Typical Applications

- Aerospace Components, Eg: Shelves, Trays, Filters.
- Defence Components
- High Technology Applications

Product Description

A medium strength rolled sheet, solution heat-treated and artificially aged to achieve ‘T6’ condition. Also available in ‘O’ (annealed) and ‘T4’ (solution heat-treated only) conditions, to accommodate various degrees of forming, drawing or spinning operations.

General Engineering Equivalent
- BS/EN EuroNorm - 6082T6
- EN 485/515/573
- Old BS - HS30TF (BS1470)
- AECMA EuroNorm - None

Surface Treatment

Anodising
- Protective - Good
- Bright - Fair
- Hard - Good / Very Good
- Colour - Good

Plating & Vitreous Enamelling
- Special pre-treatment necessary to achieve successful results

Weldability

- Brazing & Soldering - Good
- Oxygen - Fair
- Inert Gas - Very Good
- Resistance, Spot, Beam - Very Good

Formability

Good

Corrosion Resistance

Resistance to Atmospheric Attack - Good

Cut Size to Guillotined Blanks

Edge deviation over cut length/width +/- 0.2mm per m (maximum thickness 6.35mm)

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>Pb</th>
<th>Sn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Rem</td>
<td>0.7</td>
<td>0.4</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>Rem</td>
<td>1.3</td>
<td>0.5</td>
<td>1.0</td>
<td>1.2</td>
<td>0.25</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.05</td>
<td>0.05</td>
<td></td>
</tr>
</tbody>
</table>

Mechanical Properties (Minima)

<table>
<thead>
<tr>
<th>Size Range (mm)</th>
<th>Tensile Strength (MPa)</th>
<th>0.2% Proof Stress (MPa)</th>
<th>Elongation on 5.65vS9(%)</th>
<th>Elongation on 50mm (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2 to 3.0</td>
<td>295</td>
<td>255</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>3.0 to 6.0</td>
<td>295</td>
<td>240</td>
<td>-</td>
<td>8</td>
</tr>
</tbody>
</table>

NB: Figures shown above are for ‘T6’ condition.

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.

www.smithmetal.com  sales@smithmetal.com

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading. © Smiths Metal Centres 2018