

QWISE-HJ-SLSXZDS-2019

Company Standard

Hunan WISE New Material Technology Co., Ltd.

Steel Bonded Carbide sub-factory

Paraffin process Two-way Pressing process

Operating instructions

Approved by : Zhaohui LIU Prepared by: Liyun Yun Xing Wang

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Paraffin process Two-way Pressing

1 main raw and auxiliary materials

1.1 Main raw materials: paraffin mixture.

1.2 Main auxiliary materials: mold.

2 major equipment and tools

2.1 Main equipment: TPA20/3 type, TPA30/2 type, TPA6/3 type DORST press.

2.2 Main tools: balance, caliper, hex wrench, steel ruler, plastic bucket, stainless steel disc.

3 job requirements

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

3.2 The process parameters shall meet the requirements of the suppression condition notice.

3.3 The accuracy and appearance quality of the compact shall conform to the process requirements, and there shall be no defects such as delamination, cracks, adhesives, sticking molds, and falling corners.

4 steps and essentials

4.1 Preparation for suppression

4.1.1 Wear protective equipment and check the shift diary.

4.1.2 According to the production plan issued by the branch, collect the qualified paraffin mixture, prepare the tools, and check the balance and caliper.

4.1.3 Check the model, check whether the mold rack and mold meet the requirements, ensure that the material box and funnel have no residual materials and impurities, and the mold type meets the requirements of the suppression condition notice;

4.1.4 Check that the compressed air is normal and remove the moisture from the compressed air and clean the cartridge.

Management focus:

The accuracy of the A measuring tool, the pressing operation and the compressed air reach the pressing condition requirements;

When the B mold and the punch are biased, it is forbidden to start the press to prevent a safety accident.

4.2 Press air conditioner

4.2.1 Turn on the power of the press, open the control circuit switch, start the motor, disconnect the compressed air source, rotate the shape selection switch to the jog position, raise the upper punch, close all auxiliary switches, and idle the press. .

Management focus:

When the power indicator light is on and the motor start motor light is on, all auxiliary actions should be turned off to prevent the preload action from damaging the mold.

4.2.2 Adjust the zero position of the upper punch, pull-down, and press stroke.

Management focus:

When the mold is in the pull-down position, the pressing stroke cannot be adjusted. When the mold is in the pressing position, the pull-down stroke cannot be adjusted. The pull-down and pressing stroke adjustments cannot be greater than 5 scales.

4.2.3 Debugging according to the process parameters specified in the suppression condition notice.

4.2.3.1 Adjust the pull-down stroke. The pull-down stroke must be consistent with the suppression condition notice. It cannot be adjusted too large. Otherwise, when the mold is pulled down, the contact between the cavity and the lower punch base will damage the mold and the lower punch will come out of the mold cavity during reset.

4.2.3.2 Adjust the position of the female mold, adjust it after demoulding, and adjust it to the lower punch.

4.2.3.3 Adjust the top pressure stroke, the top pressure stroke should meet the requirements of the suppression condition notice, and adjust at the pressing position.

4.3 Feeding and debugging

4.3.1 Feed the press hopper, cover the cover, turn on the push gas source, and adjust the press stroke.

Management focus:

The pressing stroke should be small to prevent the press from being crushed.

4.3.2 Adjust the upper punch to ensure the height of the compact.

4.3.3 Adjust the pusher plate, the pusher plate and the large plate are at an angle of about 30°, and the loading is uniform.

Management focus:

Prevent the push box from being too advanced and staying on the cavity for too long, avoiding the push box touching the upper and lower punches and the upper punch pressing the blank box.

4.2.4 Adjust the preload to ensure that the compact does not have delamination, cracks, falling corners, and the density is moderate.

Management focus:

When the preload is adjusted, there must be material in the cavity.

4.4 suppression

4.4.1 Select the bulk density range of the paraffin mix depending on the product category.

4.4.2 When the shape selection switch is linked to the linkage, press the linkage button to continuously press the blank to stop the blank, and carefully check the single weight and height of the compact (single weight, height within the fluctuation range specified by the pressing conditions), density. If there are any defects such as delamination, cracks, adhesives, falling corners, etc., if problems are found, contact the pressure regulator or process changer and take measures until the compact meets the requirements.

4.4.3 Depending on the product category, depending on the difficulty and size of the compact, adjust the pressing stroke, pull-down stroke, preload, pressing pressure, pressing speed, holding time (see Table 2 for pressing process parameters), and strictly control the pressing speed adjustment. Got too fast.

4.4.4 When pressing, according to the leakage level of the pusher, clean the bottom of the pusher from time to time to ensure the smooth flow of the hopper and the material pipe. Do not feed the hopper once more than one-half of the hopper volume to facilitate uniform cutting. When pressing, the upper and lower punches are cleaned according to the condition of the adhesive. When the burr is too large, the punch should be replaced in time.

4.4.5 Check the blanks at any time to check items such as single weight, spot check, crack, and adhesive.

4.4.6 The pressed compacts are neatly placed in a stainless steel pan (with a newspaper on the pan), and the distance between the compacts is based on the principle of not damaging the compact.

4.4.7 Fill in the transfer card in the specification, place the compact in the product car, and transfer it to the process after passing the inspection by the process supervisor.

4.4.8 After the completion of the pressing, the finishing tools, if there are any surplus materials in the hopper, leave the cover and cover the cover, and do a good job of civilized hygiene.

4.4.9 Fill in the original record and the shift record in complete and detailed manner.

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