

# 6061

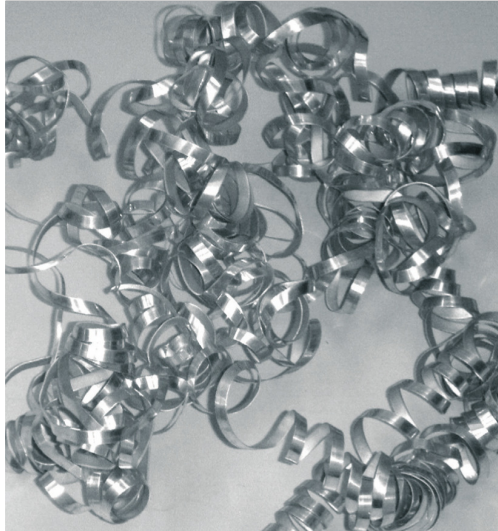


Color code  
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# EURAL

GNUTTI S.p.A.

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



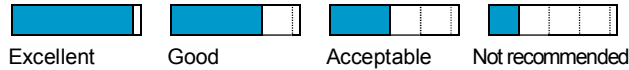
## PRESENTATION

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, defense, 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	Good
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	$\frac{\text{lb}}{\text{in}^3}$ 0.0979
Modulus of elasticity	ksi 10,008
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$ 13.1
Thermal conductivity at 68°F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$ 99.4
Electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0.037

Mechanical characteristics					
	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T6	37.7	34.8	8	95
	T6 *	52.2	46.4	11	110
Drawn	T6	42.1	34.8	10	95
	T6 *	53.7	47.9	10	110

\* Typical Eural Characteristics