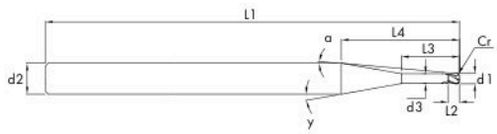
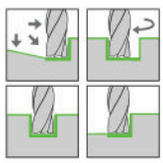
# SOLID CARBIDE END MILLS WITH CORNER RADIUS

VOLLHARTMETALL SCHAFTFRASER MIT ECKENRADIUS

KARBÜR KÖŞE RADYÜSLÜ FREZE UZUN MEDIO CORNER LONG





## MEDIO CORNER LONG

END MILL FRÄSER — TYPE

MG-10 MG-08 — QUALITY

d1 — DIAMETER

HEIKENEI SPECIAL — CORNER RADIUS

2 FLUTES

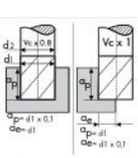
DIN 6535 HA — SHAFT TYPE

30° — HELICAL

R — CORNER RADIUS

nACo MULTILAYER — COATED

| d1 | L2 | L3 | L4 | d3 | L1 | d2(h6) | Z | y° | a° | Cr | <52 HRC | 52 - 68 HRC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0,5 | 0,8 | 1,0 | 23,65 | 0,48 | 80 | 6 | 2 | 7,00° | 6,63° | 0,10 | 4019400 | 4019410 |
| 0,5 | 0,8 | 2,0 | 17,85 | 0,48 | 80 | 6 | 2 | 10,00° | 8,75° | 0,10 | 4019420 | 4019430 |
| 0,5 | 0,8 | 4,0 | 19,85 | 0,48 | 80 | 6 | 2 | 10,00° | 7,88° | 0,10 | 4019440 | 4019450 |
| 0,6 | 0,9 | 1,2 | 23,49 | 0,57 | 80 | 6 | 2 | 7,00° | 6,55° | 0,10 | 4019460 | 4019470 |
| 0,6 | 0,9 | 2,0 | 17,62 | 0,57 | 80 | 6 | 2 | 10,00° | 8,71° | 0,10 | 4019480 | 4019490 |
| 0,6 | 0,9 | 4,0 | 19,62 | 0,57 | 80 | 6 | 2 | 10,00° | 7,83° | 0,10 | 4019500 | 4019510 |
| 0,7 | 1,1 | 1,4 | 23,34 | 0,67 | 80 | 6 | 2 | 7,00° | 6,47° | 0,10 | 4019520 | 4019530 |
| 0,7 | 1,1 | 2,5 | 17,95 | 0,67 | 80 | 6 | 2 | 10,00° | 8,39° | 0,10 | 4019540 | 4019550 |
| 0,8 | 1,2 | 1,6 | 16,75 | 0,76 | 80 | 6 | 2 | 10,00° | 8,82° | 0,15 | 4019560 | 4019570 |
| 0,8 | 1,2 | 3,0 | 18,15 | 0,76 | 80 | 6 | 2 | 10,00° | 8,15° | 0,15 | 4019580 | 4019590 |
| 0,8 | 1,2 | 6,0 | 21,15 | 0,76 | 80 | 6 | 2 | 10,00° | 7,00° | 0,15 | 4019600 | 4019610 |
| 1,0 | 1,5 | 2,0 | 16,70 | 0,95 | 80 | 6 | 2 | 10,00° | 8,51° | 0,20 | 4019620 | 4019630 |
| 1,0 | 1,5 | 4,0 | 18,70 | 0,95 | 80 | 6 | 2 | 10,00° | 7,61° | 0,20 | 4019640 | 4019650 |
| 1,0 | 1,5 | 8,0 | 22,70 | 0,95 | 80 | 6 | 2 | 10,00° | 6,28° | 0,20 | 4019660 | 4019670 |
| 1,0 | 1,5 | 12,0 | 26,70 | 0,95 | 80 | 6 | 2 | 10,00° | 5,34° | 0,20 | 4019680 | 4019690 |
| 1,0 | 1,5 | 16,0 | 30,70 | 0,95 | 80 | 6 | 2 | 10,00° | 4,65° | 0,20 | 4019700 | 4019710 |
| 1,0 | 1,5 | 20,0 | 34,70 | 0,95 | 80 | 6 | 2 | 10,00° | 4,12° | 0,20 | 4019720 | 4019730 |
| 1,2 | 1,8 | 2,0 | 16,22 | 1,14 | 80 | 6 | 2 | 10,00° | 8,41° | 0,25 | 4019740 | 4019750 |
| 1,2 | 1,8 | 4,0 | 18,22 | 1,14 | 80 | 6 | 2 | 10,00° | 7,81° | 0,25 | 4019760 | 4019770 |
| 1,5 | 2,3 | 4,0 | 17,52 | 1,43 | 80 | 6 | 2 | 10,00° | 5,96° | 0,30 | 4019780 | 4019790 |
| 1,5 | 2,3 | 8,0 | 21,52 | 1,43 | 80 | 6 | 2 | 10,00° | 5,03° | 0,30 | 4019800 | 4019810 |
| 1,5 | 2,3 | 12,0 | 25,52 | 1,43 | 80 | 6 | 2 | 10,00° | 4,35° | 0,30 | 4019820 | 4019830 |
| 2,0 | 3,0 | 4,0 | 16,35 | 1,90 | 80 | 6 | 4 | 10,00° | 6,97° | 0,50 | 4019840 | 4019850 |
| 2,0 | 3,0 | 8,0 | 20,35 | 1,90 | 80 | 6 | 4 | 10,00° | 5,61° | 0,50 | 4019860 | 4019870 |
| 2,0 | 3,0 | 12,0 | 24,35 | 1,90 | 80 | 6 | 4 | 10,00° | 4,69° | 0,50 | 4019880 | 4019890 |
| 2,0 | 3,0 | 16,0 | 28,35 | 1,90 | 80 | 6 | 4 | 10,00° | 4,03° | 0,50 | 4019900 | 4019910 |
| 2,0 | 3,0 | 20,0 | 32,35 | 1,90 | 80 | 6 | 4 | 10,00° | 3,53° | 0,50 | 4019920 | 4019930 |
| 2,5 | 3,8 | 5,0 | 16,18 | 2,38 | 80 | 6 | 4 | 10,00° | 6,17° | 0,50 | 4019940 | 4019950 |
| 2,5 | 3,8 | 8,0 | 19,18 | 2,38 | 80 | 6 | 4 | 10,00° | 5,21° | 0,50 | 4019960 | 4019970 |
| 2,5 | 3,8 | 12,0 | 23,18 | 2,38 | 80 | 6 | 4 | 10,00° | 4,31° | 0,50 | 4019980 | 4019990 |
| 3,0 | 4,5 | 6,0 | 16,01 | 2,85 | 80 | 6 | 4 | 10,00° | 5,35° | 0,50 | 4020000 | 4020010 |
| 3,0 | 4,5 | 8,0 | 18,01 | 2,85 | 80 | 6 | 4 | 10,00° | 4,76° | 0,50 | 4020020 | 4020030 |
| 3,0 | 4,5 | 12,0 | 22,01 | 2,85 | 80 | 6 | 4 | 10,00° | 3,89° | 0,50 | 4020040 | 4020050 |
| 3,0 | 4,5 | 16,0 | 26,01 | 2,85 | 80 | 6 | 4 | 10,00° | 3,30° | 0,50 | 4020060 | 4020070 |
| 3,0 | 4,5 | 20,0 | 30,01 | 2,85 | 80 | 6 | 4 | 10,00° | 2,86° | 0,50 | 4020080 | 4020090 |
| 3,5 | 5,3 | 6,0 | 14,83 | 3,33 | 80 | 6 | 4 | 10,00° | 4,81° | 0,50 | 4020100 | 4020110 |
| 4,0 | 6,0 | 6,0 | 13,68 | 3,80 | 80 | 6 | 4 | 10,00° | 4,18° | 0,50 | 4020120 | 4020130 |
| 4,0 | 6,0 | 8,0 | 15,68 | 3,80 | 80 | 6 | 4 | 10,00° | 3,64° | 0,50 | 4020140 | 4020150 |
| 4,0 | 6,0 | 12,0 | 19,68 | 3,80 | 80 | 6 | 4 | 10,00° | 2,90° | 0,50 | 4020160 | 4020170 |
| 4,0 | 6,0 | 16,0 | 23,68 | 3,80 | 80 | 6 | 4 | 10,00° | 2,41° | 0,50 | 4020180 | 4020190 |
| 4,5 | 6,8 | 7,0 | 13,51 | 4,28 | 80 | 6 | 4 | 10,00° | 3,17° | 0,50 | 4020200 | 4020210 |
| 4,5 | 6,8 | 12,0 | 18,51 | 4,28 | 80 | 6 | 4 | 10,00° | 2,32° | 0,50 | 4020220 | 4020230 |
| 5,0 | 7,5 | 8,0 | 13,34 | 4,75 | 80 | 6 | 4 | 10,00° | 2,14° | 0,50 | 4020240 | 4020250 |
| 5,0 | 7,5 | 12,0 | 17,34 | 4,75 | 80 | 6 | 4 | 10,00° | 1,65° | 0,50 | 4020260 | 4020270 |
| 5,0 | 7,5 | 16,0 | 21,34 | 4,75 | 80 | 6 | 4 | 10,00° | 1,34° | 0,50 | 4020280 | 4020290 |
| 5,0 | 7,5 | 20,0 | 25,34 | 4,75 | 80 | 6 | 4 | 10,00° | 1,13° | 0,50 | 4020300 | 4020310 |




| | P (20-30 Hrc) | | | P (30-40 Hrc) | | | M | | | GG | | | AL | | | CU | | | Titan | | | < 52 HRC | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.0050-2<br>1.0060-2<br>1.0070-2 | | | 1.5864<br>1.6580<br>1.7225 | | | 1.4405<br>1.4460<br>1.4505 | | | 0.6035<br>0.7080<br>0.8055 | | | 3.2151<br>3.2373<br>3.2382 | | | 2.1247<br>2.0580<br>2.0598 | | | 3.7035<br>3.7055<br>3.7065 | | | 1.3255<br>1.3265<br>1.3333 | | |
| | Vc= 120 m/dk. | | | Vc = 80 m/dk. | | | Vc = 60 m/dk. | | | Vc= 200 m/dk. | | | Vc = 460 m/dk. | | | Vc = 230 m/dk. | | | Vc = 60 m/dk. | | | Vc = 50 m/dk. | | |
| dl | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf |
| 0.5 | 0.009 | 60000 | 1080 | 0.011 | 51200 | 1126 | 0.011 | 38400 | 845 | 0.007 | 60000 | 840 | 0.016 | 60000 | 1920 | 0.010 | 60000 | 1200 | 0.007 | 38400 | 538 | 0.008 | 32000 | 512 |
| 1.0 | 0.016 | 38400 | 1229 | 0.023 | 25600 | 1178 | 0.021 | 19200 | 806 | 0.013 | 60000 | 1560 | 0.016 | 60000 | 1920 | 0.013 | 60000 | 1560 | 0.015 | 19200 | 576 | 0.016 | 16000 | 512 |
| 2.0 | 0.031 | 19200 | 2381 | 0.035 | 12800 | 2406 | 0.042 | 9600 | 1613 | 0.025 | 32000 | 3200 | 0.016 | 60000 | 3840 | 0.022 | 36800 | 3238 | 0.031 | 9600 | 1190 | 0.033 | 8000 | 1056 |
| 3.0 | 0.047 | 12800 | 2406 | 0.047 | 8500 | 2414 | 0.064 | 6400 | 1638 | 0.037 | 21300 | 3152 | 0.016 | 60000 | 3136 | 0.034 | 24500 | 3332 | 0.047 | 6400 | 1203 | 0.052 | 5300 | 1102 |
| 4.0 | 0.065 | 9600 | 2496 | 0.059 | 6400 | 2432 | 0.087 | 4800 | 1670 | 0.049 | 16000 | 3136 | 0.016 | 58800 | 2355 | 0.046 | 18400 | 3386 | 0.063 | 4800 | 1210 | 0.072 | 4000 | 1152 |
| 5.0 | 0.085 | 7600 | 2584 | 0.071 | 5100 | 2428 | 0.111 | 3800 | 1687 | 0.061 | 12800 | 3123 | 0.016 | 49000 | 1882 | 0.060 | 14700 | 3528 | 0.079 | 3800 | 1201 | 0.094 | 3200 | 1203 |
| 0.5 | 0.05 | 0.05 | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 0.10 | 0.10 | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 0.20 | 0.20 | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 0.30 | 0.30 | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 0.40 | 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | 0.50 | 0.50 | | | | | | | | | | | | | | | | | | | | | | |