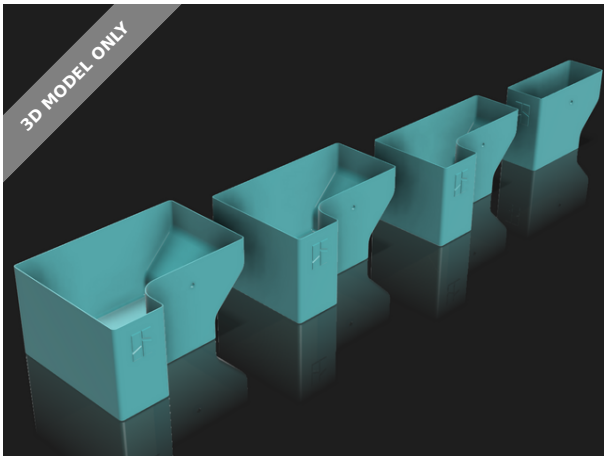

Bambu Lab Magnetic Chute Cover, Poop Management System, Recycle Cardboard bin

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VIEW IN BROWSER

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Summary

Chute Cover, Stiletto and Bins. Recycle mod for Bambu Lab printers

3D Printers > Accessories

Tags: bambulab bambulabx1carbonams bin chute cover large magnet magnetic medium poop small bambulabpoopcover xsmall slide stilletto recycle

Update 11 Jul 2023:

It has been a year since I designed the PMS (Poop Management System) for Bambu Lab printers. So many things have changed and so much development in the way we approach slicing & printing. I am doing an update and also introducing another way to collect printer poop.

The Recycling Way ♻

While I am happy that my design will be downloaded, printed and used, I do not like the fact that 150-300gm of filament will be consumed when a simple mod to the cardboard filament box could do the job. If most of the stuff you print does not poop like it down a bottle of fast laxative, you can try this mod instead.

If you like this mod, there are 2 ways you can help:

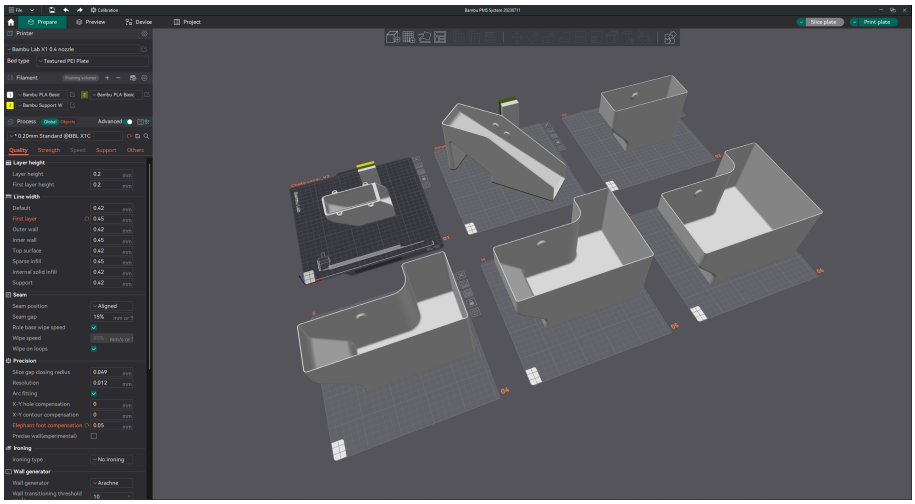
1. Like this project and download the Bambu cube V2 stl in the download section to keep this project on top of the search list so that others can find it easily.
2. Post a make of the recycled poop container to show others it can be done.

Thank you very much.

BOM

- Cardboard Filament Box
- Tape
- Magnet x2

If you still want a printed poop management system, The files are now consolidated into a 3mf project. So that it can be a one-stop shop in terms of downloads. I have done some settings, but change it to your own preference.



Introduction

A chute cover for Bambu Lab printers to guide the pooped filaments in a controlled manner. It requires 2 colours and the support filament W. I have uploaded the 3mf file with the settings that I sliced using the Bambu Studio. You will need to allocate the orientation of the filament spool according to your AMS within the Bambu slicer.

The Stiletto is a ram that guides the poop to the bin on the floor. It has a 23° internal slope and extends around 7.6cm away from the edge of the printer. It can print in single or dual colours. I have uploaded the 3mf file with the setting in the Bambu Slicer. You will need to allocate the orientation of the filament spool if you want to print in dual colour.

For those who want the conventional bins, there are 4 bin sizes available, the difference is in the depth of 140mm(L), 110mm(M), 80mm(S) and (64mm)(XS). The smaller-sized bins are for those that do only support filament where there are few filament changes.

The chute cover requires 4pcs of 6x3mm round magnets. The bin and Stiletto will need 1 or 2pcs of 6x3mm (optional)

The magnet holes have wider tolerance and need to use CA glue. I would not recommend press-fitting them into the bins as it may cause layer separation.

The bin overhang is 45°, orientate the overhang to face the Aux fan.

XS bin will take 1h50mins to print at standard 0.2mm layer height. L bin will take 3h50mins.

Please refrain from printing the chute cover and stiletto in ludicrous mode.

Conclusion

To date, my designs are free to download and use. There is no Patreon or OnlyFan (hahaha). If you like them and want to contribute to my coffee addiction & help fund the filaments I need for prototyping, a donation of $5-$10 to Ko-fi or paypal.me will be greatly appreciated.

Caveat

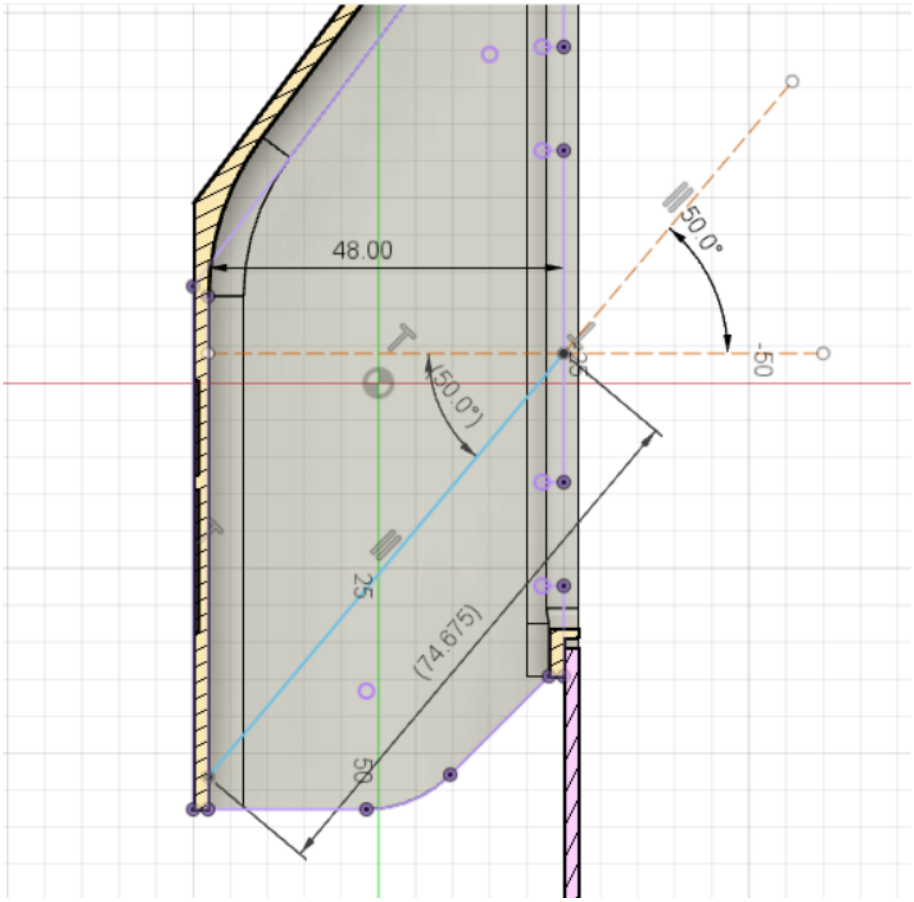
These designs are done free for the benefit of the community. They may work for some people, and not for others. Hence, print at your own discretion.

How I design the depth for the Chute Cover

When the toolhead is purging at the opening of the chute, it pushes against a lever that closes the opening. The height from the closed opening to the nozzle wipe is around 40-45mm.

Theoretically, the purge will not be longer than 45-50cm. When the toolhead release the lever, the pooped filament travels down a 50° incline slope. The internal depth of the cover is set at 48mm. Based on the sliding approach, for a poop to get stuck it has to be more than 75mm, and that is one looong poop.

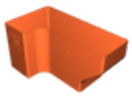
Does that mean that there will be no clogging? The answer is “I dunno, it's 3d printing, anything can happen. So far, I have no issues of clogging.”



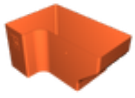
Model files

STL 12 files

chute_bin-xs-v2.stl



chute_bin-s-v2.stl



chute_bin-m-v2.stl

chute_bin-l-v2.stl

stiletto_x1_stiletto-v3.stl

bambu_x1-chute-cover-main.stl

bambu_x1-chute-cover-bambu_logo2.stl

bambu_x1-chute-cover-bambu_logo1.stl

bambu_x1-chute-cover-bambu_logo3.stl

bambu_x1-chute-cover-bambu_logo4.stl

stiletto_x1_sole-heel-v3.stl

stiletto_x1_sole-foot-v3.stl

bambu-cube-v2.stl

bambu-pms-system-20230711.3mf

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