

ACP 7 / ACP 7R

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

Chemical Composition

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

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	330 - 360 MPa (N/mm ²)
0.2 % Yield Strength $R_p 0.2$	300 - 340 MPa (N/mm ²)
Elongation A	1-2 %
Brinell Hardness	121 HB

Typical Physical Properties

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

alimex GmbH Precision in Aluminium

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

alimex Benelux B.V.

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

ACP 7 Standard Sizes

Thickness	10 - 200 mm
Width	1520 mm
Length	3020 mm

ACP 7 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.

ACP 7R 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 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 | 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 | www.alimexamericas.com

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.