



MICROGRAIN
CARBIDE END MILLS **G9F42**

SERIES PLAIN SHANK
GLATTER ZYLINDERSCHAFT

CARBIDE, 4 FLUTE SHORT LENGTH
VOLLHARTMETALL, 4 SCHNEIDEN KURZ

- Suitable for dry milling applications at high temperatures.
 - Excellent high-performance end mills.
 - 4 flute allows for better work piece finishes.
- Für die Trockenbearbeitung.
 - Hervorragendes Preis - Leistungsverhältnis.
 - 4 Schneiden erzeugen eine bessere Oberflächengüte des Werkstücks.



Unit : mm

Description	Mill Diameter	Shank Diameter	Lenght of Cut	Overall Lenght
G9F42010N	1	4	3	50
G9F42020N	2	4	6	50
G9F42030N	3	4	8	50
G9F42040N	4	4	11	50
G9F42050N	5	6	13	50
G9F42060N	6	6	16	50
G9F42080N	8	8	20	60
G9F42100N	10	10	25	75
G9F42120N	12	12	32	75
G9F42140N	14	14	32	75
G9F42160N	16	16	32	75
G9F42200N	20	20	32	100

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



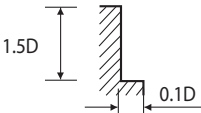
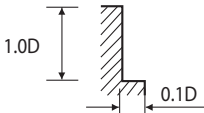
MICROGRAIN
CARBIDE END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 4 FLUTE FINISH SIDE CUTTING
VOLLHARTMETALL, 4 SCHNEIDEN SCHLICHTEN SEITENFRÄSEN

G9F42 SERIES

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS TOOL STEELS		ALLOY STEELS HEAT RESISTANT STEELS		STAINLESS STEELS		CAST IRON		ALUMINUM ALLOYS		COPPER. BRASS NON-FERROUS METALS	
HARDNESS STRENGTH	~ HRc 30 ~1000N/mm²		HRc 30 ~ HRc 45 1000~1500N/mm²									
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1.0	17600	150	10250	85	8650	75	18700	620	44000	1050	24700	605
2.0	9850	240	6450	145	5350	120	9350	640	22000	1320	16500	1035
3.0	7600	270	4750	170	3950	145	6050	640	15400	1320	11000	1035
4.0	6450	485	3950	300	3300	240	4600	640	11000	1320	8800	1035
5.0	5350	510	3200	305	2700	255	3650	640	9150	1320	6800	1035
6.0	4750	560	2850	350	2400	280	2950	770	7600	1430	5700	1100
8.0	3550	605	2150	325	1800	300	2200	815	5700	1430	4400	1100
10.0	2750	520	1700	255	1450	255	1850	860	4600	1430	3400	1100
12.0	2350	440	1450	215	1150	205	1450	900	3750	1430	2850	1100
14.0	2100	395	1300	195	1050	190	1300	945	3300	1430	2400	1100
16.0	1850	350	1150	170	950	170	1100	970	2850	1430	2200	1100
20.0	1450	270	900	135	700	130	900	1035	2200	1430	1700	1100



- The FEED, in long & extra long types, should be reduced by around 50%

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

◦ :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							
◦	◦	◦				•		•	•	•	•	•