

675 Magnesium

Technical Datasheet



Service. Quality. Value.

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)*

T5A:

LONGITUDINAL

0.2% Proof Stress	230 MPa
Tensile Strength	350 MPa
Elongation	5 %

TRANSVERSE

0.2% Proof Stress	200 MPa
Tensile Strength	300 MPa
Elongation	1 %

T5B:

LONGITUDINAL

0.2% Proof Stress	260 MPa
Tensile Strength	400 MPa
Elongation	3 %

TRANSVERSE

0.2% Proof Stress	230 MPa
Tensile Strength	340 MPa
Elongation	1 %

*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.

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**
Smiths Gateshead **0191 469 5428**
Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**
Smiths Manchester **0161 794 8650**
Smiths Norwich **01603 789 878**
Smiths Nottingham **0115 925 4801**
Smiths Redruth **01209 315 512**
Smiths Verwood **01202 824 347**
Main Office **0845 527 3331**

Quality & Testing:



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