

7075 by EURAL



Color code
black

EURAL

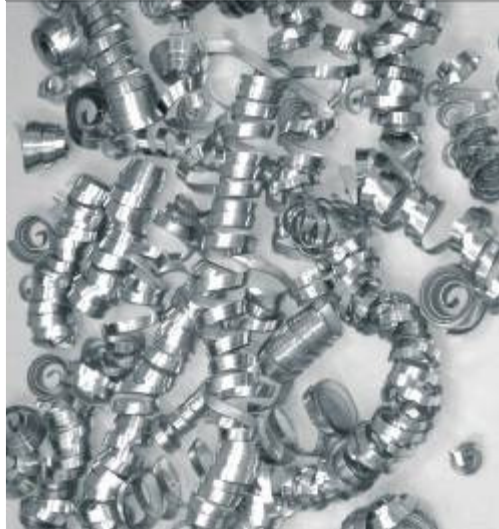
GNUTTI S.p.A.

PRODUCTION PROGRAM

Unit: in	●	■	■	◆
Drawn	0.787 - 3	–	–	–
Extruded	1.181 - 10	1.969 - 6.5	Thick. 1.181 - 5	–

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, defense, motorbike and automotive.

Samples of finished products made of Eural bars

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

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	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
Electrical resistivity at 68 °F	$\frac{\Omega \text{ mm}^2}{\text{m}}$	0.052

Mechanical properties					
	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 *	85.6	76.9	7	160

** Typical Eural properties*