

- Endmills for Acryl, A.B.S, Aluminum, non-ferrous and non-metallic materials.
- Minimize chattering by short flute design.
- Excellent tool rigidity by short flute design at high speed, feed machining.
- Reinforced edge design for preventing edge chipping.
- Excellent wear resistance by applying fine WC grade.

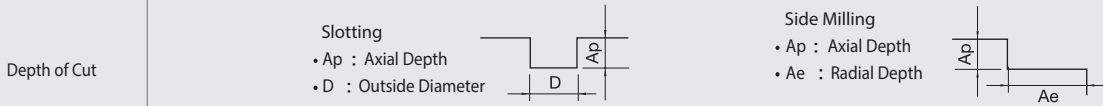


| D Size | D Tolerance |
|---------|-------------------|
| Ø1 ~ 4 | +0 ~ -0.01 mm |
| Ø6 ~ 12 | -0.01 ~ -0.025 mm |
| Ø16 | -0.015 ~ -0.03 mm |

3MRE

• RPM: rev./min • Feed: mm/min

| Material | | ABS /MC Nylon | | | | Acrylic /Polyaetal | | | | Polycarbonate | | | |
|------------------|------------------|---------------|-------|-------------------|--------------------|--------------------|------|-------------------|--------------------|---------------|-------|-------------------|--------------------|
| Outside Diameter | Effective Length | RPM | FEED | Ap Axial Depth | Ae Radial Depth | RPM | FEED | Ap Axial Depth | Ae Radial Depth | RPM | FEED | Ap Axial Depth | Ae Radial Depth |
| Ø1 | 10 | 6,360 | 560 | 0.30 | 0.03 | 10,812 | 264 | 0.30 | 0.03 | 8,250 | 1,568 | 0.30 | 0.03 |
| " | 15 | 6,360 | 560 | 0.30 | 0.02 | 9,328 | 172 | 0.30 | 0.02 | 7,360 | 1,120 | 0.30 | 0.02 |
| " | 20 | 6,360 | 560 | 0.30 | 0.01 | 8,056 | 103 | 0.30 | 0.01 | 6,750 | 840 | 0.30 | 0.01 |
| Ø1.5 | 10 | 6,360 | 851 | 0.50 | 0.05 | 10,812 | 370 | 0.50 | 0.05 | 7,950 | 1,568 | 0.50 | 0.05 |
| " | 15 | 6,360 | 818 | 0.50 | 0.03 | 9,328 | 280 | 0.50 | 0.03 | 7,102 | 1,120 | 0.50 | 0.03 |
| " | 20 | 6,254 | 784 | 0.50 | 0.02 | 8,056 | 202 | 0.50 | 0.02 | 6,466 | 840 | 0.50 | 0.02 |
| Ø2 | 10 | 6,330 | 1,100 | 1.00 | 0.10 | 10,339 | 471 | 1.00 | 0.10 | 8,124 | 1,795 | 1.00 | 0.10 |
| " | 15 | 6,225 | 1,043 | 1.00 | 0.05 | 9,284 | 404 | 1.00 | 0.05 | 7,491 | 1,571 | 1.00 | 0.05 |
| " | 20 | 6,014 | 999 | 1.00 | 0.03 | 8,440 | 337 | 1.00 | 0.03 | 6,858 | 1,346 | 1.00 | 0.03 |
| " | 25 | 5,908 | 954 | 1.00 | 0.03 | 7,596 | 281 | 1.00 | 0.03 | 6,330 | 1,234 | 1.00 | 0.03 |
| Ø3 | 20 | 5,863 | 1,466 | 1.50 | 0.20 | 6,701 | 496 | 1.50 | 0.20 | 6,596 | 2,030 | 1.50 | 0.20 |
| " | 30 | 5,444 | 1,241 | 1.50 | 0.10 | 4,712 | 327 | 1.50 | 0.10 | 5,026 | 1,354 | 1.50 | 0.10 |
| Ø4 | 20 | 5,026 | 1,579 | 2.00 | 0.30 | 6,282 | 496 | 2.00 | 0.30 | 5,340 | 1,466 | 2.00 | 0.30 |
| " | 30 | 4,712 | 1,466 | 2.00 | 0.20 | 4,921 | 384 | 2.00 | 0.20 | 4,607 | 1,241 | 2.00 | 0.20 |
| Ø6 | 30 | 3,186 | 1,224 | 3.00 | 0.40 | 3,451 | 306 | 3.00 | 0.40 | 2,522 | 969 | 3.00 | 0.40 |
| " | 40 | 2,791 | 1,093 | 3.00 | 0.30 | 2,411 | 209 | 3.00 | 0.30 | 2,157 | 823 | 3.00 | 0.30 |
| Ø8 | 40 | 2,568 | 1,028 | 4.00 | 0.50 | 2,218 | 196 | 4.00 | 0.50 | 1,984 | 774 | 4.00 | 0.50 |
| " | 50 | 1,977 | 863 | 4.00 | 0.40 | 1,708 | 165 | 4.00 | 0.40 | 1,528 | 650 | 4.00 | 0.40 |
| Ø10 | 50 | 1,740 | 803 | 5.00 | 0.60 | 1,503 | 153 | 5.00 | 0.60 | 1,345 | 604 | 5.00 | 0.60 |
| " | 60 | 1,305 | 337 | 5.00 | 0.50 | 1,127 | 64 | 5.00 | 0.50 | 1,008 | 254 | 5.00 | 0.50 |
| Ø12 | 60 | 1,109 | 307 | 6.00 | 0.60 | 958 | 59 | 6.00 | 0.60 | 857 | 231 | 6.00 | 0.60 |



- The edge of the flute precisely grinded. If you want to measure the tool, and to avoid damaging on the flutes, use non-contact measuring method.
- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine, or found red heat on the material, adjust RPM and feed in the same proportion.
- Use a machine with low vibration and good rigidity (Ø1 or less, the vibration tolerance management should be within 5 µm).