

5754 Aluminium

Technical Datasheet



Service. Quality. Value.

Commercial Aluminium Alloy

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:



www.smithmetal.com info@smithmetal.com

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.