

Injection Moulded Material Properties and Application Data

Material:	martensitic, stainless steel	
Grade:	AISI 410, DIN X15Cr13, W.Nr. 1.4024	
Nominal Composition, %:	Cr	13
	Si	1.0 max.
	Mn	1.0 max.
	C	0.12-0.17
	Fe	Rest

Typical properties	as sintered + quenched	quenched + tempered
Density (g/cm ³)	7.60	7.60
Annealing temperature (°C)		780-680
Hardness, HV	450	200-250
Hardness, HRc	45	
Elastic Modulus (GPa)	216	216
Elongation (%)	2	10
Tensile strength (MPa, N/mm ²)	1470	650-800
Yield strength (MPa, N/mm ²)	1400	450
Surface roughness	R _a < 3.2	R _a < 3.2

Uses, remarks

AISI 410 is applied for components which require moderate strength and corrosion resistance. AISI 410 has similar properties as precipitation hardened 17/4 PH is, however, somewhat more ductile and exhibits lower strength. If the strength is not adequate AISI 17/4PH or AISI 420 should be used.