EURAL GNUTTI S.p.A.

2024 by EURAL

Color code **red**

PRODUCTION PROGRAM

Unit: in	●	■	▬	⬢
Drawn	0.787 - 2.756	–	–	–
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 high mechanical properties and excellent resistance to fatigue. During machining, it creates quite long chips, therefore it is not well suited for automatic lathes.

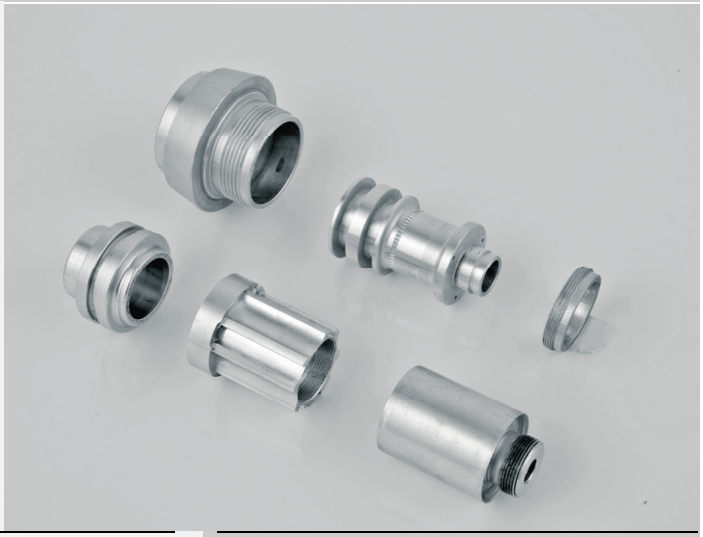
Main applications: screws and bolts, high structural resistance components for aviation and defense.

Samples of finished products made of Eural bars

Properties	T3
Machinability	Excellent
Protective anodizing	Excellent
Decorative anodizing	Acceptable
Hard anodizing	Acceptable
Resistance to atmospheric corrosion	Excellent
Resistance to marine corrosion	Acceptable
MIG-TIG weldability	Excellent
At resistance weldability	Excellent
Brazing weldability	Acceptable
Plastic formability when cold	Acceptable
Plastic formability when hot	Excellent

Legend

Excellent | Good | Acceptable | Not recommended



Chemical composition	
Si	≤ 0.50
Fe	≤ 0.50
Cu	3.80 - 4.90
Mn	0.30 - 0.90
Mg	1.20 - 1.80
Cr	≤ 0.10
Ni	
Zn	≤ 0.25
Ti	≤ 0.15
Zr	
Pb	
Bi	
Al	Remainder

Physical properties		
Density	$\frac{lb}{in^3}$	0.1008
Modulus of elasticity	ksi	10,153
Coefficient of thermal expansion	$\frac{x10^{-6}}{°F}$	12.8
Thermal conductivity at 68 °F	$\frac{Btu}{ft\ h\ °F}$	68.9
Electrical resistivity at 68 °F	$\frac{\Omega\ mm^2}{m}$	0.057

Mechanical properties	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T3	63.8	43.5	8	120
	T3 *	68.9	50.8	11	125
Drawn	T3	61.6	42.1	9	120
	T3 *	76.9	65.3	9	150

** Typical Eural properties*