

# AISi7Mg0,6

## Material properties

- High static and dynamic strength
- High corrosion resistance
- Low density
- Good thermal properties

## Applications

- Aeronautic : wings, armaments, crank
- Automobile : bumpers, engine bloc, rims
- Marine : hull and accessories

## Physical properties (as built)

Density	2670	kg.m <sup>-3</sup>
Young modulus	5800	MPa

## Chemical composition

Elements	Si	Mn	Ni	Ti	Cu	Pb	Mg	Zn	Sn	Others
%	6,5-7,5	<0,35	<0,15	<0,25	<0,2	<0,15	0,2-0,65	<0,15	<0,05	0,15

## Mechanical properties

Properties	Notation	Direction	As built	HT	units
Yield strength	Rp <sub>0,2</sub>	XY	165 ± 5	-	MPa
		Z	140 ± 50	290 ± 5	
Tensile strength	R <sub>m</sub>	XY	240 ± 20	-	MPa
		Z	220 ± 20	345 ± 5	
Elongation at break	A%	XY	2,9 ± 1	-	%
		Z	4,5 ± 2	13 ± 1,5	

(1) HT heat treatment