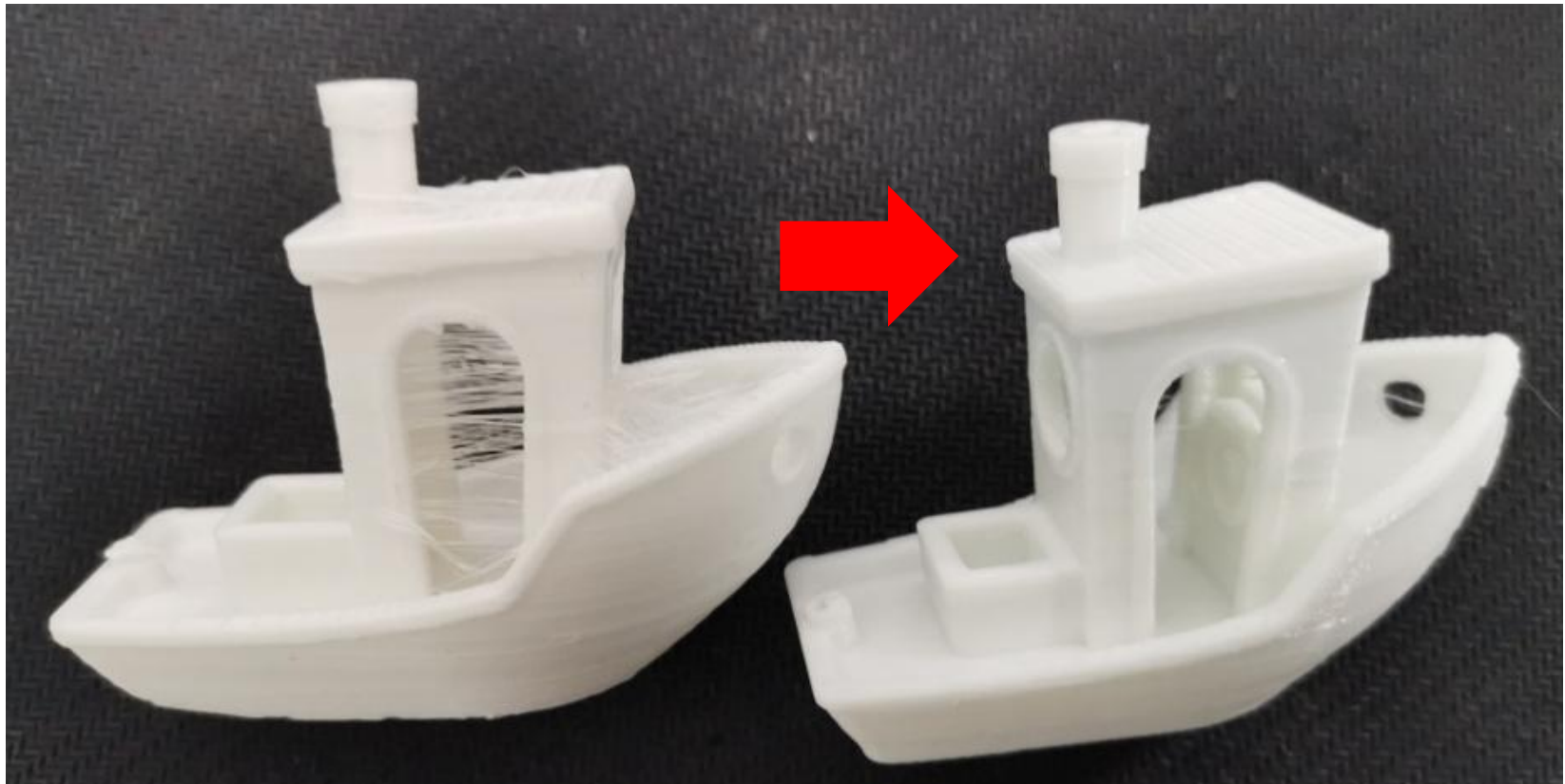




How to improve the Mixing Color hotend Stringing/Oozing issue



How to improve the M3/M4 hotend stringing or Oozing

Step 1: Load the filaments to all the extruders.

PS1: You can load filaments only two extruders too. The more channels you load filaments, the effect if the better.

PS2: The channel without filaments should be closed with hot end clean tool.

Step 2: Set Auto-Retract to On , and set the relevant parameters such as Retraction distance and Retraction speed.

```
Configuration
Auto-Retract: On
Retract mm: +008.00
Retract V: 15
Hop mm: +000.00
```

```
Retract mm: +008.00
Retract V: 15
Hop mm: +000.00
Unretr. mm: +000.00
Unretract V: 10
```

```
Configure
Back
Auto Retract
Runout Sensor: OFF
Powerloss: OFF
Auto Shutdown: OFF
119/120 20/ 0
100% 0.00
```



```
Retract
Back
Auto-Retract: OFF
Retract MM: 5.00
Retract V: 6.00
UnRetract MM: 0.02
UnRetract V: 5.00
120/120 21/ 0
100% 0.00
```



```
Retract
Back
Auto-Retract: ON
Retract MM: 10.00
Retract V: 15.00
UnRetract MM: 0.02
UnRetract V: 12.00
119/120 21/ 0
100% 0.00
```

Retract mm: 8~10

Unretr. mm: 0

Retract V: 10~20

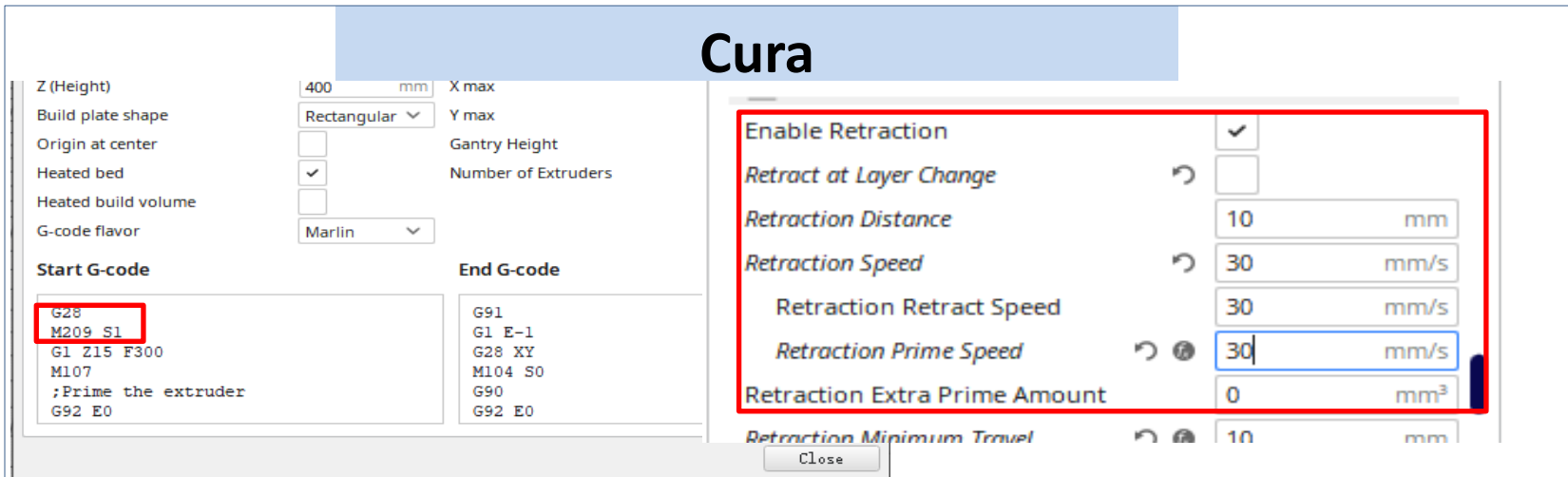
Unretr. mm: 8~15

Hop mm: 0~1 (set to 0 if you have set the Z hop in slicing setting)

How to improve the Mixing Color hotend stringing or Oozing

You can also add a M209 command in the “start gcode” of slicing software

1. Add a “**M209 S1**” command on the start code
2. Enable Retraction and set the retraction distance to 8~10mm and retraction speed to 30mm/s



How to improve the Mixing Color hotend stringing or Oozing

Repetier-HOST

Speed and Quality Structures Extrusion **G-Codes** Advanced

Start G-Code
End G-Code
Before Extruder Switch
After Extruder Switch

Create Default

You can add dynamic values, that get replaced during slicing.

Temperatures:
{TEMP0}, {TEMP1}
{BED}

```
; Default start code
G28 ; Home extruder
M209 S1; Firmware retraction
G1 Z15 F{Z_TRAVEL_SPEED}
M107 ; Turn off fan
G90 ; Absolute positioning
M82 ; Extruder in absolute mode
{IF_BED}M190 S{BED}
; Activate all used extruder
{IF_EXT0}M104 TO S{TEMP0}
G92 E0 ; Reset extruder position
; Wait for all used extruders to
{IF_EXT0}M109 TO S{TEMP0}
```

Speed and Quality Structures **Extrusion** G-Codes Advanced

General Extruder Settings

☐ Spiralize Contour ☒ Enable Retraction

Retraction Speed: 30 [mm/s]

Retraction Distance: 8 [mm]

Minimum Travel before Retract: 5 [mm]

Minimum Extrusion before Retract: 0.5 [mm]

Z Hop: 0 [mm]

Cut off Object Bottom: 0 [mm]

Nozzle Diameter: 0.4 [mm or 0 = use va]

Simplify 3D

Extruder Layer Additions Infill Support Temperature Cooling G-Code **Scripts** Speeds Other Advanced

Starting Script Layer Change Script Retraction Script Tool Change Script Ending Script

```
G28 ; home all axes
M209 S1
G1 Z5 F3000 ; lift
G1 X5 Y10 F1500 ; move to prime
G1 Z0.2 F3000 ; get ready to prime
G92 E0 ; reset extrusion distance
G1 Y150 E15 F600 ; prime nozzle
G1 Y100 F5000 ; quick wipe
```

Retraction Control

☒ Retraction Retraction Distance 8.00 mm

Extra Restart Distance 0.15 mm

Retraction Vertical Lift 0.00 mm

Retraction Speed 30.0 mm/s

☐ Coast at End Coasting Distance 0.20 mm

☒ Wipe Nozzle Wipe Distance 5.00 mm