

Material Information



Brass C260

Introduction

Brass C260, also known as Cartridge Brass or 70/30 Brass, is a copper-zinc alloy containing approximately 70% copper and 30% zinc. It offers a good combination of strength, formability, corrosion resistance, and machinability, making it suitable for CNC-machined parts and components with complex shapes.

Advantages

Good machinability, excellent cold workability, good corrosion resistance, and moderate strength. Brass C260 also offers good electrical conductivity and can be readily soldered and brazed, making it suitable for both mechanical and electrical components.

Disadvantages

Brass C260 has lower electrical conductivity than commercially pure copper and is heavier than aluminum alloys commonly used for CNC machining. Its machinability is also lower than that of free-cutting brasses, so machining conditions may need to be optimized for efficient chip control and surface quality.

Tolerance

3DSPRO can manufacture and inspect to tight tolerances, including sub +/- 0.001" tolerances, per your drawing specifications and GD&T callouts.

Recommendation

The combination of machinability, formability, corrosion resistance, and moderate strength makes Brass C260 suitable for CNC machined components used in plumbing, electrical, automotive, industrial, and consumer applications. It is particularly useful for parts that require a balance between mechanical performance and a clean brass appearance.

Material Specifications (For reference only.)	
Tensile strength	95MPa
Fatigue strength	90MPa
Elongation at Break	65%
Hardness	54 HB

Density	8.53 g/cm ³
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Attention

Brass C260 is available in different tempers, and its strength, hardness, and ductility can vary depending on the amount of cold work. When mechanical performance is critical, the required temper should be specified. Because C260 contains zinc, appropriate material selection should also be considered for applications involving specific corrosive environments or prolonged exposure to aggressive media.

Applications

3DSPRO finds people using Brass C260 to make functional parts and prototypes in the following industries and applications.

Plumbing components:

Fittings, valves, plumbing accessories, washers, and other components requiring corrosion resistance and good formability.

Electrical components:

Electrical connectors, terminals, contacts, and other components requiring moderate electrical conductivity and corrosion resistance.

Automotive parts and supplies:

Radiator components, heater cores, fasteners, pins, housings, and other precision mechanical parts.

Consumer and industrial products:

Locks, hinges, hardware, lamp fixtures, decorative components, and other CNC machined parts requiring a combination of machinability, formability, and appearance.