

## UNITED “WHITE” ALLOY # 864

Thank you for using UNITED’S alloys.

UNITED’S # 864 ALLOY may be used for **14 K – 18 K** white gold casting which produces a **White finished color**. # 864 contains a reduced silicon deoxidizer.

You should obtain excellent results by following a few simple instructions.

### MELTING

We do recommend pre-alloying all alloy and fine gold with aggressive stirring & fluxing to assure a uniform mixture.

- Step : 1** Pre- Alloying (Fine gold + alloy) Temperature **1060° - 1070° C**  
**1940° - 1958° F**
- Step : 2** Casting Temperature for 14 K – 18 K Alloyed Grain **1000° - 1020° C**  
**1832° - 1868° F**

**NOTES: Melt temperature may vary with type of unit. This alloy is designed for casting only.**

### FLASK TEMPERATURE

We suggest a slightly higher flask temperature for white gold.

### FLUXING

Fluxing white gold is extremely important to pick-up oxides. Boric Acid is the recommended flux. Do not use carbon fluxes or any fluxes designed for refining; i.e., soda ash, saltpeter, etc. Avoid flux in bottom pour automatic casting units.

### QUENCH TIME

**12 – 15 minutes.**

### INVESTMENT REMOVAL

Most standard investment removers will successfully remove the investment powder. Fluoric-based investment removers are the best for removing the silicon oxide invisible coating. Use of aggressive acids causes stress corrosion and surface damage and is therefore not recommended.

**UNITED’S Brite-Cast™ Investment Remover works effectively in removing fire scale as well as preventing stress corrosion or surface damage of the cast piece.**

### REMELTING

We recommend a 70% fresh - 30% scrap mix. White gold alloy has about 1/3 the reusability of yellow gold alloys.

### TECHNICAL ASSISTANCE

Always available... Call 1-800-999-3463 / 1-800-999-FINE  
E-mail / [doc@unitedpmr.com](mailto:doc@unitedpmr.com) Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

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