

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

Flat Bar

Properties

Stock		Chemical Properties	
Size (mm)	Weight/m (Kg)	Element	Chemical Composition %
12 x 3	0.28	Carbon (C)	0.0 - 0.03
12 x 5	0.47	Chromium (Cr)	17.5 - 19.5
12 x 6	0.57	Manganese (Mn)	0.0 - 2.0
20 x 3	0.47	Silicon (Si)	0.0 - 1.0
20 x 5	0.79	Phosphorus (P)	0.0 - 0.05
20 x 6	0.92	Sulphur (S)	0.0 - 0.02
20 x 10*	1.57	Nickel (Ni)	8.0 - 10.50
20 x 12*	1.92	Iron (Fe)	Balance
25 x 3	0.59	Above properties are for 1.4307	
25 x 5	0.98	1.4307/304L also corresponds to the following designation 304S11	
25 x 6	1.18		
25 x 8	1.58		
25 x 10*	1.98		
25 x 12*	2.36		
25 x 15*	2.96		
25 x 20*	3.93		
30 x 3	0.71		
30 x 5	1.12		
30 x 6	1.41		
30 x 8	1.90		
30 x 10*	2.37		
30 x 12*	2.83		
30 x 15*	3.56		
30 x 20*	4.78		
30 x 25*	5.93		
35 x 6	1.66		
40 x 3	0.94		
40 x 5	1.57		
40 x 6	1.88		
40 x 8	2.51		
40 x 10*	3.16		
40 x 12*	3.79		
40 x 15*	4.74		
40 x 20*	6.32		
40 x 25*	7.85		
45 x 6	2.13		
50 x 3	1.18		
50 x 5	1.96		
50 x 6	2.36		
50 x 8	3.14		
50 x 10*	3.95		
50 x 12*	4.74		

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	

50 x 15*	5.93
50 x 20*	7.90
50 x 25*	9.81
60 x 3	1.42
60 x 5	2.36
60 x 6	2.83
60 x 8	3.79
60 x 10*	4.74
60 x 12	5.69
60 x 15*	7.11
60 x 20*	9.42
60 x 25*	11.90
65 x 6	3.08
65 x 10	5.13
75 x 3	1.78
75 x 5	2.96
75 x 6	3.52
75 x 8	4.74
75 x 10*	5.93
75 x 12*	7.11
75 x 15*	8.88
75 x 20*	11.90
75 x 25*	14.70
80 x 6	3.77
80 x 8	5.02
80 x 10*	6.32
100 x 3	2.37
100 x 5	3.95
100 x 6	4.71
100 x 8	6.32
100 x 10*	7.90
100 x 12*	9.48
100 x 15*	11.90
100 x 20*	15.70
100 x 25*	19.60
125 x 6	5.97
125 x 10	9.95
125 x 12	11.85
150 x 6	7.11
150 x 8	9.48
150 x 10	11.85
150 x 12	14.32
200 x 6	9.48
200 x 8	12.64
200 x 10	15.80

*: Available hot rolled

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

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