

# 6061

Colour code  
**EU blue**

Colour code  
**USA blue**

# EURAL

GNUTTI S.p.A.

According to EU directives:  
2000/53/CE (ELV) - 2002/95/CE (RoHS)



## PRESENTATION

This alloy presents medium mechanical properties and an excellent resistance to corrosion and good weldability properties.

**Main applications:** stressed structures such as towers and shafts, carpentry, components for railroad, nautical, defence, aviation means of transport. For cars, extrusions for seat guide, bumpers, ABS parts and sub frame.

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	Excellent
Brazing weldability	Excellent
Plastic formability when cold	Acceptable
Plastic formability when hot	Not recommended

### Legend



Chemical composition	
Si	0,40 ÷ 0,80
Fe	≤0,70
Cu	0,15 ÷ 0,40
Mn	≤0,15
Mg	0,80 ÷ 1,20
Cr	0,04 ÷ 0,35
Ni	
Zn	≤0,25
Ti	≤0,15
Zr	
Pb	
Bi	
Al	Rem.

Physical characteristics		
Density	$\frac{\text{Kg}}{\text{dm}^3}$	2,71
Modulus of elasticity	MPa	69.000
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^\circ\text{C}}$	23,5
Thermal conductivity at 20°C	$\frac{\text{W}}{\text{mk}}$	173
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	260	240	8	95
	T6*	360	320	11	110
Drawn	T6	290	240	10	95
	T6*	370	330	10	110

\* Typical Eural Characteristics