

# 6026 Aluminium

## Technical Datasheet



Service. Quality. Value.

### Commercial Aluminium Alloy

#### Applications

- Electrical & electronic parts
- Machined parts
- Automotive components
- Hot forging
- Hard anodising
- Braking systems

#### Product Description

Recently developed to meet European Environmental Protection Directives, 6026 aluminium alloy offers excellent corrosion resistance and is suitable for anodising to provide both decorative and hard anodised finishes. The alloy does not contain Tin (Sn) as inclusion of this element can cause cracking in machine parts when subjected to stress and high temperature. 6026 is highly suitable for extensive machining especially in use with high speed automatic lathes.

EU Environmental Protection Directive - complies with:  
2000/53/CE-ELV – For the automotive sector  
2002/95/CE-RoHS – For the electrical and electronics

#### Key features:

- Excellent corrosion resistance
- Suitable for anodising
- Meets European Environmental Protection Directives
- Does not include Tin (Sn) which can cause cracking in machined parts

#### Related Material Specifications

- A95754
- Al Mg3
- Al 3.1Mg Mn Cr
- AW-5754

#### Machinability

6026 can be used in place of alloys 6082 or 6081, especially where the finished parts require extensive machining on high speed automatic lathes and machining centres.

#### Availability

Bar

#### Chemical Composition (weight %)

	Bi	Si	Mg	Mn	Cu	Fe	Pb	Zn	Cr	Ti	Sn	Al	Other
min.	0.50	0.60	0.60	0.20	0.20							Bal	0.05
max.	1.50	1.40	1.20	1.00	0.50	0.70	0.40	0.30	0.30	0.20	0.05	Bal	0.15

#### Mechanical Properties

Tensile Strength	360 MPa min
Elongation A50 mm	4%
Proof Stress	330 MPa min
Brinell Hardness	95 HB min

#### Physical Properties

Density	2.72 g/cm <sup>3</sup>
Thermal Expansion	23.4 x10 <sup>-6</sup> /K
Modulus of Elasticity	69 GPa
Thermal Conductivity	138 W/m.K

### 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:



www.smithmetal.com info@smithmetal.com

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