

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

Welded Butt Weld Concentric Reducers

Properties

Stock			Chemical Properties	
NB (in)	SCH	Weight (Kg)	Element	Chemical Composition %
3/4 x 1/2	10	0.04	Carbon (C)	0.0 - 0.03
3/4 x 1/2	40	0.06	Chromium (Cr)	16.50 - 18.50
1 x 1/2	10	0.09	Molybdenum (Mo)	2.0 - 2.5
1 x 1/2	40	0.11	Silicon (Si)	0.0 - 1.0
1 x 3/4	10	0.10	Phosphorus (P)	0.0 - 0.05
1 x 3/4	40	0.12	Sulphur (S)	0.0 - 0.01
1 1/4 x 1/2	10	0.10	Nickel (Ni)	10.0 - 13.0
1 1/4 x 1/2	40	0.13	Manganese (Mn)	0.0 - 2.0
1 1/4 x 3/4	10	0.11	Iron (Fe)	Balance
1 1/4 x 3/4	40	0.14	Above properties are for 1.4404	
1 1/4 x 1	10	0.12	1.4404/316L also corresponds to the following designation 316S11	
1 1/4 x 1	40	0.16		
1 1/2 x 1/2	10	0.14		
1 1/2 x 1/2	40	0.18		
1 1/2 x 3/4	10	0.15		
1 1/2 x 3/4	40	0.20		
1 1/2 x 1	10	0.17		
1 1/2 x 1	40	0.22		
1 1/2 x 1 1/4	10	0.18		
1 1/2 x 1 1/4	40	0.24		
2 x 1/2	10	0.23		
2 x 1/2	40	0.28		
2 x 3/4	10	0.22		
2 x 3/4	40	0.30		
2 x 1	10	0.23		
2 x 1	40	0.32		
2 x 1 1/4	10	0.25		
2 x 1 1/4	40	0.35		
2 x 1 1/2	10	0.27		
2 x 1 1/2	40	0.37		
2 1/2 x 1	10	0.30		
2 1/2 x 1 1/4	10	0.37		
2 1/2 x 1 1/2	10	0.39		
2 1/2 x 1 1/2	40	0.66		
2 1/2 x 2	10	0.43		
2 1/2 x 2	40	0.72		
3 x 1	10	0.43		
3 x 1	40	0.74		
3 x 1 1/4	10	0.43		
3 x 1 1/4	40	0.75		
3 x 1 1/2	10	0.45		
3 x 1 1/2	40	0.78		

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	

3 x 2	10	0.48
3 x 2	40	0.85
3 x 2 1/2	10	0.52
3 x 2 1/2	40	0.93
4 x 1 1/2	10	0.63
4 x 1 1/2	40	1.18
4 x 2	10	0.67
4 x 2	40	1.27
4 x 2 1/2	10	0.71
4 x 2 1/2	40	1.37
4 x 3	10	0.76
4 x 3	40	1.45
5 x 3	10	1.22
5 x 3	40	2.27
5 x 4	10	1.33
5 x 4	40	2.50
6 x 3	10	1.53
6 x 3	40	3.04
6 x 4	10	1.65
6 x 4	40	3.30
6 x 5	10	1.78
6 x 5	40	3.57
8 x 4	10	2.43
8 x 4	40	5.10
8 x 5	10	2.70
8 x 6	10	2.72
8 x 6	40	5.71
10 x 6	10	4.14
10 x 6	40	8.78
10 x 8	10	4.49
10 x 8	40	9.58
12 x 6	10	5.92
12 x 6	40	11.80
12 x 8	10	6.31
12 x 8	40	12.70
12 x 10	10	6.78
12 x 10	40	13.60

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