

Features

- **Excellent Free-Cutting Properties:** The 2% lead content is finely dispersed, allowing for clean cuts and preventing tool "clogging" during high-speed machining.
- **Highly Suitable for Engraving:** Known as the "go-to" alloy for rotary and manual engraving, providing a smooth surface for intricate designs.
- **High-Polished Aesthetic:** Often supplied with a brilliant, gold-like finish that is aesthetically appealing for decorative metalwork.
- **Protective Coating:** Sheets are frequently provided with a **heavy vinyl coating** on one side to protect the polished surface during fabrication.
- **Duplex Phase Structure:** This alpha-beta structure provides a balance of strength and formability, though it is not recommended for acid-etched work.

RS PRO CZ120 Brass Sheet, L:1219MM X W:610MM X T:7.2MM

RS Stock No: 0858812



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS PRO CZ120 Brass Sheet

The RS PRO CZ120 Brass Sheet is a duplex alpha-beta brass specifically formulated as an engraving grade material. Its defining characteristic is the addition of approximately 2% lead, which acts as a chip breaker during machining. This ensures that the material is "free cutting," allowing high-speed rotary tools to produce clean, sharp-edged characters without the metal "smearing" or clogging the cutter. While it is robust and offers excellent corrosion resistance for nameplates and memorial plaques, it is not intended for deep drawing or complex cold forming. Instead, it excels in applications requiring a high-quality surface finish, often coming pre-polished and protected by a vinyl film to ensure the aesthetic remains flawless until the final installation.

Key Features:

- **Good Corrosion Resistance:** Highly resistant to many natural atmospheres and common environments, ensuring longevity for plaques and signs.
- **Mechanical Strength:** Offers a robust tensile strength of 360–440 MPa, making it stronger than many standard brass grades.
- **Laser Marking Compatibility:** Can be easily marked with lasers using specialized marking sprays, expanding its versatility beyond traditional rotary tools.
- **Thermal Conductivity:** With a value of 117 W/m·K, it is an efficient conductor of heat, which aids in certain forming and soldering processes.

Applications:

- Professional Signage and Nameplates
- Commemorative Plaques and Awards
- Architectural Metalwork
- Precision Industrial Components
- Instrument and Clock Casings

General Specifications

Material	Brass
Form	Sheet
Grade	CZ120 (CW612N / Engraving Grade)
Length	1219MM
Width	610MM
Thickness	7.2MM

Metal Bars

Mechanical Specifications

Tensile Strength	360 – 440 MPa
Proof Stress	150 – 280 MPa
Hardness Vickers (HV)	90 – 120 HV
Elongation A50 mm	15 – 25%
Density	8.44 g/cm ³
Melting Point	895°C
Thermal Expansion (20-200°C)	20.9 x 10 ⁻⁶ /K
Modulus of Elasticity	105 GPa
Thermal Conductivity	117 W/m·K

Similar Products

RS Code	Form	Length	Thickness	Height
0858813	BRASS SHEET	1219MM	6.5MM	610MM
0858814	BRASS SHEET	1219MM	1/4IN	610MM
0858816	BRASS SHEET	2000MM	1.5MM	3/4"