

High Strength Heavy Plates

Typical Applications

- Industrial tools
- Heating plates
- Mechanical guides
- Tooling supports
- Injection blow-moulds
- Jigs

Product Description

Certal which is based on the 7xxx series alloys, is an aluminium tooling plate product which offers a combination of excellent machinability, shape stability and high strength. This makes this alloy an ideal choice in the production of industrial tooling including injection blow moulds which are used to create plastic bottles and containers. Certal can also be used in the production of heating plates, mechanical guides, tooling supports, jigs and fixtures. The alloy is available in the T651 temper.

Key features

- Excellent machinability
- Excellent shape stability
- High tensile strength
- ideal for industrial tooling
- Supplied in T651 temper

Availability

Plate

Machinability

Excellent

Weldability

Resistance welding is good. TIG/MIG welding is possible.

Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti+Zr	
min			0.50	0.10	2.60	0.10	4.30		
max	0.50	0.50	1.00	0.40	3.70	0.30	5.20	0.20	

Mechanical Properties

Thickness Range	Rp.0.2 [MPa]	Rm [MPa]	Elongation [%]
12.5 - 25 mm	460	540	8
25 - 50 mm	460	530	7
50 - 100 mm	420	500	6
100 - 140 mm	400	490	6

* minimum values T651 Temper

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