

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

MBF 1000 Series Alloy Composition

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

MBF 1005 and 1011 were specifically designed to have a braze temperature below 900°C to reduce thermal stresses from the braze 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.

Contact Information

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Metglas® Braze Foil Outperforms Alternative Filler Metals

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