L118
Technical Datasheet

Hydraulically Tested Aluminium Tube

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

Product Description
L118 is based on the aluminium material designation 6061. L118 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. L118 is a tube product supplied in the T6 annealed condition, hydraulically tested, offering excellent weldability and formability and is readily disposed to furnace brazing. The alloy is typically used in heavy duty structures.

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

Corrosion Resistance
Very good

Availability
Pipe, Tube

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th></th>
<th>Al</th>
<th>Si</th>
<th>Fe</th>
<th>Cu</th>
<th>Mn</th>
<th>Mg</th>
<th>Cr</th>
<th>Ni</th>
<th>Zn</th>
<th>Ti</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>min.</td>
<td>Rem</td>
<td>0.4</td>
<td>0.15</td>
<td>0.8</td>
<td>0.04</td>
<td>0.04</td>
<td></td>
<td>0.35</td>
<td>0.25</td>
<td>0.15</td>
<td>0.05</td>
</tr>
<tr>
<td>max.</td>
<td>Rem</td>
<td>0.8</td>
<td>0.7</td>
<td>0.40</td>
<td>1.2</td>
<td>0.35</td>
<td>0.25</td>
<td>0.15</td>
<td>0.15</td>
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</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th></th>
<th>0.2% Proof Stress (min)</th>
<th>Tensile Strength (min)</th>
<th>Full Tube Section (min, %)</th>
<th>Strip Test Piece (min, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>240 N/mm²</td>
<td>290 N/mm²</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Up to 1mm</td>
<td>240 N/mm²</td>
<td></td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>1.0mm to 5.0mm</td>
<td>240 N/mm²</td>
<td>290 N/mm²</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>5.0mm to 10.0mm</td>
<td>240 N/mm²</td>
<td>290 N/mm²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.