Discussion on the stoneware production techniques and methods (Quality inspection)

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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. Sintering is the final step in stoneware production and the last step in determining the quality of products produced. After picking, qualified products are packaged. The stoneware production process is completed only when the stoneware is packaged. And the quality inspection of the finished and semi-finished products involved in the process has become a particularly important step.

1. Measures for quality inspection of products, finished products and semi-finished products

Objective: To strengthen the process control and prevent unqualified products to meet the needs of products.

Scope: Suitable for the inspection of ceramic products and models in factories.

Responsibilities: factory technical supervisor is responsible for inspection supervision, inspection and product performance inspection. The quality inspection workshop is responsible for the appearance inspection of ceramic products. The mold shop is responsible for the inspection of the models.

Content:

2. Ceramic products and finished products inspection

The Quality Inspection Department conducts sampling for kiln production every year. According to different kiln locations of high and low temperature, 14 pieces are extracted and sent to the Commodity Inspection Bureau. The produced ceramic products will be sent to the quality inspection workshop for selection. Porcelain selection workers in the quality inspection workshop shall inspect the appearance of all products submitted for inspection in accordance with "Daily Porcelain" GB/T3532-2009. The products that meet the customer's requirements are export porcelain, while those that fail to meet the customer's requirements are domestic porcelain, and domestic porcelain shall be treated as domestic porcelain. The quality inspector of the quality inspection department shall check at least 50 pieces of export porcelain selected by each team in the quality inspection workshop every day. If one piece is not qualified or exceeds the standard, the porcelain selector shall be instructed to rework.

3. Inspection of packaged products

Packing inspection standards shall be classified into boxes according to customer requirements. Complete sets of products shall be packaged in the same color with no obvious color difference. Packing products shall be clean, box surface and lining shall be clean, box sealing shall be firm, box tightening shall be tight, and label shall be clear and clear. Packing workshop Packers shall pack according to the standard of 4.2.1. Quality inspection personnel shall take three boxes of packaged products every day, open the box to check whether the products conform to the label, and report the unqualified products to the supervisor for treatment opinions.

4. Rough billet inspection

The director of rough billet workshop is responsible for the inspection of the first piece of rough billet. Inspection planning: according to the mouth thickness, body thickness, bottom thickness and the weight of the blank provided by the delivered samples, test pressure for one piece of measurement before starting up. The weight error is required to be between +10% - 7%, and the rough billet is registered every day for all production varieties. The director of the finishing workshop is responsible for the inspection of the finishing products. Inspection rules: spot check shall be carried out randomly according to the second page of the quality inspection standard of semi-finished products 4.22-4.27. The number of spot check shall be 15 or 16 pieces. The batch output should not be less than 3000 pieces during the spot check, the quantity of spot check should not be less than 50 pieces, the qualified rate should not be less than 95%, and the record should be made. The hand-drawing director is responsible for the hand-drawing inspection. The drawing line fracture is not more than 4 mm, the width is not too serious, the color dirty show is not more than 8mm2, the bottom section is not too serious, the sampling rules: the number of sampling to 15 pieces of a board shall prevail, when the sampling check against the standard occurs a unqualified as rework processing, the factory department sampling check hand painting once a week 50 pieces. Color dirty, bottom sticky dirty with a razor carefully cut off, and make a record. The glazing director is responsible for glazing inspection, implementation rules:

According to the document number BY/QW / 03-10, Quality Inspection Standard for Semi-finished Products, Clause 4.2.3 -- 4.2.39, the test quantity shall be one plate, with 15 or 16 pieces for each plate. If one piece is found to be unqualified, the operator shall be instructed to rework.No less than 50 pieces shall be checked by the factory, and records shall be made for glaze blank.Semi-finished products in the process of production, according to the semi-finished product quality inspection standards are issued by the operator of next working procedure for the completed process inspection, inspection qualified rear can into the next procedure, workshop engineer to clear grey, white spot check, nonconforming to do scrap processing, into the kiln before final inspection, one by one by loaders inspection pass before loading into the kiln, nonconforming product shall be returned to the molding workshop.The quality inspector of the technical department shall conduct a weekly production process inspection of semi-finished products to check whether the fixed cutter size and the weight of the water blank are in accordance with the requirements of the technological drawings.The allowable error of small products is 0.01kg, and the allowable error of large products is 0.015kg. The thickness error of each part is not greater than 0.5mm.Check the unqualified varieties, and the technical supervisor will make the treatment advice of the unqualified products.

5. Test of plaster model

Gypsum models are self-checked by the operators in the mold shop during processing. When gypsum model is used in the production workshop, it shall be inspected by rolling workers or grouting

workers. Those who pass the inspection shall be put into use, and those who fail shall be scrapped. The quality inspector of the technical department carries out process inspection on the plaster model of the mold workshop every week. When quality inspects a member to inspect each breed random check 20, basically check the exterior quality of gesso model, rate of model pass should achieve 100%. When the qualified rate is not up to the standard, it must be inspected again, and the unqualified products will be scrapped. The quality inspector of the technical department checks the production process of the factory once a week, mainly checking the production control of raw material selection, raw material processing, blank cleaning and white blank model, etc. Quality records must be made for all inspections except production self-inspection.

6. Conclusion

The quality testing method of each process is formulated according to the requirements, unqualified or non-standard both products and tools can not be used, once used, it will cause more product quality substandard or waste, whether it is burning cost or raw material cost will increase.

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