

Stainless Steel (inc. High Performance) - 1.4404 / 316L

Ornamental Square Tube

Properties

Stock		Chemical Properties	
Size (mm)	Weight (kg/m)	Element	Chemical Composition %
17 x 17 x 1.5	0.65	Carbon (C)	0.0 - 0.03
23 x 23 x 1.5	0.90	Chromium (Cr)	16.50 - 18.50
28 x 28 x 1.5	1.13	Molybdenum (Mo)	2.0 - 2.5
33 x 33 x 1.5	1.40	Silicon (Si)	0.0 - 1.0
45 x 45 x 1.5	1.85	Phosphorus (P)	0.0 - 0.05
66 x 66 x 1.5	2.78	Sulphur (S)	0.0 - 0.01
66 x 66 x 2.0	3.70	Nickel (Ni)	10.0 - 13.0
88 x 88 x 1.5	5.00	Manganese (Mn)	0.0 - 2.0
88 x 88 x 2.0	7.40	Iron (Fe)	Balance

Above properties are for 1.4404

1.4404/316L also corresponds to the following designation 316S11

Mechanical Properties

Property	Value
Properties below are for 1.4404 (316L) which also corresponds to 316S11	
Proof Stress	220 min MPa
Tensile Strength	520 - 680 MPa
Elongation A50 mm	40% min

Physical Properties

Property	Value
Density	8.00 g/cm ³
Melting Point	1400°C
Thermal Expansion	15.9 x 10 ⁻⁶ /K
Modulus of Elasticity	193 GPa
Thermal Conductivity	16.3 W/m.K
Electrical Resistivity	0.074 x 10 ⁻⁶ Ω.m

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Disclaimer

This data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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