



## 2013 Open House Enameling Demo

- Safety:
  - Wear dust mask when handling dry enamel powder.
  - Eye protection advisable when using torch.
- Suitable metals for enameling, what gauges and overall size:
  - Copper, Sterling Silver, Fine Silver, Gold. Most gauges of metal are suitable for enameling. For torch firing, keep pieces under 3" diameter unless you can use two torches on the piece.
- Types of enamel: lead-bearing and non-lead. Opaque and transparent.
  - Lead bearing enamels are not suitable for torch firing. We carry only Thompson Brand lead-free enamels.
  - Make tests of how colors behave on your chosen metal. Most opaque colors work well on copper and silver; transparent enamels will look darker on copper. Also, the colors change with the amount of oxides absorbed from the metal and the amount of heat applied.
- Types of torches and fuel for enameling.
  - Clean gases work best and alter the enamel color the least. Mapp or Propylene gas is the cleanest. Acetylene is rather dirty and will discolor the enamel. Butane gas torches are not hot enough except for enameling the smallest objects.
- Essential hardware:
  - tripod or stand; metal screens; trivets; sifters; paintbrushes; fire brick or other heat resistant surface; tongs and tweezers; shallow glass containers;
- Preparing metal for enameling:
  - Clean the metal with abrasive pads and a degreasing cleanser.
- Applying enamel base coat:
  - Sifting
  - Dipping into enamel powder
  - Wet packing
- Firing enamels:
  - Place piece on trivet or mesh screen; heat from underneath, move torch around to distribute heat evenly. Heat until enamel melts and flows. Remove heat and let piece cool.
- Using enamel accessories: decals, lumps, threads, foil etc.
  - Use enamel threads, decals, silver or gold foil and enamel chunks on a prepared background coat of enamel. Use klyr fire as a sticking agent for these accents. Make sure the piece is dry before firing.