

#### 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

#### Production Tolerances

Manufacturing limits are as stated in AMS QQA 200. For further assistance please contact our Sales Dept / Laboratory.

#### Machinability

Very Good

#### 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

#### Corrosion Resistance

Resistance to Atmospheric Attack - Poor

#### Cut Size to Sawn Blanks

Cut to length + 1.0mm - NIL

#### Chemical Composition (weight %)

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

#### Mechanical Properties (minima, T3511 condition)

Size Range (in)	Tensile Strength (ksi)	0.2% Proof Stress (ksi)	Elongation on 5.65√S <sup>0</sup> (%)	Elongation on 4D (%)
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	70	52	-	10
up to 25 sq. in				
1.500 and over	68	48	-	8
up to 32 sq. in				

#### Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
 Smiths Biggleswade **01767 604 704**  
 Smiths Birmingham **0121 728 4940**  
 Smiths Bristol **0117 971 2800**  
 Smiths Chelmsford **01245 466 664**  
 Smiths Gateshead **0191 469 5428**  
 Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**  
 Smiths Manchester **0161 794 8650**  
 Smiths Norwich **01603 789 878**  
 Smiths Nottingham **0115 925 4801**  
 Smiths Redruth **01209 315 512**  
 Smiths Verwood **01202 824 347**  
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#### Quality & Testing:



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