

BISQUE FIRING:

User program 2.

Firing schedule is in the front of the glaze book.

Make sure there are 2 half shelves or a full shelf in the bottom of the kiln set on 1" posts. Place three upright posts, of equal length, equidistant in a triangular configuration on each half shelf.

Leave a 1 inch space between abutting shelves in the centre so that you can see from top to bottom.

Stagger the height of the shelves as you load so that the heat and air can move evenly.

Be aware of the thermocouples (T/C's) and the kiln sitter.

Adjust the height of the shelf posts to leave an inch of space between the thermocouple / kiln sitter and the top or bottom of the shelf.

When you put the shelves in the kiln, do it slowly and be careful not to bump the T/C's or the sitter.

Place greenware, which about a 1/2" shorter than the posts, on the shelf.

Greenware is fragile, do not handle it by the rim or handles and try to handle it with two hands.

Make sure that the pots are dry. If the pottery is thick, place it against your cheek, if it is cool, it is still wet, set it aside until the next firing.

You can stack the greenware inside each other. You can stack bowls and plates rim to rim. You can put several smaller pieces into a larger piece. For example, load Christmas ornaments into a bowl. The pots can touch, but be conscious of the weight of the pieces you are stacking.

Greenware is so fragile it is easy to crush the pots. If you are unsure if the weight is too much, do not stack them.

It is better to leave a few pots out of the kiln than to crack them.

Do not pack the shelf *too* tightly. We must allow room for gases to escape.

Make sure the proper cone is in the kiln sitter. Cone goes into the sitter with the number facing down. Use a small cone 04.

When the bottom shelf is full, carefully place another shelf on top of the posts.

Don't hit the soft brick on the sides of the kiln. Put three posts, of equal size, so they are directly over the posts underneath them.

Fill this shelf in the same manner as you did the bottom shelf. Leave an 1 inch space between shelves in the centre so that you can see from top to bottom.

Stagger the height of the shelves on each side as you load so that the heat and air can move evenly. If you were to cut the kiln in half, the shelves would be in a Zig-Zag pattern.

Be aware of the thermocouples (T/C's) and the kiln sitter.

Adjust the height of the shelf posts to leave an inch of space between the thermocouple / kiln sitter and the top or bottom of the shelf. When you put the shelves in the kiln, do it slowly and be careful not to bump the T/C's, sides or the sitter.

Continue stacking shelves, posts and pots until the kiln is full. Leave a minimum of an inch or so headroom between the pots and the lid. You can get more pots on the top shelf because there is no need to work around posts.

Energy Efficiency note: It takes more energy to fire kiln furniture than the pottery.

Make sure shelves are full but not packed.

Carefully close the lid. If you will be in the building, prop the lid open an inch to allow water vapour to escape during the initial ramps for 1.5 to 2 hours.

Press "Recall Program" key then press "2" on the controller and then "ENTER".

This loads the bisque program. You can check the program using the "Review Program" button. Push "Start".

Record the firing in the log book. Be sure to record the load in the log. Initial when you unload. Please record the firing time in the log before shutting off the kiln.

As a general rule to prevent cracking pots, do not open the top vent above 500 degrees or the lid above 300 degrees. When the kiln has cooled to 150 degrees, unload the kiln and place the bisque on the appropriate cart.

Vacuum the kiln, sides and floor, if necessary. DO NOT touch the kiln with the vacuum.

If you think something is wrong with the kiln put a "Do not use" sign on the kiln and report it to the Studio Technician.

GLAZE FIRING:

Glaze firing – User program 3.

Firing schedule is in the front of the glaze book.

Have a towel ready to wipe your hands, especially after you have handled a dark glaze and then plan to load a light glazed pot. For example, Rosie's Red can be easily transferred to a pot that has Sams White.

Make sure that the kiln shelves have a good coating of kiln wash and that they are free of glaze droppings.

Kiln wash is applied to protect the shelf from the glaze droplets that occasionally run off the pot. Glaze drops can be scrapped off with the sharpening stone or chipped off with a putty knife and hammer.

Caution!

This glaze is incredibly sharp - be extra careful. Wear safety goggles while chipping glaze. Make sure none of the bits get into anyone else's work, and be sure to sweep them up and throw them away.

Glaze drops will melt and adhere to the pot that is resting on it. If glaze drops remain on the shelf when firing, they will sink down through the kiln wash and ruin the kiln shelf.

The recipe for kiln wash is in the glaze binder in the glaze kitchen. See the section on glaze making to understand how to mix kiln wash.

Check the bottom of each pot; make sure it is free of glaze. If the pot has not been thoroughly cleaned, place it back on the "To Be Reworked" shelf with a polite note explaining why it can not be fired so that the glazer will learn to manage this process properly. If the glaze is too thick, is cracking, or has other flaws, put it on the same shelf.

To load the kiln: Make sure there are 2 half shelves or a full shelf in the bottom of the kiln lifted up from the bottom of the kiln with 1" posts. Set up the posts as you would for a bisque firing.

Place the glazed pots on the shelf, pots cannot be stacked and cannot touch.

Make sure there is a bit of room between the pots.

Sometimes it takes more than one try to fill a shelf. Wipe your hands to avoid transferring a dark pot's glaze to a lighter pot. Avoid chipping the glaze off the pots especially the rim.

Make sure the proper cone is in the kiln sitter. Cone goes into the sitter with the number facing down.

Do not touch the rod in the kiln sitter assembly inside the kiln when loading. Use a small cone 8 for glaze.

Use a glove to remove loose dirt and kiln wash from sides and back of shelves to prevent debris from falling onto pots. When the bottom shelf is full, carefully place another shelf on top of the posts. Don't hit the soft brick on the sides of the kiln.

Put three posts, of equal size, so they are directly over the posts underneath them.

Fill this shelf in the same manner as you did the bottom shelf. Leave a ½ inch space between shelves in the centre so that you can see from top to bottom.

Stagger the height of the shelves on each side as you load so that the heat and air can move evenly. If you were to cut the kiln in half, the shelves would be in a Zig-Zag pattern.

Be aware of the thermocouples (T/C's) and the kiln sitter.

Adjust the height of the shelf posts to leave an inch of space between the thermocouple / kiln sitter and the top or bottom of the shelf. When you put the shelves in the kiln, do it slowly and be careful not to bump the T/C's, sides or the sitter.

Continue stacking shelves, posts and pots until the kiln is full. Leave a minimum of an inch or so headroom between the pots and the lid. You can get more pots on the top shelf because there is no need to work around posts.

Close the kiln lid very slowly and carefully, you do not want dust and pieces of soft brick to fall onto the top layer of pottery. Push the button on the kiln sitter so that it engages. Press "Recall Program" key then press "3" on the controller and then "ENTER". This loads the glaze program. You can check the program using the "Review Program" button. Push "Start".

Record the firing in the log book. Be sure to record the load in the log. Initial when you unload. Please record the firing time in the log before shutting off the kiln.

As a general rule to prevent cracking pots, do not vent or open the kiln above 300 degrees.

At 500 degrees you can vent the top peep hole,

at 300 degrees open the lid to the first notch, at 200 degrees you can open the lid to top of prop and completely open at 150 degrees.

Unload the kiln and place the glazed pieces on the appropriate cart.

When unloading if you hear the pieces "ping" then they are still too hot to unload.

Vacuum the kiln, sides and floor, if necessary.

If you think something is wrong with the kiln put a label on it "Do not use" and report it to the Studio Technician.

KILN CREW

- Contact Studio Technician if repairs are needed on the kilns and to make sure that the kilns are properly repaired, if necessary have a member of your crew present when repairs are made.

Organize your crew to do the following:

- Load bisque and glaze loads in the appropriate kiln.
- Make sure the venting systems are operating during all kiln firings.
- Ensure that all firings are recorded in firing log. Photocopy log sheets as required.
- Have a working knowledge of the Controller.
- Apply kiln wash to shelves as required.
- Clean shelves as needed.
- Vacuum kilns once a week.
- Clean in, under, around and on every surface by mopping and damp dusting as necessary.