

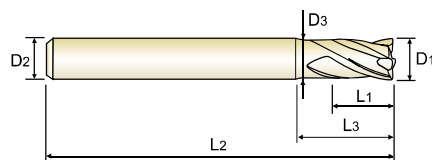
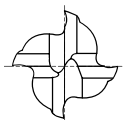


CARBIDE, 4 FLUTE with EXTENDED NECK

- **VOLLHARTMETALL, 4 SCHNEIDEN mit ABGESETZTEM SCHAFTTEIL**
- **Fraise carbure, 4 dents, détalonnée**
- **4 TAGLIENTI CON SCARICO ESTESO**

- ▶ Designed to machine high hardened materials.
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
- ▶ Excellent workpiece finish.
- ▶ Designed for high precision milling operation.
- ▶ Higher wear-resistance.

- ▶ Geeignet zum Fräsen hochgehärteter Stähle.
- ▶ Geeignet zum Trockenfräsen und HSC-Fräsen dank neuentwickeltem Material und Beschichtung.
- ▶ Excellente Werkstückoberflächen.
- ▶ Geeignet für hochpräzises Fräsen.
- ▶ Höhere Verschleißfestigkeit.



CARBIDE 4 BLUE 30° PLAIN P.156

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter
	D1	D2	L1	L3	L2	D3
G8A02010	1.0	6	1.5	3	50	0.95
G8A02020	2.0	6	2	5	50	1.95
G8A02030	3.0	6	3	8	55	2.85
G8A02040	4.0	6	4	10	55	3.85
G8A02050	5.0	6	5	13	55	4.85
G8A02060	6.0	6	6	15	55	5.85
G8A02080	8.0	8	8	20	65	7.7
G8A02100	10.0	10	10	25	75	9.7
G8A02120	12.0	12	12	28	85	11.7
G8A02160	16.0	16	16	32	90	15.7
G8A02200	20.0	20	20	40	105	19.7

Due to the characteristics of the blue decoration layer, it might be erased during short term use and the color layer might not be uniformed. However, it doesn't affect the performance of the tool.

Size	Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
up to Ø6	0 ~ - 0.012	h5
over Ø6	0 ~ - 0.015	

◎ : Excellent ○ : Good

ISO Material Description	P											M			K						
	Non-alloy steel					Low alloy steel						High alloyed steel, and tool steel			Stainless steel			Grey cast iron		Nodular cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommend					○			○	○		○										
ISO Material Description	N										S							H			
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend																		◎	◎	○	◎



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

G8A02, G8A37 SERIES 4 FLUTE - SIDE CUTTING

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)										
						1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0
P	5	Non-alloy steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245
					fz	0.008	0.013	0.02	0.027	0.032	0.037	0.048	0.056	0.066	0.077	0.083
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899
	8-9	Low alloy steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245
					fz	0.008	0.013	0.02	0.027	0.032	0.037	0.048	0.056	0.066	0.077	0.083
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899
	11.1	High alloyed steel, and tool steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245
					fz	0.008	0.013	0.02	0.027	0.032	0.037	0.048	0.056	0.066	0.077	0.083
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899
	11.2		0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195
					fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.071	0.078
					RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104
H	38.1		0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195
					fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.071	0.078
					RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104
	38.2		0.03D	1.0D	Vc	80	110	110	110	130	130	130	130	130	130	130
					fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.07	0.079
					RPM	25465	17507	11671	8754	8276	6897	5173	4138	3448	2586	2069
	39.1	Hardened steel	0.03D	1.0D	Vc	65	90	90	90	100	100	100	100	100	100	100
					fz	0.005	0.009	0.014	0.019	0.023	0.026	0.033	0.038	0.045	0.053	0.059
					RPM	20690	14324	9549	7162	6366	5305	3979	3183	2653	1989	1592
	39.2		0.03D	1.0D	Vc	414	516	535	544	586	552	525	484	478	422	376
					fz	0.004	0.007	0.011	0.015	0.018	0.021	0.026	0.03	0.036	0.042	0.048
					RPM	15915	11141	7427	5570	5093	4244	3183	2546	2122	1592	1273
39.3		0.03D	1.0D	Vc	255	312	327	334	367	356	331	306	306	267	244	
				fz	0.004	0.007	0.009	0.013	0.016	0.018	0.022	0.025	0.03	0.036	0.041	
				RPM	12732	9549	6366	4775	4456	3714	2785	2228	1857	1393	1114	
40	Chilled Cast Iron	0.03D	1.0D	Vc	40	60	60	60	70	70	70	70	70	70	70	
				fz	0.004	0.007	0.009	0.013	0.016	0.018	0.022	0.025	0.03	0.036	0.041	
				RPM	12732	9549	6366	4775	4456	3714	2785	2228	1857	1393	1114	
41	Hardened Cast Iron	0.03D	1.0D	Vc	204	267	229	248	285	267	245	223	223	201	183	
				fz	0.004	0.007	0.009	0.013	0.016	0.018	0.022	0.025	0.03	0.036	0.041	
				RPM	12732	9549	6366	4775	4456	3714	2785	2228	1857	1393	1114	
41		0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195	
				fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.071	0.078	
				RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104	
41		0.03D	1.0D	Vc	1070	1261	1261	1313	1490	1407	1335	1266	1273	1102	968	
				fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.071	0.078	
				RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104	
41		0.03D	1.0D	Vc	80	110	110	110	130	130	130	130	130	130	130	
				fz	0.007	0.012	0.018	0.025	0.03	0.034	0.043	0.051	0.06	0.07	0.079	
				RPM	25465	17507	11671	8754	8276	6897	5173	4138	3448	2586	2069	

