

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

- Aluminium-magnesium-silicium alloy.
- It is principally used in space-frame and sub-frame automotive, naval construction, hot forged components.
- Medium-high mechanical characteristics, good corrosion strength. Good for decorative anodizing.

		DIAMETER		
		≤ 150	150 ≤ 200	200 ≤ 250
		T6	T6	T6
Physical Properties				
Mechanical Properties				
Ultimate tensile strength Rm [N/mm ²]	minimal	310	280	270
Yield strength Rp 0,2	minimal	260	240	200
Elongation As	minimal	8	6	6
Hardness Brinell HB (information only)	minimal	95	95	95
Physical properties				
Density [kg/dm ³]		2,71	2,71	2,71
Module of elasticity [Gpa]		69	69	69
Electrical conductivity at 20 °C [m/Ω-mm ²]		37	37	37
Coefficient of thermal expansion [10 ⁻⁶ /K]		24	24	24
Thermal conductivity [w/m.K]		167	167	167
Melting point range °C		585 ÷ 645	585 ÷ 645	585 ÷ 645
Processing Characteristics				
Machinability		+++	+++	+++
Dimensional Stability		+++	+++	+++
Erodability		++++	++++	++++
Weldability		++++	++++	++++
Polishability		++++	++++	++++
Anodizing Decorative		+++++	+++++	+++++
Anodizing Hard		+++++	+++++	+++++
Corrosion resistance (weather)		+++++	+++++	+++++
Corrosion resistance (seawater)		++++	++++	++++

Legend - Processing Characteristics

Excellent +++++ Good ++++ Acceptable +++ Mediocre ++ Inadequate + Not suitable -

CHEMICAL COMPOSITION

DENOMINATION	Si	Fe	Mn	Mg	Cu	Zn	Cr	Ti	Ni	Pb	Bi	Sn	IMPURITY	ALUMINIUM
6082	0,70-1,30	≤0,5	0,40-1,00	0,60-1,20	≤0,10	≤0,20	≤0,25	≤0,10					0,05	0,15 remainder