPX1225	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
									
		SFHT 1B/61		SFKT 1B/61		SFHT 1B/61		SFKT 1B/61	
		Article no. 51 012 ...		Article no. 51 013 ...		Article no. 51 012 ...		Article no. 51 013 ...	
		EUR		EUR		EUR		EUR	
0903AFSR	1,0	15,76	270	11,61	270	15,76	070	11,61	070
Steel		●		●		●		●	
Stainless steel		○		○		○		○	
Cast iron		○		○		○		○	
Non ferrous metals		○		○		○		○	
Heat resistant alloys		○		○		○		○	
hardened materials		○		○		○		○	

SFHT / SFKT

ISO	RE	-F50 CTCP230		-M50 CTCP230		-F50 CTPP235		-M50 CTPP235	
		-F50 DCX1230		-M50 DCX1230		-F50 DPX1235		-M50 DPX1235	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
									
		SFHT 1B/61		SFKT 1B/61		SFHT 1B/61		SFKT 1B/61	
		Article no. 51 012 ...		Article no. 51 013 ...		Article no. 51 012 ...		Article no. 51 013 ...	
		EUR		EUR		EUR		EUR	
0903AFSR	1,0	15,76	020	11,61	020	15,76	120	11,61	120
Steel		●		●		●		●	
Stainless steel		○		○		○		○	
Cast iron		○		○		○		○	
Non ferrous metals		○		○		○		○	
Heat resistant alloys		○		○		○		○	
hardened materials		○		○		○		○	

SFHT / SFKT

		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245
		-F50 DPX2225	-M50 DPX2225	-F50 DCX2235	-F50 DPX2240		-F50 DPX2245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		SFHT 1B/61	SFKT 1B/61	SFHT 1B/61	SFHT 1B/61	NEW SFKT 1B/61	SFHT 1H/17
ISO	RE	Article no. 51 012 ...	Article no. 51 013 ...	Article no. 51 012 ...	Article no. 51 012 ...	Article no. 51 013 ...	Article no. 51 012 ...
	mm	EUR	EUR	EUR	EUR	EUR	EUR
0903AFSR	1,0	15,76 220	11,61 220	15,76 320	15,76 420	11,61 42000	19,60 470
Steel		○	○	○	○	○	●
Stainless steel		●	●	●	●	●	●
Cast iron							
Non ferrous metals							
Heat resistant alloys							
hardened materials							

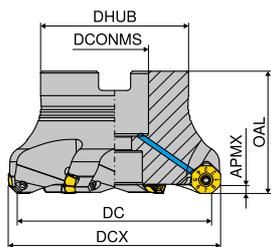
SFKT / SFHT

		-R50 CTCK215	-R50 CTPK220	-F10 CTWN215	-F40 CTC5240
		-R50 DCX3215	-R50 DPX3220	-F10 CWK4615	-F40 HCF5240
		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
					
		SFKT 1B/61	SFKT 1B/61	SFHT 1B/61	SFHT 1H/D4
ISO	RE	Article no. 51 065 ...	Article no. 51 065 ...	Article no. 50 514 ...	Article no. 50 514 ...
	mm	EUR	EUR	EUR	EUR
0903AFFR	1,0			18,90 505	
0903AFSR	1,0	11,61 520	11,61 620		19,60 504
Steel			○	○	
Stainless steel					
Cast iron			●	●	○
Non ferrous metals					●
Heat resistant alloys					
hardened materials					●

Milling guide

Machining strategy	→ 140	ISO Designation System	→ 194+195
Grade description	→ 209+210	Cutting data approximate values	→ 140
Starting Parameter	→ 141		

MaxiMill – Shell mill A 274-05/-12



Designation	DC	DCX	ZNF	APMX	OAL	DHUB	DCONMS _{H6}	torque moment Nm	Insert	2B/40	
										Article no. 50 772 ...	EUR
A274.40.R.03-12	40	48,0	3	6	40	38	16	3,2	OFHT 0504 / SFKT 1204	258,00	24000
A274.40.R.04-12	40	48,0	4	6	40	38	16	3,2	OFHT 0504 / SFKT 1204	338,50	04000
A274.50.R.05-12	50	58,0	5	6	40	43	22	3,2	OFHT 0504 / SFKT 1204	429,90	050
A274.50.R.04-12	50	58,1	4	6	40	43	22	3,2	OFHT 0504 / SFKT 1204	343,90	25000
A274.63.R.06-12	63	71,0	6	6	40	48	22	3,2	OFHT 0504 / SFKT 1204	515,90	063
A274.63.R.05-12	63	71,1	5	6	40	48	22	3,2	OFHT 0504 / SFKT 1204	440,40	26300
A274.80.R.06-12	80	88,0	6	6	50	58	27	3,2	OFHT 0504 / SFKT 1204	537,30	28000
A274.80.R.08-12	80	88,0	8	6	50	58	27	3,2	OFHT 0504 / SFKT 1204	687,90	080
A274.100.R.10-12	100	107,9	10	6	50	78	32	3,2	OFHT 0504 / SFKT 1204	849,00	100
A274.100.R.08-12	100	108,0	8	6	50	78	32	3,2	OFHT 0504 / SFKT 1204	709,40	30000
A274.125.R.12-12	125	132,9	12	6	63	88	40	3,2	OFHT 0504 / SFKT 1204	1.037,00	125
A274.125.R.09-12	125	133,0	9	6	63	88	40	3,2	OFHT 0504 / SFKT 1204	889,20	32500
A274.160.R.11-12	160	133,0	11	6	63	88	40	3,2	OFHT 0504 / SFKT 1204	1.081,00	36000 ¹⁾
A274.160.R.14-12	160	167,9	14	6	63	98	40	3,2	OFHT 0504 / SFKT 1204	1.376,00	16000 ¹⁾

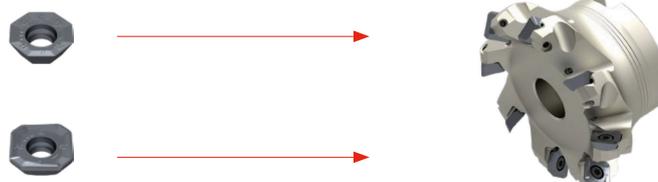
1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm

Spare parts DC

40 - 160

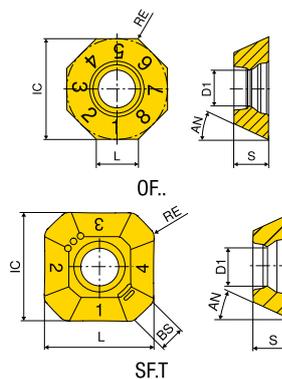
Y7	Y7	2A/28	2A/28	Y7
Article no. 80 950 ...	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 80 950 ...
EUR 5,26	EUR 11,89	EUR 4,38	EUR 4,61	EUR 131,90
054	128	303	340	193

Two insert types – ONE Cutter



OFHT / SFHT / SFKT

Designation	IC	D1	L	BS	S	AN
	mm	mm	mm	mm	mm	°
OFHT 0504..	12,7	4,8	4,5	-	4,76	25
SF.T 1204..	12,7	4,8	12,7	1,42	4,76	25



OFHT

ISO	RE	-F50 CTCP230				-M50 CTCP230				-F50 CTPP235				-M50 CTPP235			
		-F50 DCX1230				-F50 DPX1235				-F50 DPX1235				-M50 DPX1235			
		DRAGONSKIN				DRAGONSKIN				DRAGONSKIN				DRAGONSKIN			
		OFHT 1B/61				OFHT 1B/61				OFHT 1B/61				OFHT 1B/61			
		Article no. 51 002 ...				Article no. 51 003 ...				Article no. 51 002 ...				Article no. 51 003 ...			
		EUR 17,33 010				EUR 17,33 01000				EUR 17,33 110				EUR 17,33 11000			
050410SN	1,0																
Steel						●	●	●	●								
Stainless steel						○	○	○	○								
Cast iron																	
Non ferrous metals																	
Heat resistant alloys																	
hardened materials																	

OFHT

ISO	RE	-F50 CTPM225		-M50 CTPM225		-F50 CTCM235		-F50 CTPM240		-M50 CTPM240		-F50 CTPM245	
		-F50 DPX2225		-M50 DPX2225		-F50 DCX2235		-F50 DPX2240		-F50 DPX2245		-F50 DPX2245	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
		OFHT 1B/61		OFHT 1B/61		OFHT 1B/61		OFHT 1B/61		OFHT 1B/61		OFHT 1H/17	
		Article no. 51 002 ...		Article no. 51 003 ...		Article no. 51 002 ...		Article no. 51 002 ...		Article no. 51 003 ...		Article no. 51 002 ...	
		EUR 17,33 210		EUR 17,33 210		EUR 17,33 310		EUR 17,33 410		EUR 17,33 41000		EUR 19,10 460	
050410SN	1,0												
Steel													●
Stainless steel			●		●		●		●		●		●
Cast iron													
Non ferrous metals													
Heat resistant alloys													
hardened materials													

OFHT

-F10
CTWN215

-F50
CTC5240

DRAGONSKIN



OFHT

OFHT

NEW 1B/61

NEW 1H/D4

Article no.

Article no.

51 122 ...

51 002 ...

EUR

EUR

20,79 36000

19,10 16000

ISO	RE
	mm
050410FN	1,0
050410SN	1,0

Steel	
Stainless steel	
Cast iron	○
Non ferrous metals	●
Heat resistant alloys	●
hardened materials	

SFHT / SFKT

-F50
CTCP230

-M50
CTCP230

-F50
CTPP235

-M50
CTPP235

-M50
DCX1230

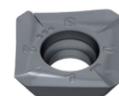
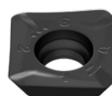
-M50
DPX1235

DRAGONSKIN

DRAGONSKIN

DRAGONSKIN

DRAGONSKIN



SFHT

SFKT

SFHT

SFKT

NEW 1B/61

1B/61

NEW 1B/61

1B/61

Article no.

Article no.

Article no.

Article no.

51 012 ...

51 013 ...

51 012 ...

51 013 ...

EUR

EUR

EUR

EUR

17,33 02500

12,77 025

17,33 12500

12,77 125

ISO	RE
	mm
1204AFSR	1,0

Steel	●	●	●	●
Stainless steel	○	○	○	○
Cast iron				
Non ferrous metals				
Heat resistant alloys				
hardened materials				

SFHT / SFKT

		-F50 CTPM225	-M50 CTPM225	-F50 CTCM235	-M50 CTCM235	-F50 CTPM240	-M50 CTPM240	-F50 CTPM245
		-F50 DPX2225	-M50 DPX2225	-F50 DCX2235	-M50 DCX2235		-M50 DPX2240	
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		SFHT	SFKT	SFHT	SFKT	SFHT	SFKT	SFHT
		1B/61	1B/61	1B/61	1B/61	NEW 1B/61	1B/61	NEW 1H/17
ISO	RE	Article no.	Article no.	Article no.				
	mm	51 012 ...	51 013 ...	51 012 ...	51 013 ...	51 012 ...	51 013 ...	51 012 ...
		EUR	EUR	EUR	EUR	EUR	EUR	EUR
1204AFSR	1,0	17,33 225	12,77 225	17,33 325	12,77 325	17,33 42500	12,77 425	21,15 47500
Steel		○	○	○	○	○	○	●
Stainless steel		●	●	●	●	●	●	●
Cast iron								
Non ferrous metals								
Heat resistant alloys								
hardened materials								

SFHT

		-F10 CTWN215	-F40 CTC5240
			DRAGONSKIN
			
		SFHT	SFHT
		NEW 1B/61	NEW 1H/D4
ISO	RE	Article no.	Article no.
	mm	51 123 ...	50 514 ...
		EUR	EUR
1204AFER	1,0		
1204AFFR	1,0	20,79 37000	21,58 50900
Steel			
Stainless steel			
Cast iron			○
Non ferrous metals			●
Heat resistant alloys			
hardened materials			●

Milling guide

Machining strategy	→ 142	ISO Designation System	→ 194+195
Grade description	→ 209+210	Cutting data approximate values	→ 142
Starting Parameter	→ 143		

System MaxiMill 274-04/-09

Cutting data recommendations/Technology data

System Maximill 274 OFHT-04

Material	F			M			R		
	m/min	f _z mm	a _p mm	m/min	f _z mm	a _p mm	m/min	f _z mm	a _p mm
Steel	50-350	0,1-0,25	2,5	60-280	0,1-0,3	2,5	60-280	0,1-0,3	2,5
Stainless steel	60-270	0,1-0,25	2,5	60-270	0,1-0,3	2,5	60-270	0,1-0,3	2,5
Cast iron				130-360	0,1-0,3	2,5	130-360	0,1-0,3	2,5
Non-ferrous metals	160-1500	0,05-0,4	2,5	160-1500	0,05-0,4	2,5	160-1500	0,05-0,4	2,5
Heat resistant alloys	25-80	0,1-0,25	2,5	25-80	0,1-0,25	2,5			
hardened materials									

Detailed information on cutting speed for each grade can be found on → page 138+139

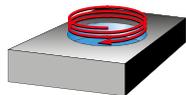
System MaxiMill 274 SFKT-09

Material	F			M			R		
	m/min	f _z mm	a _p mm	m/min	f _z mm	a _p mm	m/min	f _z mm	a _p mm
Steel	50-350	0,1-0,25	3,8	60-280	0,1-0,3	3,8	60-280	0,1-0,3	3,8
Stainless steel	60-270	0,1-0,25	3,8	60-270	0,1-0,3	3,8	60-270	0,1-0,3	3,8
Cast iron	110-130	0,05-0,4		130-360	0,1-0,35	3,8	130-360	0,1-0,35	3,8
Non-ferrous metals	160-1500	0,05-0,4	3,8	160-1500	0,05-0,4	3,8	160-1500	0,05-0,4	3,8
Heat resistant alloys	25-80	0,1-0,25	3,8	25-80	0,1-0,25	3,8	25-80	0,1-0,25	3,8
hardened materials									

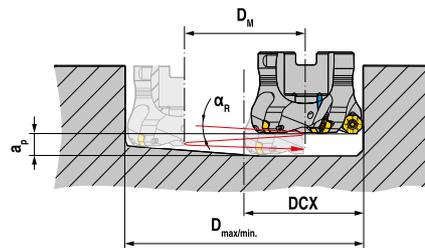
Detailed information on cutting speed for each grade can be found on → page 138+139

Machining strategy

Helical plunge milling



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



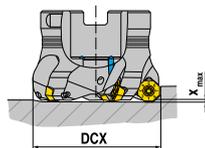
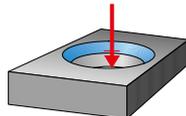
OF..04

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

SF..09

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

Axial plunging



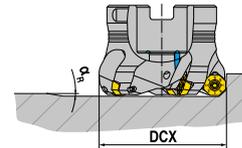
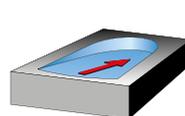
OF..04

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

SF..09

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

Angled ramping



OF..04

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

SF..09

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

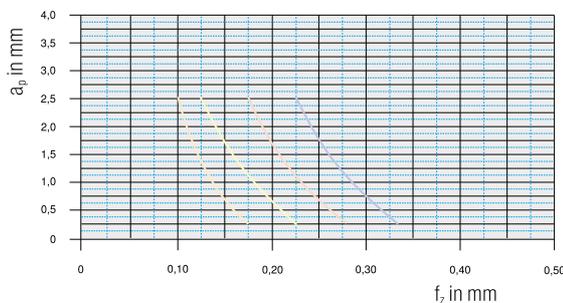
System MaxiMill 274-04

Starting Parameter

Example materials				
Steel	1000 N/mm ²	1.15	1.2312	40CrMnMoS 8-6
Stainless steel	600 N/mm ²	2.6	1.4571	X6CrNiMoTi 1712 2
Cast iron	180 HB	3.1	EN-GJL-250	EN-GJL-250 (GG25)
Heat resistant alloys	1450 N/mm ²	5.8	Inconel 625	Inconel 718



OF.. 04



Material		Inserts		v _c in m/min	Coolant
Steel	1.2312	OFHT040305SN-M50	CTPP235 (DPX1235)	200	Dry
Stainless steel	1.4571	OFHT040305SN-F50	CTPM240 (DPX2240)	180	Dry
Cast iron	5.1301	OFHT040305SN-M50	CTCK215 (DCX3215)	250	Dry
Heat resistant alloys	2.4856	OFHT040305SN-F50	CTC5240 (HCF5240)	35	Emulsion

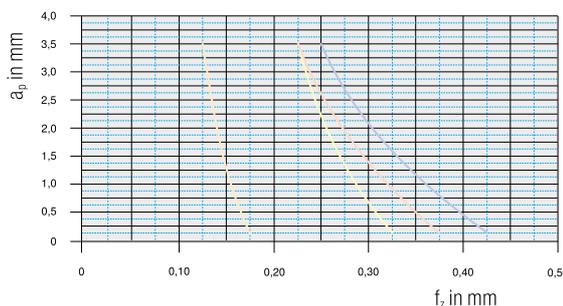
System MaxiMill 274-09

Starting Parameter

Example materials				
Steel	1000 N/mm ²	1.15	1.2312	40CrMnMoS 8-6
Stainless steel	600 N/mm ²	2.6	1.4571	X6CrNiMoTi 1712 2
Cast iron	180 HB	3.1	EN-GJL-250	EN-GJL-250 (GG25)
Heat resistant alloys	1450 N/mm ²	5.8	Inconel 625	Inconel 718



SF.. 09



Material		Inserts		v _c in m/min	Coolant
Steel	1.2312	SFKT0903AFSR-M50	CTPP235 (DPX1235)	200	Dry
Stainless steel	1.4571	SFHT0903AFSR-F50	CTPM240 (DPX2240)	180	Dry
Cast iron	5.1301	SFKT0903AFSR-R50	CTCK215 (DCX3215)	250	Dry
Heat resistant alloys	2.4856	SFHT0903AFSR-F50	CTC5240 (HCF5240)	35	Emulsion

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i From v_c > 400 m/min, the tool must be balanced!

System MaxiMill 274-05/-12

Cutting data recommendations/Technology data

System MaxiMill 274 OFHT-05

Material	F			M			R		
	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm
Steel	50-350	0,1-0,25	3	60-280	0,1-0,3	3	60-280	0,1-0,3	3
Stainless steel	60-270	0,1-0,25	3	60-270	0,1-0,3	3	60-270	0,1-0,3	3
Cast iron				130-360	0,1-0,3	3	130-360	0,1-0,3	3
Non-ferrous metals	160-1500	0,05-0,4	3	160-1500	0,05-0,4	3	160-1500	0,05-0,4	3
Heat resistant alloys	25-80	0,1-0,25	3	25-80	0,1-0,25	3			
hardened materials									

Detailed information on cutting speed for each grade can be found on → page 138+139

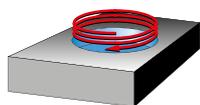
System MaxiMill 274 SFKT-12

Material	F			M			R		
	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm	v_c m/min	f_z mm	a_p mm
Steel	50-350	0,1-0,25	6	60-280	0,1-0,3	6	60-280	0,1-0,3	6
Stainless steel	60-270	0,1-0,25	6	60-270	0,1-0,3	6	60-270	0,1-0,3	6
Cast iron	110-130	0,05-0,4		130-360	0,1-0,35	6	130-360	0,1-0,35	6
Non-ferrous metals	160-1500	0,05-0,4	6	160-1500	0,05-0,4	6	160-1500	0,05-0,4	6
Heat resistant alloys	25-80	0,1-0,25	6	25-80	0,1-0,25	6	25-80	0,1-0,25	6
hardened materials									

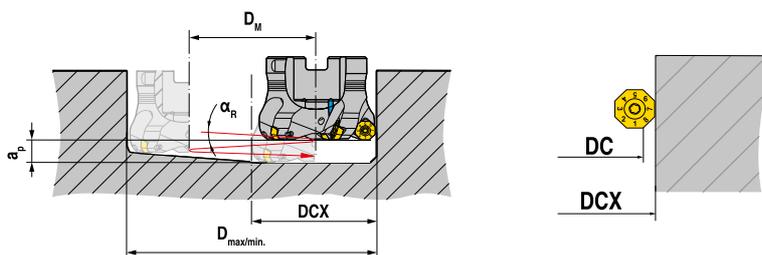
Detailed information on cutting speed for each grade can be found on → page 138+139

Machining strategy

Helical plunge milling



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



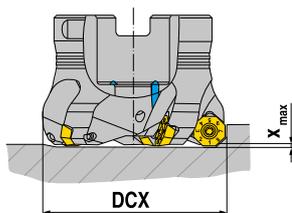
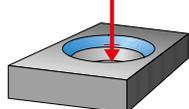
OF..05

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

SF..12

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

Axial plunging



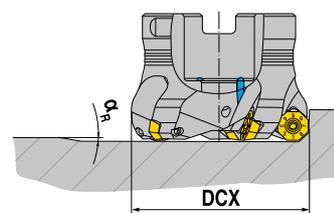
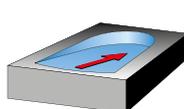
OF..05

DC mm	DCX mm	X_{max} mm	DC mm	DCX mm	X_{max} mm
50	58	2,2	47,0	61,0	3,4
63	71	1,9	59,9	74,0	3,2
80	88	1,8	76,9	90,9	3,0
100	107,9	1,1	96,9	110,9	2,5
125	132,9	1,4	121,9	135,9	2,6

SF..12

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

Angled ramping



OF..05

DC mm	DCX mm	α_{Rmax} °	DC mm	DCX mm	α_{Rmax} °
50	58	3,2	47,0	61,0	4,9
63	71	2,0	59,9	74,0	3,4
80	88	1,5	76,9	90,9	2,4
100	107,9	0,7	96,9	110,9	1,6
125	132,9	0,7	121,9	135,9	1,3

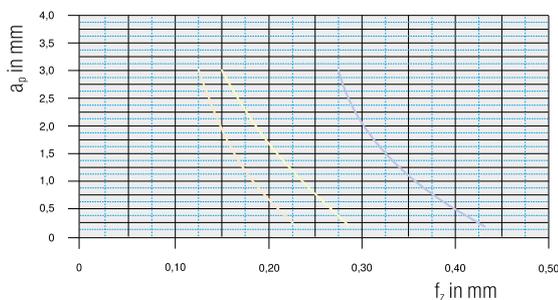
SF..12

DC mm	DCX mm	α_{Rmax} °	DC mm	DCX mm	α_{Rmax} °
47,0	61,0	4,9	59,9	74,0	3,4
59,9	74,0	3,4	76,9	90,9	2,4
76,9	90,9	2,4	96,9	110,9	1,6
96,9	110,9	1,6	121,9	135,9	1,3

System MaxiMill 274-05

Starting Parameter

Example materials				
Steel	1000 N/mm ²	1.15	1.2312	40CrMnMoS 8-6
Stainless steel	600 N/mm ²	2.6	1.4571	X6CrNiMoTi 1712 2
Cast iron	180 HB	3.1	EN-GJL-250	EN-GJL-250 (GG25)
Heat resistant alloys	1450 N/mm ²	5.8	Inconel 625	Inconel 718

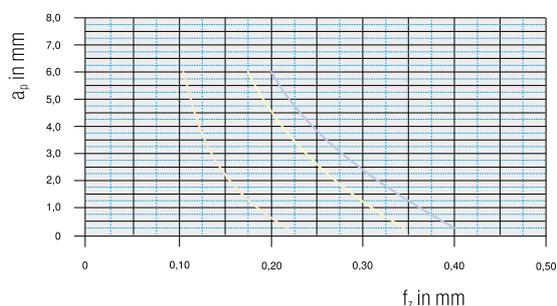


Material		Inserts		v_c in m/min	Coolant
Steel	1.2312	OFHT050410SN-M50	CTCP230 (DCX1230)	200	Dry
Stainless steel	1.4571	OFHT050410SN-F50	CTPM240 (DPX2240)	180	Dry
Cast iron	5.1301				
Heat resistant alloys	2.4856	OFHT050410SN-F50	CTC5240 (HCF5240)	35	Emulsion

System MaxiMill 274-12

Starting Parameter

Example materials				
Steel	1000 N/mm ²	1.15	1.2312	40CrMnMoS 8-6
Stainless steel	600 N/mm ²	2.6	1.4571	X6CrNiMoTi 1712 2
Cast iron	180 HB	3.1	EN-GJL-250	EN-GJL-250 (GG25)
Heat resistant alloys	1450 N/mm ²	5.8	Inconel 625	Inconel 718



Material		Inserts		v_c in m/min	Coolant
Steel	1.2312	SFKT1204AFSR-M50	CTPP235 (DPX1235)	200	Dry
Stainless steel	1.4571	SFKT1204AFSR-M50	CTPM240 (DPX2240)	180	Dry
Cast iron	5.1301				
Heat resistant alloys	2.4856	SFHT1204AFER-F40	CTC5240 (HCF5240)	35	Emulsion