



SERIES 7000

# AW 7021 CAST (Al Zn5,5Mg1,5)

Aluminium obtained by CAST process, with high mechanical resistance, designed for the manufacturing of tools, moulds and other applications where a good dimensional stability is required



## CHEMICAL COMPOSITION (% WEIGHT) (EN 573 - 3)

ELEMENTS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Zr	Al
Minimum	-	-	-	-	1.2	-	5	-	0.08	-
Maximum	0.25	0.4	0.25	0.1	1.8	0.05	6	0.1	0.18	Rest

## MECHANICAL PROPERTIES

Rm (MPa)	Rp0.2 (MPa)	A (%)	A50 (%)	HB - HARDNESS BRINELL
310-360	280-340	2	8	120 - 130

Information transcribed from the supplier datasheet.

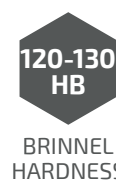
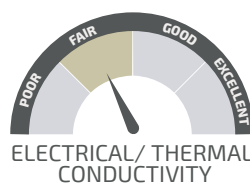


### MAIN CHARACTERISTICS

- High resistance aluminium plates
- Very good dimensional stability
- Low internal stress
- Good weldability
- Good resistance to corrosion

### APPLICATIONS

- Manufacturing of tools, moulds and models
- Injection moulds
- Construction of machinery and equipment
- Base plates, table tops and mounting plates



All figures given are indicative only. Polyanema Lda, is not liable for the use of the materials without consulting with our technical department.

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# PHYSICAL PROPERTIES

Density	2.78 g/cm <sup>3</sup>
Moldulus of Elasticity	70 000 MPa
Linear Expansion Coefficient	23 x 10 <sup>-6</sup>
Thermal Conductivity	125 - 155 W/mK
Electrical Conductivity	21 - 24 m/Ω mm <sup>2</sup>



## DELIVERY PROGRAM ON REQUEST

MACHINABILITY	
Homogenized	Excellent
Dimensional Stability	Excellent
Erosion	Excellent
SURFACE TREATMENT	
Protective Anodizing	Fair/Good
Special Anodizing Quality	-
Decorative Anodizing	Unsuitable
Painting / Coating	Fair/Good
Polishing	Good/Excellent
RESISTANCE TO CORROSION	
Normal Atmosphere	Fair
Maritime Atmosphere	Poor/Unsuitable

(COLD) FORMING	
Folding	Unsuitable
Rotary Movement	Unsuitable
Deep Stamping	Unsuitable
Bulging	Unsuitable
Cold extrusion	Unsuitable
WELDABILITY	
Gas	Unsuitable
Wig	Good/Excellent
Mig	Good/Excellent
Resistance Fusion Welding	Unsuitable

- Standard: generally available from stock
- ◐ Semi-standard: generally not available from stock
- Non-standard: generally not available from stock, manufactured to order and subject to special conditions.