

# 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	Not recommended
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