

Applying Glazes

Before applying glazes, make sure you have applied wax resist to all surfaces where you don't want any glaze. Spend a little extra time examining lids and lid-seats on covered vessels to make sure that no glaze will be deposited where it will cause the lid to stick on. Just think about every surface that will touch. Make sure that you leave a 1/8" margin of unglazed clay at the bottom of the wall of every vessel. In all situations, there should be no glaze within 1/8" of the kiln shelf during the glaze firing.

Be sure to follow all the suggestions in the "Guidelines for Glazing" handout before using any of the glazes. If a glaze seems thick, don't use it. Make sure that the glaze is mixed right before you use it, and never dip a piece in a glaze that shows a visible layer of water on the surface. Any glaze that is properly mixed for dipping, pouring, or spraying should be very fluid, and after mixing should return to absolutely level on the surface. If you have any doubts about glaze consistence, ask the instructor or resident or one of the advanced students to check the glaze before you use it.

Applying Glazes with Brush or Sponge

The practicality of applying glazes by brushing or sponging depends on brush type and technique, firing temperature, and viscosity of the maturing glaze. Any "tight" glaze like a shino that resists flowing will show all brush marks, and therefore may not be suitable for brush application unless the glaze is brush-applied in flowing coats, which yields results very much like dipping or pouring. In the case of overglaze decoration on top of a glaze which has been dipped, poured, or sprayed, brush marks are often accepted as part of the process.

In general, brushes used for glaze application should have long, soft natural bristles that give good reservoir capacity. East Asian brushes are especially suitable, and round ones in a wide range of diameters work well for banding and brushed imagery, while wide flat hake or hakeme brushes are best for coating a broad area. Bisqued clay or a dry glaze coating absorb a lot of water and a brush with small reservoir capacity will not work unless streaky dry-brush effects are desired. When applied with a brush, glaze thickness and resulting visual effects tend to respond to the reservoir capacity of the brush and the pressure and movement against the surface contour and texture of the pot. To minimize brush marks, soak the brush in water, shake out all water, load it completely with glaze, and flow the glaze evenly onto the surface with slow strokes. With a little practice, it is possible to get a smooth glaze coating with minimal brush marks.

Sponge application of glazes is an old technique capable of developing very interesting surfaces, but "sponge-ware" is a bit of a cliché. Sponges of varying textures can be cut or torn to shape and are very convenient for stamping a repeating pattern of overglaze decoration in glaze or oxide, but when considering this technique be sure to carefully observe the range of precedents in historical and contemporary work and try to come up with something original.

Applying Glazes by Dipping

Dipping and pouring are the most common glaze-application methods for functional ware. It is essential that glazes be mixed to the right consistency for dipping, as discussed above. Only you

can determine the correct dipping consistency for your own glazes. It is critically important to think about the amount of time an object is immersed in glaze. Usually a very quick dip and a quick, firm shake-off is adequate, and will give an even glaze coating with minimal runs and drips. This is a matter of practice and conscious intent. Some glazes perform best with a slightly thicker coating that can be achieved by holding the piece in the glaze a few seconds longer. Counting seconds will give you consistent results. Before you dip a piece, be sure you are holding it firmly enough to dip it and shake it off. Avoid holding forms by thin, weak sections. Also, keep in mind where the heaviest accumulation of glaze ends up, depending on how you shake off the excess glaze.

For small objects, commercially-available dipping tongs work fine for overall glaze coating. The pointed prongs grip the piece firmly for dipping, but leave only very small marks in the glaze coating that usually heal in the glaze melt.

For overall glazing on plates and bowls too large to easily dip in the bucket, transfer a few gallons of glaze to a wide tub or bowl of glaze. If you encounter this challenge often, go online and purchase a large wok or stainless steel mixing bowl. You'll be very glad you did. Grasp the piece with several fingers at opposite edges, and dip in one edge of the bowl or place and then tilt and swirl it around to coat the entire surface, and then keep going in the same direction when you remove the piece, so that the first edge to be immersed in the glaze is the first edge to come out. Set it down to dry, clean any glaze residue from the waxed foot, and touch up the finger contact points with a brush.

With many forms the simplest means of getting an overall coating of a single glaze is to dip part of the piece, and when dry grasp that part while dipping the rest. This works well even for functional work, depending on the glaze. With some glazes the overlap will be very obvious and thus you must position the overlap with overall design in mind.

In historical and contemporary glazed wares we find many examples with obvious finger marks showing in the glaze surface, and this should not be viewed as a flaw unless it is clearly a matter of sloppy practice. If you resolve yourself to grasping wares with your fingers and leaving the marks, it does simplify the process. If you do not want bare clay showing where you grasp the piece, brush on some glaze after dipping and accept the resulting irregularities in glaze surface.

Variations in glaze quality can be achieved by double-dipping the upper half or the rim, and then even triple-dipping just the rim. If you assure that each coat is quite thin, you can easily double dip over the entire surface of a piece with no problems. It's best to know your glazes before doing this, because there is always the risk of serious running. Interesting color shifts and slight running can result. When layering glazes like this, if any one of the glazes has a powdery connection with the clay surface or the glaze above or beneath, the result can be surface cracks, sometimes so severe that the glaze will peel and flake right off the piece. When double dipping, always dip the second glaze after the first has dried completely.

Some glazes, especially many lowfire glazes such as white Maiolica, tend to remain quite viscous right up to maturation temperature, and will show drips and runs in three-dimensional relief on the fired surface. When using such glazes, it may be advantageous to dip pieces in clean water about ten minutes before glazing. This helps to give a smooth, uniform glaze surface with a minimum of drips, insuring even coloring in the overglaze colors. If you have a troublesome glaze where drips, runs, and overlaps do not *heal* in the firing, it may be a good idea to use the water dip. Keep in mind that a glaze applied over damp bisqueware may need to be mixed a bit thicker.

Applying Glazes by Pouring

When done properly, pouring gives the same results as dipping, and requires similar glaze consistency. Pouring may be used to glaze the inside of any vessel, to glaze the outside of a vessel too large for dipping, or to apply decoration over another glaze.

When planning to glaze the inside of a vessel by pouring, and the outside by dipping or pouring, always glaze the inside first. Any glaze spilled over the unglazed outside is easily sponged off, whereas if the outside is already glazed you will have to live with the effect or clean the entire outer surface and start over after letting the piece dry. When glazing the inside, pour in a cup or two of glaze (depending on the size of the vessel), *quickly* tilt vessel around to coat all surfaces, and pour the excess back into the glaze container. Plastic one-quart measuring cups are ideal for general glaze-pouring. With a little practice, you can pour the glaze in, slosh it around, wind up your hand and arm, and pour the glaze out while *unwinding* so as to glaze the entire inside and inner rim in one smooth movement. If a little glaze gathers outside the rim while pouring out the excess, is your choice to leave it or sponge it off.

If the form is too large to dip the outside in a glaze container, the options are to spray or pour the glaze. There are a number of options when coating a piece by pouring. If there is a way to grasp the piece by an area that will not be glazed, as in supporting a vessel with your hand inside, hold it above a large bowl or tub and pour the glaze evenly over the surface with a pitcher. When glazing the outside of bowls and larger forms it is often advantageous to place the piece upside-down on several wood dowels or other sticks spanning the rim of a large bowl or basin (or wok). With an appropriate-sized container of glaze, pour glaze to coat the outside surface or the desired areas. For best effect, place the whole works on a pottery wheel or heavy-duty banding wheel. If you pour the glaze over the entire surface in a smooth continuous sweeping motion, you can achieve a coating as even as if the form had been dipped.