2014A Aluminium Plate

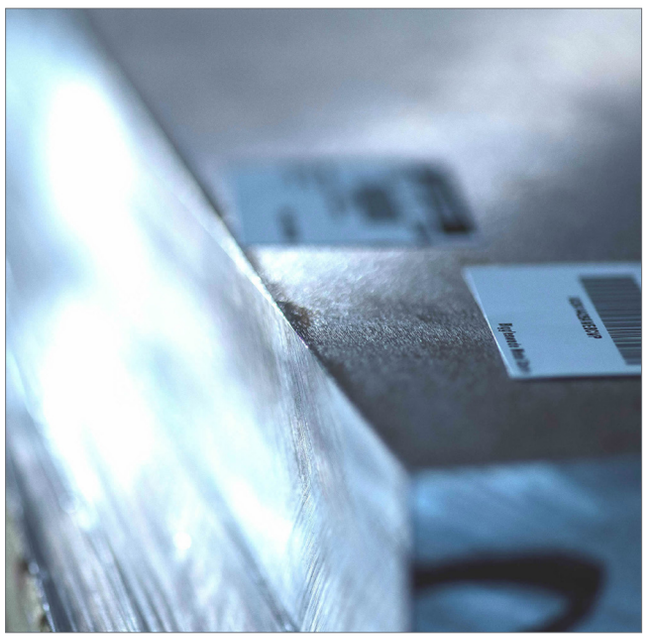
Smiths Advanced Metals

High Strength Aluminium Plate

2014A is a high strength aluminium plate product containing 3.9 to 5 % copper.

The material offers attractive mechanical properties with good machinability. Cold formability can be limited when used fully heated treated as can weldability.

Natural corrosion resistance is poor and, therefore, a protective coating is often required. BS L93 aluminium alloy is the most popular specification from this grade. We offer stock availability of 2014A aluminium plates in a wide range of sizes and tempers (including T6, T651 or T652 tempers).



Grades / Specifications

- **BS EN 573, BS EN 485**
- **BS L100**
- **BS L93**

Cut to bespoke shape service:

We offer a complete plate cutting service using a range of equipment including vertical and CNC saws. We process plates to tight dimensional tolerances to match our clients' needs which may also eliminates a requirement for additional cutting.

Technical sales support:

To find out more about the 2014A aluminium plate and for other technical advice, contact Smiths Advanced Metals today. Our team of qualified metallurgists and engineers will be pleased to assist you.

Key Applications

- **High-technology applications**
- **Defence components**
- **Aerospace components**

Benefits

- **High mechanical strength**
- **Excellent machinability**
- **Excellent fatigue resistance**

Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Zr+Ti	Each	Other	Al
min.	0.50		3.90	0.40	0.20								Rem
max.	0.90	0.50	5.00	1.20	0.80	0.10	0.10	0.25	0.15	0.20	0.05	0.15	

Mechanical Properties (minimum values unless stated)

Temper	MPa R_m	MPa $R_{p0,2}$	Elongation A50 mm (%)	Hardness HBW Typical
*T6	460	410	8	150
*T651	460	410	8	150

* Values based on thickness range from 6mm to 12.5mm

Properties as be BS EN 485-2

Physical Properties

Temper	T6
Density (g/cm^3)	2.80
Melting Range (°C)	505-640
Electrical Conductivity (20°C, % IACS)	40
Thermal Conductivity (% IACS)	39.8
Modulus of Elasticity (x10^3, N/mm^2)	73

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