

ALUMINIUM TUBE

TYPICAL APPLICATIONS

Aerospace Components
 Defence Components
 High Technology Applications

PRODUCT DESCRIPTION

A medium strength drawn seamless tube, solution heat-treated and artificially aged to achieve at the 'T6' condition. Also available in 'O'(annealed) and 'T4'(solution heat-treated only) conditions to accommodate various degrees of bending and forming.

General Engineering Equivalent - 6082T6
 General Engineering Euronorm - EN 573 / 754
 Old BS - HT30TF (BS1471)
 AECMA Euronorm - No Current Norm

STOCK RANGE

0.315" O/D X 0.040" Wall to 2" O/D X 20 SWG
(8mm O/D X 1mm Wall to 50.8mm X 0.914mm)

CUT TO SIZE SAWN BLANKS

Cut To Length +1.0mm - NIL

MACHINABILITY

Good.

CORROSION RESISTANCE

Resistance to Atmospheric Attack
 Good

SURFACE TREATMENT

Anodising
 Protective - Good
 Bright - Fair
 Hard - Good / Very Good
 Colour - Good

Plating
 Special pre-treatment necessary to achieve successful results

Vitreous Enamelling
 As Plating.

WELDABILITY

Brazing & Soldering - Good
 Oxygen - Fair
 Inert Gas - Very Good
 Resistance, Spot, Beam - Very Good

PRODUCTION TOLERANCES

Manufacturing limits are as stated in the Annex G of BS 4L100 – Tables 20 (C1 and G1, 2 & 3). For further assistance please contact our Sales Dept / Laboratory.

CHEMICAL COMPOSITION (WEIGHT %)

| | Al | Si | Fe | Cu | Mn | Mg | Cr | Ni | Zn | Ti | Pb | Sn |
|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|
| Min | REM | 0.7 | | | 0.4 | 0.5 | | | | | | |
| Max | REM | 1.3 | 0.5 | 0.1 | 1.0 | 1.2 | 0.25 | 0.1 | 0.2 | 0.2 | 0.05 | 0.05 |

MECHANICAL PROPERTIES (MINIMA)

| Size Range | Tensile Strength (MPa) | 0.2% Proof Stress (MPa) | Elongation on 5.65 √S ₀ (%) | Elongation on 50mm (%) |
|----------------|------------------------|-------------------------|--|------------------------|
| Up to 6mm Wall | 310 | 255 | - | 7 |
| 6 To 10mm Wall | 310 | 240 | - | 9 |

TECHNICAL SALES ASSISTANCE

Our resident team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.

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