



PLAIN SHANK  
GLATTER ZYLINDERSCHAFT

FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

## CARBIDE, 4 FLUTE REGULAR LENGTH VOLLHARTMETALL, 4 SCHNEIDEN STANDARD

- ▶ Special flute geometry eliminates vibrations
- ▶ Designed to mild steels, stainless steel, cast iron, tool steels, titanium alloys, prehardened steels and low hardness material under HRc 40
- ▶ Excellent work piece finishes
- ▶ Higher speeds, deeper cuts and metal removal rates

- ▶ Spezielle Schneidengeometrie verhindert Vibrationen
- ▶ Geeignet für Baustähle, Rostfreie Stähle, Grauguss, Werkzeugstähle, Titanlegierungen, hochfeste Stähle und Werkstoffe unter 40 HRc
- ▶ Bessere Werkstückoberflächen.
- ▶ Höhere Schnittgeschwindigkeiten, größere Profiltiefe und größeres Zerspanungsvolumen



Unit : inch

EDP No.		Mill Diameter	Shank Diameter h6	Length of Cut	Overall Length
PLAIN	FLAT				
EMB12008	-	1/8	1/8	3/8	1-1/2
EMB12010	-	5/32	3/16	7/16	2
EMB12012	-	3/16	3/16	7/16	2
EMB12014	-	7/32	1/4	7/16	2-1/2
EMB12016	-	1/4	1/4	1/2	2-1/2
EMB12018	-	9/32	5/16	5/8	2-1/2
EMB12020	-	5/16	5/16	13/16	2-1/2
EMB12022	EMB37022	11/32	3/8	13/16	2-1/2
EMB12024	EMB37024	3/8	3/8	7/8	2-1/2
EMB12026	EMB37026	13/32	7/16	15/16	2-3/4
EMB12028	EMB37028	7/16	7/16	1	2-3/4
EMB12030	EMB37030	15/32	1/2	1	3
EMB12032	EMB37032	1/2	1/2	1	3
EMB12036	EMB37036	9/16	9/16	1-1/8	3-1/2
EMB12040	EMB37040	5/8	5/8	1-1/4	3-1/2
EMB12048	EMB37048	3/4	3/4	1-1/2	4
EMB12064	EMB37064	1	1	1-1/2	4

Mill Dia. Tolerance(inch)	Shank Dia. Tolerance
0~-.0012	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

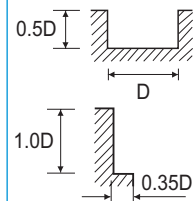
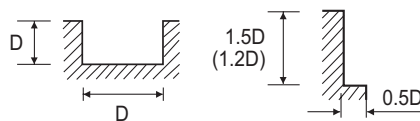


**RECOMMENDED CUTTING CONDITIONS**  
**EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, 4 FLUTE**  
**VOLLHARTMETALL, 4 SCHNEIDEN**

**EMB41, EMB42, EMB43, EMB44, EMB14, EMB39, EMB15, EMB40, EMB12, EMB37, EMB13, EMB38 SERIES**

MATERIAL	ALLOY STEELS CAST IRON		ALLOY STEELS CAST IRON		STAINLESS STEELS 300SERIES		STAINLESS STEELS 400SERIES		TITANIUM		INCONEL	
	HARDNESS	~HB 300	HB 300~HB 380	STRENGTH	~1000N/mm <sup>2</sup>	1000~1300N/mm <sup>2</sup>	DIAMETER	RPM	FEED	RPM	FEED	RPM
3.0	13475	275	9430	190	10185	195	14260	205	10185	205	2715	55
4.0	10105	330	7070	230	7600	250	14260	255	7600	255	2005	55
5.0	8085	370	5660	260	6110	310	8655	310	6110	310	1630	80
6.0	6735	435	4715	385	5095	360	7130	360	5095	360	1355	95
8.0	5050	555	3535	385	3820	435	5345	465	3280	465	1015	125
10.0	4455	690	3115	480	3055	590	4275	585	3055	585	815	155
12.0	3710	695	2600	485	2545	565	3565	565	2545	565	675	150
14.0	3180	620	2225	435	2180	520	3055	520	2180	520	580	140
16.0	2785	590	1950	410	1910	480	2670	480	1910	480	505	130
18.0	2475	585	1730	410	1695	475	2375	475	1695	475	450	125
20.0	2225	580	1560	405	1525	470	2140	470	1525	470	405	125
25.0	1780	450	1245	315	1215	380	1710	380	1215	380	320	110



1.2 x D Axial cutting depth should be applied for Short length series DIA over 8mm

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