Aluminium Alloy 3103 H14 Sheet

Dalsteel Metals Pty Limited

SPECIFICATIONS

Commercial	3103
EN	3103

Aluminium alloy 3103 H14

CHEMICAL COMPOSITION

BS EN 573-3:2009
Alloy 3103

Element	% Present
Manganese (Mn)	0.90 - 1.50
Iron (Fe)	0.0 - 0.70
Silicon (Si)	0.0 - 0.50
Magnesium (Mg)	0.0 - 0.30
Zinc (Zn)	0.0 - 0.20
Others (Total)	0.0 - 0.15
Chromium (Cr)	0.0 - 0.10
Copper (Cu)	0.0 - 0.10
Titanium + Zirconium (Ti+Zr)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy 3103 corresponds to the following standard designations and specifications ***but may not be a direct equivalent***:
ISO Al Mn1

TEMPER TYPES

The most common tempers for 3103 aluminium are:

- H14 - Work hardened by rolling to half hard, not annealed after rolling

SUPPLIED FORMS

Alloy 3103-H14 is normally supplied as Sheet

- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.73 g/cm³
Melting Point	655 °C
Thermal Expansion	23.1 x10^{-6} /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	160 W/m.K
Electrical Resistivity	42 % IACS

MECHANICAL PROPERTIES

BS EN 485-2:2008
Sheet
0.2mm to 6.0mm

Property	Value
Proof Stress	120 Min MPa
Tensile Strength	140 - 180 MPa
Hardness Brinell	45 HB

Properties above are for material in the H14 condition

WELDABILITY

Alloy 3103 has very good weldability

FABRICATION

Workability – Cold: Good
Machinability: Acceptable
Weldability – Gas: Very Good
Weldability – Arc: Very Good
Weldability – Resistance: Good
Brazability: Very Good
Solderability: Very Good

CONTACT

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REVISION HISTORY

Datasheet Updated 13 November 2018

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