AIROLDI METALLI SPA

product sheet

LEGA 2007

ROUND
EXTRUDED BARS

COLOUR CODE

Aluminium Alloy 2007 (EN AW 2007 AlCu4PbMgMn)

- Aluminium-copper alloy.
- Ideal alloy for automatic high speed lathe it doesn't wear the tolls, high mechanical stenghtness and good machinability.
- It can be decorative anodized.

		DIAMETER		
		≤ 80	80 ≤ 200	200 ≤ 250
Physical Properties		**T4**	**T4**	**T4**
Mechanical Properties				
Ultimate tensile strenght Rm[N/mm²]	minimal	370	340	330
Yield strenght Rp 0,2	minimal	250	220	210
Elongation A_5	minimal	8	8	7
Hardness Brinnel HB (information only)	minimal	95	95	95
Physical properties				
Density [kg/dm³]		2,85	2,85	2,85
Module of elasticity [Gpa]		71	71	71
Electrical conductivity at 20 °C [m/Ω-mm²]		57	57	57
Coefficient of thermal expansion [10^{-6}/K]		23,5	23,5	23,5
Thermal conductivity [w/m.K]		140	140	140
Melting point range °C		540 ÷ 645	540 ÷ 645	540 ÷ 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
2007	≤0,80	≤0,80	0,50-1,00	0,40-1,80	3,30-4,60	≤0,80	≤0,10	≤0,20	≤0,20	0,80-1,00	≤0,20		0,10	0,30	remainder

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