



Customizable filament spool divider



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Summary

I want to use some empty filament spools to store electric wire - but my wires are not that long, so I could fit more...

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I want to use some empty filament spools to store electric wire - but my wires are not that long, so I could fit more than one on a spool. So - parametric spool dividers it is!

The OpenSCAD file can create circular dividers for spools that are made from two halves held together with screws (e.g. ESun). It can also output 60° or 120° sections - so 6 / 3 pieces can be glued to the spool core to form a circular divider. Just enter your spool outer diameter (OD) and inner diameter (ID, core diameter), the desired total height of the divider (HD) as well as the desired material thickness (T).

The script can also calculate the required height for a given inner spool width (CH, core height) and number of divisions (NDIV). If you set NDIV to a value greater than zero, the automatic calculation is active and the divider height value (HD) is overwritten by the calculated value.

Here's an example: A spool with an inner width of 60 mm should be divided into 4 sections. The material thickness T is set to 1.4.

So CH is set to 60 and NDIV is set to 4, which results in a calculated divider height of 15.35 mm.

To fix the beginning of the wire/filament to be stored, the "flange" has starter holes every 60°. These can be drilled through the core with a long twist drill. The wire/filament end can be threaded through another hole on the outside of the divider wall. Each divider has generous cut-outs in both the flange and the divider wall to save on material.

After printing, just glue the divider pieces to the spool core with some superglue.

If you like it, please leave a comment or a make. If you have issues, leave a comment as well!

Print Settings

Printer Brand:

Creality

Printer:

Ender 3

Rafts:

No

Supports:

No

Resolution:

0.28 mm

Infill:

irrelevant

Filament: any PLA any

Category: Tool Holders & Boxes

Model files



spool_divider.scad



spool_divider_example_60deg.stl



spool_divider_example_120deg.stl

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com/thing:1111111)

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