



CuAl10Fe1

Aluminum Bronze Alloy

Standardization:
Aluminum Bronze

ALLOY DESCRIPTION

An Aluminum Bronze alloy offering high mechanical strength and exceptional corrosion resistance against saltwater/acids. Equipped with excellent resistance to dynamic loads and wear.

CHEMICAL COMPOSITION (% WEIGHT)

Fe (%)	Si (%)	Mn (%)	Ni (%)	Al (%)	Pb (%)	Zn (%)	Sn (%)
0.5 - 1.5	max 0.2	max 0.5	max 1	9 - 10	max 0.02	max 0.5	max 0.1

MECHANICAL PROPERTIES (MIN.)

Elongation (A)	20
Hardness (HB)	105 - 145

PHYSICAL PROPERTIES

Density	7.60 [kg/dm ³]
Melting Temperature	~1030 - 1050 [°C]
Elk. Conductivity	~8 - 10 [MS/m]
Elasticity Modulus	120 [kN/mm ²]

CASTING / MANUFACTURING METHODS

EK	Extrusion (Rod/Profile)
GS	sand casting
GM	Permanent mold casting
GZ	Centrifugal casting

AREAS OF APPLICATION

Ship Propellers	Chemical Plant Sleeves
Heavy Duty Bearings	Wear Plates
Aircraft Landing Gears	

MACHINABILITY & CHARACTERISTICS

Due to its high hardness, it shows superior performance against erosion, cavitation, and corrosion. The most ideal material for marine and heavy industries. Carbide tools are recommended during machining.

The technical information specified in this document reflects the standard reference values of international EN and DIN norms. Deviations may be observed depending on final production conditions.

CORUM BRONZE

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