


## Key Features

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


## 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.

## Applications

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- 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 | $360-440 \mathrm{MPa}$ |
| Proof Strength | $270 \mathrm{MPa}, \mathrm{max}$ |
| Elongation | $30 \% \mathrm{~min}$ |
| Hardness, H090 <br> Vickers | $90-120 \mathrm{HV}$ |

* Properties as per BS EN 1652



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