

2024

EURAL

GNUTTI S.p.A.

Colour code
USA red



According to EU directives:
2000/53/CE (ELV) - 2002/95/CE (RoHS)



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.

It can be replaced by 2030 which has the same mechanical properties but has better machinability, allowing higher productivity.

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

Properties	T3
Machinability	Excellent
Protective anodizing	Good
Decorative anodizing	Acceptable
Hard anodizing	Not recommended
Resistance to atmospheric corrosion	Good
Resistance to marine corrosion	Acceptable
MIG-TIG weldability	Good
At resistance weldability	Excellent
Brazing weldability	Good
Plastic formability when cold	Acceptable
Plastic formability when hot	Not recommended

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	Rem.

Physical characteristics	
Density	$\frac{\text{Kg}}{\text{dm}^3}$ 2,79
Modulus of elasticity	MPa 70.000
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{C}}$ 23,1
Thermal conductivity at 20°C	$\frac{\text{W}}{\text{mk}}$ 120
Electrical resistivity at 20°C	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0,057

Mechanical properties					
	Temper	Rm MPa	Rp 0,2 MPa	A%	HBW
Extruded	T3	440	300	8	120
	T3*	490	380	8	130
Drawn	T3	425	290	9	120
	T3*	520	420	10	140

* Typical Eural Characteristics