

Cutting Conditions

SEKR 1203 AFTN SEKR 1204 AFTN

| Material Group | Group No | Material Examples* | Brinell hardness | d.o.c [mm] | | feed [mm/tooth] | | V _c [m/min] | | | | |
|-----------------------------|----------|---|------------------|------------|------|-----------------|------|------------------------|------|------|-----|-----|
| | | | | min | max | min | max | min | max | | | |
| Low Carbon Steel | 1 | Ck 15 9SMnPb28 | 150 | 0.50 | 7.00 | 0.15 | 0.32 | 190 | 350 | | | |
| | | | 180 | | | | | | 300 | | | |
| | | | 210 | | | | | | 260 | | | |
| Alloy Steel | 2 | 42 CrMo 4 100 Cr 6 32 NiCrMo 14.5 | 180 | 0.50 | 7.00 | 0.15 | 0.30 | 150 | 240 | | | |
| | | | 230 | | | | | | 210 | | | |
| | | | 280 | | | | | 130 | 190 | | | |
| | | | 320 | | | | | | 170 | | | |
| High Alloy Steel | 3 | X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8 | 220 | 0.50 | 7.00 | 0.12 | 0.25 | 90 | 150 | | | |
| | | | 280 | | | | | | 130 | | | |
| | | | 320 | | | | | 60 | 110 | | | |
| | | | 350 | | | | | | 90 | | | |
| Austenitic Stainless Steel | 4 | 303 / 304 304 L | 210 to 250 | 0.50 | 5.00 | 0.12 | 0.32 | 170 | 250 | | | |
| | 5 | 316 / 316 L | 230 to 270 | | | | | | 0.12 | 0.28 | 170 | 210 |
| | 6 | 316 Ti 630 (F16PH) | ----- | | | | | | | | | |
| Ferritic Stainless Steel | 7 | 430 / 439 / 444 | Annealed | 0.50 | 7.00 | 0.12 | 0.32 | 150 | 210 | | | |
| Martensitic Stainless Steel | 8 | 410 / 420 | Annealed | 0.50 | 7.00 | 0.12 | 0.32 | 150 | 230 | | | |
| | | | Treated | | | | | 90 | 170 | | | |
| Grey Cast Iron | 9 | EN - GJL 200 | 140 to 230 | 0.50 | 7.00 | 0.15 | 0.40 | 170 | 300 | | | |
| | | EN - GJL 250 | | | | | | | 250 | | | |
| | | EN - GJL 300 | | | | | | | 210 | | | |
| Nodular Cast Iron | 10 | EN - GJS 400 | 210 | 0.50 | 7.00 | 0.12 | 0.32 | 120 | 210 | | | |
| | | EN - GJS 600 | 260 | | | | | | 170 | | | |
| | | EN - GJS 800 | 310 | | | | | | 150 | | | |
| Nickel Based Alloys | 11 | Inconel 625 | ----- | 0.50 | 5.00 | 0.12 | 0.28 | 25 | 35 | | | |
| | | Inconel 718 | | | | | | | 40 | | | |
| | | Hastelloy C | | | | | | | 65 | | | |
| Titanium Based Alloys | 12 | TiAl 6 V4 | ----- | 0.50 | 5.00 | 0.12 | 0.28 | 35 | 60 | | | |
| | | T40 | | | | | | 28 | 40 | | | |

*For all material types and standards, see pages 155 to 158.