

### **Technical Datasheet**



## **High Strength Precision Plate**

Service. Quality. Value.

# **Typical Applications**

- Transport tables
- Reference plates

# **Product Description**

Unidal, which is based on the 7xxx series aluminium alloys, is a high strength precision plate product which is milled on both sides and offers a unique combination of high mechanical strength with outstanding dimensional stability. The need for further operations such as reworking, rough-milling and finishing are reduced dramatically due to the materials very low internal stress which drastically reduces the possibility of deformation within the plates. Unidal is available in the T651 temper.

# Weldability

Resistance welding is excellent. WIG/MIG welding is excellent.

## **Key features**

- High mechanical strength
- Outstanding dimensional stability
- Low internal stress
- Cost savings through reduction in machining times
- Good machinability

### **Availability**

Plate

### Machinability

Good. To ensure a clean surface, Unidal should be machined at high cutting speeds using sintered carbide cutting tools.

Chemical C	Compos	sition (	weight	: %)					
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti+Zr	
min				0.15	1.50		3.50	0.10	
max	0.35	0.45	0.20	0.50	2.50	0.20	4.50	0.40	

Mechanical Properties				
Thickness Range	Rp.0.2 [MPa]	Rm [MPa]	Elongation [%]	
8 - 30 mm	350	410	8	
30 - 50 mm	340	400	8	
50 - 80 mm	330	390	8	

<sup>\*</sup> 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:**

02895 908 897 Smiths Belfast Smiths Leeds Smiths Biggleswade 01767 604 704 Smiths Manchester 0161 794 8650 Smiths Birmingham **0121 728 4940** Smiths Norwich 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 Main Office Smiths Horsham 01403 261 981

#### Quality & Testing:





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