





PRODUCTION PROGRAM

Unit: in				
Drawn	0.787 - 3	-	-	-
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 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.

Samples of finished products made of Eural bars



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



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	$\frac{\text{lb}}{\text{in}^3}$ 0.1008
Modulus of elasticity	ksi 10,153
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$ 12.8
Thermal conductivity at 68°F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$ 68.9
Typical electrical resistivity at 68°F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ 0.057

Minimum mechanical properties						
Temper	Diam. in	UTS		YTS		HBW
		ksi	ksi	A%	Typical	
T3	≤ 3	61.6	42.1	9	120	
T351	≤ 3	61.6	45	8	120	
Drawn	T6	≤ 3	61.6	45.7	5	125
	T651	≤ 3	61.6	45.7	4	125
	T8	≤ 3	66	58	4	130
	T851	≤ 3	66	58	3	130
Extruded	T3, T3510, T3511	≤ 2	65.3	45	8	120
	T3, T3510, T3511	2 < D ≤ 4	63.8	43.5	8	120
	T3, T3510, T3511	4 < D ≤ 8	60.9	40.6	8	120
	T3, T3510, T3511	8 < D ≤ 10	58	39.2	8	120
	T8, T8510, T8511	≤ 6	66	55.1	5	130