

7075

Color code
black



EURAL

GNUTTI S.p.A.

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



PRESENTATION

This alloy has extremely high mechanical properties and high resistance to fatigue. Moreover it has good resistance to corrosion and attitude to hard, protective and decorative anodizing.

Main applications: high resistance structural parts for mechanical industry, aviation, military, motorbike and automotive.

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	Acceptable
At resistance weldability	Not recommended
Brazing weldability	Not recommended
Plastic formability when cold	Not recommended
Plastic formability when hot	Not recommended

Legend



Chemical composition	
Si	≤ 0.40
Fe	≤ 0.50
Cu	1.20 - 2.00
Mn	≤ 0.30
Mg	2.10 - 2.90
Cr	0.18 - 0.28
Ni	
Zn	5.10 - 6.10
Ti	≤ 0.20
Zr	
Pb	
Bi	
Al	Rem.

Physical characteristics	
Density	$\frac{\text{lb}}{\text{in}^3}$ 0.1012
Modulus of elasticity	ksi 10,443
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$ 13.1
Thermal conductivity at 68°F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$ 74.7
Electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0.052

Mechanical characteristics					
	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T6	81.2	72.5	7	150
	T6 *	84.1	74.0	7	160
Drawn	T6	78.3	70.3	7	150
	T6 *	85.9	76.9	7	160

* Typical Eural Characteristics