

SERIES 7000 **●**

AW 7021 RECTIFIED (Al Zn5,5Mg1,5)

This aluminium is produced from AW 7021 "Cast" obtained by casting process. It fills a gap between medium and high resistance alloys, the latter being in many cases undervalued. It is characterized by a very low microporous homogeneous structure, excellent machinability and high resistance.

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

THICKNESSES	Rm	Rp0.2	A5	A	HB - BRINELL
(fromto)	(MPa)	(MPa)	(%)	(%)	HARDNESS
5 - 450 mm	330 - 380	250 - 300	3	10	

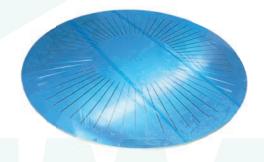
Information transcribed from the supplier datasheet.





MAIN CHARACTERISTICS

- Guaranteed thickness tolerance, ± 0.1 mm
- High resistance aluminium plates
- Surface machined and coated with PVC film
- Very good dimensional stability
- Low internal stress
- Good weldability
- Good resistance to corrosion



APPLICATIONS

- Manufacturing of tools
- Construction of machinery and equipment
- Base plates, table tops and mounting plates
- All applications where the faces are not to be rectified and better performance is required compared to 5083 alloy.













CONDUCTIVITY **HARDNESS**

PHYSICAL PROPERTIES

DENSITY	2.80 g/cm³
MODULUS OF ELASTICITY	70 000 MPa
LINEAR EXPANSION COEFFICIENT	23 x 10 ⁻⁶
THERMAL CONDUCTIVITY	125 - 155 W/mK
ELECTRICAL CONDUCTIVITY	$20 - 24 \text{ m/}\Omega \text{ mm}^2$

DELIVERY PROGRAM

PLATES

THICKNESS (mm)	DIMENSIONS (mm)	PLATE WEIGHT(kg)	STOCK
10	1520 x 3020	128.53	•
12	1520 x 3020	154.30	•
15	1520 x 3020	192.80	•
20	1520 x 3020	257.10	•
25	1520 x 3020	321.40	•
30	1520 x 3020	385.60	•
35	1520 x 3020	449.90	•
40	1520 x 3020	514.95	•
50	1520 x 3020	642.70	•

 $\label{eq:continuous} \mbox{Average weights of production}.$ Other dimensions on request.

TOLERANCES:

- -Thickness < 15: Thickness tolerance \pm 0.1 mm / Flatness 0.4 mm / Length 0/+20 and Width 0/+10 -Thickness > 15: Thickness tolerance \pm 0.1 mm / Flatness 0.25 mm / Length 0/+20 and Width 0/+10

POOR/UNSUITABLE

MACHINABILITY				
THERMICALLY TREATED	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			

(COLD) FORMING				
FOLDING	UNSUITABLE			
ROTARY MOVEMENT	UNSUITABLE			
DEEP STAMPING	UNSUITABLE			
BULGING	UNSUITABLE			
COLD EXTRUSION	UNSUITABLE			
WELDABILITY				
WELDABILITY				
WELDABILITY GAS	UNSUITABLE			
	UNSUITABLE GOOD/EXCELLENT			
GAS				
GAS WIG	GOOD/EXCELLENT			

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.