

EN AW-6012



ALUMINIUM BOZEN - Extruded Aluminum Alloys

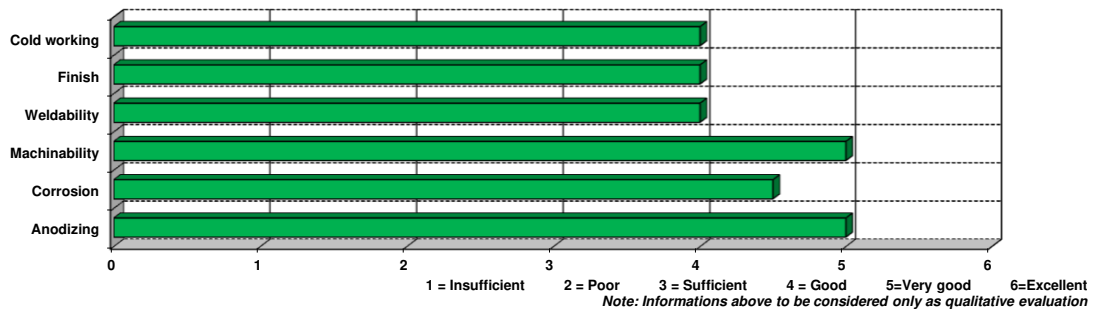
Alloy description

AlMgSiPb alloy specifically developed for machining applications and with Lead (Pb) content less than 1%. Being part of the 6000 alloys family, it also provides very good response to surface treatments/anodizing. The alloy is typically used for hydraulic valve blocks, brake components, as well as general engineering products where high machining performances are required.

Main features:

- very good machinability
- good corrosion resistance
- very good anodizing response

Alloy technological properties - T6 Temper



Chemical composition in accordance with EN 573-3	
Si %	0,6 - 1,4
Fe %	0,50 max
Cu %	0,10 max
Mn %	0,40 - 1,0
Mg %	0,6 - 1,2
Cr %	0,30 max
Ti %	0,20 max
Zn %	0,30 max
Bi %	0,7 max
Pb %	0,40 - 2,0
Others, each %	0,05
Others, total %	0,15
Al %	Remaining

Typical mechanical properties in accordance with EN 755-2								
Temper	Product	Dim [mm]	Rm [MPa]		Rp _{0.2} [MPa]		A%	HB Typical
			min	max	min	max		
T6 T6510 T6511	Rod/Bar	≤ 150	310	-	260	-	8	105
	Rod/Bar	150 < D ≤ 200	260	-	200	-	8	
	Tube	t ≤ 30	310	-	260	-	8	
	Profile	t ≤ 30	310	-	260	-	8	

Other conditions may be available and agreed upon Customer request.
The values given above represent typical figures and may be different depending on product dimension.

Physical properties		
Density	kg/dm ³	2,7
Modulus of elasticity	Mpa	70.100
Heat capacity (at 20°)	W/m*K	172
Coeff. of thermal exp.	x 10 ⁻⁶ /°C	23,4
Conductivity (at 20°)	MS/m	26,2

Note: Aluminium Bozen does not guarantee or accept any liability for the accuracy of the data provided above, even though is making every effort to ensure their consistency.

Aluminium Bozen
Via Toni Ebner, 24 - 39100 Bolzano - ITALY