

Stainless Steel (inc. High Performance) - 1.4462 / F51 Duplex

Round Bar

Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical Composition %
1	3.98	Carbon (C)	0.0 - 0.03
30mm	5.55	Chromium (Cr)	21.0 - 23.0
1 1/4	6.21	Manganese (Mn)	2.00 max
35mm	7.55	Silicon (Si)	1.00 max
1 1/2	8.94	Phosphorus (P)	0.0- 0.03
40mm	9.86	Sulphur (S)	0.0 - 0.02
1 3/4	12.18	Nickel (Ni)	4.50 - 6.50
2	15.19	Nitrogen (N)	0.08 - 0.20
50mm	15.41	Molybdenum (Mo)	2.50 - 3.50
2 1/4	20.13	Iron (Fe)	Balance
60mm	22.20		
2 1/2	24.85		
2 3/4	30.08		
70mm	30.21		
3	35.76		
100mm	61.65		
All sizes available in Bright Ground H9			
Available in 6m lengths			
		Mechanical Properties	
		Property	Value
		Proof Stress	450 min MPa
		Tensile Strength	620MPa
		Elongation	25% min
		Hardness Brinell	290 HB max
		Physical Properties	
		Property	Value
		Density	7.805 g/cm ³
		Thermal Expansion	13.7 x 10 ⁻⁶ /K
		Modulus of Elasticity	200 GPa
		Thermal Conductivity	19.0 W/m.K
		Electrical Resistivity	0.085 x 10 ⁻⁶ Ω.m

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