

## CUTTING CONDITIONS

## Milling | Endmills | Cutting conditions

# CAP-EBD

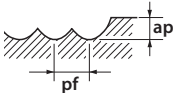
## Regular milling

|           | AL                        |               | AC                        |               | Magnesium Alloy<br>Copper Alloy |               |
|-----------|---------------------------|---------------|---------------------------|---------------|---------------------------------|---------------|
|           | A7075                     |               | <Si 13%                   |               | AZ91 • AZ80A • C1100            |               |
| Ø         | S<br>(min <sup>-1</sup> ) | F<br>(mm/min) | S<br>(min <sup>-1</sup> ) | F<br>(mm/min) | S<br>(min <sup>-1</sup> )       | F<br>(mm/min) |
| R 0,5 X 1 | 32.000                    | 845           | 32.000                    | 845           | 32.000                          | 845           |
| R 1 X 2   | 31.800                    | 1.550         | 31.800                    | 1.550         | 23.900                          | 1.150         |
| R 1,5 X 3 | 21.200                    | 1.550         | 21.200                    | 1.550         | 15.900                          | 1.150         |
| R 2 X 4   | 15.900                    | 1.550         | 15.900                    | 1.550         | 11.900                          | 1.150         |
| R 3 X 6   | 10.600                    | 1.600         | 10.600                    | 1.600         | 7.950                           | 1.150         |
| R 4 X 8   | 7.950                     | 1.950         | 7.950                     | 1.950         | 5.950                           | 1.450         |
| R 5 X 10  | 6.350                     | 1.750         | 6.350                     | 1.750         | 4.750                           | 1.300         |
| R 6 X 12  | 5.300                     | 1.650         | 5.300                     | 1.650         | 3.950                           | 1.200         |
| R 8 X 16  | 3.950                     | 1.500         | 3.950                     | 1.500         | 2.950                           | 1.150         |
| R10 X 20  | 3.150                     | 1.350         | 3.150                     | 1.350         | 2.350                           | 1.000         |

Max cutting depth

1. Use a high rigidity machine set up.
2. Use soluble oil.
3. When chattering occurs, reduce the speed and feed simultaneously.

## High speed milling

|   | AL  |               | AC                        |               | Cu                        |               |
|---|---|---------------|---------------------------|---------------|---------------------------|---------------|
|   | A7075   |               | <Si 13%                   |               | C1100                     |               |
| Ø   | S<br>(min <sup>-1</sup> )   | F<br>(mm/min) | S<br>(min <sup>-1</sup> ) | F<br>(mm/min) | S<br>(min <sup>-1</sup> ) | F<br>(mm/min) |
| R 0,5 X 1   | 50.000  | 1.200         | 50.000                    | 1.200         | 50.000                    | 1.200         |
| R 1 X 2   | 50.000  | 2.200         | 47.700                    | 2.100         | 39.800                    | 1.750         |
| R 1,5 X 3   | 50.000  | 3.300         | 31.800                    | 2.100         | 26.500                    | 1.750         |
| R 2 X 4   | 39.800  | 3.500         | 23.800                    | 2.100         | 19.900                    | 1.750         |
| R 3 X 6   | 26.500  | 3.550         | 15.900                    | 2.150         | 13.000                    | 1.800         |
| R 4 X 8   | 19.500  | 4.500         | 11.900                    | 2.650         | 9.900                     | 2.250         |
| R 5 X 10  | 15.500  | 4.050         | 9.550                     | 2.450         | 7.950                     | 2.000         |
| R 6 X 12  | 13.000  | 3.750         | 7.950                     | 2.250         | 6.600                     | 1.900         |
| R 8 X 16  | 9.900   | 3.550         | 5.950                     | 2.100         | 4.950                     | 1.800         |
| R10 X 20  | 7.950   | 3.200         | 4.750                     | 1.900         | 3.950                     | 1.600         |
| Max cutting depth   |  |               |                           |               |                           |               |
| 1. Use a high rigidity machine set up.<br>2. Use soluble oil.<br>3. When chattering occurs, reduce the speed and feed simultaneously. |   |               |                           |               |                           |               |