

C220 Brass - C22000 (Commercial Bronze)

Overview

C220 Brass, also known as Commercial Bronze or C22000, is a copper-zinc alloy characterized by its excellent ductility, strength, and corrosion resistance. Composed of 90% copper and 10% zinc, it offers a unique combination of formability and moderate strength ideal for various applications. Despite its name 'bronze,' it is technically a brass alloy.

Chemical Composition

Element	Content (%)
Copper (Cu)	89.0 - 91.0
Zinc (Zn)	Balance (~10)
Lead (Pb)	≤ 0.05
Iron (Fe)	≤ 0.05

Key Properties

- Excellent corrosion resistance to acids and alkalis
- Good thermal stability for high-temperature applications
- High strength and ductility
- Good wear resistance
- Attractive warm reddish-gold color
- Good weldability
- Melting Point: ~930°C (1706°F)

Applications

- Valve stems and lock bodies
- Piston rings and bearings
- Bushings
- Electrical fittings
- Decorative hardware
- Gas turbine and boiler components

Standards

- UNS: C22000
- Also known as: 90/10 Brass, Commercial Bronze