

Aluminium Alloy

QQ-A-200/11 T73 Bar



SPECIFICATIONS

Commercial	7075
------------	------

A very high strength aerospace aluminium alloy with, depending upon temper, Yield Strength of 24-68 ksi (165 - 465 MPa) and Tensile Strength of 40-78 ksi (275 - 540 MPa).

This alloy is used where high strength is required and where good resistance to general corrosion is NOT important.

CHEMICAL COMPOSITION

SAE AMS QQ-A-200/11
Alloy QQ A 200/11

Element	% Present
Zinc (Zn)	5.1 - 6.1
Magnesium (Mg)	2.1 - 2.9
Copper (Cu)	1.2 - 2
Iron (Fe)	0.5 max
Silicon (Si)	0.4 max
Manganese (Mn)	0.3 max
Chromium (Cr)	0.18 - 0.28
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy QQ-A-200/11 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

AMS 4166, AMS 4168, AMS 4169

TEMPER TYPES

Alloy QQ-A-200/11 is supplied in a wide range of tempers:

- O - Soft
- T6 - Solution heat treated and artificially aged
- T62 - Solution heat treated then artificially aged by the user
- T6510 - Solution heat treated and stress-relieved by stretching then artificially aged with no straightening after aging
- T6511 - Solution heat treated and stress-relieved by stretching then artificially aged with minor straightening after aging
- T73 - Solution heat treated then specially artificially aged for resistance to stress corrosion
- T7310
- T7311
- T8511 - Solution heat treated, stress-relieved by stretching then artificially aged
- T7351 - Solution heat treatment then specially artificially aged for resistance to stress corrosion.
- T73511

SUPPLIED FORMS

Alloy QQ-A-200/11 T6511 is supplied in extruded bar

- Bar
- Extrusions

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.81 g/cm ³
Melting Point	635 °C
Thermal Expansion	23.5 x10 ⁻⁶ /K
Modulus of Elasticity	72 GPa
Thermal Conductivity	134-160 W/m.K
Electrical Resistivity	40 % IACS

'Typical' Physical Properties are given

MECHANICAL PROPERTIES

These Mechanical Properties are for Bar in the T73 temper

Diameter (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Up to & incl. 6.3	400	469	7
Over 6.3 up to & incl. 38	420	483	8
Over 38 up to & incl. 76.2	407	476	8
Over 76.2 up to & incl. 114	393	469	7

CONTACT

Address: Gould Alloys Ltd
Markham Lane
Markham Vale
Chesterfield
S44 5HS
United Kingdom
Tel: +44 (0) 1246 263300
Email: sales@gouldalloys.co.uk
Web: www.gouldalloys.co.uk

REVISION HISTORY

Datasheet Updated 14 January 2019

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.