



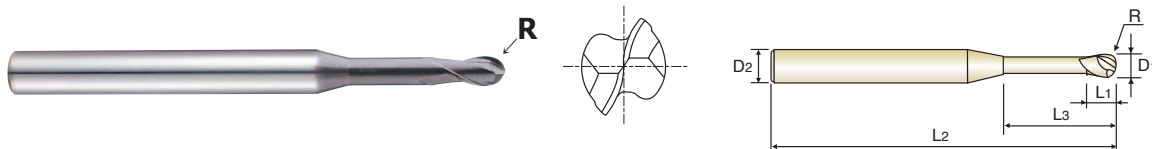
SGED27 SERIES

PLAIN SHANK
GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE BALL NOSE DLC COATING with EXTENDED NECK
VOLLHARTMETALL, 2 SCHNEIDEN STIRNRADIUS DLC BESCHICHTUNG mit ABGESETZTEM SCHAFTTETL

- ▶ Designed for copper, copper alloys soft graphites, reinforced plastics and the materials affiliated with non-ferrous metals.
- ▶ Tight radius tolerance is applied ($\pm 0.005\text{mm}$ tolerance under R3).
- ▶ Excellent surface roughness thanks to Mirror Face of cutting edges
- ▶ High strength and minimized vibration are available due to two step taper neck(under R0.5).

- ▶ Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen
- ▶ Hochgenaue Raduistoleranz ($\pm 0.005\text{mm}$ Toleranz unter R3mm)
- ▶ Sehr gute Oberflächenrauigkeit wird durch die besonders behandelte Schneide erreicht
- ▶ Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, (unter R 0,5 mm)



P.994
 R0.25-R3 R4-R6

Unit : mm

EDP No.	Radius of Ball Nose R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
SGED2700502	R0.25	0.5	4	0.5	2	45
SGED2700504	R0.25	0.5	4	0.5	4	45
SGED2700506	R0.25	0.5	4	0.5	6	45
SGED2700508	R0.25	0.5	4	0.5	8	45
SGED2700510	R0.25	0.5	4	0.5	10	45
SGED2700602	R0.3	0.6	4	0.6	2	45
SGED2700604	R0.3	0.6	4	0.6	4	45
SGED2700606	R0.3	0.6	4	0.6	6	45
SGED2700608	R0.3	0.6	4	0.6	8	45
SGED2700610	R0.3	0.6	4	0.6	10	45
SGED2700804	R0.4	0.8	4	0.8	4	45
SGED2700806	R0.4	0.8	4	0.8	6	45
SGED2700808	R0.4	0.8	4	0.8	8	45
SGED2700810	R0.4	0.8	4	0.8	10	45
SGED2700812	R0.4	0.8	4	0.8	12	45
SGED2701004	R0.5	1.0	4	1	4	45
SGED2701006	R0.5	1.0	4	1	6	45
SGED2701008	R0.5	1.0	4	1	8	45
SGED2701010	R0.5	1.0	4	1	10	45
SGED2701012	R0.5	1.0	4	1	12	45
SGED2701506	R0.75	1.5	4	1.5	6	45
SGED2701508	R0.75	1.5	4	1.5	8	45
SGED2701510	R0.75	1.5	4	1.5	10	45
SGED2701512	R0.75	1.5	4	1.5	12	45
SGED2701516	R0.75	1.5	4	1.5	16	50

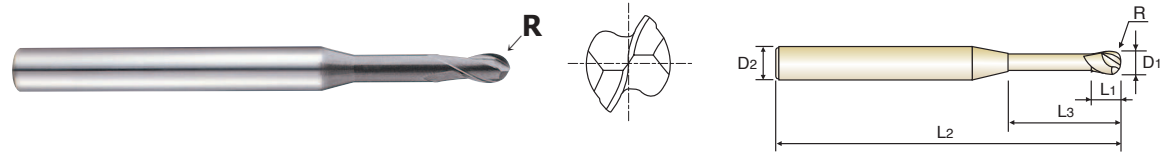
◎ : Excellent ○ : Good

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, 2 FLUTE BALL NOSE DLC COATING with EXTENDED NECK
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P.994

R0.25-R3 R4-R6

Unit : mm

EDP No.	Radius of Ball Nose	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length
	R	D1	D2	L1	L3	L2
SGED2702006	R1.0	2.0	4	3	6	45
SGED2702008	R1.0	2.0	4	3	8	45
SGED2702010	R1.0	2.0	4	3	10	45
SGED2702012	R1.0	2.0	4	3	12	45
SGED2702016	R1.0	2.0	4	3	16	50
SGED2703010	R1.5	3.0	6	4	10	50
SGED2703012	R1.5	3.0	6	4	12	50
SGED2703016	R1.5	3.0	6	4	16	60
SGED2703020	R1.5	3.0	6	4	20	60
SGED2704010	R2.0	4.0	6	5	10	50
SGED2704012	R2.0	4.0	6	5	12	50
SGED2704016	R2.0	4.0	6	5	16	60
SGED2704020	R2.0	4.0	6	5	20	60
SGED2704025	R2.0	4.0	6	5	25	60
SGED2706020	R3.0	6.0	6	8	20	60
SGED2706030	R3.0	6.0	6	8	30	90
SGED2708020	R4.0	8.0	8	10	20	70
SGED2710025	R5.0	10.0	10	12	25	80
SGED2712025	R6.0	12.0	12	14	25	80

Size	Radius Tolerance (mm)	Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
up to R3	± 0.005	0~-0.012	h6
over R3	± 0.010	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	◎			○					

- 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

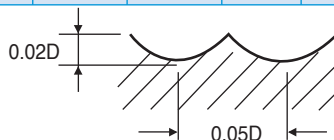


RECOMMENDED CUTTING CONDITIONS
EMPFOLGENE SCHNEIDKONDITIONEN

CARBIDE, 2 FLUTE BALL NOSE DLC COATING with EXTENDED NECK
VOLLHARTMETALL, 2 SCHNEIDEN STIRNRADIUS DLC BESCHICHTUNG mit ABGESETZTEM SCHAFTTETL

SGED27 SERIES

MATERIAL	WROUGHT ALUMINIUM				UNALLOYED COPPER				THERMOPLASTICS			
DIAMETER	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz
R0.25 × 0.5	50000	500	80	0.005	50000	500	80	0.005	50000	380	80	0.004
R0.3 × 0.6	50000	700	95	0.007	50000	650	95	0.007	50000	450	95	0.005
R0.4 × 0.8	50000	850	125	0.009	44000	770	110	0.009	50000	600	125	0.006
R0.5 × 1.0	50000	1000	155	0.010	35000	770	110	0.011	50000	630	155	0.006
R1.0 × 2.0	39600	1716	250	0.022	19800	780	125	0.020	50000	1250	315	0.013
R1.5 × 3.0	26000	1584	245	0.030	13000	720	125	0.028	39000	1512	370	0.019
R2.0 × 4.0	19000	1606	240	0.042	9500	730	120	0.038	28500	1533	360	0.027
R2.5 × 5.0	15400	1606	240	0.052	7700	730	120	0.047	23100	1533	365	0.033
R3.0 × 6.0	13000	1584	245	0.061	6500	720	125	0.055	19500	1512	370	0.039
R4.0 × 8.0	10000	1584	250	0.079	5000	720	125	0.072	15000	1512	375	0.050
R5.0 × 10.0	8000	1606	250	0.100	4000	730	125	0.091	12000	1533	375	0.064
R6.0 × 12.0	6600	1606	250	0.122	3300	730	125	0.111	9900	1533	375	0.077

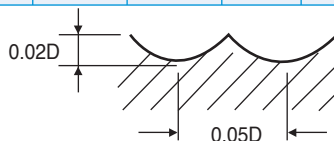


RPM = rev./min.
FEED = mm/min.
Vc = m/min.
fz = mm/t

CARBIDE, 2 FLUTE BALL NOSE DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN STIRNRADIUS DLC BESCHICHTUNG

SGED28 SERIES

MATERIAL	WROUGHT ALUMINIUM				UNALLOYED COPPER				THERMOPLASTICS			
DIAMETER	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz	RPM	FEED	Vc	Fz
R0.5 × 1.0	50000	1000	155	0.010	42000	930	130	0.011	50000	750	155	0.008
R1.0 × 2.0	47520	2068	300	0.022	24000	940	150	0.020	50000	1500	315	0.015
R1.5 × 3.0	31200	1914	295	0.031	15800	870	150	0.028	47400	1800	445	0.019
R2.0 × 4.0	22800	1936	285	0.042	11500	880	145	0.038	34500	1825	435	0.026
R2.5 × 5.0	18500	1936	290	0.052	9300	880	145	0.047	28000	1825	440	0.033
R3.0 × 6.0	15600	1892	295	0.061	7800	860	145	0.055	23500	1800	445	0.038
R4.0 × 8.0	12000	1892	300	0.079	6000	860	150	0.072	18000	1800	450	0.050
R5.0 × 10.0	9600	1936	300	0.101	4800	880	150	0.092	14500	1825	455	0.063
R6.0 × 12.0	8000	1914	300	0.120	4000	870	150	0.109	12000	1825	450	0.076



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