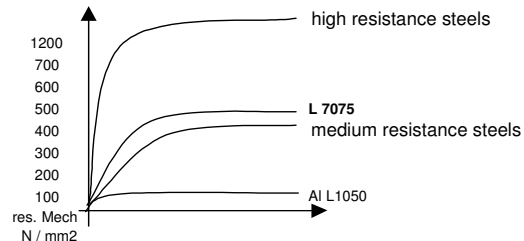


General characteristics

>> Alloy 7075 <<

Aluminium alloy in which the main alloying agent is Zinc, element that has the highest solubility in Aluminium. Zinc increases the hardness, besides helping the alloy self hardening. The alloys belonging to this series (7000), thermally treated, have the highest traction resistance of all Aluminium alloys. In the welded structures, this alloy is technically comparable to some steels, with a volume density three times lower.

mechanical resistance characteristics of alloy 7075 compared to other materials



Minimal mechanical characteristics at ambient temperature

Bars

State	Rm (Nmm ²)	Rp0.2 (Nmm ²)	Hardness Hb	Elongation %
T 6	560	495	145	7

Physical characteristics

Density: 2.81 g/cm³ a 20 °C
 Thermal conductivity at 20 °C: 155 W/m °C (state T0)
 Modulus of elasticity: 72500 Nmm²
 Fusion temperature : 475 - 635
 Thermal dilatation coef. : 23.5

Technological characteristics:

Workability at machines and tools: excellent, small chips and excellent quality of the finishing surfaces
 Formability: low
 Weldability: not recommended
 Anodisation behaviour : medium protective
 Resistance to corrosion : low

Typical uses

Nuts and bolts and heavy duty parts

Correspondence between international designations

Alloy of the family

France	Germany	Italy	USA	Great Britain
7075	Al Zn Mg Cu1,5	9007 / 2	7075	

Al Zn Mg Cu1,5

Chemical composition of alloy 7075 in %

Cu	Fe	Mn	Mg	Si	Zn	Cr	Ti	Zr + Ti	Pb
1.2 - 2	0.5	0.3	2.1 - 2.9	0.4	5.1 - 6.1	0.18 - 0.28	0.2	0.25	
	max		max				max	max	