

From Flat to Round: Screen Printing Glaze Patterns onto Pottery

by Susan Kotulak \



Today, I am going to share a ceramic decorating technique that was adapted from another artistic process: screen-printing textiles. Printing onto clay is not a new technique. A browse through the [Pottery Making Illustrated](#) back issues or the [Ceramic Arts Daily archives](#), turns up lots of articles on various ways to print on clay. But the following method was a new twist that I hadn't seen before.

Though she had started out her artistic career as a potter, life's twists and turns caused Susan Kotulak to shift gears and pursue textile arts. But the clay called her back and she now works actively in both media. It's no surprise, then, that having this dual focus would eventually lead to the two processes influencing one another. This super cool technique is one of several that she developed for pottery using materials from her textile/surface design work. Hope you are as excited to try it as I am! - Jennifer Harnetty, editor.

Through a happy accident, Susan Kotulak adapted a screen printing technique for use on pottery, such as the vase above.

For many years I did raku using a simple glaze made of 8 cups Gerstley borate, and 2 cups nepheline syenite. Then a batch made up with a new supply of Gerstley borate caused extreme flocculation, creating a pudding-like texture that made the glaze uncooperative for pouring or dipping. Frustrated, I noted that it was as thick as the thickener I used to carry dye through the silk screens I used for printing fabric. A light went on, as I realized I could silk-screen the glaze. I had been doing textile work with 2-inch X 3-inch sheets of yellow foam, and the open cells of the foam were perfect for receiving and holding a thick enough deposit of glaze to properly transfer a three-dimensional coating to the bisque ware. Eureka! Suddenly all the patterns in my wearable art could be transferred onto pottery!

For more ideas for printing images on clay, check out [Ceramic Transfer Printing](#) in the Ceramic Arts Daily Bookstore.

[Order online and get free shipping!](#)

(Free shipping offer applies to U.S. orders only)



By screen-printing the glaze onto the foam, and then quickly pressing my bisqueware down onto it, the pot absorbed the wet glaze. By using my hands under the foam to wrap and press it up against the pot all the way around, I could pattern the entire surface of the pot, with only a single seam. By planning ahead, and selecting patterns that were not overly geometric, I was able to have even the seam disappear.

Foam is capable of stretching around curves without wrinkling or folding, reaching into shallow recesses, and carrying the volume necessary for glaze development. Unlike transfer paper, used with stains and oxides, foam can work with glaze! Transfer paper, which is often recommended for screen-printing onto pottery, can only absorb small amounts of colorants, and so is useful only for concentrated oxides or stains, rather than the volume of coating that glaze development requires. Also, transfer paper can't conform to a round shape.

Here are a few tips from my experience:

Almost any glaze can be used, simply by limiting the amount of water added, or taking part of a regular batch and letting it evaporate and thicken. I found that a pudding or mayonnaise consistency is best (see photo). If too watery, the glaze doesn't go through the screen properly, leaking through too freely into the foam. If the glaze is too dry, the bisque ware does not wick up the glaze from the foam. A very light spray of water on the foam before the screen is printed onto it can help delay the glaze from drying before you can transfer it to the pot.

I found that transfer printing with foam was not suited to extremely fine detail transfers, such as photographs, because the pores of the foam need to be substantial enough to hold enough glaze, and that limits the delicacy of the image to some degree. Almost any foam can work, though each has its pros and cons. Larger, more open pores carry more glaze, but limit detail. Tight, dense foam carries less glaze and may dry out quickly. Thick foam helps achieve more even compression and transfer onto the surface of the pot, but takes longer to dry between uses. A small amount of glaze remains in the screen and foam afterward, and these can be washed out. Any residue inside the foam does not affect subsequent prints.

If you'd like to try this fun technique, you can buy foam at upholstery supply, fabric and craft stores. A silk-screen with an image based on your black and white art can be made up at many art-supply stores or there are many internet sites from which you can order custom silk screens. You can also buy a blank screen and use paper, tape, or other block-out mechanisms to create your image. Remember you'll be printing the open areas of the screen, not the taped portion! To print with glaze, you'll need a 10x size mesh or larger in your screen so the clay particles can pass through. An inexpensive window squeegee can be used to push the glaze through the screen.

For more great surface decoration techniques, be sure to download your free copy of [Three Great Pottery Decorating Techniques: A Guide to Sgraffito, How to Make and Use Terra Sigillata, and Creating and Coloring Highly Textured Surfaces.](#)