



PRODUCTION PROGRAM

Unit: mm	●	■	■	●
Drawn	14 ÷ 76,2	20 ÷ 65	Spess. 12 ÷ 55	20 ÷ 63,5
Extruded	30 ÷ 254	50 ÷ 165	Spess. 30 ÷ 127	–

According to EU directives:

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



PRESENTATION

This alloy has high mechanical properties, excellent resistance to fatigue, good attitude to forging and a fair machinability.

2014A by Eural can also be made according to aerospace BS L168 standard, which requires higher mechanical properties compared to traditional EN standards. This version is available only for extruded bars in T6511 temper, from diameter 30 mm up to 152,4 mm.

Main applications: High structural resistance components for aircraft and defense.

Samples of finished products made of Eural bars

Properties	T3/T4/T6
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	■

Legenda

■	■	■	■
Excellent	Good	Acceptable	Not recommended



Chemical composition	
Si	0,50 ÷ 0,90
Fe	≤ 0,50
Cu	3,90 ÷ 5,00
Mn	0,40 ÷ 1,20
Mg	0,20 ÷ 0,80
Cr	≤ 0,10
Ni	≤ 0,10
Zn	≤ 0,25
Ti	≤ 0,15
Pb	
Others	Each 0,05 Total 0,15
Al	Remainder

Physical properties		
Density	Kg dm ³	2,80
Modulus of elasticity	MPa	72.400
Coefficient of thermal expansion	x10 ⁻⁶ °C	23
Thermal conductivity at 20°C	W mk	T6: 155
Typical electrical resistivity at 20°C	Ω mm ² m	T6: 0,043

Mechanical properties					
Temper	Diam. mm	Rm MPa	Rp0,2 MPa	HBW A%	Typical
Drawn	T3	≤ 80	380	290	8 110
	T351	≤ 80	380	290	6 110
	T4	≤ 80	380	220	12 110
	T451	≤ 80	380	220	10 110
	T6	≤ 80	450	380	8 140
Extruded	T651	≤ 80	450	380	6 140
	T4, T4510, T4511	≤ 75	410	270	12 110
	T4, T4510, T4511	75 < D ≤ 150	390	250	10 110
	T4, T4510, T4511	150 < D ≤ 200	350	230	8 110
	T6, T6510, T6511	≤ 75	460	415	7 140
	T6, T6510, T6511	75 < D ≤ 150	465	420	7 140
	T6, T6510, T6511	150 < D ≤ 200	430	350	6 140
	T6, T6510, T6511	200 < D ≤ 250	420	320	5 140
	T6, T6510, T6511	≤ 75	490	440	7 -
	T6, T6510, T6511	75 < D ≤ 100	480	435	7 -
BSL168 Extruded	T6, T6510, T6511	100 < D ≤ 150	465	420	7 -
	T6, T6510, T6511	150 < D ≤ 200	435	390	7 -