

# KILN PUGGING GUIDE



This guide can be used to ensure the Pug Mill is correctly set up and safe to use.

## Safety

- Beware of the sudden release of stored energy; in this case electricity and air pressure.
- Never put your fingers below the rim of the hopper, instead dropping clay into the hopper.
- Use correct lifting techniques – watch your back.

## Terminology

Term	Description
<b>Auger</b>	A metal shaft with a screw blade inside the pug mill such that when it rotates it pushes the clay through the pug mill.
<b>Hopper</b>	An open section on top of the pug mill into which clay is dropped and pressed down using a square plate with a long handle.
<b>Vacuum Chamber</b>	A boxed section of the mill in which a vacuum is created to suck air out of the clay as it is blended and pushed through the mill.
<b>Pressure Gauge</b>	A device attached to the vacuum chamber lid to indicate the vacuum pressure inside the chamber.
<b>Pump</b>	A small machine used to remove air out of the vacuum chamber.

## Pugging Overview

The purpose of the pug mill is to blend recycled clay and to remove any trapped air as the clay is pushed out of one end of the mill in a sausage shape.

## Equipment

- Pug Mill (located out the back of the shed) and Pump (located underneath the glazing table).
- Vacuum Chamber lid with seal intact.
- Wire cutter to cut sausages and plastic bags to put them in.
- Tubs for storing the sausages, ideally placed on a roller tray.

## Set Up

- Make sure any clay that is put into the pug mill is already close to the desired consistency.
- Work outside if possible so that the area can be hosed down after use.
- Use a flat head screwdriver to connect the hose from one end of the pump to the vacuum chamber (see photos on the next page).
- Remove all protective/storage plastic and foam blocks from the pug mill.
- Use tables to avoid back injuries. The person cutting the sausages may like to sit on a stool.

## Operation

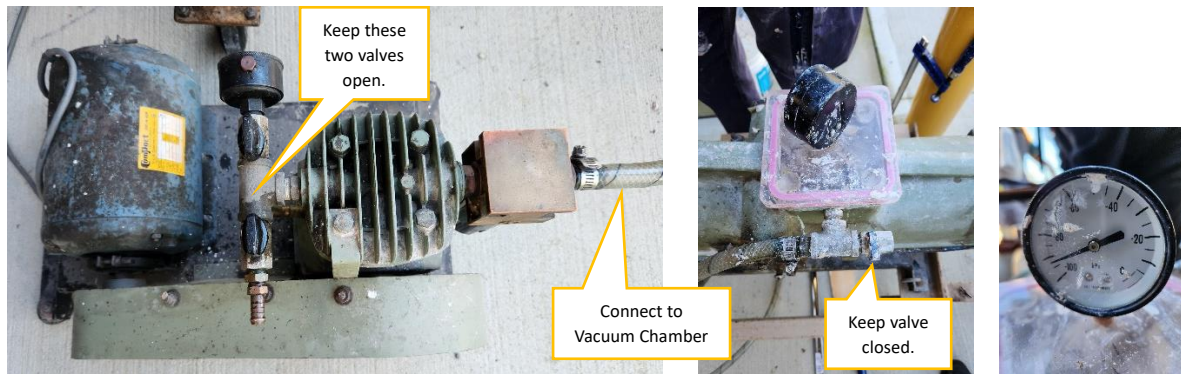
There are three valves that can be opened and closed. The two valves on the pump will regulate the suction that the pump creates. These should both be **open**. The valve for the vacuum chamber allows you to divert air away from the chamber, sucking outside air instead. This valve should be **closed**. Ensure the vacuum chamber lid is correctly seated and that the seal is intact.

Switch the pump on first to ensure a vacuum is created in the vacuum chamber. Make sure everyone is stationed in place and then turn on the auger whilst dropping clay into the hopper.

# KILN PUGGING GUIDE



## Photos



<more photos to come in future>

## Cleaning Up and Storage

It's important to clean the pug mill after use and to cover and protect the areas that are exposed to clay so that no clay can dry inside the pug mill.