

DESCRIPTION

Aluminium Alloy 5754 has excellent corrosion resistance especially to seawater and industrially polluted atmospheres. It has higher strength than 5251. This high strength makes 5754 highly suited to marine applications requiring a combination of strength and resistance to corrosion in sea water.

APPLICATIONS

AA-5754 is typically used in:

- Treadplate
- Shipbuilding
- Vehicle bodies
- Marine applications
- Drilling rigs
- Transportation equipment
- Fishing industry equipment

Please note that Mechanical Properties shown are for H-111 temper

CHEMICAL COMPOSITION

Element	Composition %
Magnesium (Mg)	2.6 – 3.60
Chromium (Cr)	0.10 – 0.30
Manganese (Mn)	0.0 – 0.50
Silicon (Si)	0.0 - 0.40
Iron (Fe)	0.0 – 0.40
Zinc (Zn)	0.0 – 0.20
Titanium (Ti)	0.0 – 0.15
Copper (Cu)	0.0 – 0.10
Others (Total)	0.0 – 0.15
Other (Each)	0.0 – 0.05
Aluminium (Al)	Balance

SUPPLIED FORMS

At **Dinco Trading Co** we stock Aluminium Alloy 5754 in the form of sheets in temper H111 & tread plates in temper H114

MECHANICAL PROPERTIES for Temper H111

Property	Value
Proof Stress	60 Min MPa
Tensile Strength	160 - 200MPa
Elongation at 50 mm	15 Min %
Hardness Brinell	44 HB

MECHANICAL PROPERTIES for Temper H114

Property	Value
Proof Stress	80 Min MPa
Tensile Strength	190 - 260MPa
Elongation at 50 mm	12 Min %
Hardness Brinell	52 HB

WELDABILITY

Weldability – Gas: Excellent
Weldability – Arc: Excellent
Brazeability: Poor
Weldability – Resistance: Excellent

FABRICATION

Machinability: Average
Workability – Cold: Very good

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.66 g/cm ³
Melting Point	600 °C
Thermal Expansion	24 ×10 ⁻⁶ /K
Modulus of Elasticity	68GPa
Thermal Conductivity	147 W/m.K
Electrical Resistivity	0.049 ×10 ⁻⁶ Ω.m

SIZES RANGE FOR AA5754-H 111 & H114

We stock Aluminium Alloy 5754 H111 / H114 at our warehouse in the UAE.

Please contact us on sales@dinco.ae with your inquiries or call: 06-5432452