

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

## Box Section - Unpolished

## Properties

Stock		Chemical Properties	
Size (mm)	Weight/m (Kg)	Element	Chemical Composition %
80 x 80 x 4.0	9.82	Carbon (C)	0.0 - 0.03
100 x 100 x 4.0	12.40	Chromium (Cr)	16.50 - 18.50
100 x 100 x 5.0	15.38	Molybdenum (Mo)	2.0 - 2.5
100 x 100 x 6.0	17.50	Silicon (Si)	0.0 - 1.0
120 x 120 x 4.0	15.03	Phosphorus (P)	0.0 - 0.05
120 x 120 x 5.0	18.66	Sulphur (S)	0.0 - 0.01
120 x 120 x 6.0	21.20	Nickel (Ni)	10.0 - 13.0
150 x 150 x 4.0	18.64	Manganese (Mn)	0.0 - 2.0
150 x 150 x 5.0	23.00	Iron (Fe)	Balance
150 x 150 x 6.0	27.36	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 <sup>3</sup>
Melting Point	1400°C
Thermal Expansion	15.9 x 10 <sup>-6</sup> /K
Modulus of Elasticity	193 GPa
Thermal Conductivity	16.3 W/m.K
Electrical Resistivity	0.074 x 10 <sup>-6</sup> Ω.m

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