

## Data Sheet

# Palnico™ (Mac-Palnico™ 30-WM)

### Description

High-purity Melt-Spun Foil alloy of nickel, palladium, chromium and boron, for vacuum brazing.

Nominal composition by weight: **56.55% Ni, 30.5% Pd, 10.5% Cr, and 2.45% B.**

Melt-Spun Foil is produced by a rapid solidification technique.

The flexible foils of brittle alloys that are made this way cannot be formed by conventional hot or cold rolling.

### Prime Features:

- Consistent wetting and melting behaviour
- Structural stability over wide temperature range

### Specifications

- Quality Assurance to ISO 9002
- MBF-1198 allied equivalent

### Typical Applications:

- Heat exchanger assemblies
- Aero engine compressor vanes, stators and hush kits
- Bonding diamond compounds to tungsten carbide cutting tools

### Supplied As:

- Strip foil up to 250mm [10in] wide
- Preforms
- Typical thickness 0.05mm [0.0002in]

### Physical Properties

Liquidus Temperature	977 °C
	1790 °F
Solidus Temperature	941 °C
	1725 °F
Density	9.41 mg/m <sup>3</sup>
	0.34 lb/in <sup>3</sup>

Please note that all values quoted are based on test pieces and may vary according to component design. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only.

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From an extensive range of advanced materials we produce components, assemblies and systems that deliver significantly enhanced performance for our customers' products and processes. Our engineered solutions are produced to high tolerances and many are designed for use in extreme environments.

We design and manufacture products for demanding applications in a variety of markets using a comprehensive range of advanced ceramic, glass, precious metal, piezoelectric and dielectric materials. We utilise core competences of applications engineering and superior materials technology, together with state of the art fully integrated manufacturing processes to offer precision ceramic components, ceramic-to-metal assemblies and special coatings for use in a variety of applications.