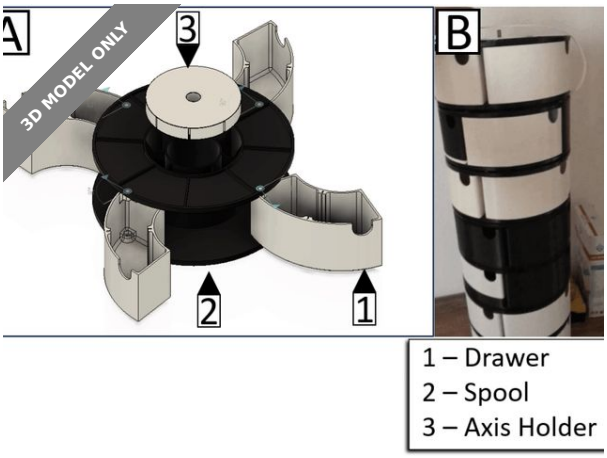

Spool Box Drawer

JK

VIEW IN BROWSER

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Summary

Portable spool box system

Hobby & Makers > Organizers

Tags: spool recycling drawer

I always wanted a portable drawer system for storing and accessing larger parts quickly and efficiently. Instead of buying one, I decided to upcycle old used filament spools to create a unique and functional drawer system. This DIY project is not only cost-effective but also environmentally friendly. Here's a detailed guide on how I built my portable drawer system.

Materials Needed

- Old filament spools (8 spools recommended)
- Hinges (8 pieces)
- Axis holder
- Screws and nuts
- Handle from a washing machine container
- Drill and drill bits
- Screwdriver
- Sandpaper (optional, for smoothing edges)

Steps to Build the Drawer System

Prepare the Spools:

- Clean the old filament spools thoroughly to remove any debris or filament remnants.
- If necessary, sand down any rough edges to ensure smooth operation of the drawers.

Construct the Drawers:

- Take four spools and cut out sections to create drawer openings. Ensure the openings are large enough to store your desired parts but still leave enough material for structural integrity.
- Attach the hinges to the edges of the cut-out sections to create a door-like mechanism for each drawer. Test the hinges to ensure they open and close smoothly.

Create the Drawer System Base:

- Arrange the remaining four spools in a stack and secure them together using the axis holder. This holder will keep the spools aligned and provide a central pivot point.
- Mount the spools with drawers around the axis holder, positioning them so that the drawers are accessible from the sides.

Install the Handle:

- For easy portability, attach a sturdy handle to the top of the drawer system. I used a handle from a washing machine container, which is durable and easy to grip.
- Secure the handle to the top spool using screws and nuts. Ensure it is firmly attached to support the weight of the system when lifted.

Tips for Best Results

- **Reinforce Weak Points:** Depending on the quality of the spools, you may need to reinforce certain areas to prevent breaking under load.
- **Label Your Drawers:** To keep things organized, label each drawer according to its contents.
- **Use Quality Hinges:** Invest in good-quality hinges to ensure the drawers operate smoothly and last longer.
- **Weight Distribution:** Be mindful of the weight distribution when loading the drawers to maintain balance and prevent tipping.

Conclusion

This portable drawer system made from old filament spools is a practical and eco-friendly solution for organizing and storing larger parts. It’s a rewarding DIY project that not only repurposes waste materials but also adds a personal touch to your workspace. Happy building!

Model files

3_spool_box-v1.3mf

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