Enameled Ring
By Steven James

This project is incredibly easy to produce because you only need a single piece of copper and a bezel ring blank. I think the domed copper is far more interesting than a flat piece of copper, but based on your tool set, you can create either look.

**Instructions**

1. **Use a dapping block to dome your copper circle.**
   I like to anneal (or slightly heat up) the metal to make it easier to dome. Use your dapping block to create your desired shape. Check to make sure that your dome will fit into your ring blank, and adjust if necessary.

2. **Counterenamel the underside of your copper.**
   Even though the backside of this piece will be unseen, you need to counterenamel it, as this will stabilize the enamel that creates the front side of your design. I often use the color black as a counterenamel, but sometimes designers will collect mixed colors of leftover enamel and use it for this purpose.

   Clean the backside with Penny Brite, water, and a toothbrush. Dry thoroughly and then brush on Klyr-fire. Sift the counterenamel on the back and transfer the metal to the trivet. Fire until the black enamel is fully fused and glossy.

   Allow the piece to cool and remove it from the trivet. Once it is completely cool, use Penny Brite again to clean the front side and remove any firescale.

3. **Design the front of the metal.**
   You can use any color or technique that you like to decorate the surface of your ring. The instructions below are for the black and silver ring. There are two alternate designs pictured here, and the techniques used to create them can be found in my book, Discover Torch Enameling.

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**Supplies**
- Bezel ring blanks (Nunn Designs)
- 18-, 20-, or 22-gauge copper circles, sized to fit into your choice of ring blank
- Lead-free powdered enamel (this project used Thompson Enamel #1995 Black)
- Klyr-fire holding agent (also available from Thompson Enamel)
- E6000 adhesive
- Flakes of dried PMC+

**Tools**
- Dapping block
- Hammer
- Paintbrush
- Penny Brite cleanser
- Toothbrush
- Small towel
- Magazine sheets for sifting
- Plastic bottle cap “stilt”
- Sifter
- Stainless steel trivet
- Butane torch and gas
- Firebrick or kiln brick
- Brass brush
- Metal file
- Bent nose pliers
- Locking tweezers
- Dust mask
- Safety goggles

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Just remember that whatever method of decoration you use, you will need to use Klyr-fire to hold the enamel in place on domed metal. Another hint: a stilt, such as a small plastic bottle cap, can be helpful to support the metal while you sift. You can also just use your index finger to hold your metal steady.

4. Try the “Fairy Dust” technique.
To obtain the lovely silver sparkles shown in PHOTO A, try this method. This design technique works best with dark enamel backgrounds, such as flame red, darkest blue, or black – here I used the same Thompson #1995 Black that we used for the counterenamel. Using lighter colors may produce a residue that dulls the shine of the silver. Brush on the Klyr-fire and then sift on the black enamel. I prefer to fire this project twice: once with a base coat, and then following up with another layer of the black, only this time sprinkling in the “fairy dust” on top of your unfired enamel.

The lovely silver sparkles are actually made from dried and grated Precious Metal Clay! I use the PMC+ version of the clay. Use your fingers to sprinkle on the desired amount of powdered clay, and then carefully transfer your piece to a trivet for firing.

Torch-fire your piece from the underside, being careful not to dislodge any part of your design. Remember that the enamel will fuse at around 1500 degrees, while the silver needs to reach 1640 degrees. You’ll need to monitor the silver to ensure it doesn’t sink into the background. You might experience a little bit of “smoke” coming off of the silver — don’t worry, it’s just the organic binder in the clay burning off. But be sure to wear a dust mask while firing, just to be safe.

Once the metal has been fully fired, quickly (and lightly) tap the silver into place with the backside of a fiber-handled tweezers. This ensures that the PMC has fused to the glass below.

Allow your piece to completely cool, and then use a brass brush to remove any firescale from your silver. Also use a file to remove any scale or burrs from the sides of the domed metal.

5. Mount your enameled piece in a ring blank.
Add a small amount of E6000 adhesive to the back of your piece and then push the metal dome into the bezel. Use the locking tweezers to hold the ring and domed metal together for at least an hour, but ideally overnight. Remove the tweezers and wear your beautiful new ring.