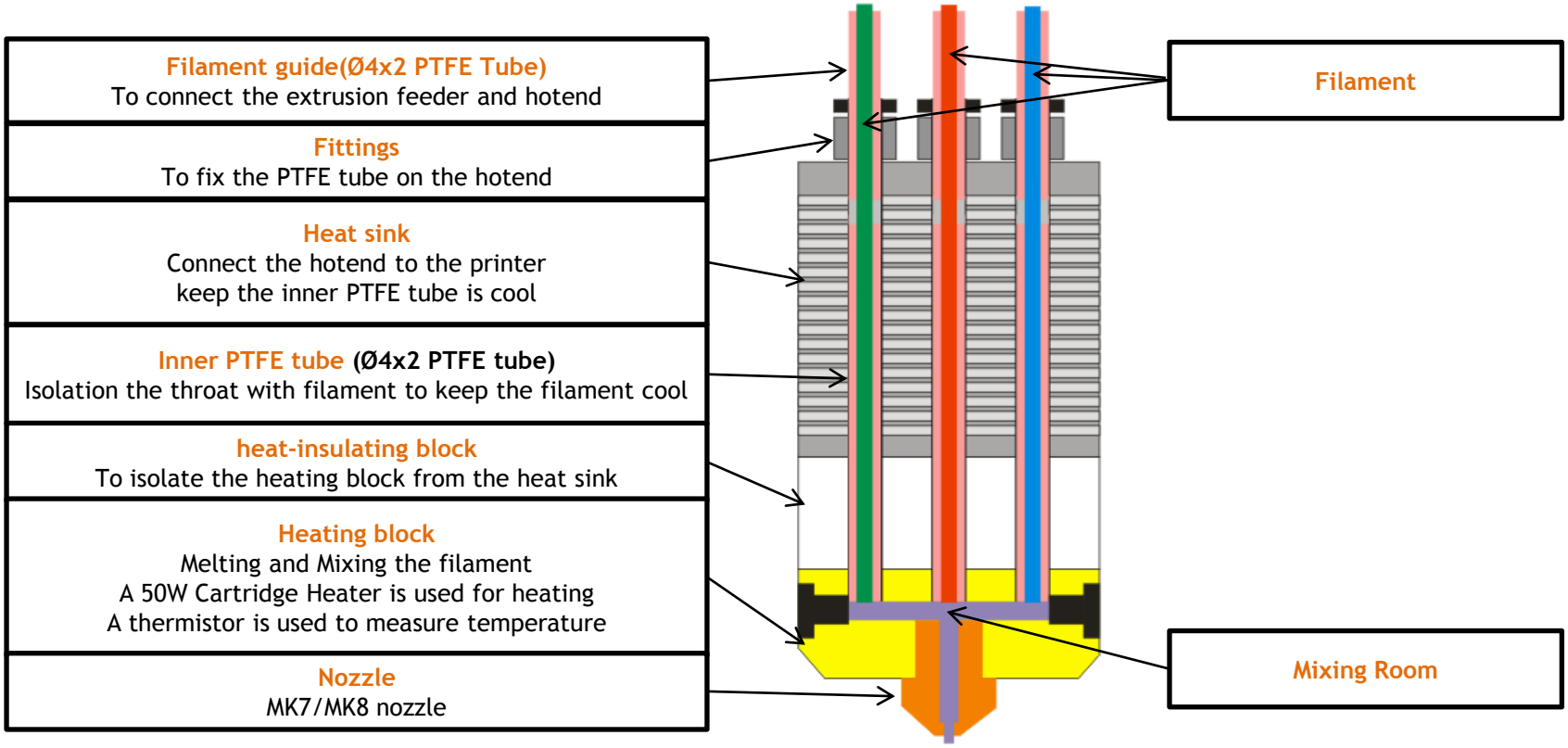
Zonestar

How to solve clogged issue of the mixing color hotend

Ver: 1.0

Sturcture and Working principle

- Structure of mixing color hot end (of the 4th version M3 and M4 hotend)



- Color mixing principle:

1. Filaments melt and mix in the mixing room, and then flow out from the nozzle.
2. To change the feed ratio, it can achieved color mixing.

Cautions for use

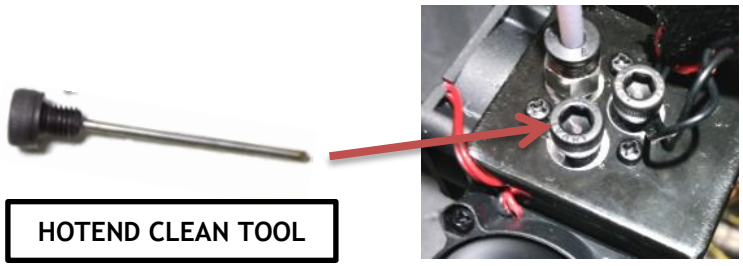
1. **A cooling fan** must be added to cool the heat sink, keep the internal filament and PTEF pipe on low temperature, otherwise the pressure of the extrude feeder cannot be transmitted to the hot end to extrude the melted filaments.

2. **The maximum working temperature of the heat insulation block is 245 degrees**. Exceeding this temperature will lead to deformation of the heat insulation.

3. **Filaments must be loaded into all channels** of the hot end at the same time, or use the hot end cleaning tool to close the unused channels, otherwise the filament will flow back from the empty channel and blocked the hotend.

4. It is must to add a **color prime tower** when printing multi-color 3D prints, to clean up the previous color filaments in the mixing room.

5. Pay attention to the slice setting of "**Retraction Length on Extractor Switch**", set it to "0" while slicing muti-color 3d object.



How to solve the blockage problem

• **Prepare : please read the file ” Mix Color HOTEND User Guide- load and unload filament.pdf” to know the correct operation process.**

Steps:

1. Heating the hotend to 200℃ and then remove the nozzle.
2. Load 300mm filaments from each channel of the hotend.
3. Remove the filament on outlet of the hotend.
4. Intsall the nozzle back or replace a new nozzle.
5. Load filament to all of the channels and check if the filament can flow from the nozzle well.