Aluminium Alloy L163 – 2014A

AMARI AEROSPACE

Aluminium alloy L163 – 2014A is supplied in sheet and strip form, generally clad with alloy 1050A.

Chemical Composition

Element	% Present
Si	0.5-0.9
Fe	0.5 Max
Cu	3.9-5.0
Mn	0.4-1.2
Cr	0.1 Max
Mg	0.2-0.8
Zn	0.25 Max
Ni	0.2 Max
Ti & Zr	0.2 Max
Al	Balance

Alloy Designations

Aluminium alloy L168 - 2014A has similarities to the following standard designations and specifications:

2014	AMS 4121

Physical Properties

Property	Value
Density	2.80 g/cm^3
Melting Point	640 °C
Modulus of Elasticity	73 GPa
Electrical Resistivity	40% IACS
Thermal Conductivity	155 W/m.K
Thermal Expansion	22.8 x10^{-6} /K

Mechanical Properties

Temper	Min
Proof Stress 0.2% (MPa)	245
Tensile Strength (MPa)	385
Shear Strength (MPa)	
Elongation A5 (%)	13
Hardness Vickers (HV)	

Temper

The most common temper for L163 – 2014A aluminium is:

- T3

Supplied Forms

L163-2014A aluminium is supplied in Sheet and Strip clad with alloy 1050A. ■

This Data is indicative only and must not be seen as a substitute for the full specification from which it is drawn.
In particular, the mechanical property requirements vary widely with temper, product and product dimensions.
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