

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

## Flanges BS4504

## Properties

Stock		Chemical Properties	
NB (in)	Pressure Rating	Element	Chemical Composition %
PN16/101 RF Slip-on		Carbon (C)	0.0 - 0.03
PN16/105 RF Blind		Chromium (Cr)	16.50 - 18.50
PN16/111 RF Weld Neck		Molybdenum (Mo)	2.0 - 2.5
1/2	16	Silicon (Si)	0.0 - 1.0
3/4	16	Phosphorus (P)	0.0 - 0.05
1	16	Sulphur (S)	0.0 - 0.01
1 1/4	16	Nickel (Ni)	10.0 - 13.0
1 1/2	16	Manganese (Mn)	0.0 - 2.0
2	16	Iron (Fe)	Balance
2 1/2	16	Above properties are for 1.4404	
3	16	1.4404/316L also corresponds to the following designation 316S11	
4	16		
5	16		
6	16		
8	16		
10	16		
12	16		
Other sizes & higher pressures available on request			
<b>Mechanical Properties</b>			
		<b>Property</b>	<b>Value</b>
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
<b>Physical Properties</b>			
		<b>Property</b>	<b>Value</b>
		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
1.4404/316L also corresponds to the following designation 316S11			

## 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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