

2007

Colour code
EU black



EURAL

GNUTTI S.p.A.



PRESENTATION

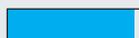
Among aluminium alloys for high speed automatic lathes, 2007 and 2030 have the highest mechanical characteristics.

This alloy is the most often selected when it is required to have a good combination of machinability and high mechanical properties. It has low corrosion resistance; therefore it is recommended to have a protective anodizing of finished products.

Main applications: screws, bolts, nuts, threaded bars.

Properties	T3/T4
Machinability	Excellent
Protective anodizing	Good
Decorative anodizing	Not recommended
Hard anodizing	Not recommended
Resistance to atmospheric corrosion	Acceptable
Resistance to marine corrosion	Not recommended
MIG-TIG weldability	Not recommended
At resistance weldability	Not recommended
Brazing weldability	Not recommended
Plastic formability when cold	Not recommended
Plastic formability when hot	Good

Legend



Excellent



Good



Acceptable



Not recommended



Chemical composition	
Si	≤0,80
Fe	≤0,80
Cu	3,30 ÷ 4,60
Mn	0,50 ÷ 1,00
Mg	0,40 ÷ 1,80
Cr	≤0,10
Ni	≤0,20
Zn	≤0,80
Ti	≤0,20
Zr	
Pb	0,80 ÷ 1,00
Bi	≤0,20
Sn	≤0,20
Al	Rem.

Physical characteristics	
Density	$\frac{\text{Kg}}{\text{dm}^3}$ 2,85
Modulus of elasticity	MPa 71.000
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{C}}$ 23,5
Thermal conductivity at 20°C	$\frac{\text{W}}{\text{mk}}$ 140
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	T4	370	250	8	95
	T4*	440	300	12	125
Drawn	T3	370	240	7	95
	T3*	465	410	8	125

* Typical Eural Characteristics