



SERIES 2000 ●

# AW 2030 (AL Cu4PbMg)

Among the aluminium alloys suitable for high-speed automatic lathes, alloy 2030 has the highest mechanical characteristics. This alloy is often selected when it is necessary to have a good combination of machinability and high mechanical properties. However, it has low resistance to corrosion.

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

ELEMENTS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Minimum	-	-	3.3	0.2	0.5	-	-	-	-
Maximum	0.8	0.7	4.5	1	1.3	0.1	0.5	0.2	Rest

## MECHANICAL PROPERTIES (EN 755 - 2)

EXTRUDED

DIAMETER (mm)	TEMPER	Rm* (MPa)	Rp0.2* (MPa)	A* (%)	HB - BRINELL HARDNESST
≤ 80	T4	370	250	8	115
80 - ≤ 200	T4510 T4511	340	220	8	115
200 - ≤ 250		330	210	7	115

\*Minimum values

POLY

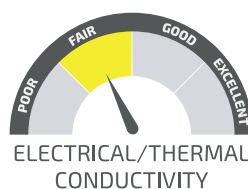


### MAIN CHARACTERISTICS

- Combination of good machining and high mechanical properties
- Low resistance to corrosion

### APPLICATIONS

- Screws
- Threads
- Threaded rods

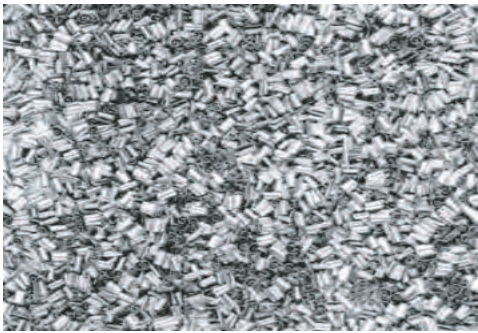




## SERIES 2000

# PHYSICAL PROPERTIES

DENSITY	2.85 g/cm <sup>3</sup>
MODULUS OF ELASTICITY	71 000 MPa
LINEAR EXPANSION COEFFICIENT	23.5 10 <sup>-6</sup> K <sup>-1</sup>
THERMAL CONDUCTIVITY	140 W/mK
ELECTRICAL CONDUCTIVITY	53 - 49 MS/m



PROPERTIES	T3/T4
MACHINABILITY	GOOD
PROTECTIVE ANODIZING	FAIR
DECORATIVE ANODIZING	POOR
HARD ANODIZING	POOR
RESISTANCE TO ATMOSPHERIC CORROSION	FAIR
RESISTANCE TO MARITIME CORROSION	POOR
MIG-TIG WELDABILITY	POOR
RESISTANCE TO WELDABILITY	POOR
ABRASIVE WELDABILITY	POOR
COLD PLASTIC FORMABILITY	POOR
HOT PLASTIC FORMABILITY	FAIR

## DELIVERY PROGRAM

### ROUND RODS

DIAMETER <sup>1</sup> (mm) EXTRUDED	WEIGHT (kg/m)	STOCK T4	DIAMETER <sup>1</sup> (mm) EXTRUDED	WEIGHT (kg/m)	STOCK T4
Standard length 3000mm					
20	0.879	●	115	29.083	○
25	1.374	●	120	31.668	●
30	1.979	●	125	34.344	○
32	2.251	●	130	37.165	●
35	2.693	●	140	43.102	●
40	3.518	●	150	49.480	●
45	4.552	●	160	56.297	●
50	5.497	●	170	63.554	●
55	6.652	●	180	71.251	●
60	7.916	●	190	77.900	●
61	8.183	●	200	86.300	●
65	9.291	●	210	95.200	●
70	10.775	●	215	105.00	●
75	12.370	●	220	106.400	○
80	14.074	●	225	111.375	●
81	14.641	●	250	135.000	○
85	15.888	●	254	143.200	●
90	17.813	●	260	146.000	○
100	21.991	●	275	166.375	○
110	26.609	●	300	194.300	○

<sup>1</sup> Other diameters available on request.

Material calibrated on request.

Average weights of production.

● 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.

### SQUARE RODS

THICKNESS <sup>1</sup> (mm) EXTRUDED	WEIGHT (kg/m)	STOCK T4
Standard length 3000mm		
35	3.430	●
40	4.480	○
45	5.670	○
50	7.000	○
60	10.080	○
70	13.720	●
80	17.920	●
90	22.680	●
100	28.000	○
110	33.880	●
120	40.320	●
130	47.320	●
150	67.800	●

<sup>1</sup> Other thicknesses available on request.

Material calibrated on request.

Average weights of production