

Typical Applications

- Aerospace Components
- Defence Components
- High Technology Applications

Product Description

A medium strength rolled plate, solution heat-treated, artificially aged and stress relieved arriving at the 'T651' condition. Officially, the scope of the specification covers only thicknesses between 6 and 25mm. Of these, only 12 to 25mm thick are ultrasonically tested. However, ultrasonically tested metal up to at least 127mm thick is commonly made to chemical composition only, although mechanical properties are usually achieved as well.

General Engineering Equivalent - 6082T651
 BS EN Euronorm - EN 573 / 754
 Old BS - HP30TF (BS1470)
 Controlled Stretched
 AECMA Euronorm - BE EN 4202

Production Tolerances

For further assistance please contact our Sales Dept / Laboratory.

Surface Treatment

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

Plating & Vitreous Enamelling
 Special pre-treatment necessary to achieve successful results

Weldability

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

Machinability

Very Good

Corrosion Resistance

Resistance to Atmospheric Attack - Good

Cut Size to Size Sawn Blanks

Cut To Length and Width + / - 1.6mm

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 (%)
Up to 25mm	295	240	8	8

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:



www.smithmetal.com info@smithmetal.com