



# **FIRED UP KILNS**

*and pottery supplies*

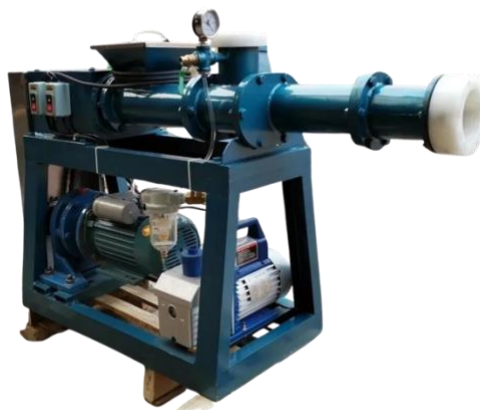


## **Fired Up Pug Mill TC90 Owner's Manual**

Last Updated: January 2025

### Please take special note of the following:

- Read this manual **before** assembling & using your pug mill.
- **Contact us** if you have any questions or queries. We are always happy to help.
- Always adhere to strict **electrical safety** when using your pug mill.
- Never alter or interfere with your pug mills vacuum or drive **mechanisms**.
- **Keep your body parts, including clothing, clear of the pug mills drive mechanisms, serious injury could result.**
- Treat your pug mill with care and make sure it is cleaned after use.



### The Fired Up Pug Mill:

Your Fired Up Pug Mill is a mechanical device used to wedge and de-air your clay.

It can be used to mix clay and remove any air bubbles from the clay before use.

This machine is suitable for clay with a moisture content of about 20% - 24%

### Pug Mill Parameters:

- Length - 1260mm
- Width - 400mm
- Height - 800mm
  
- Output Diameter: 75mm
  
- Output Volume: 200kg to 400kg an hour



### Installation:

1. Ensure you place your pug mill on a sturdy surface, in a safe area and provide good ventilation.
2. Ensure all attachments, bolts etc. are tightened before use.
3. Wear protective clothing, eye protections and sturdy gloves.
4. Only turn on the power once you are prepared and the area is secure.

### How to use:

1. Turn your pug mill on and put the clay evenly into the clay skip.
2. Once the clay begins to extrude, start the vacuum pump to wedge the clay to remove any air.
3. When you have no more clay to extrude, open the exhaust valve.
4. Stop the Pug Mill, then
5. Stop the Vacuum pump
6. Place a damp cloth in the clay skip to keep the moisture in any clay.
7. Seal the skip and outlet nozzle with a plastic bag.
8. If the Pug Mill is not going to be used again soon, then clean the machine fully of any clay.
9. We recommend starting your pug mill monthly to keep the components lubricated.

**Note:** Dry clay **CANNOT** go directly into the clay skip, it needs to be moistened first.

**Note:** There must be no foreign bodies or debris in the recycled clay.

## Specifications:

Model	TC90
Clay Output	200-400kg/hr
Clay Extrusion Diameter	75mm
Spindle Speed	42 RPM
Electric Motor	1.5 – 2.2 Kw
Electric Motor	0.68 – 0.96
Dimensions (approximate)	12600mm x 400mm x 800mm
Weight (approximate)	140kg
Vacuum Pump Model	2X - 4 Rotary Vane
Vacuum Pump Power	0.55 Kw
Operating Voltage	220V



## Trouble Shooting:

Issue	Cause	Action
The Pug Mill doesn't extrude, or it extrudes slowly.	<ol style="list-style-type: none"> <li>1. There is a blockage, likely a plug of clay.</li> <li>2. Clay is too dry.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn off and unplug Pug Mill, then manually remove any clogs.</li> <li>2. Moisten the Clay.</li> </ol>
The reducer box is making an unusual sound.	<ol style="list-style-type: none"> <li>1. Not enough lubricating oil.</li> <li>2. Gear wear or large clearance.</li> <li>3. Damage of the wheel shaft.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add lubricating oil.</li> <li>2. Replace the gears.</li> <li>3. Replace the bearings.</li> </ol>
Difficult to start or has an abnormal noise.	Hard clay or other hard objects have dried in the pug mill.	Remove and clean of all Debris.

Vacuum Pump Fault		
Clay vacuum pressure is bad or the vacuum pressure drops.	<ol style="list-style-type: none"> <li>1. The vacuum pump has no oil.</li> <li>2. There is a leakage of the vacuum.</li> <li>3. The suction outlet is blocked.</li> <li>4. There is damage or failure of the vacuum table.</li> <li>5. The cover on the vacuum chamber is installed correctly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add vacuum pump oil.</li> <li>2. Find the air leakage and eliminate.</li> <li>3. Remove the blocked clay.</li> <li>4. Replace the vacuum table.</li> <li>5. Check and re-apply the cover.</li> </ol>



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Fired Up Kilns works from the lands of the Wurundjeri Woi Wurrung and Bunurong peoples of the Kulin Nation and pay our respects to their Elders past and present.

We also acknowledge the Elders, Ancestors, cultures, and heritage of all Aboriginal and Torres Strait Islander Nations.

