

### Aluminium Tube

#### Applications

- Shipbuilding
- Motorboats
- Aircraft structures
- Truck bodies
- Pylons & towers
- Rail coaches

#### Key features:

- Medium to high strength heat-treatable alloy
- Medium fatigue strength
- Very good corrosion resistance
- Typically used in heavy duty structures

#### Product Description

L117 is based on the aluminium material designation 6061. L117 aluminium tube is the least expensive and most versatile of the heat-treatable alloys. It is a medium to high strength heat-treatable material with very good corrosion resistance and medium fatigue strength. L117 is a tube product supplied in the T6 annealed condition, offering excellent weldability and formability and is readily disposed to furnace brazing. The alloy is typically used in heavy duty structures.

#### Corrosion Resistance

Very good

#### Availability

Pipe, Tube

#### Chemical Composition (weight %)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Other
min.	Rem	0.4		0.15		0.8	0.04				0.05
max.	Rem	0.8	0.7	0.40	0.15	1.2	0.35		0.25	0.15	0.15

#### Mechanical Properties

	0.2% Proof Stress (min)	Tensile Strength (min)	Full Tube Section (min, %)	Strip Test Piece (min, %)
Up to 1mm	240 N/mm <sup>2</sup>	290 N/mm <sup>2</sup>	10	8
1.0mm to 5.0mm	240 N/mm <sup>2</sup>	290 N/mm <sup>2</sup>	12	10
5.0mm to 10.0mm	240 N/mm <sup>2</sup>	290 N/mm <sup>2</sup>	14	12

#### Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
 Smiths Biggleswade **01767 604 704**  
 Smiths Birmingham **0121 728 4940**  
 Smiths Bristol **0117 971 2800**  
 Smiths Chelmsford **01245 466 664**  
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 Smiths Redruth **01209 315 512**  
 Smiths Verwood **01202 824 347**  
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#### Quality & Testing:



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