



PLAIN SHANK  
GLATTER ZYLINDERSCHAFT

FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

## CARBIDE, 4 FLUTE LONG LENGTH VOLLHARTMETALL, 4 SCHNEIDEN LANG

- ▶ Designed to machine tool steel, alloy steel, mold steel and other high hardened materials.
- ▶ 4 flute allows for better workpiece finishes.
- ▶ Increased production.

- ▶ Zur Bearbeitung: Werkzeugstählen, Legierten Stählen, Stahlguß und gehärteten Stählen.
- ▶ 4 Schneiden erzeugen eine bessere Oberfläche des Werkstücks.
- ▶ Höhere Produktivität.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
PLAIN	FLAT				
EM817020	—	2.0	4	8	40
EM817030	EM827030	3.0	6	12	50
EM817040	EM827040	4.0	6	15	50
EM817050	EM827050	5.0	6	20	60
EM817060	EM827060	6.0	6	20	60
EM817080	EM827080	8.0	8	25	70
EM817100	EM827100	10.0	10	30	90
EM817120	EM827120	12.0	12	30	90
EM817140	EM827140	14.0	16	40	110
EM817160	EM827160	16.0	16	50	110
EM817180	EM827180	18.0	20	50	110
EM817200	EM827200	20.0	20	55	110
EM817250	EM827250	25.0	25	75	140

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6

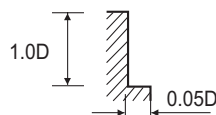
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎	○				○				

◎ : Excellent ○ : Good

## CARBIDE, 4 FLUTE SHORT - SIDE CUTTING VOLLHARTMETALL, 4 SCHNEIDEN KURZ - SEITENFRÄSEN

### EM811, EM821 SERIES

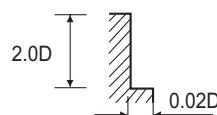
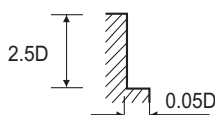
MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON		ALLOY STEELS HEAT RESISTANT STEELS		STAINLESS STEELS		HARDENED STEELS		HARDENED STEELS	
HARDNESS	~ HRC30		HRC30 ~ HRC45				HRC45 ~ HRC55		HRC55 ~ HRC65	
STRENGTH	~ 1000N/mm <sup>2</sup>		1000 ~ 1500N/mm <sup>2</sup>				1500 ~ 2000N/mm <sup>2</sup>		2000N/mm <sup>2</sup> ~	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
2.0	11560	280	7560	170	6300	140	5040	50		
3.0	8920	320	5560	200	4620	170	3360	60	1900	50
4.0	7560	570	4620	350	3880	280	2940	60	1480	50
5.0	6300	600	3780	360	3160	300	2320	70	1260	50
6.0	5560	660	3360	410	2840	330	2000	80	1100	50
8.0	4200	710	2520	380	2100	350	1680	110	840	50
10.0	3260	610	2000	300	1680	300	1360	90	680	40
12.0	2740	520	1680	250	1360	240	1160	80	560	40
16.0	2200	410	1360	200	1100	200	900	60	440	25
20.0	1680	320	1060	160	840	150	680	40	320	25
25.0	1360	250	840	130	680	120	540	30	260	20


 RPM = rev./min.  
FEED = mm/min.

## CARBIDE, 4 FLUTE LONG - SIDE CUTTING VOLLHARTMETALL, 4 SCHNEIDEN LANG - SEITENFRÄSEN

### EM817, EM827 SERIES

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON		ALLOY STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS	
HARDNESS	~ HRC30		HRC30 ~ HRC45		HRC45 ~ HRC55		HRC55 ~ HRC65	
STRENGTH	~ 1000N/mm <sup>2</sup>		1000 ~ 1500N/mm <sup>2</sup>		1500 ~ 2000N/mm <sup>2</sup>		2000N/mm <sup>2</sup> ~	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
2.0	8820	200	5040	80	3150	45		
3.0	6170	230	3570	100	2200	55	1890	30
4.0	5000	280	2840	115	1790	60	1470	35
5.0	4270	360	2420	140	1580	70	1260	40
6.0	3680	430	2100	180	1370	90	1160	50
8.0	2800	460	1580	180	1050	90	840	50
10.0	2350	460	1370	180	840	90	670	50
12.0	1920	360	1160	160	700	70	560	40
16.0	1620	320	890	125	560	60	440	35
20.0	1180	230	680	90	420	45	340	25


 RPM = rev./min.  
FEED = mm/min.