Belzona 1111 (Super Metal) is a cold-curing 100% solids epoxy composite reinforced with silicon steel alloy.

This material can be used for various applications including bonding, shimming, forming, rebuilding, wrapping, patching, sealing and filling.

It will not shrink while curing in service, allowing for exact dimensions and geometry to be achieved. Belzona 1111 ensures lasting in-service performance, accounting for temperature and pressure fluctuations, loading and stresses, impact and abrasion.

Five-year shelf life makes Belzona 1111 an invaluable stock item for many maintenance professionals.

**Technical Data**

- **Mixing ratio (Base : Solidifier)**: 3:1 by volume 5:1 by weight
- **Working life**: 15 minutes at 25°C (77°F)
- **Shelf life**: 5 years
- **Dry heat resistance**: 200°C (392°F)
- **Adhesion (tensile shear)**: Mild steel - 2,790 psi (19.2 Mpa) Stainless steel - 2,960 psi (20.4 Mpa)
- **Compressive strength**: 9,620 psi (66.3 Mpa) at 20°C (68°F)
- **Volume capacity**: 24.3 in³ (398 cm³) / kg
- **Heat distortion temperature**: 53°C (127°F) at 20°C (68°F) 91°C (195°F) at 100°C (212°F)
- **Abrasion resistance**: H10 Wheels (Wet) 852 mm³ CS17 - 24 mm³ dry

**Cure Times**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>10°C (50°F)</th>
<th>15°C (59°F)</th>
<th>20°C (68°F)</th>
<th>25°C (77°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No loading or immersion</td>
<td>3 hours</td>
<td>2½ hours</td>
<td>1¾ hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Machining and/or light loading</td>
<td>4 hours</td>
<td>3 hours</td>
<td>2 hours</td>
<td>1½ hours</td>
</tr>
<tr>
<td>Full mechanical or thermal loading</td>
<td>2 days</td>
<td>1½ days</td>
<td>1 day</td>
<td>20 hours</td>
</tr>
<tr>
<td>Immersion in chemicals</td>
<td>4 days</td>
<td>3 days</td>
<td>2 days</td>
<td>1½ days</td>
</tr>
</tbody>
</table>

*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.
Application Areas:

- **Bonding and shimming**
- **Forming and rebuilding**
- **Wrapping and patching**
- **Sealing and filling**

Key Benefits:

- **Multi-purpose**
  Can be used for bonding, irregular shimming, forming, rebuilding, wrapping and patching.

- **Durable**
  High compressive strength, impact and abrasion resistance.

- **High precision**
  Moulds to precise contours and can be machined with conventional tools.

- **Simple application**
  Easy to mix and apply with no specialist tools.

- **Versatile**
  Adheres well to almost any substrate and can be applied in thin or thick sections in one operation.

- **100% Solids**
  No shrinkage, expansion or contraction during cure.

For more information, please contact your local Belzona representative.

**QUALITY PRODUCTS – TECHNICAL SUPPORT**

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.