**End Mills featuring high efficiency at speeds as low as 3,000 RPM and provide maximum performance at speeds of 10,000 RPM and higher!**

**Our flute designs are engineered to create less drag on the spindle and draw less power.**

**Applications for roughing and/or finishing can be accomplished with either low or high horsepower.**

**These selected families of End Mills provide maximum performance in following materials:**

- Aluminum Alloys
- High Silicon Aluminum
- Brass, Bronze, and Copper Alloys
- Composites, Fiberglass, and Plastics
- Die Cast Aluminum
- Extruded Metal Materials
- Non-Ferrous Materials
- Magnesium Alloys

| MATERIAL TYPES | Type of Cut | Axial D.O.C. | Radial D.O.C. | No. of Flutes | SFM (Vc) | Cutter Diameter Chip Load per Tooth (Fz) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1/8 | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 1 |
| **Materials** | | | | | | | | | | | | |
| **Aluminum / Aluminum Alloys** | | | | | | | | | | | | |
| 2024, 6061, 7075 | Slotting | D x 1 | D x 1 | 2 | 800 | .0020 | .0040 | .0060 | .0080 | .0100 | .0120 | .0160 |
| | Roughing | D x 1 | D x .75 | 3 | 1000 | .0020 | .0050 | .0075 | .0100 | .0120 | .0150 | .0200 |
| | Finishing | D x 1.5 | D x .01 | 3 | 1200 | .0030 | .0060 | .0090 | .0120 | .0160 | .0200 | .0250 |
| **High Silicone Aluminum** | | | | | | | | | | | | |
| A380, A390 | Slotting | D x 1 | D x 1 | 3 | 400 | .0010 | .0020 | .0030 | .0040 | .0050 | .0060 | .0080 |
| | Roughing | D x 1 | D x .75 | 3 | 600 | .0015 | .0030 | .0045 | .0060 | .0075 | .0090 | .0120 |
| | Finishing | D x 1.5 | D x .01 | 3 | 800 | .0018 | .0035 | .0055 | .0070 | .0090 | .0110 | .0140 |
| **Brass / Bronze / Copper Alloys** | | | | | | | | | | | | |
| High Lead Brass, Red Brass, Yellow Brass, Naval Brass, Low Silicon Brass, Berylium Copper, Nickel Silver, Oxygen Free Copper | Slotting | D x .75 | D x 1 | 2 | 400 | .0010 | .0020 | .0030 | .0040 | .0050 | .0060 | .0080 |
| | Roughing | D x 1 | D x .75 | 3 | 475 | .0012 | .0025 | .0037 | .0050 | .0063 | .0075 | .0100 |
| | Finishing | D x 1.5 | D x .01 | 3 | 550 | .0015 | .0030 | .0045 | .0060 | .0075 | .0090 | .0120 |
| **Composites, Fiberglass, Plastics** | | | | | | | | | | | | |
| Acrylics, Fiberglass,Glass Epoxy, Phenolics, Plastics | Slotting | D x 1 | D x 1 | 3 | 400 | .0010 | .0020 | .0030 | .0040 | .0050 | .0060 | .0080 |
| | Roughing | D x 1 | D x .75 | 3 | 600 | .0015 | .0030 | .0045 | .0060 | .0075 | .0090 | .0120 |
| | Finishing | D x 1.5 | D x .01 | 3 | 800 | .0018 | .0035 | .0055 | .0070 | .0090 | .0110 | .0140 |
| **Magnesium Alloys** | | | | | | | | | | | | |
| | Slotting | D x 1 | D x 1 | 2 | 800 | .0020 | .0040 | .0060 | .0080 | .0100 | .0120 | .0160 |
| | Roughing | D x 1 | D x .75 | 3 | 1000 | .0020 | .0050 | .0075 | .0100 | .0120 | .0150 | .0200 |
| | Finishing | D x 1.5 | D x .01 | 3 | 1200 | .0030 | .0060 | .0090 | .0120 | .0160 | .0200 | .0250 |

**The Machining Data shown below, is considered to be "safe starting conditions" and may need to be adjusted to obtain optimal tool performance.**

**Safety precautions must be implemented including safety glasses and machine shields to protect the operator and/or observers from hot flying chips.**

**Our Technical Team is ready to offer solutions for that difficult machining application. Whether you need tool specific speeds, feeds, depth of cuts, grade selection(s) or any questions and/or concerns regarding the application of MICRO 100 Solid Carbide Cutting Tools, they are there to help!**

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