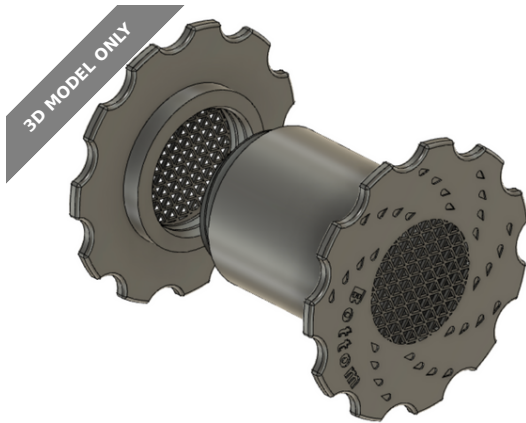




SpinCycle : Keep every spool dry, For Bambu X1 /P1P AMS and Print-from dryboxes



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[VIEW IN BROWSER](#)

updated 3. 3. 2023 | published 3. 3. 2023

Summary

This model is designed to make storing and using your filament rolls easier if you print from a dry box / AMS.

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Update 2/19/2023: Added no-water-drops design for Top and the Default Jar Size per user comment/request (top/bottom text remains).

Update 2/7/2023: Added a 12 mm-shorter version per user request.

This model is designed to make storing and using your filament rolls easier if you print from the Bambu Labs AMS. It ought to work for any printer where you print from a dry box with rollers, however.

It doubles as an in-place drying system if you store your filament in zip-lock bags, or other airtight container. For the AMS, it has the added benefit of replacing or supplementing the other difficult-to-access silica storage options available (either the OEM slots or added).

I have designed this initial revision to fit Bambulabs stock spools (or the ones you can print yourself, see below for compatibility).

I have so far adapting this to fit a larger range of spools based on what I have available. It is likely one of these will work for you. Pick the Jar size that fits your spool type. If people request other sizes, I will post them, by hopefully this range of sizes gets a lot of people covered. If you are impatient, you may also make your own size from the STEP file by increasing/reducing the jar height.

Jar Sizes

Default Size Compatibility:

- Bambu Labs stock spools
- Bambu Labs printable spools (I've tested [this version](#))
- Overture Plastic & Cardboard* spools
- Prusament Spools

Medium Size Compatibility (-3 mm height):

- Flashforge Plastic Spools
- AMOLEN Spools
- Also fits Bambu Lab Stock spools and many in the default size category (doesn't completely screw shut as much, but a good middle ground). If you're not sure which to print, you could start here.

Smallest Size Compatibility (-6 mm height):

- Sunlu spools
- Inland Spools
- Matter Hackers build spools
- Polymaker Cardboard*

Tiny Size Compatibility (-12 mm height):

- User-requested. May fit your special needs.

It's advised to avoid cardboard spools in the X1 AMS, and possibly other similar dry-print boxes, as the action of the cardboard on spool rollers can

generate fine particles as the cardboard frays. Over time, these particles can gum up the works of either your printer mechanisms or your roller bearings.

Recommended Printing Details

- Filament: **PLA** or **PETG** or **Nylon** or **ABS** (all tested, ABS works with or without scaling)
- Layer height: **0.16** (0.20 might work too, but lower is better for the thread detail).
- Slow down around the thread area if you're able, or print (enable slow down for overhangs or similar slicer adjustments). This isn't really required, but will improve quality.

Post Processing

- Very little required. The threads might be a little tight based on your individual experience. If that's the case, simply screw the cap on and off a few times and it should quickly become smooth.

Why did I make it this way ?

I adapted this model from the thingiverse link included here, and also was influenced by the other great silica gel holders here on thingiverse, such as the ones linked in the Remix section.

I'm aware of a similar option for drying spools [here](#), but I wanted something that was only 2 parts with less complex screws, and was easier to access with my fingers, and would scale to different spool sizes more easily (which is why the finger grips are so wide, in part). Aesthetically, I also prefer the larger cross-sectional area of the triangle top/bottom for better airflow. I find that the triangle mesh provides a nicer look on the endcaps of the holder and have less issues associated with plastic flex than the circular grill pattern found in some models. Lastly, the large threads in this model print well with PLA, but also work with trickier filaments like Nylon.. so you could even print dehydrator-resistant jars.. to dry your silica and the roll at the same time !

Each side is embossed with “top” or “bottom”, so you don't make the mistake of unscrewing things upside down. The thickness of the wide base was adjusted to be easily graspable with fingers so you don't struggle to open/close the thing. Early versions I made had this issue unfortunately.

Silly details

The name SpinCycle and the water droplets come from the idea of how a washing machine extracts excess moisture at the end of the clothes wash.... I originally planned to make them holes so you could attach one

side of the holder permanently to a spool with a screw, but found that to be too much effort and also unnecessary.. the containers stay in place great with compression from screwing the two parts together snugly.

Notes on Silica Gel sizes and the triangle mesh:

Nominally, these triangles should not let any perfect sphere over size 1.0 mm through, but silica gel isn't perfect. Therefore it's good to make sure you're getting good mostly uniform sized silica gel of size 2.0 mm or greater when using these. I use Dry&Dry brand here in the USA. In any case, it's typical to be able to buy gel pre-sieved in a range (say 2-4 mm). Since these do rotate with the filament roll if you have lots of little half-broken bits in your gel they could leak out during use.

If you're paranoid, you can avoid this by sieving your bulk silica gel with the included optional sieve model, which should ensure that nothing will leak out, because this sieve is the same size triangle mesh.

This remix is based on



Bambu Lab Filament Desiccant Holder

by Lucoot



Silica Gel Holder For Small Beads

by micahjj



Silica gel spool container

by gdrag

Model files



spincycle_defaultjar.stl



spincycle_defaultcap.stl



spincycle_default.step



spincycle_smallestjar_6mmshorter.stl



spincycle_mediumjar_3mmshorter.stl



optional_sieve_forgel.stl

spincycle_tinyjar_12mmshorter.stl

spincycledefaultjar_nodrops.stl

☐ no raindrops design

spincycle_defaultcap_nodrops.stl

☐ no raindrops design

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