

General Information Sheet

Castings Stainless Steel 316 BS3146(1975):Pt2:ANC4BFC

Chemical Composition

Carbon	0.08% max
Silicon	1.5% max
Manganese	2% max
Nickel	10% min
Chromium	20% max
Molybdenum	3% max
Sulphur	0.035% max
Phosphorus	0.035% max

Mechanical Properties

0.2% Proof Stress (MPa)	200
Tensile Strength (MPa)	460
Elongation (%)	20
Brinell Hardness Number	215 max

Physical Properties

Coefficient of Thermal Expansion per °C 16.5 x 10 ⁻⁶		
Thermal Conductivity at 100°C	16.3W/(m.k)	
Specific Gravity	7.96g/cm ³	

Corrosion Resistance

Resistance to corrosion in most atmospheric environments is high.

316 is regarded as a marine grade stainless steel, but may exhibit surface corrosion in many marine environments. This is particularly associated with a rough surface finish.

Electro-Polishing

Electro-polishing of enclosures provides a smoother surface finish thus increasing the resistance to surface corrosion.