

A B I Precious Metals

Tech Tip: White Bronze Casting

It's different than sterling

White bronze is an excellent low cost alternative to sterling silver, but the higher nickel and copper content creates a harder metal that requires more heat when casting.

Casting: Machine casting with a cover gas is best, but torch will work if you visually monitor the proper liquidus level. White bronze liquidus level is in the 2000° F (1094° C) range with a recommended casting temperature of 2210° F (1210° C). It is important to use a higher flask temperature than sterling in the 1050° F - 1300° F (566° C – 705° C) range depending on the jewelry piece design and weight. Clean casting trees can be recycled with 60% new metal.

Spruing: Larger sprues are better, but taper them at the jewelry piece connection point to control shrinkage porosity.

Pickling: Recommended to remove oxides.

Finishing: Machine tumble or hand finish with chrome or white rouge.

Finally, we recommend that you follow the specific casting recommendations for each white bronze alloy on their technical data sheet.

10/11