This is a common problem for novice 3D printers. However, fortunately, this problem is easier to solve. Extruder does not squeeze consumables, there may be 4 possibilities. We will explain each case one by one, and introduce how to solve the problem.

1.1 The loading consumables are not filled in place before printing starts

Before starting to print, there is no consumables at the nozzle because the loading of the consumables was not loaded. In this case, stop printing first, and then reload the consumables. For details on how to load the consumables, see the instructions for using the machine. If consumables are successfully loaded, consumables will flow out at the nozzle.

1.2 When printing starts, there are no consumables inside the nozzle

The printer has a problem: When the extrusion head is in a heated and stationary state, the consumables melted in the nozzles cause the consumables inside the nozzles to continue to flow due to the influence of gravity, resulting in empty nozzles. This problem of stationary sag may be in the pre-printing stage, when your nozzle is heated, it may also happen when the extruder cools down after printing is finished. If your nozzle has some consumables because of the sag, then it may take a while for the next time that the consumables begin to squeeze out of the nozzle.

To solve this problem, you need to ensure that the consumables are already full of nozzles. The usual way to solve this problem is to use something called "skirt" in the slicing software. The skirt is around the line around the model, and the nozzle is filled with consumables before the model is officially printed. If you need more “skirts”, you can set the number of laps to increase in the “Expert Settings” tab in the slicing software.

1.3 nozzle too close to the platform

If the nozzle is too close to the platform, the platform will block the nozzle while printing, causing the consumable to not be able to squeeze out of the nozzle.

Specific performance: There is no consumables attached to the top of the platform or the masking tape is scratched by the nozzle. The rebound of the extrusion gear causes the consumable cannot be fed. as follows

Judgment method is: First, when the first layer is printed by visual inspection to see if the nozzle and the platform is in a compressed state: The second is the printer nozzle temperature is added to 240 °C, the nozzle and platform are separated by a distance, and then manually feed Look at the nozzle for consumables flowing out smoothly. If the consumables flow out smoothly and the nozzle is not blocked, you can use the machine again after commissioning the machine.

Solution: Re-adjust the printer platform. Refer to the printer manual for specific leveling methods.

1.4 printer plug

If none of the above suggestions can solve the problem, then it may be that the printer is plugged. After the printer is plugged, although the extruder is feeding normally but the nozzle cannot flow out of the consumables, the printer cannot print smoothly. Printer plugs are problems that FDM printers cannot avoid. After this problem occurs, we need to clean them manually.

The condition of the plug is as follows: The printer supplies a large amount of material, forms accumulation at the nozzle, and finally blocks the nozzle; or the printer is used in a dusty environment, dust in the air may adhere to the consumables, and the printer follows the consumables along with the work. Into the nozzle, the ash layer accumulates and then the plug is formed; one is that the heat of the extruder is not enough, the consumables begin to expand outside the expected melting area, and the consumables are deformed so that the inner wall of the guide tube clings to each other, leading to extrusion. Machine can not smoothly push supplies.

Specific performance: The printer retracts the extrusion gear, and no consumables flow out at the nozzle.