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## STEPS FOR MAXIMISING ARGENTIUM SILVER'S TARNISH RESISTANCE

### 1. Preparation: Heat Hardening

- **Heat-harden** all pieces **before** polishing.

*This **simple, low temperature hardening process** makes it quicker to polish Argentium Silver to a bright, lustrous finish, and improves tarnish resistance.*

**NB.** Argentium Silver items must be pickled after heat hardening and before finishing.

 Refer to alloy user guide for heat-hardening and pickling instructions:  
<https://www.argentiumsilver.com/user-guides-downloads>

### 2. Polishing

- Use **traditional polishing wheels** or **mass finishing techniques**.
- It is preferable to use **dedicated polishing wheels/media** for Argentium Silver to prevent cross-contamination from other metals, which may reduce tarnish resistance. (Pre-used polishing wheels must be raked clean before use.)

### 3. Cleaning & Rinsing (*A grease-free surface is essential for maximising tarnish resistance*)

**Recommended: Ultrasonic Cleaning – 5-Step Process**



 \*- Clean using a **near-neutral pH** ultrasonic degreasing solution (e.g. **'Andy Gold' liquid detergent**).  
*(dilution and cleaning time as advised by the manufacturer, working temperature **no more than 40°C**).*

- A thorough final rinse in **distilled water** is important to remove any remaining residues from the cleaning solution.
- After the final rinse, dry pieces using an air gun and/or fan oven.

 DO **NOT** USE

-  Deionised or reverse osmosis water
-  Electrolytic cleaning
-  Steam cleaning

All of the above can cause a surface reaction with Argentium Silver.

### 4. Surface Passivation

- Heat finished pieces in a **clean oven** for **1 hour at 100°C**.

*This process assists tarnish resistance by promoting the formation of Argentium Silver's protective oxide layer.*