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Sanding Pots, Applying and Polishing Terra Sigillata

Sanding Pots

While sanding is commonly used on slip-cast greenware to clean up the mold seam and other flaws, it is rarely used for finishing handmade ware, because it leaves a gritty surface on claybodies containing sand or grog and erases every trace of human touch. Sanding must never be considered a standard way to smooth out imperfections. Far better to deal with those imperfections while the clay is soft or leather-hard, when smoothing can be effectively accomplished with a rib, hand, sponge, or a piece of chamois.

One situation where a sanded surface is very appropriate is in preparation for application of terra sigillata, especially if you want a very smooth, streamlined surface. Clay is best sanded with drywall sanding mesh, available from any building materials supplier or home-improvement center. There are several important considerations when sanding pots:

- Never sand indoors without proper dust extraction, such as the spray booth or dust evacuation nozzles in the glaze room. We normally do our sanding outside. Make sure that your sanding dust is not blowing in someone else's face.
- Be careful how you hold the piece. Do not hold any piece by the rim or by fragile appendages while sanding. With larger work, cradle the piece in your lap and hold it gently around the body of the piece while you sand it. While sanding pots in the intro class there is often some breakage, and it is almost always the result of holding a piece by the rim while sanding.
- If you are trying to get a streamline surface with no bumps and dips, hold the sanding mesh against the flat of your hand, and sand with a random orbital motion.
- If you are trying to preserve an irregular surface while sanding, use a flexible, well-used piece of sanding mesh, and hold it by your fingertips so that it follows the contour of the surface.
- When you are done sanding, wipe all surfaces gently but thoroughly to remove all dust, using a soft cloth such as tee-shirt material. If you neglect to do this, the paintbrush will carry the dust back to the terra sigillata container, contaminating the sig.
- You get the smoothest, most streamlined surface by sanding before applying the terra sig, but if you have created a patterned or textured surface that would be damaged by sanding, leave it unsanded. If you apply the terra sigillata properly, it will still adhere to the piece.
- If you need to sand in small hard-to-reach places, tear off a small piece of the sanding mesh.
- If you find that the sanding mesh is too stiff to reach into corners, take a small piece of sanding mesh and crumple it up and then straighten it out. It will become much more flexible.
- Remember to wipe off the piece thoroughly with a soft cloth after completing your sanding. Do this outside, and shake off the cloth before returning it to the bag.

Applying Terra Sigillata

After you have sanded your work and wiped off all the dust, you are ready to apply terra sig. Before pouring some sig into a smaller container, stir the sig thoroughly with a long brush, making sure that there is no sediment left in the bottom. Terra sig is best applied with a very soft, thick brush with lots of reservoir capacity, heavily loaded with sig. Lay the sig onto the surface with flowing strokes, applying as much sig as possible while avoiding drips. If the sig does drip down the surface, chase the drips with your brush. Don't let the drips harden on the surface, and don't let any part of the piece sit in pooled terra sig. Work your way around the piece, building up thin coats until you get an opaque surface that begins to conceal the sanded texture. This will probably take six or eight coats overall. Once you have concealed the sanding texture to your satisfaction, stop applying sig. This is still a very thin coat overall, but if you accumulate much more thickness, you risk causing the piece to crack, and you also risk later cracking and peeling of the sig coat.

If you wish to preserve the sanded texture or an applied texture, you can get a good shine with just a few coats of sig, because the shine results from the ultra-fine clay platelets laying flat on the surface.

Ultimately, it's a matter of experience with the particular terra sig and base claybody. Experiment with the thinnest application that meets your needs, and build up from there if necessary.

Polishing the Terra Sigillata-Coated Surface

As soon as you have achieved the desired sig buildup and the surface wetness has soaked in completely but is still damp (has not lightened in color), polish the surface with a piece of grocery bag plastic stretched over your fingertips. The first time you do this, you won't believe what happens. It is magical. Grocery bag plastic is harder and denser than other plastic bag material and gives a better shine. Some people prefer to polish with soft flannel or tee-shirt material, very soft chamois, or a soft brush, but I have had best success with the grocery bag plastic. I get a glassy shine in one polish after all coats of terra sig have been applied. There's no reason to polish between coats. When you do polish, if you are not satisfied with the shine, you can simply paint on more terra sig. The new coat disrupts the previous shine, achieving a good bond.

As you are polishing, you are also compressing the surface, and the shine will increase with enough polishing. The surface must be slightly damp for compressing and polishing to occur. Do not try to polish terra sig that is completely dry, because it will diminish the shine and possibly cause the sig to chip and flake. If you have applied as much sig as you want, and it is getting too dry to polish, you can always mist the piece very carefully with water, applying just a little at a time and allowing it to soak in. Do not over wet the surface with water, because that can cause the terra sig to blister.

When polishing larger pieces, part of the piece may dry too much before you get to it. When this happens, you can either paint on more terra sig to the area still needing polishing or mist the surface as explained above. In either case, you may get some visible change in color where the new sig or water has been applied, but any such contrast will diminish in any firing and disappear in a blackware bonfiring.

Once you have finished polishing the surface, handle it very carefully. The terra sig surface is easily scratched, even by your hands. It seems so seductively smooth and shiny, but resist the temptation to run your hands over the surface. You can do that after the piece is fired.

After finishing the polishing, scratch your initials in the bottom with an old ball-point pen, and consider scratching a sgraffito design in the surface of the piece. Handle the piece very carefully when doing this.

To preserve the very best shine, polished terra sig pieces should not be fired higher than cone 014 (1500F).