# C250 Aluminium Tooling Plate

Product Datasheet



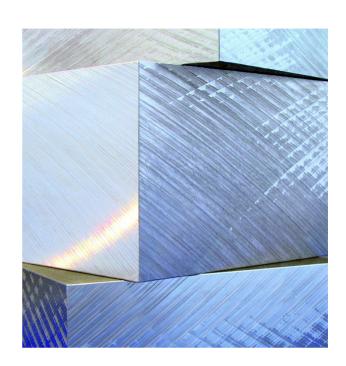
Cast Aluminium Tooling Plate

Service. Quality. Value.

## Precision Milled Plate

Manufactured from 5083 aluminium alloy, C250 is a cast aluminium tooling plate product with a fine grain, homogenised structure.

The material offers excellent dimensional stability combined with high mechanical strength. C250 tooling plate is stress relieved while still able to retain 85% - 90% of its core strength when compared to rolled plate products. With excellent flatness, C250 provides enhanced corrosion resistance and retains excellent dimensional tolerances and flatness after machining. The plate product has excellent machining, welding and anodising capabilities, and both sides of the plate are foiled. This precision milled plate also benefits from extremely low residual stress. It is precision milled to a roughness Ra of 0.4 microns.



# **Key Features**

- Excellent dimensional tolerances
- High strength
- Excellent flatness
- Superior corrosion resistance
- Extremely low residual stress

- Excellent weldability
- Excellent machining and anodising capabilities
- Homogenised and stress relieved
- Two surfaces, precision milled

### Chemical Composition (weight %)

Weight	(%) Al	Mn	Fe	Cu	Mg	Si	Zn	Cr	Ti	Other (ea)	Other (total)
Min Max	Bal Bal	0.40 1.00	0.40	0.10	4.00 4.90	0.40	0.10	0.05 0.25	0.25	0.05	0.15

# Mechanical Properties (typical)

Tensile Strength	Proof Stress	Elongation A	Hardness (Brinell)	
230 - 260 Mpa	110-130Mpa	10 - 15%	68 - 73 HB	

#### UK Service Centres:

#### Quality & Testing:

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





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