Typical Applications

- Aerospace Components
- Defence Components
- High Technology Applications

Product Description

A high strength 5.1 to 6.1% Zinc alloy. Solution treated, artificially aged and controlled stretched to achieve the T6511 condition, in extruded bar and profile form.

BS/EN Euronorm - EN 573 / 755
AECMA Euronorm - BS Pr EN 2394, 2631

Surface Treatment

- Anodising
  - Protective - Fair
  - Bright - Variable
- Plating
  - Vitreous Enamelling - N/A
- Hard - Fair
- Colour - Fair
- N/A

Weldability

- Brazing & Soldering - Not Recommended
- Oxygen - Not Recommended
- Inert Gas - Not Recommended
- Resistance, Spot, Beam - Very Good

Mechanical Properties (minima, T6511 condition)

<table>
<thead>
<tr>
<th>Size Range (in)</th>
<th>Tensile Strength (ksi)</th>
<th>0.2% Proof Stress (ksi)</th>
<th>Elongation on 4D (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 0.249</td>
<td>78</td>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>0.250 - 0.499</td>
<td>81</td>
<td>73</td>
<td>7</td>
</tr>
<tr>
<td>0.500 - 1.499</td>
<td>81</td>
<td>72</td>
<td>7</td>
</tr>
<tr>
<td>1.500 - 2.999</td>
<td>78</td>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>3.000 - 4.499</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Up to 20 sq. in 4.500 - 5.000</td>
<td>78</td>
<td>68</td>
<td>6</td>
</tr>
</tbody>
</table>

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>Zn</th>
<th>Ti</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>REM</td>
<td></td>
<td></td>
<td>1.2</td>
<td></td>
<td>2.1</td>
<td>0.18</td>
<td>5.1</td>
<td>0.05</td>
<td>Each (max)</td>
</tr>
<tr>
<td>Max.</td>
<td>REM</td>
<td>0.40</td>
<td>0.50</td>
<td>2.0</td>
<td>0.30</td>
<td>2.9</td>
<td>0.28</td>
<td>6.1</td>
<td>0.20</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Machinability

Very Good

Corrosion Resistance

Resistance to Atmospheric Attack - Fair

Cut Size to Sawn Blanks

Cut to length + 1.0mm - NIL

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

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