

Aerospace, Defence, Motorcycle and Automotive, Mechanical Industry, Nuclear applications

Havacılık, Savunma, Motosiklet ve Otomotiv, Mekanik Endüstrisi,
Nükleer uygulamaları

This alloy has extremely high mechanical properties and high resistance to fatigue. Offering superior stress corrosion resistance, 7075 provides very high yield and tensile strengths. This high strength makes it a good alloy for use in the aerospace industry. It is also used in the defence industry with its hard anodised coatings.

Bu alaşım son derece yüksek mekanik özelliklere ve yorulmaya karşı yüksek dirence sahiptir. Üstün gerilme korozyonu direnci sunan 7075 çok yüksek akma ve çekme mukavemetleri sağlar. Bu yüksek mukavemet, havacılık endüstrisinde kullanılan iyi bir alaşım olmasını sağlamaktadır. Sert eloksal kaplamaları ile savunma endüstrisinde yer alır.

Unit mm				
Extruded	20 - 170	20 - 120	5 - 105	20 - 145

Minimum Mechanical Properties / Min. Mekanik Özellikler

Temper	Diam. mm	Rm	Rp0,2	A%	HBW	
		MPa	MPa		Typical	
O, H111	≤ 200	275	165	10	60	
T6, T6510, T6511	≤ 100	560	500	7	150	
EXTRUDE	T6, T6510, T6511	100 < D ≤ 150	550	440	5	150
	T6, T6510, T6511	150 < D ≤ 200	440	400	5	150
	T73, T73510, T73511	≤ 75	475	405	7	135
	T73, T73510, T73511	75 < D ≤ 100	470	390	6	135
	T73, T73510, T73511	100 < D ≤ 150	440	360	6	135

7075

2015/863 AMENDING ANNEX II TO
DIRECTIVE 2011/65/EU

Colour Code
EU Violet
Colour Code
USA Black



Chemical Composition / Kimyasal Bileşenler

Si	≤ 0,40
Fe	≤ 0,50
Cu	1,20 - 2,00
Mn	≤ 0,30
Mg	2,10 - 2,90
Cr	0,18 - 0,28
Ni	-
Zn	5,10 - 6,10
Ti	≤ 0,20
Pb	-
Bi	-
Others	Each 0,05 Total 0,15
Al	Remainder

Properties / Özellikler

T6

Machinability	Excellent	Good	Acceptable	Not recommended
Protective anodizing	Excellent	Good	Acceptable	Not recommended
Decorative anodizing	Excellent	Good	Acceptable	Not recommended
Hard anodizing	Excellent	Good	Acceptable	Not recommended
Resistance to atmospheric corrosion	Excellent	Good	Acceptable	Not recommended
Resistance to marine corrosion	Excellent	Good	Acceptable	Not recommended
MIG-TIG weldability	Excellent	Good	Acceptable	Not recommended
Resistance weldability	Excellent	Good	Acceptable	Not recommended
Brazing weldability	Excellent	Good	Acceptable	Not recommended
Plastic formability when cold	Excellent	Good	Acceptable	Not recommended
Plastic formability when hot	Excellent	Good	Acceptable	Not recommended

Physical Properties / Fiziksel Özellikler

Density	Kg/ dm ³	2,80
Modulus of elasticity	Mpa	72.000
Coefficient of thermal expansion	x10 ⁻⁶ /°C	23,5
Thermal conductivity at 20°C	W / mK	130
Typical electrical resistivity at 20°C	Ω mm ² / m	0,052

