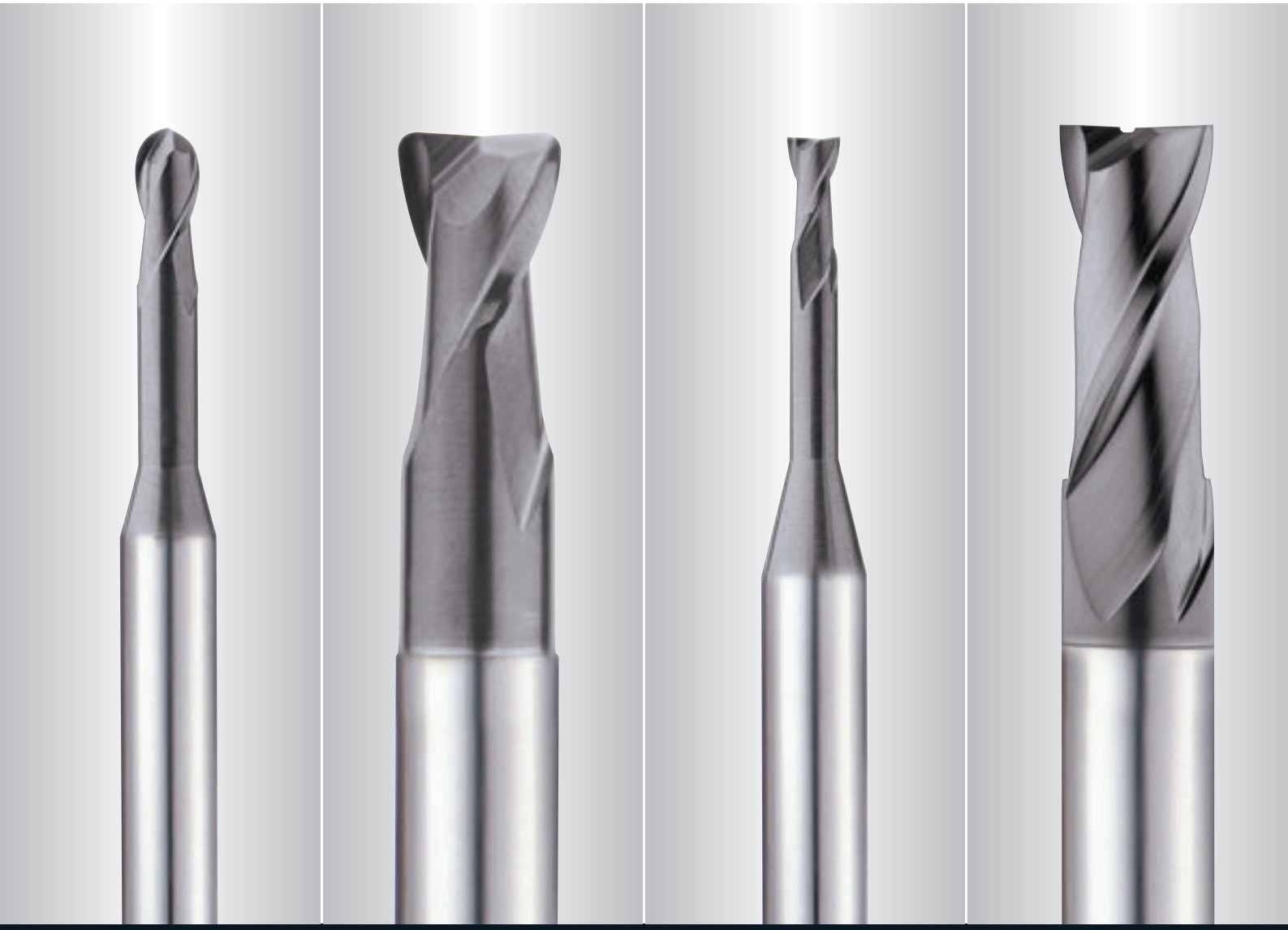
CARBIDE

Being the best through innovation



CRX S

CRX S FRÄSER

- DLC Coated Carbide End Mills for Copper
- DLC beschichtete VHM Fräser für die Kuper - und Kupferlegierungen zu bearbeiten

SELECTION GUIDE

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
SGED27		CARBIDE, 2 FLUTE LONG NECK BALL NOSE DLC COATING VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH STIRNRADIUS DLC BESCHICHTUNG	R0.25	R6.0	242
SGED28		CARBIDE, 2 FLUTE BALL NOSE DLC COATING VOLLHARTMETALL, 2 SCHNEIDEN STIRNRADIUS DLC BESCHICHTUNG	R0.5	R6.0	244
SGED29		CARBIDE, 2 FLUTE LONG NECK CORNER RADIUS DLC COATING VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH ECKENRADIUS DLC BESCHICHTUNG	D1.0	D12.0	245
SGED30		CARBIDE, 2 FLUTE LONG NECK DLC COATING VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH DLC BESCHICHTUNG	D0.5	D12.0	247
SGED31		CARBIDE, 2 FLUTE DLC COATING VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG	D1.0	D12.0	249
		RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN			250

◎ : Excellent ○ : Good

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							
						◎			○			
						◎			○			
						◎			○			
						◎			○			
						◎			○			

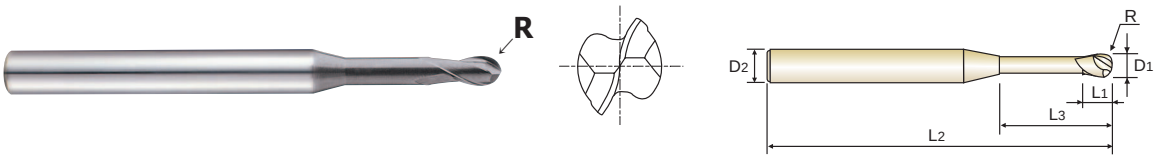
CRX S END MILLS

SGED27 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

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

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Tight Radius tolerance is applied (±0.005mm 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 und CFK, GFK Materialien
- Hochgenaue Raduistoleranz (±0.005mm Toleranz unter R3mm)
- Sehr gute Oberflächenrauhigkeit wird durch die besonders behandelte Schneide erreicht
- Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, (unter R 0,5 mm)



NG HM | 2 | 30° | R ±0.005 (R0.25~R3) | R ±0.010 (R4~R6) | PLAIN P.250

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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

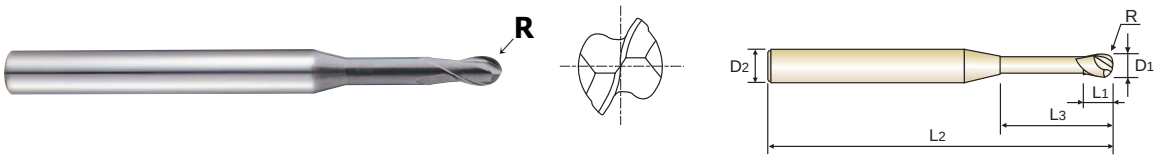
CRX S END MILLS

SGED27 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

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

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Tight Radius tolerance is applied (±0.005mm 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 und CFK, GFK Materialien
- Hochgenaue Raduistoleranz (±0.005mm Toleranz unter R3mm)
- Sehr gute Oberflächenrauhigkeit wird durch die besonders behandelte Schneide erreicht
- Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, (unter R 0,5 mm)



NG HM | 2 | 30° | R ±0.005 (R0.25~R3) | R ±0.010 (R4~R6) | PLAIN

P.250

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
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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

CRX S END MILLS

SGED28 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

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

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Tight Radius tolerance is applied (±0.005mm tolerance under R3).
- Excellent surface roughness thanks to Mirror Face of cutting edges

- Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen und CFK, GFK Materialien
- Hochgenaue Raduistoleranz (±0.005mm Toleranz unter R3mm)
- Sehr gute Oberflächenrauhigkeit wird durch die besonders behandelte Schneide erreicht

NG HM | 2 | 30° | R ±0.005 | PLAIN

P.250

Unit : mm

EDP No.	Radius of Ball Nose R (±0.005)	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
SGED28010	R0.5	1.0	6	2.5	50
SGED28015	R0.75	1.5	6	4	50
SGED28020	R1.0	2.0	6	5	50
SGED28030	R1.5	3.0	6	8	60
SGED28040	R2.0	4.0	6	8	70
SGED28050	R2.5	5.0	6	12	90
SGED28060	R3.0	6.0	6	12	90
SGED28080	R4.0	8.0	8	16	100
SGED28100	R5.0	10.0	10	20	100
SGED28120	R6.0	12.0	12	25	110

Size	Radius Tolerance (mm)	Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
up to R3	±0.005	0~−0.012	h6
over R3		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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

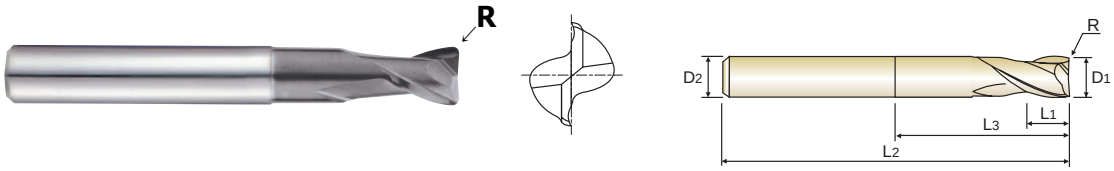
CRX S END MILLS

SGED29 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE LONG NECK CORNER RADIUS DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH ECKENRADIUS DLC BESCHICHTUNG

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Suitable for various cutting application like roughing, semi-finishing and finishing thanks to application

- Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen und CFK, GFK Materialien
- Ausgelegt für verschiedene Anwendungen, z.B. schruppen, schruppschlichten und zur schlicht Bearbeitung, aufgrund der neuartigen Geometrie



NG HM | 2 | 30° | R ±0.010 (Ø1~Ø6) | R ±0.015 (Ø8~Ø12) | PLAIN

P.251

Unit : mm

EDP No.	Corner Radius R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
SGED290100104	RO.1	1.0	4	1.5	4	45
SGED290100106	RO.1	1.0	4	1.5	6	45
SGED290100108	RO.1	1.0	4	1.5	8	45
SGED290100204	RO.2	1.0	4	1.5	4	45
SGED290100206	RO.2	1.0	4	1.5	6	45
SGED290100208	RO.2	1.0	4	1.5	8	45
SGED290150106	RO.1	1.5	4	2.3	6	45
SGED290150108	RO.1	1.5	4	2.3	8	45
SGED290150110	RO.1	1.5	4	2.3	10	45
SGED290150206	RO.2	1.5	4	2.3	6	45
SGED290150208	RO.2	1.5	4	2.3	8	45
SGED290150210	RO.2	1.5	4	2.3	10	45
SGED290200208	RO.2	2.0	4	3	8	45
SGED290200210	RO.2	2.0	4	3	10	45
SGED290200212	RO.2	2.0	4	3	12	45
SGED290200508	RO.5	2.0	4	3	8	45
SGED290200510	RO.5	2.0	4	3	10	45
SGED290200512	RO.5	2.0	4	3	12	45
SGED290300210	RO.2	3.0	6	4.5	10	50
SGED290300212	RO.2	3.0	6	4.5	12	50
SGED290300216	RO.2	3.0	6	4.5	16	60
SGED290300310	RO.3	3.0	6	4.5	10	50
SGED290300312	RO.3	3.0	6	4.5	12	50
SGED290300316	RO.3	3.0	6	4.5	16	60

◎ : Excellent ○ : Good

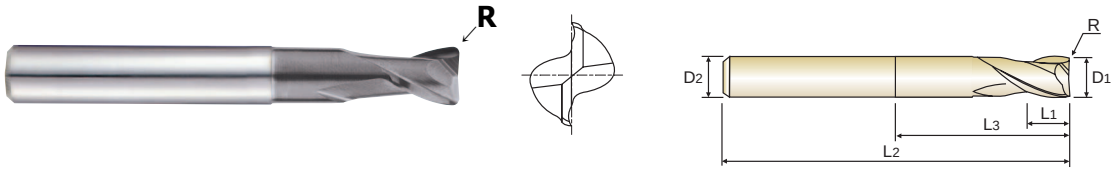
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

CRX S END MILLS

SGED29 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE LONG NECK CORNER RADIUS DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH ECKENRADIUS DLC BESCHICHTUNG

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Suitable for various cutting application like roughing, semi-finishing and finishing thanks to application
- Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen und CFK, GFK Materialien
- Ausgelegt für verschiedene Anwendungen, z.B. schruppen, schruppschlichten und zur schlicht Bearbeitung, aufgrund der neuartigen Geometrie



NG HM | 2 | 30° | R ±0.010 (Ø1~Ø6) | R ±0.015 (Ø8~Ø12) | PLAIN

P.251

Unit : mm

EDP No.	Corner Radius R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
SGED290400212	R0.2	4.0	6	6	12	50
SGED290400216	R0.2	4.0	6	6	16	60
SGED290400220	R0.2	4.0	6	6	20	60
SGED290400512	R0.5	4.0	6	6	12	50
SGED290400516	R0.5	4.0	6	6	16	60
SGED290400520	R0.5	4.0	6	6	20	60
SGED290600320	R0.3	6.0	6	9	20	60
SGED290600520	R0.5	6.0	6	9	20	60
SGED290601020	R1.0	6.0	6	9	20	60
SGED290800325	R0.3	8.0	8	12	25	65
SGED290800525	R0.5	8.0	8	12	25	65
SGED290801025	R1.0	8.0	8	12	25	65
SGED291000530	R0.5	10.0	10	15	30	70
SGED291001030	R1.0	10.0	10	15	30	70
SGED291200532	R0.5	12.0	12	18	32	80
SGED291201032	R1.0	12.0	12	18	32	80

Size	Corner Radius Tolerance (mm)	Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
up to Ø6	±0.010	0~−0.012	h6
over Ø6	±0.015	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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

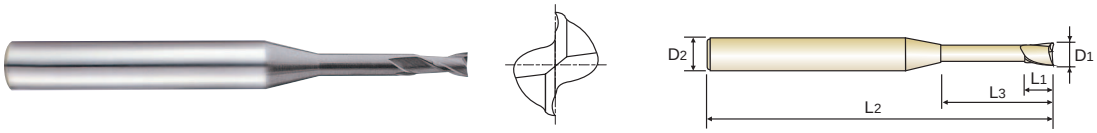
CRX S END MILLS

SGED30 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE LONG NECK DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH DLC BESCHICHTUNG

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- 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 und CFK, GFK Materialien
- Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, (unter Ø 1 mm)
- Hervorragende Oberflächenrauheit durch speziell behandelte Nutengeometrie



NG HM | 2 | 30° | PLAIN

P.252

Unit : mm

EDP No.	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length 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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

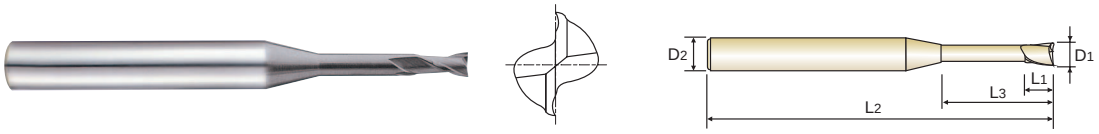
CRX S END MILLS

SGED30 SERIES PLAIN SHANK / GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE LONG NECK DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH DLC BESCHICHTUNG

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- 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 und CFK, GFK Materialien
- Hohe Zähigkeit und verminderte Vibrationen werden durch den besonderen kegelförmigen Hals erreicht, (unter Ø 1 mm)
- Hervorragende Oberflächenrauheit durch speziell behandelte Nutengeometrie



NG HM | 2 | 30° | PLAIN P.252

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

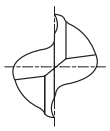
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

CRX S END MILLS

SGED31 SERIES PLAIN SHANK
GLATTER ZYLINDERSCHAFT

CARBIDE, 2 FLUTE DLC COATING
VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG

- Designed to copper, copper alloys soft graphites, reinforced plastics and the matterials affiliated with non-ferrous metals & nonmetals like carbon fiber and glass.
- Excellent surface roughness thanks to special flute geometry for reduced burr
- Entwickelt für die Bearbeitung von Kupfer, Kupferlegierungen, sowie faserverstärkten Kunststoffen, NE- Metallen und CFK, GFK Materialien
- Hervorragende Oberflächenrauheit durch speziell behandelte Nutengeometrie was zur verminderten Gratbildung führt



NG HM | 2 | 30° | PLAIN

P.252

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
SGED31010	1.0	6	2.5	50
SGED31015	1.5	6	4	50
SGED31020	2.0	6	6	50
SGED31025	2.5	6	8	50
SGED31030	3.0	6	10	50
SGED31040	4.0	6	12	50
SGED31050	5.0	6	15	60
SGED31060	6.0	6	15	60
SGED31080	8.0	8	20	65
SGED31100	10.0	10	25	70
SGED31120	12.0	12	30	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
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
						◎			○			

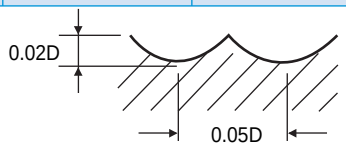
CRX S END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

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

SGED27 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
0.5	50000	500	50000	500	50000	380
0.6	50000	700	50000	650	50000	450
0.8	50000	850	44000	770	50000	600
1.0	50000	1000	35000	770	50000	630
2.0	39600	1716	19800	780	50000	1250
3.0	26000	1584	13000	720	39000	1512
4.0	19000	1606	9500	730	28500	1533
5.0	15400	1606	7700	730	23100	1533
6.0	13000	1584	6500	720	19500	1512
8.0	10000	1584	5000	720	15000	1512
10.0	8000	1606	4000	730	12000	1533
12.0	6600	1606	3300	730	9900	1533

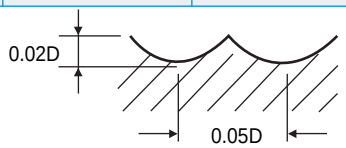


RPM = rev./min.
FEED = mm/min.

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

SGED28 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
1.0	50000	1000	42000	930	50000	750
2.0	47520	2068	24000	940	50000	1500
3.0	31200	1914	15800	870	47400	1800
4.0	22800	1936	11500	880	34500	1825
5.0	18500	1936	9300	880	28000	1825
6.0	15600	1892	7800	860	23500	1800
8.0	12000	1892	6000	860	18000	1800
10.0	9600	1936	4800	880	14500	1825
12.0	8000	1914	4000	870	12000	1825



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

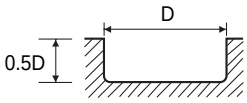
CRX S END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 2 FLUTE LONG NECK CORNER RADIUS DLC COATING - SLOTTING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH ECKENRADIUS DLC BESCHICHTUNG-NUTENFR SEN

SGED29 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
1.0	50000	1000	50000	1000	50000	700
2.0	50000	1800	50000	1700	50000	1400
3.0	50000	2600	44500	2350	50000	2100
4.0	50000	3680	33400	2100	50000	2600
5.0	50000	4300	27000	2100	50000	3400
6.0	44500	4670	22300	2100	50000	4200
8.0	33400	4560	16700	2100	50000	5700
10.0	26700	4770	13370	2100	40000	5500
12.0	22200	4660	11100	2100	33500	5600

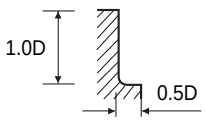


RPM = rev./min.
FEED = mm/min.

CARBIDE, 2 FLUTE LONG NECK CORNER RADIUS DLC COATING - SIDE CUTTING
VOLLHARTMETALL, 2 SCHNEIDEN HALSFREISTICH ECKENRADIUS DLC BESCHICHTUNG-SEITENFR SEN

SGED29 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
1.0	50000	1400	50000	1200	50000	1200
2.0	50000	2800	50000	2500	50000	2500
3.0	50000	4200	50000	3700	50000	3700
4.0	50000	5300	50000	4700	50000	5000
5.0	50000	6500	40000	4800	50000	6500
6.0	50000	7850	33400	4900	50000	7500
8.0	37500	7850	25000	4700	50000	8400
10.0	30000	7850	20000	4800	40000	8400
12.0	25000	7850	16700	4700	33500	8400



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

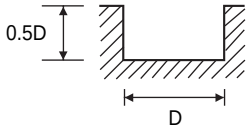
CRX S END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 2 FLUTE DLC COATING - SLOTTING
VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG-NUTENFR SEN

SGED30, SGED31 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
0.5	50000	160	50000	160	50000	140
0.6	50000	200	50000	190	50000	170
0.8	50000	260	43000	225	50000	220
1.0	50000	330	35000	230	50000	280
2.0	25400	330	12700	165	38100	429
3.0	17600	530	8700	265	26100	689
4.0	13000	560	6500	280	19500	728
6.0	8700	560	4350	280	13050	728
8.0	6600	560	3300	280	9900	728
10.0	5200	560	2600	280	7800	728
12.0	4400	570	2200	285	6600	741

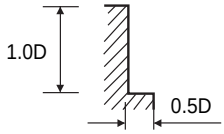


RPM = rev./min.
FEED = mm/min.

CARBIDE, 2 FLUTE DLC COATING - SIDE CUTTING
VOLLHARTMETALL, 2 SCHNEIDEN DLC BESCHICHTUNG-SEITENFR SEN

SGED30, SGED31 SERIES

MATERIAL	WROUGHT ALUMINIUM		UNALLOYED COPPER		THERMOPLASTICS	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
0.5	50000	170	50000	160	50000	130
0.6	50000	210	45000	175	50000	160
0.8	50000	280	34000	170	50000	210
1.0	41250	288	27500	180	50000	263
2.0	20550	288	13700	180	27400	288
3.0	13950	456	9300	285	18600	456
4.0	10500	480	7000	300	14000	480
6.0	7200	512	4800	320	9600	512
8.0	5250	480	3500	300	7000	480
10.0	4200	480	2800	300	5600	480
12.0	3600	512	2400	320	4800	512



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