



### UNITED ALLOY # 964

Thank you for using UNITED'S alloys.

UNITED'S 964 ALLOY may be used for 10K, 14K & 18K white gold casting, which produces a good white finished color. #964 has high fluidity and is suitable for stone-in-place casting. This alloy contains small amounts of silicon as deoxidizers.

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

#### **MELTING**

Melt Temperature for 10K Alloyed Grain	1040° - 1050° C. 1904° - 1922° F.
Melt Temperature for casting 14K & 18K.	1010° - 1025° C. 1850° - 1877° F.
Melt Temperature for Alloying	1055° - 1065° C. 1931° - 1949° F.

We do recommend pre-graining all alloy and fine gold before casting to assure a uniform mixture.

#### **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**

15 – 20 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. UNITED'S Brite-Cast Investment Remover works very well.

#### **REMELTING**

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

#### **NOTES**

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

#### **TECHNICAL ASSISTANCE**

Always available...  
Call 1-800-999-3463 / 1-800-999-FINE.  
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