

#### Typical Applications

- Tooling Aerospace Industry
- CNC-Components
- Mould and Gauge Making
- Tool Technology
- Food Technology
- Security and Medical Technology
- General and Precision Engineering

#### Product Description

ACP 5080R aluminium tooling plate is an outstanding material which benefits from added qualities whilst offering costs savings due to the materials' excellent machinability. ACP 5080R is a low porosity alloy with fine grain structure and has outstanding dimensional stability combined with good mechanical and physical properties.

#### Key features

- Low porosity
- Fine grain structure
- Excellent machining characteristics
- Dimensional stability
- Good mechanical & physical properties
- Cost saving material

#### Availability

Tooling Plate

#### Corrosion resistance

Very good

#### Weldability

Good

#### Mechanical Properties

Tensile Strength Rm	240 - 290 MPa (N/mm <sup>2</sup> )
0.2 % Yield Strength Rp 0.2	110 - 130 MPa (N/mm <sup>2</sup> )
Elongation A 5 %	15
Brinell Hardness HB	70

#### Physical Properties

Density	2.66 g/cm <sup>3</sup>
Thermal Conductivity	110 - 140 W/(mK)
Electrical Conductivity	16 - 19 MS/m (m/Ω mm <sup>2</sup> )
Modulus of Elasticity	~70,000 N/mm <sup>2</sup>
Coefficient of Thermal Expansion	24.2 x10 <sup>-6</sup> /K

#### 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:



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