THAMES STOCKHOLDERS
A Division of SMITHS

# CZ120 (CW612N)

BRASS ALLOY (Engraving Brass)

## Product Overview

We stock **CZ120 (CW612N)** in plate and sheet form. The alloy is most commonly known as engraving brass - a more traditional material used for signs, plaques and decorative use.

CZ120 is an alpha-beta brass that benefits from including 2% lead (Pb) in the alloying process, resulting in excellent free-cutting characteristics. The material has a duplex phase structure, so acid-etched work is not advisable. However, the alloy combines good corrosion and strength with excellent hot formability and promotes superior machining capabilities.

CZ120 has an attractive, highly polished finish and may be engraved or laser marked.

## Key Features

- Excellent free-cutting capabilities
- Good corrosion resistance
- Good strength
- Highly suitable as an engraving material

## Applications

- Name plates
- Plaques
- Gears and valves
- Fasteners

## Material Specifications: 2.0380, C37700, CuZn39Pb2, CW612N, NF A51-101

## * Chemical Composition (weight, %)

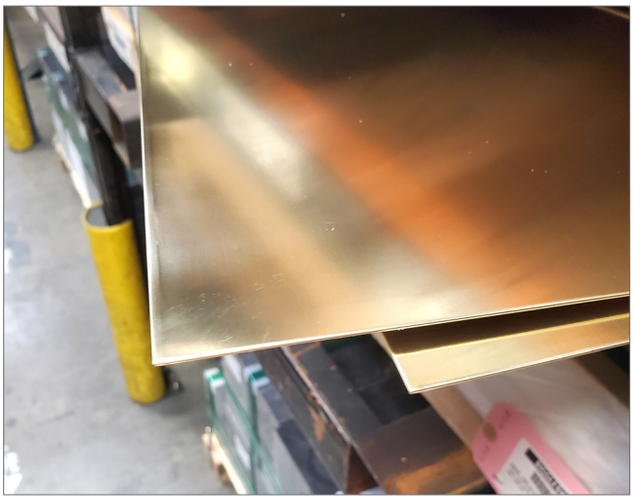
| | Cu | Pb | Zn | Al | Fe | Ni | Sn | Other |
|---|---|---|---|---|---|---|---|---|
| Min. | 59.0 | 1.60 | | | | | | |
| Max. | 60.0 | 2.50 | Rem | 0.05 | 0.30 | 0.30 | 0.30 | 0.20 |

* Properties as per BS EN 1652

## * Mechanical Properties

| | |
|---|---|
| Tensile, R360 | |
| Tensile Strength | 360 - 440 MPa |
| Proof Strength | 270 MPa, max |
| Elongation | 30% min |
| | |
| Hardness, H090 | |
| Vickers | 90 -120 HV |

* Properties as per BS EN 1652



THAMES STOCKHOLDERS
A Division of SMITHS

Thames Stockholders
Unit 5W. Woodall Road, Redburn Industrial Estate
Ponders End, Enfield, Middlesex EN3 4LQ

Tel: +44 (0)20 8805 3282

sales@thamesstock.com

www.thamesstock.com

bsi ISO 9001 Quality Management Systems CERTIFIED

SCAN ME

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

© Thames Stockholders 2026