

285103

ISO	Material	Material Designation	Material Condition	Hardness	Cutting Speed Recommendations (Vc)
P	1	Non-alloy steel and cast steel, free cutting steel <0.25%C.	Annealed	125 HB	115-175 m/min
P	2	Non-alloy steel and cast steel, free cutting steel >=0.25%C.	Annealed	190 HB	85-135 m/min
P	3	Non-alloy steel and cast steel, free cutting steel <0.55% C	Quenched and tempered	250 HB	85-125 m/min
P	4	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Annealed	220 HB	80-140 m/min
P	5	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Quenched and tempered.	300 HB	65-120 m/min
P	6	Low alloy and cast steel (less than 5% of alloying elements)	Annealed	200 HB	75-130 m/min
P	7	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	275 HB	75-130 m/min
P	8	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	300 HB	65-110 m/min
P	9	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	350 HB	70-110 m/min
P	10	High alloyed steel, cast steel and tool steel	Annealed	200 HB	75-115 m/min
P	11	High alloyed steel, cast steel and tool steel	Quenched and tempered	325 HB	60-100 m/min
P	12	Stainless steel and cast steel	Ferritic/martensitic	200 HB	65-155 m/min
P	13	Stainless steel and cast steel	Martensitic	240 HB	65-150 m/min
M	14	Stainless steel and cast steel	Austenitic, duplex	180 HB	50-140 m/min
K	15	Grey cast iron (GG)	Pearlitic/ferritic	180 HB	105-185 m/min
K	16	Grey cast iron (GG)	Pearlitic/martensitic	260 HB	100-145 m/min
K	17	Nodular cast iron (GGG)	Ferritic	160 HB	110-200 m/min
K	18	Nodular cast iron (GGG)	Pearlitic	250 HB	90-135 m/min
K	19	Malleable cast iron	Ferritic	130 HB	130-215 m/min
K	20	Malleable cast iron	Pearlitic	230 HB	110-170 m/min
S	31	High temp. alloys Fe based	Annealed	200 HB	25-45 m/min
S	32	High temp. alloys Fe based	Hardened	280 HB	20-35 m/min
S	33	High temp. alloys Ni or Co based	Annealed	250 HB	20-25 m/min
S	34	High temp. alloys Ni or Co based	Hardened	350 HB	15-25 m/min
S	35	High temp. alloys Ni or Co based	Cast	320 HB	15-20 m/min
S	36	Titanium (pure)	Pure	190 HB	90-130 m/min
S	37	Titanium alloys	Alpha+beta alloys, hardened	310 HB	25-55 m/min
H	38	Hardened steel	Hardened	55 HRC	25-35 m/min
H	39	Hardened steel	Hardened	60 HRC	25-35 m/min
H	40	Chilled cast iron	Cast	400 HB	30-45 m/min
H	41	Cast iron	Hardened	55 HRC	30-40 m/min