

6026



Color code
orange

EURAL

GNUTTI S.p.A.

According to EU directives:
2000/53/EC (ELV) – 2011/65/EU (RoHS II)



PRESENTATION

This innovative alloy has been conceived and developed in Eural Gnutti SpA's research laboratories, in order to meet the most recent standards for the protection of the environment. It is particularly suitable for being machined on high speed automatic lathes. It has good resistance to corrosion, medium-high mechanical properties, good suitability for decorative and industrial hard anodizing. It is also used for hot forging purposes. Eural 6026 alloy does not contain tin (Sn) which, as it has been proved, causes weakness and cracking of the machined parts when submitted to stress and high temperature. It is an alternative to 6061, 6082, 6064A, 6042, 6262 and 6012 alloys.

Main applications: automotive industry, electric and electronic industry, hot forging.

Properties	T6	T8/T9
Machinability	Excellent	Excellent
Protective anodizing	Good	Good
Decorative anodizing	Acceptable	Acceptable
Hard anodizing	Not recommended	Not recommended
Resistance to atmospheric corrosion	Excellent	Excellent
Resistance to marine corrosion	Good	Good
MIG-TIG weldability	Acceptable	Acceptable
At resistance weldability	Not recommended	Not recommended
Brazing weldability	Not recommended	Not recommended
Plastic formability when cold	Not recommended	Not recommended
Plastic formability when hot	Not recommended	Not recommended

Legend



Chemical composition	
Si	0.60 - 1.40
Fe	≤ 0.70
Cu	0.20 - 0.50
Mn	0.20 - 1.00
Mg	0.60 - 1.20
Cr	≤ 0.30
Ni	
Zn	≤ 0.30
Ti	≤ 0.20
Zr	
Pb	≤ 0.40
Bi	0.50 - 1.50
Al	Rem.

Physical characteristics			
Density	$\frac{\text{lb}}{\text{in}^3}$		0.0983
Modulus of elasticity	ksi		10,008
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$		13.0
Thermal conductivity at 68°F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$		98.8
Electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$		0.039

Mechanical characteristics					
	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T6	53.7	43.5	8	95
	T6 *	56.6	50.8	10	115
Drawn	T6	53.7	43.5	8	95
	T6 *	56.6	50.8	10	115
	T8	50.0	45.7	4	95
	T8 *	53.7	52.2	10	105
	T9	52.2	47.9	4	95
	T9 *	58.0	55.1	8	110

* Typical Eural Characteristics