6005A Aluminium

Product Datasheet

Commercial Aluminium Alloy



Service. Quality. Value.

Improved extrusion capabilities

6005A is a highly versatile aluminium alloy which provides excellent corrosion resistance with medium strength.

The product is heat-treatable and offers excellent weldability. The properties of the material sit between 6061 and 6082 aluminium and can often be used interchangeably with these materials, but 6005A has better extrusion characteristics than both. The product also has an improved mill surface finish. The production of thin-walled or complex extrusions is difficult, although 6005A is still more extrudable when compared to 6082. 6005A is more suitable for the production of standard and custom shape extrusions that are solid or hollow in design. We generally supply 6005A aluminium alloy in extruded or tubular form.

Key Features

- Excellent corrosion resistance
- Ideal for standard and custom shaped extrusions
- Superior tube bending properties

Chemical Composition (weight %)

Medium strength



Applications

- Industrial pylons, pipelines and platforms
- Tubing in furniture products
- Truck, trailer, automotive, bus, and rail components
- Platforms, ladders, structures
- Marine applications

Weight (%) Al Si Fe Cu Mn Mg Zn Cr Mn + Cr Ti Min Bal 0.50 0.4 0.12 0.90 0.7 0.50 Max Bal 0.35 0.30 0.50 0.20 0.10 0.30

Physical Properties

Property	Value	Property	Value	
Density	2.70 g/cm³	Modulus of Elasticity	70 GPa	
Melting Point	605 °C	Thermal Conductivity	188 W/m.K	
Thermal Expansion	24 x10^-6 /K	Electrical Resistivity	0.034 x10^-6 Ω .m	

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