SERIES 5000

AW 5005 (Al Mg1)

The aluminium alloy AW 5005 gives an excellent finish in anodizing with the guarantee AQ variant. It possesses medium mechanical characteristics, excellent weldability, excellent corrosion resistance good plastic deformation and good response to chemical or electrochemical polishing.

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

ELEMENTS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Minimum	-	-	-	-	0.5	-	-	-	-
Maximum	0.3	0.7	0.2	0.2	1.1	0.1	-	0.25	Rest

MECHANICAL PROPERTIES (EN 485 - 2)

TEMPER	THICKNESS (mm)	Rm (MPa)		Rp0.2* (MPa)	A50 (%)	HB - BRINELL HARDNESS
		min.	max.			
H24	1.5 - 3	145	185	110	3-6	48

*Minimum values.

MAIN CHARACTERISTICS

- Medium mechanical resistance
- Excellent weldability
- Excellent corrosion resistance
- Good plastic conformation
- Good polishing response

APPLICATIONS

- Construction
- Anodized coatings
- Decoration and furniture
- Beverage cans
- Signaling

POLISHING

MACHINABILITY

WELDABILITY

CONDUCTIVITY ELECTRICAL/THERMAL

≈48 HB
BRINELL HARDNESS

2.70
DENSITY

SERIES 5000

PHYSICAL PROPERTIES

DENSITY	2.70 g/cm^3
MODULUS OF ELASTICITY	69 500 MPa
LINEAR EXPANSION COEFFICIENT	23.5 µm.m^{-1}.K^{-1}
THERMAL CONDUCTIVITY	201 W.m^{-1}.K^{-1}
ELECTRICAL CONDUCTIVITY	29 nΩ.m

DELIVERY PROGRAM

PLATES

THICKNESS (mm)	DIMENSIONS (mm)	STOCK H24
1.5	800 x 3000	●
	1000 x 2000	●
	1250 x 2500	●
	1250 x 3000	◪
	1250 x 4000	◪
	1500 x 3000	●
	1500 x 4000	●
2.0	1000 x 2000	◪
	1250 x 2500	◪
	1250 x 3000	◪
	1250 x 4000	◪
	1500 x 3000	●
	1500 x 4000	●
3.0	1000 x 3000	●
	1000 x 4000	●
	1250 x 2500	◪
	1500 x 3000	◪

Other measures on request.

● 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.