

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

**Tube - Mirror Polished**

**Properties**

Stock			Chemical Properties	
OD (in)	Wall (mm)	Wt/m (Kg)	Element	Chemical Composition %
1/2	1.2	0.35	Carbon (C)	0.0 - 0.03
1/2	1.5	0.42	Chromium (Cr)	16.50 - 18.50
5/8	1.2	0.44	Molybdenum (Mo)	2.0 - 2.5
5/8	1.5	0.54	Silicon (Si)	0.0 - 1.0
3/4	1.2	0.54	Phosphorus (P)	0.0 - 0.05
3/4	1.5	0.66	Sulphur (S)	0.0 - 0.01
7/8	1.2	0.63	Nickel (Ni)	10.0 - 13.0
7/8	1.5	0.77	Manganese (Mn)	0.0 - 2.0
1	1.2	0.73	Iron (Fe)	Balance
1	1.5	0.90	Above properties are for 1.4404	
1	2.0	1.17	1.4404/316L also corresponds to the following	
1	3.0	1.68	designation 316S11	
1 1/8	1.5	1.11	<b>Mechanical Properties</b>	
30mm	2.0	1.40	<b>Property</b>	<b>Value</b>
1 1/4	1.5	1.14	Properties below are for 1.4404 (316L) which also corresponds to 316S11	
1 1/2	1.5	1.38	Proof Stress	220 min MPa
1 1/2	2.0	1.81	Tensile Strength	520 - 680 MPa
1 1/2	3.0	2.64	Elongation A50 mm	40% min
1 3/4	1.5	1.62	<b>Physical Properties</b>	
2	1.5	1.85	<b>Property</b>	<b>Value</b>
2	2.0	2.44	Density	8.00 g/cm <sup>3</sup>
2	3.0	3.59	Melting Point	1400°C
2 1/2	1.5	2.33	Thermal Expansion	15.9 x 10 <sup>-6</sup> /K
3	1.5	2.81	Modulus of Elasticity	193 GPa
3	2.0	3.72	Thermal Conductivity	16.3 W/m.K
3	3.0	5.49	Electrical Resistivity	0.074 x 10 <sup>-6</sup> Ω.m
4	1.5	3.75	1.4404/316L also corresponds to the following designation 316S11	

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