

Applications

- Aircraft components
- Heat exchangers
- Heating & cooling systems
- Aircraft & military components
- Vehicle radiators
- Corrugated roofing
- Cooking utensils & kitchen equipment
- Air conditioning evaporators

Product Description

L59/L60/L61 aluminium alloy is an aerospace aluminium sheet which is close in properties to 3003. With very good resistance to atmospheric corrosion and excellent mechanic properties, L59/L60/L61 is a versatile alloy which is used in the aerospace, oil and gas industry and automotive sector amongst others. The material has improved mechanical properties over 1000 series aluminium alloys, especially at elevated working temperature. Due to the alloys improved performance at elevated temperatures, this widens the use of the alloy as a construction cladding material.

Availability

Sheet

Key features:

- Medium strength alloy
- Good resistance to atmospheric corrosion
- Properties very close to 3003
- Very good weldability

Related Material Specifications

- Alloy 31103

Weldability

Very good

Corrosion Resistance

Very good

Tempers

Alloy L59	-	H16 & H26
Alloy L60	-	H12 & H22
Alloy L61	-	'O' temper

Chemical Composition (weight %)

Weight (%)	Mn	Fe	Cu	Mg	Si	Zn	Cr	Ti+Zr	Al	Other
min	0.90								Bal	0.05
max.	1.50	0.70	0.10	0.30	0.50	0.20	0.10	0.10	Bal	0.15

Mechanical Properties

Tensile Strength	90-130 MPa
Elongation A50 mm	20% min

Physical Properties

Density	2.73 g/cm ³
Melting Point	655°C
Thermal Expansion	23.1 x10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	160 W/m.K
Electricity Resistivity	42% IACS

The properties above are for material in the H12 condition

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 Leeds	0113 307 5167
Smiths Biggleswade	01767 604 704	Smiths Manchester	0161 794 8650
Smiths Birmingham	0121 728 4940	Smiths Norwich	01603 789 878
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Smiths Horsham	01403 261 981	Main Office	0845 527 3331

Quality & Testing:



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