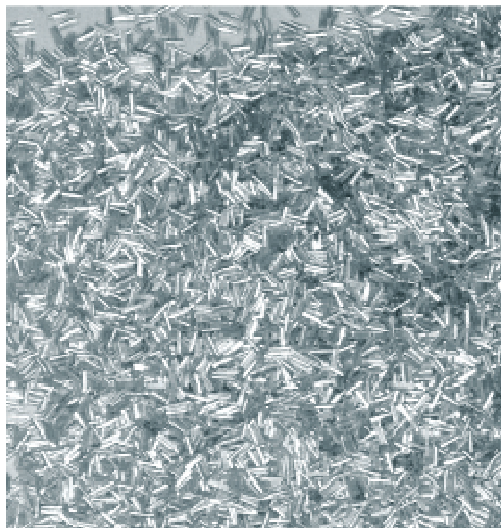


PRODUCTION PROGRAM

Unit: in	●	■	■	◆
Drawn	0.197 - 3	0.472 - 2.559	Thick. 0.472 - 2.165	0.472 - 2.362
Extruded	1.181 - 10	1.181 - 6.5	Thick. 1.181 - 5	—

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



PRESENTATION

This alloy is the most often selected for high speed automatic lathes.

It offers the following advantages:

- easy machining with any equipment;
- cutting stress lower than most of other alloys;
- longer life of cutting tools;
- cutting area always clean due to very thin chip;
- high mechanical properties
- possibility to anodize finished parts in several colors *.

Main applications: screws, bolts, nuts, threaded bars.

* To get an optimal surface finishing of anodized pieces, we suggest use suitable lubricants during machining.

Samples of finished products made of Eural bars

Properties	T3/T6	T8
Machinability	Excellent	Good
Protective anodizing	Good	Acceptable
Decorative anodizing	Acceptable	Not recommended
Hard anodizing	Acceptable	Not recommended
Resistance to atmospheric corrosion	Good	Acceptable
Resistance to marine corrosion	Acceptable	Not recommended
MIG-TIG weldability	Good	Acceptable
At resistance weldability	Acceptable	Not recommended
Brazing weldability	Acceptable	Not recommended
Plastic formability when cold	Good	Acceptable
Plastic formability when hot	Acceptable	Not recommended

Legend



Chemical composition	
Si	≤ 0.40
Fe	≤ 0.70
Cu	5.00 - 6.00
Mn	
Mg	
Cr	
Ni	
Zn	≤ 0.30
Ti	
Zr	
Pb	0.20 - 0.40
Bi	0.20 - 0.60
Al	Remainder

Physical properties	
Density	$\frac{\text{lb}}{\text{in}^3}$ 0.1022
Modulus of elasticity	ksi 10,152
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$ 12.7
Thermal conductivity at 68 °F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$ T3: 86.7 T8: 98.2
Electrical resistivity at 68 °F	$\frac{\Omega \text{ mm}^2}{\text{m}}$ T3: 0.038 T8: 0.043

Mechanical properties					
	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T6	45.0	33.4	8	110
	T6 *	49.3	35.5	12	115
Drawn	T3	46.4	39.2	10	90
	T3 *	55.1	42.1	16	120
	T8	53.7	39.2	8	115
	T8 *	57.3	45.7	16	125

* Typical Eural properties