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Dremel 3D Printer 101

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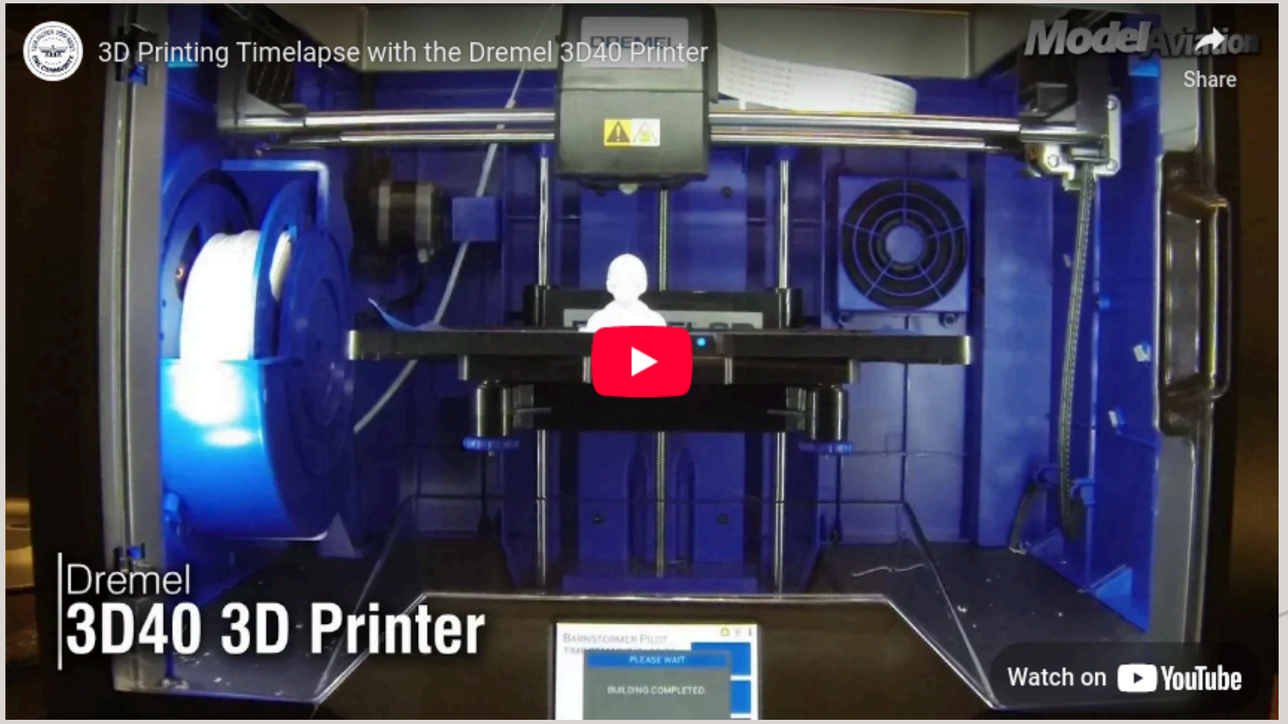
What is a 3-D Printer?

A 3D printer creates physical objects from digital designs by building layers of material on top of each other.



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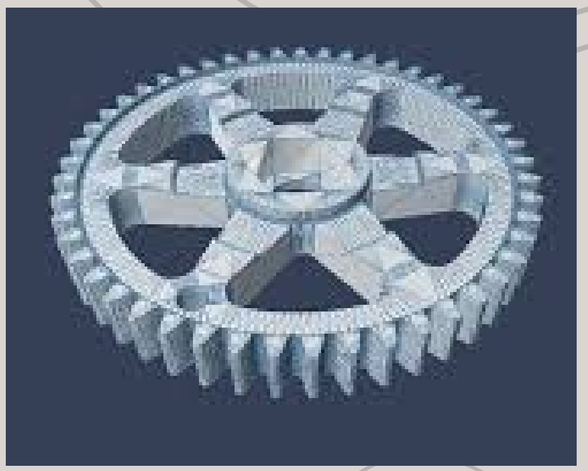
Some 3-D lingo!

Filament

Extruder/
Extruder Tip

Build Platform/
Build Plate/Tray



STL
Standard Triangle
Language

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How to Use it Safely?

1. Please don't force anything onto the machine.
2. Please don't load the machine with a new filament without a staff member who can do it.
3. If the extruder tip does get hot, please don't touch it directly.
4. Please do not pull on the printer extruder. If you need to stop the project, you can cancel it on the screen below or the computer.

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File Format and Softwares To Print

The Dremel 3D printer accepts the following file formats:
3D model file types: STL, OBJ, 3MF, X3D

Other file types: BMP, .g, .gcode, GIF, JPG, JPEG, PNG

To print with our 3-D printer, you need to use the Dremel Digilab 3D printer: Dremel Print Cloud

https://printcloud.dremel.com/

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What Software to Use to Create a Design

You can create 3D models using a 3D design software program, or download existing 3D files from the internet. Some popular sharing sites for 3D models include: Thingiverse, MyMiniFactory, and Cults, tinkerCAD.

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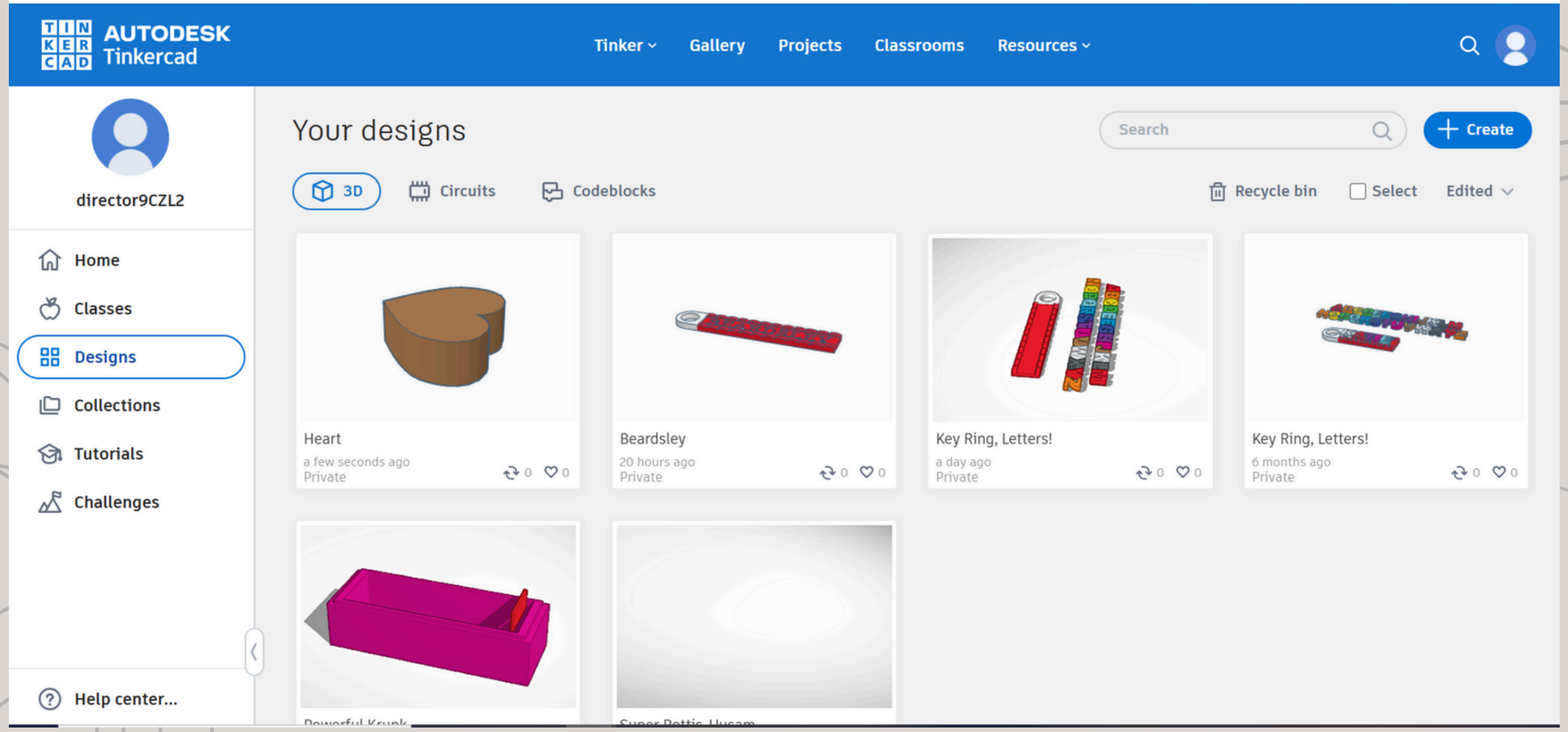
TINKERCAD



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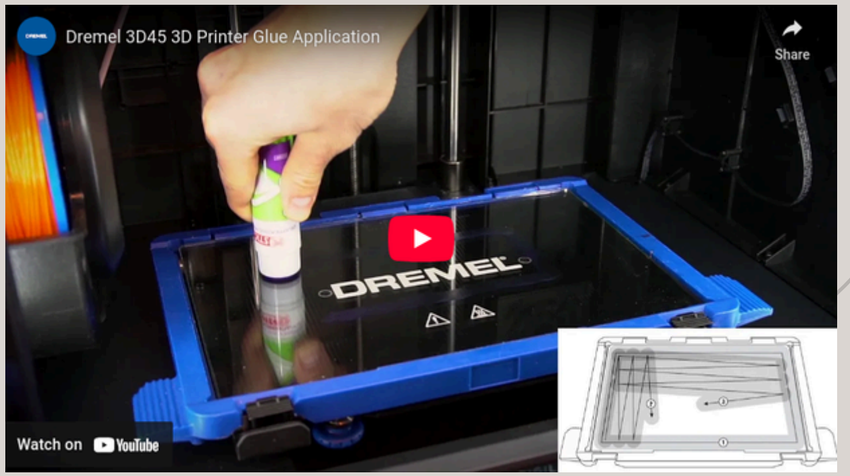
How to Prepare the Machine to Print

1. Make sure there is filament on the side, and that it is inserted into the extruder.
    a. On the small screen the 3-D printer if you go to clear nozzle
2. Make sure plate is clean and inserted.
    a. Some water and a paper towel can work. If available Microfiber towel would work better.
3. Add glue on the plate in the area that you are printing.



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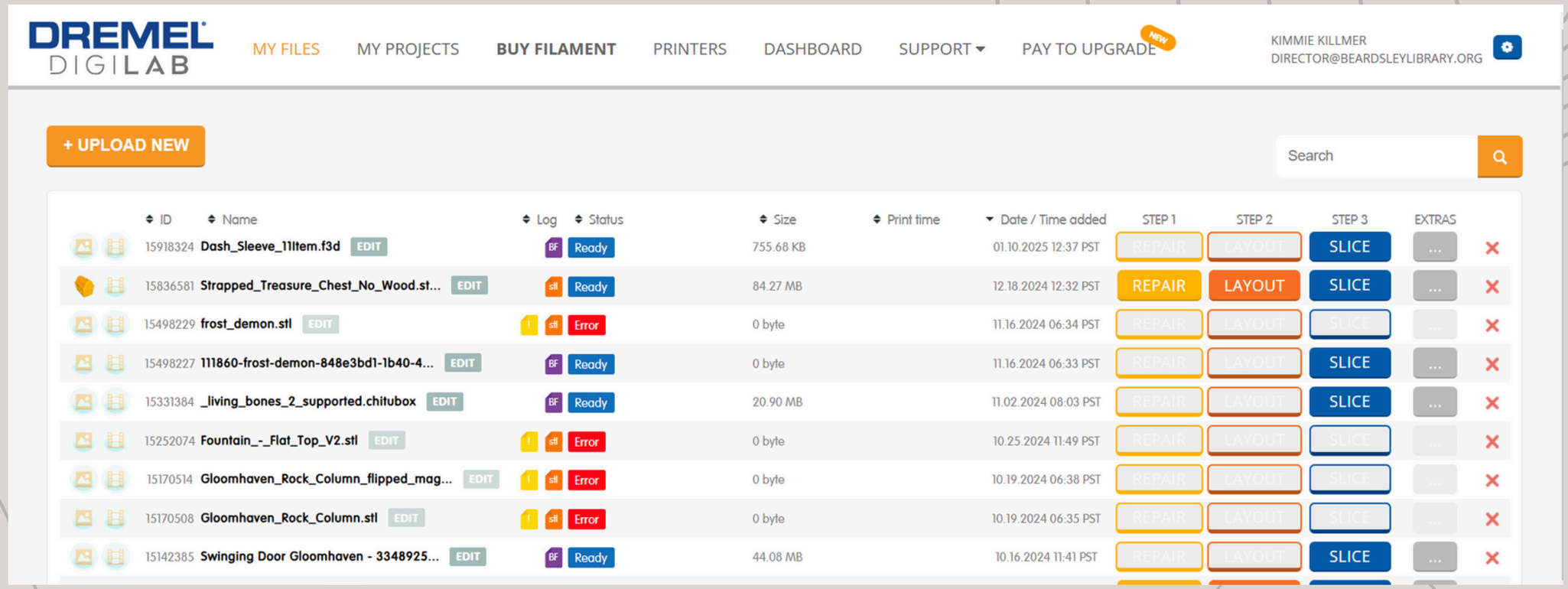
Dremel DIGILAB https://printcloud.dremel.com/

My Files:



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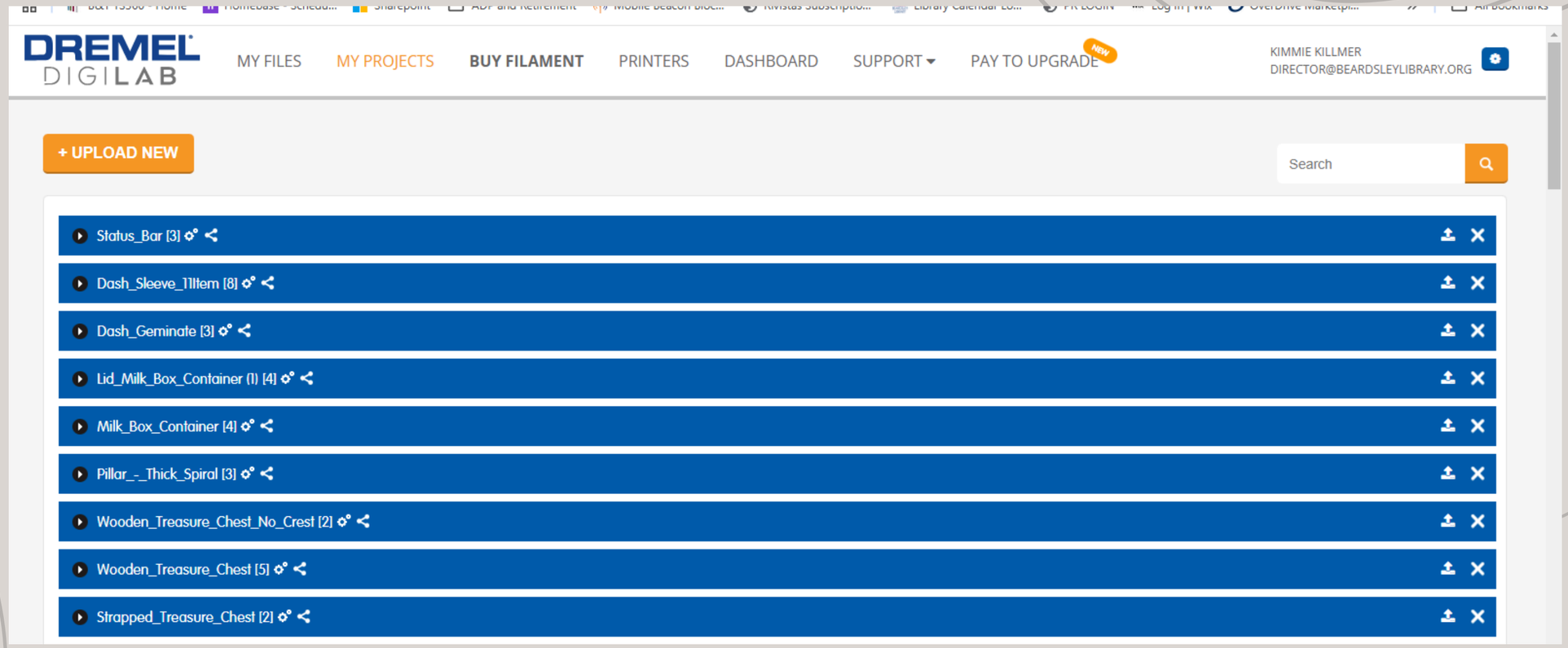
Dremel DIGILAB https://printcloud.dremel.com/

My Projects:



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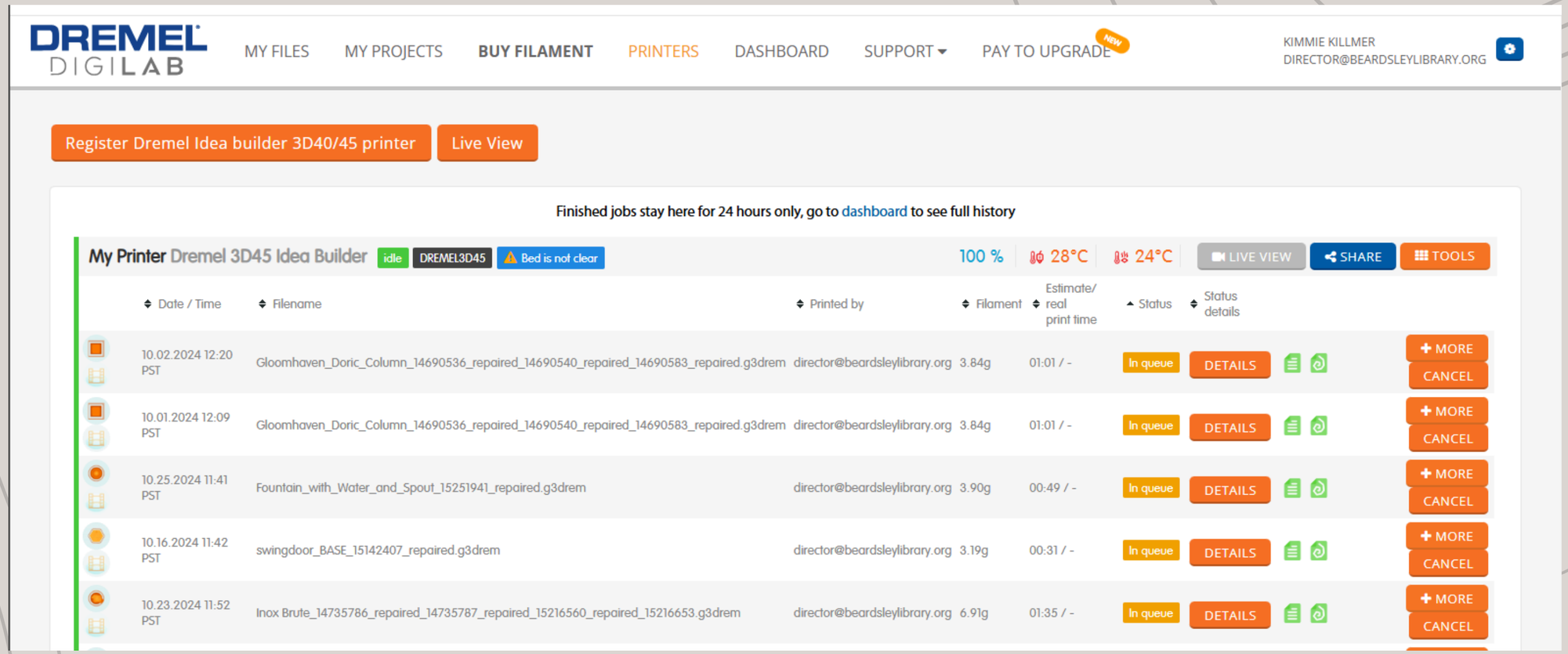
Dremel DIGILAB https://printcloud.dremel.com/

Printers:



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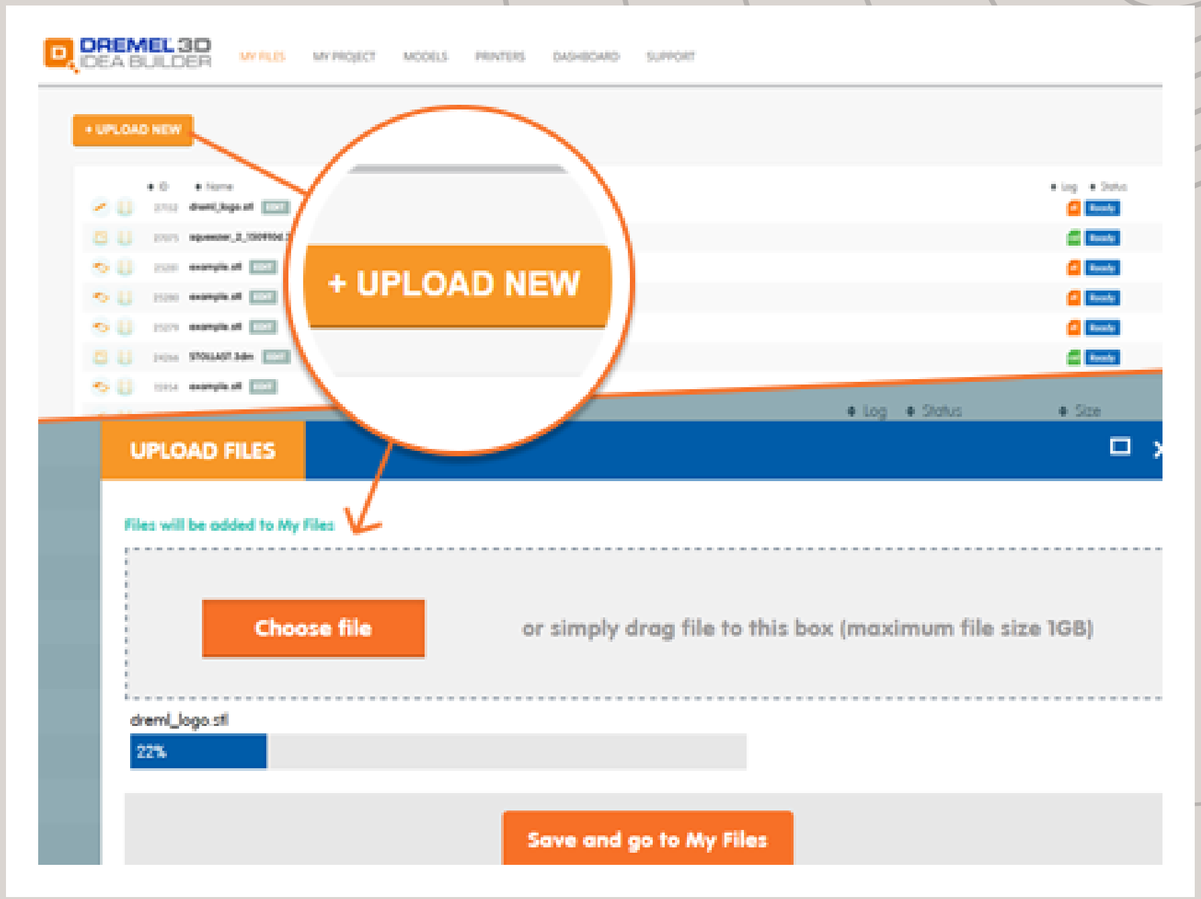
How to print?

Upload files to the cloud:

On My Files or My Project tabs, click a button + Upload new to upload a new file.

STL and g3drem files are supported.



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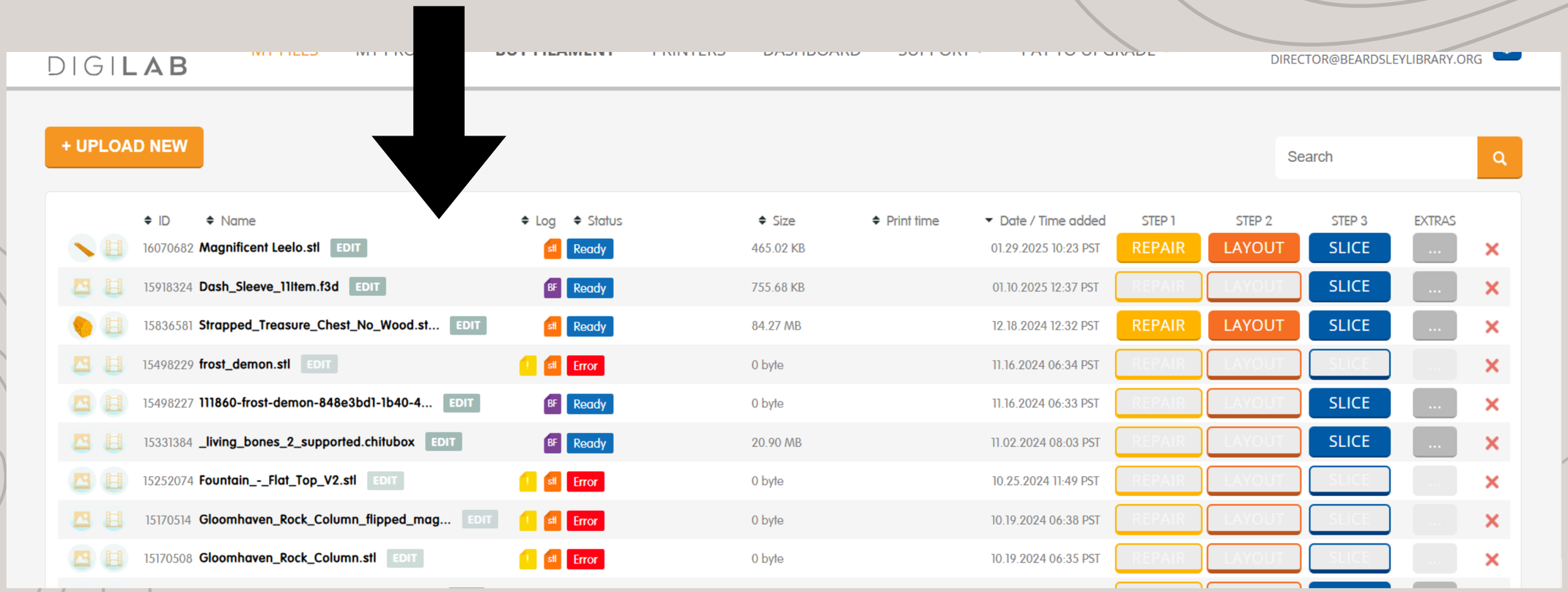
How to print?

Find your file on the top.



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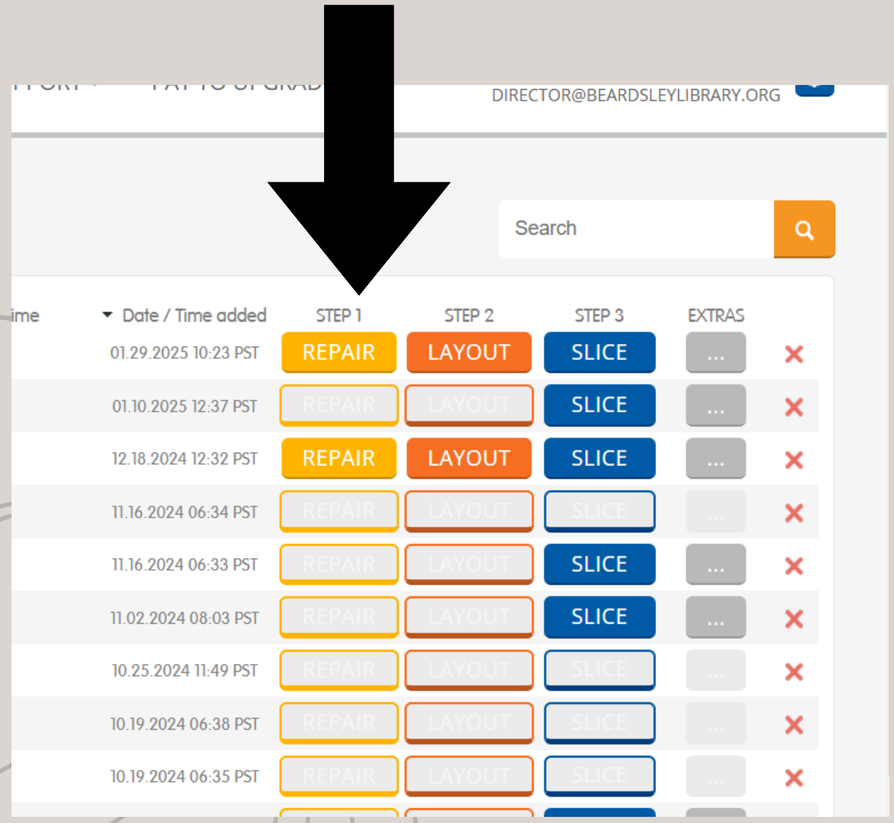
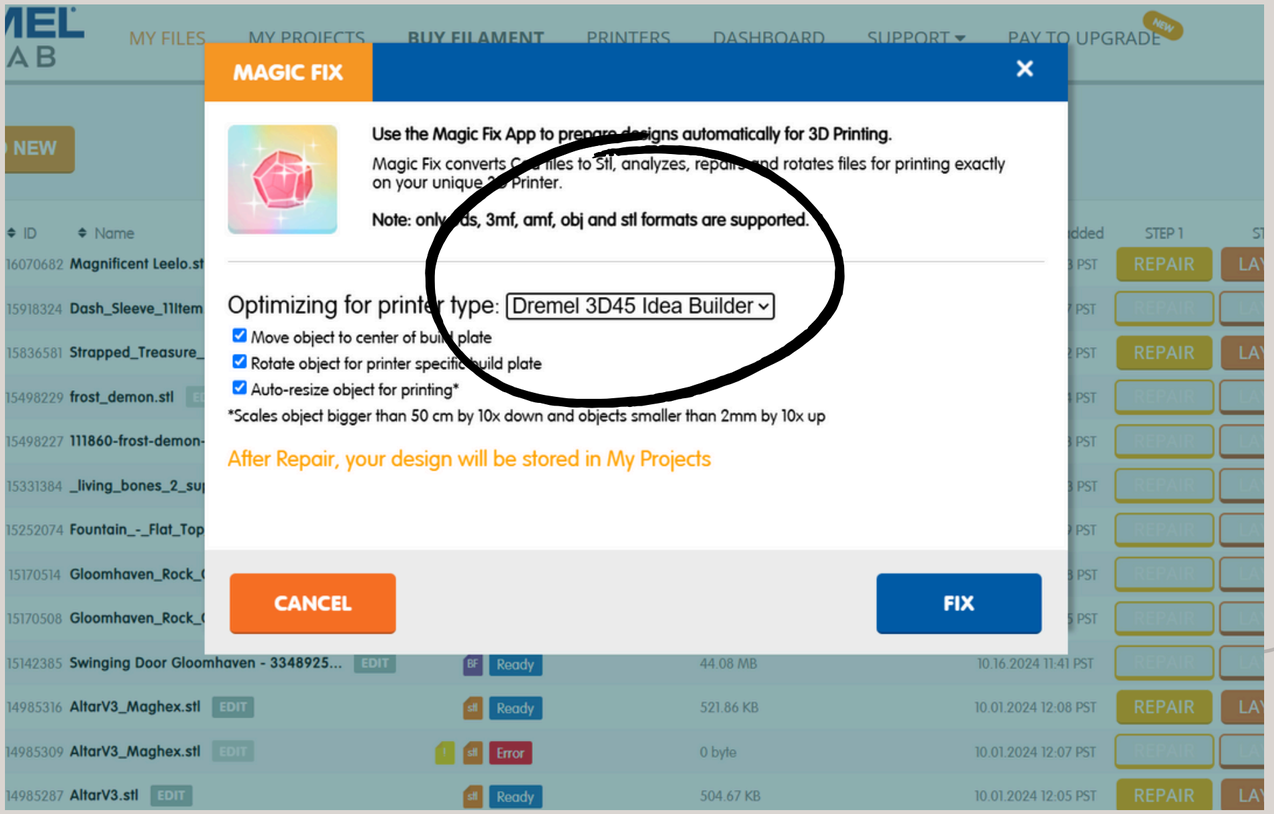
How to print?

1. Follow the steps: Step 1 is REPAIR.



2.Select Optimized Printer Type: Dremel 3D45 Idea Builder



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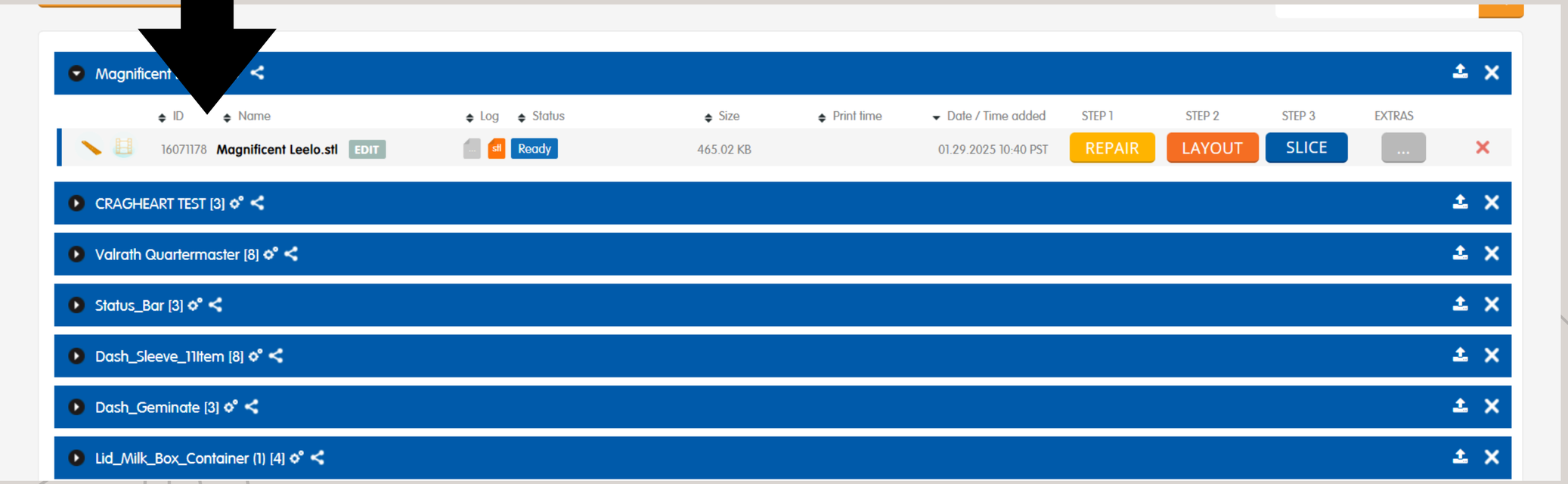
How to print?

1. It will relocate you to my project folder.

1. If you do not see a second file that says the file name, then repair, then you must repeat the following steps, select repair and Optimized Printer Type



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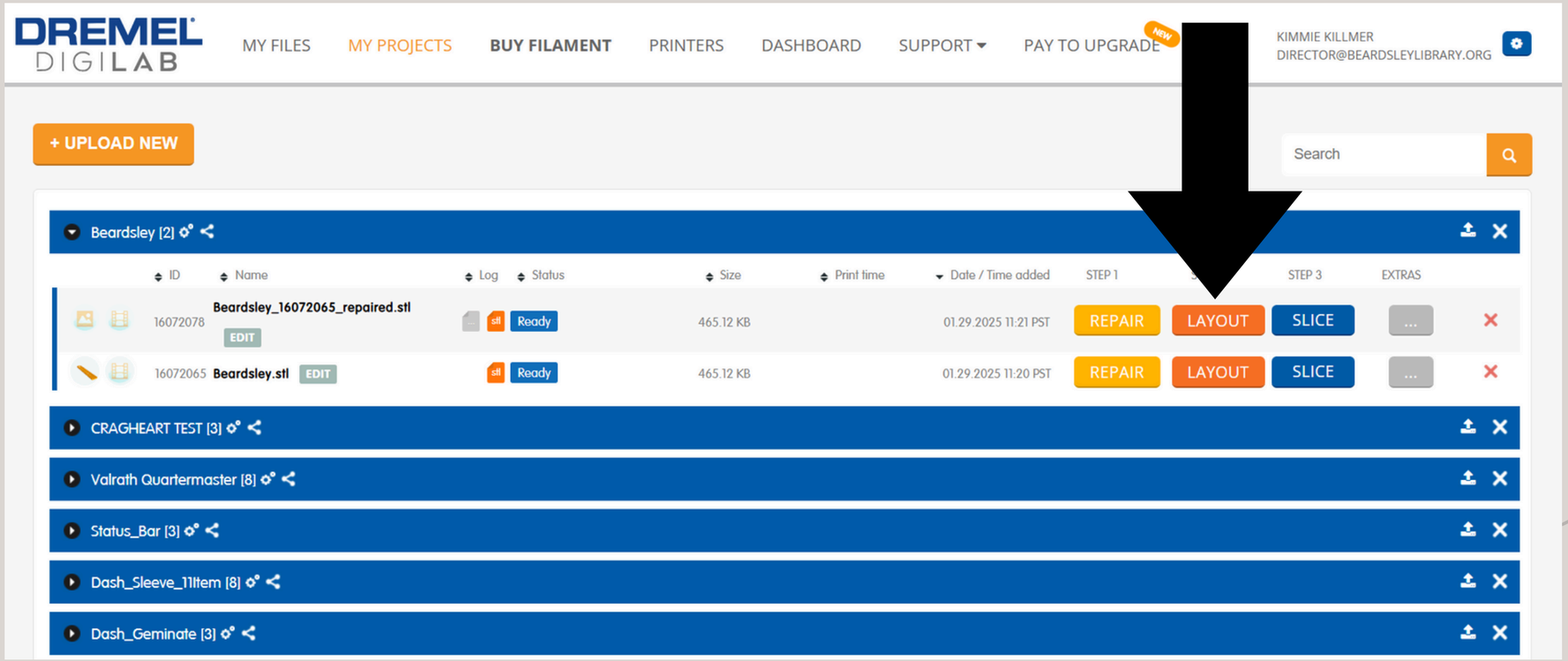
How to print?

Once repaired, please find the file with the file name_repair.stl and continue through the steps. Select LAYOUT.



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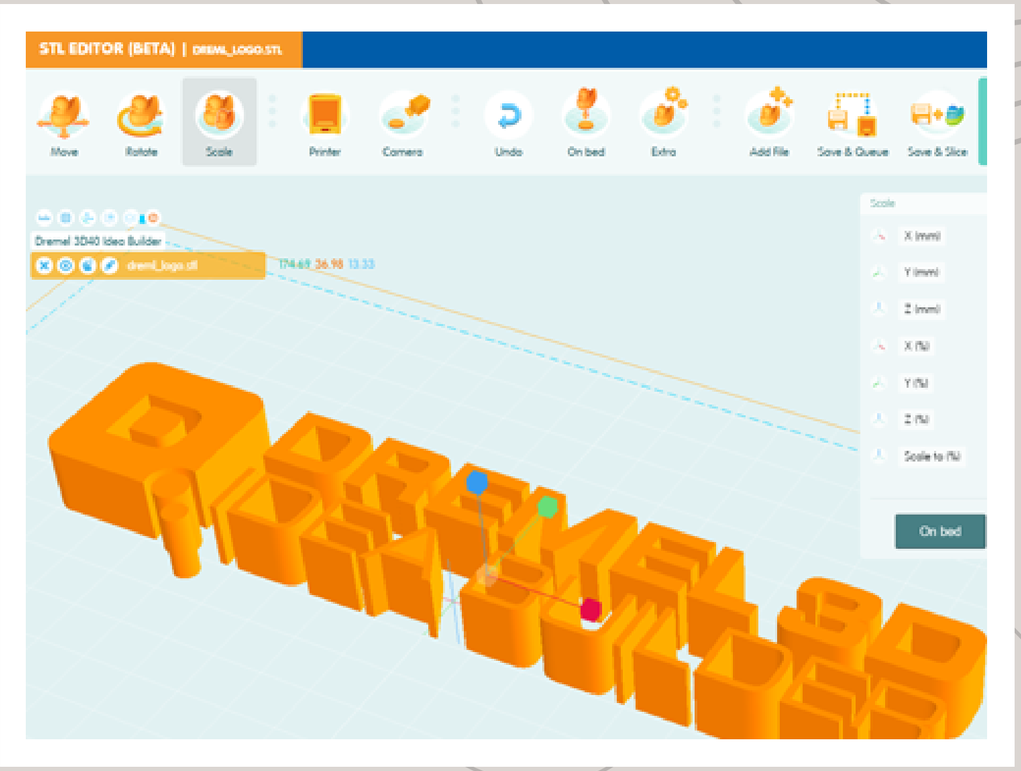
How to print?

Build tray allocation:

To position one or more models on a build tray, click the Layout button on the model you would like to print. You can move the model to position it precisely on the build tray, adjust the angle at which the model is positioned, and scale the model up or down if needed. To add more models to the same build tray, click the Add File button.



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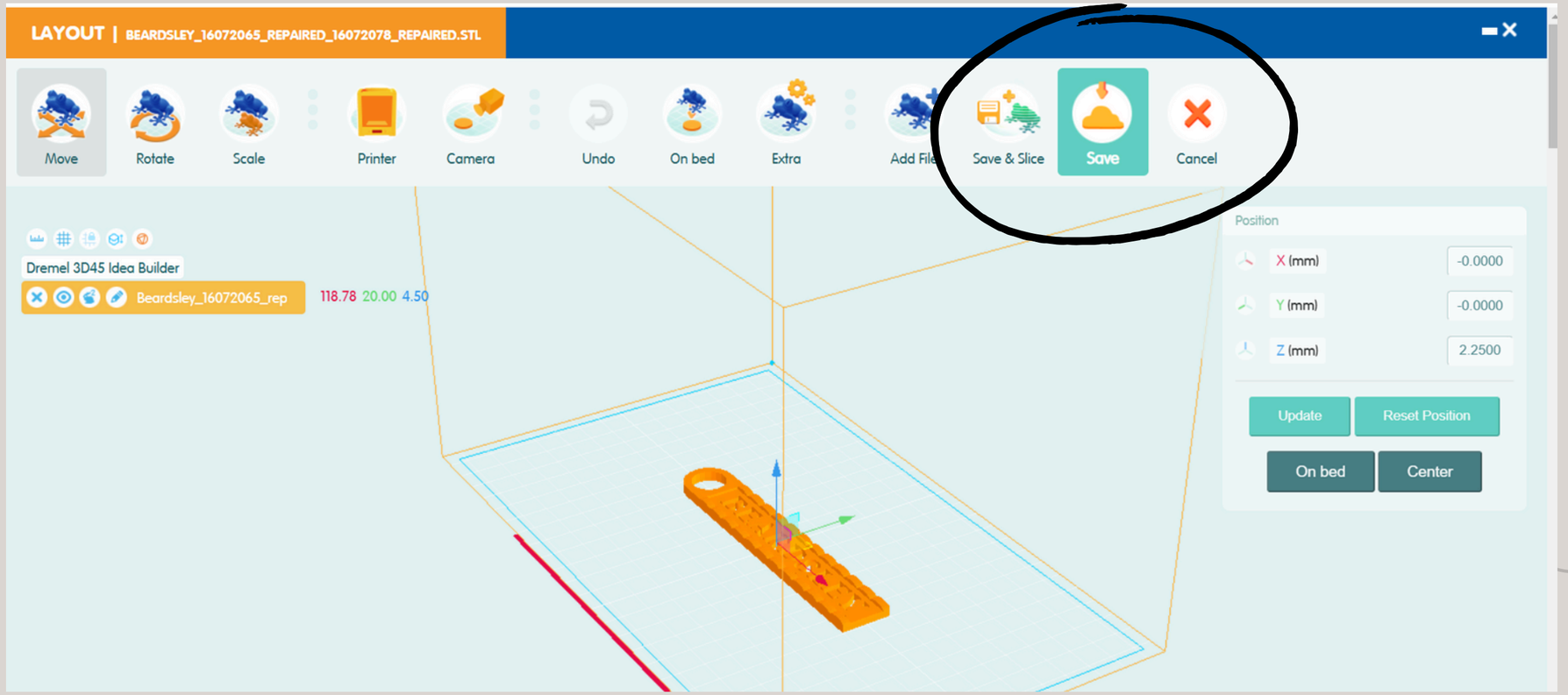
How to print?

Once the layout is presented click on SAVE.



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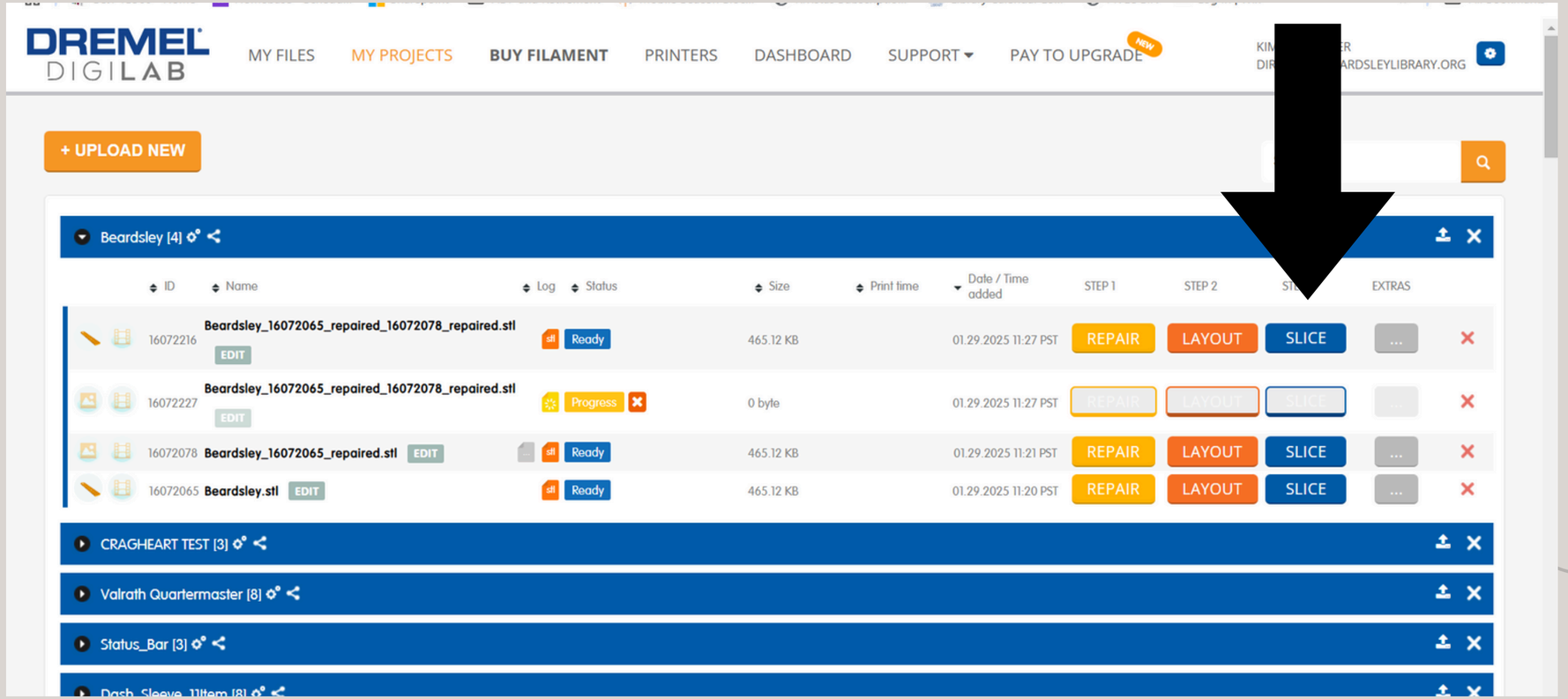
How to print?

Once the layout is complete select, SLICE.



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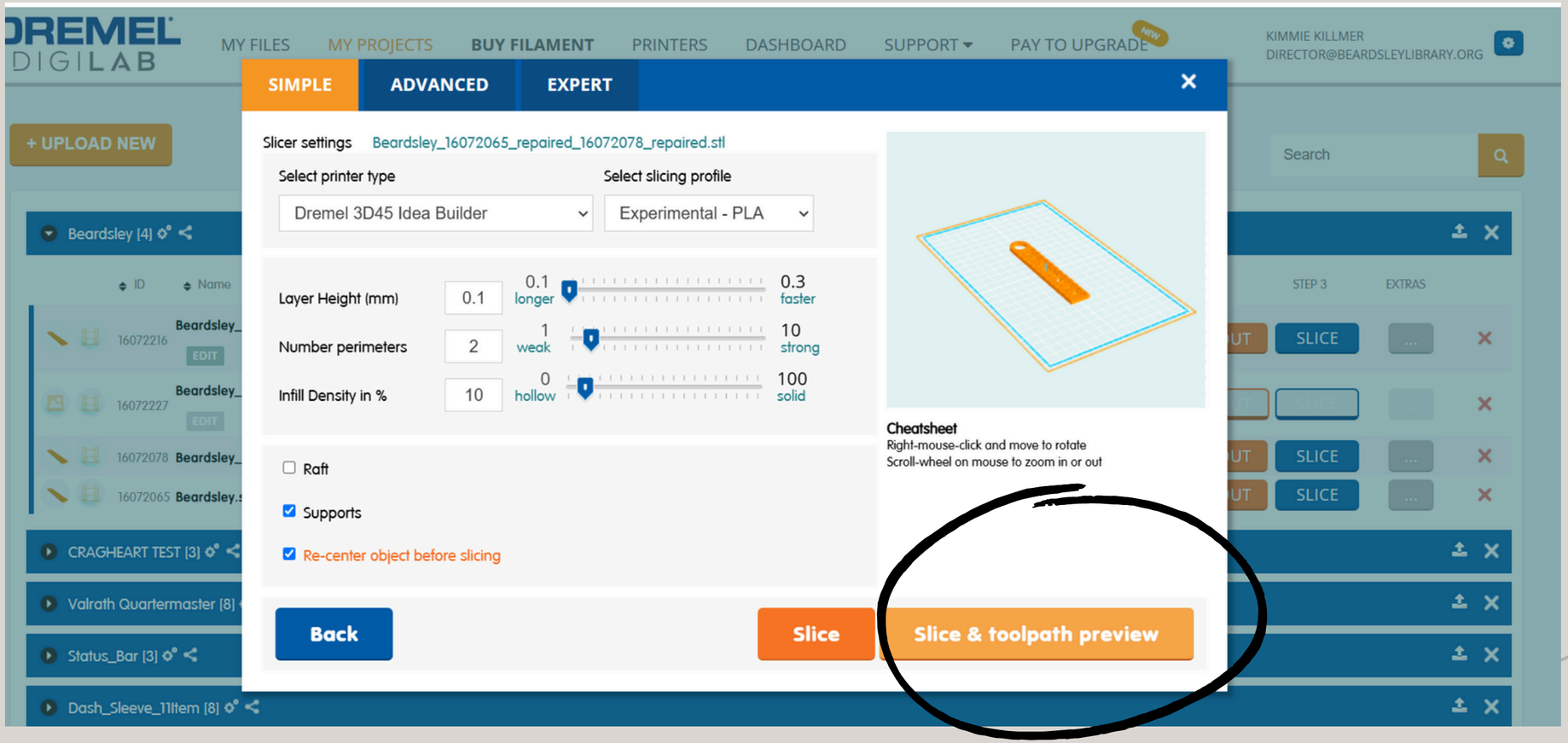
How to print?

When you select slice, the 3-D printer will choose the best settings for your print. Do not change anything; select SLICE & TOOLPATH PREVIEW.



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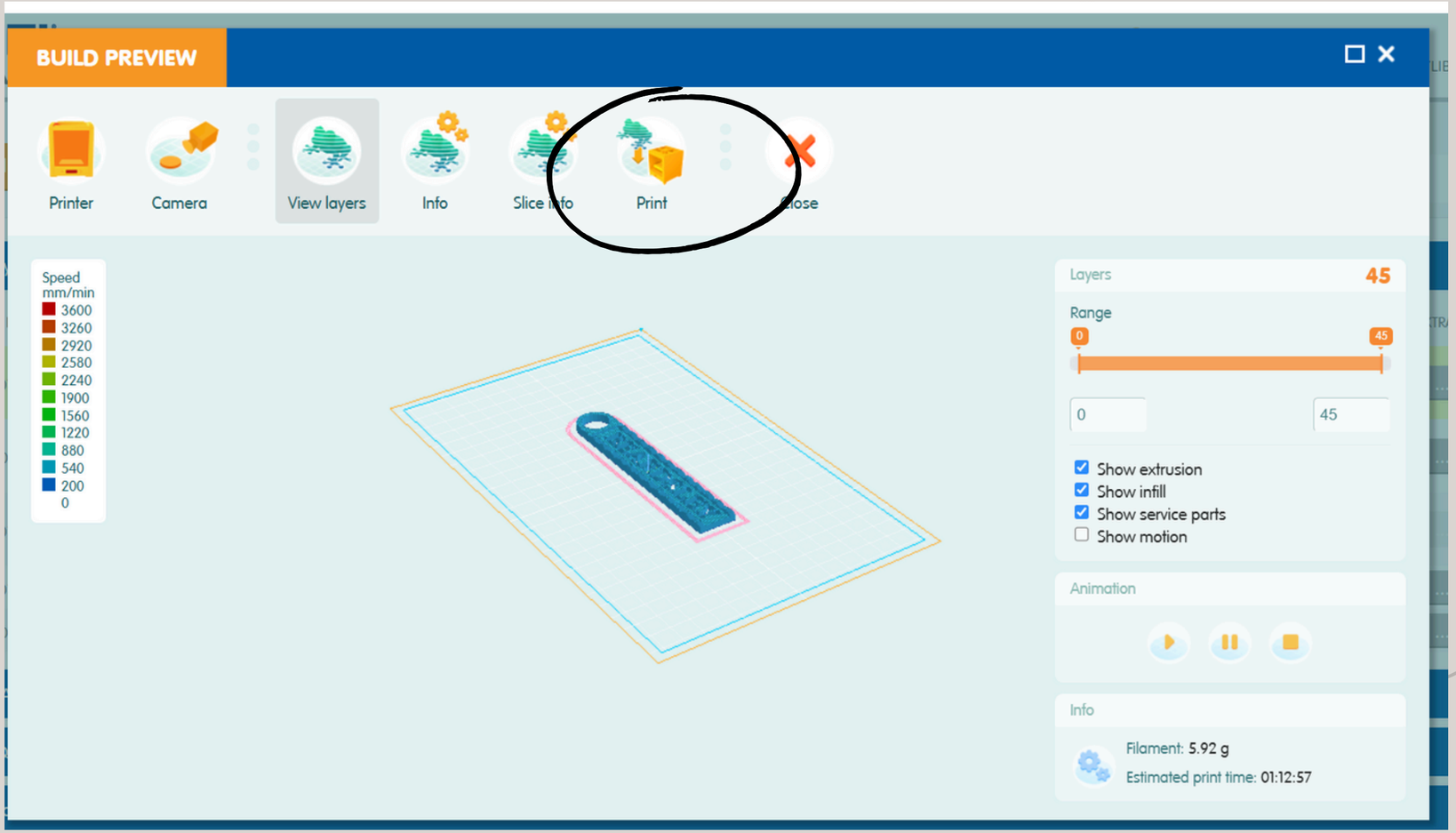
How to print?

1. It will bring you to this build preview; select PRINT



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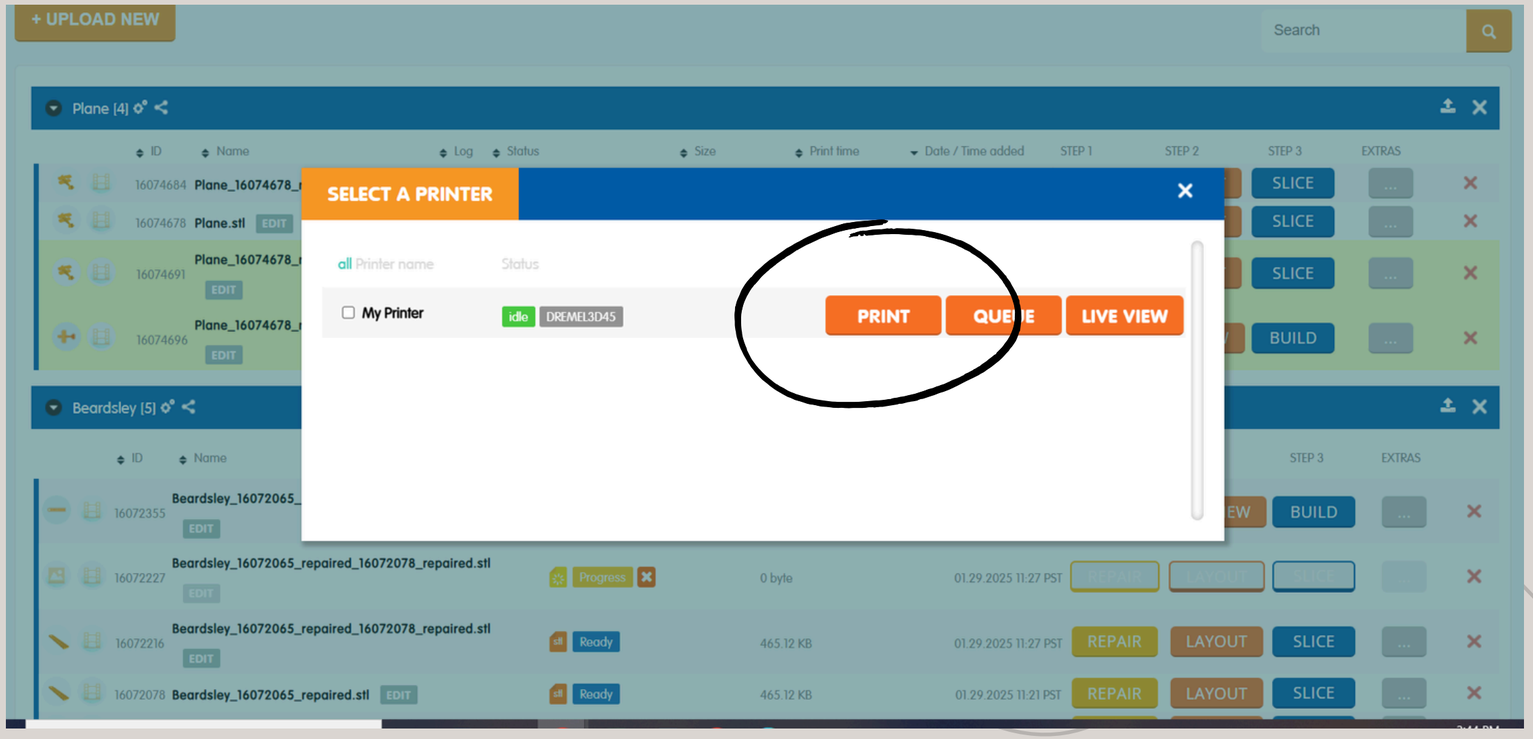
How to print?

1. It will bring you to this build preview; select PRINT



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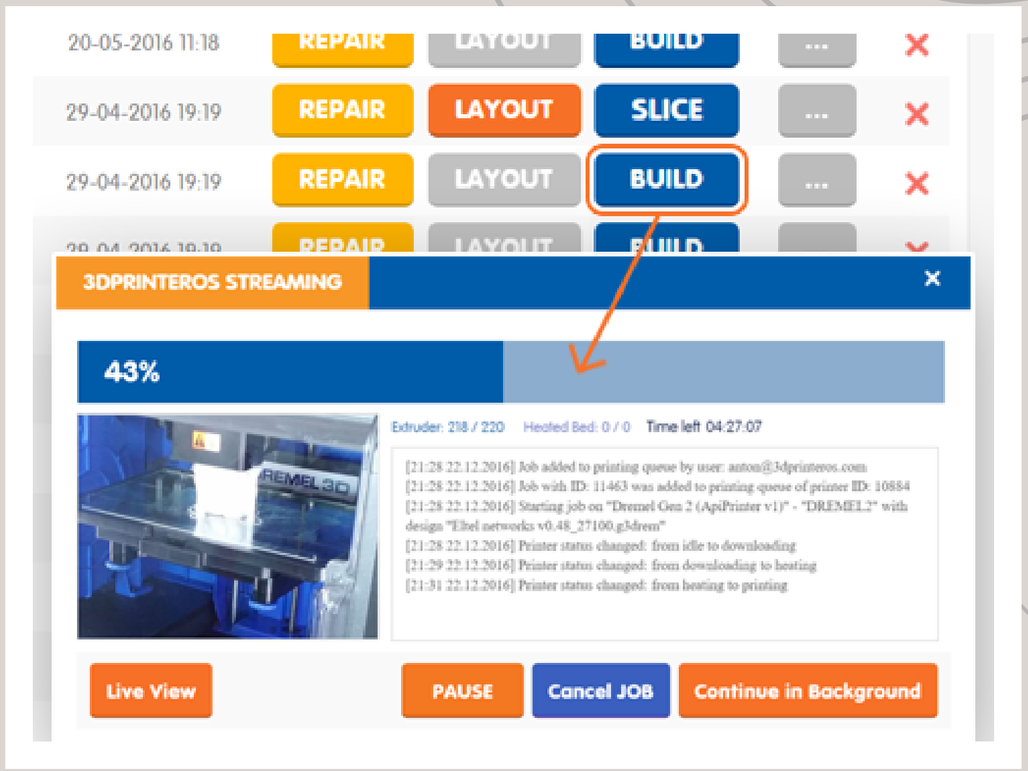
How to print?

Building the model:

To start the printing process, the Printer will download the file from the cloud, heat up the nozzle, and start printing.



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The Final Step

Once your print is complete, allow the plate to cool down, and you can remove your 3-D model. If you need help getting your model off the plate, there is a scraper tool.

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Thank You!

Any questions?

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Links:

Cloud software to print on 3-D printer: https://printcloud.dremel.com/

Tinkercad, a free 3-D design app: https://www.tinkercad.com/

3PI Tech gives tutorials on Dremmel 3D printers and trouble shooting them: https://3pitech.com/pages/3d45-support

Thingiverse is the world's largest 3D printing community. Thingiverse allows users to make, discover, and share 3D printable items: https://www.thingiverse.com/