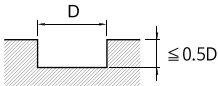
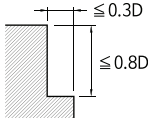
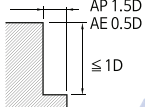
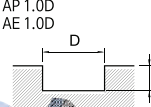
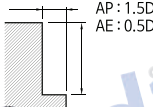
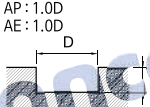
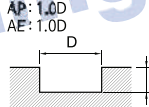


| 3ACR         |                                                                                   |      |                      |                       | Cutting Condition                                                                   |      |                   |                    |
|--------------|-----------------------------------------------------------------------------------|------|----------------------|-----------------------|-------------------------------------------------------------------------------------|------|-------------------|--------------------|
|              | Slotting                                                                          |      |                      |                       | Side Cutting                                                                        |      |                   |                    |
| Material     | Aluminium Alloys AL7075                                                           |      |                      |                       | Aluminium Alloys AL7075                                                             |      |                   |                    |
| Outside Dia. | RPM                                                                               | FEED | Ap<br>Axial<br>Depth | Ae<br>Radial<br>Depth | RPM                                                                                 | FEED | Ap<br>Axial Depth | Ae<br>Radial Depth |
| Ø 6          | 10000                                                                             | 3300 | 3.0                  | 6.0                   | 10000                                                                               | 4200 | 4.8               | 1.8                |
| Ø 8          | 9000                                                                              | 2700 | 4.0                  | 8.0                   | 9000                                                                                | 3750 | 6.4               | 2.4                |
| Ø 10         | 7500                                                                              | 2000 | 5.0                  | 10.0                  | 7500                                                                                | 3000 | 8.0               | 3.0                |
| Ø 12         | 6500                                                                              | 1600 | 6.0                  | 12.0                  | 6500                                                                                | 2700 | 9.6               | 3.6                |
| Ø 16         | 5000                                                                              | 1600 | 8.0                  | 16.0                  | 5000                                                                                | 2700 | 12.8              | 4.8                |
| Ø 20         | 4000                                                                              | 1500 | 10.0                 | 20.0                  | 4000                                                                                | 2500 | 16.0              | 6.0                |
| Depth of Cut |  |      |                      |                       |  |      |                   |                    |

- In case of long effective length, reduce the RPM and feed by 20% or less.
- Refer to the corner radius value for side milling.
- Consider the corner radius value when you set up the Ae value.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- Air blow or mist coolants are recommended and note for chip emission, heat or ignition.

| 3ARCR        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |      |                       | Cutting Condition |          |      |              |      |          |      |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------|-----------------------|-------------------|----------|------|--------------|------|----------|------|
| Material     | Aluminium Alloys AL7075                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |          |      | Aluminium Alloys AC4B |                   |          |      | Non-ferrous  |      |          |      |
|              | Side Milling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | Slotting |      | Side Milling          |                   | Slotting |      | Side Milling |      | Slotting |      |
| Outside Dia. | RPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FEED | RPM      | FEED | RPM                   | FEED              | RPM      | FEED | RPM          | FEED | RPM      | FEED |
| Ø 3          | 40300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3600 | 37000    | 2200 | 26500                 | 1600              | 15900    | 1200 | 47700        | 5700 | 40000    | 3600 |
| Ø 4          | 30250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4080 | 27800    | 2500 | 19900                 | 2400              | 12000    | 1450 | 35820        | 6450 | 30000    | 4000 |
| Ø 5          | 25500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5080 | 22300    | 2780 | 15900                 | 2800              | 9550     | 1720 | 28600        | 6880 | 24200    | 4350 |
| Ø 6          | 21200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5700 | 18500    | 2900 | 13270                 | 2900              | 7960     | 1790 | 23800        | 7100 | 20170    | 4800 |
| Ø 8          | 15900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6200 | 14000    | 3700 | 9950                  | 2300              | 5970     | 2150 | 17900        | 7500 | 15100    | 5450 |
| Ø 10         | 12800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5700 | 11200    | 4000 | 7960                  | 2150              | 4770     | 2290 | 14300        | 8100 | 12100    | 5800 |
| Ø 12         | 10600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5400 | 9250     | 3600 | 6630                  | 2980              | 3980     | 2000 | 12000        | 7500 | 10080    | 6050 |
| Ø 16         | 8560                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4700 | 7000     | 3100 | 4970                  | 2680              | 3000     | 1700 | 8950         | 6780 | 7560     | 5200 |
| Ø 20         | 6850                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4100 | 5570     | 2800 | 3980                  | 2300              | 2400     | 1450 | 7170         | 5800 | 6050     | 4550 |
| Depth of Cut | <div><div><div>AP 1.5D<br/>AE 0.5D<br/>≤ 1D</div></div><div><div>AP 1.0D<br/>AE 1.0D</div></div><div><div>AP 1.5D<br/>AE 0.5D</div></div><div><div>AP 1.0D<br/>AE 1.0D</div></div><div><div>AP 1.5D<br/>AE 0.5D</div></div><div><div>AP 1.0D<br/>AE 1.0D</div></div></div> |      |          |      |                       |                   |          |      |              |      |          |      |

- During tool entry, try to enter from outside the workpiece as much as possible.
- For diameters & effective lengths without specific cutting conditions, set them proportionally UP&DOWN to similar diameters & effective lengths.
- The above cutting conditions are numerical values, so they may need to be adjusted depending on the actual machining shape, machining purpose, and applied machine.
- If the rotation speed of the applied machine is insufficient, reduce the rotation speed and feed rate at the same ratio.
- Please use a rigid and low-vibration machine (vibration tolerance within 5µm for Ø1 or below).
- We recommend using a soluble coolant for smooth chip evacuation.