CZ108 (CW508L) Technical Datasheet

Applications

- Heat exchangers
- Radiator tanks
- Decorative components
- Switch components
- Lamp holders
- General copper smithing work

Product Description

CZ108/CW508L is referred to as a basic brass containing 37% zinc. Classified predominantly as an alpha brass, CZ108 is a popular material grade due to its hot and cold working properties. It is a high purity cold forming brass and is used where severe bending properties are required. The material can be machined but only at slow speed with very light feeds.

Cold Working

Excellent and can be readily drawn.

Hot Working

Fabrication rated as fair

Alloy Attributes

- Very good bending properties
- Reasonable machining properties
- Good corrosion resistance
- Good cold heading properties

Related Material Specifications

- CW508L
- CZ108
- CuZn37

Corrosion Resistance

Good to excellent, Not suitable for use with hydrochloric acids, nitric acids, acetic acids, most ammonia or ammonia compounds

Availability

Sheet, Tube

Weldability

- Excellent for soldering and brazing.
- Oxyacetylene welding is good
- Gas shielding methods only fair

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th>Weight (%)</th>
<th>Cu</th>
<th>Ni</th>
<th>Sn</th>
<th>Pb</th>
<th>Al</th>
<th>Zn</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>min.</td>
<td>62.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>max.</td>
<td>64.0</td>
<td>0.30</td>
<td>0.10</td>
<td>0.10</td>
<td>0.05</td>
<td>Balance</td>
<td>0.20</td>
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</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proof Stress</td>
<td>110 MPa</td>
<td>500 MPa</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>300 MPa</td>
<td>550 MPa</td>
</tr>
<tr>
<td>Elongation √5.65</td>
<td>15% 55 HV</td>
<td>180 HV</td>
</tr>
</tbody>
</table>

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

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