

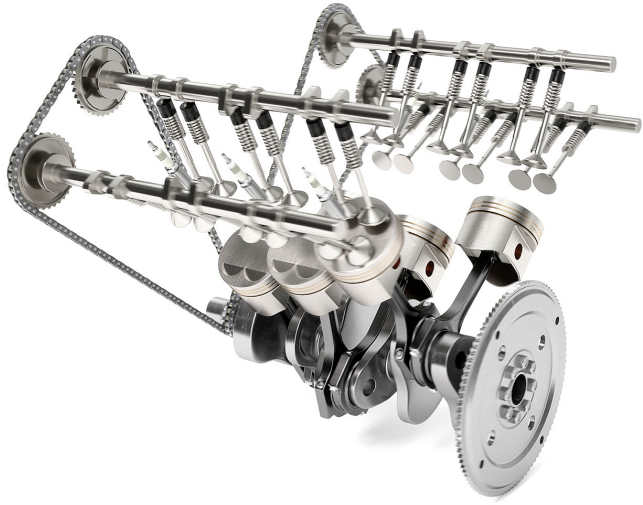
Elektron[®] 675

Product Datasheet

A lightweight magnesium extrusion alloy for motorsport applications

Elektron[®] 675 magnesium alloy offers excellent high-temperature performance.

Used effectively in temperatures up to 250°C, Elektron[®] 675 is a lightweight, flame-proof material with superior overall corrosion resistance and offers good machinability when compared to aluminium. The product is an extrusion alloy supplied in the T5 temper heat treated condition and used in a variety of motorsport applications. Further optimisation of the material results in greater strength and density.



Mechanical Properties (extruded values at ambient temperatures)*

| T5A: | | T5B: | |
|-------------------|---------|-------------------|---------|
| LONGITUDINAL | | LONGITUDINAL | |
| 0.2% Proof Stress | 230 MPa | 0.2% Proof Stress | 260 MPa |
| Tensile Strength | 350 MPa | Tensile Strength | 400 MPa |
| Elongation | 5% | Elongation | 3% |
| TRAVERSE | | TRAVERSE | |
| 0.2% Proof Stress | 200 MPa | 0.2% Proof Stress | 230 MPa |
| Tensile Strength | 300 MPa | Tensile Strength | 340 MPa |
| Elongation | 1% | Elongation | 1% |

* up to 100 dia

Characteristics

- Lightweight with ultra high strength
- Good corrosion resistance
- Superior machinability compared to aluminium
- For use in temperatures up to 250°C

Applications

- Chassis and hydraulic components
- Engine casings and gearboxes
- Racing wheels
- Weight reduction design

About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials to the global motorsport sector. We are supply partners in a range of specialist motorsport markets including Formula 1, Formula E, NASCAR, MOTO GP, WEC & WRC.