

CNC Bronze Alloys

SUITABLE FOR CNC MACHINING



MATERIAL NAME

CNC Bronze Alloys

COLOR

Natural Bronze

PROCESS

CNC

PRODUCT DESCRIPTION

CNC Bronze Alloys are a class of alloy materials containing copper base, usually composed of copper (Cu) with elements such as tin (Sn), aluminum (Al), phosphorus (P), silicon (Si) or manganese (Mn). These alloys have good mechanical properties, wear resistance, corrosion resistance and excellent machinability, and are widely used in industrial manufacturing.

TYPICAL APPLICATIONS

- Bearings and bushings
- Gear and wear parts
- Ships and Marine equipment(Propeller Shafts)

PRODUCT SAFETY

- Metal dust generated during CNC machining should be controlled through appropriate ventilation and protective measures to avoid inhalation.
- Use safety goggles, gloves and a dust mask during processing to prevent fine metal particles and sharp edges.

PRODUCT DELIVERY & WAREHOUSING

- **STORAGE**

Store in a dry, ventilated environment, avoiding moisture and exposure to corrosive chemicals. Apply protective coatings to prevent oxidation or corrosion of metal surfaces.

- **USAGE AND HANDLING**

Remove burrs and residual materials from the product. Use protective equipment like gloves when handling. Avoid using the product in extreme environments or high-load scenarios; regularly inspect for mechanical performance.

- **CHEMICAL COMPATIBILITY**

Avoid contact with strong acids, alkalis, or corrosive solvents. Use appropriate cleaning and maintenance solutions.

Assess risks of oxidation, corrosion, or magnetic effects based on specific application environments.

MATERIALS WE SUPPORT:

ASTM	DIN	GB	Density (g/cm ³)	Hardness	Tensile Strength, Yield(Mpa)	Fatigue Strength (Mpa)	Elongation at Break(%)
C521	CuSn8	QSn7-0.2	8.9	90~120 HB	450~600	150~250	10~15
C172	CuBe2&2.1247	QBe2	8.8	180~220 HB	700~900	250~400	4~10
C182	CuCr	QCr0.5	8.9	150~210 HB	700~800	200~350	8~12

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>



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