
Witbox

Slic3r Manual

bq
Witbox

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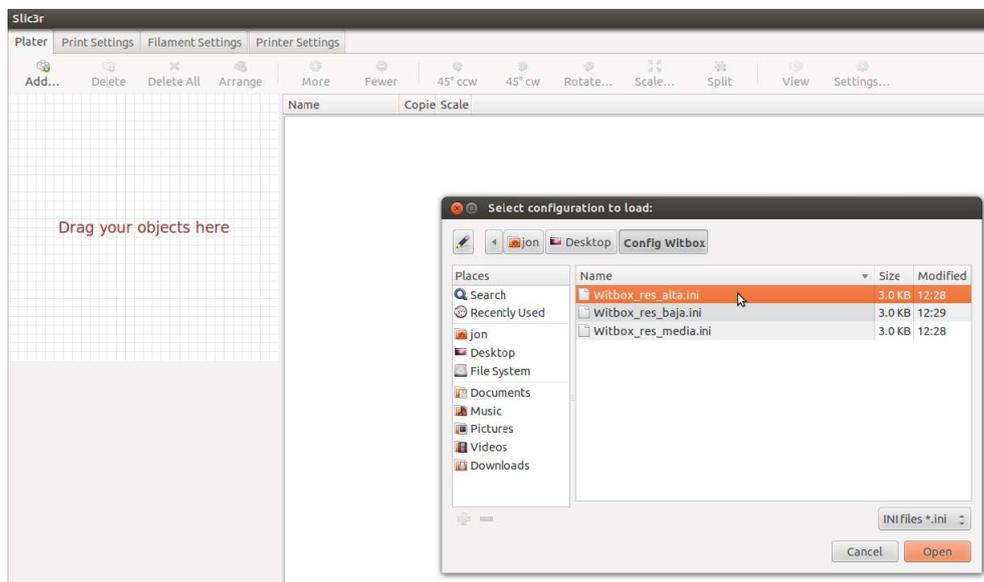
GENERATING A GCODE FILE TO PRINT AN OBJECT

In order for the Witbox to print a 3D model, it is necessary to create the .gcode – a file with all the instructions that the printer needs to follow to build the object correctly.

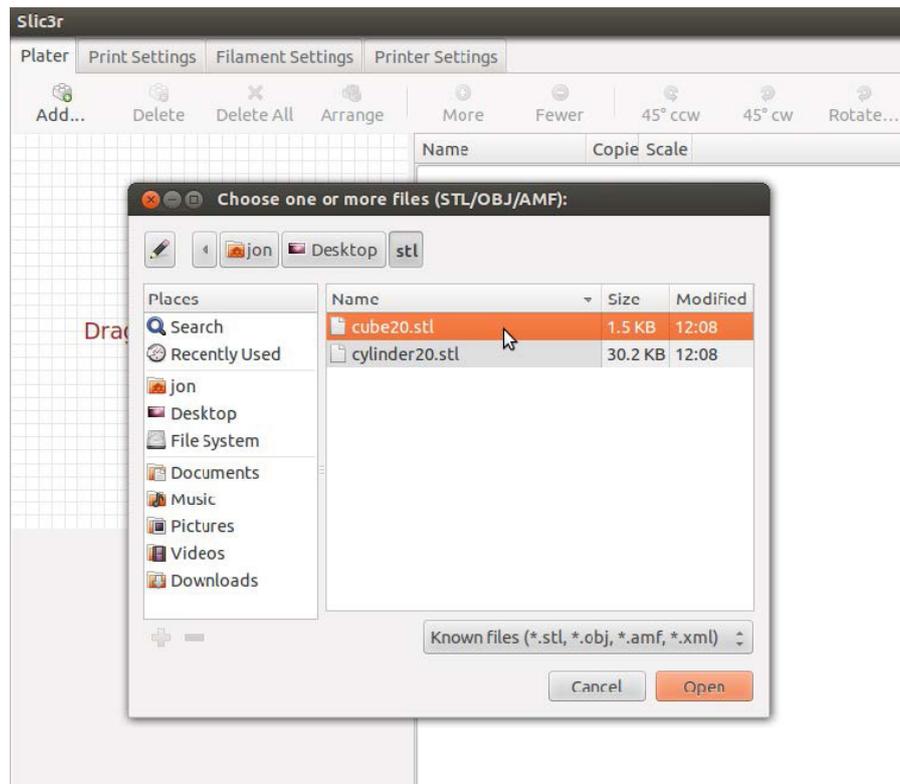
There are several programs that can generate this .gcode file from a .stl 3D model file. In this guide we will show the process in Slic3r, which is a free and open source software package that can be downloaded at www.slic3r.org.

Once you have installed the program and run it for the first time, a configuration wizard will allow you to enter the characteristics of the printer. You can skip this step and download the Witbox configuration files from: <http://www.bq.com/productos/witbox.html>.

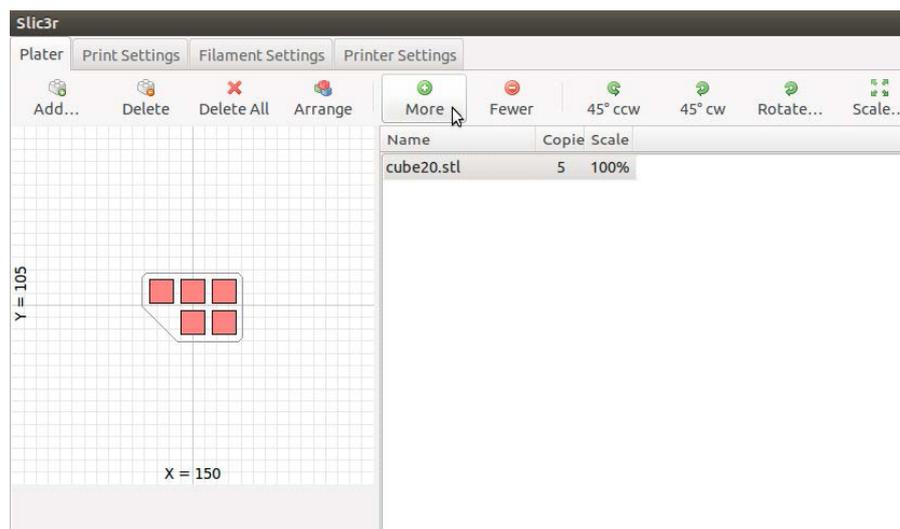
Once you are in the main view of Slic3r, the first thing you should do is load the configuration you wish to use. To do so, go to **File > Load Config** and select a configuration file from the folder you just downloaded. This will set all the parameters to work correctly with your Witbox. Make sure you load the configuration every time you open Slic3r, otherwise all the parameters will revert to default and the gcode will not work correctly. There are three configuration files for high, medium, and low resolution printing.



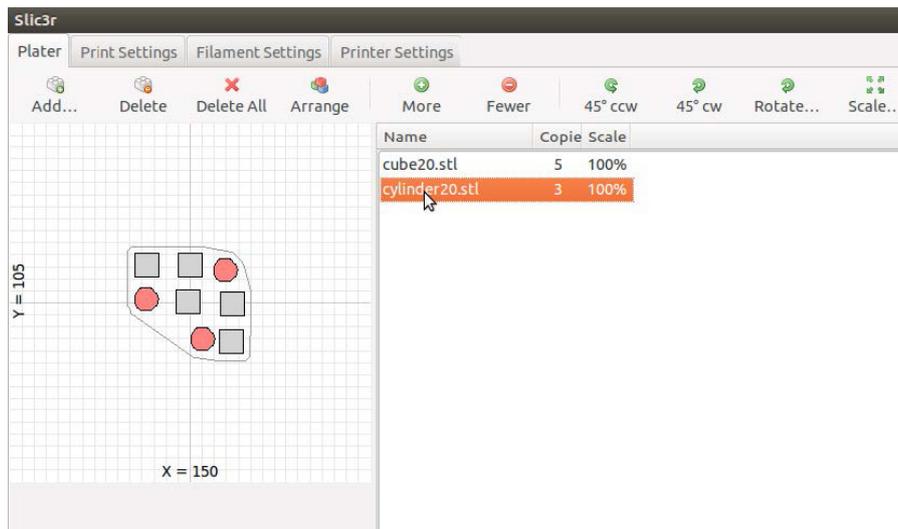
In the *Plater* tab you can see a grid that represents the print bed. By clicking the **Add...** button you can import the .stl file you wish to print.



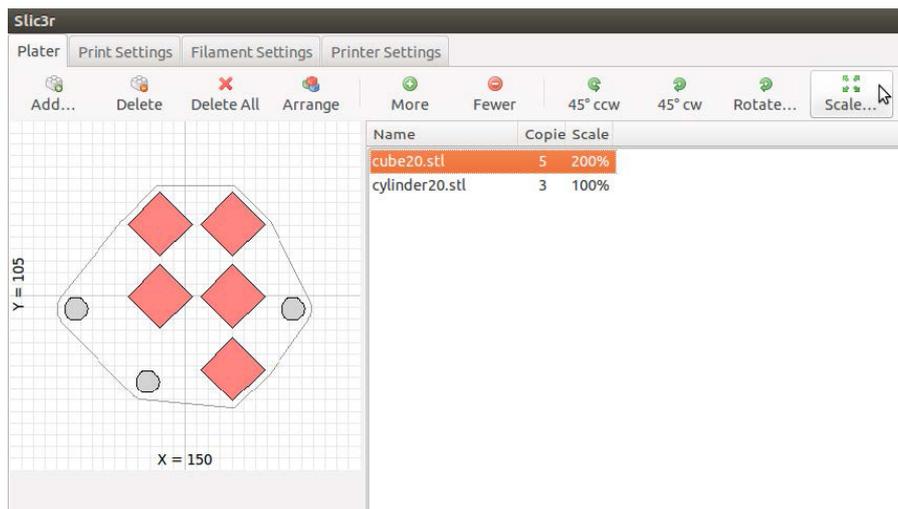
Once you open the .stl you will see its projection onto the print bed. You can add more copies of the same model by clicking **More**, and each object can be repositioned by clicking and dragging to the desired position.



You can also add other 3D models by selecting the **Add...** button again. This allows you to print different objects at the same time.



You can also rotate, scale, or modify the objects that have been imported with the buttons in the top section.



Once all the parts are in the desired position, we save the .gcode file to the SD card by clicking on the **Export G-code** button.



When the .gcode has finished exporting you can remove the SD card from the computer and insert it in the Witbox. From the LCD panel you can navigate to “Print from SD” and choose the file you wish to print.

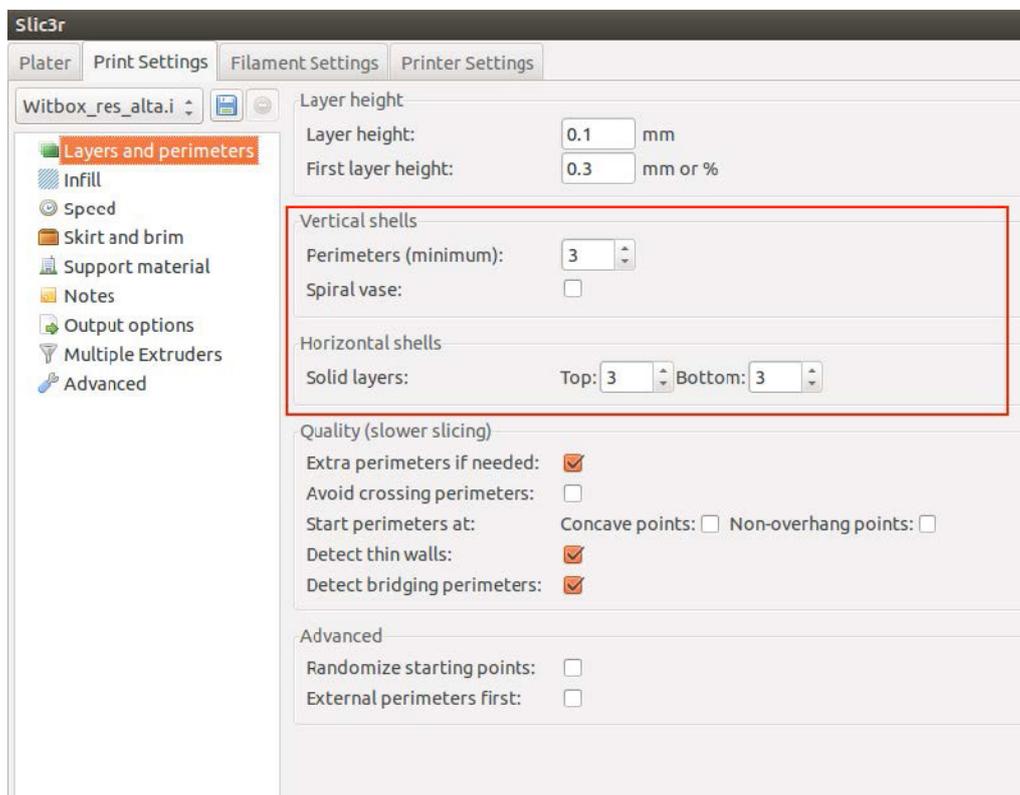
Modifying Parameters in Slic3r

You should never have to change most of the parameters that you can see in slic3r. If you wish to learn more about how slic3r works, how to change the parameters, and learn about more advanced configurations, please visit <http://manual.slic3r.org/>

There are, however, a few options that can be useful and will be changed more often, depending on the part that is going to be printed.

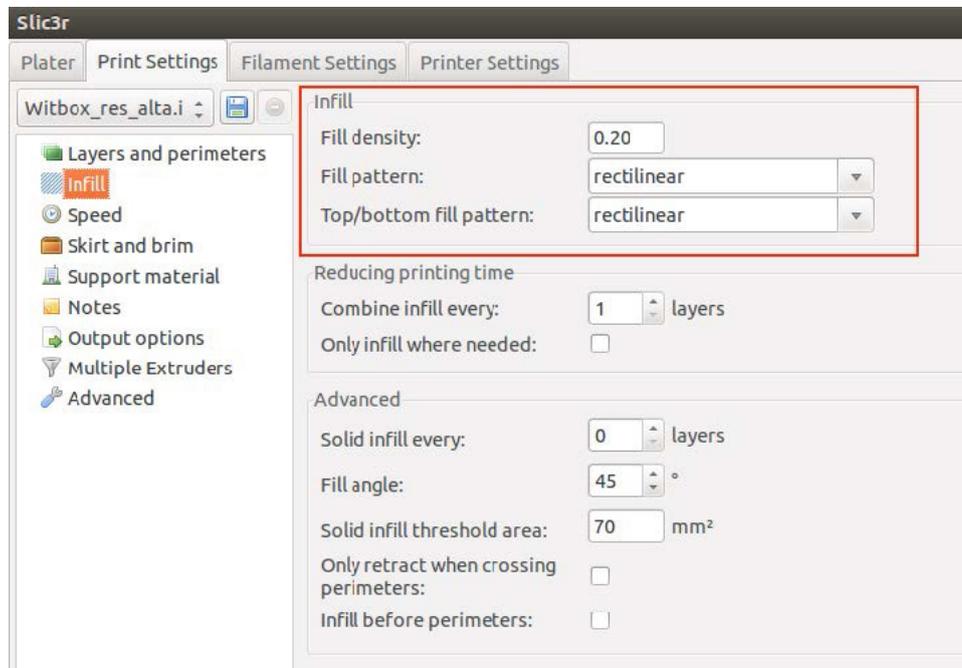
Vertical Shells: This is the thickness of the outer wall of the object. Normally it is set to 3, but if you want to print very thin features or create a stronger wall you may need to increase/decrease this value.

Horizontal Shells: This is the number of solid layers at the top and bottom of the object. If you need a thicker base, for example, you should increase the bottom layers. If, for any reason, you want to leave the top of the object open, you should set 0 top layers.

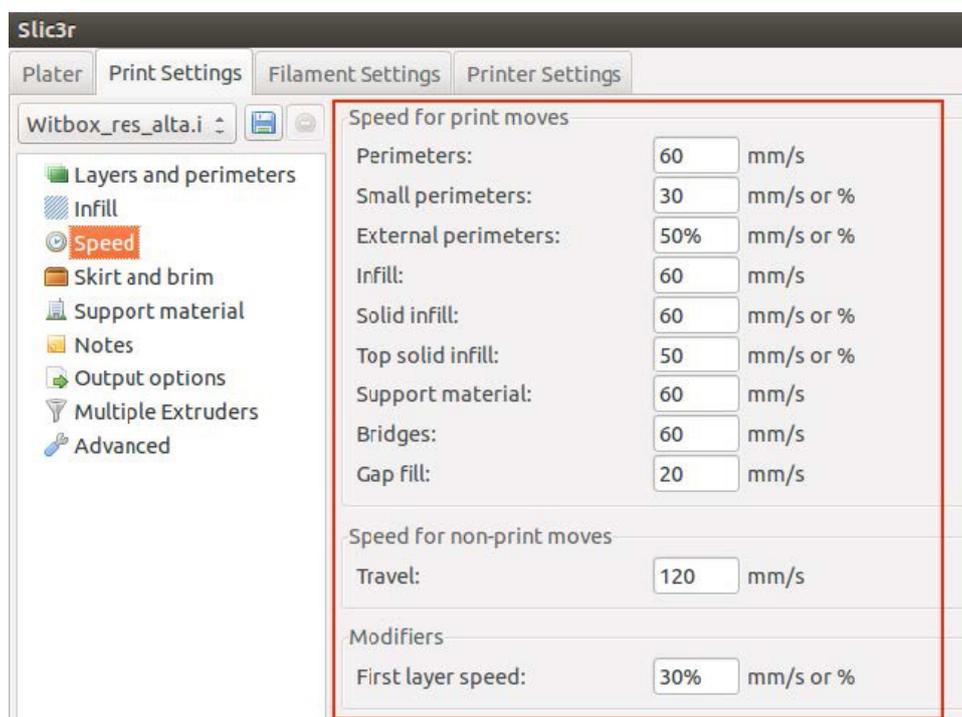


Fill density: This is a value from 0 to 1 that represents how much of the inside of the part will be filled with plastic (0=0%, 1=100%). Very strong parts can be obtained with an infill of about 30%.

Fill pattern: The fill pattern controls the shape of the infill material. This is usually not critical, unless a specific property or resistance in a certain direction is necessary.



Speed: All the values in this section control the speed of the printer while it is performing different movements. The Witbox has been tested with speeds up to 90mm/s for perimeters and infill, although increasing the speed compromises the reliability of the printing process.





For more information, contact:
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