WIDIA

Indexable Milling • Chamfer Mills

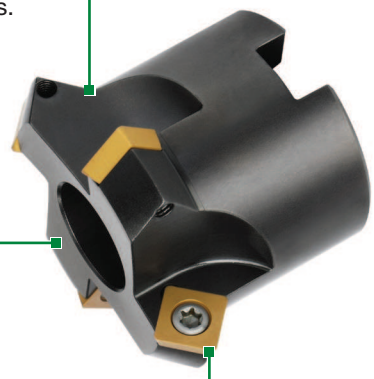
M25 ..... I2–I10

For Chamfering and Countersinking Applications • **M25™ Series Chamfer Mills**

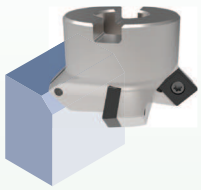
M25 Series Chamfer Mills are the ideal tool of choice for milling all steel, stainless steel, and cast iron materials. With clearance for back-chamfer operations, the M25 Series will help streamline your most challenging milling operations.

- Strong tool design for optimum insert support.
- 45° lead angle for most chamfering applications.

M25



Chamfer Mills



M25™ SD0903..

Max depth of cut: 6,4mm

Lead angle: 45°
Indexes per insert: 4
Diameter: 25–40mm

Pages: I4–I6, I8, I10

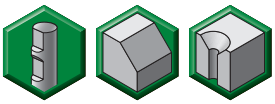
M25 SP1204..

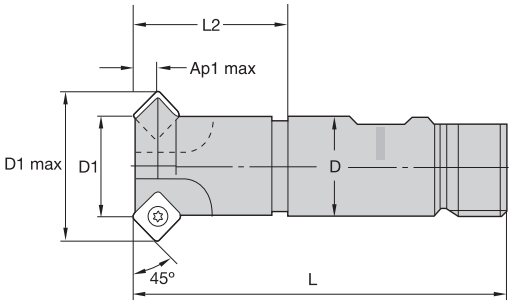
Max depth of cut: 8,3mm

Lead angle: 45°
Indexes per insert: 4
Diameter: 50–63mm

Pages: I7, I9–I10

- Chamfer milling in steel, stainless steel, and cast iron.





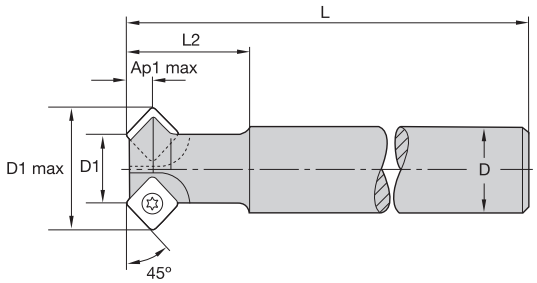
Weldon Shanks

order number	catalogue number	D	D1	D1 max	L	L2	Ap1 max	Z	insert 1	coolant supply	kg
2022628	**12292510400**	16	16	28,8	75	27	6,4	2	SD..0903..	No	0,10
2022629	**12292510800**	25	25	37,8	96	40	6,4	2	SD..0903..	No	0,30
2022630	**12292511000**	32	32	44,8	100	40	6,4	3	SD..0903..	No	0,50

Spare Parts

insert screw	Nm	Torx wrench
12148095100	3,0	**12148000600**

- Chamfer milling in steel, stainless steel, and cast Iron.



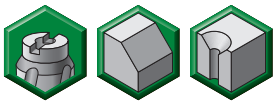
Cylindrical Shanks

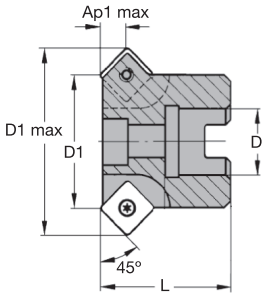
order number	catalogue number	D1	D1 max	D	L	L2	Ap1 max	Z	insert 1	coolant supply	kg
2022634	**12292550400**	16	28,8	16	200	27	6,4	2	SD..0903..	No	0,40
2022635	**12292550800**	25	37,8	25	200	40	6,4	2	SD..0903..	No	0,70
2022636	**12292551000**	32	44,8	32	200	40	6,4	3	SD..0903..	No	1,20

Spare Parts

insert screw	Nm	Torx driver
12148095100	3,0	**12148000600**

- Chamfer milling in steel, stainless steel, and cast iron.





Shell Mills

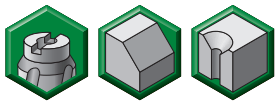
order number	catalogue number	D1	D1 max	D	L	Ap1 max	Z	insert 1	coolant supply	kg
2022631	**12292511200**	40	52,3	22	40	6,1	4	SD..0903..	No	0,80

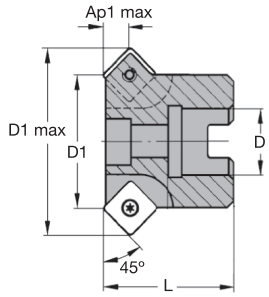
NOTE: Standard milling cutters will accept insert nose radii up to 2mm without modification.

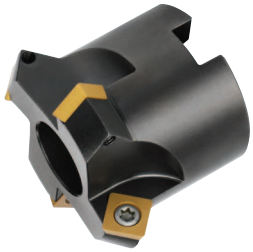
Spare Parts

insert screw	Nm	Torx driver
12148095100	3,0	**12148000600**

- Chamfer milling in steel, stainless steel, and cast Iron.







Shell Mills

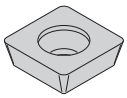
order number	catalogue number	D1	D1 max	D	L	Ap1 max	Z	insert 1	coolant supply	kg
2022632	**12292511400**	50	66,7	22	40	8,3	4	SP..1204..	No	0,90
2022633	**12292511600**	63	79,7	22	40	8,3	5	SP..1204..	No	1,10

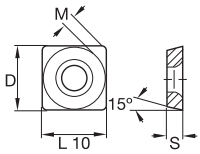
Spare Parts

insert screw	Nm	Torx driver
12148007200	4,0	**12148007500**

Insert Selection Guide for Insert Style SD09

Material Group	Light Machining		General Purpose		Heavy Machining	
	Geometry	Grade	Geometry	Grade	Geometry	Grade
P1–P2	. ..	TN7525	. ..	**TN7525**	. ..	TN7525
P3–P4	. ..	TN7525	. ..	**TN7535**	. ..	TN7535
P5–P6	. ..	TN7525	. ..	**TN7535**	. ..	TN7535
M1–M2	. ..	TN7525	. ..	**TN7525**	. ..	TN7525
M3	. ..	TN7535	. ..	**TN7535**	. ..	TN7535
K1–K2	–	–	–	–	–	–
K3	. ..	TN7535	. ..	**TN7535**	. ..	TN7535
N1–N2	–	–	–	–	–	–
N3	–	–	–	–	–	–
S1–S2	–	–	–	–	–	–
S3	–	–	–	–	–	–
S4	–	–	–	–	–	–
H1	. ..	TN2510	–	–	–	–



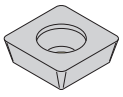


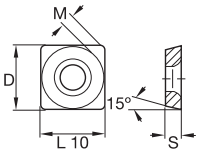
● first choice
○ alternate choice

P	○	●	●
M		○	○
K	●		○
N			
S			
H	●		

SDNT

catalogue number	cutting edges	D	L10	M	S	hm	TN2510	TN7525	TN7535
SDNT090308	4	9,53	9,53	1,64	3,18	0,10	–	2030200	2030198
SDNT090308T	4	9,53	9,53	1,64	3,18	0,10	2028336	–	–





● first choice
○ alternate choice

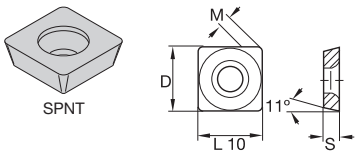
P	●	
M	○	
K		○
N		●
S		○
H		

SDMW

catalogue number	cutting edges	D	L10	M	S	hm	TN7525	THM
SDMW090308	4	9,53	9,53	1,64	3,18	0,10	2105263	2028332

Insert Selection Guide for Insert Style SP12

Material Group	Light Machining		General Purpose		Heavy Machining	
	Geometry	Grade	Geometry	Grade	Geometry	Grade
P1–P2	. ..	TN7525	. ..	**TN7525**	. ..	TN7525
P3–P4	. ..	TN7525	. ..	**TN7535**	. ..	TN7535
P5–P6	. ..	TN7525	. ..	**TN7535**	. ..	TN7535
M1–M2	. ..	TN7525	. ..	**TN7525**	. ..	TN7525
M3	. ..	TN7535	. ..	**TN7535**	. ..	TN7535
K1–K2	. ..	WK15CM	. ..	**WK15CM**	. ..	WK15CM
K3	. ..	TN7535	. ..	**WK15CM**	. ..	WK15CM
N1–N2	–	–	–	–	–	–
N3	–	–	–	–	–	–
S1–S2	–	–	–	–	–	–
S3	–	–	–	–	–	–
S4	–	–	–	–	–	–
H1	–	–	–	–	–	–

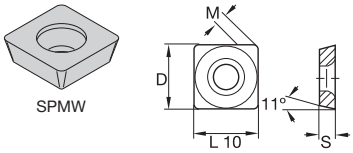


● first choice
○ alternate choice

P	●	●
M	○	○
K		○
N		
S		
H		

SPNT

catalogue number	cutting edges	D	L10	M	S	hm	TN7525	TN7535
SPNT120408	4	12,70	12,70	2,30	4,76	0,10	2029794	2029792



● first choice
○ alternate choice

P		
M		
K	○	●
N	●	
S	○	
H		

SPMW

catalogue number	cutting edges	D	L10	M	S	hm	THM	WK15CM
SPMW120408	4	12,70	12,70	2,30	4,76	0,14	2014066	5427380

Recommended Starting Speeds [m/min]

Material Group		TN2510			TN7525			TN7535			WK15CM			THM		
P	1	660	**580**	540	410	**310**	280	545	**475**	445	–	**–**	–	–	**–**	–
	2	410	**370**	330	310	**250**	215	335	**305**	275	–	**–**	–	–	**–**	–
	3	370	**330**	305	280	**215**	185	305	**275**	245	–	**–**	–	–	**–**	–
	4	275	**260**	230	235	**170**	145	230	**210**	190	–	**–**	–	–	**–**	–
	5	330	**300**	275	310	**235**	200	310	**275**	250	–	**–**	–	–	**–**	–
	6	230	**205**	175	205	**160**	130	190	**160**	130	–	**–**	–	–	**–**	–
M	1	270	**240**	210	245	**220**	185	245	**220**	185	–	**–**	–	–	**–**	–
	2	245	**210**	190	220	**190**	170	220	**190**	170	–	**–**	–	–	**–**	–
	3	190	**175**	150	175	**155**	140	175	**155**	140	–	**–**	–	–	**–**	–
K	1	420	**360**	300	380	**280**	240	355	**320**	290	505	**460**	410	145	**110**	90
	2	360	**300**	250	325	**240**	200	280	**250**	230	400	**355**	330	150	**120**	85
	3	300	**250**	200	240	**200**	170	235	**210**	190	335	**300**	275	155	**115**	70
N	1	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	1080	**720**	600
	2	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	820	**560**	460
	3	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	540	**335**	240
S	1	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
	2	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
	3	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
	4	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
H	1	145	**110**	70	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
	2	145	**110**	70	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–
	3	115	**80**	45	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–

*NOTE: FIRST choice starting speeds are in **bold** type.*
As the average chip thickness increases, the speed should be decreased.

Recommended Starting Feeds

Recommended Starting Feeds [mm]

Light Machining	General Purpose	Heavy Machining

Insert Geometry	Programmed Feed per Tooth (fz)			Insert Geometry
SD09	0,10	**0,15**	0,30	SD09
SP12	0,10	**0,15**	0,35	SP12

NOTE: Use "Light Machining" value as starting feed rate.