

5754 Aluminium

Technical Datasheet



Commercial Aluminium Alloy

Service. Quality. Value.

Applications

- Shipbuilding
- Food processing equipment
- Treadplate
- Vehicle bodies
- Fishing industry equipment
- Welded chemical & nuclear structures

Product Description

5754 aluminium alloy offers extremely good resistance to both seawater corrosion and industrially polluted atmospheres. Higher in strength than 5251, the alloy has excellent weldability and very good workability. 5754 is used in applications in market sectors such as marine, oil, & gas, chemical and nuclear.

Availability

Plate, Sheet

Key features:

- Excellent resistance to seawater & industrial chemical corrosion
- Higher in strength than 5251
- Excellent weldability
- Very good workability

Related Material Specifications

- A95754
- Al Mg3
- Al 3.1Mg Mn Cr
- AW-5754

Weldability

Excellent weldability (brazability is poor)

Corrosion Resistance

Highly resistant to both seawater and industrial chemical attack.

Chemical Composition (weight %)

Weight (%)	Mn	Fe	Mg	Si	Al
min			2.60		Bal
max.	0.50	0.40	3.20	0.40	Bal

Mechanical Properties

Tensile Strength	245 - 290 MPa
Elongation A50 mm	10 - 15%
Proof Stress	185 - 245 MPa

Physical Properties

Density	2.66 g/cm ³
Melting Point	600°C
Thermal Expansion	24 x10 ⁻⁶ /K
Modulus of Elasticity	68 GPa
Thermal Conductivity	147 W/m.K

The properties above are for material in the H22 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 Biggleswade	01767 604 704
Smiths Birmingham	0121 728 4940
Smiths Bristol	0117 971 2800
Smiths Chelmsford	01245 466 664
Smiths Gateshead	0191 469 5428
Smiths Horsham	01403 261 981

Smiths Leeds	0113 307 5167
Smiths Manchester	0161 794 8650
Smiths Norwich	01603 789 878
Smiths Nottingham	0115 925 4801
Smiths Redruth	01209 315 512
Smiths Verwood	01202 824 347
Main Office	0845 527 3331

Quality & Testing

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