

test sieve brush

by Rebekah Myers and Tim Berg

A simple, smart update to an old toothbrush makes an ergonomic and perfectly sized brush for getting glaze material through a test sieve.

Re-purposing household items in the studio is a great way to give a second life to objects that have exhausted their original use. We always have a stash of used toothbrushes in the studio that are great for cleaning tiles after grouting, adding texture to sculptures, and scrubbing hard-to-clean spots. We discovered another novel use for an old toothbrush that makes tedious work more efficient.

Achieving the Perfect Surface

While working on a recent project, we found ourselves searching for the most elusive of things—the perfect surface. For this project we were using a light-colored engobe and glaze combination. In order to achieve a uniform color throughout the piece, we wanted to make sure that any little bits in the glaze or engobe that weren't sufficiently crushed during ball milling were sieved out of the mixtures. Although commercial engobes and glazes are very reliable, we have found that sometimes there are chunks that need to be passed through a sieve or just removed entirely in order to avoid discoloration in the final surface.

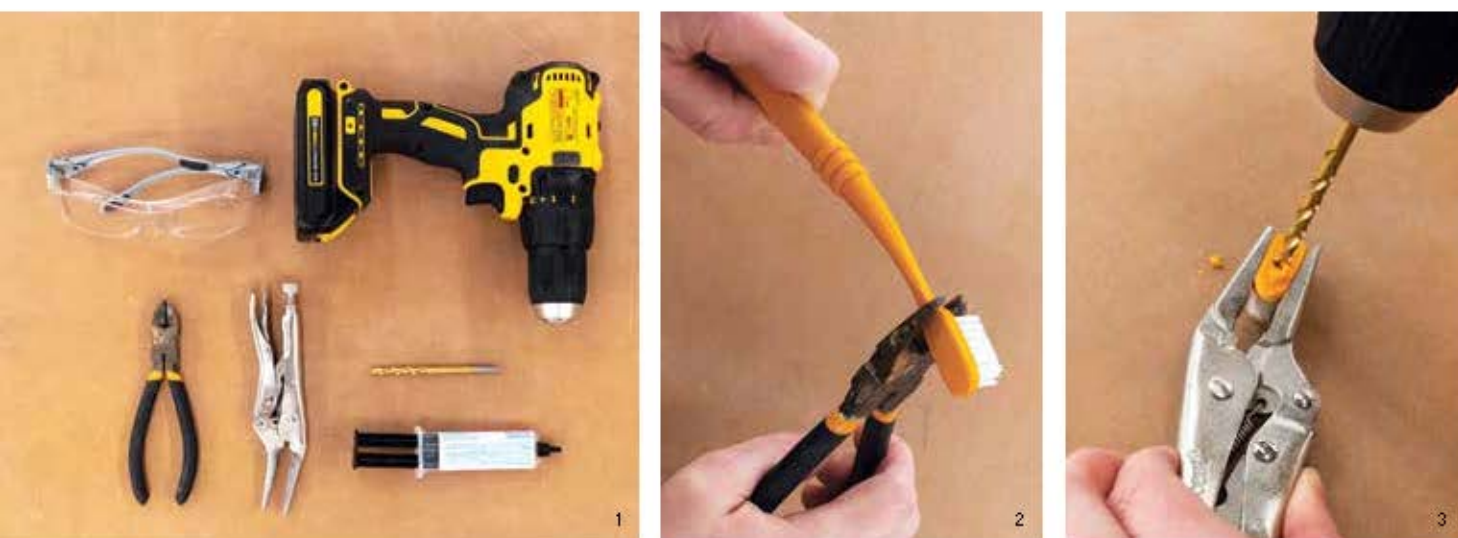
We methodically sieved the engobes and glazes, one jar at a time, into one-quart mixing containers that the Talisman test sieve we own sits in nicely. We found it difficult to find an efficient way to move material through the sieve because it has such a narrow opening. Often we would just swirl our fingers around and use our fingertips to press the material through the face of the mesh. This was a slow process and ultimately led to sore hands. We also tried moving the material around with a rubber rib, but again, because the sieve opening is so small this wasn't really feasible.

We thought a brush might work for this task, and then realized we had many old toothbrushes stockpiled. We tried to use a toothbrush in the sieve, but found we just couldn't find a good angle at which the brush contacted the mesh. Then we thought about the functionality of the large Talisman sieve and how its three brushes sit flat against the screen. After some consideration, we quickly and easily modified the toothbrush so that it had the perfect angle for pushing material through the sieve.

In order to make this tool for your own studio, you will need a toothbrush, cutting pliers, a drill and drill bit, quick-setting epoxy (such as one minute) or cyanoacrylate (CA) glue (super glue), a pair of locking pliers, coarse sandpaper, and safety glasses (1). First, cut off the head of the toothbrush (2). Keep the cut close to the bristles and at the narrowest point of the handle. Rotate the toothbrush while you squeeze the cutting pliers incrementally around this part of the handle until you have cut all the way through (alternatively, you could use a small hand saw or rotary cutting tool to make this cut). Using coarse sandpaper, shape and soften the sharp cut end of the brush head and handle.

Next, on the back of the toothbrush head, mark a spot in the middle where you will drill a shallow hole about the diameter of the cut end of the toothbrush handle. While holding the head of the toothbrush in a pair of locking pliers, drill the hole carefully, being sure not to drill all the way through the plastic head (it is okay to reveal the back of the bristles where they are glued into the brush) (3).

After you have drilled the hole, test the placement of the toothbrush handle for fit and adjust the depth and size of the hole as necessary.



1 Tools needed to make test sieve brush. 2 Use cutting pliers to remove the toothbrush head from the handle. 3 Hold the toothbrush head with locking pliers, then drill a shallow hole in the back of the removed toothbrush head.



Using your test sieve, experiment with the angle at which you will glue the handle to the brush head to discover the most ergonomic and useful placement. Mix up the epoxy or use the CA glue and permanently affix the handle into the drilled shallow hole in the back of the toothbrush head (4); you will need to hold it steady while it sets (5). Allow the glue to fully cure before use. This brush not only works incredibly well for stirring glaze through the test-sized sieve (6), but it is also equally good for scrubbing the hard-to-clean groove in the sieve where the mesh attaches to the plastic (7). This simple yet effective new tool for your studio comfortably speeds up the time-consuming tasks that accompany mixing glaze tests and reconstituting dried-out glazes, while keeping one more item out of the landfill.

the author *Rebekah Myers and Tim Berg are a studio art collaborative based in Claremont, California. Their studio is filling up with used toothbrushes, plastic utensils, and food containers waiting for their chance at a useful second life. To learn more, www.myersbergstudios.com.*



4 Attach the handle into the drilled hole using epoxy or CA glue. 5 Hold the handle in place while the glue sets. 6 Completed brush in use in sieve with glaze. 7 Completed brush in groove of sieve without glaze. All photos: *Re Myers.*