

QWISE-FM-QMG SZDS-2019

Company Standard

Hunan WISE New Material Technology Co., Ltd.

Powder sub-factory

Powder product ball milling process

Operating instructions

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August 1, 2019 Release

August 1, 2019 Effective

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Powder sub-factory Operating instructions

Carbide ball milled through sieve

1 main raw and auxiliary materials

1.1 Raw materials: various carbide blocks.

1.2 Auxiliary materials: different aperture screens.

2 major equipment and tools

2.1 Equipment: ball mill, vibrating screen.

2.2 Tools: 500kg platform scale, stainless steel insert barrel, material truck.

3 job quality requirements

Single batch of carbide powder passed the screening inspection.

4 steps and essentials

4.1 Turn on the exhaust and lights. Operate according to the operation and maintenance procedures of the equipment.

4.2 Carefully review the original records, process notices, material rework notices, and specify the loading conditions and ball milling processes of each ball mill. When changing materials of different grades, it is necessary to clear the machine and not mix.

4.3 Loading.

4.3.1 Find the materials to be loaded, check the weight, pay attention to the grade, batch number, and do not mistake the wrong card.

4.3.2 Find the same type of carbide powder empty inserting barrel, confirm that there is no residual material in the barrel, and close the joint in the ball mill discharge port. Stop the machine, open the cover, inner cover, and put the hopper.

4.3.3 Hang the drum smoothly on the funnel, pull out the insert, and pour the material into the machine.

4.3.4 Insert the plug-in board, hang the empty bucket, take off the funnel, and close the sealing cover and the outer cover.

4.4 Ball milling.

4.4.1 Boot ball mill. The ball milling process system is issued by the process technician. Write down the power on and down time.

4.4.2 Fill in the record in the date, shift, batch number, grade, feeding operator, feed

weight, start-up time, carbon content (carbon content), etc., if it is heavy carbonized material or other special circumstances Indicated in the remarks column.

4.5 Discharge.

4.5.1 After the ball milling time is up, prepare for unloading.

4.5.2 Start discharge for 4-8 minutes, after the inspection material has been unloaded, stop.

4.5.3 Hit the hopper with a wooden hammer and try to remove the residual material from the lower hopper.

4.5.4 The unloading material is over-weighted, and the unloading material weight is required to be substantially equal to the loading weight, and the unloading material shall not be less than 5 kg of the loading weight.

4.5.5 Record the unloading weight and the unloading operator will transfer the material into the screening room.

4.6 Screening.

4.6.1 Check if the screen is intact. If you change the materials of different grades, you must first clean the residual materials in the sieve tray and the lower hopper.

4.6.2 Prepare the empty bucket, remove the residual material in the bucket, insert the plug-in board, and put it on the trolley. Close the mouth of the barrel and the bottom of the vibrating screen, and close the valve of the lower hopper of the hopper.

4.6.3 Hang the bucket steadily on the hopper, pull out the inserting plate, and pour the material into the hopper. The material in the drum must be cleaned up.

4.6.4 Insert the plug-in board, hang the empty bucket, cover the lid, turn on the machine, discharge the material, and sift.

4.6.5 Return the empty bucket to the specified position and cover the lid.

4.6.6 During the sieving process, the sieve materials should be cleaned in time, and each batch of materials should not be less than 3 times. If the screen is damaged during the sieving process, the screen should be replaced in time and the screened material should be re-screened.

4.7 Weighing: The weight of the material after sieving shall reach 95% of the unloading weight of the batch.

4.8 Fill in the material card and the remaining columns of the original record. Place the card on the corresponding material surface and do not misplace the wrong card.

4.9 Place the drums neatly according to the fixed management regulations.

4.10 After screening and inspection, the unqualified materials shall be re-screened by the supervisor after re-screening the notice, and the records shall be carefully written.

4.11 Heavy abrasives are reground, sieved, and carefully recorded in accordance with the regrind notice issued by the process technician.

4.12 Class inspection.

4.12.1 Check whether the ball mill and vibrating screen are operating normally, and whether the ball mill leaks.

4.12.2 Check that the sieve is in good condition and shall not be screened.

4.12.3 Collect the sprinkled materials in time, pour the feeding materials and other undirted materials into the sieve, and grind the ground into the residual drum. Pay attention to the savings.

4.13 Clean up the sanitation and stop the wind.

4.14 Carefully complete the work record of this class, pack the record book, turn off the light, and stop the work. If there is a handover shift, the handover record must be carefully filled out.

Note:

1. The ball mill alloy ball must be cleaned every other quarter to remove the damaged alloy ball.

2. Re-adjust the weight and proportion of the alloy ball according to the process requirements. The new alloy ball must be cleaned and dried with gasoline before use.

3. When reloading the ball, the material must be loaded first, followed by the alloy ball.

4. In case of special circumstances, it is necessary to adjust the ball milling and sieving process parameters, which shall be subject to the notice issued by the process technician.

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