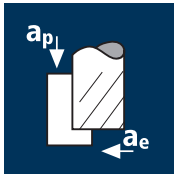


Application



Material

Nickel-based alloys
annealed
Rm < 1000 N/mm²
[Inconel 718]



Nickel-based alloys
precipitation hardened
Rm > 1000 N/mm²
[Inconel 718]



Manganese steel
Mn > 5%
[1.3964 / Nitronic]
[1.3401 / X120Mn12]



Inox difficult
[Cr-Ni-Mo++/1.4529]
Heat resistant steel
[1.4841]



PM high-speed steel
annealed
[Böhler S390]
[ASP 2023]



Titanium alloys
> 300 HB
[Ti6Al4V]



| d1 [mm] | z | v _c [m/min] | f _s [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _r [mm/min] | Q [cm ³ /min] |
|------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|
| 6.00 | 5 | 45 | 0.020 | 10.800 | 1.200 | 2385 | 240 | 3.1 |
| 8.00 | 5 | 45 | 0.030 | 14.400 | 1.600 | 1790 | 270 | 6.2 |
| 10.00 | 5 | 45 | 0.035 | 18.000 | 2.000 | 1430 | 250 | 9.0 |
| 12.00 | 5 | 45 | 0.045 | 21.600 | 2.400 | 1195 | 270 | 13.9 |
| 16.00 | 5 | 45 | 0.050 | 28.800 | 3.200 | 895 | 225 | 20.6 |
| 20.00 | 5 | 45 | 0.060 | 36.000 | 4.000 | 715 | 215 | 30.9 |

| | | | | | | | | |
|-------|---|----|-------|--------|-------|------|-----|------|
| 6.00 | 5 | 30 | 0.015 | 10.800 | 1.200 | 1590 | 120 | 1.5 |
| 8.00 | 5 | 30 | 0.025 | 14.400 | 1.600 | 1195 | 150 | 3.4 |
| 10.00 | 5 | 30 | 0.030 | 18.000 | 2.000 | 955 | 145 | 5.2 |
| 12.00 | 5 | 30 | 0.035 | 21.600 | 2.400 | 795 | 140 | 7.2 |
| 16.00 | 5 | 30 | 0.040 | 28.800 | 3.200 | 595 | 120 | 11.0 |
| 20.00 | 5 | 30 | 0.050 | 36.000 | 4.000 | 475 | 120 | 17.2 |

| | | | | | | | | |
|-------|---|----|-------|--------|-------|------|-----|------|
| 6.00 | 5 | 50 | 0.020 | 10.800 | 1.200 | 2655 | 265 | 3.4 |
| 8.00 | 5 | 50 | 0.030 | 14.400 | 1.600 | 1990 | 300 | 6.9 |
| 10.00 | 5 | 50 | 0.035 | 18.000 | 2.000 | 1590 | 280 | 10.0 |
| 12.00 | 5 | 50 | 0.045 | 21.600 | 2.400 | 1325 | 300 | 15.5 |
| 16.00 | 5 | 50 | 0.050 | 28.800 | 3.200 | 995 | 250 | 22.9 |
| 20.00 | 5 | 50 | 0.060 | 36.000 | 4.000 | 795 | 240 | 34.4 |

| | | | | | | | | |
|-------|---|----|-------|--------|-------|------|-----|------|
| 6.00 | 5 | 60 | 0.035 | 10.800 | 1.200 | 3185 | 555 | 7.2 |
| 8.00 | 5 | 60 | 0.045 | 14.400 | 1.600 | 2385 | 535 | 12.4 |
| 10.00 | 5 | 60 | 0.055 | 18.000 | 2.000 | 1910 | 525 | 18.9 |
| 12.00 | 5 | 60 | 0.065 | 21.600 | 2.400 | 1590 | 515 | 26.8 |
| 16.00 | 5 | 60 | 0.070 | 28.800 | 3.200 | 1195 | 420 | 38.5 |
| 20.00 | 5 | 60 | 0.085 | 36.000 | 4.000 | 955 | 405 | 58.4 |

| | | | | | | | | |
|-------|---|----|-------|--------|-------|------|-----|------|
| 6.00 | 5 | 90 | 0.020 | 10.800 | 1.200 | 4775 | 475 | 6.2 |
| 8.00 | 5 | 90 | 0.030 | 14.400 | 1.600 | 3580 | 535 | 12.4 |
| 10.00 | 5 | 90 | 0.035 | 18.000 | 2.000 | 2865 | 500 | 18.0 |
| 12.00 | 5 | 90 | 0.045 | 21.600 | 2.400 | 2385 | 535 | 27.8 |
| 16.00 | 5 | 90 | 0.050 | 28.800 | 3.200 | 1790 | 450 | 41.3 |
| 20.00 | 5 | 90 | 0.060 | 36.000 | 4.000 | 1430 | 430 | 61.9 |

| | | | | | | | | |
|-------|---|----|-------|--------|-------|------|-----|------|
| 6.00 | 5 | 85 | 0.020 | 10.800 | 1.200 | 4510 | 450 | 5.8 |
| 8.00 | 5 | 85 | 0.025 | 14.400 | 1.600 | 3380 | 425 | 9.7 |
| 10.00 | 5 | 85 | 0.035 | 18.000 | 2.000 | 2705 | 475 | 17.0 |
| 12.00 | 5 | 85 | 0.040 | 21.600 | 2.400 | 2255 | 450 | 23.4 |
| 16.00 | 5 | 85 | 0.045 | 28.800 | 3.200 | 1690 | 380 | 35.1 |
| 20.00 | 5 | 85 | 0.055 | 36.000 | 4.000 | 1355 | 370 | 53.6 |