

CW508L / CZ108 is a 37% zinc containing brass commonly referred to as basis brass. Predominantly an alpha brass it is one of the most popular sheet and plate grades due to its hot and cold working capabilities.

CW508L / CZ108 is often used for general purpose applications and forming operations when very good bending properties are required. It also offers a very good general corrosion resistance in many natural atmospheres, a reasonable machinability and good cold heading properties.

Related Specifications

CW508L	CZ108
C27200	CuZn37

Chemical Composition

Copper	62.0-65.0%
Lead	0.30% max
Zinc	Rem
Others	0.50% max

Key Features

- Good hot and cold forming properties
- Good Corrosion resistance
- Very good cold heading attributes
- Good strength properties

Typical Physical Properties

Melting Point	920°C
Density	8.45 g/cm ³
Specific Heat	380 J/Kg°K
Thermal conductivity (RT)	125 W/m°K
Thermal expansion coefficient (20-200°C)	21 x 10 ⁻⁶ / °C
Electrical conductivity	26 % IACS
Electrical Resistivity	0.066 ohm mm ² /m
Modulus of Elasticity	103.4 GPa

Fabrication Properties

Hot Working Temperature Range	720-820°C
Hot Formability	Good
Cold Formability	Good
Cold Reduction Between Anneals	65%
Machinability rating (free cutting brass = 100)	35 %
Annealing Temp. Range	450-650°C
Stress Relieving Temp. Range	250-350°C

Joining Methods

Soldering	Excellent
Brazing	Excellent
Oxy-acetylene welding	Good
Gas-shielded arc welding	Fair
Resistance welding: Spot and Seam	Fair
Butt	Good

Typical Uses:

The CW508L / CZ108 is used for a variety of decorative components as well as general components such as heat exchangers, lamp caps, lamp-holder and switch components, general copper-smithing work, chains, eyelets, fasteners, hinges, locks, instrument covers and blanked articles such as instrument plates and wheels. Other uses include cold headed items including pins, rivets, screws, springs, radiator tanks and torch cases.

This technical information is given by Holme Dodsworth Metals without charge and the user shall employ such information at their own discretion and risk. For more detailed technical advice on temper selection, fabrication, joining, machining, physical and mechanical data please contact us as space does not permit the listing of every feature of the material.