



PRODUCTION PROGRAM

Unit: in	●	■	■	●
Drawn	0.236 - 3	0.394 - 2.559	Thick. 0.472 - 2.165	0.394 - 2.5
Extruded	1.181 - 10	2 - 6.5	Thick. 1.181 - 5	-

According to EU directives:

2000/53/EU (ELV) – 2011/65/EU (RoHS II)



PRESENTATION

This alloy has medium mechanical properties, but high resistance to corrosion and excellent attitude to weldability, hot forging and anodizing.

Main applications: highly stressed structural parts for ground and nautical means of transport, anti-impact lateral bars, door frame, space frame and sub frame for cars, hydraulic systems, stairs and scaffoldings, platforms, screws and rivets, particulars for nuclear plants, food industry.

Samples of finished products made of Eural bars

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

Legend



Chemical composition	
Si	0.40 - 0.80
Fe	≤ 0.70
Cu	0.15 - 0.40
Mn	≤ 0.15
Mg	0.80 - 1.20
Cr	0.04 - 0.35
Ni	
Zn	≤ 0.25
Ti	≤ 0.15
Pb	
Bi	
Others	Each 0.05 Total 0.15
Al	Remainder

Physical properties	
Density	$\frac{\text{lb}}{\text{in}^3}$ 0.0979
Modulus of elasticity	ksi 10,008
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$ 13.1
Thermal conductivity at 68°F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$ 99.4
Typical electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0.037



Minimum mechanical properties					
Temper	Diam. in	UTS YTS		HBW	
		ksi	ksi	A%	Typical
Extruded / Drawn	T6	≤ 3	42.1 34.8	10	95
	T6	≤ 8	37.7 34.8	8	95