

Material	Lubricant	Cutting Speed
Steel, unalloyed and low alloyed, short chipping	S/E	10 - 20
non-abrasive material, short chipping	S/E	6 - 15
Steel, heat resistant, long chipping	S	4 - 8
Steel, heat resistant, short chipping	S	4 - 8
Steel, cementation and heat treatable, short chipping	S	4 - 8
Steel, tool steel up to 1200 N/mm ²	S	2 - 5
Steel, tool steel over 1200 N/mm ²	S	2 - 5
Stainless steel, short chipping	S	5 - 10
Stainless steel, long chipping	S	5 - 10
Iron, cast	P/T	6 - 20
Iron, spheroidal graphite	P/T	6 - 20
Iron, malleable cast	E	6 - 12
Brass, short chipping	E	20 - 30
Brass, long chipping	S/E	10 - 15
Bronze, short chipping	S/E	6 - 15
Bronze, long chipping	S/E	6 - 15
Copper	S/E	10 - 15
Aluminium-alloys, short chipping	S/E	15 - 30
Aluminium-alloys, long chipping	E	10 - 20
Zinc alloys	S/E	10 - 15
Magnesium alloys	E/T	10 - 20
Titanium, short chipping	S	3 - 4
Titanium, long chipping	S	3 - 4
Plastics, thermoplastics	E/T	5 - 15
Plastics, thermosetting	T	5 - 15

S = cutting oil

E = emulsion oil

P = kerosene

T = dry