## Work Flow for Adding Engraves onto an Existing Catalog Object or Vector File using the Glowforge Interface

If I wanted to add an engraving to an object that already existed, such as personalizing one of the Catalog files that already had vector cut and score paths set up for me, this is what I would do or consider. (And a good tutorial to start with for definitions is here: Laser Design Basics)

## 1. Prep the raster file to use for engraving.

(This is usually a Jpeg file, but it can also be a PNG or GIF file.)

- If the file size is large, (over a MB or so), you might want to crop the image and/or save it at a lower resolution. This will help the file to upload faster.
- If you want to feature only part of an image, you might want to clean up and remove any distracting background first. (Photoshop, GIMP, Corel Paintshop)
- Consider that the laser only creates two "colors" for engraving ... burned and not burned.

  (Increasing the power and slowing the speed down will result in deeper engraves, not necessarily darker engraves. Changing the number of Lines Per Inch (LPI) can make an engrave more solid or less solid looking, but at low LPI values, there will be visible streaks in the solid fill areas of the engraving.)

Simple black and white line drawings will engrave beautifully without fuss. Try for a clean sharp edge between the black and white colors for best results.

(Ex: Black ink on paper works better than pencil on paper, although both are exceptionally good for this machine.)

Engraving something like a photograph is a more advanced technique that will benefit from additional preparation of the image before you engrave it. Engravings of photographs, like screen printing, will give better results if they are "dithered" or "halftoned", which is an application of dots, squares or streaks of color spaced closely, or farther apart, to give the appearance of different shades of gray. The Glowforge interface uses a simple dithering program to interpret the results of a scan of your image, but you might wish to make a few adjustments of your own to create a different look. (This can be done in raster programs like Photoshop or GIMP. Tutorials are available in the **Table of Contents** for the **Glowforge Tips and Tricks Category** in the forum. Follow the links in the TOC to the Matrix.)

• Save your prepared file as a Jpeg, PNG or GIF file. Any of these can be uploaded into an open vector file in the Glowforge interface.

## 2. Load your material into the Glowforge, and turn it on.

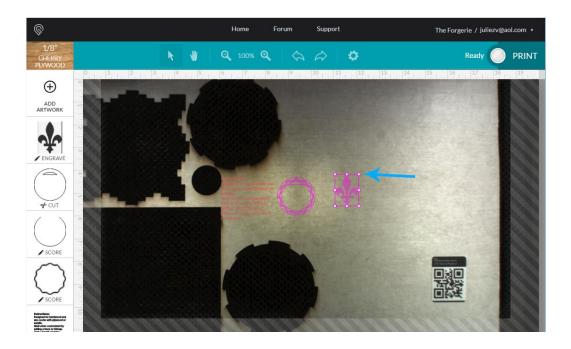
## 3. Open the Glowforge Interface on your computer.

• Open the file you wish to place the engraving on. This can be a Catalog item, or a vector cutting file (SVG) that you have prepared yourself, that you want to add an engraving to that was not included in the original file.

• Click on the **Add Artwork** button in the left column and browse to the file you saved to load it into the interface.



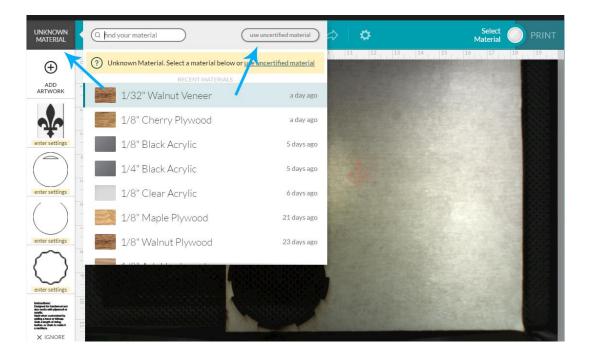
• Click the **Selection Arrow** in the top row, then click and drag the engraving to position it where you want it on the cutting shape.



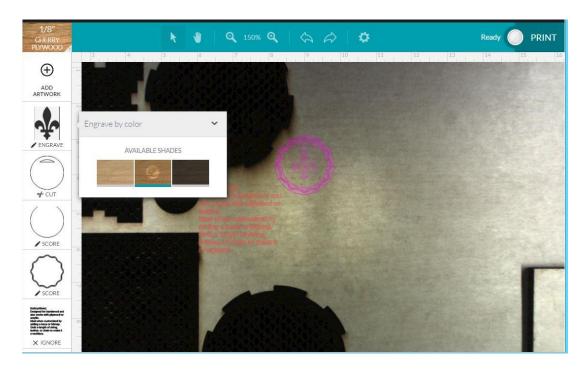
You can scale the artwork by dragging the little white boxes that appear at the corners and sides when you select the artwork. (At this time, raster image files cannot be rotated in the interface.)

If you want to change the operation order, you can click on the thumbnails in the left hand column and drag them higher in the stack before releasing them, to make those operations be performed first.

• If you are not using Proofgrade material with a QR code, be sure that you have entered the actual measured height of the material, in inches, by clicking on the **Unknown Material** button at the top of the left column, and then clicking on **Use Uncertified Material**. (You will need to enter Manual settings for Uncertified Materials.)



- Drag a selection rectangle around both the engraving and the cut shape parts and move them to where you want them to be cut on the material.
- Choose your settings for the Engraves. (Click on the thumbnail in the left column and choose a Light, Medium or Dark Engrave setting for each engraved part.)



- Click the **Print** button in the upper right corner. After the file has been uploaded to Glowforge for processing, and the results have downloaded to the machine, the button on the machine will start winking at you.
- Press the big Glowie button on the machine to start the print.
- (Do not leave the laser unattended while it is in operation.)
- Wait for the fan to spin down after the print finishes to open the lid. (Cuts down on the smell.)