



## ACP 5080MF

The main characteristic of the high precision aluminium cast plate ACP 5080MF is its mirror finished surface (max.  $R_a$  0.15  $\mu\text{m}$ ) on one side. The other side is precision surface machined. ACP 5080MF extends the major advantages of the ACP products such as fine grain structure, extremely low porosity, low-stress, dimensional stability and excellent mechanical and physical properties with an optically perfect mirror surface finish, which is covered by a protective foil.



„Even with heavy equipment, ACP 5080MF ensures troublefree contact in rotary motion.“

# ACP 5080MF

## Chemical Composition

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

## Material Properties

Machinability	very good
Dimensional Stability	very good

## Typical Mechanical Properties

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

## Typical Physical Properties

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

## Thickness Range & Sizes

Pre-cut sizes from 0.3937" thickness available according to specification. (Protective foil on one side.)

## Tolerances

Surface	excellent optical
Surface finish A-side $R_a$	max. 0.15 $\mu$ m
Surface finish B-side $R_a$	$\leq$ 0.30 $\mu$ m

This unique product won the European Aluminium Award.  
See more here: <http://awardvideo.alimex.de>