ISO	Material	Condition	Tensile Strength RM (N/mm2)	Hardness (HB)	Material No.	Cutting Speed Vc (SFM)	Feed vs Dia. .189 - .292 IPR (inches/rev)
P	Non-Alloy Steel & Cast Steel, Free Cutting Steel <0.25% C	Annealed	420	125	1	450-550	.001 - .003
	>= 0.25% C	Annealed	650	190	2	450-550	.001 - .003
	<0.55% C	Quenched & Tempered	850	250	3	450-550	.001 - .003
	>= 0.55% C	Annealed	750	220	4	450-550	.001 - .003
		Quenched & Tempered	1000	300	5	450-550	.001 - .003
	Low Alloy Steel & Cast Steel (less than 5% alloying elements)	Annealed	600	200	6	450-550	.001 - .003
		Quenched & Tempered	930	275	7	450-550	.001 - .003
			1000	300	8	450-550	.001 - .003
			1200	350	9	450-550	.001 - .003
	High Alloy Steel, Cast Steel & Tool Steel	Annealed	680	200	10	450-550	.001 - .003
		Quenched & Tempered	1100	325	11	450-550	.001 - .003
M	Stainless Steel & Cast Stainless Steel	Ferritic/Martensitic	680	200	12	400-500	.001 - .003
		Martensitic	820	240	13	300-400	.001 - .003
		Austenitic	600	180	14	400-500	.001 - .003
K	Grey Cast Iron (GG)	Ferritic		160	15	300-400	.002 - .004
		Pearlitic		250	16	300-400	.002 - .004
	Cast Iron Nodular (GGG)	Ferritic		180	17	450-550	.002 - .004
		Pearlitic		260	18	450-550	.002 - .004
	Malleable Cast Iron	Ferritic		130	19	450-550	.002 - .004
		Pearlitic		230	20	450-550	.002 - .004
N	Aluminum - Wrought Alloy	Not cureable		60	21	1500-3000	.002 - .004
		Cured		100	22	1500-3000	.002 - .004
	Aluminum -Cast, Alloyed <=12% Si	Not cureable		75	23	1500-3000	.002 - .004
		Cured		90	24	1500-3000	.002 - .004
	>12% Si	High Temperature		130	25	1500-3000	.002 - .004
	Copper Alloys > 1% Pb	Free cutting		110	26	1500-3000	.002 - .004
		Brass		90	27	1500-3000	.002 - .004
		Electrolitic Copper		100	28	1500-3000	.002 - .004
	Non-Metallic	Duro & Fiber Plastics			29		
		Hard rubber			30		
S	High Temp Alloys Fe based	Annealed		200	31	100-200	.001 - .003
		Cured		280	32	100-200	.001 - .003
	Ni or Co Based	Annealed		250	33	100-200	.001 - .003
		Cured		350	34	100-200	.001 - .003
		Cast		320	35	100-200	.001 - .003
	Titanium, Ti Alloys		Rm 400		36	130-230	.001 - .003
		Alpha+Beta Alloys Cured	Rm 1050		37	130-230	.001 - .003
H	Hardened Steel	Hardened		55 HRC	38	50-100	.001 - .003
		Hardened		60 HRC	39	50-100	.001 - .003
	Chilled Cast Iron	Cast		400	40	50-100	.001 - .003
	Cast Iron Nodular	Hardened		55 HRC	41	50-100	.001 - .003