

ALUMINIUM EXTRUSION, ROD, BAR, SHAPES, TUBE, WIRE

TYPICAL APPLICATIONS

Aerospace Components
 Defence Components
 High Technology Applications

PRODUCT DESCRIPTION

A high strength 3.8 to 4.9% Copper alloy in extruded bar and profile form. Solution heat-treated and controlled stretched to achieve the T3511 condition, produced to the American Standard.

General Engineering Euronorm - EN 573 / 755
 AECMA Euronorm - BS EN 2318, 2633
 BS Pr EN 2321, 2638

STOCK RANGE

- Round Bar** : 1/2" to 9" Diameter (12.7 to 228.6mm)
- Flat & Squares** : 1 1/4" Square to 8" X 4" (31.75mm Square to 203.2 X 101.6mm)

CUT TO SIZE SAWN BLANKS

Cut to Length + 1.0mm - NIL

MACHINABILITY

Very Good

CORROSION RESISTANCE

Resistance to Atmospheric Attack
 Poor

SURFACE TREATMENT

- Anodising
 - Protective - Fair
 - Bright - Variable
 - Hard - Good
 - Colour - Fair (Dark Colours Only)
- Plating
 - Very Good
- Vitreous Enamelling
 - Unsuitable

WELDABILITY

- Brazing & Soldering - Not Recommended
- Oxygen - Not Recommended
- Inert Gas - Not Recommended
- Resistance, Spot, Beam - Excellent

PRODUCTION TOLERANCES

Manufacturing limits are as stated in the Tables 11.2 to 11.14 of U.S. Aluminium Standards & Data. For further assistance please contact our Sales Dept / Laboratory.

CHEMICAL COMPOSITION (WEIGHT %)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others
Min	REM			3.8	0.3	1.2				0.05 Each Max
Max	REM	0.5	0.5	4.9	0.9	1.8	0.1	0.25	0.15	0.15 Total

MECHANICAL PROPERTIES (MINIMA)

Size Range (in)	Tensile Strength (ksi)	0.2% Proof Stress (ksi)	Elongation on 5.65 √ S ₀ (%)	Elongation on 50mm (%)
Up to 0.249	57	42	-	12
0.250 - 0.749	60	44	-	12
0.750 - 1.499	65	46	-	10
1.500 and over Up to 25 sq. in	70	52	-	10
1.500 and over Up to 32 sq. in	68	48	-	8

TECHNICAL SALES ASSISTANCE

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