675 Magnesium
Technical Datasheet

Lightweight Magnesium Extrusion Alloy

Typical Applications
• Aerospace components
• Motorsport
• Engine & gearbox casings
• Forging and machine from solid applications
• Racing wheels
• Helicopter transmissions

Product Description
675 Magnesium Alloy offers excellent performance at high temperatures (up to 250°C). The flame-proof, lightweight material offers superior machinability when compared to aluminium, with good overall corrosion resistance. 675 Magnesium Alloy is an extrusion alloy and is used in market sectors such as aerospace, motorsport and defence, where weight reductions can be made without impairing performance. The product is superior to some typical commercial aluminium alloys. Supplied in the T5 heat-treated condition.

Key features
• Lightweight
• Ultra High strength
• Excellent corrosion resistance
• For use at temperatures up to 250°C
• Superior machinability to aluminium

Availability
Bar

Corrosion resistance
Good

Machinability
Excellent machinability - superior to many commercial aluminium grades.

Mechanical Properties (extruded values at ambient temperature)*

<table>
<thead>
<tr>
<th></th>
<th>T5A:</th>
<th>T5B:</th>
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<tbody>
<tr>
<td></td>
<td>LONGITUDINAL</td>
<td>LONGITUDINAL</td>
</tr>
<tr>
<td></td>
<td>0.2% Proof Stress</td>
<td>0.2% Proof Stress</td>
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<tr>
<td></td>
<td>230 MPa</td>
<td>260 MPa</td>
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<tr>
<td></td>
<td>350 MPa</td>
<td>400 MPa</td>
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<tr>
<td></td>
<td>5 %</td>
<td>3 %</td>
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<tr>
<td>Tensile Strength</td>
<td>Elongation</td>
<td>Tensile Strength</td>
</tr>
</tbody>
</table>

*up to 100mm dia

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.