

# 7075 by EURAL

Color code  
black

# EURAL

GNUTTI S.p.A.

## PRODUCTION PROGRAM

Unit: in	●	■	■	◆
Drawn	0.75 - 3	-	-	-
Extruded	0.181 - 10	2 - 6.5	Thick. 1.181 - 5	-

### According to EU directives:

2000/53/EU (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, defense, motorbike and automotive.

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	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
Pb	
Bi	
Others	Each 0.05 Total 0.15
Al	Remainder

Physical properties	
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
Typical electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0.052

Minimum mechanical properties				
Temper	Diam. in	UTS	YTS	HBW
		ksi	ksi	A% Typical
Drawn	T6	≤ 3	78.3 70.3	7 150
	T651	≤ 3	78.3 70.3	5 150
	T73	≤ 3	66.0 55.8	10 135
	T7351	≤ 3	66.0 55.8	8 135
Extruded	T6, T6510, T6511	≤ 4	81.2 72.5	7 150
	T6, T6510, T6511	4 < D ≤ 6	79.8 63.8	5 150
	T6, T6510, T6511	6 < D ≤ 8	63.8 58.0	5 150
	T73, T73510, T73511	≤ 3	68.9 58.7	7 135
	T73, T73510, T73511	3 < D ≤ 4	68.2 56.6	6 135
T73, T73510, T73511	4 < D ≤ 6	63.8 52.2	6 135	

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