

CARBIDE, MULTI FLUTE LONG LENGTH ROUGHING - COARSE PITCH

VOLLHARTMETALL, MEHRSCHEIDEN LANG SCHRUPPFÄRER - GROB

- ▶ Suitable for dry milling applications at high temperatures.
- ▶ Excellent high-performance end mills.
- ▶ Fast chip ejection.
- ▶ Für die Trockenbearbeitung.
- ▶ Hervorragendes Preis - Leistungsverhältnis.
- ▶ Guter Spanauswurf.



Unit : mm

| EDP No. | Mill Diameter h10 | Shank Diameter h6 | Length of Cut | Overall Length | No. of Flute |
|----------|----------------------|----------------------|---------------|----------------|--------------|
| G9A42060 | 6.0 | 6 | 16 | 57 | 3 |
| G9A42080 | 8.0 | 8 | 16 | 63 | 3 |
| G9A42100 | 10.0 | 10 | 22 | 72 | 4 |
| G9A42120 | 12.0 | 12 | 26 | 83 | 4 |
| G9A42140 | 14.0 | 14 | 26 | 83 | 4 |
| G9A42160 | 16.0 | 16 | 32 | 92 | 4 |
| G9A42180 | 18.0 | 18 | 32 | 92 | 4 |
| G9A42200 | 20.0 | 20 | 38 | 104 | 4 |
| G9A42250 | 25.0 | 25 | 45 | 121 | 5 |

Tolerances according to DIN 7160 & 7161

Toleranzen nach DIN 7160 & 7161

| Tolerance range in μm / Toleranzwerte in μm | | | | | |
|---|----------------------------|-----------------------------|-------------------------------|---------------------------------|---------------------------------|
| Nominal-Diameter in mm / Nennmaßbereich in mm | | | | | |
| | from 1 to 3 von 1 bis 3 | over 3 to 6 über 3 bis 6 | over 6 to 10 über 6 bis 10 | over 10 to 18 über 10 bis 18 | over 18 to 30 über 18 bis 30 |
| h10 | 0 - 40 | 0 - 48 | 0 - 58 | 0 - 70 | 0 - 84 |
| h6 | 0 - 6 | 0 - 8 | 0 - 9 | 0 - 11 | 0 - 13 |

◎ : 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 | | | | | | | |
| ◎ | ◎ | ◎ | | | | ○ | | ○ | ○ | ○ | ○ | ○ |

- CARBIDE
- HSS
- CBN END MILLS
- i-Xmill END MILLS
- X5070 END MILLS
- X-POWER END MILLS
- JET-POWER END MILLS
- V7 Mill INOX END MILLS
- V7 Mill STEEL END MILLS
- ALU-POWER END MILLS
- D-POWER END MILLS
- K-2 CARBIDE END MILLS
- GENERAL CARBIDE END MILLS
- TANK-POWER END MILLS
- GENERAL HSS END MILLS
- MILLING CUTTERS
- TECHNICAL DATA

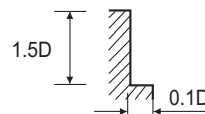
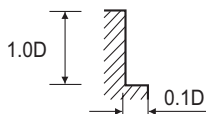
YG K-2 CARBIDE END MILLS

**RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN**

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

G9432, G9A69, G9448, G9540, G9449, G9453 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 | ~ HRc 30 | | HRc 30 ~ HRc 45 | | | | | | | | | |
| STRENGTH | ~1000N/mm ² | | 1000~1500N/mm ² | | | | | | | | | |
| 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 |
| 1.5 | 11800 | 215 | 7050 | 115 | 7050 | 120 | 12100 | 620 | 27500 | 1160 | 20300 | 910 |
| 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 |



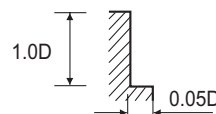
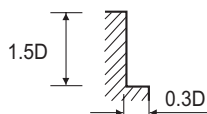
* The FEED, in long & extra long types, should be reduced by around 50%

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

**CARBIDE, MULTI FLUTE ROUGHING SIDE CUTTING
VOLLHARTMETALL, MULTI SCHNEIDEN SCHRUPPFÄSER SEITENFRÄSEN**

G9A42 SERIES

| MATERIAL | NON-ALLOYED STEELS ALLOY STEELS TOOL STEELS | | ALLOY STEELS HEAT RESISTANT STEELS | | STAINLESS STEELS | | INCONEL | |
|----------|---|------|--|------|------------------------------|------|---------|------|
| HARDNESS | ~ HRc30 | | HRc30 ~ HRc38 | | HRc38 ~ HRc45 | | | |
| STRENGTH | 1000N/mm ² | | 1000 ~ 1200N/mm ² | | 1200 ~ 1400N/mm ² | | | |
| DIAMETER | RPM | FEED | RPM | FEED | RPM | FEED | RPM | FEED |
| 6.0 | 13250 | 1970 | 10550 | 710 | 7150 | 480 | 2050 | 160 |
| 8.0 | 9850 | 1970 | 7800 | 710 | 5350 | 480 | 1550 | 150 |
| 10.0 | 7800 | 1970 | 6450 | 710 | 4350 | 480 | 1100 | 160 |
| 12.0 | 6800 | 2040 | 5100 | 680 | 3550 | 480 | 1000 | 160 |
| 14.0 | 5800 | 2040 | 4400 | 710 | 3050 | 480 | 750 | 110 |
| 16.0 | 5100 | 2040 | 4100 | 650 | 2800 | 430 | 700 | 90 |
| 18.0 | 4400 | 1970 | 3750 | 610 | 2300 | 360 | 600 | 90 |
| 20.0 | 4100 | 1840 | 3050 | 480 | 2050 | 310 | 550 | 90 |
| 25.0 | 3650 | 1830 | 2700 | 530 | 1850 | 350 | 500 | 90 |



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

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