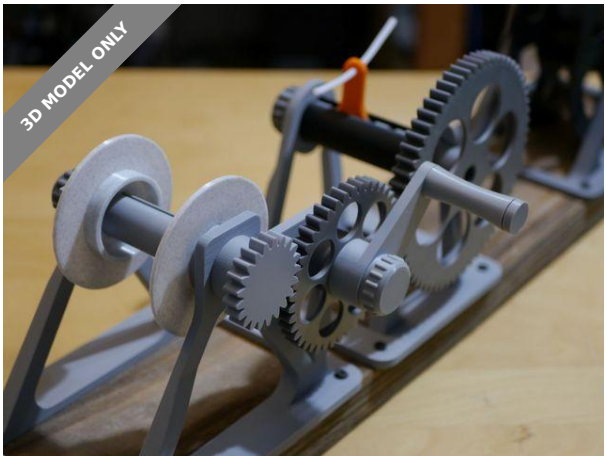
Printables by JOSEF PRUSA



Filament Spool Winder

V3 Precision

VIEW IN BROWSER

updated 5. 4. 2023 | published 5. 4. 2023

Summary

This is a spool winder for transferring filament from one spool to another.

3D Printers > Accessories

Tags: filament filamentspoolholder filamentspoolwinder bambulab bambulabx1ams

This is a spool winder for transferring filament from one spool to another. Inspired by the need to use certain filament spools for the Bambu Lab AMS. This build should speed up the process and give a nice tight winding. There is room for improvement, so feel free to give some feedback either on Printables or on the Youtube videos.

This version is 100% 3D printed (not including the mounting screws). Future versions will use bearings and possibly a motor to drive the gears.

The images show the assemblies mounted to a 2x6 for testing. The assemblies can be mounted to a similar board or to a base made from aluminum extrusions.

Printing Recommendations

I used PLA while developing the spool winder. I would recommend using PETG, or Nylon CF, or other stronger, stiffer filament.

The ‘worm’ gear can be tricky to print. In Bambu Lab Studio, I set the part upright and set support to tree (auto) and threshold angle at 10. Set a brim at 8mm.

The gears are easy to print and require no support or post processing.

The bases need some support and did well with tree (auto) and threshold angle of 30.

I used 4 walls and 15% infill on most pieces. The thumbscrews I used 100% infill.

Assembly

Most of the assembly is easy and self-explanatory.

Note that the rear driven gear is reverse threaded.

Specific instructions can be found in an upcoming Instructions Video .....

There will also be a link to the video on the V3 Precision website.

Video

Feel free to view our video at

Donations

I spent a lot of time designing and developing this Spool Winder kit and used a lot of PLA filament during development. I decided not to charge for the files, but any donations for the cause would be greatly appreciated.

Any donations will go towards the next version using bearings and a motor (and additional miscellaneous designs that can be posted on Printables).

You can send donations to me at rdgray11@gmail.com on Paypal.

Model files

base_mid.3mf

base_front.3mf

adapter_sides_2inch.3mf

base_mid.stl

base_front.stl

axle_front.3mf

axle_rear_2.3mf

base_rear.stl

base_rear.3mf

adapter_sides_2inch.stl

axle_front.stl

cap_thumb_axle_2.3mf

gear_rear_handle.3mf

axle_rear_2.stl

cap_thumb_axle_rear.3mf

cap_thumb_mid.3mf

hub_handle_drive.stl

gear_rear_drive.stl

gear_worm_drive.3mf

handle_thumb_screw.3mf

cap_thumb_axle_rear.stl

gear_rear_drive.3mf

handle_roller.3mf

hub_handle_drive.3mf

handle_stem_2.3mf

handle_stem_2.stl

handle_rod.stl

handle_rod.3mf

cap_thumb_mid.stl

gear_rear_handle.stl

cap_thumb_axle_2.stl

handle_thumb_screw.stl

gear_worm_drive.stl

handle_roller.stl

worm_gear_guide_ptfe.3mf

worm_gear_tube.3mf

worm_gear.3mf

worm_gear_tube.stl

worm_gear_guide_pin.3mf

worm_gear_guide_ptfe.stl

worm_gear_guide_pin.stl

worm_gear.stl

License