

Aluminium

2011 T6 Bar

Datasheet Updated
05 August 2021

RANGE

Product Form	Imperial Sizes	Metric Sizes
Round Bar	3/16" - 16"	6mm - 50mm

SPECIFICATIONS

Commercial	2011 T6
EN	2011 T6

High mechanical strength alloy that machines exceptionally well.

CHEMICAL COMPOSITION

BS EN 573-3 Alloy 2011

Element	% Present
Iron (Fe)	0.00 - 0.70
Copper (Cu)	5.00 - 6.00
Lead (Pb)	0.20 - 0.40
Bismuth (Bi)	0.20 - 0.60
Other (Each)	0.00 - 0.05
Others (Total)	0.00 - 0.15
Silicon (Si)	0.00 - 0.40
Zinc (Zn)	0.00 - 0.30
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy 2011 also corresponds to the following standard designations and specifications *but may not be a direct equivalent*:

- AlCu6BiPb
- FC1
- A92011
- CB60
- 3.1655
- AlCuBiPb

TEMPER TYPES

The most common tempers for 2011 aluminium extruded bar is:

- T6

SUPPLIED FORMS

- Bar
- Rod

APPLICATIONS

2011 is typically used in applications that require parts manufactured by repetition machining. These applications may include:

- Appliance parts & trim
- Automotive trim
- Fasteners and fittings
- Ordnance

CHARACTERISTICS

- Machining at high speeds produces fine chips that are easily removed. The excellent machining characteristics allow the production of complex and detailed parts. In some circumstances 2011 can replace free machining brass without the need for alterations to tooling.
- It has poor corrosion resistance, which means parts made from 2011 tend to be anodised to provide additional surface protection. When higher levels of corrosion resistance are required, 6262 T9 may be a suitable replacement.
- Alloy 2011 has extremely poor weldability and thus welding is not recommended. However, as it is used for machined parts there is rarely a need to weld this alloy.

MECHANICAL PROPERTIES

BS EN 755-2

Rod and Bar Up to 75mm Dia.

Property	Value
Elongation A50 mm	6 Min %
Tensile Strength	310 Min MPa
Proof Stress	230 Min MPa
Hardness Brinell	110 HB
Elongation A	8 Min %

BS EN 755-2

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Tensile Strength	310 Min MPa
Proof Stress	230 Min MPa
Hardness Brinell	110 HB
Elongation A	8 Min %

DISCLAIMER

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