

Spool holder (adjustable, AKA "Dovetail Party")



SaddamCZ

[VIEW IN BROWSER](#)

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Summary

My take on the 3D printing evergreen – filament spool holder.



21.28 hrs



1 pcs



0.15 mm



0.40 mm



PLA



168 g



Prusa
MK3/S/S+

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My take on the 3D printing evergreen – filament spool holder. The base is formed by a bunch of dovetails, allowing it to be adjusted to any width and still hold together. All the dovetails are identical, so you can assemble it as shown in the pictures with the long rails facing in (for wider spools) or switch the sides and have the short rails inside for extra narrow spools. You can also assemble the whole holder with identical parts (either all short-railed or all long-railed).

This thing was made with Tinkercad. Edit it online <https://www.tinkercad.com/things/9vw9thFaHxm>

Print instructions

You will need to print:

- 4pcs of the frame pieces (either 2pcs "Long rails" and 2pcs "Short rails", or 4 identical pieces)
- 4pcs "Roller"

For the assembly, you will also need:

- 4pcs 608 ball bearings

Printing and assembly instructions:

- Print the parts as shown in the picture, sides on the bed, rails pointing up. No supports needed. If you decide to use screws to fix the bearings in the frame (read below), use local modifiers to increase infill and/or perimeters in the pegs (where the frame holds the bearings).
- Press the bearings in the rollers (should be a tight press fit with no further fixation needed, if not, print a new set of rollers with adjusted scale).
- Assemble the sides, each side consists of: 2 roller assemblies + 1 long-railed frame part + 1 short-railed frame part. There are three ways how to hold the side assembly together: (i) rely on the friction fit between the pegs and the inner bearing races; (ii) put a dab of glue on the face of the pegs so that they stick together after meeting in the center of the inner bearing race; (iii) drill the rest of the way through the pegs (2.5mm holes are started from the outside but don't go through to allow the gluing option) and use screws / tap+bolts to fix the assembly.
- Slide the two side assemblies together and enjoy!

Note: The renders show the parts in different colors just for better distinction, the magenta and cyan parts (and also the red and green ones) are identical.

Model files



long_rails.stl



short_rails.stl

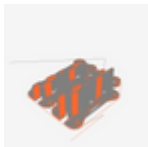


roller.stl



spool-holder-complete-sliced.3mf

Print files



spool-holder-complete-sliced_015mm_pla_mk3s_21h.gcode

🌀 PLA 📏 0.40 mm ⚖️ 0.15 mm ⌚ 21.28 hrs ⚖️ 168 g 🖨️ Prusa MK3/S/S+

[Find source .stl files on Thingiverse.com](#)

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