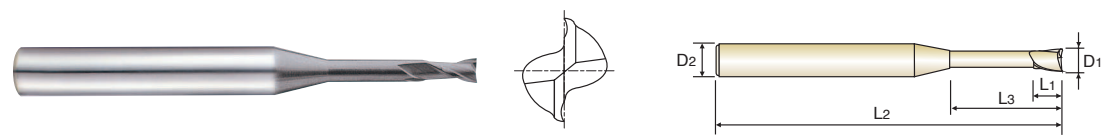


**CARBIDE, 2 FLUTE DLC COATING with EXTENDED NECK**  
**VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG mit ABGESETZTEM SCHAFTTETEL**

- ▶ Designed to copper, copper alloys soft graphites, reinforced plastics and the materials affiliated with non-ferrous metals.
- ▶ High toughness and minimized vibration are available due to two step taper neck(under dia. 1.0mm)
- ▶ Excellent surface roughness due to special flute geometry for removing burrs

- ▶ Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen
- ▶ Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, ( unter Ø 1 mm)
- ▶ Hervorragende Oberflächenrauheit durch speziell behandelte Nutengeometrie



Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length
	D1	D2	L1	L3	L2
SGED3000502	0.5	4	0.7	2	45
SGED3000504	0.5	4	0.7	4	45
SGED3000506	0.5	4	0.7	6	45
SGED3000508	0.5	4	0.7	8	45
SGED3000510	0.5	4	0.7	10	45
SGED3000602	0.6	4	0.9	2	45
SGED3000604	0.6	4	0.9	4	45
SGED3000606	0.6	4	0.9	6	45
SGED3000608	0.6	4	0.9	8	45
SGED3000610	0.6	4	0.9	10	45
SGED3000804	0.8	4	1.2	4	45
SGED3000806	0.8	4	1.2	6	45
SGED3000808	0.8	4	1.2	8	45
SGED3000810	0.8	4	1.2	10	45
SGED3000812	0.8	4	1.2	12	45
SGED3001004	1.0	4	1.5	4	45
SGED3001006	1.0	4	1.5	6	45
SGED3001008	1.0	4	1.5	8	45
SGED3001010	1.0	4	1.5	10	45
SGED3001012	1.0	4	1.5	12	45
SGED3001506	1.5	4	2.3	6	45
SGED3001508	1.5	4	2.3	8	45
SGED3001510	1.5	4	2.3	10	45
SGED3001512	1.5	4	2.3	12	45
SGED3001516	1.5	4	2.3	16	50

◎ : Excellent ○ : Good

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

- CARBIDE**
- HSS**
- CBN END MILLS
- i-Xmill END MILLS
- i-HS mill END MILLS
- X5070 END MILLS
- 4G MILL END MILLS
- X-SPEED ROUGHER END MILLS
- X-POWER END MILLS
- JET-POWER END MILLS
- TN MILL END MILLS
- V7 Mill END MILLS
- ALU-POWER END MILLS
- CRX S END MILLS**
- D-POWER GRAPHITE END MILLS
- D-POWER CFRP END MILLS
- ROUTERS
- K-2 CARBIDE END MILLS
- GENERAL CARBIDE END MILLS
- TANK-POWER END MILLS
- GENERAL HSS END MILLS
- MILLING CUTTERS
- TECHNICAL DATA

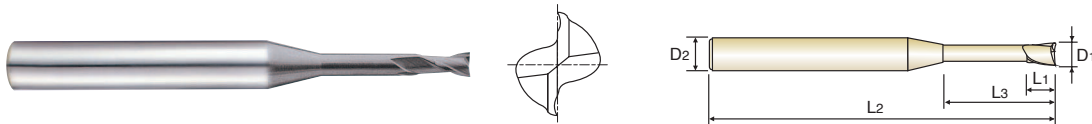


PLAIN SHANK  
GLATTER ZYLINDERSCHAFT

**CARBIDE, 2 FLUTE DLC COATING with EXTENDED NECK**  
**VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG mit ABGESETZTEM SCHAFTTITEL**

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- ▶ Hervorragende Oberflächenrauheit durch speziell behandelte Nutengeometrie



Unit : mm

EDP No.	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
SGED3002008	2.0	4	3	8	45
SGED3002010	2.0	4	3	10	45
SGED3002012	2.0	4	3	12	45
SGED3002016	2.0	4	3	16	50
SGED3003008	3.0	6	4.5	8	50
SGED3003010	3.0	6	4.5	10	50
SGED3003012	3.0	6	4.5	12	50
SGED3003016	3.0	6	4.5	16	60
SGED3003020	3.0	6	4.5	20	60
SGED3004010	4.0	6	6	10	50
SGED3004012	4.0	6	6	12	50
SGED3004016	4.0	6	6	16	60
SGED3004020	4.0	6	6	20	60
SGED3004025	4.0	6	6	25	60
SGED3006020	6.0	6	8	20	60
SGED3006030	6.0	6	8	30	90
SGED3008020	8.0	8	12	20	70
SGED3010025	10.0	10	15	25	80
SGED3012025	12.0	12	18	25	80

Size	Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
up to Ø6	0~-0.012	h6
over Ø6	0~-0.015	

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRC30~40	HRc40~45	HRc45~55	HRc55~70	◎			○					

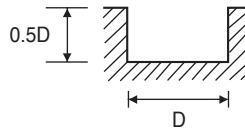


**RECOMMENDED CUTTING CONDITIONS**  
**EMPHOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, 2 FLUTE DLC COATING - SLOTTING**  
**VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG-NUTENFRÄSEN**

**SGED30, SGED31 SERIES**

MATERIAL	WROUGHT ALUMINIUM				UNALLOYED COPPER				THERMOPLASTICS				
	DIAMETER	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz
0.5	50000	480	80	0.005	0.005	50000	480	80	0.005	50000	140	80	0.001
0.6	50000	600	95	0.006	0.006	50000	570	95	0.006	50000	170	95	0.002
0.8	50000	780	125	0.008	0.008	43000	675	105	0.008	50000	220	125	0.002
1.0	50000	990	155	0.010	0.010	35000	690	110	0.010	50000	280	155	0.003
2.0	50000	990	315	0.010	0.010	25400	495	160	0.010	50000	429	315	0.004
3.0	35200	1590	330	0.023	0.023	17400	795	165	0.023	50000	689	470	0.007
4.0	26000	1680	325	0.032	0.032	13000	840	160	0.032	39000	728	490	0.009
6.0	17400	1680	325	0.048	0.048	8700	840	165	0.048	26100	728	490	0.014
8.0	13200	1680	330	0.064	0.064	6600	840	165	0.064	19800	728	500	0.018
10.0	10400	1680	325	0.081	0.081	5200	840	160	0.081	15600	728	490	0.023
12.0	8800	1710	330	0.097	0.097	4400	855	165	0.097	13200	741	495	0.028

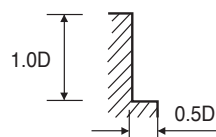


RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
fz = mm/t

**CARBIDE, 2 FLUTE DLC COATING - SIDE CUTTING**  
**VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG-SEITENFRÄSEN**

**SGED30, SGED31 SERIES**

MATERIAL	WROUGHT ALUMINIUM				UNALLOYED COPPER				THERMOPLASTICS				
	DIAMETER	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz
0.5	50000	510	80	0.005	0.005	50000	480	80	0.005	50000	390	80	0.004
0.6	50000	630	95	0.006	0.006	45000	525	85	0.006	50000	480	95	0.005
0.8	50000	840	125	0.008	0.008	34000	510	85	0.008	50000	630	125	0.006
1.0	41250	864	130	0.010	0.010	27500	540	85	0.010	50000	789	155	0.008
2.0	41100	864	260	0.011	0.011	27400	540	170	0.010	50000	864	315	0.009
3.0	27900	1368	260	0.025	0.025	18600	855	175	0.023	37200	1368	350	0.018
4.0	21000	1440	265	0.034	0.034	14000	900	175	0.032	28000	1440	350	0.026
6.0	14400	1536	270	0.053	0.053	9600	960	180	0.050	19200	1536	360	0.040
8.0	10500	1440	265	0.069	0.069	7000	900	175	0.064	14000	1440	350	0.051
10.0	8400	1440	265	0.086	0.086	5600	900	175	0.080	11200	1440	350	0.064
12.0	7200	1536	270	0.107	0.107	4800	960	180	0.100	9600	1536	360	0.080



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