

Aluminium - 2011 T3 Speedal

Round Bar

Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical Composition (%)
3/16	0.05	Silicon (Si)	0.40 typical
6mm	0.08	Iron (Fe)	0.70 typical
1/4	0.09	Copper (Cu)	5.00 - 6.00
5/16	0.14	Lead (Pb)	0.20 - 0.60
8mm	0.15	Bismuth (Bi)	0.20 - 0.60
9mm	0.18	Zinc (Zn)	0.30 typical
3/8	0.20	Others (Total)	0.15 typical
10mm	0.22	Aluminium (Al)	Balance
10.31mm	0.24		
7/16	0.27		
1/2	0.35		
9/16	0.45		
5/8	0.56		
21/32	0.62		
11/16	0.68		
18mm	0.71		
3/4	0.80		
20mm	0.89		
13/16	0.95		
21mm	0.98		
7/8	1.10		
15/16	1.26		
25mm	1.39		
1	1.57		
1 1/16	1.69		
1 1/8	1.82		
1 3/16	2.01		
1 1/4	2.23		
1 5/16	2.48		
1 3/8	2.71		
1 1/2	3.24		
1 5/8	3.79		
1 3/4	4.40		
1 7/8	5.05		
2	5.73		
2 1/8	6.47		
2 1/4	7.26		
2 3/8	8.09		
2 1/2	8.97		

Mechanical Properties	
Property	Value
Proof Stress	290 - 300 MPa
Tensile Strength	365 MPa
Elongation	15%
Shear Strength	220 MPa
Hardness Vickers	110 HV

Physical Properties	
Property	Value
Density	2.82 g/cm ³
Melting Point	535°C
Thermal Expansion	23 x 10 ⁻⁶ /K
Modulus of Elasticity	71 GPa
Thermal Conductivity	138 W/m.k
Electrical Resistivity	0.045 x 10 ⁻⁶ Ω.m

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