AIROLDI METALLI SPA

product sheet

ALLOY 6082
ROUND
DRAWN BARS

COLOUR CODE

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 constuction, hot forged components.
- Medium-high mechanical characteristics, good corrosion strenght. Good for decorative anodizing.

		DIAMETER
		≤ 80
Physical Properties		**T6**
Mechanical Properties		
Ultimate tensile strenght Rm[N/mm²]	minimal	310
Yield strenght Rp 0,2	minimal	255
Elongation A_5	minimal	10
Hardness Brinnel HB (information only)	minimal	95
Physical properties		
Density [kg/dm³]		2,71
Module of elasticity [Gpa]		69
Electrical conductivity at 20 °C [m/Ω-mm²]		37
Coefficient of thermal expansion [10^{-6}/K]		24
Thermal conductivity [w/m.K]		167
Melting point range °C		585 ÷ 645
Processing Characteristics		
Machinability		+++
Dimensional Stability		+++
Erodability		++++
Weldability		++++
Polishability		++++
Anodizing Decorative		+++++
Anodizing Hard		+++++
Corrosion resistance (weather)		+++++
Corrosion resistance (seaweather)		++++

Legend - Processing Characteristics

Excellent +++++	Good ++++	Accettable +++	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

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