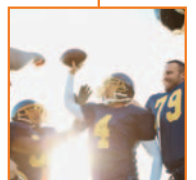


ACP 5080

High precision aluminum cast plate, ACP 5080, is precision surface machined on both sides to industry leading close tolerance standards. Fine grain structure, low porosity and excellent machining characteristics all define the cost saving and value added attributes of ACP 5080. Superb industry leading material dimensional stability is inherent in every plate of ACP 5080, thanks to proprietary process- and manufacturing control, our flatness and tolerances are industry leading, predicable and precise.

„Heating plates made from ACP 5080 are used in machines for flock coating jerseys.“



ACP 5080

Chemical Composition

EN AW-5083 (AlMg4.5Mn0.7), acc. to DIN EN 573-3 / 3.3547

Material Properties

Machinability	very good (HSC/HPS excellent)
Weldability (TIG, MIG)	good (with S Al 5183)
Anodising Properties	good, not decorative
Polishing	very good
Corrosion Resistance	very good
Eroding Properties	good

Typical Mechanical Properties

Tensile Strength R_m	240-290 MPa (N/mm ²)
0.2 % Yield Strength $R_p 0.2$	110-130 MPa (N/mm ²)
Elongation A 5 %	15
Brinell Hardness HB	70

Typical Physical Properties

Density	96* 10 ⁻³ lb/in ³
Thermal Conductivity	63 - 81 Btu/(ft* h°F)
Electrical Conductivity	~35% IACS
Modulus of Elasticity	10.3* 10 ³ ksi
Coefficient of Thermal Expansion	13.5* 10 ⁻⁶ /°F

Thickness Range & Sizes

Plates and pre-cut sizes between 0.1969" and 3.94" are available in the following dimensions:

Thickness	max. Width*	Length*
≥ 0.1969" x	51.97"	x 118.90" (up to 236.22")
≥ 0.1969" x	59.84"	x 118.90" (up to 236.22")
≥ 0.3937" x	61.81"	x 144.49" (up to 236.22")
≥ 0.5906" x	85.04"	x 157.48" (up to 236.22")

(Blanks, rings and pre-cut sizes on request.)

> 85.04" Width: Please see the product information for ACP 5080 GIANT / ACP 5080R GIANT

Tolerances

Surface Finish R_a	≤ 0.3 μm
Tolerance in Thickness	+/- 0.0039"
Flatness	0.2362"-0.4724" thickness ≤ 0.0157" ** > 0.4724"-3.94" thickness ≤ 0.0051" **
Tolerance in Width for Plates	0/+0.3937"
Tolerance in Length for Plates	0/+0.5906"
Tolerance (L/W) for Sized Cuts	DIN ISO 2768-m (closer on request)

* Further dimensions on request. Subject to technical change.

** Linear measured section 39.37"