

1.4404 / 316L

Chemical Properties

Element	Chemical Composition %
Carbon (C)	0.0 - 0.03
Chromium (Cr)	16.50 - 18.50
Molybdenum (Mo)	2.0 - 2.5
Silicon (Si)	0.0 - 1.0
Phosphorus (P)	0.0 - 0.05
Sulphur (S)	0.0 - 0.01
Nickel (Ni)	10.0 - 13.0
Manganese (Mn)	0.0 - 2.0
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

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

Product Forms

45 deg L/R Elbow

45 deg L/R Elbow

600 Grit Mirror Polished

90 deg L/R Elbows

90 deg L/R Elbows

Angle

Box Section Dull Polished

Box Section Unpolished

Bright Polished

BS10

BS4504

BSP 150LB fittings

Concentric Reducers

Concentric Reducers

CPP Plate

D Section

Eccentric Reducers

End Caps

Equal Tees

Equal Tees

Flat Bar

Glass Clamp sets

Handrail Dull Polish

Handrail Mirror Polished

Handrail Satin Polish 320 Grit

Hexagon Bar

Hygienic fittings

Hygienic Welded Tube

Linear Buff

Linear Buff Super Mirror Marine

Metric ISO tube

Mirror Polish

Ornamental Square

Oval Tube

Plate

R/F Slip on & Blind

Rectangular Section Dull Polished

Rectangular Section Mirror Polished

Rectangular Section Unpolished

Reducing Tees

RF Weld Neck

Round Bar

Satin Polish 320 Grit

Seamless Pipe

Seamless Tube

Sheet 2B Finish

Sheet Dull Polish 240S

Sheet No8 Marine

Sheet Super Mirror Marine

Square Bar

Stub Ends

Stub Ends

Super Mirror Marine

Super Mirror Marine

Welded Pipe

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.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.