3D printer vibration and loopback texture solution

Loopback is a wavy texture that appears on the surface of the printout because of printer vibration. Usually, you see this texture as the extruder suddenly turns, as near the sharp corners. For example, you print a 20mm square and each time the extruder prints the other side of the square, it needs to change direction. In the sudden change of direction, the inertia of the extruder will cause vibrations, which will appear on the print. Next, we will discuss the common ways of causing a loopback and explain the reasons.

Print too fast

The most common cause of loopback textures is that you are trying to print too fast. When the printer suddenly changes direction, the rapid movement will result in more power and thus lingering vibrations. If you think your printer is printing too fast, try reducing the printing speed. In the basic - speed / temperature - print speed (mm / s) to adjust the print speed, the appropriate print speed is generally between 30-80, different models of different speeds, commonly used in 50mm / s. If vibration and loopback textures appear, try to reduce the print speed by a little.

Mechanical failure

If other methods do not solve the problem of loopback, then you may need to check the mechanical factors that may cause excessive vibration. For example, the screws may be loose, the brackets may be damaged, and excessive vibration may result. While you are printing, look carefully at your printer and try to check where the vibration originated. By the way, rub a layer of grease on the screw to lubricate the screw. Check if the platform is loose. If loose, adjust the eccentric nut under the platform to achieve the purpose of tightening.