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Glazing TIPS and TECHNIQUES

(with acknowledgements to Tony Moody, Harrow 2003)

Glazing is an activity that requires the individual's creative focus, care and awareness. It is a time consuming business, something best not approached if you are in a hurry, as the shortcuts or "seeming quick fixes" will come back to aggravate you and become all too evident to the critical glare of others. These notes are by no means exhaustive; they set out some solutions to help overcome a number of common glazing problems. They are intended to foster an approach that is professional, thoughtful, and hopefully, analytical and inventive. Remember that by analysing a failure in the glaze room you can easily arm yourself with the lessons for future success.

Preparation

After biscuit firing pieces use "wet and dry paper " on any rough or sharp edges. Use medium to fine grade, depending on the problem, this will help sort out any imperfections. Thoroughly wash and dry the pieces before proceeding to glaze them.

Prepare your glaze in advance so it is ready for use. The timing of this will very much depend on the nature of the materials in the glaze, and how often the glaze is used. Some glazes you need to prepare well in advance like the previous day or several hours ahead. Other glazes, particularly those with lead frit in, may settle out within a matter of minutes and require constant stirring and awareness in their use. As a maker you are involved in an on-going relationship with the materials you are using and it is a matter of becoming sensitive to the characteristics of those materials. It is always a good idea to make notes when making up a glaze listing the water to dry material ratio, this way you can begin to get consistent result in glaze thickness, and can develop a sound approach for adjusting that recipe in future. You may need to re-sieve a glaze prior to use (80 or 120 mesh) for spraying, whereas (60 mesh) could fine for dipping or pouring. This does depend on the type of glaze - Celadons can benefit from Ball Milling or a 200s mesh sieve.

Where necessary bases, rims, ledges etc. can be brushed carefully with a resist. Shellac based varnish; ie, French polish, Button polish etc. can be used instead of wax. Wax can trap very small droplets of glaze in its surface texture. A Shellac based polish seals the surface of the clay with smoother finish making it easier to clean and less prone to unwanted additions of glaze. NB. you will need a white spirit cleaner to clean your brushes after use, as the varnish can easily ruin a brush!

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Objects with lids, particularly those made of porcelain can find themselves "Silica— stuck—together" after a glaze firing. You need to address this problem in advance. So after you have glazed and clean off the likely problem areas, mix up a little Alumina with a cheap glue. A PVA wood glue is readily avai1able. Brush this carefully in the middle of the clean, dry unglazed area where the two surfaces will meet. Put the piece together and fire as normal. An alternative is to use small pieces of wadding mixture. Clean off the residual alumina after the firing. You may need to use a piece of fine wet and dry paper to clean the unattached surfaces properly (or a Dremel)

Applying glazes

Plan ahead. Keep a selection of plastic containers of different heights and widths to hand. Think through the most appropriate method of glazing a piece; spraying. dipping, pouring, brushing etc. Make sure pieces are clean, dry and dust free and all rough edges sorted out in advance. It could simply be a matter of having the right bowl and equipment (Tongs) to hand which makes your life easier. When dipping for example be consistent; try adopting a counting method of 1,2,3, then the piece comes out of the glazing container. Remember it is by cutting down the variables that helps promote a clearer understanding.

When pouring a glaze, for example on the inside of a large thin walled bowl, the water content will become transferred to the body. So you will need to let this piece dry for say a couple of hours in a warm atmosphere before proceeding to glaze the outside. This way you will ensure the best chances of achieving an even glaze match with that of the inside of the bowl.

Let observation and experience be your best guide. An interesting example of how to apply this to your advantage might be, thinking through the "damp-surface-equals-less-glaze-take-up syndrome". For example, glazing the inside of a tea pot. By dampening the holes to the spout less glaze will be taken up thereby reducing the chances of clogging the holes.

Reminder - Glazing is a time consuming business; accept it, work with it and try not to get too frustrated. Just in case you do get near to blowing a gasket, take a break and try to come back with a happier mind set.

Spraying a glaze can be very useful since it may save making up bucketfuls of glaze, which can be extremely costly as well as wasteful. By spending a little time learning

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the techniques associated with spraying you can arm yourself with some useful choices for glaze solutions.

Glaze thickness? A common problem associated with spraying a glaze is trying to judge the glaze thickness and sometimes missing areas completely. Add vegetable dye or cheap children's powder paints (the darker or brighter the better) to your glaze solution. This is particularly useful when trying to spray a light coloured glaze on a light coloured body. You can use different colours for subsequent layers if you find this useful. Initially use a sharp needle to scratch the surface to indicate glaze thickness.

Notes

Make notes listing quantity of glaze taken in relation to size of piece. This will help you in two ways; it will help you estimate in future the total amount of glaze you will need to make up to glaze a number of pieces; and you will begin to develop a sense of the quantity of glaze a particular shape or size of piece will need to ensure it is properly covered.

Develop a systematic approach to the glazing procedure. Be aware where you are starting, the distance the spray is from the piece and the intensity of the spray jet. Take care of glaze runs if they happen may appear on you final piece. It can be useful to keep the spray point more or less fixed and rotate the piece on the turn-table with your spare hand, marking or otherwise keeping a sense of where the beginning and end is. Be sure to always keep a little spare glaze back in reserve, it's amazing how often a "finished" piece can collect damage or a glaze flake—off before or during kiln packing! Take care to handle the piece very carefully after spraying – I have found that the surface can be very powdery, and any finger marks will show after firing.

White Copydex glue is an excellent peelable resist to use where you want to introduce a new glaze into specific areas on a piece. Apply the copydex first to the areas which you want to blank out, or which will carry the second glaze. Allow this to dry for a few minutes; it will harden and change colour slightly. After applying your base glaze over the whole piece, use a sharp knife or needle and pick off the copydex resist. This is a very good technique to use to create blank areas completely devoid of glaze contamination and therefore possible colour distortions.

To establish a clean consistent glaze line 1 or 2mm up from the base of a piece make up a couple of very simple tools out of thin metal. File a right angle in one corner to

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the depth required, this can then be drawn around the base of the work to remove the unwanted glaze up from the base.

Finally, examine your work very carefully after the happiness of the perfect cone controlled glaze firing. What are the characteristics of the glaze? Do those glaze runs you left show up? How is the glaze thickness. Learn from the setbacks and disappointments. Think carefully through your approach and techniques to glazing to find the answers. One thing is for sure the good and bad answers are always revealed in the firing.