



## HARDENING PROCESS FOR STERLING SILVER

- 1.) Prepare the pieces need to make hardening process, If the pieces needs to joined, they should be joined together before make the hardening process.
- 2.) A boric acid fire coat should be applied before hardening process in open atmosphere oven to protect the metal from heavy oxidation.
- 3.) Pre-heated the oven at 300 °C, then load the casting pieces in oven and keeping them in oven for 1-2 hours depends on the thickness of casting piece, the thicker design may take longer time for increasing the hardness.
- 4.) When finished the time, remove the casting pieces from oven and cooling down by air.
- 5.) If the pieces need to clean up, they can be clean in warm pickle solution.
- 6.) If the pieces can be tumbled in tumbler machine, it will be help to increase more hardness.
- 7.) The result of hardening process will be 90 -120 HV. depends the alloy formulation.

**Note :** Do not re-heat the piece after hardening process because the piece will be normal hardness.