

# SERIES 7000 • **AW 7021** (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*	Rp0.2*	A	A50	HB - BRINELL
(MPa)	(MPa)	(%)	(%)	DUREZA
410	350	10	8	≈120

<sup>\*</sup>Minimum values.

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













MACHINABILITY WELDABILITY ELECTRICAL/THERMAL BRINELL
CONDUCTIVITY HARDNESS

## **PHYSICAL PROPERTIES**

DENSITY	2.80 g/cm <sup>3</sup>
MODULUS OF ELASTICITY	70 000 MPa
LINEAR EXPANSION COEFFICIENT	23 x 10 <sup>-6</sup>
THERMAL CONDUCTIVITY	125 - 155 W/mK
ELECTRICAL CONDUCTIVITY	20 - 24 m/Ω mm²

# **DELIVERY PROGRAM**

#### **PLATES**

THICKNESSES	DIMENSIONS	STOCK	
(mm)	(mm)	T79	
10 - 500	3020 x 2020 mm	•	

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	EXCELLENT				

EXCELLENT

(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				

MARITIME ATMOSPHERE



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.