

Stainless Steel (inc. High Performance) - 1.4307 / 304L

Welded Pipe

Properties

Stock			Chemical Properties	
NB (in)	SCH	Weight/m (Kg)	Element	Chemical Composition %
ASTM A312			Carbon (C)	0.0 - 0.03
1/2	5S	0.81	Chromium (Cr)	17.5 - 19.5
1/2	10S	1.01	Manganese (Mn)	0.0 - 2.0
1/2	40S	1.29	Silicon (Si)	0.0 - 1.0
3/4	5S	1.04	Phosphorus (P)	0.0 - 0.05
3/4	10S	1.30	Sulphur (S)	0.0 - 0.02
3/4	40S	1.71	Nickel (Ni)	8.0 - 10.50
1	5S	1.31	Iron (Fe)	Balance
1	10S	2.13	Above properties are for 1.4307	
1	40S	2.54	1.4307/304L also corresponds to the following designation 304S11	
1 1/4	5S	1.68		
1 1/4	10S	2.74		
1 1/4	40S	3.44		
1 1/2	5S	1.93		
1 1/2	10S	3.16		
1 1/2	40S	4.11		
2	5S	2.42		
2	10S	4.00		
2	40S	5.52		
2 1/2	5S	3.75		
2 1/2	10S	5.34		
2 1/2	40S	8.77		
3	5S	4.59		
3	10S	6.56		
3	40S	11.47		
3 1/2	5S	5.26		
3 1/2	10S	7.53		
3 1/2	40S	13.78		
4	5S	5.93		
4	10S	8.50		
4	40S	16.32		
5	10S	11.74		
5	40S	22.10		
6	5S	11.48		
6	10S	14.04		
6	40S	28.70		
8	5S	15.00		
8	10S	20.74		
8	40S	43.20		
10	5S	22.70		
10	10S	28.21		
10	40S	61.23		

Mechanical Properties	
Property	Value
Tensile Strength	500 to 670 MPa
Elongation	45% min
Compressive Strength	200 MPa
Above properties are for 1.4307	
1.4301/304 also corresponds to the following designation 304S11	

Physical Properties	
Property	Value
Density	8.00 g/cm ³
Melting Point	1450°C
Thermal Expansion	17.2 x 10 ⁻⁶ /K
Modulus of Elasticity	193 GPa
Thermal Conductivity	16.2 W/m.K
Electrical Resistivity	0.072 x 10 ⁻⁶ Ω.m
1.4307/304L also corresponds to the following designation 304S11	

12	5S	31.30
12	10S	36.54
12	40S	74.92
14	10S	41.99
16	10S	48.07
18	10S	54.15
20	10S	69.95
24	10S	95.92

Disclaimer

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