L111

DATA SHEET

ALUMINIUM EXTRUSION

TYPICAL APPLICATIONS

Aerospace & Defence Components
High Technology Applications

PRODUCT DESCRIPTION

A medium strength extruded bar and profile solution heat-treated, artificially aged and usually stocked controlled stretched to achieve the 'T6511' condition. Scope of specification officially ends at 200mm. However, controlled stretched bar is made, conforming to full spec up to 10"(254mm) diameter dependant on shape. Controlled stretching is not always possible on profiles.

General Engineering Equivalent - 6082T6511
General Engineering Euronorm - EN 573 / 755
Old BS - HE30TF (BS1474) controlled stretched
AECMA Euronorm - BS EN 2326, 2636
BS Pr EN 4273, 4274

STOCK RANGE

Round Bar : 3/16" to 10" Diameter (4.75 to 254mm)

Flat & Squares : Various

CUT TO SIZE SAWN BLANKS

Cut to length in house to tolerances - Nil + 1.0mm

MACHINABILITY

Very 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 Section 5 of BS 4L100 – Tables 5 (C1, 2, 3, 4, 5, 6, 7 & 8). 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 (mm)		Tensile Strength (MPa)	0.2% Proof Stress (MPa)	Elongation on $5.65\sqrt{S_0}$ (%)	Elongation on 50mm (%)
Over	Up To & Including				
-	20	295	255	8	7
20	150	310	270	8	-
150	200	280	240	5	-

NB: Figures shown above are for 'T6' condition.

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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