

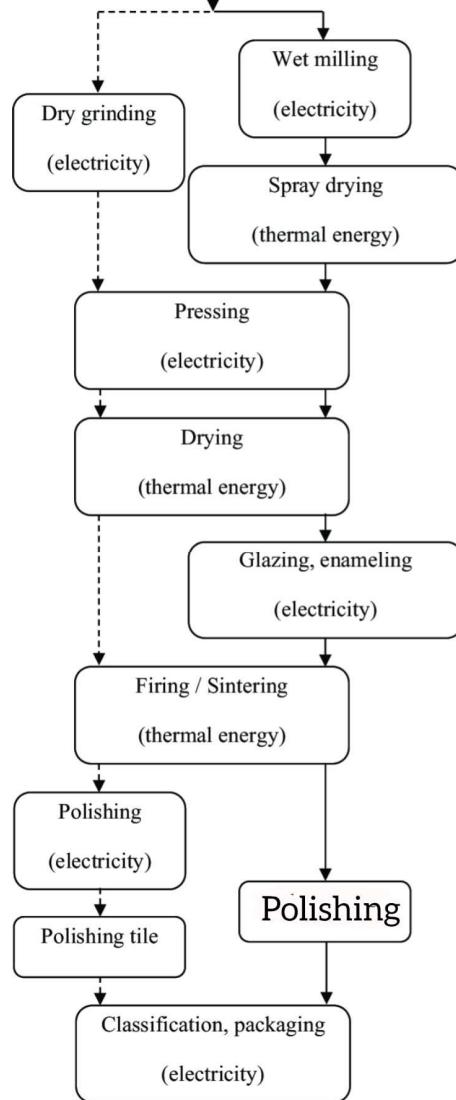


How we made TILES..??

MANUFACTURING PROCESSES OF TILES



Tile making processes



*Raw materials :



Clay or Ceramic

Clays(50%)
Feldspar powder(24.7%)
Quartz powder (0.1%)
Glazing mat. (25.2%)

Porcelain

Ball Clay(41%)
Feldspars(40.5%)
Sand(5.5%)
Glazing mat. (13%)



- Feldspars is fluxing agent.
It is mixture of Potassium, sodium or calcium with Silicone and Aluminium.
- As glazing material we use Binder,Frit,Colour,Chemical.

* Raw Material Preparation:

Mainly , I am focusing on Ceramic Tiles.

So,

The raw materials are mixed. Then it will go to ball mill to make slurry. Then spray dryer will convert slurry into dry power form.



Ball Mill



Spray dryer

* **Forming(pressing):**

The mixed materials are formed into desired shape and size using Molds or Press Machines (High Pressure Hydraulic Press). Then let it dry in air to remove excess moisture.



* **Tile Designing :**

By Rolling machine, Tiles are designed layer by layer to get desired decoration.



* **Glazing**

It is a process in which Tiles can be glazed to add colour and shine. It is very important process.

Glaze is a Glass(SiO₂) that has been modified into to melt into a Clay.

There are 3 types of glaze :

1) Matte 2) Gloss 3) Satin

Generally, Glaze is applied to tiles so that tile became water-resistant and got slip resistant surface.

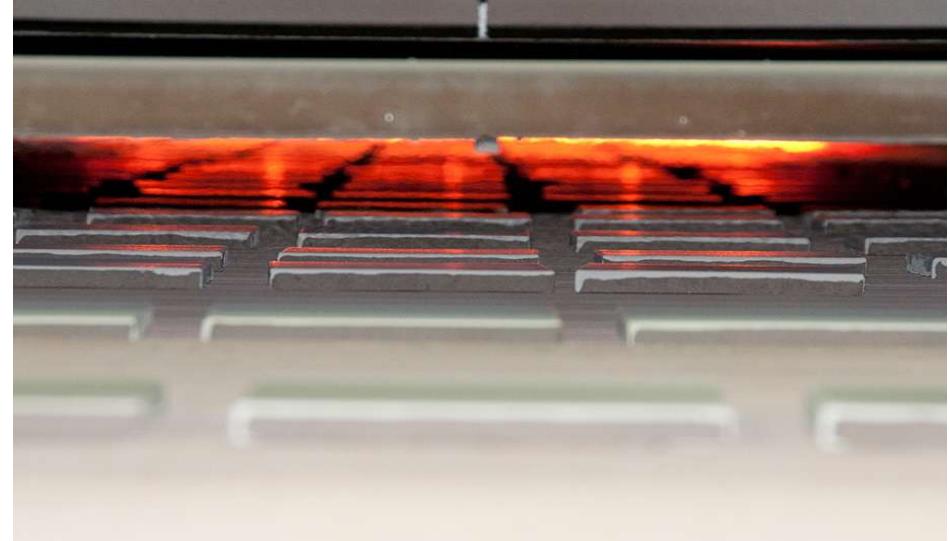
* **Firing :**

It is very important stage in tile making.

In this process, Tiles are put through a high temperature furnace to provide Mechanical properties and final finishing.

Temperature will be around 1000°C – 1250°C (1832° – 2282° F).

Then let dry tiles naturally.



*Polishing:

As Polishing Material : mixture of Fine Al₂O₃ and soft material like Fe₂O₃,Cr₂O₃.

By polishing tiles became
Highly durable
More Moisture Resistance
Stain Resistance



Yongtao Machinery

Quality Control



QUALITY CONTROL PART

After passing many tests, all products we selling are Grade AAA with high quality.No corner,no edge breakage,no black points.



PACKING & LOADING



Let's Understand this processes by video :



THANK YOU FOR YOUR PRECIOUS TIME.

Drashvi Thoriya
En.no. – 231040011008
Sr. no – B1-35