



Solvol Filament Dryer Box Shelf System - v17



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[VIEW IN BROWSER](#)

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Summary

For the dual reel Solvol Filament Dryer Box system to sit directly above the direct drive of the printer.

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Tags: [shelf](#) [2020extrusion](#) [filamentdrybox](#) [ender3s1plus](#)
[solvolmks3](#)

The original idea for this came from @TheDOJ <https://www.printables.com/model/377542>. But after several failed prints due to mainly me getting fed up trying to figure out the correct interference fit I thought sod it and went and redesigned my own shelving system from the bottom up. So all that poor old @TheDOJ was left with from the original was the name.

I wanted to have the filament dryer orientated front to back so that the filament ran smoothly into the Runout Sensor and DOJ's version ran laterally and the filament kept getting jammed.

Also, I added slots at the bottom of the shelf to aid with affording what I felt was improved ventilation away from the dryer. I also added sides to the shelf to prevent the dryer from falling onto the print bed which again sadly @TheDOJ's version did too frequently.

I added cutouts on the bottom of the shelf to allow for Command-style velcro strips to be used so that I could mount my LED lights in whichever orientation I desired.

There are screw holes in the bottom of the base to take M3 screws which screw into heat-pressed screw threads to secure the shelves and brackets, again to prevent the shelf from falling onto the print bed below.

I used the following print settings

The brackets need to be orientated so that the brace arms are on the bed surface otherwise supports would need to be introduced.

Supports would be needed in the Shelf for the LED light strip recess and the slots for the Brackets

Prusaslicer High Detail Setting for my PLA+

Nozzle: 0.4mm

3 walls

2 top/bottom layers

15% Cubic infill

Weight: 120.05g

Est. Cost £7.16

Time 2 days 17hrs 41 Mins

Added various file formats in case anyone wants to modify it.

STL, STEP, f3d, 3mf

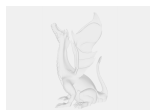
f3d: Fusion 360

3mf: OrcaSlicer.

Model files



solvol-filament-dryer-box-shelf-system-bracket-v17.3mf



solvol-filament-dryer-box-shelf-system-bracket-v17.step



solvol-filament-dryer-box-shelf-system-shelf-v17.3mf



solvol-filament-dryer-box-shelf-system-v17.f3d



solvol-filament-dryer-box-shelf-system-shelf-v17.step

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