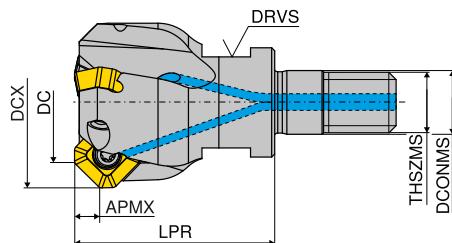
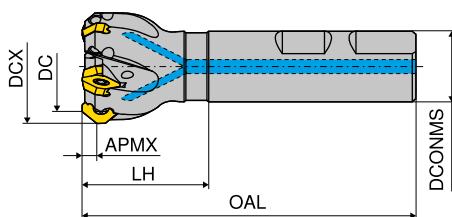


## MaxiMill - Screw in cutter 45° G 270-09



Designation	DC	DCX	ZNF	APMX	LPR	THSZMS	DCONMS	DRVS	torque moment Nm	Insert	Article no.
	mm	mm		mm	mm		mm	mm			EUR
G270.ESF.16.R.02-09	16	24,4	2	4	27	M8	8,5	10	1,8	SD.. 0903..	157,30 016
G270.ESF.20.R.03-09	20	28,4	3	4	33	M10	10,5	15	1,8	SD.. 0903..	184,50 020
G270.ESF.25.R.04-09	25	33,4	4	4	35	M12	12,5	17	1,8	SD.. 0903..	207,70 025
G270.ESF.32.R.05-09	32	40,4	5	4	35	M16	17,0	17	1,8	SD.. 0903..	228,50 032

## MaxiMill - End milling cutter 45° C 270-09

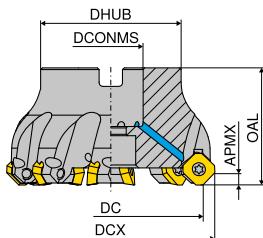


B

2B/40

Designation	DC	DCX	ZNF	APMX	OAL	LH	DCONMS	torque moment Nm	Insert	Article no.
	mm	mm		mm	mm	mm	mm	EUR		EUR
C270.06.R.01-09	6	14,4	1	4	80	32	16	1,2	SD.. 0903..	135,80 006
C270.12.R.01-09	12	20,4	1	4	80	32	16	1,2	SD.. 0903..	150,00 012
C270.16.R.02-09	16	24,4	2	4	90	40	20	1,8	SD.. 0903..	170,80 016
C270.20.R.03-09	20	28,4	3	4	90	40	20	1,8	SD.. 0903..	217,30 020
C270.25.R.04-09	25	33,4	4	4	100	44	25	1,8	SD.. 0903..	307,90 025
C270.32.R.05-09	32	40,4	5	4	95	36	25	1,8	SD.. 0903..	362,20 032

## MaxiMill – Shell mill 45° A 270-09



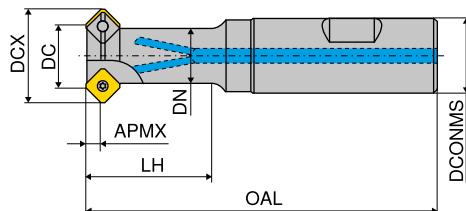
Designation	DC	DCX	ZNF	APMX	OAL	DHUB	DCONMS <sup>H6</sup>	right 2B/40	right 2B/40	right 2B/40	left 2B	
											Article no. 50 704 ... EUR	Article no. 50 705 ... EUR
A270.32.R.05-09	32	40,4	5	4	40	34	16	1,8			346,60	532
A270.40.R.04-09	40	48,4	4	4	40	38	16	1,8	355,70	540		
A270.40.R.06-09	40	48,4	6	4	40	38	16	1,8			401,10	540
A270.42.R.06-09	42	50,4	6	4	40	38	16	1,8			415,20	542
A270.50.R.06-09	50	58,4	6	4	40	43	22	1,8	412,70	550		
A270.50.R.08-09	50	58,4	8	4	40	43	22	1,8			494,20	550
A270.50.L.08-09	50	58,4	8	4	40	43	22	1,8			511,70	550
A270.52.R.08-09	52	60,4	8	4	40	43	22	1,8				
A270.63.R.05-09	63	71,4	5	4	40	48	22	1,8	401,10	563		
A270.63.R.08-09	63	71,4	8	4	40	48	22	1,8	500,60	563		
A270.63.R.10-09	63	71,4	10	4	40	48	22	1,8			623,50	563
A270.63.L.10-09	63	71,4	10	4	40	48	22	1,8				644,90
A270.66.R.10-09	66	74,4	10	4	40	48	22	1,8			644,90	566
A270.80.R.06-09	80	88,4	6	4	50	58	27	1,8	454,00	580		
A270.80.R.10-09	80	88,4	10	4	50	58	27	1,8	632,50	580		
A270.80.R.12-09	80	88,4	12	4	50	58	27	1,8			750,10	580
A270.80.L.12-09	80	88,4	12	4	50	58	27	1,8				776,00
A270.100.R.07-09	100	108,4	7	4	50	78	32	1,8	586,10	600		
A270.100.R.12-09	100	108,4	12	4	50	78	32	1,8	763,20	600		
A270.100.R.14-09	100	108,4	14	4	50	78	32	1,8			886,20	600
A270.125.R.12-09	125	133,4	12	4	63	88	40	1,8	892,60	625		
A270.160.R.12-09	160	168,4	12	4	63	93	40	1,8	1.148,00	660 <sup>1)</sup>		

1) With threaded holes M12 on the front face, pitch circle diameter = 66,7 mm

- i** ▲ 50 704 ... Open pitch for use on aluminum alloys, non-ferrous metals and plastics
- ▲ 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
- ▲ 50 707 ... As 50 706 ..., but **left hand** version

**MaxiMill – Chamfer milling cutter C 272-09**

▲ Usable on front and rear cutting edges



B

2B

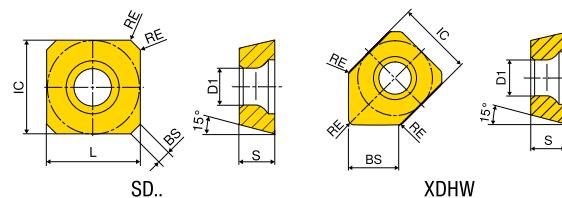
Designation	DC	DCX	ZNF	APMX	DN	OAL	LH	DCONMS	Insert	Article no. 50 669 ... EUR
	mm	mm		mm	mm	mm	mm	Nm		
C272.06.R.01-09	6	14,4	1	4	10	91	24,0	16	SD.. 0903..	161,50 006
C272.08.R.01-09	8	16,4	1	4	10	91	25,5	16	SD.. 0903..	180,00 008
C272.12.R.01-09	12	20,4	1	4	12	91	26,0	16	SD.. 0903..	185,00 012
C272.16.R.02-09	16	24,4	2	4	15	97	30,0	20	SD.. 0903..	227,70 016
C272.18.R.02-09	18	26,4	2	4	16	97	30,0	20	SD.. 0903..	227,70 018
C272.25.R.03-09	25	33,4	3	4	21	109	35,0	25	SD.. 0903..	266,40 025

Spare parts  
DC

	Article no. 80 950 ... EUR	Article no. 80 950 ... EUR	Article no. 70 950 ... EUR	Article no. 70 950 ... EUR	Article no. 80 950 ... EUR
6 - 12	4,76 033	7,80 110	4,38 303	3,14 365	118,90 191
16 - 160	4,76 033	7,80 110	4,38 303	2,57 115	118,90 191

## SDHW / SDNT / SDHT / XDHW

Designation	IC	D1	L	BS	S
	mm	mm	mm	mm	mm
XDHW 0903..	9,52	3,4	-	5,50	3,18
SD.. 0903..	9,52	3,4	9,52	1,68	3,18



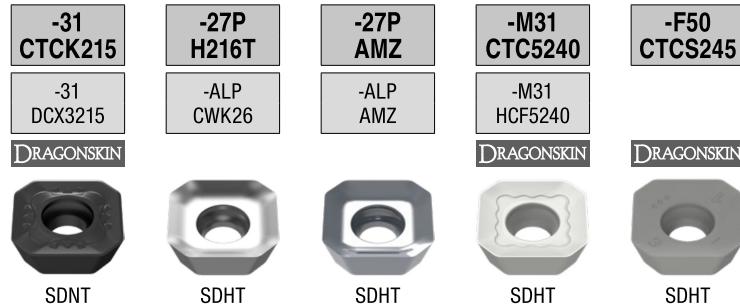
## SDHW / SDNT / SDHT



ISO	RE	SDHW		SDNT		SDHT		SDHT		SDHT		
		Article no.	EUR									
0903AESN	1,0	50 428 ...	15,97	898	13,79	020	13,79	120	15,76	420	16,59	420

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

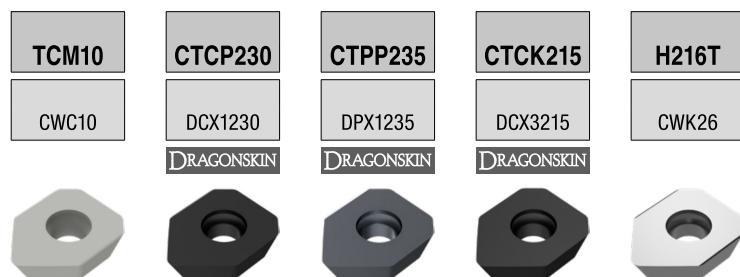
## SDNT / SDHT



ISO	RE	SDNT		SDHT		SDHT		SDHT		SDHT		
		Article no.	EUR									
0903AEFN	1,0	51 029 ...	13,20	520	15,76	548	18,90	848	19,60	509	19,60	57100
0903AESN	1,0											

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

## XDHW



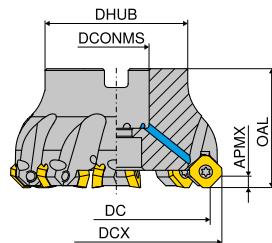
ISO	RE mm	CERMET XDHW 1B/79		XDHW 1B/61		XDHW 1B/61		XDHW 1B/18		XDHW 1B/61	
		Article no. 50 449 ...	EUR 17,31 898	Article no. 51 015 ...	EUR 19,39 020	Article no. 51 015 ...	EUR 19,39 120	Article no. 51 015 ...	EUR 18,75 520	Article no. 50 449 ...	EUR 16,59 548
0903AEEN	1										
0903AEFN	1										
0903AESN	1										
Steel		●		●		●		○			
Stainless steel		●		○		○					
Cast iron		○						●		○	
Non ferrous metals											●
Heat resistant alloys											
hardened materials											

*Milling guide*

Machining strategy	→ 146	ISO Designation System	→ 194+195
Grade description	→ 209+210	Cutting data appoximate values	→ 146

## MaxiMill – Shell mill 45° A 270-12

- ▲ 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 <sub>H6</sub> mm	OAL mm	DHUB mm	Insert	2B/40		2B/40	
									Article no. 50 705 ... EUR	Article no. 50 706 ... EUR	Article no. 50 706 ... EUR	
A270.32.R.03-12	32	46	3	6	16	40	32	5	SD../XD.. 1204..	397,10	032	
A270.40.R.03-12	40	54	3	6	16	40	38	5	SD../XD.. 1204..	406,20	040	
A270.40.R.04-12	40	54	4	6	16	40	38	5	SD../XD.. 1204..	406,20	040	
A270.50.R.04-12	50	64	4	6	22	40	43	5	SD../XD.. 1204..	459,20	050	
A270.50.R.05-12	50	64	5	6	22	40	43	5	SD../XD.. 1204..	459,20	050	
A270.63.R.04-12	63	77	4	6	22	40	48	5	SD../XD.. 1204..	525,20	063	
A270.63.R.06-12	63	77	6	6	22	40	48	5	SD../XD.. 1204..	601,50	063	
A270.80.R.05-12	80	94	5	6	27	50	58	5	SD../XD.. 1204..	609,30	080	
A270.80.R.08-12	80	94	8	6	27	50	58	5	SD../XD.. 1204..	750,10	080	
A270.100.R.06-12	100	114	6	6	32	50	78	5	SD../XD.. 1204..	717,80	100	
A270.100.R.10-12	100	114	10	6	32	50	78	5	SD../XD.. 1204..	878,30	100	
A270.125.R.07-12	125	139	7	6	40	63	88	5	SD../XD.. 1204..	877,00	125	
A270.125.R.12-12	125	139	12	6	40	63	88	5	SD../XD.. 1204..	1.186,00	125	
A270.160.R.08-12	160	174	8	6	40	63	94	5	SD../XD.. 1204..	1.120,00	160 <sup>1)</sup>	

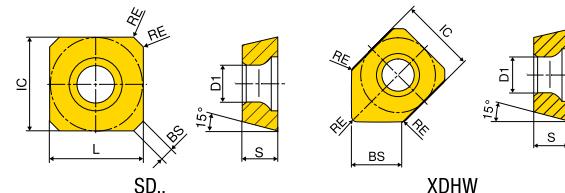
1) With threaded holes M12 on the front face, pitch circle diameter = 66.7 mm



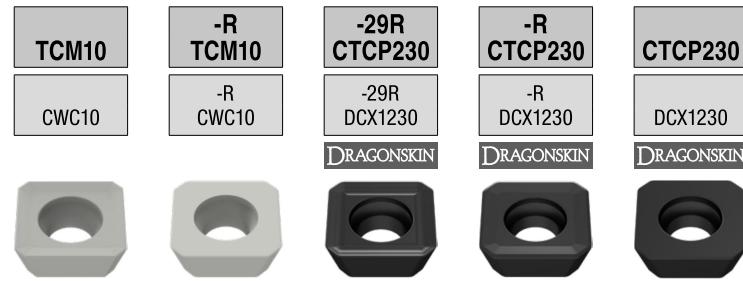
Spare parts	Article no. 80 950 ... EUR	Article no. 80 397 ... EUR	Article no. 80 950 ... EUR	Article no. 70 950 ... EUR	Article no. 70 950 ... EUR	Article no. 70 950 ... EUR	Article no. 80 950 ... EUR
DC	4,76 037	3,91 040	9,95 114	12,48 151	4,38 303	2,52 280	131,90 193
32-40	4,76 037	9,95 114	4,38 303	4,38 303	2,52 280	131,90 193	

## SDHT / SDHW / SDMT / XDHW

Designation	IC	D1	L	BS	S
	mm	mm	mm	mm	mm
XDHW 1204..	12,7	5,5	-	7,50	4,76
SD.. 1204..	12,7	5,5	12,7	1,74	4,76



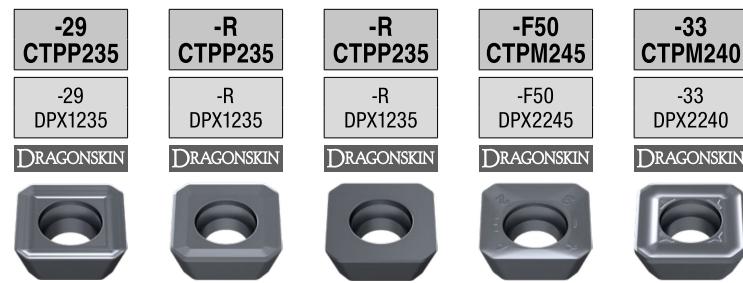
## SDHT / SDHW / SDMT



ISO	RE	CERMET SDHT 1B/79			CERMET SDHW 1B/79			SDMT 1B/61			SDHT 1B/61			SDHW 1B/61		
		Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	
1204AESN	0,2	50 426 ...	17,19	900	50 428 ...	17,91	899	51 010 ...	14,65	020	51 006 ...	16,71	020	51 008 ...	17,19	020
1204AESN	1,0															

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

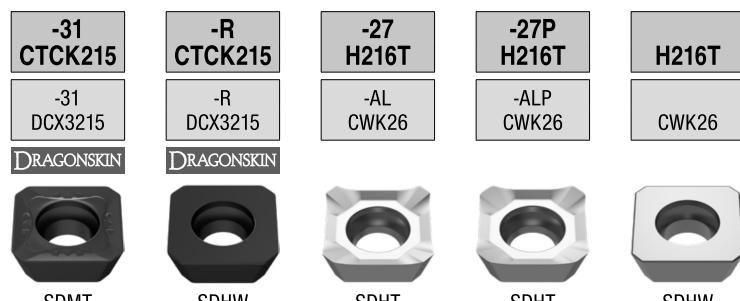
## SDMT / SDHT / SDHW



ISO	RE	SDMT 1B/61			SDHT 1B/61			SDHW 1B/61			SDHT 1H/17			SDHT 1B/61		
		Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	
1204AESN	1,0	51 010 ...	14,65	120	51 006 ...	16,71	120	51 008 ...	17,19	120	51 109 ...	22,57	475	51 028 ...	17,19	425

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

## SDMT / SDHW / SDHT

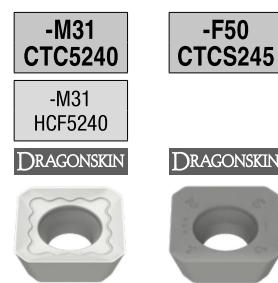


ISO	RE	SDMT 1B/61		SDHW 1B/61		SDHT 1A/90		SDHT 1A/90		SDHW 1B/61	
		Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR	Article no.	EUR
1204AEEN	1,0	51 059 ...	14,28	520	17,19	520	50 426 ...	17,19	504	50 426 ...	14,28
1204AEFN	0,2										
1204AEFN	1,0										
1204AESN	0,2										600

Material compatibility chart:

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

## SDHT

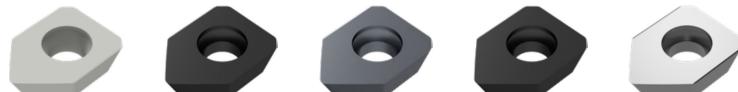


ISO	RE	SDHT 1H/D4		SDHT 1H/D4	
		Article no.	EUR	Article no.	EUR
1204AESN	1,0	50 421 ...	22,57	512	22,57
					57600

Material compatibility chart:

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

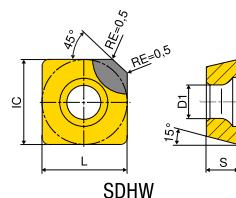
## XDHW

CERMET  
XDHW  
1B/79Article no.  
50 449 ...  
EURXDHW  
1B/61Article no.  
51 015 ...  
EURXDHW  
1B/61Article no.  
51 015 ...  
EURXDHW  
1B/61Article no.  
51 015 ...  
EURXDHW  
1B/61Article no.  
50 449 ...  
EUR

ISO	RE					
	mm					
1204AEEN	1					
1204AEFN	1					
1204AESN	1		22,64	900	23,74	025
					23,74	125
Steel		●	●	●	○	
Stainless steel		●	○	○		
Cast iron		○			●	○
Non ferrous metals						●
Heat resistant alloys						
hardened materials						

**SDHW**

Designation	IC	D1	L	S
	mm	mm	mm	mm
SDHW 1204..	12,7	5,5	12,7	4,76

**SDHW**

ISO	CTBS10U	PBC10	CBN SDHW V9	Article no. 51 900 ... EUR	54,15	300	1204AETN-2
							Steel
							Stainless steel
							Cast iron
							Non ferrous metals
							Heat resistant alloys
							hardened materials

1)  $a_{p\max} = 2.0 \text{ mm}$ **SDHW**

ISO	CTDPS30	PDC	DIAMOND SDHW V9	Article no. 51 900 ... EUR	59,03	100	1204AEFN-2
							1204AEFN-3
							Steel
							Stainless steel
							Cast iron
							Non ferrous metals
							Heat resistant alloys
							hardened materials

1)  $a_{p\max} = 2.0 \text{ mm}$ 2)  $a_{p\max} = 3,5 \text{ mm}$ *Milling guide*

Machining strategy → 147

Grade description → 209+210

ISO Designation System

→ 194+195

Cutting data appoximate values

→ 147

# System MaxiMill 270-09

## Cutting data recommendations/Technology data

for standard inserts

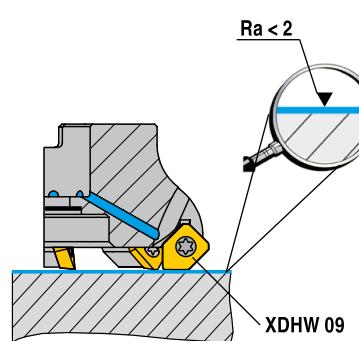
Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel	60-280	0,1-0,3	4	60-280	0,1-0,3	4	60-280	0,1-0,3	4
Stainless steel	60-270	0,1-0,25	4	60-270	0,1-0,25	4	60-270	0,1-0,25	4
Cast iron	110-130	0,05-0,4		130-360	0,1-0,35	4	130-360	0,1-0,35	4
Non-ferrous metals	160-1500	0,05-0,4	4	160-1500	0,05-0,4	4	160-1500	0,05-0,4	4
Heat resistant alloys	25-80	0,1-0,25	4	25-80	0,1-0,25	4	25-80	0,1-0,25	4
hardened materials									

for wiper inserts

Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel	150-350	0,05-0,25	0,10-2,0						
Stainless steel	110-200	0,05-0,25	0,10-2,0						
Cast iron	150-280	0,05-0,25	0,10-2,0						
Non-ferrous metals	< 2000	0,05-0,25	0,10-2,0						
Heat resistant alloys									
hardened materials									

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

## Machining strategy



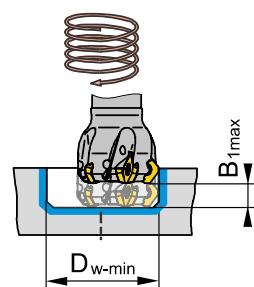
Finish milling with wiper inserts

Two wiper inserts are mounted in each 125mm head



Steel	SDNT 0903AESN-29	DPX 1235	+	XDHW 0903AESN	DPX 1235
	SDNT 0903AESN-29	DCX 1230	+	XDHW 0903AESN	DCX 1230
	SDHT 0903AESN-33	DCX 1230	+	XDHW 0903AESN	DCX 1230
	SDHW 0903AESN	CWC 10	+	XDHW 0903AESN	CWC 10
Cast iron	SDNT 0903AESN-31	DCX 3215	+	XDHW 0903AEEN	DCX 3215
Non-ferrous metals	SDHT 0903AEFN-ALP	CWK 26	+	XDHW 0903AEFN	CWK 26

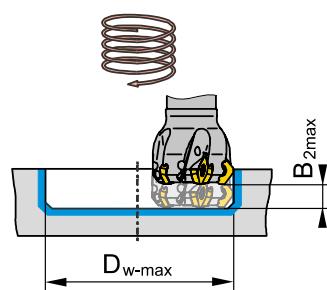
## Helical plunge milling (without start hole)



## C 270-09

DC mm	D <sub>w-min</sub> mm	B <sub>1 max</sub> mm	D <sub>w-max</sub> mm	B <sub>2 max</sub> mm
6	14,4	1,5	19,0	1,5
12	28,5	1,5	31,0	1,5
16	36,5	1,5	39,0	1,5
20	44,5	1,5	47,0	1,5
25	54,5	1,5	57,0	1,5
32	68,5	1,5	71,0	1,5

## A 270-09



DC mm	D <sub>w-min</sub> mm	B <sub>1 max</sub> mm	D <sub>w-max</sub> mm	B <sub>2 max</sub> mm
32	68,5	1,5	71,0	1,5
40	84,5	1,5	87,0	1,5
50	104,5	1,5	107,0	1,5
63	130,5	1,5	133,0	1,5
80	164,5	1,5	167,0	1,5
100	204,5	1,5	207,0	1,5
125	254,5	1,5	257,0	1,5
160	324,5	1,5	327,0	1,5

# System MaxiMill 270-12

Cutting data recommendations/Technology data  
for standard inserts

Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel	30-280	0,1-0,3	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	0,1-0,25	6	60-270	0,1-0,25	6
Cast iron	150-200	0,05-0,4	6	130-360	0,1-0,35	6	130-360	0,1-0,3	6
Non-ferrous metals	160-3500	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									

for wiper inserts

Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel	20-350	0,10-0,25	0,10-4,00						
Stainless steel	40-120	0,10-0,25	0,10-4,00						
Cast iron	120-290	0,10-0,25	0,10-4,00						
Non-ferrous metals	< 2000	0,10-0,25	0,10-4,00						
Heat resistant alloys									
hardened materials									

for CBN inserts

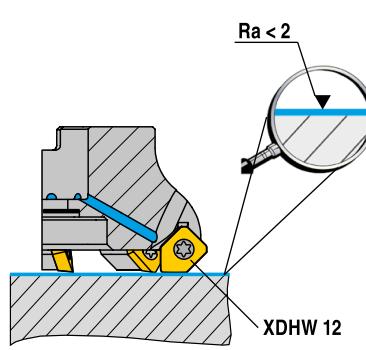
Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel									
Stainless steel									
Cast iron	600-1600	0,10-0,25	0,20-1,50						
Non-ferrous metals									
Heat resistant alloys	350-700	0,08-0,15	0,20-1,00						
hardened materials	350-600	0,08-0,12	0,20-0,40						

for PCD / MDC inserts

Material	F			M			R		
	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm	v <sub>c</sub> m/min	f <sub>z</sub> mm	a <sub>p</sub> mm
Steel									
Stainless steel									
Cast iron									
Non-ferrous metals	< 2000	0,05-0,25	0,10-2,00						
Heat resistant alloys									
hardened materials									

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

Machining strategy



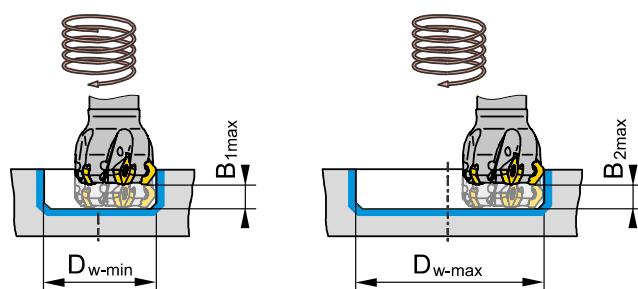
Finish milling with wiper inserts

Two wiper inserts are mounted in each 125mm head



Steel	SDMT 1204AESN-29R	DPX 1235	+	XDHW 1204AESN	DPX 1235
	SDMT 1204AESN-29R	DCX 1230	+	XDHW 1204AESN	DCX 1230
	SDHW 1204AESN-R	CWC 10	+	XDHW 1204AESN	CWC 10
Cast iron	SDMT 1204AEEN-31	DCX 3215	+	XDHW 1204AEEN	DCX 3215
	SDHW 1204AEEN-R	DCX 3215	+	XDHW 1204AEEN	DCX 3215
Non-ferrous metals	SDHT 1204AEFN-ALP	CWK 26	+	XDHW 1204AEFN	CWK 26

Helical plunge milling (without start hole)



D <sub>C</sub> mm	D <sub>w-min</sub> mm	B <sub>1_max</sub> mm	D <sub>w-max</sub> mm	B <sub>2_max</sub> mm
32	74,5	1,5	78,0	1,5
40	90,5	1,5	94,0	1,5
50	110,5	1,5	114,0	1,5
63	136,5	1,5	140,0	1,5
80	170,5	1,5	174,0	1,5
100	210,5	1,5	214,0	1,5
125	260,5	1,5	264,0	1,5
160	330,5	1,5	334,0	1,5

**!** From v<sub>c</sub> > 400 m/min, the tool must be balanced!