



Aluminium Alloy 6082 (EN AW 6082 AlSi1MgMn) According to EU directives: 2000/53/CE (ELV) - 2011/65/CE (RoHS II)

- Aluminium-magnesium-silicium alloy.
- Alu-mec are six-sides sawn cast plates, with low porosity and good chip machining. Excellent corrosion resistance.
- They are used for the realization of moulds and mechanical components.

		THICKNESS	
		100≤600	
		TEMPERED AND ARTIFICIALLY AGED	
Physical state			
Mechanical properties			
Ultimate tensile strenght Rm[N/mm ²]	minimal	230	
Yield strenght Rp 0,2	minimal	200	
Elongation A ₅	minimal	7	
Hardness Brinell HB (information only)	minimal	100	
Physical properties			
Density [kg/dm ³]		2,71	
Module of elasticity [Gpa]		70	
Electrical conductivity at 20 °C [m/Ω-mm ²]		27	
Coefficient of thermal expansion [10 ⁻⁶ /K]		23,4	
Thermal conductivity [w/m.K]		174	
Melting point range °C		570 ÷ 645	
Tolerance			
Tolerance in thickness < 150 mm		-0/+3 mm	
Tolerance in thickness 150 ≤ 400 mm		-0/+6 mm	
Tolerance in thickness ≤ 400 mm		-0/+10 mm	
Processing characteristics			
Machinability		+++	
Dimensional stability		+++	
Erodability		++++	
Weldability		++++	
Polishability		++++	
Anodizing decorative		+++++	
Anodizing hard		+++++	
Corrosion resistance (weather)		+++++	
Corrosion resistance (seawather)		++++	

Legend - Processing Characteristics

Excellent +++++

Good ++++

Accettable +++

Mediocre ++

Inadequate +

Not suitable -

CHEMICAL COMPOSITION

DENOMINATION	Si	Fe	Mn	Mg	Cu	Zn	Cr	Ti	Ni	Pb	Bi	V	Others	IMPURITY	ALUMINIUM
6082	0,70-1,30	≤0,50	0,40-1,00	0,60-1,20	≤0,10	≤0,20	≤0,25	≤0,10						0,05	0,15 remainder