



Microstructure

# Alloy

## CuAl11Fe6Ni6



### Characteristics & Typical Applications

High strength, corrosion resistance, and wear resistance. Extremely high stressed bearing parts and worm wheels. Valves, valve seats, cover plates, sliding components, wear parts, matrices for chipless forming technology, high-pressure steam fittings.

### Chemical Composition

Elements	Cu	Al	Ni	Fe	Mn	Sn	Zn	Si	Pb	Mg
EN 1982	72 - 82,5	10-12	4-7,5	4-7	2,5 max	0,2 max	0,5 max	0,1 max	0,05 max	0,05 max
Average Nominal	77	11	5	5	1,5	0,15	0,2	0,1	0,03	0,02

### Typical Mechanical Properties

		Centrifugal Cast
Tensile Strength Rm	MPa(min)	750
%0,2 Yield Stress	MPa(min)	380
Elongation	%(min)	5
Hardness	HB(min)	185

### Physical Properties

Density	Specific Heat Capacity	Electrical Conductivity	Thermal Conductivity
7.53 gm/cm <sup>3</sup> at 20°C	419.0 J/kg. °K at 20°C	0.049 Mega Siemens/cm at 20°C	41.9 W/m.°K at 20°C

### Fabrication Processes

Joining Technique	Soldering	Brazing	Oxyacetylene Welding	Gas Shielded Arc Welding	Coated Metal Arc Welding	Machinability Rating
Suitability	Good	Fair	Not Recommended	Good	Good	50

### Related Specifications

EN1982

CC334G