



CuSn10-C

Pewter Bronze Alloy

Brand Name

KUPTIN 10

Standardization:

DIN EN 1982 / CC480K / C90500

ALLOY DESCRIPTION

GBz 10 is a Tin-Bronze alloy that is extremely resistant to corrosion and seawater. It is characterized by relatively high extensibility and is a construction material that offers an ideal combination of toughness and corrosion resistance. It exhibits high performance in pump and armature bodies, especially in marine applications. It provides excellent texture structure with special casting techniques for thick-walled parts.

CHEMICAL COMPOSITION (% WEIGHT)

Cu (%)	Sn (%)	Pb (%)	Ni (%)	P (%)	Zn (%)
88.0-90.0	9.0-11.0	max. 1.0	max. 2.0	max. 0.2	max. 0.5

MECHANICAL PROPERTIES (MIN.)

Tensile Strength (R_m)	250 - 280 [N/mm²]
Yield Strength ($R_{p0.2}$)	130 - 160 [N/mm²]
Elongation (A_5)	min. 10 - 18 [%]
Hardness (HBW)	min. 70 - 80 [HB]

PHYSICAL PROPERTIES

Density	8.70 [kg/dm³]
Melting Temperature	830 - 1020 [°C]
Elk. Conductivity	7 - 8 [MS/m]
Elasticity Modulus	90 - 110 [kN/mm²]

CASTING METHODS

GS	sand casting
GM	Permanent mold casting
GZ	Centrifugal casting
GC	continuous casting

AREAS OF APPLICATION

Valve and Pump Bodies	Water Turbines Parts
Sealing Rings	Sea Water Equipment
Parts Requiring High Toughness	

MACHINABILITY & CHARACTERISTICS

It is known for its good machinability and high corrosion resistance. It is safely preferred especially in heavy industrial equipment exposed to sea water. Its biggest advantage is that it maintains a homogeneous texture structure even in thick-walled castings.

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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