

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

### TYPICAL APPLICATIONS

Aerospace Components  
 Defence Components  
 High Technology Applications

### PRODUCT DESCRIPTION

A medium strength alloy, made to the American Standard. Solution treated, artificially aged and controlled stretched to achieve the T6511 condition, in extruded bar and profile form.

General Engineering Old B.S. - HE20TF (BS1474)  
 General Engineering Euronorm - EN 573 / 755  
 AECMA Euronorm - BS EN 2702

### STOCK RANGE

**Round Bar** : 1/4" to 11" Diameter  
 (6.35 to 279.4mm)

**Flat & Squares** : 1/4" Square to 10" X 8"  
 (6.35mm Square to  
 254 X 203.2mm)

### CUT TO SIZE SAWN BLANKS

Cut to Length + 1.0mm - NIL

### MACHINABILITY

Very Good

### CHEMICAL COMPOSITION (WEIGHT %)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others
Min	REM	0.40		0.15		0.80	0.04			0.05 Each (Max)
Max	REM	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	0.15 Total

### MECHANICAL PROPERTIES (MINIMA)

Size Range	Tensile Strength (ksi)	0.2% Proof Stress (ksi)	Elongation on 5.65 √S <sub>0</sub> (%)	Elongation on 50mm (%)
6.35mm and over	38	35		10

### TECHNICAL SALES ASSISTANCE

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

### CORROSION RESISTANCE

Resistance to Atmospheric Attack  
 Good

### SURFACE TREATMENT

Anodising

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

Plating  
 A special pre-treatment is required for 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 Tables 11.2 to 11.14 of U.S. Aluminium Standards & Data. For further assistance please contact our Sales Dept / Laboratory.

### Smiths High Performance

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