



Speeds & Feeds

Product Table: Variable Helix End Mills for High Temp Alloys - Ball - Long Reach, Stub Flute

Characteristics: 5x Reach Multiple, 4 Flutes

Series: 636xx-C6, 637xx-C6, 9887xx-C6

| Material | Hardness (HBn) | SFM | Chip Load (IPT) By Cutter Diameter | | | | | | | | | | | | Depth of Cut | | |
|---|----------------|-----|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|----------|---------------|
| | | | 0.015 | 0.031 | 0.047 | 0.062 | 0.078 | 0.093 | 0.125 | 0.187 | 0.250 | 0.312 | 0.375 | 0.500 | Radial | Axial | |
| Stainless Steels: 40x, 41x, 42x, 43x, 44x, 13-8, 15-5, 15-7, 17-4, 17-7 | 275 - 300 | 160 | Slotting | .00005 | .00010 | .00016 | .00020 | .00026 | .00031 | .00041 | .00062 | .00083 | .00108 | .00130 | .00173 | 1x Dia | .28x Dia |
| | 300 - 350 | 140 | | | | | | | | | | | | | | | |
| | 350 - 400 | 100 | | | | | | | | | | | | | | | |
| Tool Steels: D, H, M, T, S series | 400 - 425 | 80 | Roughing | .00006 | .00013 | .00020 | .00026 | .00033 | .00039 | .00053 | .00079 | .00105 | .00138 | .00165 | .00221 | .28x Dia | .5x - .7x Dia |
| | 275 - 300 | 200 | | | | | | | | | | | | | | | |
| Titanium: All alloys | 300 - 350 | 125 | Finishing | .00008 | .00017 | .00026 | .00034 | .00043 | .00051 | .00069 | .00103 | .00138 | .00180 | .00217 | .00289 | .1x Dia | .5x - 1x Dia |
| | 350 - 400 | 75 | | | | | | | | | | | | | | | |
| | 400 - 425 | 75 | | | | | | | | | | | | | | | |
| Nickel Alloys: Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy | 275 - 300 | 80 | Max | .00010 | .00020 | .00031 | .00041 | .00051 | .00061 | .00083 | .00123 | .00165 | .00216 | .00260 | .00347 | - | - |
| | 300 - 350 | 60 | | | | | | | | | | | | | | | |
| | 350 - 400 | 50 | | | | | | | | | | | | | | | |
| | 400 - 425 | 40 | | | | | | | | | | | | | | | |

Please note:
 All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. If less than minimum Axial or Radial DOC values are used, increased feed rates are possible. If greater than maximum Axial or Radial DOC values are used, decreased feed rates may be needed.
 If you require additional information, Harvey Tool has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-645-5609** or **Harveytech@harveyperformance.com**.
 WARNING: Cutting tools may shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment in the vicinity of use.