

CW606N / CZ131 is a riveting and turning brass with a duplex phase structure containing a fine dispersion of lead particles to improve machinability. In addition the alloy offers a high general corrosion resistance combined with a good strength and ductility.

The CW606N / CZ131 has a high enough copper content to retain good cold heading and cold forming properties together with the ability to be crimped and knurled. Typically used for the production of headed components and is the ideal choice for components requiring forming and machining.

### Related Specifications

CZ131	C35300
CW606N	CuZn36Pb2

### Chemical Composition

Copper	61.0-63.0%
Lead	1.5-2.5%
Iron	0.2% max
Zinc	Rem
Others	0.50% max

### Key Features

- Good strength and ductility
- High general corrosion resistance
- Ability to be machined and formed

### Mechanical Properties (Specification minima 18-40mm)

UTS	350 N/mm <sup>2</sup>
Proof Strength	-
Elongation	25%

### Typical Physical Properties

Melting Point	910°C
Density	8.50 g/cm <sup>3</sup>
Specific Heat	380 J/Kg°C
Thermal conductivity (20°C)	117 W/m°C
Thermal expansion coefficient (20-200°C)	20 x 10 <sup>-6</sup> per °C
Electrical conductivity	26 % IACS
Electrical Resistivity	0.066 ohm mm <sup>2</sup> /m

### Fabrication Properties

Hot Working Temperature Range	700-800°C
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Hot Formability	Good
Cold Formability	Good
Cold Reduction Between Anneals	50%
Machinability rating (free cutting brass = 100)	75 %
Annealing Temp. Range	450-650°C
Stress Relieving Temp. Range	250-350°C

### Joining Methods

Soldering	Excellent
Brazing	Good
Oxy-acetylene welding	Not recommended
Gas-shielded arc welding	Not recommended
Resistance welding: Spot and Seam	Not recommended
Butt	Fair

### Typical Uses:

The CW606N / CZ131 is used for nuts, rivets, screws and other headed components, together with builders hardware, plumbing fittings, faucet seats, instrument parts, clock and watch components, battery terminals and other parts requiring a good machinability and reasonable cold forming.

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.