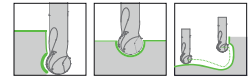
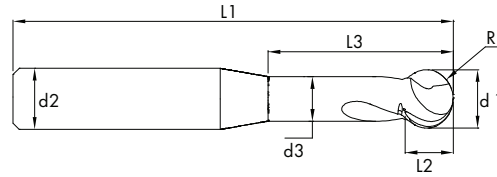


SOLID CARBIDE BALL NOSE END MILLS

heikenei.com

VOLLHARTMETALL RADIUSFRASER
KARBÜR KÜRE FREZE ORBITCUT 270°



ORBITCUT 270°

<52 HRC

| | | | | | | | | |
|------|---------|----------|------|----------|------------|---------|--------|--------|
| | | | | | | | | |
| TYPE | QUALITY | DIAMETER | NORM | 2 FLUTES | SHAFT TYPE | HELICAL | RADIUS | COATED |

| d1 | L2 | L3 | L4 | L1 | d2(h6) | Z | R | Coated Code |
|----|-------|------|----|-----|--------|---|------|-------------|
| 3 | 2,56 | 2,5 | 9 | 57 | 6 | 2 | 1,50 | 4026440 |
| 4 | 3,41 | 3,3 | 12 | 57 | 6 | 2 | 2,00 | 4026450 |
| 5 | 4,27 | 4,1 | 15 | 57 | 6 | 2 | 2,50 | 4026460 |
| 6 | 5,12 | 4,7 | 18 | 57 | 6 | 2 | 3,00 | 4026470 |
| 8 | 6,83 | 6,5 | 19 | 63 | 8 | 2 | 4,00 | 4026480 |
| 10 | 8,54 | 8,2 | 22 | 72 | 10 | 2 | 5,00 | 4026490 |
| 12 | 10,24 | 9,8 | 26 | 83 | 12 | 2 | 6,00 | 4026500 |
| 16 | 13,66 | 13,4 | 32 | 92 | 16 | 2 | 8,00 | 4026510 |
| 3 | 2,56 | 2,3 | 30 | 100 | 6 | 2 | 1,50 | 4026520 |
| 4 | 3,41 | 3,3 | 36 | 100 | 6 | 2 | 2,00 | 4026530 |
| 5 | 4,27 | 4,1 | 40 | 100 | 6 | 2 | 2,50 | 4026540 |
| 6 | 5,12 | 4,7 | 45 | 100 | 6 | 2 | 3,00 | 4026550 |
| 8 | 6,83 | 6,5 | 48 | 100 | 8 | 2 | 4,00 | 4026560 |
| 10 | 8,54 | 8,2 | 52 | 100 | 10 | 2 | 5,00 | 4026570 |
| 12 | 10,24 | 9,8 | 60 | 130 | 12 | 2 | 6,00 | 4026580 |
| 16 | 13,66 | 13,4 | 70 | 130 | 13 | 2 | 8,00 | 4026590 |

| | | | | P (< 20 HRC) | | | P (< 25 HRC) | | | P (< 30 HRC) | | | P (< 35 HRC) | | | < 40 HRC | | | < 45 HRC | | | < 50 HRC | | | < 52 HRC | | |
|----|-------|-----|-------|--------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|------|-------|------------------------------------|------|-------|------------------------------------|------|-------|
| | | | | 1.7131-1.7139 1.7149-1.7262 | | | 1.4112 - 1.4116 1.4117 - 1.4125 | | | 1.7039 - 1.7225 1.7220 - 1.7226 | | | 1.5864 - 1.7707 1.6580 - 1.4542 | | | 1.7139 - 1.7262 1.7311 - 1.7323 | | | 1.8509 - 1.2713 1.2714 - 1.2718 | | | 1.2718 - 1.2726 1.2343 - 1.2344 | | | 1.2360 - 1.2782 1.2884 - 1.2365 | | |
| | | | | Vc = 150 m/dk. | | | Vc = 140 m/dk. | | | Vc = 130 m/dk. | | | Vc = 125 m/dk. | | | Vc = 120 m/dk. | | | Vc = 110 m/dk. | | | Vc = 100 m/dk. | | | Vc = 90 m/dk. | | |
| d1 | de | ap | β | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf | fz | n | Vf |
| 4 | 3,67 | 1,2 | 18,5° | 0,041 | 13016 | 540xZ | 0,041 | 12149 | 500xZ | 0,041 | 11280 | 460xZ | 0,039 | 10847 | 420xZ | 0,035 | 10413 | 360xZ | 0,034 | 9545 | 320xZ | 0,032 | 8678 | 280xZ | 0,031 | 7810 | 240xZ |
| 5 | 4,58 | 1,5 | 18,5° | 0,052 | 10430 | 540xZ | 0,051 | 9735 | 500xZ | 0,051 | 9039 | 460xZ | 0,048 | 8692 | 420xZ | 0,043 | 8344 | 360xZ | 0,042 | 7649 | 320xZ | 0,040 | 6954 | 280xZ | 0,038 | 6258 | 240xZ |
| 6 | 5,50 | 1,8 | 18,5° | 0,062 | 8685 | 540xZ | 0,062 | 8106 | 500xZ | 0,061 | 7527 | 460xZ | 0,058 | 7238 | 420xZ | 0,052 | 6948 | 360xZ | 0,050 | 6369 | 320xZ | 0,048 | 5791 | 280xZ | 0,046 | 5211 | 240xZ |
| 8 | 7,33 | 2,4 | 18,5° | 0,083 | 6517 | 540xZ | 0,082 | 6083 | 500xZ | 0,081 | 5648 | 460xZ | 0,077 | 5431 | 420xZ | 0,069 | 5214 | 360xZ | 0,067 | 4779 | 320xZ | 0,064 | 4345 | 280xZ | 0,061 | 3910 | 240xZ |
| 10 | 9,16 | 3,0 | 18,5° | 0,103 | 5215 | 540xZ | 0,103 | 4867 | 500xZ | 0,102 | 4520 | 460xZ | 0,097 | 4346 | 420xZ | 0,086 | 4172 | 360xZ | 0,084 | 3824 | 320xZ | 0,080 | 3477 | 280xZ | 0,077 | 3129 | 240xZ |
| 12 | 11,00 | 3,6 | 18,5° | 0,124 | 4343 | 540xZ | 0,123 | 4053 | 500xZ | 0,122 | 3764 | 460xZ | 0,116 | 3619 | 420xZ | 0,103 | 3474 | 360xZ | 0,100 | 3185 | 320xZ | 0,097 | 2895 | 280xZ | 0,092 | 2605 | 240xZ |
| 14 | 12,83 | 4,2 | 18,5° | 0,145 | 3723 | 540xZ | 0,144 | 3475 | 500xZ | 0,142 | 3227 | 460xZ | 0,135 | 3103 | 420xZ | 0,121 | 2978 | 360xZ | 0,117 | 2730 | 320xZ | 0,113 | 2482 | 280xZ | 0,107 | 2234 | 240xZ |
| 16 | 14,66 | 4,8 | 18,5° | 0,166 | 3258 | 540xZ | 0,164 | 3041 | 500xZ | 0,163 | 2824 | 460xZ | 0,155 | 2715 | 420xZ | 0,138 | 2607 | 360xZ | 0,134 | 2390 | 320xZ | 0,129 | 2172 | 280xZ | 0,123 | 1955 | 240xZ |
| 18 | 16,50 | 5,4 | 18,5° | 0,186 | 2895 | 540xZ | 0,185 | 2702 | 500xZ | 0,183 | 2509 | 460xZ | 0,174 | 2413 | 420xZ | 0,155 | 2316 | 360xZ | 0,151 | 2123 | 320xZ | 0,145 | 1930 | 280xZ | 0,138 | 1737 | 240xZ |
| 20 | 18,33 | 6,0 | 18,5° | 0,207 | 2606 | 540xZ | 0,205 | 2432 | 500xZ | 0,203 | 2258 | 460xZ | 0,193 | 2172 | 420xZ | 0,173 | 2085 | 360xZ | 0,167 | 1911 | 320xZ | 0,161 | 1738 | 280xZ | 0,153 | 1564 | 240xZ |