

AUFHAUSER PalCo-6535 is a solid solution alloy with minimum melting point designed for vacuum brazing. **PalCo-6535** has an extremely high melting temperature of 2226°F (1219°C) which allows for incredible resistance to extreme environments and thermal exposure. **PalCo-6535** has high oxidation and corrosion resistance and creates extremely strong hermetic seals. PalCo-6535 joint clearance is 0.001 - 0.003".

APPLICATIONS

Brazing nickel, nickel-super alloys, refractory metals in vacuum applications.

NOMINAL COMPOSITION, wt.%

Pd	Co
65	35

Zn	Cd	Pb	P	C	Other volatile elements each*	Total non-volatile elements**
<0.001	<0.001	<0.002	<0.002	<0.010	<0.002	<0.075

*) All other metallic impurities having a vapor pressure higher than 10^{-7} torr at 500°C are limited to 0.002 wt.% each.

***) Impurities having a vapor pressure lower than 10^{-7} torr at 500°C are limited to a total of 0.075 wt.%. This applies to all forms except powder and extrudable paste.

PHYSICAL PROPERTIES

Solidus	2226°F (1219°C)
Liquidus	2226°F (1219°C)
Recommended brazing range	2300 - 2400°F (1260 - 1316°C)
Coefficient of Thermal Expansion (CTE)	9.6 x 10 ⁻⁶ /°F, for 68 - 1832°F 17.0 x 10 ⁻⁶ /°C, for 20 - 1000°C
Density	10.4 g/cm ³ (0.375 lb/in ³)
Yield strength (0.2% offset)	344 MPa (50 x 10 ³ lb/in ²)
Tensile strength	661 MPa (96 x 10 ³ lb/in ²)
Electrical resistivity	132 x 10 ⁻⁹ ohm · m

SPECIFICATIONS

AWS A5.8 BVPd-1

AVAILABLE FORMS

Foil, Wire
Powder, Paste
Preforms