# List 573: Regular Length, 2 Flute
# List 574: Regular Length, Multiple Flute

## Slotting

| Hardness | – | | <145 Brinell | | <20 HRC | | 20-30 HRC | | 30-40 HRC | |
|---|---|---|---|---|---|---|---|---|---|---|
| Work Material | Aluminum Alloyed<br>Aluminum Plastics<br>Woods | | Mild Steels<br>Brass Bronze | | Medium Tensile Steels<br>Mild Steel Forgings<br>Cast Iron<br>Hard Brass and Bronze<br>Copper | | High Tensile Steels<br>Unalloyed Titanium<br>Heat Resistant<br>Ferritic Low Alloys | | High Tensile Steels<br>Tool Steels<br>Medium Strength<br>Stainless<br>Steels and Titanium<br>Alloys | |
| Cutting Speed | 250-350 SFM | | 80-100 SFM | | 50-65 SFM | | 35-45 SFM | | 20-30 SFM | |
| Depth of Cut | 2 Flute: $a_a$=0.5D<br>4 Flute: $a_a$= 0.25D | | | | | | | | | |
| Mill Dia. | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min |
| 1/8 | 9,170 | 9.2 | 2,750 | 3.1 | 1,760 | 4.2 | 1,220 | 1.0 | 765 | 0.6 |
| 5/32 | 7,335 | 10.4 | 2,200 | 3.5 | 1,400 | 4.8 | 980 | 1.1 | 610 | 0.6 |
| 3/16 | 6,110 | 11.6 | 1,830 | 4.0 | 1,170 | 5.5 | 815 | 1.3 | 510 | 0.7 |
| 1/4 | 4,585 | 12.1 | 1,375 | 4.4 | 880 | 5.9 | 610 | 1.4 | 380 | 0.8 |
| 5/16 | 3,670 | 14.0 | 1,100 | 4.9 | 700 | 6.7 | 490 | 1.5 | 300 | 0.8 |
| 3/8 | 3,055 | 12.9 | 915 | 4.8 | 585 | 6.5 | 410 | 1.5 | 255 | 0.8 |
| 7/16 | 2,620 | 13.9 | 785 | 5.3 | 500 | 7.1 | 350 | 1.7 | 220 | 0.9 |
| 1/2 | 2,290 | 13.8 | 690 | 5.2 | 440 | 6.7 | 305 | 1.6 | 190 | 0.9 |
| 9/16 | 2,040 | 12.8 | 610 | 4.9 | 390 | 6.6 | 270 | 1.6 | 170 | 1.0 |
| 5/8 | 1,835 | 12.3 | 550 | 4.6 | 350 | 6.2 | 245 | 1.6 | 150 | 1.0 |
| 11/16 | 1,670 | 12.5 | 500 | 4.8 | 320 | 5.7 | 220 | 1.6 | 140 | 1.0 |
| 3/4 | 1,530 | 11.5 | 460 | 4.4 | 295 | 5.2 | 200 | 1.5 | 130 | 0.9 |
| 13/16 | 1,410 | 11.2 | 425 | 4.2 | 270 | 4.8 | 190 | 1.5 | 120 | 1.0 |
| 7/8 | 1,310 | 11.1 | 395 | 4.1 | 250 | 4.4 | 175 | 1.4 | 110 | 0.9 |
| 15/16 | 1,220 | 11.0 | 365 | 4.1 | 235 | 4.2 | 165 | 1.3 | 100 | 0.8 |
| 1 | 1,150 | 10.3 | 345 | 3.9 | 220 | 4.0 | 155 | 1.2 | 95 | 0.7 |

1) Based on regular 4FL end mills cutting depth (1.5D) x cutting width (0.1D).
2) For 2FL end mill, decrease feed 50%.
3) For finish, increase RPM 1.3 to 1.5 times.

# List 574: Regular Length, Multiple Flute (Continued)

## Side Milling

| Hardness | – | | <145 Brinell | | <20 HRC | | 20-30 HRC | | 30-40 HRC | |
|---|---|---|---|---|---|---|---|---|---|---|
| Work Material | Aluminum Alloyed<br>Aluminum Plastics<br>Woods | | Mild Steels<br>Brass Bronze | | Medium Tensile Steels<br>Mild Steel Forgings<br>Cast Iron<br>Hard Brass and Bronze<br>Copper | | High Tensile Steels<br>Unalloyed Titanium<br>Heat Resistant<br>Ferritic Low Alloys | | High Tensile Steels<br>Tool Steels<br>Medium Strength<br>Stainless<br>Steels and Titanium<br>Alloys | |
| Cutting Speed | 325-590 SFM | | 130-165 SFM | | 105-125 SFM | | 65-80 SFM | | 30-50 SFM | |
| Depth of Cut | | | | | $a_a$=1.5D<br>$a_r$= 0.1D |  | | | | |
| Mill Dia. | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min | Speed RPM | Feed in/min |
| 1/8 | 13,980 | 28.0 | 4,500 | 10.1 | 3,550 | 7.1 | 2,240 | 3.6 | 1,250 | 1.6 |
| 5/32 | 11,185 | 31.8 | 3,550 | 11.4 | 2,800 | 8.0 | 1,800 | 4.0 | 1,000 | 1.9 |
| 3/16 | 9,320 | 35.4 | 2,800 | 12.4 | 2,240 | 9.0 | 1,400 | 4.5 | 800 | 2.1 |
| 1/4 | 6,990 | 36.9 | 2,240 | 14.4 | 1,800 | 10.1 | 1,120 | 5.0 | 630 | 2.4 |
| 5/16 | 5,590 | 42.5 | 1,800 | 16.1 | 1,400 | 11.3 | 900 | 5.8 | 500 | 2.6 |
| 3/8 | 4,660 | 39.5 | 1,600 | 17.0 | 1,250 | 11.8 | 800 | 6.1 | 450 | 2.9 |
| 7/16 | 3,995 | 42.4 | 1,250 | 16.8 | 1,000 | 12.0 | 630 | 6.3 | 355 | 3.0 |
| 1/2 | 3,495 | 41.9 | 1,120 | 16.8 | 900 | 11.4 | 560 | 5.9 | 315 | 3.0 |
| 9/16 | 3,100 | 39.2 | 1,000 | 16.0 | 800 | 11.4 | 500 | 6.0 | 280 | 3.1 |
| 5/8 | 2,795 | 37.5 | 900 | 15.3 | 710 | 10.6 | 450 | 6.0 | 250 | 3.1 |
| 11/16 | 2,540 | 38.1 | 800 | 15.3 | 630 | 9.5 | 400 | 5.6 | 224 | 3.1 |
| 3/4 | 2,330 | 35.0 | 800 | 15.3 | 630 | 9.5 | 400 | 5.6 | 224 | 3.1 |
| 13/16 | 2,150 | 34.4 | 710 | 14.3 | 560 | 8.4 | 355 | 5.6 | 200 | 3.3 |
| 7/8 | 2,000 | 34.0 | 630 | 13.4 | 500 | 7.5 | 315 | 5.0 | 180 | 2.9 |
| 15/16 | 1,865 | 33.6 | 560 | 12.5 | 450 | 6.8 | 280 | 4.5 | 160 | 2.5 |
| 1 | 1,750 | 31.5 | 560 | 12.5 | 450 | 6.8 | 280 | 4.5 | 160 | 2.5 |

1) Based on regular 4FL end mills cutting depth (1.5D) x cutting width (0.1D).
2) For 2FL end mill, decrease feed 50%.
3) For finish, increase RPM 1.3 to 1.5 times.