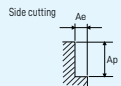


6FLUTE RECOMMENDED CUTTING CONDITIONS(INCH)

| ISO Hardness (BHN) | Work Materials | Speed and Feed Recommendations | | | |
|--------------------|--|--------------------------------|------------------------|---------|------|
| | | Type of Cut | Ap x D1 | Ae x D1 | |
| P<300 | CARBON STEEL 10**, 11**, 12**, 12L**, 15** | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| 300<P<380 | ALLOY STEEL 41**, 43**, 51**, 86** | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| P<380 | TOOL STEEL A2, D2, H13, P20, T15 | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| M | STAINLESS STEELS 300 304, 316, 304L, 316L,SUS316 | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| M | STAINLESS STEELS 400 416, 420F, 430F, 440F | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| M | STAINLESS STEELS (PH) 17-4PH, 15-5PH, 13-8PH | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| S | TITANIUM Ti6Al4V, Ti5Al5V5Mo, Ti7Al4Mo | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |
| S | HIGH-TEMPERATURE ALLOY INCONEL, HASTALLOY, RENE | Side Cutting | 2 [$\frac{1}{2}$] | 0.05 | RPM |
| | | | | | Fz |
| | | | | | FEED |
| | | | | | SFM |

| Diameter | | | | | | |
|----------------|--------|--------|--------|--------|--------|--------|
| 1/4 | 5/16 | 3/8 | 1/2 | 5/8 | 3/4 | 1 |
| 984 [787-1101] | | | | | | |
| 15036 | 12028 | 10024 | 7518 | 6014 | 5012 | 3759 |
| 0.0027 | 0.0046 | 0.0057 | 0.0068 | 0.0080 | 0.0089 | 0.0091 |
| 241.52 | 329.60 | 340.96 | 307.22 | 286.98 | 266.38 | 206.00 |
| 663 [533-777] | | | | | | |
| 10176 | 8141 | 6784 | 5088 | 4071 | 3392 | 2544 |
| 0.0020 | 0.0033 | 0.0042 | 0.0050 | 0.0059 | 0.0066 | 0.0069 |
| 120.19 | 163.46 | 169.88 | 153.85 | 143.27 | 133.82 | 104.57 |
| 328 [262-394] | | | | | | |
| 5012 | 4009 | 3341 | 2506 | 2005 | 1671 | 1253 |
| 0.0016 | 0.0028 | 0.0035 | 0.0041 | 0.0048 | 0.0054 | 0.0057 |
| 48.54 | 67.25 | 69.46 | 62.15 | 58.25 | 54.06 | 42.62 |
| 482 [386-578] | | | | | | |
| 7365 | 5892 | 4910 | 3682 | 2946 | 2455 | 1841 |
| 0.0016 | 0.0028 | 0.0035 | 0.0041 | 0.0048 | 0.0054 | 0.0056 |
| 71.33 | 98.82 | 102.07 | 91.34 | 85.60 | 79.45 | 62.20 |
| 697 [559-839] | | | | | | |
| 10681 | 8545 | 7120 | 5340 | 4272 | 3560 | 2670 |
| 0.0019 | 0.0033 | 0.0041 | 0.0049 | 0.0057 | 0.0064 | 0.0066 |
| 123.63 | 169.55 | 174.93 | 157.69 | 147.34 | 136.24 | 105.97 |
| 440 [352-528] | | | | | | |
| 6723 | 5379 | 4482 | 3362 | 2689 | 2241 | 1681 |
| 0.0016 | 0.0028 | 0.0035 | 0.0041 | 0.0048 | 0.0054 | 0.0056 |
| 65.11 | 90.21 | 93.17 | 83.38 | 78.14 | 72.53 | 56.38 |
| 381 [305-457] | | | | | | |
| 5822 | 4657 | 3881 | 2911 | 2329 | 1941 | 1455 |
| 0.0013 | 0.0022 | 0.0028 | 0.0033 | 0.0038 | 0.0044 | 0.0046 |
| 45.38 | 60.51 | 64.18 | 57.07 | 53.36 | 51.80 | 40.22 |
| 108 [86-130] | | | | | | |
| 1650 | 1320 | 1100 | 825 | 660 | 550 | 413 |
| 0.0013 | 0.0022 | 0.0028 | 0.0032 | 0.0038 | 0.0044 | 0.0045 |
| 12.86 | 17.15 | 18.19 | 15.98 | 15.13 | 14.55 | 11.21 |



NOTES:
 • Feed to be reduced by approximately 50% if L.O.C. (Length Of Cut) is over 3xD
 • The above recommendations are based on ideal conditions, for smaller taper machining centers or less rigid conditions please adjust parameters accordingly on diameters greater than 1/2"
 • In profile operations, engaging more than 2xD, reduce the radial depth of cut by 50%-60%
 • Finish cuts typically require reduced cutting feeds and speeds, also, it is recommended the radial width of cut (AE) should not exceed 2% x D1