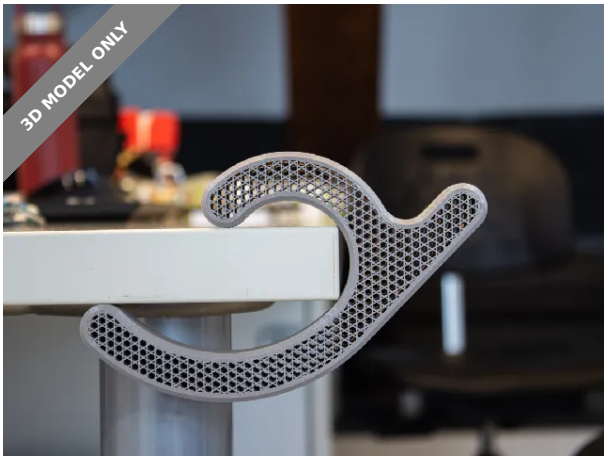


Fibonacci Hook

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VIEW IN BROWSER

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Summary

The perfect desk hook for every office

Household > Office

Tags: holder hook desk bag hanger fibonacci fibonaccispiral deskhook

This Hook is inspired by piesupplies' Desk Bag Hook

(https://www.printables.com/model/1453-desk-bag-hook)

The Fibonacci Hook is based on a Fibonacci Spiral and is completely customizable.
It fits different desk thicknesses and you can customize the maximum desk thickness yourself. However I recommend using the thickness of your desk as the maximum thickness, because this way the position of the hook looks the best.

Since I don't use these hooks for heavy loads I printed mine in PLA with a layer height of 0.2mm. I recommend using at least 3 contour lines for rigidity.

If you want to hang heavier things I suggest using PETG or ABS and a layer height of 0.3mm with at least 3 contours, maybe even more to be safe.

However I have not done a strength test so far. If you do, please share your results in the comments.

I also included some regular sized hooks for you as stl files, so you don't necessarily have to customize the model.

Also this was my first attempt on designing something with OpenSCAD to make it customizable for you, so please let me know if you see ways to improve my model.

(Btw yes I know that I could have used partial rotate extrudes, but the Thingiverse customizer, for wich I intentionally designed this, does not support these, as well as other commands, but that's another story)

NOTES FOR CUSTOMIZATION

You can customize the hook easily by yourself with the help of OpenSCAD. Yes this sounds terrifying, but rest assured, I have an easy to follow step-by-step guide here for you.

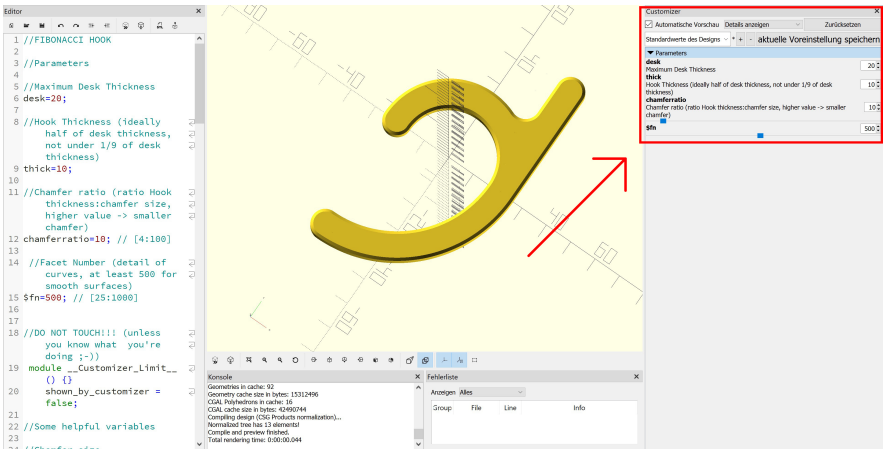
1

If you haven't already done this, download and install OpenSCAD under the following Link
https://openscad.org/downloads.html

2

Open the Fibonacci_Hook.scad file in OpenSCAD.

3



Change the parameters to fit your desk and taste in the OpenSCAD Customizer. You can find the OpenSCAD Customizer on the top right, as shown in the picture on the right. Press the F5 key on your keyboard to get a preview.

The Parameters are explained below.

4

Before exporting you have to render the hook by pressing the F6 key on your keyboard. When the rendering is finished press the F7 key on your Keyboard to export the model as an STL-file.

5

Happy printing!

I recommend using at least 3 contour lines and a material that fits your needs.

PARAMETERS

DeskThickness

Insert the maximum desk thickness you want to use the hook on. In my opinion the hook's position looks the best, if you set the max. thickness to the thickness of your desk.

Hook Thickness

This is the thickness of your hook. It should not be less than 1/9 of your table's thickness, or else you might get bugs. If you get a hole in the middle try increasing the Hook Thickness, or increase the Chamfer Ratio. In my opinion setting the Hook Thickness to 1⁄2 of the Desk thickness looks the best.

Chamfer Ratio

This is the ratio of the Hook Thickness to the chamfer size. The higher this number is, the smaller the chamfer gets. If you get a hole in the middle try increasing the Hook Thickness, or increase the Chamfer Ratio.

$fn

This is the facet number, which controls how detailed curves are modeled. I recommend using at least 500, unless you want the aesthetics of visible geometrical facets, then lower this number by quite a bit. Just try it out, be creative.

However I should mention that the higher this number is, the longer it will take for your model to be rendered, but we are only talking about one minute or so.

I was made aware of an error, that does not occur on every Computer, in the file and tried fixing it. The fibonacci_hook.scad file should work without a problem now. Please let me know, if it doesn't. I kept the old file and marked it as fibonacci_hook_error.scad, so you can look at what I fixed, if you're interested.

Thank you for your interest in my Fibonacci Hook! Please leave a comment, if you have any questions. If you have any suggestions how I could improve my model please let me know, I'm always open to feedback!

Model files

fibonacci_hook.scad



fibonacci_hook_20_desk_14_thick.stl



fibonacci_hook_20_desk_10_thick.stl



fibonacci_hook_18_desk_10_thick.stl



fibonacci_hook_30_desk_15_thick.stl

fibonacci_hook_error.scad

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