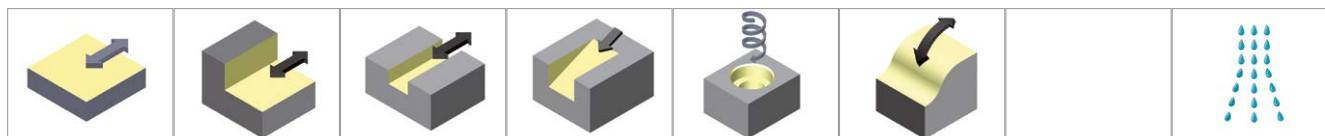
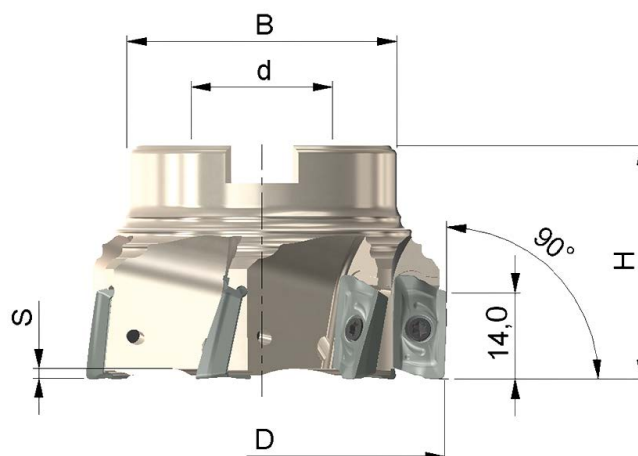


B25 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*



Aufsteckfräser *Shell type mills, Fraises à alésage, Frese per attacco a manicotto*



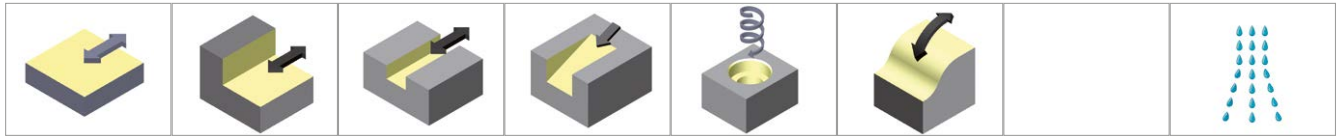
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	H	d	B	S	Z	MS
90PP-032-70-16-3	32	40	16	29	2,0	3	DS 12
90PP-035-70-16-4	35	40	16	29	2,0	4	DS 12
90PP-040-70-16-4	40	40	16	38	2,0	4	MS-8x25-912
90PP-050-70-5	50	40	22	46	2,0	5	MS-10x25-912
90PP-063-70-5	63	40	22	46	2,0	5	MS-10x25-912
90PP-080-70-6	80	50	27	58	2,0	6	MS-12x35-912
90PP-100-70-8	100	50	32	78	2,0	8	MS-16x30-912
90PP-125-70-9	125	50	40	90	2,0	9	MS-20x45-7991
90PP-160-70-10	160	50	40	90	2,0	10	MS-20x45-7991

Enge Teilung *close pitch, à pas réduit, a passo stretto:*

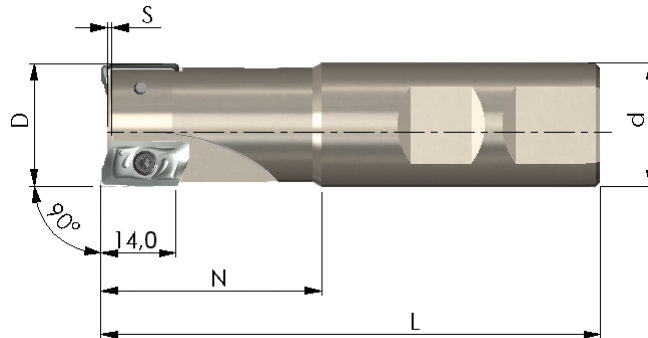
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	H	d	B	S	Z	MS
90PP-032-70-16-4	32	40	16	29	2,0	4	DS 12
90PP-040-70-16-5	40	40	16	38	2,0	5	MS-8x25-912
90PP-050-70-6	50	40	22	46	2,0	6	MS-10x25-912
90PP-063-70-7	63	40	22	46	2,0	7	MS-10x25-912
90PP-080-70-8	80	50	27	58	2,0	8	MS-12x35-912
90PP-100-70-10	100	50	32	78	2,0	10	MS-16x30-912
90PP-125-70-11	125	50	40	90	2,0	11	MS-20x45-7991
90PP-160-70-12	160	50	40	90	2,0	12	MS-20x45-7991

MS= Mittenschraube *Central screw, Vis centrale, Vite centrale di fissaggio*

B25 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*

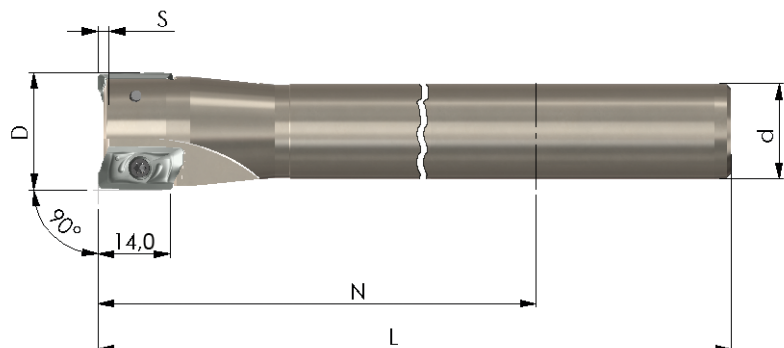


Schafffräser DIN 1835-B *Shank type mills, Fraises à queue Weldon, Frese a gambo Weldon*



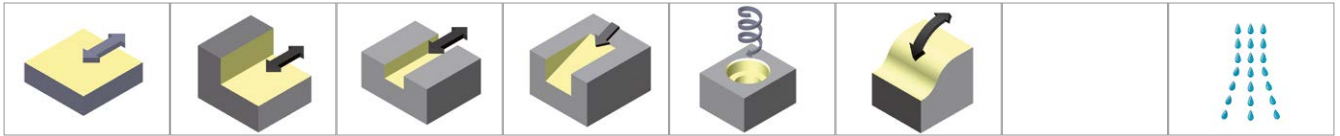
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	N	L	d	S	Z
90PP-20-32-70-2	20	32,0	82	20	2,0	2
90PP-20-50-70-2	20	49,0	100	20	2,0	2
90PP-25-42-70-2	25	44,0	100	25	2,0	2
90PP-25-60-70-3	25	60,0	116	25	2,0	3
90PP-32-48-70-3	32	48,0	104	25	2,0	3
90PP-32-60-70-3	32	60,0	116	25	2,0	3
Enge Teilung <i>close pitch, à pas réduit, a passo stretto:</i>						
90PP-25-42-70-3	25	44,0	100	25	2,0	3
90PP-32-48-70-4	32	48,0	104	25	2,0	4

Schafffräser DIN 1835-A *Shank type mills, Fraises à queue, Frese a gambo*

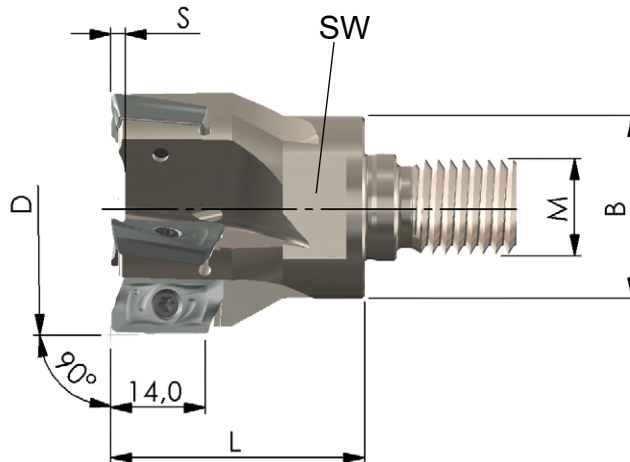


Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	N	L	d	S	Z
90PP-20-70-2-150	20	93	150	18	2,0	2
90PP-25-70-2-170	25	113	170	20	2,0	2
90PP-32-70-3-195	32	138	195	25	2,0	3

B25 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*

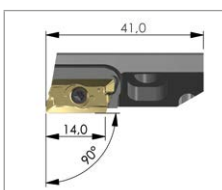


Einschraubfräser *Screw-In cutters, Fraises à queue fileté, Frese con attacco filettato*



Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	L	M	B	SW	S	Z
ESF-20-M10-70-2	20	40	M10	18	16	2,0	2
ESF-25-M12-70-2	25	40	M12	21	18	2,0	2
ESF-32-M16-70-3	32	40	M16	29	24	2,0	3
ESF-35-M16-70-3	35	40	M16	29	24	2,0	3
ESF-40-M16-70-3	40	40	M16	29	24	2,0	3
Enge Teilung <i>close pitch, à pas réduit, a passo stretto:</i>							
ESF-25-M12-70-3	25	40	M12	21	18	2,0	3
ESF-32-M16-70-4	32	40	M16	29	24	2,0	4
ESF-35-M16-70-4	35	40	M16	29	24	2,0	4
ESF-40-M16-70-5	40	40	M16	29	24	2,0	5

Kassetten *Cassettes, Cassettes, Porta inserti*



K90-70-G

NI-beschichtete, hoch verschleißfeste Ausführung

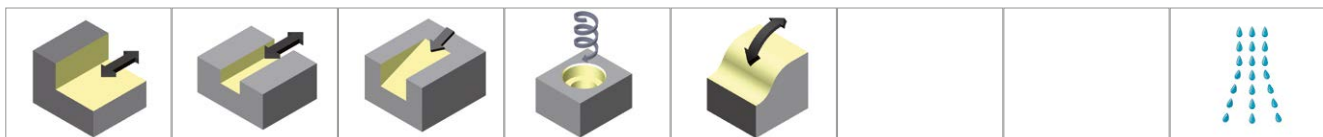
Hard wearing NI-Coating

Modèle doté d'un revêtement NI particulièrement résistant à l'usure

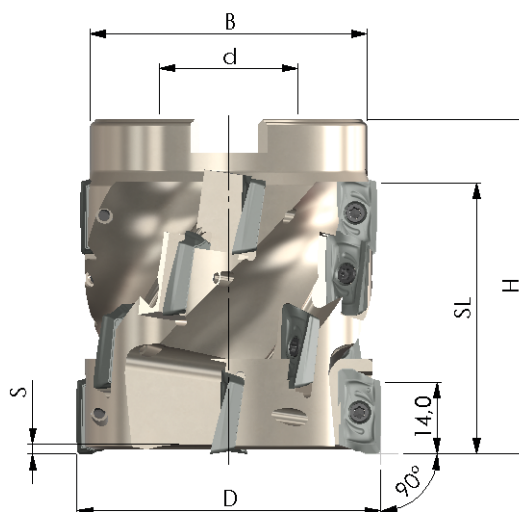
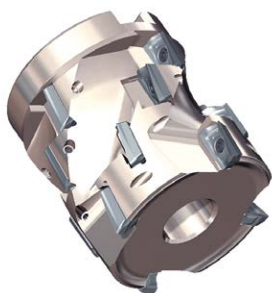
Modello con rivestimento NI resistente all'usura

Trägerkörper, Cassette holders, Supports, Supporti > Page 268

B25 Vielzahnfräser *Multi-Tooth milling cutters, Fraises multi-dents (hérisson), Frese a riccio*



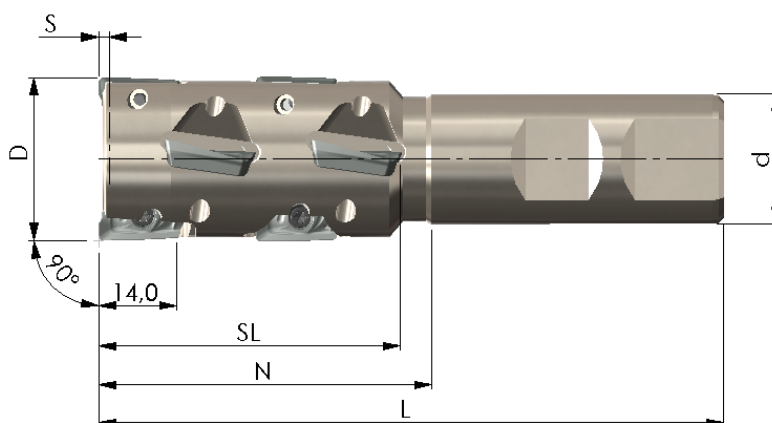
Aufsteckfräser *Shell type mills, Fraises à alésage, Frese per attacco a manicotto*



Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	SL	H	d	B	S	Z _{eff.}	ZZ	MS
VZF 40-42-70-3 KD16	40	42,6	55	16	36	2,0	3	9	MS-8x45-912
VZF 50-42-70-3 KD22	50	42,6	55	22	46	2,0	3	9	MS-10x45-912
VZF 63-55-70-4 KD27	63	56,2	70	27	58	2,0	4	16	MS-12x55-912

MS= Mittenschraube *Central screw, Vis centrale, Vite centrale di fissaggio*

Schaftfräser DIN 1835-B *Shank type mills, Fraises à queue Weldon, Frese a gambo Weldon*

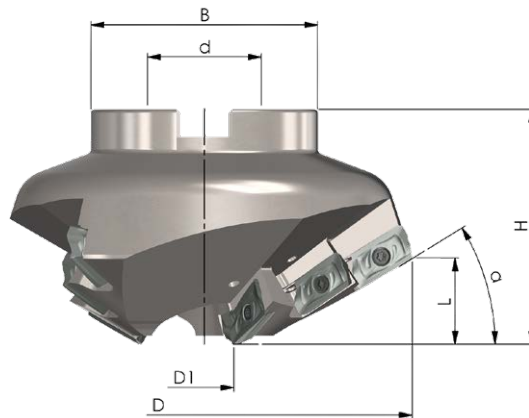


Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	SL	N	L	d	S	Z _{eff.}	ZZ
VZF 25-42-25-70-2	25	42,6	53	110	25	2,0	2	6
VZF 28-42-25-70-2	28	42,6	53	110	25	2,0	2	6
VZF 32-55-25-70-2	32	56,1	63	120	25	2,0	2	8
VZF 32-55-32-70-2	32	56,1	64	125	32	2,0	2	8

B25 Fasenfräser *Chamfering mills, Fraises à chanfreiner, Frese per smussatura*



Aufsteckfräser *Shell type mills, Fraises à alésage, Frese per attacco a manicotto*



Bestell-Nr.	D	D ₁	H	α	L	d	B	Z	MS
ASF-34-30-B25-21	108,0	34	60	30°	21,5	27	58	3x3	MS-12x40-912
ASF-34-45-B25-30	95,2	34	60	45°	30,4	27	58	3x3	MS-12x40-912
ASF-34-60-B25-37	77,2	34	60	60°	37,8	27	58	3x3	MS-12x40-912

MS= Mittenschraube *Central screw, Vis centrale, Vite centrale di fissaggio*

B25 Fräswendepplatten und Schnittdaten

Milling inserts and parameters, Plaquettes de fraiseage et paramètres, Inserti e parametri di taglio

			HC45 (code 41)	HC30 (code 52)	XC35 (code 46)	XC34 (code 64)	HC20 (code 53)	K15M (code 8)	
	JMB25-70SR08- 18,0x9,0x5,0 R0,8 S	Order-No.	B25RZ -41-A	B25HY -52-A			B25NX -53-A		
	f_z [mm]		0,15 (0,10-0,30)	0,15 (0,10-0,30)			0,15 (0,10-0,30)		
	JMB25-70HR08- 18,0x9,0x5,0 R0,8 H M	Order-No.	B25RM -41-A	B25XR -52-A			B25ZM -53-A		
	f_z [mm]		0,15 (0,10-0,30)	0,15 (0,10-0,30)			0,15 (0,10-0,30)		
	JMB25-70MR02- 18,0x9,0x5,0 R0,2 U	Order-No.	B25UH -41-B			B25ZF -64-B			
	f_z [mm]		0,15 (0,10-0,30)			0,15 (0,10-0,30)			
	JMB25-70MR02- 18,0x9,0x5,0 R0,2 U	Order-No.						B25WL -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
	JMB25-70MR04- 18,0x9,0x5,0 R0,4 U	Order-No.	B25FB -41-B			B25PO -64-B			
	f_z [mm]		0,15 (0,10-0,30)			0,15 (0,10-0,30)			
	JMB25-70MR04- 18,0x9,0x5,0 R0,4 U	Order-No.						B25KW -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
	JMB25-70MR08- 18,0x9,0x5,0 R0,8 U	Order-No.	B25BT -41-B		B25UO -46-B	B25MT -64-B			
	f_z [mm]		0,15 (0,10-0,30)		0,15 (0,10-0,25)	0,15 (0,10-0,25)			
	JMB25-70MR08- 18,0x9,0x5,0 R0,8 U	Order-No.						B25DZ -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
	JMB25-70MR12- 18,0x9,0x5,0 R1,2 U	Order-No.	B25GF -41-B			B25JP -64-B			
	f_z [mm]		0,15 (0,10-0,30)			0,15 (0,10-0,25)			
	JMB25-70MR12- 18,0x9,0x5,0 R1,2 U	Order-No.						B25HE -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
	JMB25-70MR16- 18,0x9,0x5,0 R1,6 U	Order-No.	B25YP -41-B			B25LG -64-B			
	f_z [mm]		0,15 (0,10-0,30)			0,15 (0,10-0,25)			
	JMB25-70MR16- 18,0x9,0x5,0 R1,6 U	Order-No.						B25XL -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
	JMB25-70MR20- 18,0x9,0x5,0 R2,0 U	Order-No.	B25CU -41-B			B25YT -64-B			
	f_z [mm]		0,15 (0,10-0,30)			0,15 (0,10-0,25)			
	JMB25-70MR20- 18,0x9,0x5,0 R2,0 U	Order-No.						B25HC -08-D	
	f_z [mm]							0,35 (0,20-0,50)	
			10	10	10	10	10	10	

B25 Fräswendepplatten und Schnittdaten

Milling inserts and parameters, Plaquettes de fraisage et paramètres, Inserti e parametri di taglio

			HC45 (code 41)	HC30 (code 52)	XC35 (code 46)	XC34 (code 64)	HC20 (code 53)	K15M (code 8)	
	JMB25-70MR25- 18,0x9,0x5,0 R2,5 U	Order-No.	B25TK -41-B		B25WT -46-B	B25OL -64-B			
		f _z [mm]	0,15 (0,10-0,30)		0,15 (0,10-0,25)	0,15 (0,10-0,25)			
	JMB25-70MR25- 18,0x9,0x5,0 R2,5 U	Order-No.						B25LR -08-D	
		f _z [mm]						0,35 (0,20-0,50)	
	JMB25-70AR08- 18,0x9,0x5,0 R0,8 S	Order-No.	B25LR -41-B	B25HX -52-B	B25SJ -46-B	B25EL -64-B	B25AY -53-B		
		f _z [mm]	0,15 (0,10-0,30)	0,15 (0,10-0,30)	0,10 (0,05-0,20)	0,10 (0,05-0,20)	0,15 (0,10-0,30)		
	JMB25-70AR04- 18,0x9,0x5,0 R0,4 U	Order-No.						B25ZH -08-D	
		f _z [mm]						0,35 (0,20-0,50)	
			10	10	10	10	10	10	

Ersatzteile und Schnittdaten

Spare parts and parameters, Pièces de rechange et paramètres, Parti di ricambio e parametri di taglio

V _c [m/min]	Stahl Steel Acier Acciaio	Rostfrei Stainless Acier inoxydable Inossidabile	Guss Cast iron Fonte Ghisa	NE-Metalle Non-ferrous metals Non ferreux Metalli non ferrosi	Hochwarmfest Highly heat-resistant Superalliages Resistente al calore	Gehärtet Tempered Aciers traités Temprato
HC45	250 (200 - 350)	240 (140 - 300)	240 (130 - 280)			
HC30	160 (120-220)	200 (100 - 300)			60 (40 - 200)	
XC35		120 (60 - 180)			80 (40 - 200)	
XC34		120 (60 - 180)			80 (40 - 200)	
HC20			260 (180 - 350)			80 (40 - 120)
K15M				400 (300 - 600)		

Ersatzteile Spare parts, Pièces de rechange, Parti di ricambio

	SS 3,0-2 (M = 1,7-1,8 Nm)		T09		Fett Grease, Graisse, Grasso
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B25 Rampingwinkel

Ramping angle type, Angle de ramping, Angolo rampa inserti

D	Ramping- winkel <i>Ramping angle type Angle de ramping Angolo rampa inserti</i> max. α (°)	Bearbeitungs- weg <i>Processing path Distance parcourue lunghezza di lavorazione</i> min. L (mm)	a_p max. $\phi/2$	ϕ WP <i>Insert Plaquette Inserti</i>	WP <i>Insert Plaquette Inserti</i>
20	9,3	55	3,00	8,50	JMB25 (FP 70S, FP70A)
25	6,4	80	3,00	8,50	
32	4,5	115	3,00	8,50	
35	4,0	130	3,00	8,50	
40	3,3	155	3,00	8,50	
50	2,5	205	3,00	8,50	
63	1,9	270	3,00	8,50	
80	1,5	355	3,00	8,50	
100	1,1	455	3,00	8,50	
125	0,9	580	3,00	8,50	
160	0,7	755	3,00	8,50	