### **Appalachian Center for Crafts - Clay Studio**

Vince Pitelka, 2016

### **Bluebird Pugmill Instructions**

**CAUTION - DANGER**: Used properly, a pugmill is a very safe and effective machine, but no one should operate a pugmill without being trained its operation and fully aware of the danger. Pugmills are incredibly powerful machines, geared down to a slow speed that is almost unstoppable. The similarity to a large meat-grinder is appropriate, because the pugmill cannot tell the difference between plastic clay and your arm. The outcome of pugmill accidents is almost invariably gruesome. Under no circumstances should your hands or anything other than clay or the built-in plunger ever pass beneath the top of the hopper opening while the machine is running. If you need to clean the inside of the pugmill or retrieve something from the hopper, turn off the main pugmill switch AND the wall disconnect switch above the pugmill. Do not EVER put your hands inside the pugmill or disassemble the machine without turning off both the pugmill switch and the wall disconnect switch.

## When You Are Ready to Pug Your Clay:

- **Remove and save the plastic** from the hopper opening and the extrusion nozzle.
- Place the rectangular wood stool in-line with the pugmill under the extrusion opening to catch the logs as they are extruded. Keep a cutoff wire draped over the extrusion nozzle, and cut off the extrusions when they are about 18" long. We normally keep a small table in the clay mixing room, and you can either stack the pugs on that table or put them straight into your clay barrel. If mixing a large quantity of clay, you can also stack your pugs on one of the platform carts.
- What to Do About Clay Already in the Pugmill: Unless you know for sure that the previous user was processing the same claybody, as you start pugging your clay, extrude the first three 18" logs and set them aside. If the previous claybody is similar to yours, simply include a chunk of that clay periodically as you process your clay in order to blend it evenly into yours. If the previous claybody is quite different from yours, keep those three logs in reserve until you are done, but blend the next three logs into your clay as described above. As you finish processing your clay, pug those reserved logs last in order to push as much as possible of your clay out of the mill.
- This pugmill will efficiently self-feed if your clay is proper plastic consistency. If so, you should be able to simply toss lumps of clay into the hopper and the machine should gobble them up. When/if the clay backs up in the hopper you can use the attached plunger. If your clay is a little too wet, the pugmill will not self-feed, and you will have to use the plunger every time. If your clay is very soft and wet, don't even bother trying to pug it.

## • Immediately after Mixing/Pugging Clay:

- 1. Clean clay residue from the outside of the pugmill.
- 2. Place sponge over nozzle and tie plastic over to hold it in place.
- 3. Lower plunger into hopper opening, place damp sponges atop plunger, cover with plastic.
- 4. Place empty materials bags in trash barrel. If you produce more than a few, take them out to the dumpster.
- 5. Scrape accumulated clay from floor with a square-point shovel or straight-hoe and place in the trash (not the recycle barrels).
- 6. Sweep up remaining clay residue and place in the trash (not the recycle barrels).
- 7. After scraping and sweeping up all clay debris, hose down floor and squeegee into floor drain. We must minimize the clay in the floor drain. Do not hose down and squeegee until after you have scraped and swept up as much clay residue as possible.

# What kind of shape was the clay-mixing room in when you started?

If you find the floor, mixer, or pugmill a mess, please report it to the instructor or the resident artist, and we will do our best to identify the offender and suitably flog them. When you mix clay it is always your responsibility to clean the floor, the mixer, and the outside of the pugmill, regardless of the condition you find them in.