

Tech Specs; 950 – 3P (1.5) Sterling / 1.0% Pd / 0.5% Au Grain (Patent Pending)

For Casting Machines

- Fineness:** 95.0% Silver, 1.0% Palladium - 0.5% Gold
- Density:** 10.4 g/ccm ~ same as Regular Sterling
- Investment:** Same Investment as your current Gold & Silver Investment (Gypsum)
- Melt Range:** 893 – 910 C (1640 – 1670 F)
Please protect metal with inert gas during the melting process.
- Pasty Range:** 882 – 902 C (1620 – 1656 F)
- Casting Range:** 1010 – 1050 C *depending on Casting Equipment & Pieces*
- Hardness:** 70 – 75 Hv
- Flask Range:** You should be able to cast @ 621-648 C (1150-1200F) temperatures Depending on piece size and detail.
**Flask temperature should be “trail and error” basis (as always).
Everybody’s ovens are a little different.**
- Quench:** 20 to 30 Minutes --- **Note:** 30 Minute quench will yield significantly harder pieces than 20 minutes
- Pickle:** Pickling with SPAREX (Granular Sodium Bisulfate) is recommended. After pickling, the Sprues and trees (to be re-cast), should be tumbled & thoroughly rinsed & cleaned prior to casting.
- Metal Mix:** We recommend 60-70% new to 30-40% old to start... It is important to “thoroughly tumble and clean” the old (used) metal (of investment and oxides) prior to re-using. It is **imperative** to "regrain" the buttons & sprues if you plan to reuse them to eliminate the sulfur dioxide from previous melts. Good Housekeeping equals better casting results.

Higher reusability is possible and if above parameters followed – could achieve 3 to 4 + castings --- possibly more, prior to purging depending on casting quality requirements and results.
- Flux:** Not necessary with this metal. If desired – use 25% granular Boric Acid and 75% granular Borax mixed on the button.
- Machine Notes:** If casting with a frequency machine, always cast “on the upswing” of the metal heating cycle. Always retrieve flask well before casting temperature is reached, then cast it when the temperature reaches set point.