

# *Discussion on the stoneware production techniques and methods (processing)*

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**Abstract:** The status of stoneware in the ceramic circle is irreplaceable, and stoneware is not burnt like other porcelain, but to form a mass production line, stoneware burning process and methods are particularly important at this time. How to ensure quality under the premise of mass production has become the key to stoneware production. And processing is an essential part of stoneware production. It includes the necessary steps for painting and glazing the embryos.

## **1. Purpose and operational requirements of embryo removal process**

### **1.1 Purpose**

To ensure that the embryo cleaning process has sufficient capacity to make the embryo body more smooth and delicate, so as to facilitate later painting and glazing, etc.

### **1.2 Operation requirements**

#### **1.2.1 Work preparation before production**

First of all, check whether the wheel and platform are in normal operation, and then start production. Check whether the birdbath and water pipe are leaking or not. Prepare sackcloth, sponge or other tools for the shift in advance.

#### **1.2.2 Matters needing attention in production**

When repairing the blanks, check the quality of the blanks one by one, and do not repair the unqualified ones and do not repair the dry ones. The edge should be rounded and not allowed to be repaired into the edge of the knife. Emery cloth and repair knife should be used properly to avoid bruising. Repair to control the billet by hand, the billet should be put positive and steady, the hand pressure can not be too large, too fierce, too heavy, the billet should be smooth, round, and not be allowed to double along the side of the edge, a knot. The broken billet and powder foam of the machine should not accumulate too much and be wiped clean in time if there is water. Washing billet to first mouth and then wash the outer surface, do not leave a partition, wet a sponge wipe a billet, and to turn over with sponge wipe again, water can not be too much, to achieve smooth inside and outside, no billet pit, bumps, mud marks, powder knot, finger marks. Emery cloth should be changed frequently, avoid by all means only repair a part, only wash a part, resulting in local less meat, thin, especially

pay attention to the mouth and the part.No mud wisp, sand path, mud, meaty, less meat, take gently, avoid touching foot, touch mouth.Put the slab from top to bottom on the frame, and pull the slab from bottom to top on the frame.There is a button product, first wash the button and then wash the body, the force should be light.The blank board is dirty or there is water to wipe clean and then put the blank.

### ***1.2.3 Matters to be done after work***

Check whether all parts of the machine are in normal condition, wipe the machine after normal condition.Deliver broken billet and garbage to the designated place and clean up the site.Put the tools well, turn off the water source, the power supply, the seat, the blank frame, the wheel, the birdbasin and the broken blank box, and put them neatly, otherwise you are not allowed to get off work.

## **2. The purpose of the painting process and its operational requirements**

### **2.1 Purpose**

To ensure that the painting process has sufficient capacity to meet the production requirements.

### **2.2 Scope**

It is applicable to all operators of the painting process in the molding workshop of the factory.

### **2.3 Operation guidance**

#### ***2.3.1 Preparation before production***

First of all, we should know the picture of the product, use paint, and prepare all kinds of brushes.Check whether the grid edge wheel is running normally and the table is not straight.Confirm whether the pigment concentration is standard, not standard or not allowed to use.The pigment capacity should not exceed 2/3 of the container.The new screen is operated after proficiency.

#### ***2.3.2 Matters needing attention in production***

On the shelf to put the slab from the top down, from the shelf to pull the slab from the bottom to the top, the blank and the blank to maintain a distance of 2cm, to do straight, side look, do straight pumping, light support, light put, prevent the blank body damage by earthquake, end plate to be flat and stable.Strictly in accordance with the requirements of the sample picture painting, do a pigment color, depth of the same, the picture size is consistent, not out of shape.Carefully check each product before painting, defective products are not painted.The blank board is dirty and wet, wipe it clean and then put the product. Take the blank with both hands and put it gently.Keep the pigment and brush strength moderate, prevent the explosion, color line, if there is pigment accumulation or too thick must use a knife to scrape thin to do a brush to stir the pigment, take less often to take the pigment, to prevent precipitation.Keep brush, washing water, table and hands clean to prevent dirty color.Grid products before filling water, water should not be too large, moderate.Hand contact with the product for a long time, the picture must be filled with water, to prevent the appearance of blank powder pores.Pigment containers with large color difference must be separated and there must be pallets under the containers.The width of case, narrow, spacing, circle number should be drawn by standard requirement, must not appear unevenness of thickness, width and width and connect hair bifurcation, break line.Camouflage pattern, uniform color, strictly according to the technical standards, sample production color dirty, irregular picture, uneven color, not allowed to flow into the next process.

## 2.4 What to do after work

The remaining paint is returned to the paint room, the container is scrubbed clean and the tools are put away. Send broken billet and garbage to the designated place and clean up the site. Seats, frames and tables should be put in order. Turn off the power. Otherwise, you are not allowed to get off work.

## 3. The purpose of glazing process and its operating requirements

### 3.1 Purpose

To glaze the product so that it becomes the desired color in the firing process. Different colors are determined by the glaze material.

### 3.2 Scope

Applicable to all employees who apply glazing in the factory floor

### 3.3 Specification content

strictly implement the dry blank glaze system, dry blank is not allowed to apply glaze. Before taking the glaze, the glaze slurry in the glaze tank should be fully stirred evenly, carefully done to measure the specific gravity, in addition to iron sieving and other work, so that the non-standard glaze is not allowed to be used, and the glaze should be over 120 mesh sieve. After taking the glaze, the inside and outside of the glaze tank should be cleaned up in time, the cylinder cover is strict, and the glaze tank should be cleaned once a month. When glazing, to blow the dust on the blank, pick out the unqualified products, to handle gently, to prevent the broken edge. Before applying glaze products, water must be evenly applied on the surface of the blank body; When dipping the glaze, the dipping time of the blank body in the glaze should not be less than 3 seconds; When the blank body is out of the glaze, it should be slowly out. Not too fast; Glaze slurry must be often stirred in the process of glazing to prevent precipitation. When rubbing, the sponge should contain water properly, the sponge should be flattened, and the glaze layer of the foot should be wiped off gently. Be careful not to erase the glaze layer of other parts. The foot glaze should be wiped clean. No glaze is allowed within 1.5mm of the lower part of the foot, and the edge rings should be neat and even. Sponge should be washed frequently to prevent the foot glaze from being unclean and too much mud, covering the glaze and causing defects of sticky foot and sticky bowl. Apply glaze blank, want to check whether the mouth is short of glaze, if there is short of glaze, apply brush to dip in glaze to fill, prohibit to appear pile glaze phenomenon. If the blank falls into the glaze basin carelessly, it should be pulled out in time to prevent the slag from sticking to the blank body and causing the powder knot. After rubbing, billet pile pile is, and check whether there are defects on both sides. After work, the unused glaze slurry in the glaze basin should be returned to the glaze tank, and the glaze basin is washed clean with sponge, and the site is cleaned.

## 4. Conclusion

Processing workshops every working procedure of the relationship between the products are the lifeblood of the, net, coloured drawing or pattern, glazing any non-standard process will cause the product scrap, net embryo repair spare parts besides the product itself, coloured drawing or pattern according to the customer designated pattern drawing, glazing after coloured drawing or pattern is

equivalent to color the product link, is the last process before the products into the kiln firing. We hope that this process can provide a useful reference in the stoneware production process.

## References

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