

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

## Flanges RF Weld Neck

## Properties

Stock			Chemical Properties	
NB (in)	SCH	Pressure Rating	Element	Chemical Composition %
ASTM/ASME SA182 ANSI B16.5			Carbon (C)	0.0 - 0.03
1/2	10S	150/300	Chromium (Cr)	16.50 - 18.50
1/2	40S	150/300	Molybdenum (Mo)	2.0 - 2.5
1/2	80S	150/300	Silicon (Si)	0.0 - 1.0
3/4	10S	150	Phosphorus (P)	0.0 - 0.05
3/4	40S	150/300	Sulphur (S)	0.0 - 0.01
3/4	80S	150	Nickel (Ni)	10.0 - 13.0
1	10S	150/300	Manganese (Mn)	0.0 - 2.0
1	40S	150/300	Iron (Fe)	Balance
1	80S	150/300	Above properties are for 1.4404	
1 1/4	10S	150	1.4404/316L also corresponds to the following designation 316S11	
1 1/4	40S	300		
1 1/2	10S	150		
1 1/2	40S	150/300		
1 1/2	80S	150/300		
2	10S	150/300		
2	40S	150/300		
2	80S	150/300		
2 1/2	10S	150/300		
2 1/2	40S	150/300		
3	10S	150/300		
3	40S	150/300		
3	80S	150/300		
4	10S	150/300		
4	40S	150/300		
4	80S	150		
5	10S	150		
5	40S	150		
6	10S	150		
6	40S	150		
8	10S	150		
8	40S	150		
10	10S	150		
10	40S	150		
12	10S	150		
12	40S	300		
16	10S	150		
18	10S	150		
20	10S	150		
24	10S	150		

  

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

## Disclaimer

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