

DATA SHEET**BELMONT WHITE BRONZE ALLOY 4587**

Belmont White Bronze Alloy is a proprietary copper base alloy developed for jewelry and art casters to whom it is of particular interest due to its low melting range, and white color.

Melting Range	-1520 ⁰ - 1605 ⁰ F.
Pouring Range	-1650 ⁰ - 1850 ⁰ F.
Density	-0.29 pounds per cubic foot
Specific Gravity	- 8.1
Pattern Makers Shrinkage	- 5/16 inch per foot
Machinability vs. free cutting brass	40%

CASTING

Molds should be gated in the same manner as for aluminum bronze and manganese bronze. Keep turbulence to a minimum, and feed liberally.

Melting should be rapid and under slightly oxidizing furnace conditions. The 500⁰ - 700⁰ F. lower pouring temperature means faster melting, and lower fuel cost. Air pollution problems are minimized as the alloy does not fume.

As there are deoxidizers present in the alloy neither melting nor deoxidized fluxes are needed.

STRESS RELIEVING

The alloy will not respond to solution heat treatment or precipitation hardening. However, it can be stress relieved by heating to 500⁰ F. or 260⁰ C. for an hour per inch of thickness followed by cooling in air.

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SOLDERING AND BRAZING

White Bronze can be soldered and brazed by conventional methods with some added precautions.

Tin Lead Solders should contain tin in the range of 50% to 63% with antimony content less than 1% and arsenic content less than 0.02% . To a regular solder flux add 15% to 25% of Alcoa # 64, or equal, organic aluminum soldering flux-fluxing range 350⁰ F. to 525⁰ F.

FORMS AVAILABLE

20 lb. Foundry Ingot
2 Section- 5 lb. ingot
Cut Bar, approximately 3/4" wide x 1/2" thick x 2" long are available from stock. Lengths down to 1/2" are also available on special order.