Aluminium Alloy
L114 T4 Tube

SPECIFICATIONS

Commercial	6082

Applications:
Packaging: containers, foils, collapsible tubes, radiator tubes, wide jar closures, printing plates (offset). Strip for heat exchanger, boilermaking. Insulation foils. Kitchenware. Chemical and food industry equipment, containers. Automotive trim, light reflectors. Architecture. Vessels, piping.

Characteristic Properties:
Very good corrosion resistance. Very good weldability (lowered strength values in the zone of welding). Good machinability. Good cold formability in T4 temper after a stabilizing heat treatment. Heat treatable medium high strength construction. Alloy with a strength somewhat higher than 6061. Medium high fatigue strength. Not suitable for complex sections.

CHEMICAL COMPOSITION

BS L114(1971)
Alloy L114

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
Zinc (Zn)	0.2 max
Titanium (Ti)	0.2 max
Copper (Cu)	0.1 max
Nickel (Ni)	0.1 max
Tin (Sn)	0.05 max
Lead (Pb)	0.05 max
Aluminium (Al)	Balance

TEMPER TYPES

The most common temper for L114-6082 aluminium is:
- T4 - Solution heat treated and naturally aged to a substantially stable condition

SUPPLIED FORMS

L114-6082 T4 Aluminium is supplied as drawn tube
- Tube

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.71 g/cm³
Melting Point	650 °C
Thermal Expansion	23.10 x10^{-6} /K
Thermal Conductivity	167-216 W/m.K
Modulus of Elasticity	70 GPa

MECHANICAL PROPERTIES

BS L114(1971)
Tube
Up to and inc. 6.00mm WT

Property	Value
Tensile Strength	310 Min N/mm2
Elongation A	7 Min %
0.2% Proof Stress	255 Min N/mm2

Different values for additional sizes are shown in the specification

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CONTACT

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REVISION HISTORY

Datasheet Updated	09 January 2014

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This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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