



MINIMILL

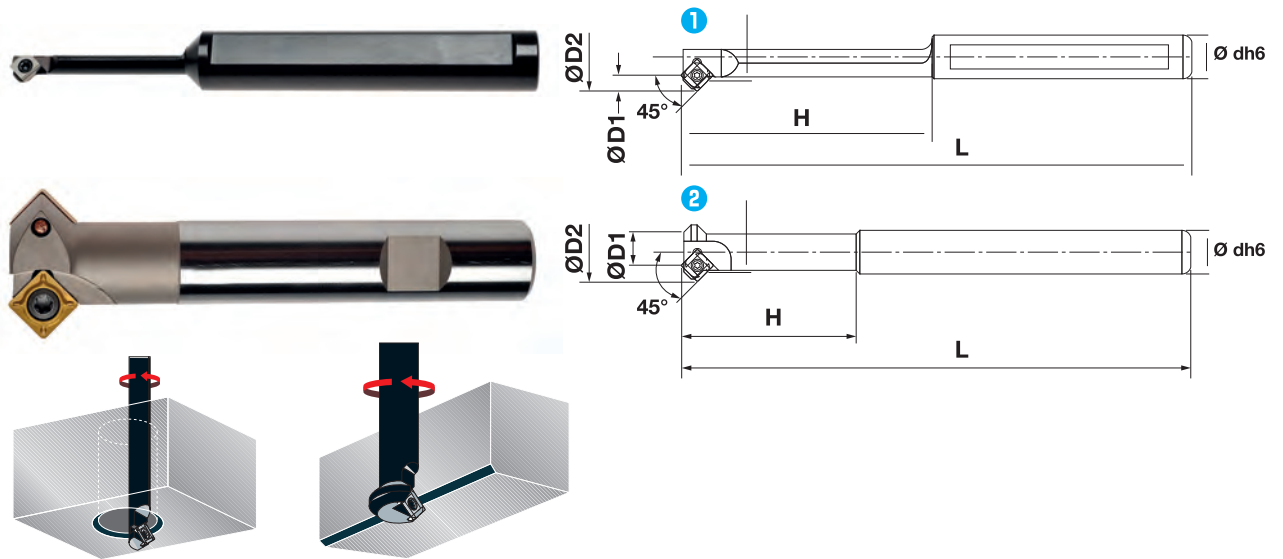
Frese per smussi e svasature 45°

Fräser zum Fasen 45°

Milling cutter for chamfering 45°



ART. 320 W

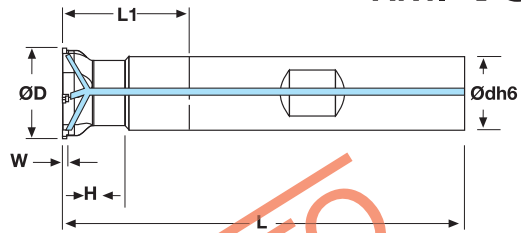


Codice d'ordine Bestell-Nr. Order No.	Fig.	(mm) Dimensioni - Abmessungen - Dimensions							Fig.		
		ØD1	ØD2	L	H	Ødh6	Z				
320.001 W	1	4	6,2	107	37	12	1	SP-SPET 040102	1	L 18	BT 06
320.003 W	1	4,75	7,5	117	47	12	1				
320.004 WW	1	4	10	80	28	12	1	SCMT0602	3	VT 25	BT 08
320.011 WW	2	11	20	80	32	12	2				
320.012 WW	1	12	23,7	100	37	20	1	SCMT09T3	3	VT 40	BT 15
320.016 WW	2	16	28,8	100	32	16	2				
320.025 WW	2	30	42,3	100	32	20	3				
Serie lunga - Lange Ausführung / Long models											
320.012 WWL	1	12	23,7	200	37	20	1	SCMT09T3	3	VT 40	BT 15
320.016 WWL	2	16	28,8	200	32	16	2				
320.025 WWL	2	30	42,3	200	32	20	3				

Frese per canalini

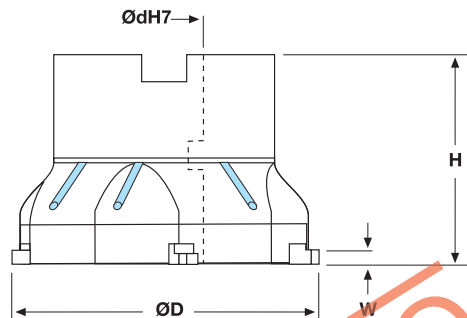
Fräser für Seegering

Milling cutter for seeger grooving



ART. 150 W

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions									
	ØD	Ødh6	L	H	L1	Z	W			
150.019 WW	19	16	100	20	52	1	1,1-4,15	154.3-16	VT40SG	BT 15
150.034 WW	34	20	125	25	75	3	1,1-4,15	"	"	"



ART. 150 M

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions							
	Ø	ØdH7	H	Z	W			
150.048 MW	48	16	40	4	1,1-4,15	154.3-16	VT40SG	BT 15
150.063 MW	63	22	40	5	1,1-4,15	"	"	"

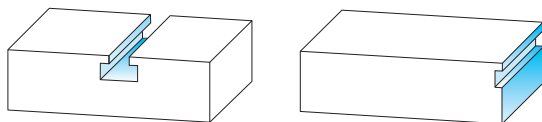
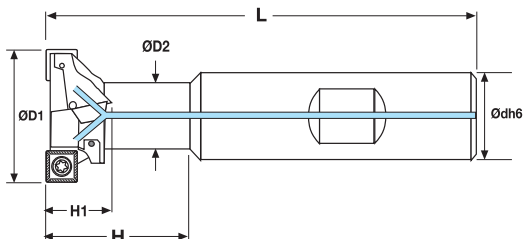
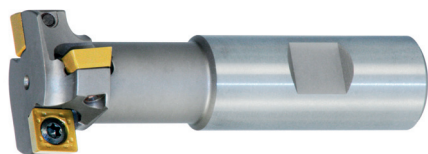
Frese per cave a T

Fräser für T-nuten

T slot milling cutter



ART. 250 W



Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions										
	ØD1	ØD2	L	H	H1	Ødh6	K	Z			
250.021 WW	21	11	76	26	9	16	1	2	SPMT 060304	VT 25	BT 08
250.025 WW	25	13	82	31	11	16	2	4			
250.032 WW	32	17	88	38	14	20	2	4			
250.040 WW	40	21	108	50	17	25	2	4	SPMT 09T308	VT 35	BT 15
250.050 WW	50	27	120	56	22	32	2	4	SPMT 120408	VT 50	BT 20

Z = Numero di eliche / Schraubenanzahl / Number of flutes
K = Fattore d' avanzamento / Vorschubfaktor / Factor of feed

NOTE: - Per cave a "T" secondo norme DIN 650-UNI 4788-ISO 299
- Für "T" Nuten nach DIN 650-uni 4788-ISO 299 Normen
- For "T" slot cutters according to DIN 650-UNI 4788-ISO 299 norms

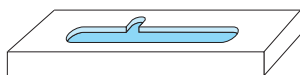
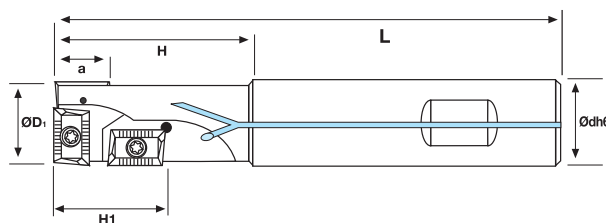
Frese foranti

Bohrnutfräser

Drilling and mill



ART. 720 W

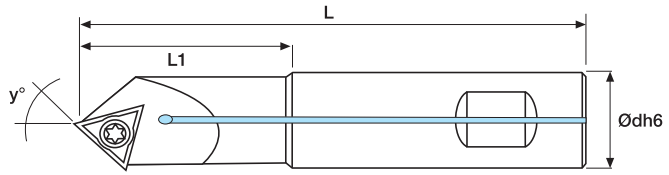


Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions									
	ØD1	Ødh6	L	H	H1	a	Z			
720 WW D.20	20	20	90	35	17	9	3	APKT 1003	VT 25	BT 08
720 WW D.25	25	25	110	50	19	9	3			
720 WW D.32	32	32	130	50	30	15	3			
Serie lunga - Lange Ausführung / Long models										
720 WWL D.20	20	20	150	30	17	9	3	APKT 1003	VT 25	BT 08
720 WWL D.25	25	25	150	50	19	9	3			
Serie extra lunga - Extralange Ausführung / Extralong models										
720 WXL D.20	20	20	180	30	17	9	3	APKT 1003	VT 25	BT 08
720 WXL D.25	25	25	200	50	19	9	3			
720 WXL D.32	32	32	220	50	30	15	3			

Frese per smussi, scanalature a V e centrare 45°

Fas- und Zentrierfräser 45°

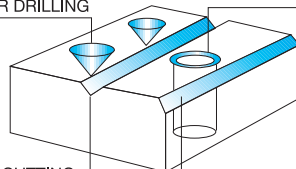
Center drilling, chamfering and V groove cutting 45°



ART. **311 W**

CENTRATURA ZENTRIER-SENK CENTER DRILLING

SMUSSO SU FORO BOHRUNG ANFASEN BORE CHAMFERING



SCANALATURA "V" "V"-NUTENFRAESER "V"-GROOVE CUTTING

SMUSSO LATERALE ECKE ANFASEN CORNER CHAMFERING

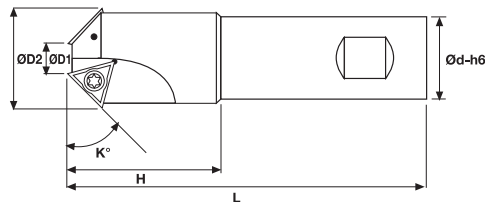
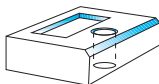
Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions									
	dh6	L	L1	y°	Z	D.min	D.max			
311.020 WW	20	115	40	45°	1	0,2	20	TCMX 16T3ZR (TCMT 16T3)	VT 40	BT 15
311.020 WWL	20	150	60	45°	1	0,2	20			
311.020 WXL	20	200	80	45°	1	0,2	20			

W-W = Con fori di lubrificazione / Kühlmittelbohrung / Coolant Bores

Frese per smussi e svasature 30°, 45° e 60°

Fräser zum Fasen 30°, 45° und 60°

Milling cutter for chamfering 30°, 45° and 60°



ART. **300 W**

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions									
	ØD1	ØD2	L	H	Ødh6	Y°	Z			
300 - 45°										
300.016 WW	1,2	16	70	20	12	45°	1	TCMT 1102	VT 25	BT 08
300.021 WW	6,2	21	90	35	20	45°	2			
300.032 WW	10,4	32,5	100	42	25	45°	2	TCMT 16T3	VT 40	BT 15
310 - 60°										
310.016 WW	5,4	16	70	20	12	60°	1	TCMT 1102	VT 25	BT 08
310.027 WW	15,8	26	90	35	20	60°	2			
310.032 WW	20	35	100	39	25	60°	2	TCMT 16T3	VT 40	BT 15
315 - 30°										
315.032 WW	6	32	100	38	25	30°	2	TCMT 16T3...	VT 40	BT 15

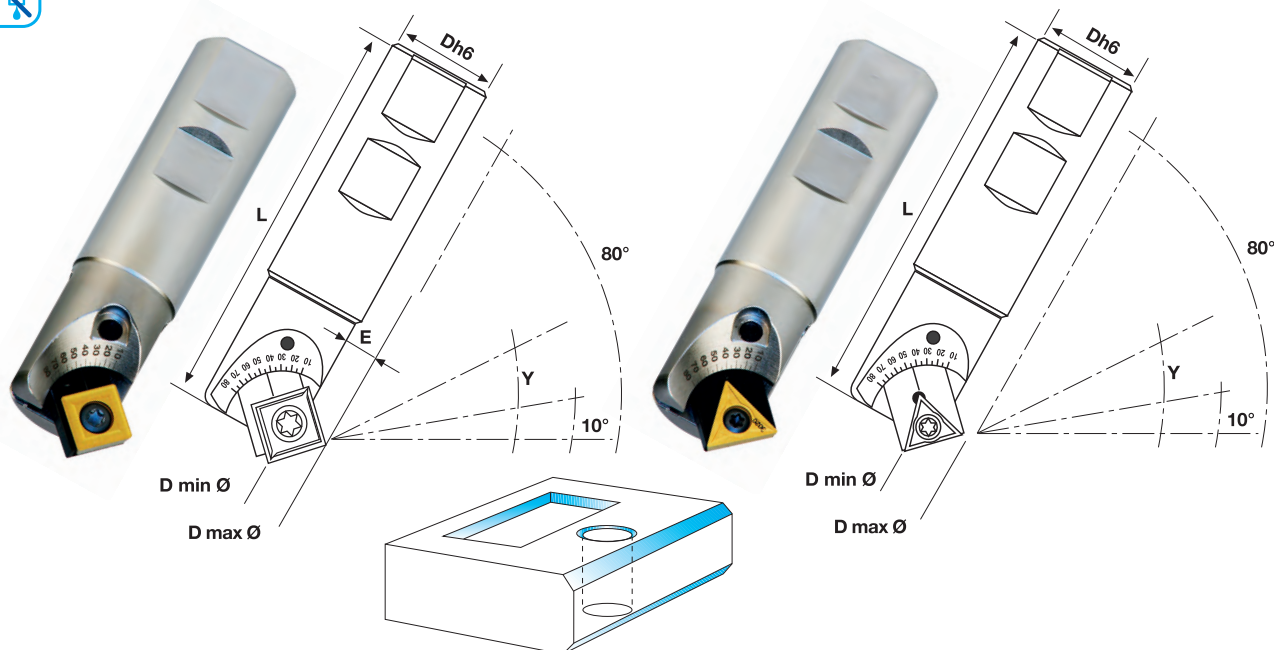
Frese per smussi e svasature registrabile da 10° a 80°

Fasenfräser, winkelverstellbar von 10° bis 80°

Milling cutter for chamfering-flaring 10° to 80°



ART. 340 W NEW



Con cassetta TCMT 16T3 ... Mit Kassette TCMT 16T3 ... With poket TCMT 16T3 ...

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions					T16 NEW	TCMT 16T3...	VT 40	M6-16	BT 15
	D h6	L	Y	D. min. Ø	D. max. Ø					
340 W 025 NEW	25	100	10°	Ø 5	Ø 32					
340 W 025 NEW	25	100	20°	Ø 6	Ø 33					
340 W 025 NEW	25	100	30°	Ø 7	Ø 34					
340 W 025 NEW	25	100	40°	Ø 10	Ø 33					
340 W 025 NEW	25	100	45°	Ø 11	Ø 33					
340 W 025 NEW	25	100	50°	Ø 13	Ø 32					
340 W 025 NEW	25	100	60°	Ø 16	Ø 31					
340 W 025 NEW	25	100	70°	Ø 19	Ø 29					
340 W 025 NEW	25	100	80°	Ø 23	Ø 27					
340 WL 025 NEW	25	150	"	"	"					
340 WXL 025 NEW	25	200	"	"	"					
340 W 020 NEW	20	100	"	"	"					

Con cassetta SCMT 1204 ... Mit Kassette SCMT 1204 ... With pocket SCMT 1204 ...

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions						S 12 NEW	SCMT 1204..	VT 40S	M6-16	BT 20
	D h6	L	Y	D. min. Ø	D. max. Ø	E					
340 W 025 NEW	25	100	10°	Ø 7,5	Ø 30	2,7					
340 W 025 NEW	25	100	20°	Ø 10	Ø 32	3,6					
340 W 025 NEW	25	100	30°	Ø 13	Ø 32,5	4,3					
340 W 025 NEW	25	100	40°	Ø 16,5	Ø 33,5	4,5					
340 W 025 NEW	25	100	45°	Ø 17,5	Ø 33,5	4,6					
340 W 025 NEW	25	100	50°	Ø 19	Ø 33,5	4,6					
340 W 025 NEW	25	100	60°	Ø 22	Ø 33,5	4,3					
340 W 025 NEW	25	100	70°	Ø 24,5	Ø 33,5	3,8					
340 W 025 NEW	25	100	80°	Ø 27	Ø 31	3					
340 WL 025 NEW	25	150	"	"	"	"					
340 WXL 025 NEW	25	200	"	"	"	"					
340 W 020 NEW	20	100	"	"	"	"					

NB: LE FRESE VENGONO SEMPRE FORNITE CON 2 CASSETTE COMPRESSE T16 NEW + S12 NEW

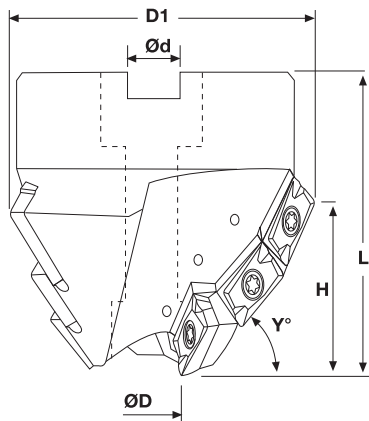
NB: DIE FRÄSER WERDEN IMMER MIT 2 KASSETTEN GELIEFERT T16 NEW + S12 NEW

NB: IN THE MILLING CUTTERS ARE ALWAYS INCLUDED 2 POCKETS

Frese per smussi 15° - 30° - 45° - 60° - 75°

Fasenfräser 15° - 30° - 45° - 60° - 75°

Milling cutter for chamfering 15° - 30° - 45° - 60° - 75°



ART. **FB.030**

15° - 30° - 45° - 60° - 75°

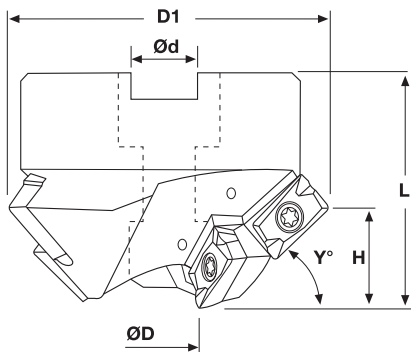
VITE FB.030. ... - COD.: **VT.FB.030**

NOVITA'
NEU
NEW

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions										
	D	D1	d	L	Y°	H	Z	K			
FB.030.001 W	17	56	22	50	45°	19	9	3	APKT 1003 APHT1003 APHX1003	VT 25	BT 08
FB.030.002 W	17	45	16	50	60°	24	9	3			
FB.030.003 W	17	65	22	50	30°	13	9	3			
FB.030.004 W	17	70	22	50	15°	7	9	3			
FB.030.005 W	19	33	16	60	75°	27	9	3			
FB.030.006 W	17	60	22	50	40°	17	9	3			

Disponibile a richiesta anche FB 030 con gradazioni differenti Y°
Lieferbar auf Anfrage FB 030 mit verschiedenen Graden Y°
Available on request FB 030 with different grades Y°

K= Fattore d'avanzamento / Vorschubfaktor / Factor of feed



ART. **FB.035**

15° - 30° - 45° - 60° - 75°

VITE FB.035.005 W - COD.: **VT.FB.75**

NOVITA'
NEU
NEW

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions										
	D	D1	d	L	Y°	H	Z	K			
FB.035.001 W	35	77,8	27	50	45°	21,5	6	3	APKT 1604 APHT1604 APHX1604	VT 40	BT 15
FB.035.002 W	35	65	27	50	60°	26,5	6	3			
FB.035.003 W	35	88	27	50	30°	15,0	6	3			
FB.035.004 W	35	94	27	50	15°	8,0	6	3			
FB.035.005 W	35	50,7	22	60	75°	29,5	6	3			
FB.035.006 W	35	84	27	50	40°	19	6	3			

Disponibile a richiesta anche FB 035 con gradazioni differenti Y°
Lieferbar auf Anfrage FB 035 mit verschiedenen Graden Y°
Available on request FB 035 with different grades Y°

K= Fattore d'avanzamento / Vorschubfaktor / Factor of feed

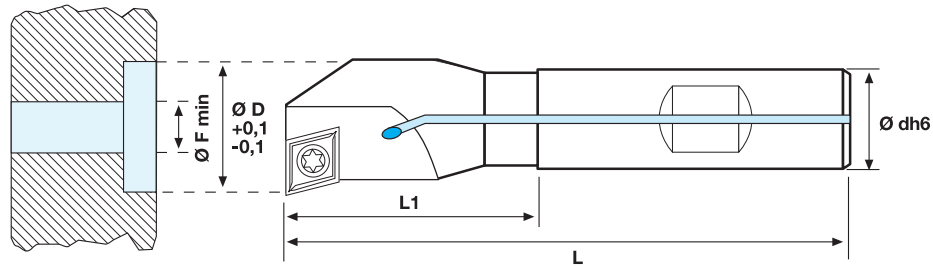
Frese per lamatura ed alesare



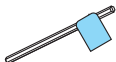
Senkfräser und Ausbohrer

Spot facing and boring milling cutter



ART. **380 W**



Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions								
	Ø D	L	L1	dh 6	Ø F min	Z			
380 WW D.10	10	85	15	12	4	1	CCMT 060204	VT 25	BT 08
380 WW D.11	11	85	15	12	4	1			
380 WW D.12	12	85	18	12	4	1			
380 WW D.13	13	85	23	12	5	1			
380 WW D.14	14	85	23	12	5	1			
380 WW D.15	15	85	30	12	5	1			
380 WW D.16	16	85	30	12	5	1			
380 WW D.17	17	95	30	16	6	1	CCMT 09T304	VT 40	BT 15
380 WW D.18	18	95	40	16	6	1			
380 WW D.19	19	95	40	16	6	1			
380 WW D.20	20	95	40	16	5	1			
380 WW D.21	21	95	42	16	5	1			
380 WW D.22	22	95	42	16	6	1			
380 WW D.23	23	95	42	16	6	1			
380 WW D.24	24	95	42	16	6	1			
380 WW D.25	25	95	42	16	8	1			
380 WW D.26	26	120	56	20	8	1			
380 WW D.27	27	120	56	20	8	1			
380 WW D.28	28	120	56	20	10	1			
380 WW D.29	29	120	56	20	10	1			
380 WW D.30	30	120	56	20	10	1			
380 WW D.31	31	120	56	20	12	1			
380 WW D.32	32	120	56	20	12	1			
380 WW D.33	33	120	56	20	12	1			

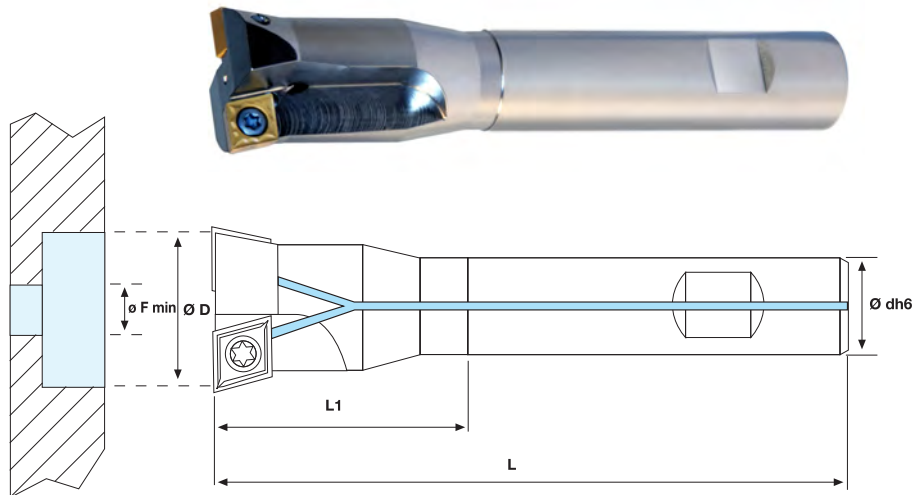
Frese per lamatura 180°



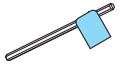
180° - Senkfräser

180° Spot-facing end mills



ART. 480 W



Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions								
	Ø D	L	L1	dh 6	Ø F min	Z			
480 WW D.16	16	92	30	12	5	2	CCMT 060204	VT25	BT08
480 WW D.17	17	94	32	16	6	2			
480 WW D.17,5	17,5	96	40	16	6,5	2			
480 WW D.18	18	97	41	16	7	2			
480 WW D.19	19	100	41	16	8	2			
480 WW D.20	20	102	41	16	9	2			
480 WW D.21	21	105	41	16	10	2			
480 WW D.22	22	110	41	16	11	2			
480 WW D.23	23	112	41	16	12	2			
480 WW D.24	24	115	41	16	13	2			
480 WW D.25	25	120	40	16	8	2	CCMT 09T304	VT40	BT15
480 WW D.26	26	125	55	20	9	2			
480 WW D.27	27	128	55	20	10	2			
480 WW D.28	28	130	55	20	11	2			
480 WW D.29	29	132	55	20	12	2			
480 WW D.30	30	134	55	20	13	2			
480 WW D.31	31	136	55	20	14	2			
480 WW D.32	32	138	55	20	15	2			
480 WW D.33	33	140	55	20	16	2			
480 WW D.34	34	140	60	25	16	2			
480 WW D.35	35	140	60	25	17	2			
480 WW D.36	36	140	60	25	18	2			
480 WW D.37	37	140	60	25	19	2			
480 WW D.38	38	140	60	25	20	2			
480 WW D.39	39	140	60	25	21	2			
480 WW D.40	40	140	60	25	22	2			
480 WW D.41	41	140	60	25	23	2			
480 WW D.42	42	140	60	25	24	2			

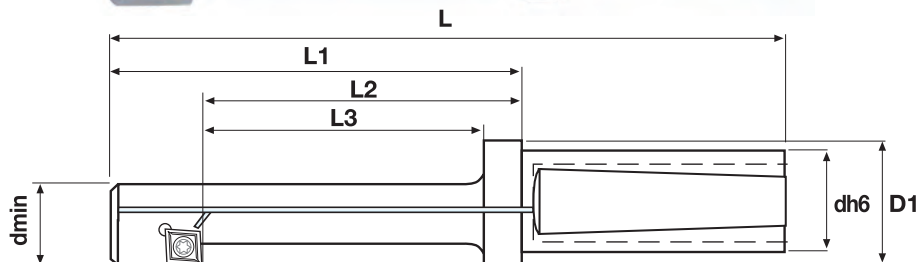
Frese per lamatura a tirare 180°

Rückwärtssenker 180°

Back facing milling cutter 180°

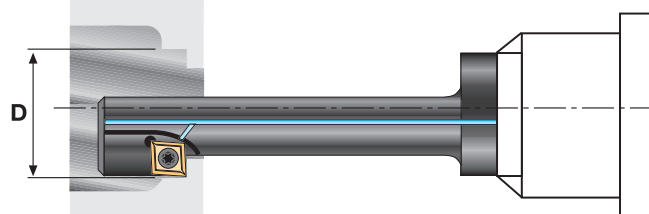


ART. **360 W**

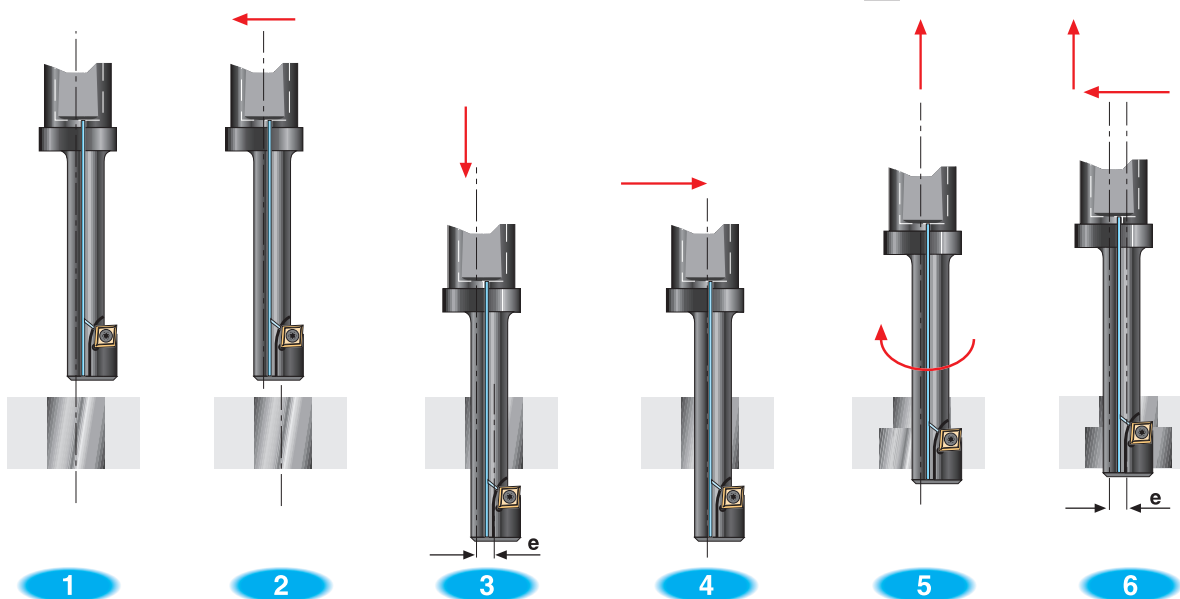


NOVITA'
NEU
NEW

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni - Abmessungen - Dimensions											
	D	dmin	L	L ₁	L ₂	L ₃	dh6	D ₁	e			
360W D. 15	15	8.5	105	55	42	35	20	25	3.5	CPMT 05T104	VT 22	BT 07
360W D. 18	18	10.5	112	62	47	40	20	25	4.0			
360WW D. 20	20	13.0	117	67	52	45	20	25	3.75	CCMT 060204	VT 25	BT 08
360WW D. 24	24	15.0	122	72	57	50	20	25	4.75			
360WW D. 26	26	17.0	132	82	67	60	20	25	5.0			
360WW D. 30	30	19.0	142	92	77	65	20	25	6.0			
360WW D. 33	33	21.0	152	102	82	75	20	25	6.5	CCMT 09T304	VT 40	BT 15
360WW D. 36	36	23.0	173	113	93	85	32	40	7.0			
360WW D. 40	40	25.0	183	123	103	95	32	40	8.0			
360WW D. 43	43	30.0	183	123	103	95	32	40	7.0			
360WW D. 48	48	33.0	223	163	143	135	32	40	8.0	CCMT 120404	VT 50	BT 20
360WW D. 53	53	36.0	210	140	40	110	40	/	9.0			
360WW D. 57	57	39.0	220	150	40	120	40	/	9.5			
360WW D. 66	66	45.0	245	165	50	135	50	/	11.0			
360WW D. 76	76	52.0	265	185	50	155	50	/	12.5			



vc = 50 - 80 m/min
f = 0,08 - 0,1 mm/u



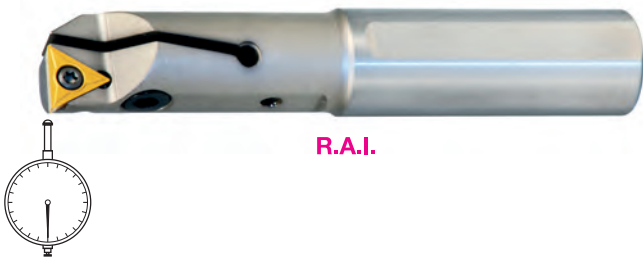
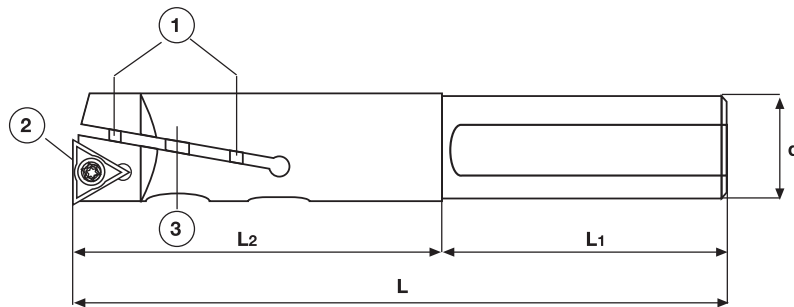
Bareni registrabili per alesatura

Einstellbare Feinbohrstangen

Adjustment boring bars



ART. **R.A.I.**



R.A.I.



R.A.I. CCMT...

Codice d'ordine Bestell-Nr. Order No.	(mm) Dimensioni Abmessungen - Dimensions						vite regolazione 1 Zugschraube 1 adjust.screw 1	vite inserto 2 Wpl.Schraube 2 inserts screw 2	vite fissaggio 3 Druckschraube 3 clamp scew 3	inserto wendeplatte inserts
	L	L ₁	L ₂	d	D _{min}	D _{max}				
R.A.I. 06	85	65	20	8	06 mm	07 mm	RE 11	VT 24	BL 11	WCMT 0201...
R.A.I. 07	90	65	25	8	07 mm	08 mm	RE 9	VT 20	BL 9	TPGX 0601 ..L
R.A.I. 08	90	65	25	8	08 mm	10 mm	RE 10	VT 20	BL 10	TPGX 0601 ..L
R.A.I. 10	100	70	30	10	10 mm	12 mm	RE 0	VT 20	BL 0	TPGX 0802 ..L
R.A.I. 12	105	70	30	12	12 mm	15 mm	RE 1	VT 20	BL 1	TPGX 0802 ..L
R.A.I. 15	110	60	50	16	15 mm	20 mm	RE 2	VT 20	BL 2	TPGX 0802 ..L
R.A.I. 20	120	60	60	20	20 mm	25 mm	RE 3	VT 25	BL 3	TCMT 1102 ...
R.A.I. 25	140	70	70	25	25 mm	30 mm	RE 4	VT 40	BL 4	TCMT 16T3...
R.A.I. 30	160	70	90	25	30 mm	35 mm	RE 5	VT 40	BL 5	TCMT 16T3...
R.A.I. 35	170	70	100	32	35 mm	40 mm	RE 6	VT 40	BL 6	TCMT 16T3...
R.A.I. 40	190	70	120	32	40 mm	45 mm	RE 7	VT 40	BL 7	TCMT 16T3...
R.A.I. 45	220	70	150	32	45 mm	50 mm	RE 8	VT 40	BL 10	TCMT 16T3...
R.A.I. 10 CCMT	100	70	30	10	10 mm	12 mm	RE 1	VT 25	BL 0	CCMT 0602 ...
R.A.I. 12 CCMT	105	70	30	12	12 mm	15 mm	RE 1	VT 25	BL 1	CCMT 0602 ...
R.A.I. 15 CCMT	110	60	50	16	15 mm	20 mm	RE 2	VT 25	BL 2	CCMT 0602 ...
R.A.I. 20 CCMT	120	60	60	20	20 mm	25 mm	RE 3	VT 25	BL 3	CCMT 0602 ...
R.A.I. 25 CCMT	140	70	70	25	25 mm	30 mm	RE 4	VT 35	BL 4	CCMT 09T3 ...
R.A.I. 30 CCMT	160	70	90	25	30 mm	35 mm	RE 5	VT 35	BL 5	CCMT 09T3 ...
R.A.I. 35 CCMT	170	70	100	32	35 mm	40 mm	RE 6	VT 35	BL 6	CCMT 09T3 ...
R.A.I. 40 CCMT	190	70	120	32	40 mm	45 mm	RE 7	VT 35	BL 7	CCMT 09T3 ...
R.A.I. 45 CCMT	220	70	150	32	45 mm	50 mm	RE 8	VT 35	BL 10	CCMT 09T3 ...
Serie extra lunga - Extralange Ausführung / Extralong models										
R.A.I. 12 SL	130	70	60	12	12 mm	15 mm	RE 1	VT 20	BL 1	TPGX 0802 ..L
R.A.I. 15 SL	140	70	70	16	15 mm	20 mm	RE 2	VT 20	BL 2	TPGX 0802 ..L
R.A.I. 20 SL	150	70	80	20	20 mm	25 mm	RE 3	VT 25	BL 3	TCMT 1102 ...
R.A.I. 25 SL	170	70	100	25	25 mm	30 mm	RE 4	VT 40	BL 4	TCMT 16T3 ...
R.A.I. 30 SL	190	70	120	25	30 mm	35 mm	RE 5	VT 40	BL 5	TCMT 16T3 ...
R.A.I. 35 SL	220	70	150	32	35 mm	40 mm	RE 6	VT 40	BL 6	TCMT 16T3 ...

Set Minimill

Codice d'ordine Bestell-Nr. Order No.	SET 300 W - 45°	Frese smussi e svasature Fräser zum fassen Milling cutter for chamfering
Contenuto del set - Inhalt pro Set / Set Contents		
SET 300 W - 45°		
1	300.016 WW	
1	300.021 WW	



Codice d'ordine Bestell-Nr. Order No.	SET 310 W - 60°	Frese smussi e svasature Fräser zum fassen Milling cutter for chamfering
Contenuto del set - Inhalt pro Set / Set Contents		
SET 310 W - 60°		
1	310.016 WW	
1	310.027 WW	



Codice d'ordine Bestell-Nr. Order No.	SET R.A.I. 10-25 CCMT	Bareni registrabili per alesatura Einstellbare feinbohrstangen Adjustment boring bars
Contenuto del set - Inhalt pro Set / Set Contents		
SET R.A.I. 10-25 CCMT		
1	R.A.I. 10 CCMT	
1	R.A.I. 12 CCMT	
1	R.A.I. 15 CCMT	
1	R.A.I. 20 CCMT	

