Aluminium Alloy 6262 - T6 Extrusions



SPECIFICATIONS

Commercial	6262
EN	6262

Aluminium alloy 6262 is a heat treatable alloy with very good corrosion resistance and strength. Additions of bismuth to the alloy mean that 6262 has excellent machinability and surface finish.

High-speed steel or carbide tooling can be used to obtain smooth finishes. Heavy cutting requires oil lubricant but light cutting can be done dry.

Alloy 6262 can be used in place of 2011 when higher corrosion resistance and better anodising response is required.

Applications

6262 is commonly used in the manufacture of:

Screw machine products

Camera parts

Nuts

Couplings

Marine fittings

Decorative hardware and appliance fittings

Hinge pins

Oil line fittings

Valves and valve parts

PLEASE NOTE: Due to European Environmental Protection Directives:

2000/53/CE-ELV - For the automotive sector

2002/95/CE-RoHS – For the electrical and electronics sector

This alloy has been replaced by Alloy 6026 which has a lower Lead content.

CHEMICAL COMPOSITION

BS EN 573-3:2009 Alloy 6262	
Element	% Present
Copper (Cu)	0.15 - 1.4
Magnesium (Mg)	0.8 - 1.2
Silicon (Si)	0.4 - 0.8
Iron (Fe)	0.7 max
Bismuth (Bi)	0.4 - 0.7
Lead (Pb)	0.4 - 0.7
Zinc (Zn)	0.25 max
Manganese (Mn)	0.15 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Chromium (Cr)	0.04 - 0.14
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy 6262 also corresponds to the following standard designations and specifications **but may not be a direct equivalent:**

AA6262

Al 1.0Mg 0.6Si Pb

A96262

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TEMPER TYPES

The most common tempers for 6262 aluminium are:

- T9 Solution heat treated, artificially aged and cold worked
- T6 Solution heat treated and artificially aged

SUPPLIED FORMS

Alloy 6262 is supplied as round bar for machining

Bar



GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.71 g/cm³
Melting Point	582 °C
Thermal Expansion	23.4 x10 ⁻⁶ /K
Modulus of Elasticity	68.3 GPa
Thermal Conductivity	172 W/m.K
Electrical Resistivity	$0.039~\text{x}10^{-6}~\Omega$.m

MECHANICAL PROPERTIES

BS EN 755-2: 2008 Rod & Bar Up to 200mm Dia. & A/F	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

BS EN 755-2: 2008 Tube Up to 25mm Wall Thickness	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

BS EN 755-2:2008 Profiles Up to 25mm Wall Thickness	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

WELDABILITY

Alloy 6262 is readily weldable by all commercial methods and can also be brazed.

Weldability – Gas: Excellent Weldability – Arc: Excellent

Weldability - Resistance: Excellent

Brazability: Excellent

FABRICATION

Workability - Cold: Poor Machinability: Excellent



CONTACT

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REVISION HISTORY

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