

QWISE-HJ-YMBGZDS-2019

Company Standard

Hunan WISE New Material Technology Co., Ltd.

Steel Bonded Carbide sub-factory

Pressing mold quality identification process

Operating instructions

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Steel Bonded Carbide sub-factory Operating instructions

Pressing mold quality identification

1.1 Main raw materials: molds of various models and rubber grades of various grades.

1.2 Main auxiliary materials: anti-rust oil, gasoline.

2 main equipment

2.1 Main equipment: grinder, polishing machine, demagnetizer.

2.2 Main tools: balance, caliper, micrometer, angle ruler, brush, oil stone.

3 job quality requirements

3.1 Work must strictly comply with equipment safety techniques and operating procedures.

3.2 The geometric shape and appearance of the pressure test product shall conform to the requirements of the drawings, and there shall be no defective products such as delamination, crack, no pressure, adhesive, etc., and provide accurate pressing technical conditions for the suppressing personnel.

3.3 Accepted molds can meet the quality requirements of mass suppression.

3.4 The mold and punch are equipped to meet the needs of production.

3.5 The mold storage is reasonably intact, and the molds are sent and received in time and without errors.

4 steps and essentials

4.1 Reporting the mold plan and the model

4.1.1 According to the quality improvement of the production order and the consumption of the mold, the production department will report the mold plan within the specified time.

4.1.2 When the mold is received from the mold factory, the model and quantity of the mold should be checked and the mold order should be checked.

4.2 Pressure test of new models

4.2.1 Calculate the parameters such as single weight and pressing height of the test compact according to the shrinkage coefficient of the mold, the alloy grade and the size of the pattern.

4.2.2 Prepare the molds and tools required for the pressure test process, and collect the required rubber compound from the corresponding team (or material warehouse). Adhesive grade, if there is no such grade when pressure test can be used to replace the pressure test, when a model of multiple grades is produced, select the grade of the production difficulty test pressure. However, it is not allowed to mix the particle material and the powder material, such as the particle material for the steel circle mode, and the particle material for the alloy mode.

4.2.3 Check the smoothness and fit of the mold, the finish is not enough, or the mold with bad mold should be processed

first until it meets the requirements.

4.2.4 When the site is pressure tested, the operation method should be consistent with the normal production, and the single weight, the ethical model should be adjusted, and the pressing height should be pressed according to the calculated parameters. For models that can only be used with reverse-mixed or reverse-doped SBP materials to ensure molding, make a record on the Mold Pressure Recording Table.

4.2.5 Check the density of the compact and the presence or absence of defects such as delamination, cracks, adhesives, and uncompressed, and record the single weight and size of the compact in the parameter "Mold Pressure Recording Table". Unqualified green compacts cannot be transferred to trial burn.

4.2.6 For models with a small single weight, the number of test compacts is more than 5; for models with a single weight of 200 grams or more, the number of test compacts is more than 2.

4.2.7 The qualified blanks are numbered, and the processed ones should be processed first (for the basic size of the appearance after processing, the processed compacts should be measured for size), and then sent to the sintering test, at the same time The sinter card is clearly marked.

4.2.8 After the pressure tester unloads the boat, the sintered product is carefully inspected, and the bending deformation exceeds the required requirements. The test content shall be the items detected by the drawings and product standards for the alloy requirements, such as size, angle and Whether there are delamination, cracks, no pressure, etc.

4.2.9 When the test pressure results can meet the requirements of drawings and mass production, fill in the test results on the "Mold Pressure Test Record Form" and determine the technical conditions for suppression.

If the pressure test result does not meet the requirements of the drawings, or the model cannot meet the mass production, the reason should be analyzed: if the pressure is not accurate or the operation is improper, the pressure must be re-tested; if the mold itself is designed and manufactured, , carefully fill in the "Mold Information Feedback Card" and return to the mold manufacturing branch with the mold, and feedback information to the branch.

4.3 Filling and release of pressing technical conditions

4.3.1 The technical conditions for the suppression shall be based on the pressure test record. When the pressure test grade is inconsistent with the production grade, the technical conditions of the press can be obtained by calculation, but the spot check should be carried out during production to verify the accuracy of the pressing conditions, and the spot check record is made.

4.3.2 Fill in the qualified suppression parameters carefully in the "Repression Conditions Notice", including the grade, model, weight and compression height, fluctuation range, processing or not.

4.3.3 The Notice of Suppression Conditions is valid for 30 days (from the date of the order). The "Notice of Suppression Conditions" must be signed by the pressure testers before they can reach the various suppression teams. If they cannot be jointly signed for objective reasons, they can be reissued within 2 days.

4.4 Check and acceptance of new models

4.4.1 A random sampling method should be adopted for the new model to verify the correctness of the pressing technical conditions.

4.4.2 Sampling in a large number of qualified compacts, the number of samples is small, the number of samples is greater than 5; for the number of singles greater than 200 grams, the sampling is greater than 2 pieces. The sampling results are registered and the technical conditions are adjusted according to the results.

4.4.3 Input the new model's pressing technical conditions into the computer to realize the microcomputer management.

4.5 Pressure test of new mold

4.5.1 The content includes newly made molds and molds whose cavities have been repaired.

4.5.2 Test the new mold according to the normal pressing technical conditions of the model as a parameter. The pressure test operation shall be carried out according to normal requirements. The process shall carefully check the fit and finish of the various parts of the mold, and whether the mold can be formed and inspect the appearance of the compact.

4.5.3 The test pressure qualified mold is registered and submitted to the mold holder in the mold library. The unqualified mold will be returned to the mold factory along with the “Mold Information Feedback Card”, and the mold will be re-tested as required.

4.6 New model, new mold pressure test time requirements

4.6.1 In the current month, the new mold opening and repairing of the production order shall be tested within 6 working days, and the “Mold Pressure Test Information Feedback Card Form” shall be filled out on the working day; the new mold opening without production order will be issued in the current month. To repair the mold, the test results should be issued within 15 working days, and the “Mold Pressure Test Information Feedback Card Form” should be filled out; the urgent need for the mold should be taken out within 3 days.

4.6.2 Test, new product development, research and development molds are arranged according to the development schedule requirements.

4.7 Mold Management

4.7.1 According to the numbering requirements, the mold racks shall be numbered and the molds shall be classified and managed, and the storage quantity shall be appropriate to ensure that the molds are “take, release, check and find” freely.

4.7.2 The refiner shall receive the mold according to the “Repression Conditions Notice”, and the disbursement personnel shall issue the mold according to the production order and the “Repression Conditions Notice”.

4.7.3 The molds at the production site shall be recovered in time, and the molds that reflect the problems during the pressing shall be confirmed and disposed of. Qualified cleaning and anti-embroidering oil is put into the warehouse, and registered in the “issuing mold record”; if it is not qualified, it will be repaired; if it is to be scrapped, it will be registered in the “Original Record of Die Consumption”.

4.7.4 Do the mold inventory work every month, and input the mold inventory into the computer for microcomputer management.

4.8 Management focus

4.8.1 The pressure test should reflect the quality of the mass production, and the quality of the test pressure should meet the requirements.

4.8.2 The technical conditions of the pressing are accurate.

4.8.3 Mold management specifications and stocks can meet the requirements of production, quality and scientific research.

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