

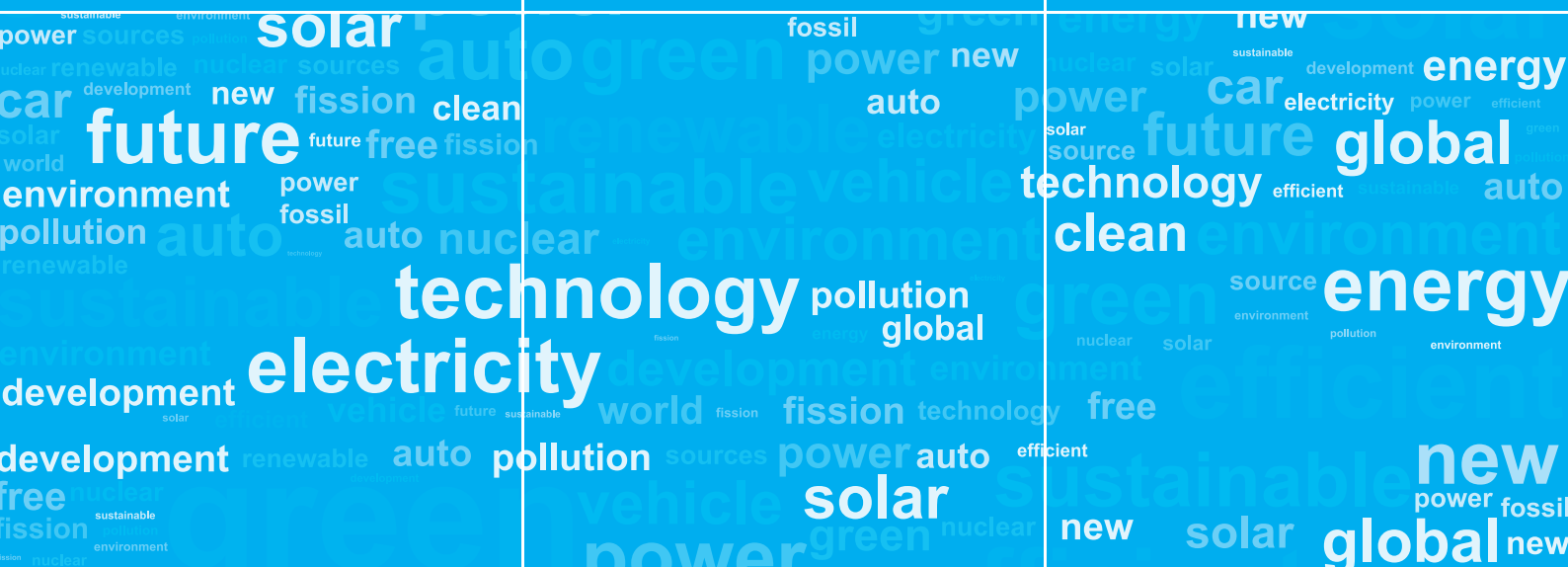
EURAL
GNUTTI S.p.A.

6026LF
by Eural
Aluminium Alloy

ELV
Compliant

RoHS II
Compliant

Actual and future revisions



6026LF

by Eural

PRESENTATION

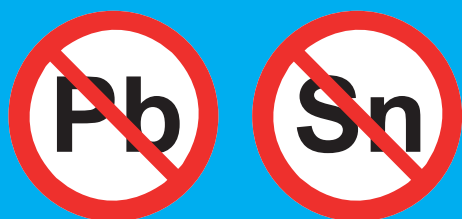
This innovative alloy has been conceived and developed in Eural Gnutti S.p.A.'s research laboratories, in order to meet the most recent standards for the protection of the environment. It is particularly suitable for being machined on high speed automatic lathes.

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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 6026LF 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.

LEAD FREE



Aluminium alloy

Due to its brittle nature, tin has the dangerous tendency to suddenly break without significant previous deformation (strain).

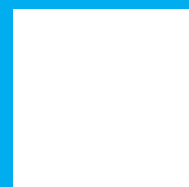
It can replace 2007, 2011, 2015, 2028, 2030, 2044, 6012, 6012A, 6020, 6021, 6023, 6028, 6033, 6040, 6041, 6042, 6061, 6065, 6082, 6262, 6064A, 6262A, 6351, 7020 alloys.

According to EU directives:

2000/53/EC (ELV)
2011/65/EC (RoHS II)
actual and future revisions



Colour code
EU white



ELV
Compliant

RoHS II
Compliant

Actual and future revisions

PRODUCTION PROGRAM

UNIT. mm	●	■	■	◆
Drawn	6 ÷ 76,2	10 ÷ 65	Thick. 12 ÷ 55	10 ÷ 63,5
Extruded	30 ÷ 254	50 ÷ 165	Thick. 30 ÷ 157	-

Properties	T6	T8/T9
Machinability	Excellent	Excellent
Protective anodizing	Good	Good
Decorative anodizing	Good	Good
Hard anodizing	Acceptable	Excellent
Resistance to atmospheric corrosion	Good	Good
Resistance to marine corrosion	Acceptable	Good
MIG-TIG weldability	Good	Good
At resistance weldability	Good	Good
Brazing weldability	Acceptable	Good
Plastic formability when cold	Good	Acceptable
Plastic formability when hot	Good	Good

Legend



Excellent



Good



Acceptable



Not
recommended

MAIN APPLICATIONS

automotive industry, electric and electronic industry, hot forging, screws, bolts, nuts, threaded parts.

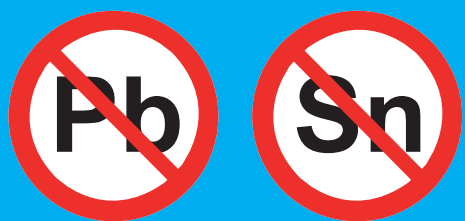


6026LF

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LEAD FREE



Aluminium alloy

According to EU directives:

2000/53/EC (ELV)
2011/65/EC (RoHS II)
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Chemical composition

Si	Fe	Cu	Mn	Mg	Cr
0,6 ÷ 1,40	≤ 0,70	0,20 ÷ 0,50	0,20 ÷ 1,00	0,60 ÷ 1,20	≤ 0,30

* 6026 is registered with Pb ≤ 0,40

Physical properties

Density	$\frac{\text{Kg}}{\text{dm}^3}$	2,72
Modulus of elasticity	MPa	69.000
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{\text{C}^\circ}$	23,4
Thermal conductivity at 20°C	$\frac{\text{W}}{\text{mk}}$	172
Electrical resistivity at 20°C	$\frac{\Omega \text{ mm}^2}{\text{m}}$	0,039



ELV
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RoHS II
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Ni	Zn	Ti	Sn	Pb	Bi	Al
-	≤ 0,30	≤ 0,20	≤ 0,05	≤ 0,05* (traces)	0,50 ÷ 1,50	Remainder

6026LF F37

by Eural

Mechanical properties

	Temper	Diam. mm	Rm MPa	Rp 0,2 MPa	A%	HBW Typical
Drawn	T6	≤ 80	370	300	8	95
	T8	≤ 80	345	315	4	95
	T9	≤ 80	360	330	4	95
Extruded	T6	≤ 140	370	300	8	95
	T6	140 < D ≤ 200	340	250	8	90
	T6	200 < D ≤ 250	300	200	8	90



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LEAD FREE

Aluminium alloy

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ELV
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APPLICATION FIELDS

6026LF by EURAL is extremely versatile, due to its medium-high mechanical properties, good attitude to anodizing, good weldability, good attitude to forging, good corrosion resistance.

6026LF by EURAL is suitable for components used in several industries as automotive, electric and electronic, valves, oleohydraulic, pneumatic, defence.

PRODUCTION PROGRAM

6026LF by EURAL is available in drawn or extruded conditions.

Drawn round bars from 6 to 76,2 mm (0,236"-3"), temper T6, T8 or T9.

Extruded round bars from 30 to 254 mm (1,181"-10"), temper T6. Square, rectangular, hexagonal bars are available.

A wide range of drawn bars are also available in h9 tolerance.



ECOLOGICAL CHOICE

Since many years, the European Community is working on reducing the content of hazardous substances.

Actual revisions of RoHS, ELV, REACH directives limit the content of Pb to max 0,40% on aluminium alloys, and the tendency for the future is to revise this limit to be lead free.

Eural Gnutti has anticipated the future restrictions of such directives creating the **6026LF by EURAL** Lead Free.

ALTERNATIVE TO:

6026LF by EURAL is the best alternative to several aluminium alloys such as 2007, 2011, 2015, 2028, 2030, 2044, 6012, 6012A, 6020, 6021, 6023, 6028, 6033, 6040, 6041, 6042, 6061, 6065, 6082, 6262, 6064A, 6262A, 6351, 7020.

6026LF by EURAL is an excellent replacement of brass, due to its good machinability, good attitude to forging, medium-high mechanical properties. Moreover, since **6026LF by EURAL** has a specific gravity of 1/3 compared to brass, it results extremely convenient costwise.

THE BIRTH OF 6026LF BY EURAL

6026LF by EURAL is an innovative alloy designed and developed by Eural Gnutti S.p.A. R&D laboratories in order to meet the strictest requirements in critical automotive applications such as brake systems.

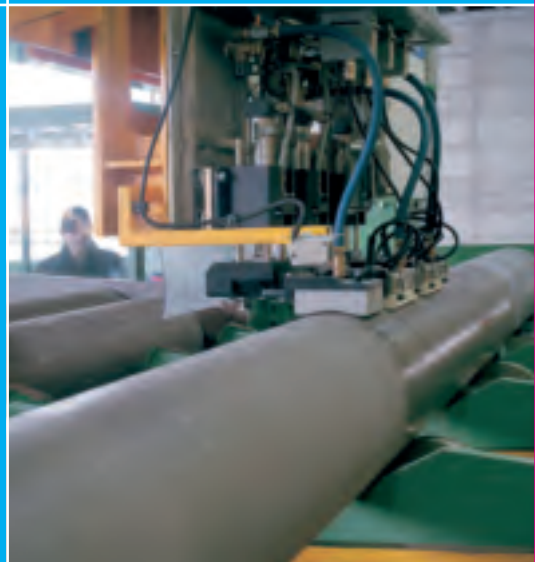


NO TIN

On many alloys of 6000 series lead (Pb) has been replaced with tin (Sn) which, as it has been proved, causes weakness and cracking of the machined parts when submitted to stress and high temperature ($>140^{\circ}\text{C}$, 284°F).

Due to its brittle nature, tin has the dangerous tendency to suddenly break without significant previous deformation (strain).

6026LF by EURAL does not contain tin.



ULTRASONIC TESTED BILLETS

All semi-finished products in **6026LF by EURAL** are made of 100% ultrasonic tested billets according to **SAE AMS-STD-2154 class A**.



HIGH MACHINABILITY

6026LF by EURAL is particularly suitable for being machined on high speed automatic lathes due to **extremely good chip forming**.

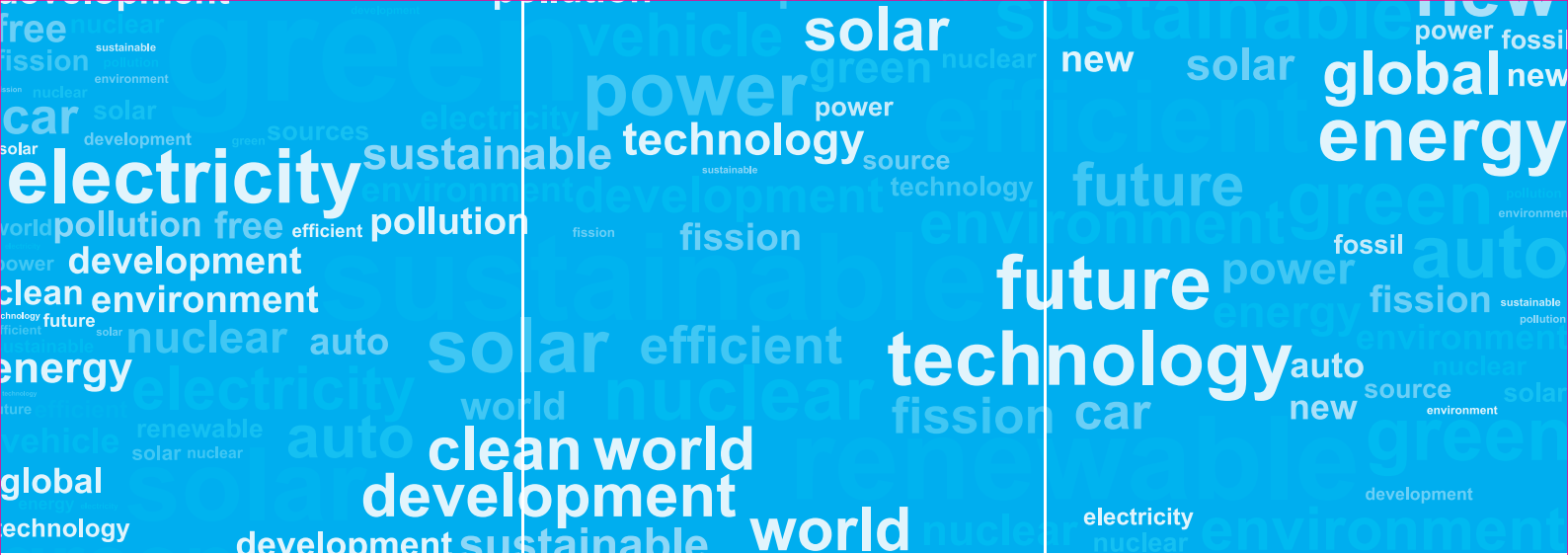
COMPATIBILITY IN DRAWINGS

6026 by EURAL was born on 2002, and it has been registered to the Aluminum Association and to EN standards with a lead content of $\text{Pb} \leq 0,40$.

Therefore, **6026LF by EURAL** does not need any variations in drawings where 6026 is already indicated.

Lead (Pb) and tin (Sn) can be present as traces, within the limit of 0,05%, as prescribed by international regulations.



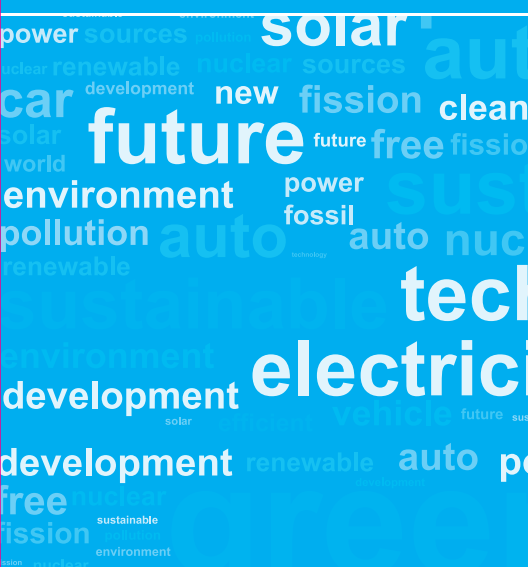
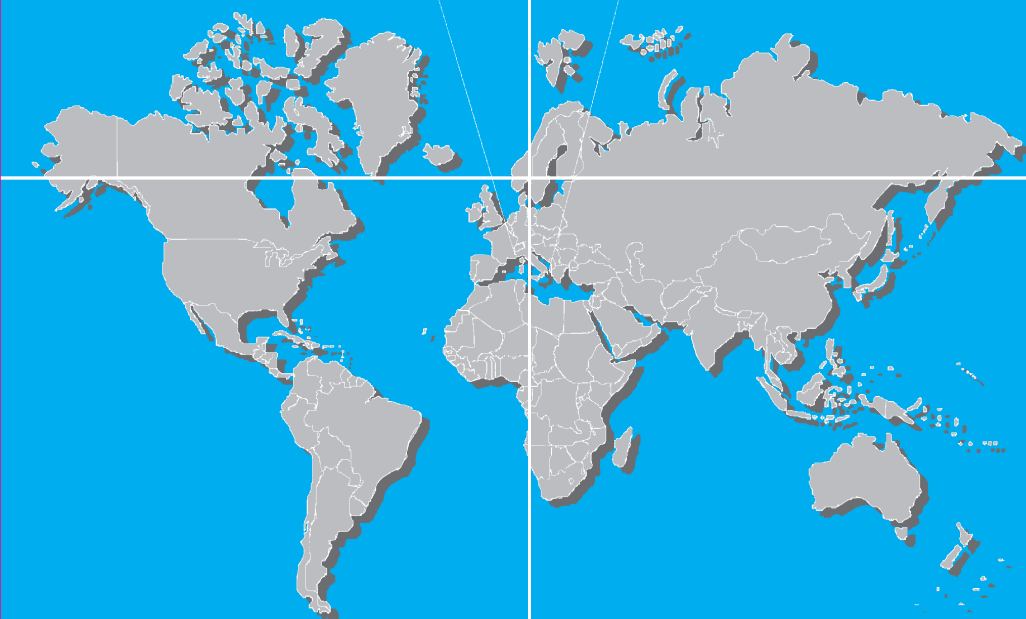


Airports:
Milano Malpensa
Milano Linate
Bergamo Orio al Serio



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EURAL GNUTTI S.p.A.

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