

Material Information



Brass C260

Introduction

Brass C260, also known as C26000 or Cartridge Brass, is a copper-zinc alloy containing approximately 70% copper and 30% zinc. It is known for its excellent ductility, good corrosion resistance, good electrical and thermal conductivity, and excellent cold-forming characteristics. Brass C260 is widely used for sheet metal fabrication when a combination of formability, appearance, corrosion resistance, and moderate strength is required.

Advantages

Excellent formability, good corrosion resistance, and good machinability make Brass C260 suitable for a wide range of sheet metal fabrication applications. Its high ductility allows it to be readily bent, stamped, deep drawn, and formed into complex shapes. It also offers good electrical and thermal conductivity, while its brass appearance can provide an attractive finish for visible components.

Disadvantages

Brass C260 has lower strength than many engineering steels and some higher-strength copper alloys, which may limit its use in heavily loaded structural applications. Its relatively high density also results in heavier parts compared with aluminum sheet metal. In addition, repeated cold forming can cause work hardening, which may require intermediate annealing when extensive forming is needed.

Tolerance

We offer tolerances as tight as $\pm 0.005"$. Tighter tolerances are available upon manual review.

Recommendation

The combination of excellent formability, corrosion resistance, moderate strength, conductivity, and attractive appearance makes Brass C260 suitable for sheet metal fabricated parts used in electrical, plumbing, automotive, hardware, decorative, and general industrial applications. It is particularly appropriate for formed components, housings, brackets, terminals, fittings, and other parts that require extensive cold forming.

Material Specifications (For reference only.)	
Tensile strength	295 to 510MPa
Elongation at Break	23%
Density	8.53 g/cm ³
Thermal conductivity	120 W/m·K at 20°C
Electrical conductivity	28% IACS at 20°C

Attention

Brass C260 is a non-heat-treatable copper-zinc alloy, and its mechanical properties depend on the temper and amount of cold work. During bending, stamping, and deep drawing, the material's high ductility generally supports complex forming, but repeated deformation can increase work hardening and reduce further formability. Appropriate bend radii and forming conditions should be considered to minimize cracking. For applications requiring joining, the selected soldering, brazing, or welding method should also be evaluated based on the material thickness and service requirements.

Applications

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

Electrical and electronics:

Terminals, connectors, electrical components, contact parts, shields, and other fabricated parts requiring good conductivity and excellent formability.

Plumbing and fluid-handling equipment:

Fittings, formed components, tubes, covers, and other parts requiring corrosion resistance, ductility, and ease of fabrication.

Automotive and transportation:

Radiator components, terminals, brackets, fittings, trim components, and other fabricated parts requiring a combination of formability and corrosion resistance.

Hardware and general industrial applications:

Housings, brackets, panels, decorative components, stamped parts, and other sheet metal fabricated components that benefit from Brass C260's excellent forming characteristics and distinctive brass appearance.