

Application values

Screw tap, HSSE TiCN M ISO 2 (6H) 40° (right) 376 C (Art. no. 1003141 041-047)



| Material groups for cutting values | Strength Class [N/mm²] | Description regarding DIN | Vc [m/min] |
|--|------------------------|---------------------------|------------|
| 1. Steels | | | |
| 1.1 Free machining steel | < 900 | 9 S 20 | 10-25 |
| 1.2 Structural steel | <500 | ST 37-2 | 10-25 |
| 1.3 Structural steel | > 500 | ST 60-2 | 10-20 |
| 1.4 Heat-treated steel | <1000 | 42 CrMo 4 | 10-20 |
| 1.5 Cast iron | <1000 | GS-45 | 10-15 |
| 1.6 Case-hardened steel | <1200 | 16 MnCr 5 | 8-20 |
| 1.7 Ferritic/martensitic stainless steel | <1100 | X 10 Cr 13 | 8-15 |
| 1.8 Heat-treated steel | >1000 | 43 CrMo 4 | 8-12 |
| 1.9 Nitriding steel | <1300 | 31 CrMoV 9 | 8-12 |
| 1.10 Tool steel | <1300 | X 38 CrMoV 5 1 | 8-20 |
| 2. Stainless steels | | | |
| 2.1 Austenitic stainless steel | <1100 | G-X 2 CrNiMo 18 15 | 8-12 |
| 3. Non-ferrous metals | | | |
| 3.1 Long-chipping aluminium | <500 | Al99.9 | 15-30 |
| 3.2 Short-chipping aluminium | <500 | G-AlSi12 | 15-25 |
| 3.3 Copper alloy bronze, long-chipping | <1200 | CuSn4 | 10-20 |
| 3.4 Copper alloy bronze, short-chipping | <850 | CuNi12Zn24 | 10-20 |
| 3.5 Copper alloy brass, long-chipping | <600 | Cu Zn 20 | 15-25 |
| 3.7 Thermoplastic | <600 | Cu Zn 39 Pb 3 | 15-22 |
| | <100 | PVC, Acrylglas | 10-20 |
| 3.8 Duroplast | <150 | Bakelit, Melamin | 8-15 |
| 3.9 Fibre-reinforced plastics | <1500 | CFK, GFK | 5-12 |
| 3.10 Graphite | <60 | C8000 | 15-25 |
| 3.11 Composite materials | | | 5-12 |
| 4. Cast metal | | | |
| 4.1 Grey cast iron | <260 HB | GG10 | 10-25 |
| 4.2 Spheroidal graphite iron | <310 HB | GGG 40 | 10-25 |
| 4.3 Ductile iron | <280 HB | GTW-55 | 10-25 |
| 5. Special alloys | | | |
| 5.1 Titanium alloy | <1200 | TiAl5Sn2,5 | 5-8 |
| 5.2 Nickel-based alloy | <1400 | NiCr21Mo | 5-8 |
| 5.3 Super alloys | <1400 | X45CrSi 9 3 | 5-8 |

