From Blender model to physical 3D-print

by
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Is my 3D-model printable

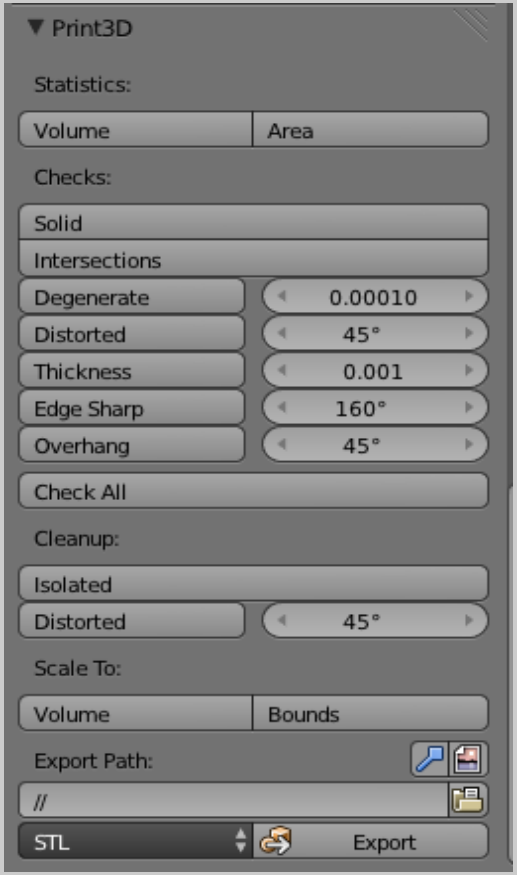
Common errors:

- Non-flat faces
- Double vertices
- Holes in the geometry

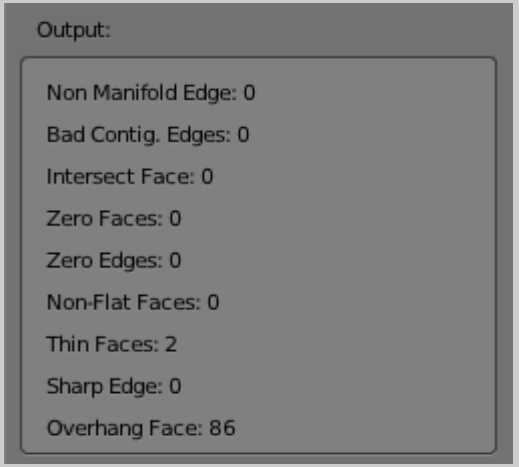
Fortunately - Blender has tools for that

“3D Print Tools” - in the settings-> addons tab

Check your mesh for errors



1. Select “Check all” in the Print 3D-Panel
2. An Error report will be generated
3. If the report shows 0 for all points except “Overhang faces” you’re ready to export your mesh
4. else: Fix your mesh as shown on the next slide



Fixing your mesh in Blender

Most problems can be fixed by:

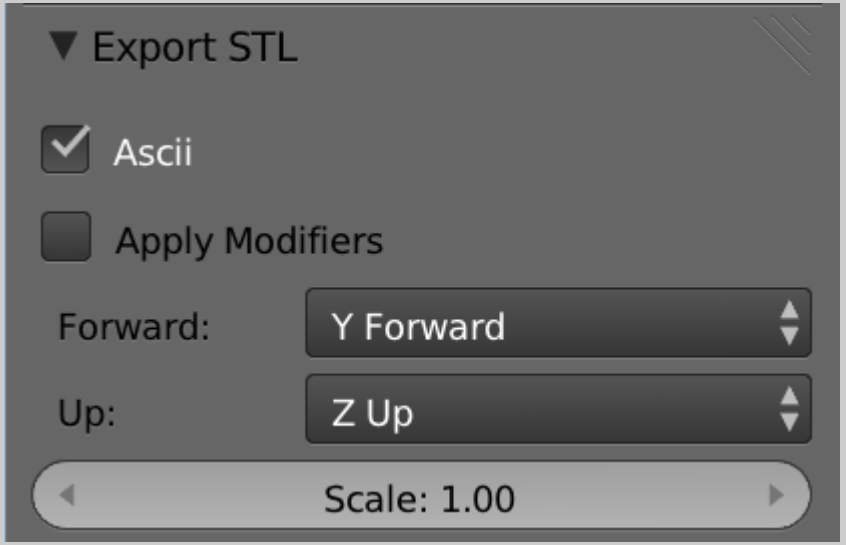
- Recalculating normals for all selected faces *(Ctrl-N)*
- Merging double vertices with “Remove Doubles” *(W -> Remove Doubles)*
- Closing holes in your Mesh with faces *(F)*
- Splitting up bent faces using “Triangulate Faces” *(Ctrl-T)*

Measurement in Blender

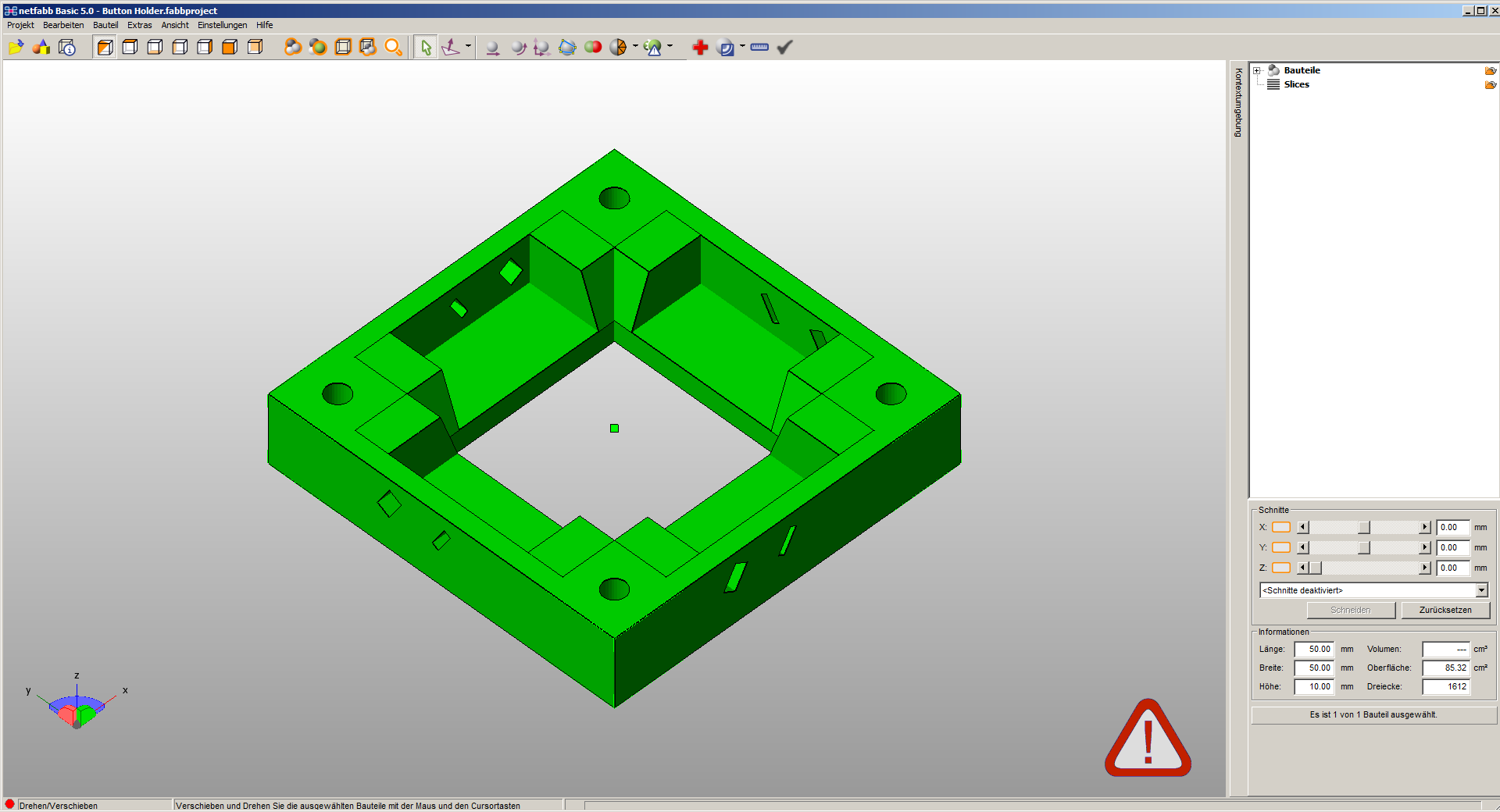
- You can view the measurements of your objects in 3D view.
- Model in metric.

Exporting as STL

- File -> Export -> STL
- Set Scale to 1000 in export settings (Blender 2.6)
- Check Apply Modifiers



Repairing in Netfab



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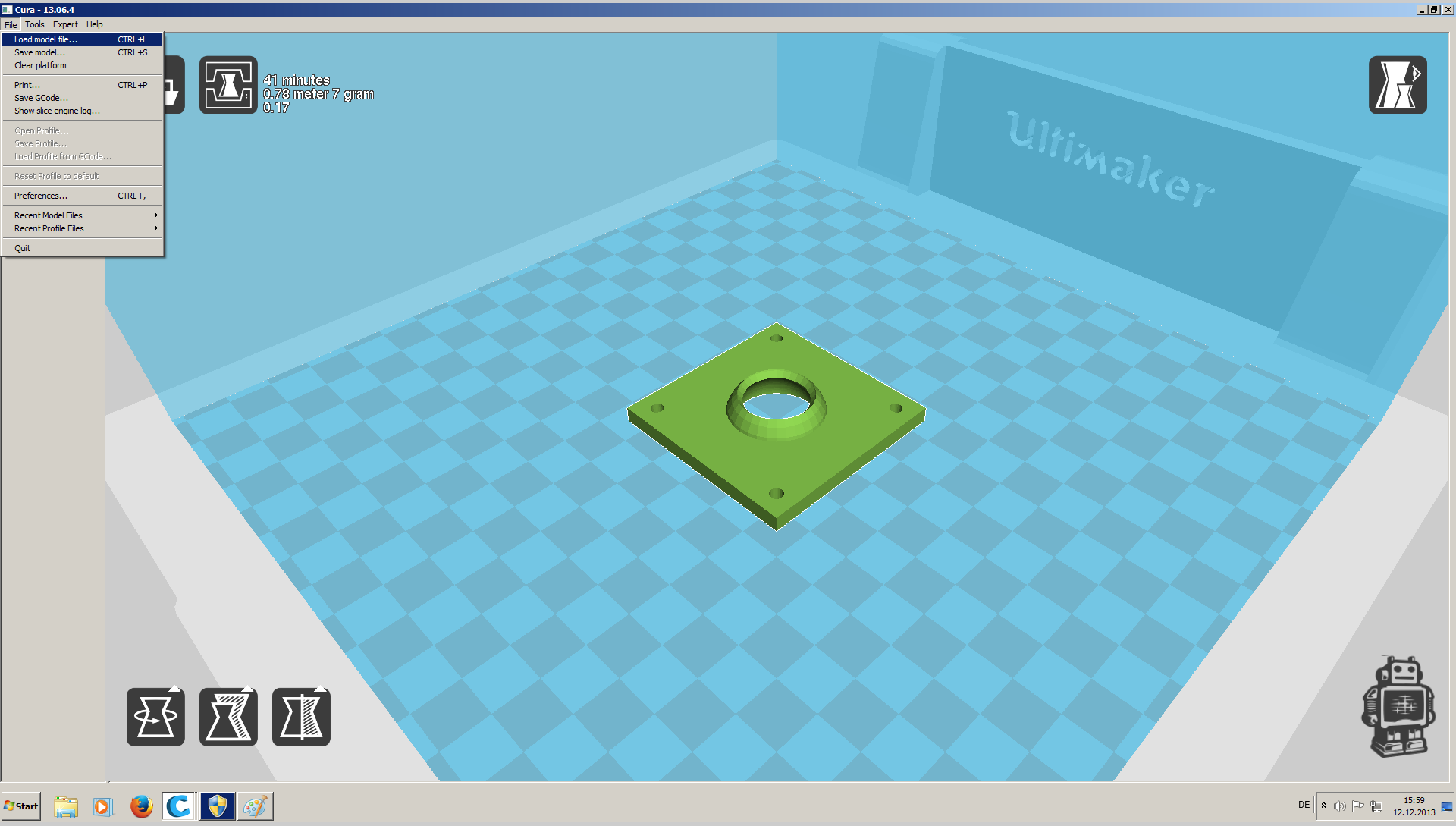
How to adjust the settings in Cura



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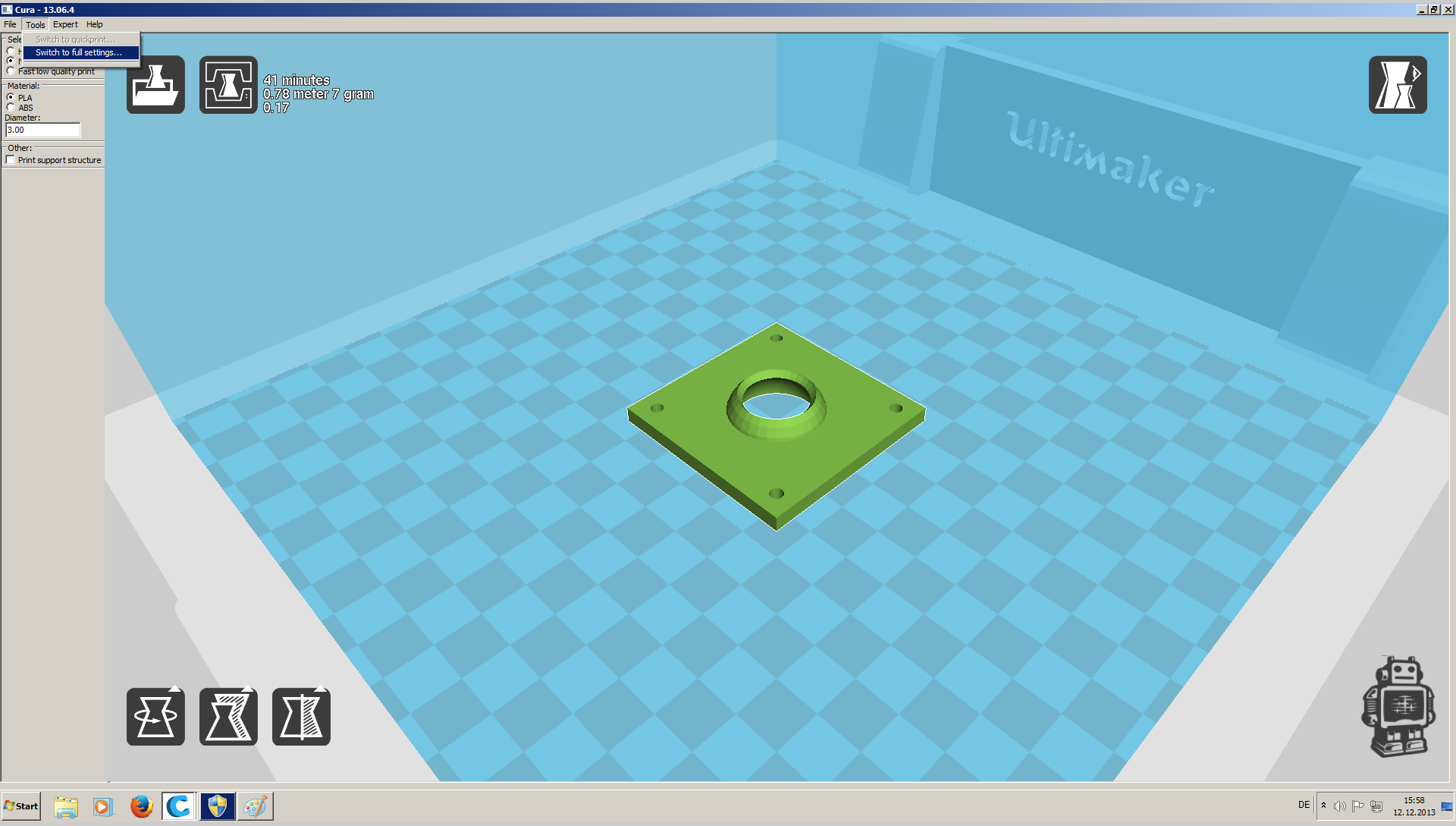

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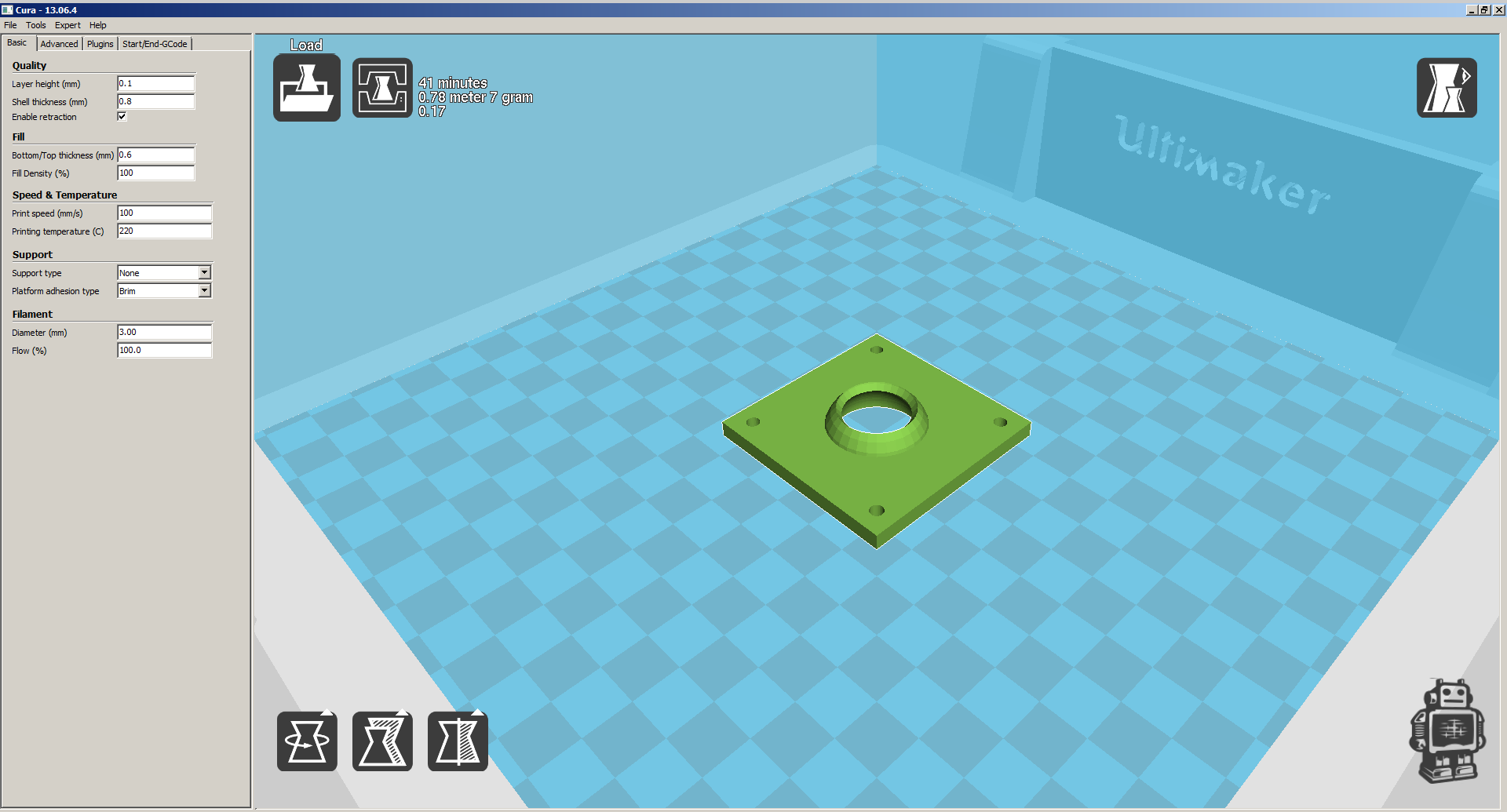

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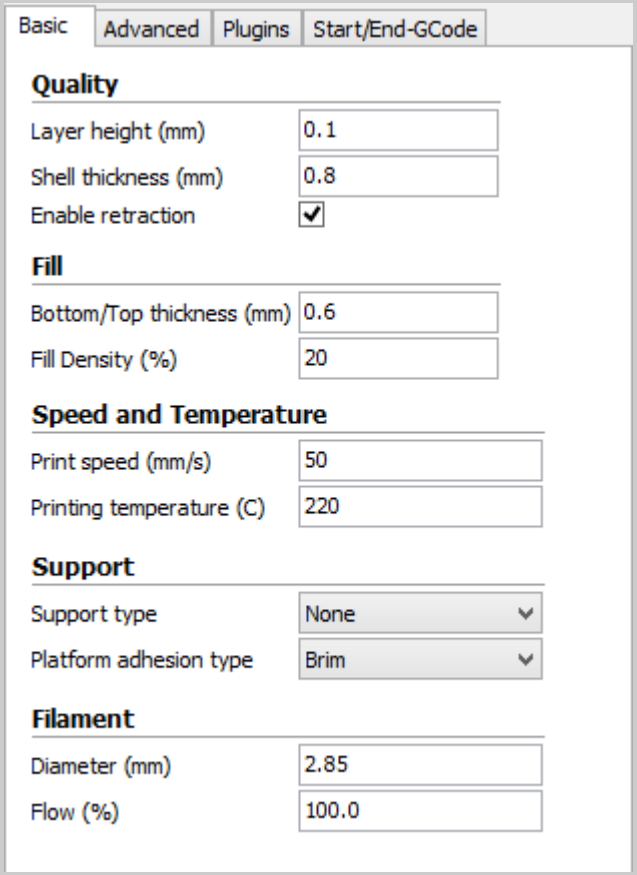

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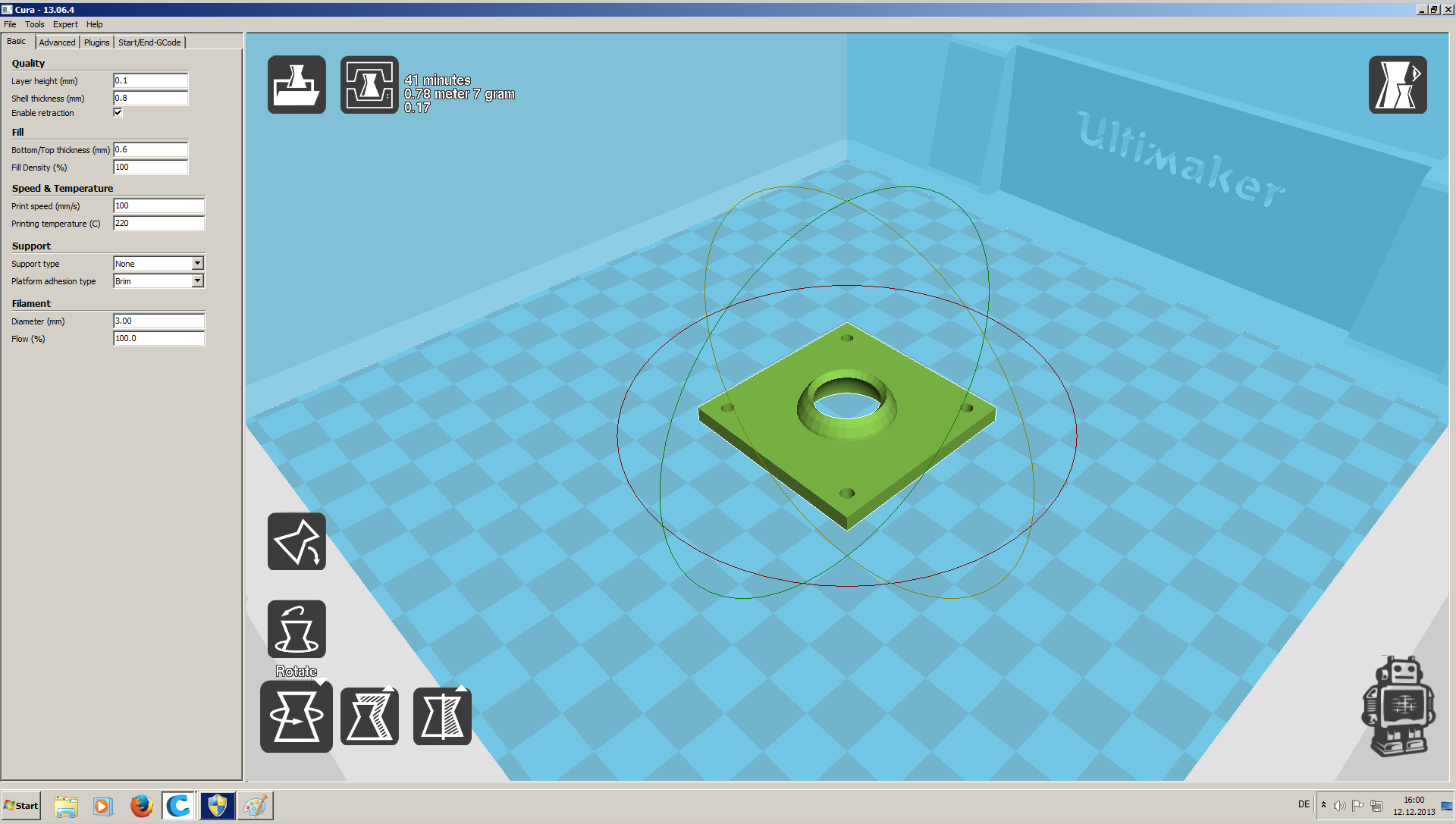

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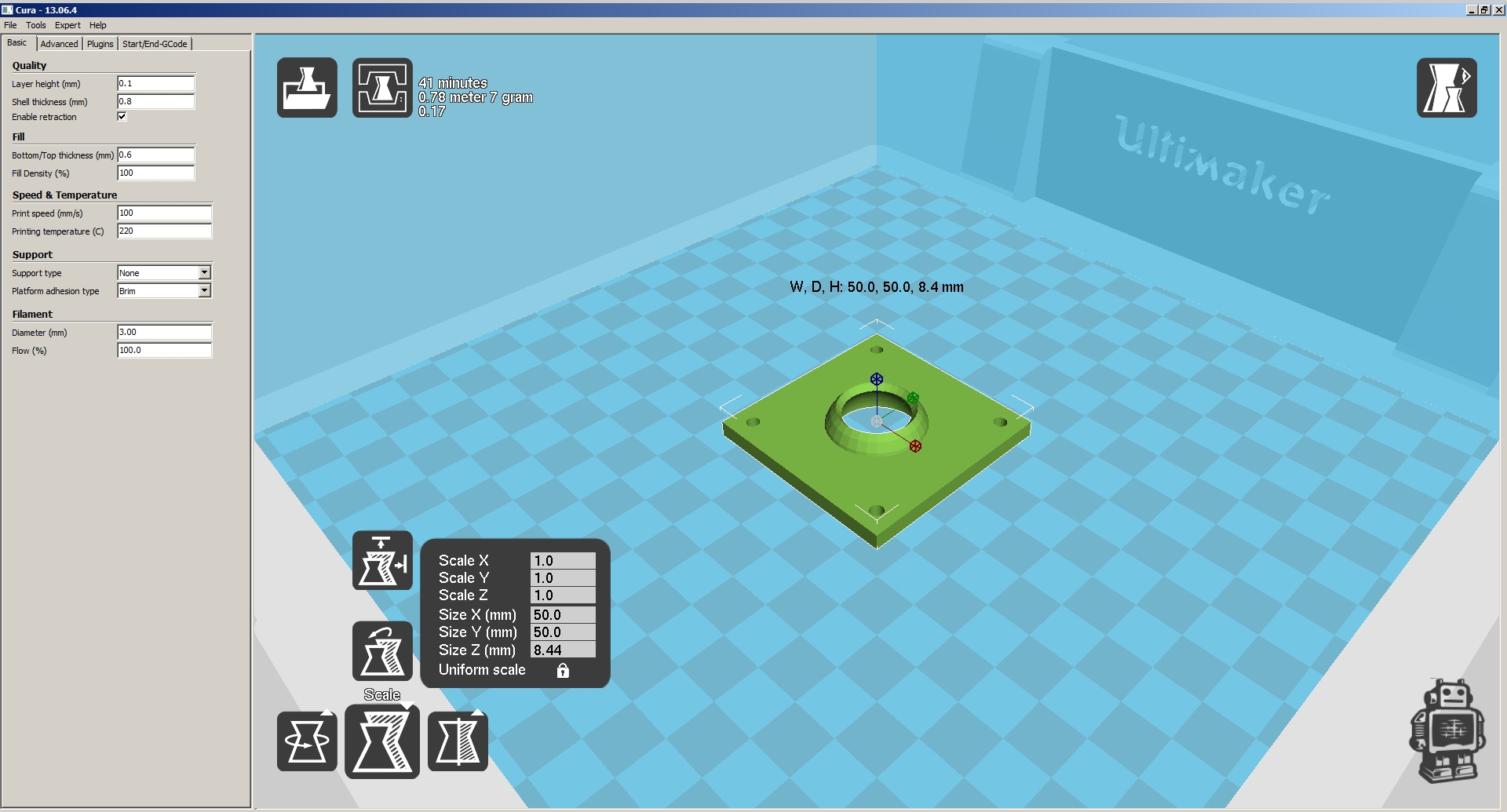

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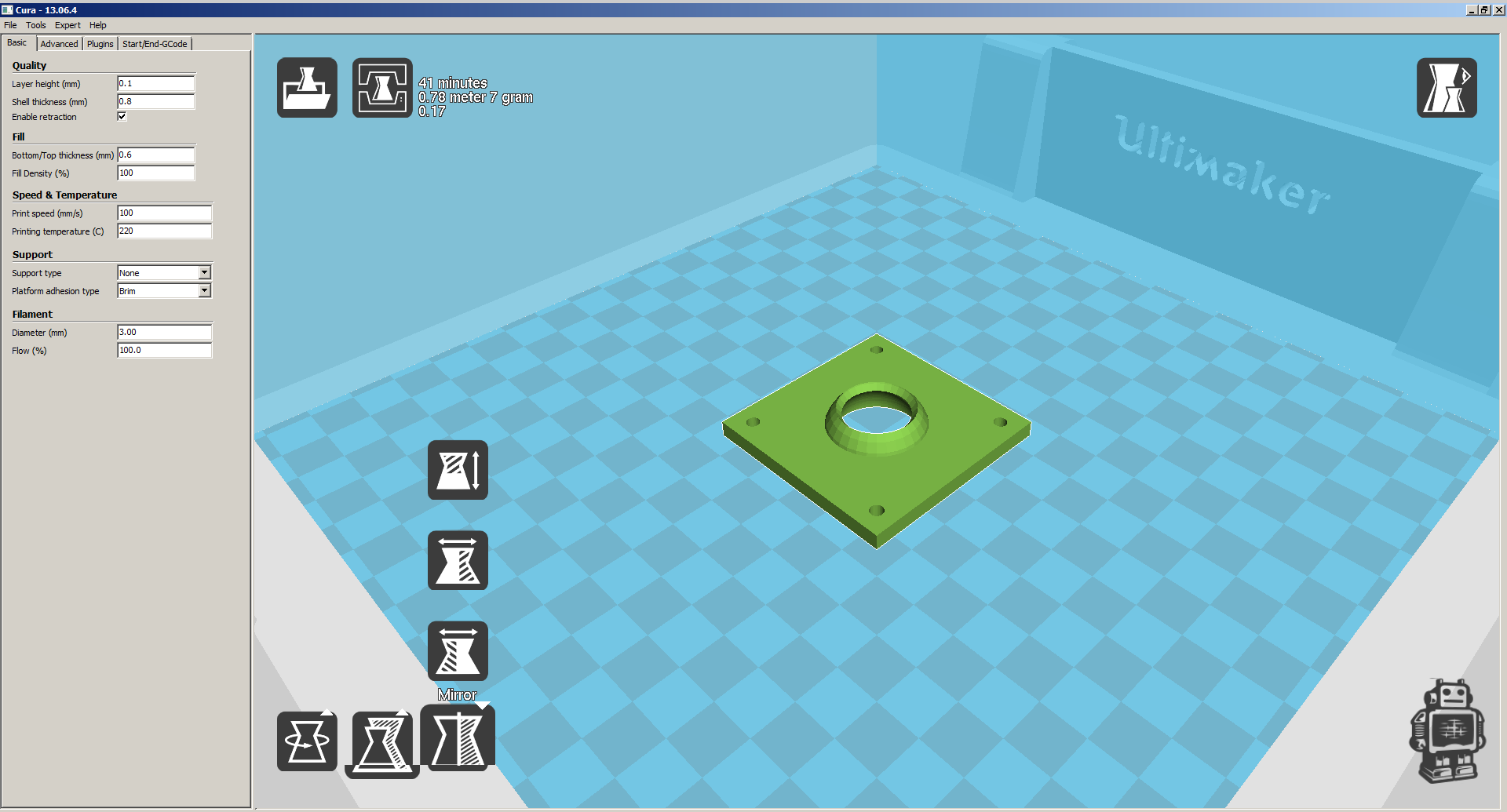

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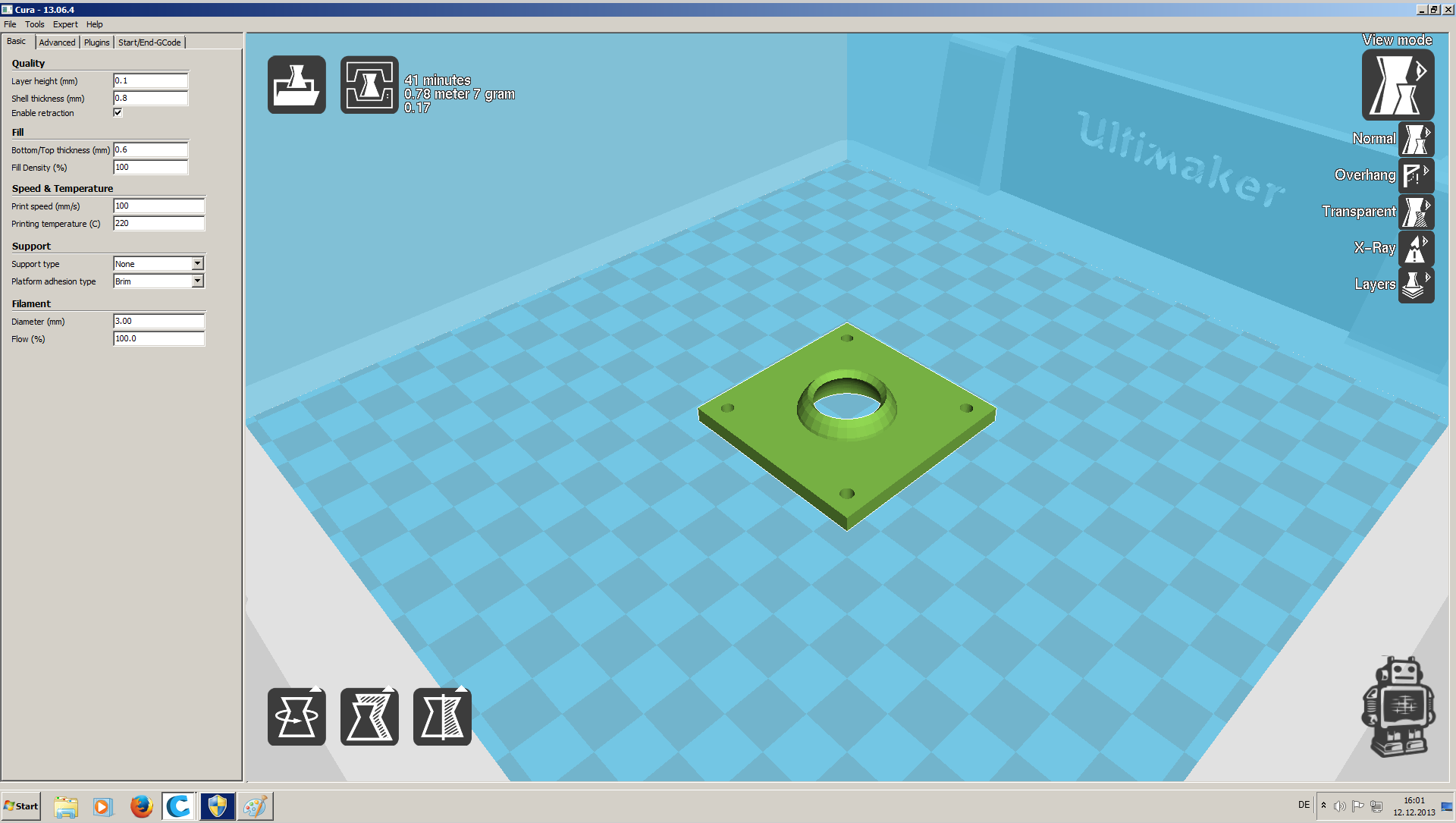

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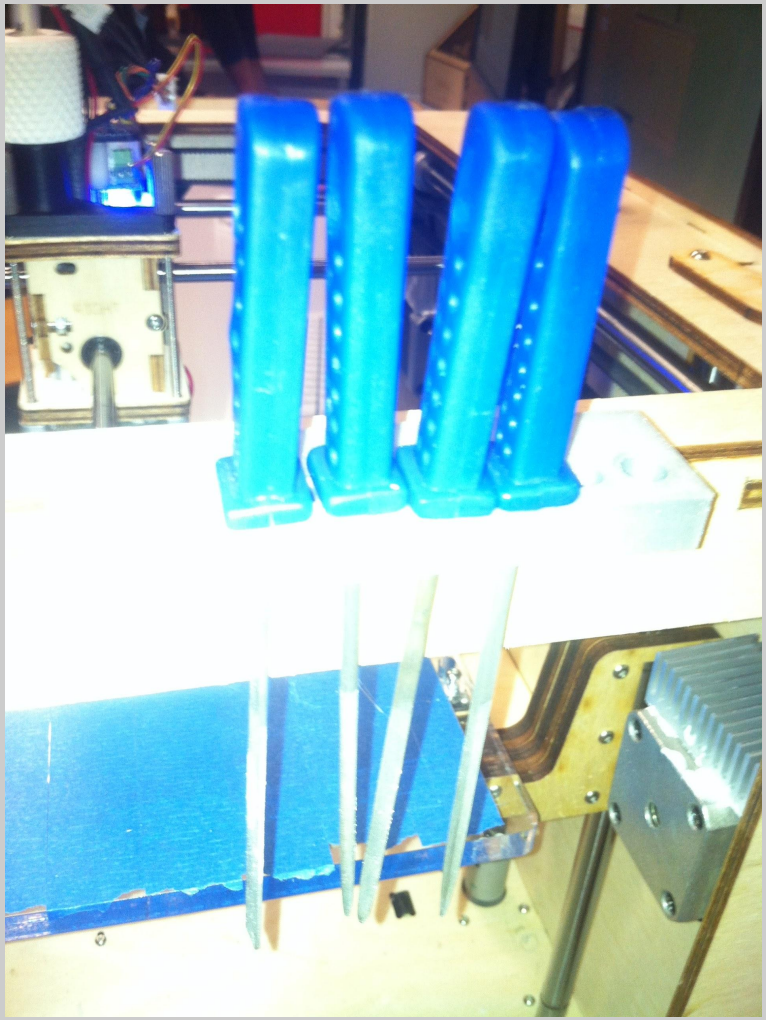
What next?

Wait for a looooooooooong looooooooooong time...

Until it's ready!

Not sufficient outcome?



Use us!

Thank you for your attention!