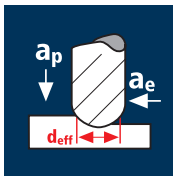





Application





Material

Hardened tool steel
42 - 48 HRC


 

Hardened tool steel
48 - 52 HRC

Hardened tool steel
52 - 56 HRC

Hardened tool steel
56 - 60 HRC

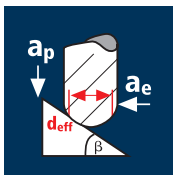
| d1 [mm] | z | v _c [m/min] | f _t [mm] | a _s [mm] | a _e [mm] | d _{eff} [mm] | n [min ⁻¹] | v _t [mm/min] | Q [mm ³ /min] |
|---------|---|------------------------|---------------------|---------------------|---------------------|-----------------------|------------------------|-------------------------|--------------------------|
| 0.20 | 2 | 20 | 0.008 | 0.033 | 0.040 | 0.15 | 42440 | 640 | 0.8 |
| 0.30 | 2 | 29 | 0.013 | 0.050 | 0.060 | 0.22 | 41960 | 1055 | 3.2 |
| 0.40 | 2 | 40 | 0.016 | 0.067 | 0.080 | 0.30 | 42440 | 1390 | 7.5 |
| 0.50 | 2 | 49 | 0.020 | 0.083 | 0.100 | 0.37 | 42155 | 1700 | 14.1 |
| 0.60 | 2 | 59 | 0.024 | 0.100 | 0.120 | 0.45 | 41735 | 2000 | 24.0 |
| 0.80 | 2 | 79 | 0.033 | 0.134 | 0.160 | 0.60 | 41910 | 2745 | 58.9 |
| 1.00 | 2 | 99 | 0.040 | 0.167 | 0.200 | 0.75 | 42015 | 3390 | 113.2 |
| 1.50 | 2 | 140 | 0.060 | 0.250 | 0.300 | 1.12 | 39790 | 4815 | 361.0 |
| 2.00 | 2 | 140 | 0.081 | 0.334 | 0.400 | 1.49 | 29910 | 4825 | 644.4 |

| | | | | | | | | | |
|------|---|-----|-------|-------|-------|------|-------|------|-------|
| 0.20 | 2 | 20 | 0.007 | 0.033 | 0.040 | 0.15 | 42440 | 610 | 0.8 |
| 0.30 | 2 | 29 | 0.012 | 0.050 | 0.060 | 0.22 | 41960 | 1005 | 3.0 |
| 0.40 | 2 | 40 | 0.016 | 0.067 | 0.080 | 0.30 | 42440 | 1325 | 7.1 |
| 0.50 | 2 | 49 | 0.019 | 0.083 | 0.100 | 0.37 | 42155 | 1620 | 13.4 |
| 0.60 | 2 | 59 | 0.023 | 0.100 | 0.120 | 0.45 | 41735 | 1905 | 22.8 |
| 0.80 | 2 | 79 | 0.031 | 0.134 | 0.160 | 0.60 | 41910 | 2615 | 56.1 |
| 1.00 | 2 | 99 | 0.038 | 0.167 | 0.200 | 0.75 | 42015 | 3225 | 107.8 |
| 1.50 | 2 | 120 | 0.058 | 0.250 | 0.300 | 1.12 | 34105 | 3930 | 294.7 |
| 2.00 | 2 | 120 | 0.077 | 0.334 | 0.400 | 1.49 | 25635 | 3940 | 526.1 |

| | | | | | | | | | |
|------|---|-----|-------|-------|-------|------|-------|------|-------|
| 0.20 | 2 | 20 | 0.006 | 0.033 | 0.040 | 0.15 | 42440 | 510 | 0.7 |
| 0.30 | 2 | 29 | 0.010 | 0.050 | 0.060 | 0.22 | 41960 | 840 | 2.5 |
| 0.40 | 2 | 40 | 0.013 | 0.067 | 0.080 | 0.30 | 42440 | 1105 | 5.9 |
| 0.50 | 2 | 49 | 0.016 | 0.083 | 0.100 | 0.37 | 42155 | 1350 | 11.2 |
| 0.60 | 2 | 59 | 0.019 | 0.100 | 0.120 | 0.45 | 41735 | 1585 | 19.0 |
| 0.80 | 2 | 79 | 0.026 | 0.134 | 0.160 | 0.60 | 41910 | 2180 | 46.7 |
| 1.00 | 2 | 99 | 0.032 | 0.167 | 0.200 | 0.75 | 42015 | 2690 | 89.8 |
| 1.50 | 2 | 100 | 0.048 | 0.250 | 0.300 | 1.12 | 28420 | 2730 | 204.6 |
| 2.00 | 2 | 100 | 0.064 | 0.334 | 0.400 | 1.49 | 21365 | 2735 | 365.3 |

| | | | | | | | | | |
|------|---|----|-------|-------|-------|------|-------|------|-------|
| 0.20 | 2 | 20 | 0.005 | 0.033 | 0.040 | 0.15 | 42440 | 460 | 0.6 |
| 0.30 | 2 | 29 | 0.009 | 0.050 | 0.060 | 0.22 | 41960 | 755 | 2.3 |
| 0.40 | 2 | 40 | 0.012 | 0.067 | 0.080 | 0.30 | 42440 | 995 | 5.3 |
| 0.50 | 2 | 49 | 0.014 | 0.083 | 0.100 | 0.37 | 42155 | 1215 | 10.1 |
| 0.60 | 2 | 59 | 0.017 | 0.100 | 0.120 | 0.45 | 41735 | 1425 | 17.1 |
| 0.80 | 2 | 60 | 0.023 | 0.134 | 0.160 | 0.60 | 31830 | 1490 | 31.9 |
| 1.00 | 2 | 60 | 0.029 | 0.167 | 0.200 | 0.75 | 25465 | 1465 | 49.0 |
| 1.50 | 2 | 60 | 0.043 | 0.250 | 0.300 | 1.12 | 17050 | 1475 | 110.5 |
| 2.00 | 2 | 60 | 0.058 | 0.334 | 0.400 | 1.49 | 12820 | 1475 | 197.3 |

Application





Material

Hardened tool steel
42 - 48 HRC



 



Hardened tool steel
48 - 52 HRC

Hardened tool steel
52 - 56 HRC

Hardened tool steel
56 - 60 HRC

| d1 [mm] | z | v _c [m/min] | f _t [mm] | a _s [mm] | a _e [mm] | d _{eff} [mm] | n [min ⁻¹] | v _t [mm/min] | β [°] |
|---------|---|------------------------|---------------------|---------------------|---------------------|-----------------------|------------------------|-------------------------|-------|
| 0.20 | 2 | 25 | 0.008 | 0.008 | 0.008 | 0.19 | 41885 | 670 | 45° |
| 0.30 | 2 | 37 | 0.010 | 0.012 | 0.012 | 0.28 | 42060 | 840 | 45° |
| 0.40 | 2 | 49 | 0.014 | 0.016 | 0.016 | 0.37 | 42155 | 1180 | 45° |
| 0.50 | 2 | 62 | 0.020 | 0.022 | 0.022 | 0.47 | 41990 | 1680 | 45° |
| 0.60 | 2 | 74 | 0.020 | 0.026 | 0.026 | 0.56 | 42060 | 1680 | 45° |
| 0.80 | 2 | 99 | 0.022 | 0.034 | 0.034 | 0.75 | 42015 | 1850 | 45° |
| 1.00 | 2 | 123 | 0.028 | 0.042 | 0.042 | 0.93 | 42100 | 2360 | 45° |
| 1.50 | 2 | 185 | 0.034 | 0.064 | 0.064 | 1.40 | 42060 | 2860 | 45° |
| 2.00 | 2 | 245 | 0.038 | 0.084 | 0.084 | 1.86 | 41930 | 3185 | 45° |

| | | | | | | | | | |
|------|---|-----|-------|-------|-------|------|-------|------|-----|
| 0.20 | 2 | 25 | 0.008 | 0.008 | 0.008 | 0.19 | 41885 | 670 | 45° |
| 0.30 | 2 | 37 | 0.010 | 0.012 | 0.012 | 0.28 | 42060 | 840 | 45° |
| 0.40 | 2 | 49 | 0.014 | 0.016 | 0.016 | 0.37 | 42155 | 1180 | 45° |
| 0.50 | 2 | 62 | 0.020 | 0.022 | 0.022 | 0.47 | 41990 | 1680 | 45° |
| 0.60 | 2 | 74 | 0.020 | 0.026 | 0.026 | 0.56 | 42060 | 1680 | 45° |
| 0.80 | 2 | 99 | 0.020 | 0.034 | 0.034 | 0.75 | 42015 | 1680 | 45° |
| 1.00 | 2 | 123 | 0.026 | 0.042 | 0.042 | 0.93 | 42100 | 2190 | 45° |
| 1.50 | 2 | 185 | 0.032 | 0.064 | 0.064 | 1.40 | 42060 | 2690 | 45° |
| 2.00 | 2 | 245 | 0.036 | 0.084 | 0.084 | 1.86 | 41930 | 3020 | 45° |

| | | | | | | | | | |
|------|---|-----|-------|-------|-------|------|-------|------|-----|
| 0.20 | 2 | 25 | 0.008 | 0.008 | 0.008 | 0.19 | 41885 | 670 | 45° |
| 0.30 | 2 | 37 | 0.010 | 0.012 | 0.012 | 0.28 | 42060 | 840 | 45° |
| 0.40 | 2 | 49 | 0.012 | 0.016 | 0.016 | 0.37 | 42155 | 1010 | 45° |
| 0.50 | 2 | 62 | 0.018 | 0.022 | 0.022 | 0.47 | 41990 | 1510 | 45° |
| 0.60 | 2 | 74 | 0.018 | 0.026 | 0.026 | 0.56 | 42060 | 1515 | 45° |
| 0.80 | 2 | 99 | 0.020 | 0.034 | 0.034 | 0.75 | 42015 | 1680 | 45° |
| 1.00 | 2 | 123 | 0.026 | 0.042 | 0.042 | 0.93 | 42100 | 2190 | 45° |
| 1.50 | 2 | 185 | 0.030 | 0.064 | 0.064 | 1.40 | 42060 | 2525 | 45° |
| 2.00 | 2 | 200 | 0.034 | 0.084 | 0.084 | 1.86 | 34225 | 2325 | 45° |

| | | | | | | | | | |
|------|---|-----|-------|-------|-------|------|-------|------|-----|
| 0.20 | 2 | 25 | 0.006 | 0.008 | 0.008 | 0.19 | 41885 | 505 | 45° |
| 0.30 | 2 | 37 | 0.008 | 0.012 | 0.012 | 0.28 | 42060 | 675 | 45° |
| 0.40 | 2 | 49 | 0.012 | 0.016 | 0.016 | 0.37 | 42155 | 1010 | 45° |
| 0.50 | 2 | 62 | 0.016 | 0.022 | 0.022 | 0.47 | 41990 | 1345 | 45° |
| 0.60 | 2 | 74 | 0.016 | 0.026 | 0.026 | 0.56 | 42060 | 1345 | 45° |
| 0.80 | 2 | 99 | 0.018 | 0.034 | 0.034 | 0.75 | 42015 | 1515 | 45° |
| 1.00 | 2 | 123 | 0.022 | 0.042 | 0.042 | 0.93 | 42100 | 1850 | 45° |
| 1.50 | 2 | 150 | 0.028 | 0.064 | 0.064 | 1.40 | 34105 | 1910 | 45° |
| 2.00 | 2 | 150 | 0.030 | 0.084 | 0.084 | 1.86 | 25670 | 1540 | 45° |