## Bisque Firing (First Firing)



## Changing your Greenware pieces to Bisqueware!

#### Important to Remember -

All pieces should be bone dry - if the work is cool or cold to the touch, it is not bone dry. The greenware drying process will take a minimum of 2-3 weeks! When firing your clay pieces, try to fire full loads to take advantage of conduction heating and also save electricity. Remember, the bone-dry greenware is very fragile and must be loaded into the kiln with a great deal of care.

#### How the Kiln Works -

A very slow temperature rise is critical. During the beginning of the firing, the last of the water is driven out of the clay. If heated too quickly, the water will turn into steam while inside the clay body, causing the clay to burst.

When a kiln reaches about 660°F (350°C), the chemically bonded water will begin to be driven off. By the time the clay reaches 930°F (500°C), it will have become completely dehydrated. At this point the clay is changed forever; it is now a ceramic material.

The bisque firing continues until the kiln reaches about 1730°F (945°C). At this temperature, the pot has become less fragile while still porous enough to accept the application of glazes. Once the desired temperature has been reached, the kiln turns off. The cooling is also slow, to avoid the pots breaking due to stress from the temperature changes. After the kiln is completely cool, it is opened and the newly created bisqueware removed.



# **INSTRUCTIONS**



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#### LOADING KILN -

- 1. Make sure ALL pieces are thoroughly dry! Or they may explode inside kiln!
- 2. Pieces can touch each other during bisque firing (just not during glaze firing!)
- 3. You may place pieces on the bottom of the kiln, just do not to cover the three small holes.
- 4. Once bottom has been loaded, use the stilts and shelves for the next level, and so on.
- 5. Continue loading this way until all pieces are loaded or until kiln is full.
- 7. Lower lid and begin steps below.

### **BEFORE FIRING –**

- 1. Make sure kiln is plugged in and power is on.
- 2. Make sure upper vent is open.
- 3. Turn on the exhaust fan lever to the left of the kiln.
- 4. Make sure there is nothing leaning against the kiln on any sides.
- 5. Make sure there is never anything sitting on top of the kiln.

### **BISQUE FIRING STEPS –**

- 1. Press START
- 2. Press CONE FIRE button, use ARROW buttons to scroll to <u>04</u>. Press ENTER.
- 3. Display will show <u>HD 0</u> minutes hold. Press ENTER.
- 4. Press OPTIONS, go to spd. Press ENTER. Use ARROWS to scroll to s40. Press ENTER.
- 5. Use ARROW buttons until <u>rEtn</u> shows. Press ENTER.
- 6. Wait until idle shows (may take 20 seconds), press START.

The kiln has now started. You can tell it has started because a small red light above the control panel will blink off and on while the kiln heats up. Temperature will be displayed on the control panel. The kiln will remain going until it reaches its preset temperature. It will then automatically shut off.

Be sure to return to kiln first thing in the morning to unload your bisqueware!