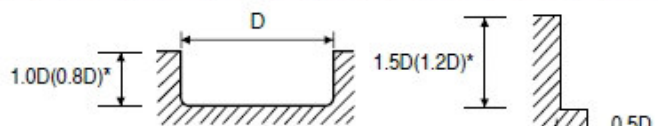


**CARBIDE, 4 FLUTE**  
**VOLLHARTMETALL, 4 SCHNEIDEN**
**GMF52, GMF53, GMF54, GMF55, GMF56, GMF57, GMF58, GMF59, GMF60, GMF61, GMF62, GMF63 SERIES**

MATERIAL	P											
	CARBON STEELS				ALLOY STEELS				TOOL STEELS			
HARDNESS	~HB 300				HB 300 ~ HB 380				~HB 380			
STRENGTH	~1000 N/mm <sup>2</sup>				1000 ~ 1300 N/mm <sup>2</sup>				~ 1300 N/mm <sup>2</sup>			
DIAMETER	RPM	FEED	VC	fz	RPM	FEED	VC	fz	RPM	FEED	VC	fz
3.0	16130	325	152	0.005	11350	225	107	0.005	6790	80	64	0.003
4.0	12100	385	152	0.008	8510	270	107	0.008	5090	120	64	0.008
5.0	9680	425	152	0.011	6810	300	107	0.011	4070	130	64	0.008
6.0	8060	515	152	0.016	5680	365	107	0.016	3400	150	64	0.011
8.0	6050	655	152	0.027	4260	460	107	0.027	2550	195	64	0.019
10.0	5350	815	168	0.038	3720	565	117	0.038	2230	240	70	0.027
12.0	4460	840	168	0.047	3100	585	117	0.047	1860	240	70	0.032
14.0	3820	750	168	0.049	2660	520	117	0.049	1590	215	70	0.034
16.0	3340	710	168	0.053	2330	495	117	0.053	1390	205	70	0.037
18.0	2970	700	168	0.059	2070	490	117	0.059	1240	205	70	0.041
20.0	2670	695	168	0.065	1860	485	117	0.065	1110	200	70	0.045
25.0	2140	550	168	0.064	1490	380	117	0.064	890	160	70	0.045



\*( ) : Short length & Neck type

0.8xD(Slotting), 1.2xD(Side Cutting) Axial

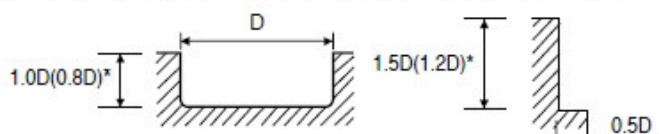
\* cutting depth should be applied for Short length(GMF52, GMF53, GMF54, GMF55)

& Neck type(GMF60, GMF61, GMF62, GMF63) series diameter over 8mm

RPM = rev./min.  
Vc = m/min.

FEED = mm/min.  
fz = mm/tooth

MATERIAL	M											
	STAINLESS STEELS 300				STAINLESS STEELS 400				STAINLESS STEELS (PH)			
HARDNESS												
STRENGTH												
DIAMETER	RPM	FEED	VC	fz	RPM	FEED	VC	fz	RPM	FEED	VC	fz
3.0	11250	225	106	0.005	15700	250	148	0.004	10080	200	95	0.005
4.0	8440	270	106	0.008	11780	285	148	0.008	7560	240	95	0.008
5.0	6750	350	106	0.013	9420	340	148	0.009	6050	315	95	0.013
6.0	5620	405	106	0.018	7850	410	148	0.013	5040	365	95	0.018
8.0	4220	470	106	0.028	5890	520	148	0.022	3780	425	95	0.028
10.0	3370	650	106	0.048	4710	640	148	0.034	3020	580	95	0.048
12.0	2810	620	106	0.055	3930	610	148	0.039	2520	555	95	0.055
14.0	2410	570	106	0.059	3360	565	148	0.042	2160	510	95	0.059
16.0	2110	525	106	0.062	2940	530	148	0.045	1890	470	95	0.062
18.0	1870	525	106	0.07	2620	525	148	0.05	1680	465	95	0.069
20.0	1690	520	106	0.077	2360	520	148	0.055	1510	460	95	0.076
25.0	1350	415	106	0.077	1880	415	148	0.055	1210	370	95	0.076



\*( ) : Short length & Neck type

0.8xD(Slotting), 1.2xD(Side Cutting) Axial

\* cutting depth should be applied for Short length(GMF52, GMF53, GMF54, GMF55)

& Neck type(GMF60, GMF61, GMF62, GMF63) series diameter over 8mm

RPM = rev./min.  
Vc = m/min.

FEED = mm/min.  
fz = mm/tooth



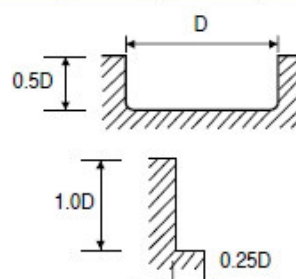
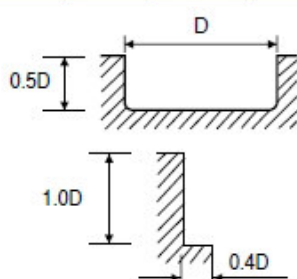
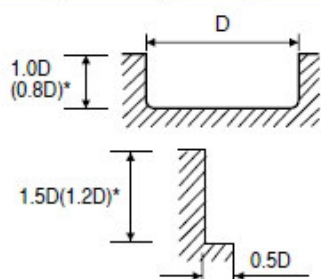
# V7 PLUS END MILLS

## RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

### CARBIDE, 4 FLUTE VOLLHARTMETALL, 4 SCHNEIDEN

#### GMF52, GMF53, GMF54, GMF55, GMF56, GMF57, GMF58, GMF59, GMF60, GMF61, GMF62, GMF63 SERIES

MATERIAL	K				S				S			
	CAST IRON				TITANIUM				HIGH TEMPERATURE ALLOYS			
HARDNESS	~HB 260											
STRENGTH	~ 900 N/mm <sup>2</sup>											
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
3.0	11880	285	112	0.008	6150	100	58	0.004	2760	55	26	0.005
4.0	8910	355	112	0.01	4620	130	58	0.007	2070	60	26	0.007
5.0	7130	400	112	0.014	3690	160	58	0.011	1660	55	26	0.008
6.0	5940	475	112	0.02	3080	195	58	0.016	1380	65	26	0.012
8.0	4460	605	112	0.034	2310	230	58	0.025	1030	80	26	0.019
10.0	3920	750	123	0.048	1850	310	58	0.042	830	110	26	0.033
12.0	3260	755	123	0.058	1540	310	58	0.05	690	105	26	0.038
14.0	2800	680	123	0.061	1320	280	58	0.053	590	95	26	0.04
16.0	2450	635	123	0.065	1150	255	58	0.055	520	90	26	0.043
18.0	2180	635	123	0.073	1030	255	58	0.062	460	90	26	0.048
20.0	1960	635	123	0.081	920	250	58	0.068	410	90	26	0.054
25.0	1570	495	123	0.079	740	205	58	0.069	330	70	26	0.052



\*( ) : Short length & Neck type

0.8xD(Slotting), 1.2xD(Side Cutting) Axial

\* cutting depth should be applied for Short length(GMF52, GMF53, GMF54, GMF55) & Neck type(GMF60, GMF61, GMF62, GMF63) series diameter over 8mm

RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
fz = mm/tooth