

| Material groups | | | Application | Cutting speed m/min |
|------------------------|---|---|--|---------------------|
| Steel, cast steel | Non-hardened, non-heat treated steels up to 1200 N/mm ² (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels | Coarse machining with high stock removal | 450-600 |
| | Hardened, heat-treated steels exceeding 1200 N/mm ² (> 38 HRC) | Tool steels, tempering steels, alloyed steel, cast steels | | 250-350 |
| Stainless steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | Coarse machining with high stock removal | 250-350 |
| Non-ferrous metals | Hard-non-ferrous metals | Bronze, titanium/titanium alloys, hard alu-alloys (high Si content) | Coarse machining with high stock removal | 250-350 |
| | High-temperature resistant materials | Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction) | | 300-450 |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL, with nodular graphite cast iron EN-GJS, white annealed cast iron EN-GJMW, black cast iron EN-GJMB | Coarse machining with high stock removal | 450-600 |



| Cutting speed (m/min) | | | | | | | |
|-----------------------|------------------------|--------|--------|--------|--------|--------|--------|
| | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
| ∅ (mm) | Rotational speed (rpm) | | | | | | |
| 2 | 40,000 | 48,000 | 56,000 | 64,000 | 72,000 | 80,000 | 95,000 |
| 3 | 27,000 | 32,000 | 37,000 | 42,000 | 48,000 | 53,000 | 64,000 |
| 4 | 20,000 | 24,000 | 28,000 | 32,000 | 36,000 | 40,000 | 48,000 |
| 6 | 13,000 | 16,000 | 19,000 | 21,000 | 24,000 | 27,000 | 32,000 |
| 8 | 10,000 | 12,000 | 14,000 | 16,000 | 18,000 | 20,000 | 24,000 |
| 10 | 8,000 | 10,000 | 11,000 | 13,000 | 14,000 | 16,000 | 19,000 |
| 12 | 7,000 | 8,000 | 9,000 | 11,000 | 12,000 | 13,000 | 16,000 |
| 16 | 5,000 | 6,000 | 7,000 | 8,000 | 9,000 | 10,000 | 12,000 |
| 20 | 4,000 | 5,000 | 6,000 | 6,000 | 7,000 | 8,000 | 10,000 |
| 25 | 3,000 | 4,000 | 4,000 | 5,000 | 6,000 | 6,000 | 8,000 |

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