Aluminium Alloy
L113 T6 Sheet

SPECIFICATIONS

Commercial	6082

Aluminium alloy L113 – 6082T6 is a medium strength alloy with excellent corrosion resistance. It has the highest strength of the 6000 series alloys. Alloy 6082 is known as a structural alloy. In plate form, 6082 is the alloy most commonly used for machining. As a relatively new alloy, the higher strength of 6082 has seen it replace 6061 in many applications. The addition of a large amount of manganese controls the grain structure which in turn results in a stronger alloy.
In T6 temper, the alloy machines well.

CHEMICAL COMPOSITION

BS L113(1971)
Alloy L113

Element	% Present
Silicon (Si)	0.7 - 1.3
Magnesium (Mg)	0.5 - 1.2
Manganese (Mn)	0.4 - 1
Iron (Fe)	0.5 max
Chromium (Cr)	0.25 max
Titanium (Ti)	0.2 max
Zinc (Zn)	0.2 max
Copper (Cu)	0.1 max
Nickel (Ni)	0.1 max
Lead (Pb)	0.05 max
Tin (Sn)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy L113 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**
6082

TEMPER TYPES

The most common temper for L113 – 6082 aluminium is:
- T6 - Solution heat treated and artificially aged

SUPPLIED FORMS

L113-6082T6 aluminium is supplied in sheet, strip and plate.
- Plate
- Sheet
- Strip

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.70 g/cm³
Melting Point	555 °C
Thermal Expansion	24 x10^{-6} /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	180 W/m.K
Electrical Resistivity	0.038 x10^{-6} Ω .m

MECHANICAL PROPERTIES

BS L113(1971)
Sheet
0.2mm to 3.0mm inc.

Property	Value
Elongation A50 mm	8 Min %
Tensile Strength	295 Min N/mm2
0.2% Proof Stress	255 Min N/mm2

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CONTACT

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REVISION HISTORY

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