



# D-POWER GRAPHITE END MILLS

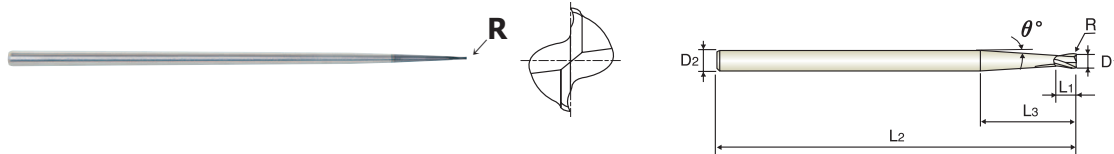
## EIB86 SERIES

PLAIN SHANK  
GLATTER ZYLINDERSCHAFT

### CARBIDE, 2 FLUTE CORNER RADIUS with TAPER NECK VOLLHARTMETALL, 2 SCHEIDEN ECKENRADIUS mit KONISCH ABGESETZTEM SCHAFTTEIL

- ▶ Higher hardness of film and excellent wear-resistance increase the tool life surprisingly.
- ▶ Ultra fine film of YG-1's diamond coated carbide ball end mills ensure the smooth and excellent surface on work materials.
- ▶ High performance on graphite, wrought aluminum, bakelite, plastics, wood, brass etc. YG-1's diamond coated carbide ball end mills have good result for the machining of non-ferrous metals and non-metallic materials.

- ▶ Höhere Härte der Beschichtung und ausgezeichnete Verschleißfestigkeit verlängern die Standzeit beachtlich.
- ▶ Ultrafeiner Film auf YG-1 Diamant - beschichteten Hartmetall Schaftfräser gewährleisten eine glatte und ausgezeichnete Oberflächengüte.
- ▶ Hohe Leistungsfähigkeit bei Graphit, Aluminium ohne Silicon, Bakelit, Plastik, Holz, Messing, etc. YG-1 Diamant - beschichtete Hartmetall Schaftfräser zeigen gute Ergebnisse beim Bearbeiten von NE - Metallen und Nichtmetall - Werkstoffen.



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Unit : mm

EDP No.	Corner Radius R	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2	Neck Taper Angle $\theta^\circ$
EIB86010	RO.1	1.0	3	2	30	60	2°
EIB86901	RO.1	1.0	3	2	70	100	1°
EIB86015	RO.15	1.5	3	3	30	60	1°30'
EIB86902	RO.15	1.5	3	3	50	100	1°
EIB86020	RO.15	2.0	3	4	30	60	1°
EIB86903	RO.15	2.0	4	4	70	100	1°

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.02	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									
							◎		○					○

**YG D-POWER GRAPHITE END MILLS**

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, 2 FLUTE MINIATURE  
CORNER RADIUS  
VOLLHARTMETALL, 2 SCHNEIDEN MINI ECKENRADIUS**

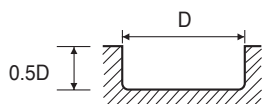
**CARBIDE, 4 FLUTE  
CORNER RADIUS  
VOLLHARTMETALL, 4 SCHNEIDEN ECKENRADIUS**

**EI996, EIB86 SERIES**

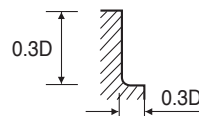
**EIB88 SERIES**

MATERIAL	GRAPHITE			
	DIAMETER	RPM	FEED	Vc
0.4	40000	640	50	0.008
0.6	40000	640	75	0.008
0.8	40000	800	100	0.010
1.0	40000	960	125	0.012
1.2	40000	1200	150	0.015
1.5	40000	1440	190	0.018
2.0	40000	1600	250	0.020
3.0	27000	1900	255	0.035
4.0	20000	2300	250	0.058
5.0	16000	2300	250	0.072
6.0	14000	2300	265	0.082

MATERIAL	GRAPHITE			
	DIAMETER	RPM	FEED	Vc
6.0	40000	5600	755	0.035
8.0	32000	5600	805	0.044
10.0	26000	5700	815	0.055
12.0	21000	5450	790	0.065



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

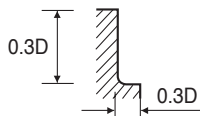


RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
fz = mm/t

**CARBIDE, 3 FLUTE 40° HELIX  
CORNER RADIUS  
VOLLHARTMETALL, 3 SCHNEIDEN 40° RECHTSSPIRALE  
ECKENRADIUS**

**EIA13, EIA14 SERIES**

MATERIAL	GRAPHITE			
	DIAMETER	RPM	FEED	Vc
2.0	40000	3000	250	0.025
3.0	40000	4200	375	0.035
4.0	40000	6000	505	0.050
5.0	40000	7200	630	0.060
6.0	40000	8400	755	0.070
8.0	32000	8400	805	0.088
10.0	26000	8600	815	0.110
12.0	21000	8200	790	0.130



\* The FEED, in long & long reach types, should be reduced by around 50%

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