



PRODUCTION PROGRAM

Unit: mm	●	■	■	◆
Drawn	20 ÷ 76,2	-	-	-
Extruded	30 ÷ 254	50 ÷ 165	Thick. 30 ÷ 127	-

According to EU directives:

2000/53/EU (ELV) - 2018/740/EU (RoHS II)



PRESENTATION

This alloy has high mechanical properties and excellent resistance to fatigue. During machining, it creates quite long chips, therefore it is not well suited for automatic lathes.

Main applications: screws and bolts, high structural resistance components for aviation and defense.

Properties	T3			
Machinability	■			
Protective anodizing	■			
Decorative anodizing	■			
Hard anodizing	■			
Resistance to atmospheric corrosion	■			
Resistance to marine corrosion	■			
MIG-TIG weldability	■			
At resistance weldability	■			
Brazing weldability	■			
Plastic formability when cold	■			
Plastic formability when hot	■			

Legend

■	■	■	■
Excellent	Good	Acceptable	Not recommended

Samples of finished products made of Eural bars



Chemical composition	
Si	≤ 0,50
Fe	≤ 0,50
Cu	3,80 ÷ 4,90
Mn	0,30 ÷ 0,90
Mg	1,20 ÷ 1,80
Cr	≤ 0,10
Ni	
Zn	≤ 0,25
Ti	≤ 0,15
Pb	
Bi	
Others	Each 0,05 Total 0,15
Al	Remainder

Physical properties		
Density	Kg dm ³	2,79
Modulus of elasticity	MPa	70.000
Coefficient of thermal expansion	x10 ⁻⁶ °C	23,1
Thermal conductivity at 20°C	W mk	120
Typical electrical resistivity at 20°C	Ω mm ² m	0,057

Minimum mechanical properties						
Temper	Diam. mm	Rm	Rp0,2	A%	HBW	
		MPa	MPa		Typical	
Drawn	T3	10 < D ≤ 80	425	290	9	120
	T351	≤ 80	425	310	8	120
	T6	≤ 80	425	315	5	125
	T651	≤ 80	425	315	4	125
	T8	≤ 80	455	400	4	130
	T851	≤ 80	455	400	3	130
Extruded	T3, T3510, T3511	≤ 50	450	310	8	120
	T3, T3510, T3511	50 < D ≤ 100	440	300	8	120
	T3, T3510, T3511	100 < D ≤ 200	420	280	8	120
	T3, T3510, T3511	200 < D ≤ 250	400	270	8	120
	T8, T8510, T8511	≤ 150	455	380	5	130