ABI Manufacturing INTERNATIONAL

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TECH SPECS: 92.5% Sterling Silver/ 5% Platinum (patented)

FINENESS: 92.5% Silver, 5% Platinum

DENSITY: 10.7 g/ccm- VS .10.4g/ccm for regular sterling

INVESTMENT: Regular sterling investment acceptable - premium investment preferred

MELT :   990ºC   (1814ºF)

Please protect metal with inert gas during the melting process

CASTING RANGE: 1010ºC – 1040ºC (1850ºF - 1904ºF) **PASTY RANGE:** 907ºC – 960ºC
(1665ºF – 1760ºF)

FLASK RANGE: 528ºC - 638ºC (980ºF -1180ºF) Dependant on part(s), weight or type. In
general, we believe this alloy should be **cast at flask temperature 100ºF to
200ºF higher** than you currently use for traditional sterling castings. It is
important to hold flask at intended temperature or at least 1 hour prior to
casting. We suggest test casting with 1 flask at the same temperature as you
normally do for traditional sterling, a 2nd flask 100ºF (38ºC) higher and a 3rd
200ºF (93ºC) higher to establish the optimum temperatures for your oven and
specific parts.

QUENCH: 15 to 20 minutes (quicker = softer castings, longer = harder)

HEAT TREAT: Place pieces on trees in 650ºF (343ºC) oven for 2 hour. Turn off
oven and let the oven cool to room temperature (about one hour more)

PICKLE: Pickling with SPAREX (Granular Sodium Bisulfate) is recommended.
After pickling the sprues and trees to be re-cast should be tumbled &
thoroughly rinsed and cleaned prior to casting.

METAL MIX: At least 60% new to 40% old. It is important to thoroughly clean the old
(used) metal prior to re-using. It is imperative to "regrain" the buttons &
sprues if you plan to re-use them to eliminate the sulfur dioxide from
previous melts.

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 heat cycle.   Always retrieve flask well before casting temperature is
reached, then cast when temperature reaches set point.