

Material Cross Reference • DIN



Material Grp.	Description	Content	Tensile strength RM (MPa)*	Hardness (HB)	Hardness (HRC)	Material Number
P1	Low-Carbon Steels, Short Chipping, Free Machining	C<0,25%	<530	<125		ST37
P2	Medium- and High-Carbon Steels	C>0,25%	>530	<220	<25	ST52, S355JR, 520M
P3	Alloy Steels and Tool Steels	C>0,25%	600-850	<330	<35	4110, ASTM A182 F22, Arne, Rigor, SS2140, SS2260
P4	Alloy Steels and Tool Steels	C>0,25%	850-1400	340-450	35-48	4130, 4140, 8630, ASTM A182 F22
P5	Ferritic, Martensitic, and PH Stainless Steels		600-900	<330	<35	4145, 2541, 4140-P110, 13Crom, 420M
P6	High-Strength Ferritic, Martensitic, and PH Stainless Steels		900-1350	350-450	35-48	17/4PH, S165M, SS2387, 316L
P6+	(Still P6 but upper end)					Super 13Crom
M1	Austenitic Stainless Steel		<600	130-200		
M2	High Strength Austenitic Stainless and Cast Stainless Steels		600-800	150-230	<25	316L
M3	Duplex Stainless Steel		<800	135-275	<30	Duplex, UNS31803, SAF2205, Non Mag P550
M3+	(Still M3 but upper end)					Duplex, Super Duplex, UNS32750, SAF2507, Non Mag P750
S1	Iron-Based, Heat-Resistant Alloys		500-1200	160-260	25-48	Super Duplex
S2	Cobalt-Based, Heat-Resistant Alloys		1000-1450	350-450	25-48	
S3	Nickel-Based, Heat-Resistant Alloys		600-1700	160-450	<48	Inconel 625
S3+	(Still S3 but upper end)					Inconel 718/925, Monel
S4	Titanium and Titanium Alloys		900-1600	300-400	33-48	Titan Grad 2
S4+	(Still S4 but upper end)					Titan Grad 5
H1	Hardened Materials				44-48	Hardox
N1	Wrought Aluminium					ALU6082T6
N2	Low-Silicon Aluminium Alloys and Magnesium Alloys	Si <12,2%				ALU7075T6
N3	High-Silicon Aluminium Alloys and Magnesium Alloys	Si >12,2%				
N4	Copper, Brass, Zinc-Based on Machinability Index 70-100					AM7, OM7
N5	Nylon, Plastics, Rubbers, Phenolics, Resins, Fibreglass					POM, Teflon, Epoxy