

GARR TOOL Milling Guide for Die Mold Cutters

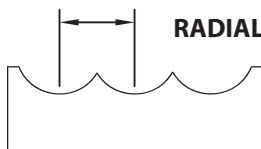
Roughing

(Reference series: 350MX)

| DIAMETER | RPM | | CHIPLOAD PER TOOTH (Fz) | |
|----------|-----------------|-----------------|-------------------------|-----------------|
| | 40 - 50 HRC | 50 - 60 HRC | 40 - 50 HRC | 50 - 60 HRC |
| 1/32" | 20,000 - 40,000 | 20,000 - 40,000 | .0005" - .0007" | .0004" - .0005" |
| 1/16" | 20,000 - 40,000 | 20,000 - 40,000 | .0010" - .0015" | .0008" - .0010" |
| 3/32" | 20,000 - 32,000 | 20,000 - 30,000 | .0015" - .0020" | .0010" - .0015" |
| 1/8" | 18,000 - 24,000 | 15,000 - 20,000 | .0020" - .0025" | .0015" - .0020" |
| 3/16" | 12,000 - 16,000 | 10,000 - 14,000 | .0030" - .0040" | .0020" - .0030" |
| 1/4" | 9,000 - 12,000 | 7,500 - 10,000 | .0040" - .0050" | .0025" - .0040" |
| 5/16" | 7,000 - 10,000 | 6,000 - 8,500 | .0050" - .0065" | .0035" - .0050" |
| 3/8" | 6,000 - 8,000 | 5,000 - 7,000 | .0060" - .0075" | .0045" - .0060" |
| 1/2" | 4,500 - 6,000 | 4,000 - 5,500 | .0080" - .0100" | .0055" - .0080" |
| 5/8" | 3,500 - 5,000 | 3,000 - 4,500 | .0090" - .0110" | .0065" - .0090" |
| 3/4" | 3,000 - 4,000 | 2,500 - 3,500 | .0100" - .0120" | .0075" - .0100" |
| 1" | 2,300 - 3,000 | 2,000 - 2,500 | .0110" - .0130" | .0085" - .0110" |

Semi-Finishing and Finishing

| DIAMETER | RPM | | CHIPLOAD PER TOOTH (Fz) | |
|----------|-----------------|-----------------|-------------------------|-----------------|
| | 40 - 50 HRC | 50 - 60 HRC | 40 - 50 HRC | 50 - 60 HRC |
| 1/32" | 20,000 - 40,000 | 20,000 - 40,000 | .0004" - .0005" | .0003" - .0004" |
| 1/16" | 20,000 - 40,000 | 20,000 - 40,000 | .0008" - .0010" | .0005" - .0008" |
| 3/32" | 20,000 - 40,000 | 20,000 - 40,000 | .0010" - .0015" | .0008" - .0012" |
| 1/8" | 20,000 - 40,000 | 20,000 - 36,000 | .0015" - .0020" | .0010" - .0015" |
| 3/16" | 20,000 - 32,000 | 20,000 - 25,000 | .0020" - .0030" | .0015" - .0020" |
| 1/4" | 18,000 - 25,000 | 15,000 - 18,000 | .0025" - .0040" | .0020" - .0030" |
| 5/16" | 14,000 - 19,000 | 12,000 - 14,000 | .0035" - .0050" | .0025" - .0040" |
| 3/8" | 12,000 - 16,000 | 10,000 - 12,000 | .0045" - .0060" | .0030" - .0045" |
| 1/2" | 9,000 - 12,000 | 7,500 - 9,000 | .0055" - .0080" | .0040" - .0060" |
| 5/8" | 6,500 - 9,000 | 5,000 - 7,000 | .0065" - .0090" | .0050" - .0070" |
| 3/4" | 5,500 - 7,500 | 4,000 - 6,000 | .0075" - .0100" | .0060" - .0080" |
| 1" | 4,000 - 6,000 | 3,500 - 5,500 | .0085" - .0110" | .0070" - .0090" |



RADIAL STEP OVER (ae)

AXIAL DEPTH OF CUT (ap)



| Roughing | |
|-------------|-------------------|
| Axial (ap) | 15% - 25% of Dia. |
| Radial (ae) | 20% - 30% of Dia. |

| Semi-Finishing | |
|----------------|-----------------|
| Axial (ap) | 5% - 8% of Dia. |
| Radial (ae) | 2% - 5% of Dia. |

| Finishing | |
|-------------|------------------|
| Axial (ap) | 1% - 3% of Dia. |
| Radial (ae) | .5% - 1% of Dia. |

High pressure air is recommended for clearing chips away from the cut.

NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.