

CARBIDE



Being the best through innovation





D-POWER CFRP

D-POWER CFK

- For composite materials including CFRP, GFRP
- Für Verbund Materialien einschl. CFK und GFK

SELECTION GUIDE

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
GUF40		CARBIDE, MULTI FLUTE DUAL HELIX VOLLHARTMETALL, MULTI SCHNEIDEN DOPPEL HELIX	D6.0	D12.0	1020
GUF39		CARBIDE, 4 FLUTE VOLLHARTMETALL, 4 SCHNEIDEN	D6.0	D12.0	1021
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN					1022

D-POWER CFRP END MILLS

◎ : Excellent ○ : Good

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



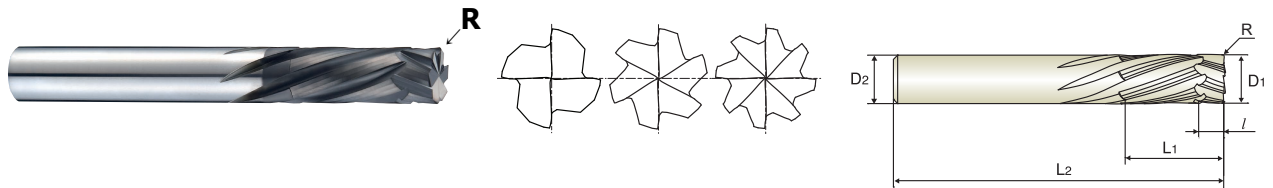
GUF40 SERIES

PLAIN SHANK
GLATTER ZYLINDERSCHAFT

CARBIDE, MULTI FLUTE DUAL HELIX
VOLLHARTMETALL, MULTI SCHNEIDEN DOPPEL HELIX

- ▶ For composite materials - CFRP, GFRP.
- ▶ Reduce delamination and burrs.
- ▶ Diamond coating with excellent abrasion resistance

- ▶ Für verbund materialien - CFK und GFK
- ▶ Verringert Ablösungen (Delamination) und Gratbildung
- ▶ Diamant-Beschichtung mit ausgezeichneter Abriebfestigkeit.



Unit : mm

EDP No.	Corner Radius R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1(l)	Overall Length L2	No. of Flute
GUF40060	R0.5	6.0	6	12(3)	65	4
GUF40080	R0.5	8.0	8	16(4)	70	6
GUF40100	R0.5	10.0	10	20(5)	80	6
GUF40120	R0.5	12.0	12	24(6)	90	8

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6

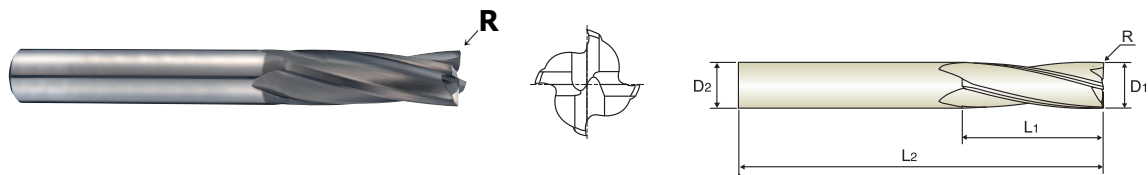
◎ : Excellent ○ : Good

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, 4 FLUTE

VOLLHARTMETALL, 4 SCHNEIDEN

- ▶ For composite materials - CFRP, GFRP.
 - ▶ Reduce delamination and burrs.
 - ▶ Diamond coating with excellent abrasion resistance
- ▶ Für verbund materialien - CFK und GFK
 - ▶ Verringert Ablösungen (Delamination) und Gratabbildung
 - ▶ Diamant-Beschichtung mit ausgezeichneter Abriebfestigkeit.



EDP No.	Corner Radius R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Overall Length L2
GUF39060	RO.2	6.0	6	18	65
GUF39080	RO.2	8.0	8	24	70
GUF39080	RO.3	10.0	10	30	80
GUF39120	RO.3	12.0	12	36	100

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6

◎ : 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									
							○							◎

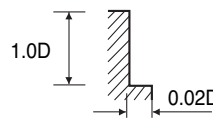
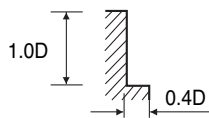


**RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, MULTI FLUTE DUAL HELIX
VOLLHARTMETALL, MULTI SCHNEIDEN DOPPEL HELIX**

GUF40 SERIES

MATERIAL	CFRP				GFRP				CFRP				GFRP			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
6.0	7950	1115	150	0.035	4240	425	80	0.025	10610	1995	200	0.047	5300	740	100	0.035
8.0	5960	1610	150	0.045	3180	590	80	0.031	7950	2955	200	0.062	3970	955	100	0.040
10.0	4770	1575	150	0.055	2540	565	80	0.037	6360	2940	200	0.077	3180	860	100	0.045
12.0	3970	2065	150	0.065	2120	730	80	0.043	5300	3900	200	0.092	2650	1060	100	0.050

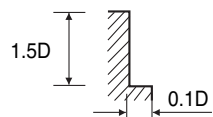
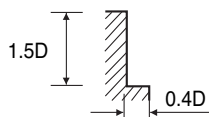


RPM = rev./min.
FEED = mm/min.
Vc = m/min.
fz = mm/t

**CARBIDE, 4 FLUTE
VOLLHARTMETALL, 4 SCHNEIDEN**

GUF39 SERIES

MATERIAL	CFRP				GFRP				CFRP				GFRP			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
6.0	10610	1485	200	0.035	5300	530	100	0.025	10610	1190	200	0.028	5300	530	100	0.025
8.0	7950	1430	200	0.045	3970	490	100	0.031	7950	1145	200	0.036	3970	445	100	0.028
10.0	6360	1400	200	0.055	3180	470	100	0.037	6360	1120	200	0.044	3180	405	100	0.032
12.0	5300	1380	200	0.065	2650	455	100	0.043	5300	1100	200	0.052	2650	370	100	0.035



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