

Aluminium Extrusion

Typical Applications

- Aerospace 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
BS/EN Euronorm	- EN 573 / 755
Old BS	- HE30TF (BS1474)
	controlled stretched
AECMA Euronorm	- BS EN 2326, 2636
	- BS Pr EN 4273, 4274

Cut Size to Sawn Blanks

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

Corrosion Resistance

Resistance to Atmospheric Attack - Good

Surface Treatment

Anodising

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

Plating & Vitreous Enamelling

Special pre-treatment necessary to achieve successful

Machinability

Very Good.

Weldability

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

Production Tolerances

Manufacturing limits are as stated in U.S. 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√S ⁰ (%)	Elongation on 50mm (%)
- to 20	295	255	8	7
20 to 150	310	270	8	-
150 to 200	280	240	5	-

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

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
Main Office	0845 527 3331

Quality & Testing:



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