

# ACP 7 / ACP 7R

*Excellent machining properties  
with high demands on mechanical  
properties and material stability.*

The precision surface machined plate ACP 7 or ACP 7R, the latter with a sawn surface, is particularly suitable for applications with high demands on mechanical properties in combination with excellent machining properties. As the world's leading manufacturer of aluminium cast plates, with ACP 7 we have succeeded in achieving outstanding cast plate quality in the EN AW 7000 alloy range.

# ACP 7 / ACP 7R

EXCELLENT MACHINING PROPERTIES WITH HIGH DEMANDS ON MECHANICAL PROPERTIES AND MATERIAL STABILITY.

Manufactured in accordance with the technical specifications of DIN SPEC 91529.

## Chemical Composition

EN AW-7021 (Al Zn5.5Mg1.5), acc. to DIN EN 573-3

## Material condition

T79 in accordance with DIN EN 515

## Material Properties

Machinability	very good (HSC/HPC)
Dimensional Stability	very good
Polishing	very good
Weldability (WIG, MIG)	good
Anodising Properties	acceptable
Corrosion Resistance	acceptable

## Typical Mechanical Properties

Tensile Strength $R_m$	Min. 330 MPa (N/mm <sup>2</sup> )
0.2 % Yield Strength $R_p 0.2$	Min. 300 MPa (N/mm <sup>2</sup> )
Elongation A	1 - 2 %
Brinell Hardness	125 (+10/-5) HB

## Typical Physical Properties

Density	2.78 g/cm <sup>3</sup>
Thermal Conductivity	150 W/(mK)
Electrical Conductivity	19 - 23 MS/m (m/Ω mm <sup>2</sup> )
Modulus of Elasticity	~72,000 N/mm <sup>2</sup>
Coefficient of Thermal Expansion	23.7* 10 <sup>-6</sup> /K <sup>1</sup>

## ACP 7

### Standard Sizes

Thickness	10 - 200 mm
Width	1520 mm
Length	3020 mm

### Tolerances

Surface Finish $R_a$	≤ 0.4 μm
Tolerance in Thickness	+/- 0.1 mm
Flatness	10 - 12 mm thickness: on request > 12 - 200 mm thickness: ≤ 0.13 mm (Linear measured section 1 m)
Tolerance in Width for Plates	0/+10 mm
Tolerance in Length for Plates	0/+15 mm
Tolerance (L/W) for cut pieces	DIN ISO 2768-m (Linear measured section 1 m)

Other tolerances on request.

## ACP 7R

### Standard Sizes

Thickness	15 - 500 mm
Width	1520 - 2020 mm
Length	3020 - 4020 mm
Standard Plate Formats:	≥ 15 - 400 mm x 1520 mm x 3020 mm ≥ 50 - 500 mm x 2020 mm x 4020 mm

Wider or longer material may be available upon request.

### Tolerances

Surface	sawn on all sides
Tolerance in Thickness	0/+3 mm
Tolerance in Width for Plates	0/+10 mm
Tolerance in Length for Plates	0/+15 mm
Tolerance (L/W) for cut pieces	0/+3 mm (Linear measured section 1 m)

Other tolerances on request.

### alimex GmbH Precision in Aluminium

Karl-Arnold-Straße 14 - 16 | 47877 Willich | Germany  
Phone: +49 (0) 2154 9177 0  
Email: [contact@alimex.de](mailto:contact@alimex.de) | [www.alimex.de](http://www.alimex.de)

### alimex Benelux B.V.

Patersstraat 19b | 5801 AT Venray | Netherlands  
Phone: +31 (0) 478 550288  
Email: [info@alimex.nl](mailto:info@alimex.nl) | [www.alimex.de](http://www.alimex.de)

### alimex ACP Asia Sdn Bhd

Block 1 no. 7, Jalan SiLC 1/4, Kawasan Perindustrian SiLC  
Iskandar Puteri 79200, Johor Malaysia  
Phone: +60 (7) 553 9827  
Email: [info@alimex.com.my](mailto:info@alimex.com.my) | [www.alimex.com.my](http://www.alimex.com.my)

### alimex Precision in Aluminum, Inc. (alimex Americas)

195 Shop Grove Drive - Unit A, Columbia, SC 29209 USA  
Phone: +1 (803) 339-0757  
Email: [sales@alimexamericas.com](mailto:sales@alimexamericas.com) | [www.alimexamericas.com](http://www.alimexamericas.com)