

Stainless Steel (inc. High Performance) - 1.4003 / 3CR12

Plate

Properties

Stock		Chemical Properties	
Size (mm)	Weight/Sheet (Kg)	Element	Chemical Composition %
1D Finish		Carbon (C)	0.0 - 0.03
2000 x 1000 x 3.0	48.00	Chromium (Cr)	10.5 - 12.5
2500 x 1250 x 3.0	75.00	Manganese (Mn)	0.0 - 1.50
3000 x 1500 x 3.0	108.00	Silicon (Si)	0.0 - 1.0
2500 x 1250 x 5.0	125.00	Phosphorus (P)	0.0 - 0.04
2500 x 1250 x 8.0	200.00	Sulphur (S)	0.0 - 0.02
3000 x 1500 x 8.0	288.00	Nickel (Ni)	0.30 - 1.0
3000 x 1500 x 10.0	366.00	Nitrogen (N)	0.0 - 0.03
		Iron (Fe)	Balance
Mechanical Properties			
		Property	Value
		Proof Stress	250 min MPa
		Tensile Strength	450 - 650 MPa
		Elongation	18% min
		Compressive Strength	280 min MPa
Physical Properties			
		Property	Value
		Density	7.74 g/cm ³
		Melting Point	1430 - 1510°C
		Thermal Expansion	11.1 - 12.3 x 10 ⁻⁶ /K
		Modulus of Elasticity	200 GPa
		Thermal Conductivity	30.5 W/m.K
		Electrical Resistivity	0.0678 x 10 ⁻⁶ Ω.m

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