

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.