

#### Typical Applications

- Aerospace & Defence Components
- High Technology Applications

#### Product Description

A strong aluminium alloy containing nominally 2% copper and 1.5% magnesium. Produced as bar, plate and tube. Also available as clad sheet and strip. Solution treated and artificially aged to achieve the T6 condition or with the addition of controlled stretching to achieve the T6511 temper. 2618A can be employed to a maximum of 300°C and retains mechanical strength relatively well to around 200°C and above. The alloy has a density of 2.75 g/cc.

Aerospace Equivalent (bar) - DTD 5014A  
 General Engineering Euronorm - EN 573 EN AW-2618A (composition) (AlCu2Mg1.5Ni)  
 Old BS (pre-1980) Specification - H16

#### Product Tolerances

Manufacturing limits are as stated in Table 7.7b to 7.18 in BS L100. For further assistance please contact our Sales Dept / Laboratory.

#### Surface Treatment

**Anodising** Protective - Fair  
 Bright - Unsuitable  
 Hard - Fair  
 Colour - Fair

**Plating** Very Good  
**Vitreous Enamelling** Unsuitable

#### Weldability

**Brazing & Soldering** - Not Recommended  
**Oxygen** - Not Recommended  
**Inert Gas** - Not Recommended

#### Corrosion Resistance

Resistance to Atmospheric Attack - Fair.

#### Machinability

Good

#### Cut Size to Sawn Blanks

Cut to length in house to tolerances - Nil + 1.6mm

#### Chemical Composition (weight % for DTD 5014A)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti+Zr	Pb+Sn	Ti
Min.	Rem		0.9	1.8		1.2		0.8				
Max.	Rem	0.25	1.4	2.7	0.2	1.8	-	1.4	0.1	0.2	0.05	0.2

#### Mechanical Properties (Minima for T6 Condition Bar/Sections - DTD5014A)

Thickness >, mm	Thickness =/<, mm	0.2% PS, MPa	UTS, MPa	Elong, % on 50 mm
-	10	320	400	5
10	100	340	420	7

#### 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 Leeds	0113 307 5167
Smiths Biggleswade	01767 604 704	Smiths Manchester	0161 794 8650
Smiths Birmingham	0121 728 4940	Smiths Norwich	01603 789 878
Smiths Bristol	0117 971 2800	Smiths Nottingham	0115 925 4801
Smiths Chelmsford	01245 466 664	Smiths Redruth	01209 315 512
Smiths Gateshead	0191 469 5428	Smiths Verwood	01202 824 347
Smiths Horsham	01403 261 981	Main Office	0845 527 3331

#### Quality & Testing:



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