

**AUFHAUSER Ni-64** is a nickel-chromium-phosphorus brazing alloy. It is used in high temperature, high strength and oxidation applications. Typically, this alloy is used for joining super alloys, stainless steels, and alloys requiring good joint strength at high temperatures while maintaining good corrosion and oxidation resistant characteristics. It provides better corrosion and oxidation resistance than its analog Aufhauser Ni-P-Cr. Typical applications would include brazing of honeycomb structures, thin-walled tube assemblies, and nuclear applications where additions of boron are not permitted. It can also be used as a coating alloy to resist oxidation.

### Nominal Composition, wt. %

Cr	P	Ni
25.0	10.0	balance

### Controlled Impurities, wt. %, max

Fe	Si	B	Co	C
0.2	0.1	0.02	0.10	0.06

### Physical Properties

<b>Solidus</b>	1620°F (880°C)
<b>Liquidus</b>	1740°F (950°C)
<b>Recommended brazing range</b>	1800 - 2000°F (980 - 1095°C)

### Brazing Characteristics / How to Braze

Good flow characteristics are possible in joint clearances up to 0.002" (0.05 mm). When brazing thin sections, such as 0.005" (0.127 mm), braze at the lower end of the range, e.g. 1870°F (1020°C). Heavier sections require more heat, e.g. 1920°F (1050°C). Best joint clearance is less than 0.001" (0.025 mm). Higher brazing temperatures tend to increase flow through tight joints. Atmospheres of pure dry hydrogen or vacuum are recommended.

### Specifications

AWS A5.8 BNi-12

### Available Forms

Powder, paste, sintered rods, brazing tape