As the world’s leading producer of Amorphous Brazing Filler Metals, Metglas, Inc. continues to expand brazing alloy compositions suitable for the most demanding applications. Our new amorphous MBF-1000 series brazing foil is specifically designed for application in aerospace turbine blade repair and polycrystalline diamond tip brazing.

**MBF 1000 Series Alloy Composition**

<table>
<thead>
<tr>
<th>Amorphous Metals Designation</th>
<th>Nominal Composition, wt %</th>
<th>Temperature °C (°F)</th>
<th>Mass Density g/cm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ni  Cr  Pd  Si  B  Co  Mo</td>
<td>Solidus</td>
<td>Liquidus</td>
<td></td>
</tr>
<tr>
<td>MBF 1005 Bal - 46.7 6.1 - - -</td>
<td>810 (1490)</td>
<td>851 (1564)</td>
<td>9.93</td>
</tr>
<tr>
<td>MBF 1011 Bal - 45.5 5.0 - 5.0 4.5</td>
<td>847 (1557)</td>
<td>895 (1643)</td>
<td>9.11</td>
</tr>
<tr>
<td>MBF 1012 Bal 10.5 36.0 0.5 3.0 - -</td>
<td>820 (1508)</td>
<td>960 (1760)</td>
<td>8.80</td>
</tr>
</tbody>
</table>

MBF 1005 and 1011 were specifically designed to have a brazing temperature below 900°C to reduce thermal stresses from the brazing process and prevent polycrystalline diamond from graphitization. The low silicon content and lack of boron help reduce intermetallic particles in the braze joint and increase joint strength.

All MBF 1000 series alloys can be used to join 300 series stainless steel and nickel based super-alloys. Braze joints with these materials exhibit very high corrosion resistance and low erosion of base metal.

Available as flexible 100% metallic foil having **18-50 μm (0.7-2.0 mil) thickness and 50 mm (2”) width**. Foil with wider width may be supplied on a special request.

**RECOMMENDED APPLICATIONS:**

AIRCRAFT AND POWER TURBINES, DIAMOND TIPPED TOOLS AND DRILL BITS.

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**Contact Information**

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**Metglas®**

Brazing Foil Outperforms Alternative Filler Metals

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