

2124 Aluminium

Technical Datasheet



Service. Quality. Value.

High Strength Aluminium Alloy

Applications

- Moderately elevated temperature applications
- Wing skins
- Use in high performance military aircraft
- Fuselage bulkheads

Product Description

2124 Aluminium Alloy is a higher purity form of 2024 and was developed specifically for elevated temperature applications. The aerospace sector is a primary market for this alloy as fracture toughness of the material is guaranteed, and can be used in critical components such as the fuselage and wings. The fracture toughness of the material is superior to 2024. This alloy is also recommended for applications requiring improved short-transverse ductility,

Availability

Sheet, plate

Key features:

- Guaranteed fracture toughness
- Good strength retention
- Good creep resistance
- Fracture toughness higher than 2024

Related Material Specifications

- AMS 4221
- ASTM B209
- QQ A-250/29
- QQ A250/9

Corrosion Resistance

Resistance to atmospheric attack is poor. Excellent exfoliation corrosion resistance.

Machinability

Good

Chemical Composition (weight %)

Weight (%)	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others
min.			3.80	0.30	1.20					0.05
max.	0.20	0.30	4.90	0.90	1.80	0.10	0.25	0.15	Bal	0.15

Mechanical Properties

Thickness (in.)	Tensile Strength (ksi)	Yield Strength (ksi)	Elongation %
1.001-2.00	66	57	5
5.001-6.00	63	54	4

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**
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Smiths Redruth **01209 315 512**
Smiths Verwood **01202 824 347**
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Quality & Testing:



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