



Helix Test Cube / Filament Sample / XYZ Calibration



Extrutim

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Summary

A 30x30x30mm cube to test your settings or use it as a filament sample.



1.30 hrs



1 pcs



0.20 mm



0.40 mm



PLA



10 g



Prusa
MK3/S/S+

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I wanted to have a test print which I can use to test the dimensional accuracy of my printer and the print quality of my filaments. But it should also be pretty enough to keep as a color sample afterwards. So I created this **30x30x30 mm** cube which contains several functions.

The print takes a bit less than **1.5h**.

Below are pictures from which you can take some measurements to check your cubes for dimensional accuracy.

You can check the following properties on this cube:

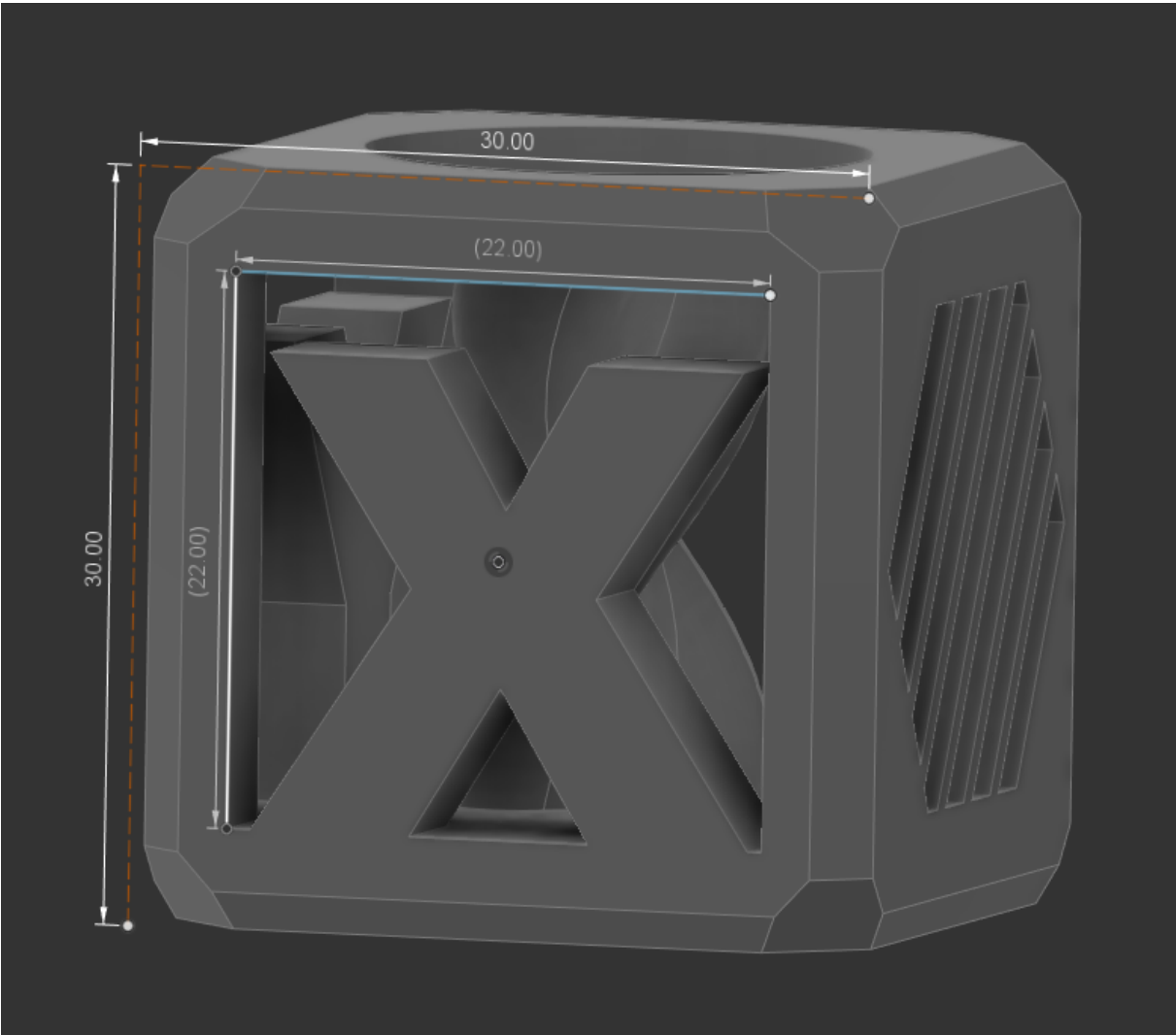
- stringing
- bridging (are the bridges over the letter clean, including the large area inside?)
- ghosting / ringing
- overhangs
- dimensional accuracy in all axes
- first layer height (is the logo clearly visible on the underside, are there holes in the narrow areas?)
- Was the helix printed neatly with a single wall line?
- Are there problems with the Z-seam due to the many retraction?
- Was the Z printed neatly on the top?

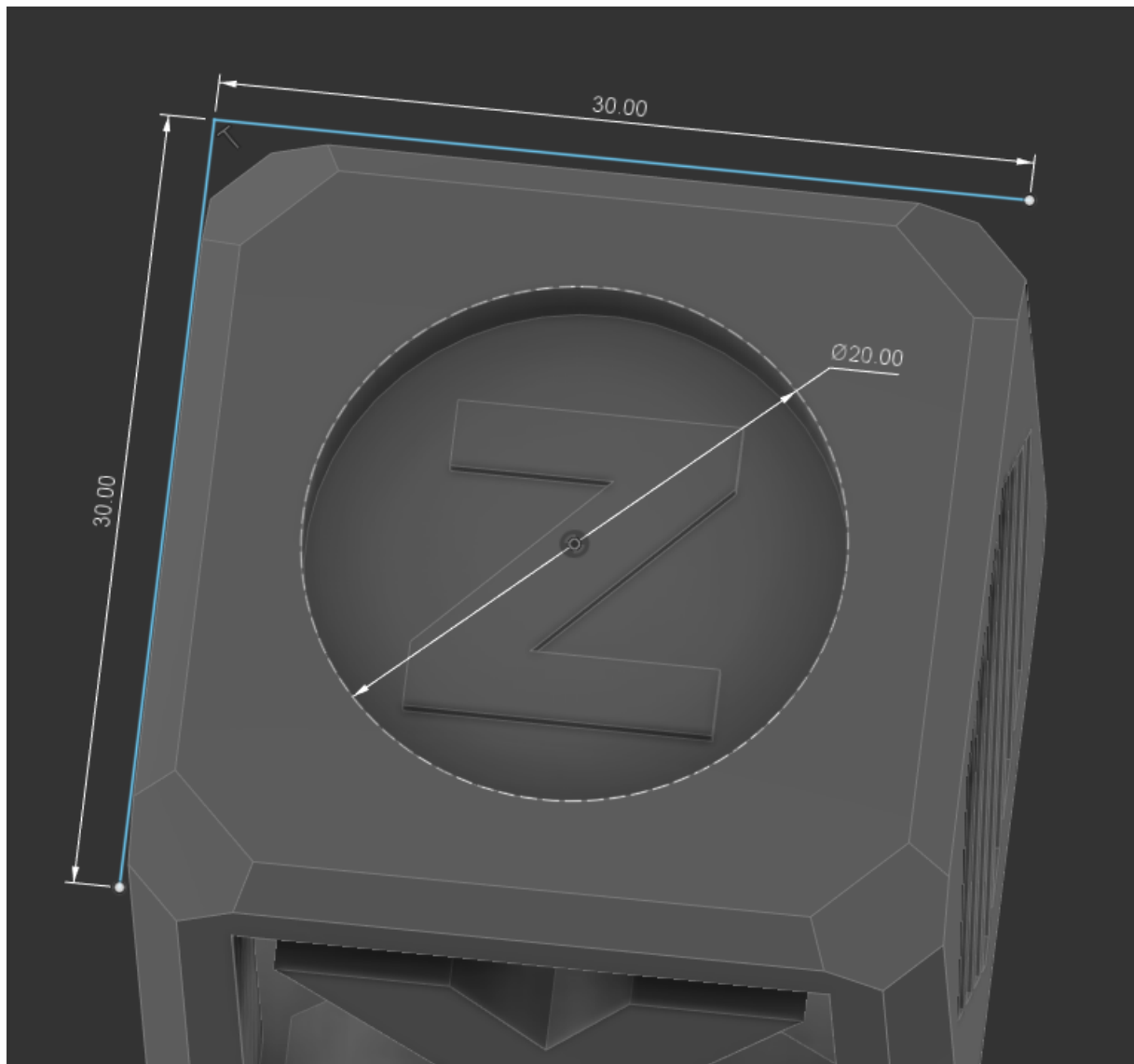
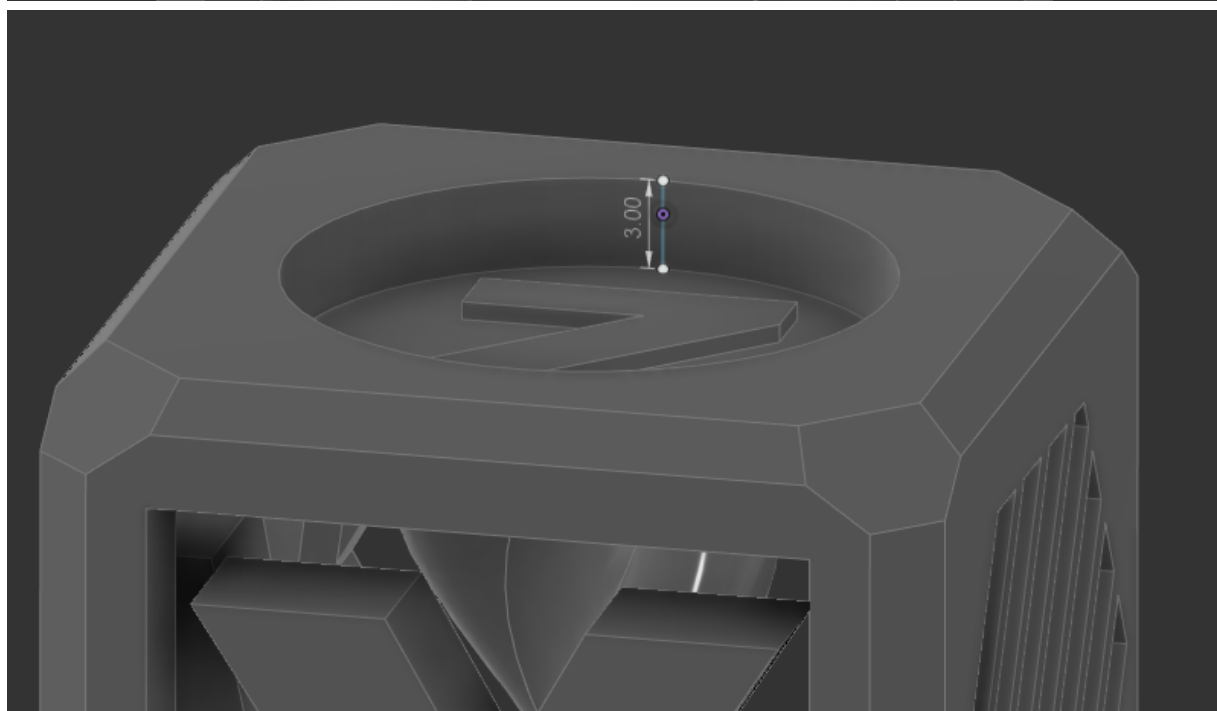
You can also try breaking out the Y, if that is too easy you may have to reduce the cooling or increase the printing temperature.

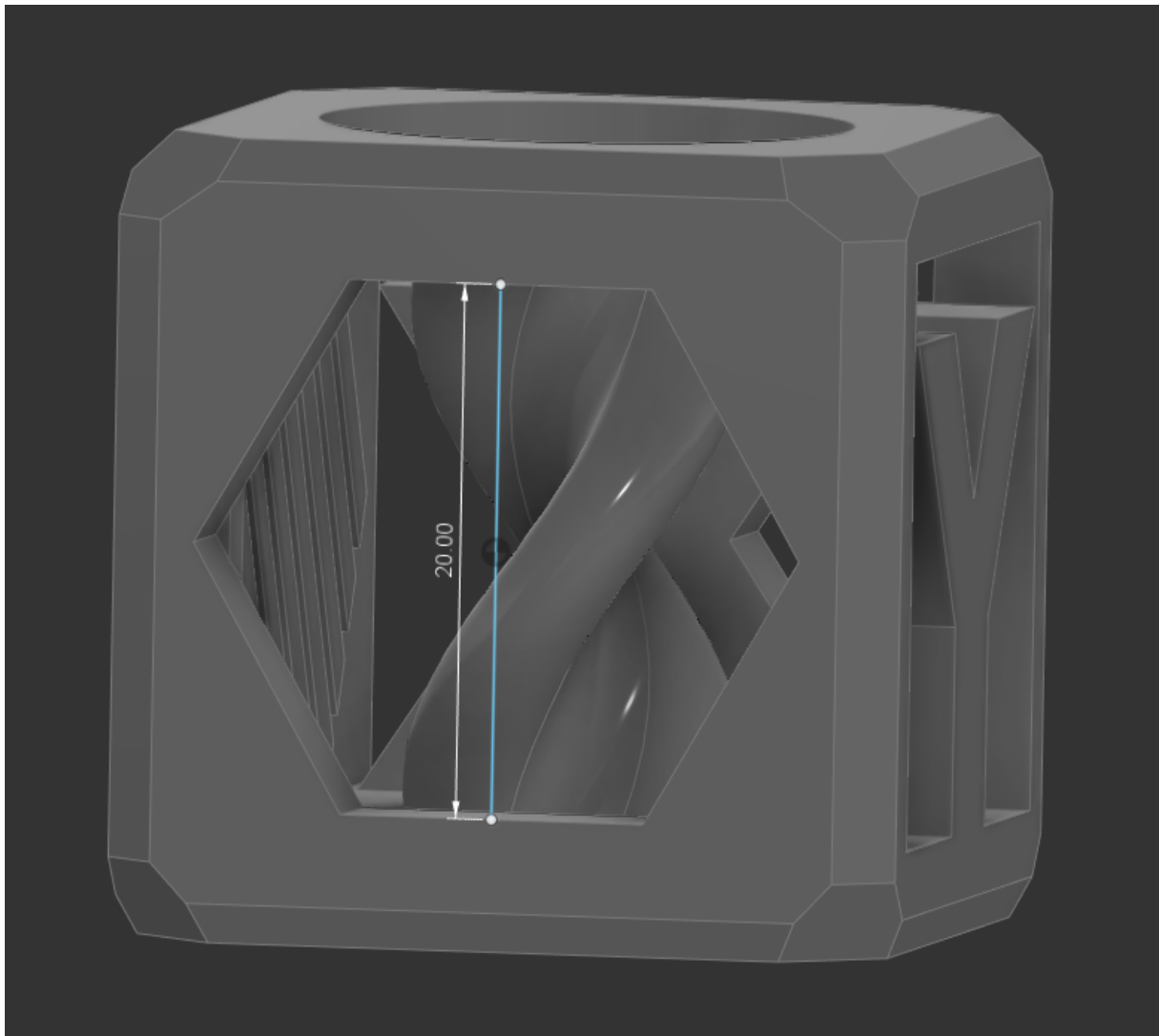
Note: Since some people with a nozzle larger than 0.4mm had the problem that the slicer did not slice the Helix (minimum wall thickness for slicing) I added versions for 0.6mm and 0.8mm nozzles.

If you like this project, check out [my other designs](#) too!

Make sure to follow me on [Twitter](#)! ;-)







Model files



04helixtestcube.stl

☐ 0.4mm Nozzle



06helixtestcube.stl

☐ 0.6mm Nozzle



08helixtestcube.stl

☐ 0.8mm Nozzle

Print files



04helixtestcube_mk3s_02mm_pla_1h18m.gcode

PLA 0.40 mm 0.20 mm 1.30 hrs 10 g Prusa MK3/S/S+

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