

6082 by EURAL



Colour code
EU turquoise

According to EU directives:
2000/53/EC (ELV) – 2011/65/EU (RoHS II)



EURAL
GNUTTI S.p.A.

PRODUCTION PROGRAM

Unit: mm	●	■	■	◆
Drawn	7,94 ÷ 76,2	12 ÷ 65	Thick. 12 ÷ 55	12 ÷ 60
Extruded	30 ÷ 254	20 ÷ 165	Thick. 10 ÷ 127	–

PRESENTATION

This alloy has medium mechanical properties, but high resistance to corrosion and excellent attitude to weldability, hot forging and anodizing.

Main applications: highly stressed structural parts for ground and nautical means of transport, anti-impact lateral bars, door frame, space frame and sub frame for cars, hydraulic systems, stairs and scaffoldings, platforms, screws and rivets, particulars for nuclear plants, food industry.

Samples of finished products made of Eural bars

Properties	T6
Machinability	Excellent
Protective anodizing	Good
Decorative anodizing	Acceptable
Hard anodizing	Not recommended
Resistance to atmospheric corrosion	Excellent
Resistance to marine corrosion	Good
MIG-TIG weldability	Excellent
At resistance weldability	Good
Brazing weldability	Acceptable
Plastic formability when cold	Excellent
Plastic formability when hot	Good

Legend



Chemical composition	
Si	0,70 ÷ 1,30
Fe	≤ 0,50
Cu	≤ 0,10
Mn	0,40 ÷ 1,00
Mg	0,60 ÷ 1,20
Cr	≤ 0,25
Ni	
Zn	≤ 0,20
Ti	≤ 0,10
Zr	
Pb	
Bi	
Al	Remainder

Physical properties	
Density	$\frac{\text{Kg}}{\text{dm}^3}$ 2,71
Modulus of elasticity	MPa 69.000
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{\text{°C}}$ 24
Thermal conductivity at 20°C	$\frac{\text{W}}{\text{mk}}$ 167
Electrical resistivity at 20°C	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0,037

Mechanical properties					
	Temper	Rm MPa	Rp 0,2 MPa	A%	HBW
Extruded	T6	310	260	8	95
	T6 *	325	310	9	105
Drawn	T6	310	255	10	95
	T6 *	380	360	10	110

* Typical Eural properties