Mold making / Ring Formation

## **Materials**

Polymer clay 10g Art Clay Silver Art Clay Silver syringe; green tip 4mm prong setting (optional) 4mm stone for setting (optional) Corn starch

### Tools

Basic Metal Clay Tool Kit

Roller

Underlay

Graduated slat set

Clay rolling papers

Small pointed paint brush

Cutter / Scraper

Craft knife

Burt's Bees Hand Salve

Sand paper

Emery board

Rubber block

Brass brush

Sunshine polishing cloth

Pasta machine (optional)

Silly putty (optional)

Note cards

Antique miniature spoons

XL Post-It note

Full can of soda

Ring sizer

Stepped ring mandrel

Snake roller

Snake rolling board

Silicon tipped shaper

Ultra needle tool

Sanding sticks

Sanding needles

Tape

Scissors

Ruler

Prong pusher (optional)

Olive oil

## Firing Supplies

Pellet form

Fiber shelf

Fiber blanket

Kiln



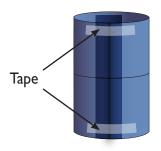
### Mold Spoons

- Condition polymer clay by warming it up in your hands a bit, or run it through a pasta machine on the biggest setting a few times. Lightly dust a smooth work surface with a bit of corn starch. Dust polymer clay with more cornstarch then roll it out into a long oval that is 17 cards thick (purple + red + green).
- 2. Pick up slab and place it on a full soda can crosswise (it won't collapse as easily as an empty one). Set spoon handle in place with the bowl of the spoon at one end of the polymer slab. Starting pressing the spoon into the polymer clay, rolling it on the can as you go and making sure that you are pressing it in evenly (see photos).

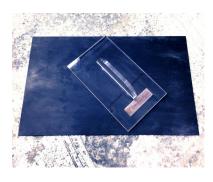




- 3. Remove the polymer from the can. Set the slab flat on a note card for baking. Always bake polymer clay in a dedicated toaster oven according to manufacturers instructions, usually 230° 275° for 30 minutes. Cool.
- 4. You can press Silly Putty into the baked polymer clay to see if the texture came out as desired.



Snake Station



Rolling Station



Positioning



Olling



## Shape Ring

- 5. Establish desired ring size. Increase working size for clay 2 sizes, i.e. a finished size 7 ring needs to be formed as a size 9. Trim a 1" piece of Post-It note. Draw a line lengthwise on note. Wrap note around the larger working size on a stepped ring mandrel. Tape paper together along edges only to secure seam (diagram). Wrap a scrap of paper around the sized note and mark the circumference of your ring size then mark another 1/2" away. This longer length will be a guide to let you know how long the clay strip needs to be. Set aside.
- 6. Set up your workspace by setting up two rolling stations: a snake station with an ungreased snake rolling board and snake roller; and a regular rolling station with cards/slats and a greased work surface and roller (see photos).
- 7. Condition and moisturize 10g of clay. Roll 10g of clay into a snake about 1/4" in diameter. Squash with the snake roller to flatten a bit. Transfer to the greased work surface on the regular rolling station. Roll out to be very long and 6 cards thick (**blue + green**).
- 8. Transfer to mold. Place slats OUTSIDE the mold to 17 cards thick (purple + red + green). Stack on yellow + black (3 cards) for a total of 20 cards thick. This is the thickness of the mold plus three cards thick. Set the greased mold with the tip toward you. Set the rolled clay in place with the slab just beyond the tip (photo). Roll firmly away from you (photo).
- 9. Check to be sure the textured clay is at least as long as the marked, reserved paper strip. Trim just outside the design on the clay using an ultra needle tool. Use the drawn line on the Post-It note to help wrap the clay around straight.

Overlap version: Lay the narrow end down first, wrap around to see where the overlap begins. Trim off any excess more than <sup>1</sup>/4". Smear the narrow end a bit to help with the joint. Add some water to the smear, then a bit of syringe. Lay the tip of the spoon on top. Press lightly to blend.

#### Optional version with butted design:

Wrap around prepared mandrel. Lay trimmed end down first. Wrap the other side over the top. Trim diagonally through all thicknesses using the cutter-scraper. Remove both scraps and press together with shaper. Attach pieces together with syringe.

#### Optional version with setting:

Make one short piece up to step 4. Set aside in a humid environment. Make another piece that matches the first. Drape one piece over the mandrel. Set the prong setting in place with a bit of syringe, then drape the second piece. Carefully splice seam on the back in the same fashion as the butted design.

## Dry & Refine

- 10. Set aside to dry for about 10 minutes, or 5 minutes in a dehydrator. As soon as it is dry to the touch, slide the paper off the mandrel to prevent the seam from pulling apart as the clay shrinks as it dries. Put on a mug warmer to dry.
- 11. After at least 10 minutes, carefully remove note and ring from mandrel. Remove all tape. Use tweezers to very carefully grab inner edge of teflon sheet and coil it inward to remove it from the ring. Apply syringe to seam, inside and out. Dry and repeat until all grooves are filled.
- 12. Use sanding sticks and sanding needles to refine. Place teflon sheet underneath to catch filings. Use sanding sponges to soften the edges of the band for comfort.
- TIP: Rings can be torch fired if necessary. Put a bit of fiber blanket under the ring so it will sit horizontally. You do not want there to be any extra weight on wide areas of the band or they can distort during firing. Place on a firing brick and torch for 4 minutes. Rings should be heated as hot as possible without melting for extra sturdiness. Try to maintain a deep orange color if firing in the dark.

# Fire

13. It is preferable to use a kiln to fire the pieces, as ring pellets must be kiln fired. Place dried rings on a fiber board. Insert pellet that is desired finished size, lay the pellet sideways and stabilize everything with pieces of fiber blanket. Fire 1575° for 1 hour. Cool. Do not quench. Pellet may pop if temperature changes too quickly. Remove pellet. If it is stuck, pop out the plug over a trash can. Remove as much as possible then rinse. Do not get pellet debris down drain, as it will clog the pipes!

### Finish & Polish

- 14. After firing, the silver will have a matte white surface. You can brush it with a steel brush for a scratch finish, or a brass brush/steel wool for a satin finish. For a shiny finish you can tumble the ring.
- 15. If you used a prong setting, place stone in setting. Using the prong pusher, gently push the tip of the north prong toward the stone (diagram), then push the south. Next move to east and west. Go back around again, pushing a little harder until stone does not wiggle. Always tighten opposite prongs to help keep the stone seated properly.
- 16. Patina and use a polishing cloth if desired. Enjoy!

