

# Aluminium - 6063 T6

## Round Tube

## Properties

Stock			Chemical Properties	
OD (in)	Thickness	Weight/m (Kg)	Element	Chemical Composition %
3/8	16G	0.11	Manganese (Mn)	0.0 - 0.10
1/2	18G	0.12	Iron (Fe)	0.0 - 0.35
1/2	16G	0.15	Magnesium (Mg)	0.45 - 0.90
1/2	10G	0.26	Silicon (Si)	0.20 - 0.60
5/8	18G	0.15	Zinc (Zn)	0.0 - 0.10
5/8	16G	0.20	Titanium (Ti)	0.0 - 0.10
5/8	10G	0.35	Chromium (Cr)	0.0 - 0.10
3/4	18G	0.19	Copper (Cu)	0.0 - 0.10
3/4	16G	0.24	Other (Each)	0.0 - 0.05
3/4	10G	0.44	Others (Total)	0.0 - 0.15
7/8	18G	0.22	Aluminium (Al)	Balance
7/8	16G	0.29		
7/8	10G	0.53		
1	18G	0.25		
1	16G	0.33		
1	10G	0.61		
1	3/16	0.83		
1	1/4	1.03		
1 1/8	16G	0.37		
1 1/8	10G	0.70		
1 1/4	18G	0.32		
1 1/4	16G	0.42		
1 1/4	10G	0.79		
1 1/4	3/16	1.08		
1 3/8	16G	0.46		
1 3/8	10G	0.88		
1 1/2	18G	0.38		
1 1/2	16G	0.50		
1 1/2	10G	0.96		
1 1/2	3/16	1.35		
1 1/2	1/4	1.71		
1 5/8	16G	0.55		
1 5/8	10G	1.05		
1 5/8	3/16	1.48		
1 3/4	16G	0.59		
1 3/4	10G	1.14		
1 7/8	10G	1.23		
1 29/32	7G	1.67		
2	1.5mm	0.63		
2	3.0mm	1.22		
2	16G	0.68		
2	10G	1.32		

  

Mechanical Properties	
Property	Value
Proof Stress	170 Min MPa
Tensile Strength	215 Min MPa
Hardness Brinell	75 Typical HB
Elongation A	8 Min %

  

Physical Properties	
Property	Value
Density	2.70 g/cm <sup>3</sup>
Melting Point	655°C
Thermal Expansion	23.5 x 10 <sup>-6</sup> /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	201 W/m.K
Electrical Resistivity	0.033 x 10 <sup>-6</sup> Ω .m
Electrical Resistivity	52% IACS

2	3/16	1.86
2	1/4	2.39
2	3/8	4.38
2 1/4	16G	0.77
2 1/4	10G	1.49
2 1/2	16G	0.86
2 1/2	10G	1.67
2 1/2	3/16	2.38
2 1/2	1/4	3.08
2 1/2	3/8	3.36
2 3/4	10G	1.84
3	1.5mm	0.95
3	3.0mm	1.86
3	16G	1.03
3	10G	2.02
3	3/16	2.90
3	1/4	3.76
3 1/2	16G	1.21
3 1/2	10G	2.37
3 1/2	1/4	4.46
3 1/2	1/2	8.25
4	1.5mm	1.27
4	3.0mm	2.51
4	16G	1.38
4	10G	2.72
4	1/4	5.15
4	1/2	9.61
4 1/2	10G	3.07
4 1/2	1/4	5.83
5	10G	3.42
5	1/4	6.52
5 1/2	10G	3.37
6	10G	4.13
6	1/4	7.90
6 1/2	1/4	8.58
100mm	2.0mm	1.66
150mm	2.0mm	2.51
152mm	2.5mm	3.17

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