

Aluminium Alloy 5005 - H24

DESCRIPTION

Aluminium Alloy 5005 is a marine grade aluminium suitable for anodizing and architectural facades. AA 5005 is a medium strength alloy with very good resistance to atmospheric corrosion and very good weldability that is highly suitable for decorative anodizing. Please note that whilst alloy 5005 is suitable for anodizing, streaks can occur. If the finish you are seeking is critical, please specify 'special anodizing quality' at time of order.

APPLICATIONS

AA-5005 is typically used in:

- Manufacture of appliance, small boats
- Signage, Road Signs & Name Plates
- Food & Chemical Equipment
- Anodized Parts
- Packaging
- Architectural Facade Panels
- Furniture

CHEMICAL COMPOSITION

Element	Composition %
Magnesium(Mg)	0.5-1.10
Iron (Fe)	0.00 - 0.70
Silicone(Si)	0.00 - 0.30
Zinc(Zn)	0.0 - 0.25
Manganese(Mn)	0.0-0.20
Copper(Cu)	0.0-0.20
Chromium(Cr)	0.0-0.1
Others(Total)	0.0-0.15
Others(Each)	0.0-0.05
Aluminium(Al)	Balance

WELDABILITY

Weldability - Gas:	Very Good
Weldability - Arc:	Very Good
Brazeability:	Good
Weldability - Resistance:	Very Good

MECHANICAL PROPERTIES

Property	Value
Proof Stress	110 Min MPa
Tensile Strength	120-230 MPa
Elongation at 50 mm	5 Min %
Hardness Brinell	28 -64HB

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.7 g/cm ³
Melting Point	655 °C
Thermal Expansion	23.1 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	201 W/m.K
Electrical Resistivity	0.033 x 10 ⁻⁶ Ω .m

WELDABILITY

Machinability:	Excellent
Workability - Cold:	Very Good