



THAMES
STOCKHOLDERS

6082 ALUMINIUM

COMMERCIAL ALUMINIUM ALLOY

PRODUCT DESCRIPTION

Offering the highest strength of all 6000 series alloys, 6082 is often referred to as a 'structural alloy'. Used predominantly in high stressed applications such as bridges, cranes and roof structures, the alloy's extruded finish is not as smooth as others found in the 6000 series so is not so aesthetically pleasing. In many applications, 6082 has replaced 6061 as a result of a number of factors including excellent corrosion resistance with good machinability.

KEY FEATURES

- Highest strength alloy in 6000 series
- Excellent corrosion resistance
- Good machinability
- Replaced 6061 in many applications

APPLICATIONS

- Highly stressed applications
- Bridge construction, cranes, roof trusses
- Milk churns
- Ore skips

CHEMICAL COMPOSITION (weight %)

	Mn	Fe	Mg	Si	Cu	Zn	Ti	Cr	Al
Min	0.40		0.60	0.70					Bal
Max	1.00	0.50	1.20	1.30	0.10	0.20	0.10	0.25	Bal

MECHANICAL PROPERTIES

Tensile Strength	260 MPa
Proof Stress	170 MPa
Shear Strength	170 MPa
Elongation A50 mm	19%
Brinell Vickers	75 HV

PHYSICAL PROPERTIES

Density	2.70 g/cm ³
Melting Point	555 °C
Thermal Expansion	24 x10 ⁻⁶ /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	180 W/m.K



AVAILABILITY

Bar, plate, sheet, tube and extrusions

MATERIAL SPECIFICATIONS

AA6082 | HE30 | DIN 3.2315 | EN AW-6082
ISO: Al Si1MgMn | A96082



Thames Stockholders

Unit 5W, Woodall Road, Redburn Industrial Estate
Ponders End, Enfield, Middlesex EN3 4LQ

t +44 (0)20 8805 3282
f +44 (0)20 8804 8164

w www.thamesstock.com
e sales@thamesstock.com



www.thamesstock.com

sales@thamesstock.com

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

© Thames Stockholders 2018