FabCreator Manual

For FabCreator Versions 2.2.0.XX
February 10, 2021
*Note: Some screenshots may be of older software versions but the same integral UI components as the new version are retained

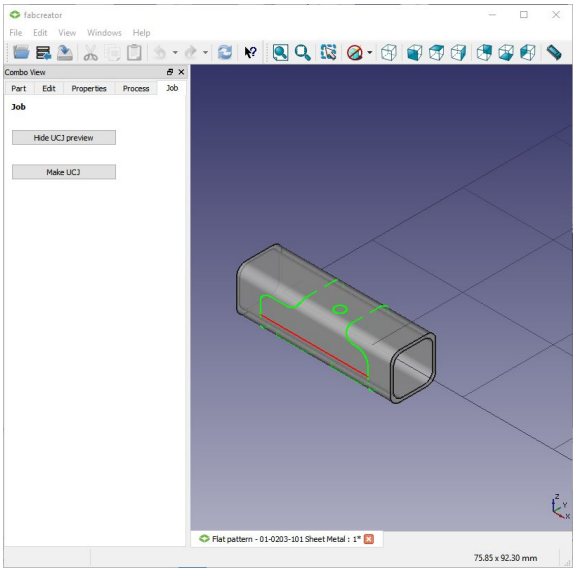


Table of Contents

1. Computer Requirements **3**

2. Installation **3**

3. Running **4**
3.1. On Launch 4
3.2. Preferences 4
3.2.1. General 5
3.2.2. Material Database 6
3.2.3. Units 7
3.2.4. Dxf/Dwg Import Tab 8
3.3. Importing 9
3.4. Mouse Navigation 10

4. Tab Workflow **11**
4.1. Part Tab 11
4.1.1. Process Groups 11

4.1.2. Choosing Geometry Items 11
4.1.3. Changing the Process or Cut Order of a Geometry Item 12
4.1.4. Some Notes on Raster 12
4.2. Edit Tab 13
4.2.1. Move / Rotate Part 13
4.2.1. Move to Origin 13
4.2.2. Deleting Items 14
4.2.3. Editing Text 14
4.3. Properties Tab 16
4.3.1. Database 16
4.3.2. Catalog 17
4.3.3. Sheet Properties 17
4.3.4. Tube Properties 18
4.3.5. Engrave & Raster Settings 21
4.3.6. Accept 21
4.4. Process Tab 22
4.4.1. Tabs on Sheets 22
4.4.2. Tabs on Tubes 23
4.4.3. Round Tube 2D Cuts 23
4.4.4. Kerf Compensation 25
4.5. Job Tab 26
4.5.1. Step & Repeat a Part 26
4.5.2. Incorrect Tube Wrapping 27
4.5.3. Make and Save the .FAB File 29
5. Editing Materials in a Database **31**
5.1. Stock Properties DB File Location & Management 32
5.2. A Note About the Materials on the Machine 32
6. Running a FAB File 33
7. Installing a Newer Version of FabCreator 33
8. Service Through Freshdesk 33

1. Computer Requirements

To run this software, the following are required:

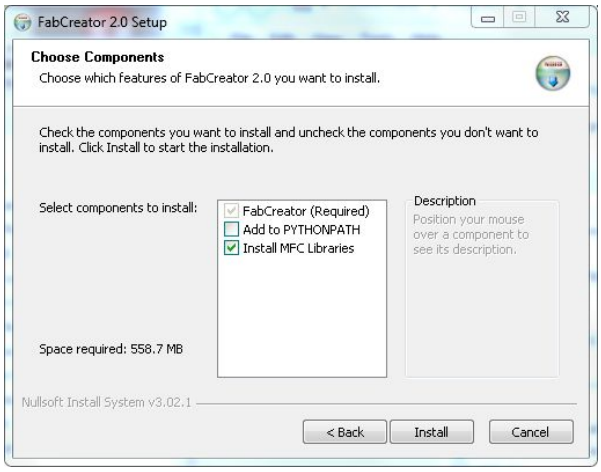
- 64-bit version of Windows 7 or 10
- 4GB RAM, 2GHz processor, 200MB free space

2. Installation

When downloading the FabCreator installer, Windows and other software might warn you that this program is not safe. Click through to ignore these warnings. NOTE: This is not malware, this is simply software we created in-house but have not yet had certified.

Double click on the installer. On Windows 10, you will see another warning: “"Windows Has Protected your PC” Click More Info then Run anyway to accept and continue installation.

During installation, follow the dialog boxes to set up initial preferences, do not uncheck INstall MFC Libraries on the Choose Components dialog window.



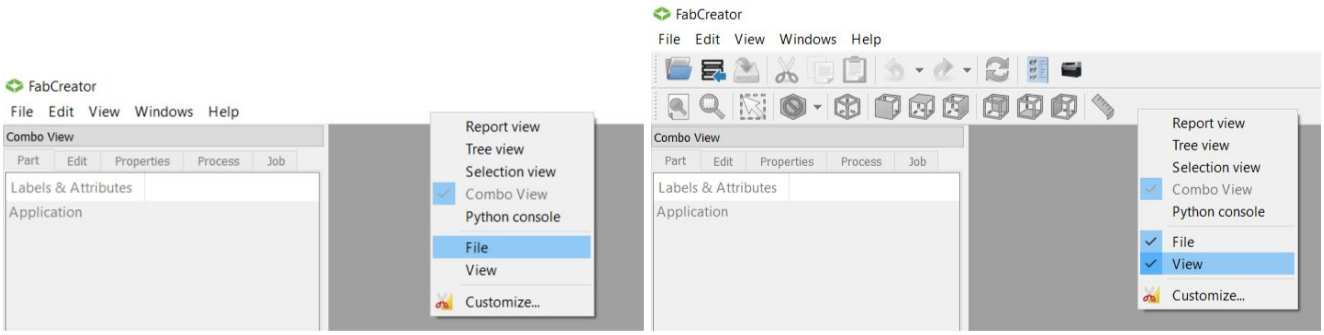
Once the program has finished installing the dialog boxes will close and you can start up FabCreator

3. Running

3.1. On Launch

When you first open FabCreator, there will be an empty window, as shown below. Under File, you can either Open (Ctrl+O) an existing .FAB file, or Import (Ctrl+I) a DXF or DWG file.

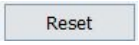
NOTE: If the icon toolbars are not visible, you can toggle them by right clicking under the File toolbar and checking File and View



3.2. Preferences

You can access FabCreator settings through Edit > Preferences. FabCreator is undergoing Factory revisions that will simplify Preferences by removing historical artifacts that are no longer relevant to users and the .fab file workflow. Most of the currently visible options can either be ignored or left at default values. The pertinent sections you may want to adjust are all located in the General icon and are described below. It is not recommended to change any settings you do not understand under the Part

Design, Display, Draft, or Sketcher icons. Those sections primarily contain information used rarely for Factory troubleshooting.

To reset all changes to Factory defaults, click 

below the left-hand icons. To reset just the changes in the tab you are viewing, click

if it is available.

3.2.1. General

The default view of Preferences is the General tab under the General icon, where you can set Language, Main Window appearance, and dimensions to reflect your Machine Properties. Most of the Machine Properties default values are set according to standard FabLight manufacturing dimensions and do not need to be changed. FabCreator uses these values to check files for parts that are too big or small to properly load or run in the machine.

In cases where your dedicated application is always on stock material that is within FabCreator's default min and max values, it can be helpful to adjust those values to make personalized use of FabCreator's file verification feature. Properties that may be appropriate for you to personalize are explained below:

Tubes

Property	**Range**	**Explanation**
Max Tube Length	≤ 52in	The FabLight rotary space accepts tubes of lengths up to 52 inches. You may only lower this value.
Min Tube Length	≥ 0.001in	See "Tube Waste Material" below. You may only increase this value.
Round and Square/Rectangle Tube Min Diameter	≥ 0.5in	The standard FabLight rotary jaws accepts tubes of down to 0.5 inches in outer diameter. This applies to all the accepted shapes: round, square, and rectangle. You may only raise this value. If you wish to run a smaller application, contact us to request personalized jaws and we will try to work out a design for you. Refer to section "7. Service Through Freshdesk"
Round and Square/Rectangle Tube Max Diameter	≤ 2in	The standard FabLight rotary jaws accepts tubes of up to 2 inches in outer diameter. This applies to all the accepted shapes: round, square, and rectangle. You may only lower this value. If you wish to run a larger application, contact us to request personalized jaws and we will try to work out a design for you. Refer to section "7. Service Through Freshdesk"
Tube Waste Material	≥ 1.5in	Due to interference between the rotary chucks and cutting head box, the available job space on a tube starts after a 1.5 inch buffer space from both rotary chucks. That means the stock tube that is loaded must be at least 3 inches greater than the size of the job so there is material for the machine to clamp onto. This dedicated material space becomes waste for discard after the job finishes. You may only increase this value.

Round Tube 2D Cut Factor	≤ 0.5	2D cuts on round tubes are explained in section 4.4.3. of this manual. Due to how the nozzle interacts with the tube during a 2D cut, the Factory recommendation is no greater than a 0.5 factor. This is the limit for the percentage (as a decimal value) of the tube's outer diameter size that a 2D cut can be sized as. For example, if the default value of 0.25 is applied to a file for a 2" tube, a 2D cut feature can only be up to .5" wide. Exceeding the recommended value can lead to tip touch pauses or nozzle knockoffs.

Sheets

Property	Range	Explanation
Min Border (X and Y)	≥ 0in	This is where you can set the default value for margins in the X and the Y between the edges of the stock material and the bounding box of the job. The margin also applies when you Step & Repeat a part, which is explained in section 4.5.1. of this manual.
Bed Size Width (X)	≤ 50in	The FabLight bed space accepts sheets up to 50 inches long. You may only lower this value.
Bed Size Depth (Y)	≤ 25in	The FabLight bed space accepts sheets up to 25 inches wide. You may only lower this value.

General

Property	Range	Explanation
Material Thickness (Min and Max)	> 0in	Material thickness is only limited by what you can secure down to the pallet or rotary chuck (minimum) and what good Factory processes have been developed for (maximum). We currently have processes in our Factory databases for up to .188" thickness for all materials. Please submit a service request for process development if you have a thicker application you want to run. See section 7 of this manual for service information.
Raster DPI (X and Y)	N/A	The FabLight raster operation works by engraving a certain number of Dots Per Inch (DPI) to fill out a raster shape. The DPI value essentially represents the resolution of your raster, with greater DPI creating finer resolution at the cost of longer job time. Lower DPI runs faster but decreases resolution. You may set these to your preference.

3.2.2. Material Database

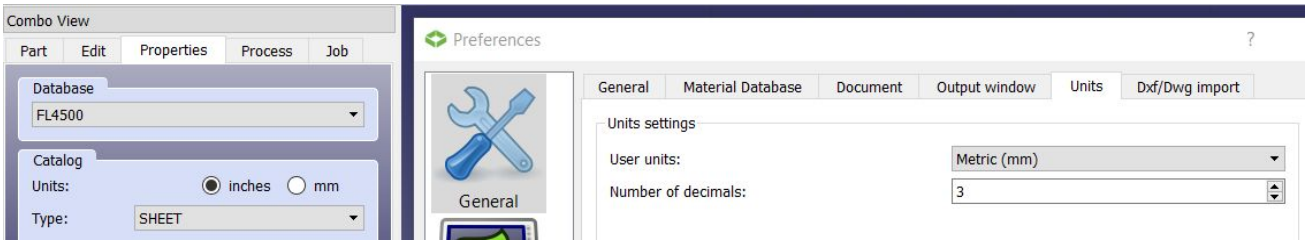
Your FabLight will be shipped with the most recent Factory database. We will also email you a copy of that database file (.db extension) to download for FabCreator use. To load a database file into FabCreator, go to Edit > Preferences > General > Material Database tab. Your FabLight will be one of

three power levels we manufacture: 1500, 3000, or 4500. Click on the ... button next to the appropriate power level to specify the location of the database file on your computer.

See section “3.3.4. Units” below for guidance on how to add material to a loaded database.

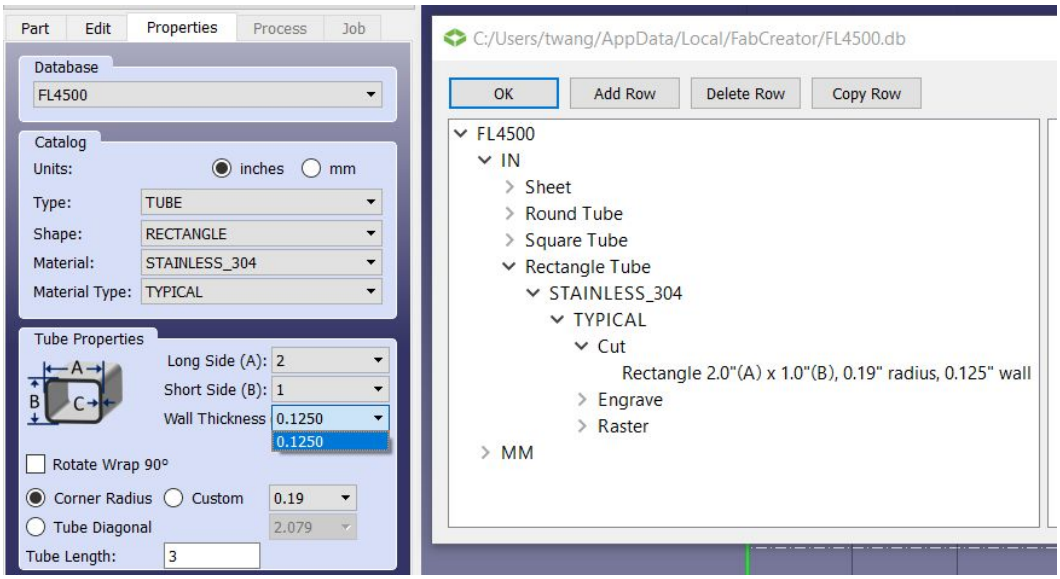
3.2.3. Units

You can select the unit system and number of significant figures for the overall FabCreator system. This applies to everywhere in the software EXCEPT the Properties tab of the job file you are making at any given time. The purpose for these two settings being unlinked is to enable users to enter the job properties in the unit system that the stock material was bought under, and process the rest of the job settings in the unit system they are personally used to. For example, if a European user familiar with the metric system wants to make a .fab file for stock material sold under the imperial system, they can fill out the Properties tab to match material dimensions easily in inches then arrange the Process and Job tab settings in their native millimeters.

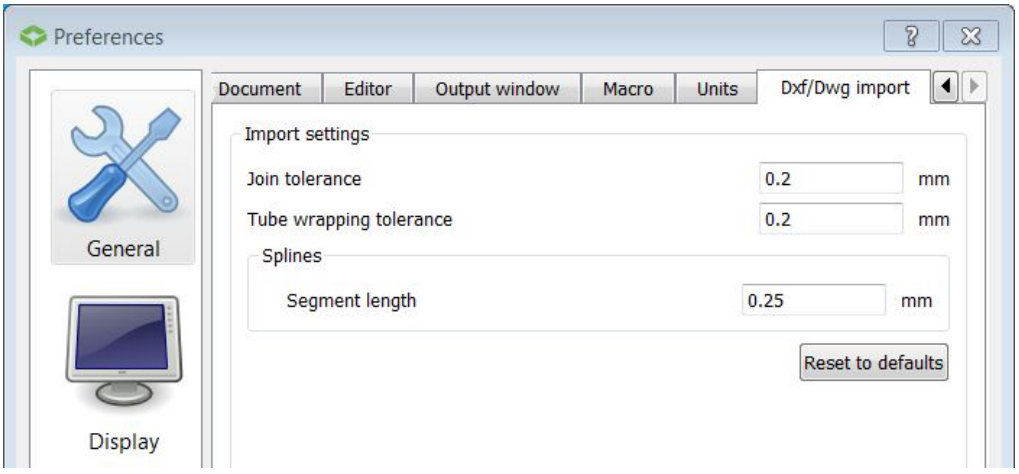


NOTE: The unit system you select in the job Properties tab applies both to the material dimension values you enter as well as what matching process is pulled from the database loaded in FabCreator. Please verify you have the correct Catalog and material dimension entries in your loaded database for unit system you are using.

To pull up the active database, click the icon in the toolbar. In the screenshot below, there is only one wall thickness option available in imperial units for a stainless rectangle typical tube because there is only one entry under that directory in the database. To add entries, navigate to the appropriate level in the directory tree and use the available buttons in the “OK” toolbar.



3.2.4. Dxf/Dwg Import Tab



Firstly, FabCreator checks imported files for entities that are within the “Join tolerance” value (default 0.2mm) distance from each other and automatically try to join them into a single entity. If those close by entities are themselves smaller than the “Join tolerance” value, you will see the Join Warning below upon

importing a file because FabCreator will not be sure which end of each small entity to attempt the join from.

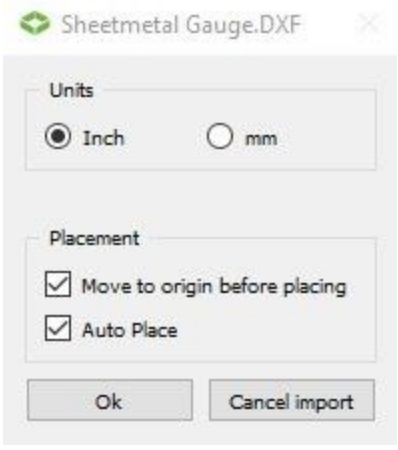
If you hit OK and the file looks ok, you can proceed. Otherwise, you can either lower the join tolerance or make the small features on your drawing larger.

Secondly, “Tube wrapping tolerance” (default 0.2mm) is how close you have to get white dotted bounding box around an unwrapped tube for it to indicate, by turning orange, that gaps will be successfully healed upon wrap. Refer to the bottom of section “4.3.4. Tube Properties” for more details on wrap matching.

Finally, FabCreator imports splines as polylines in segments set by the “Spline Segment length” (default 0.25mm). A smaller value results in smoother recreation of the spline but at the cost of longer job time. A higher value allows the job to run faster by replicating the spine in fewer segments.

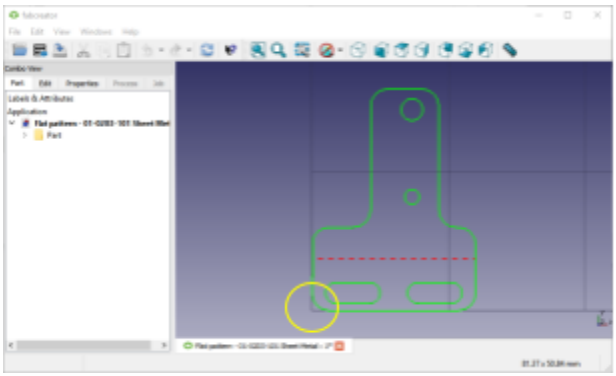
3.3. Importing

During import, pick the units that match the file being imported. If you created the file in mm, select Millimeters. A checkbox also allows you to move the part to the origin. This is recommended if you created the DXF with an origin not at the corner of the “bounding box” that would enclose the part. The Auto Place setting will automatically move the imported object outside of any existing object previously imported

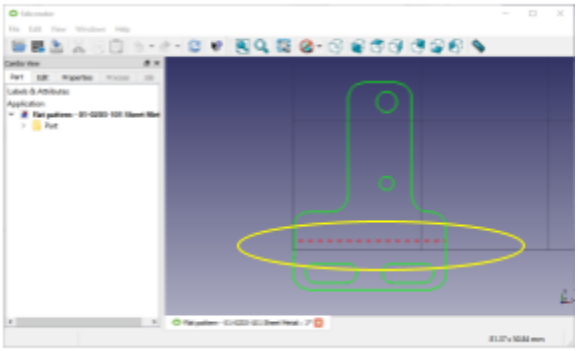


Here are two images showing an imported part. On the left is with “Move to Origin” checked, and on the right it is unchecked. Notice how the part on the right is below the black line grid that represents the

cutting bed. In general, it's recommended to check "Move to Origin" for imports. (It is also possible to do "Move to Origin" under the Properties tab if you forget.)



Left: "Move to Origin" checked on import.

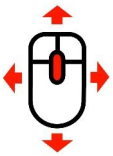
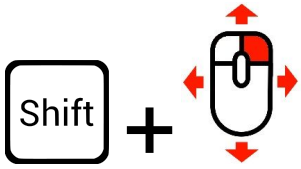


Right: Unchecked, drawings origin is below bed

This example part is a mounting bracket cut from flat sheet metal for use on the FabLight. It includes two slots for adjustment, two holes for mounting, and a bend line. We'll use this as the main example in this manual, with a few other tube examples mixed in.

3.4. Mouse Navigation

On all FabCreator screens, you can interact with the view of the part in two ways:

Pan (X -Y plane)		Use the Mouse Scroll Wheel (or Middle Button) to click and drag.
Rotate		Hold down the Shift key and right-clicking and moving the mouse. This is especially useful when looking at a tube preview on the Job Tab, covered below.

4. Tab Workflow

Once the part is imported, it is displayed with five tabs on the side panel: Part, Edit, Properties, Process, and Job. The concept is that you move from left to right along the tabs, and set the file up for export. When you first import a part, the Process and Job tabs are grayed out.

4.1. Part Tab

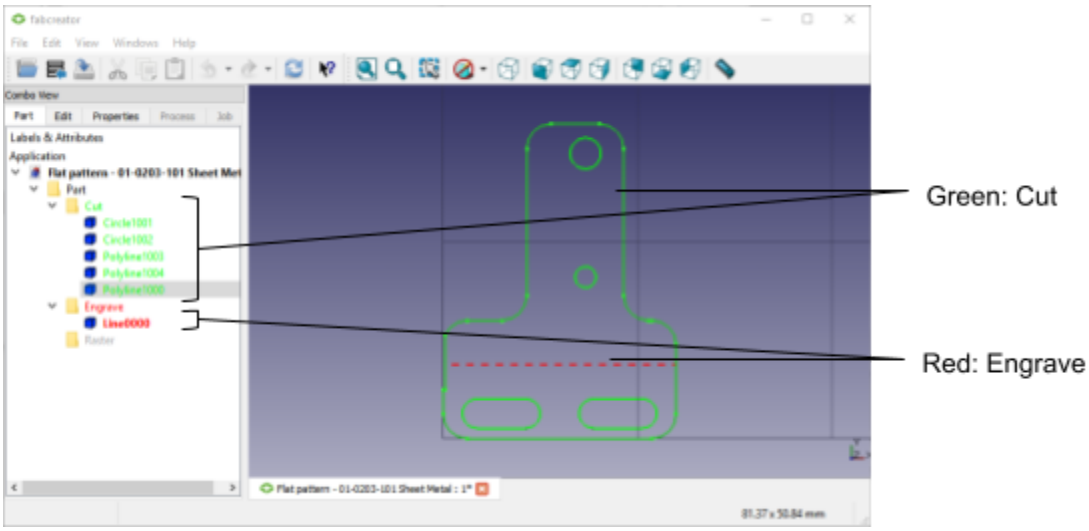
After importing, the file is displayed in the Part tab. A tree structure can be seen in the sidebar.

4.1.1. Process Groups

Expanding the tree structure reveals the process groups Cut, Engrave, and Raster and Reference. Further expanding each group reveals the Geometry items within. The color in the tree matches the color on the image:

- green represents geometry to “Cut,”
- red represents geometry to “Engrave,”
- blue represents geometry to “Raster” engrave.
- Black represents geometry that will not be cut.

In this example, the red dotted bend line will be engraved, and the rest of the green geometry will be cut.



4.1.2. Choosing Geometry Items

Each geometry item can be selected, either in the tree or by directly clicking in the image.

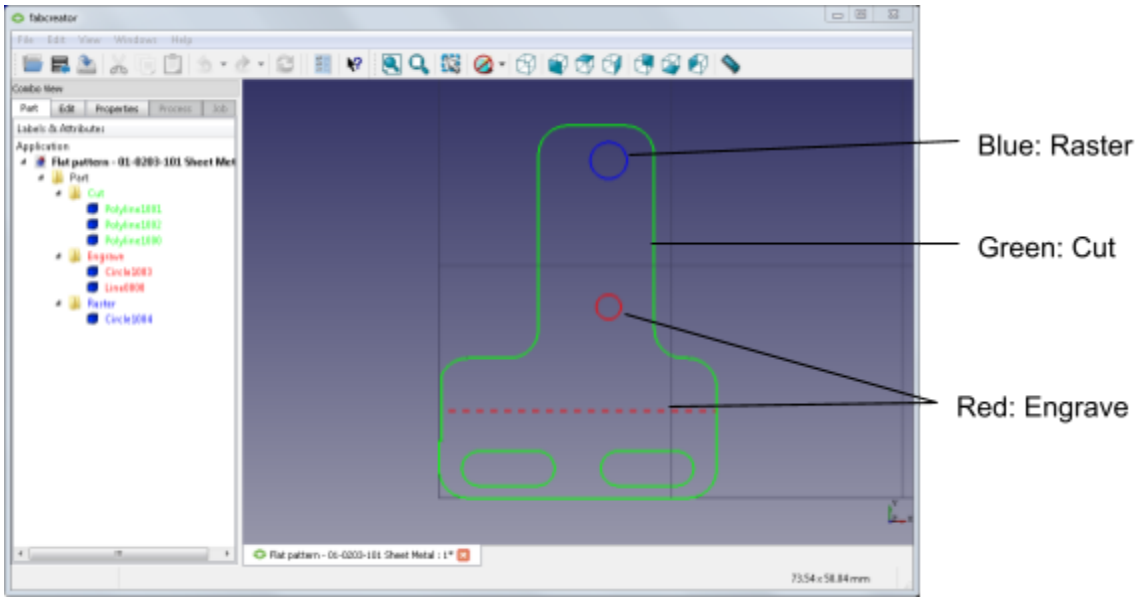
Multiple geometry items can be selected using the Group Select icon in the icon bar and dragging a box around the items.

Holding down the Ctrl key while clicking multiple items -- either in the tree, or directly on the image -- allows all of those geometry items to be selected at the same time.

4.1.3. Changing the Process or Cut Order of a Geometry Item

Geometry items are cut/engraved in order from top to bottom. You can drag and drop geometry items to change cut order.

The geometry items can be dragged between groups, and the color will change appropriately. Compare the picture below to the picture above, and see that the small circle is now red instead of green, since the Circle1003 geometry has been moved from the Cut group to the Engrave group. In addition, the large circle is now blue, since the Circle1004 geometry has been moved to the Raster group.



4.1.4. Some Notes on Raster

Any geometry in the Raster Group will be treated as a raster image and filled in if it is a closed shape

Raster images are automatically joined so they will not go in the order of the raster tree. If adjacent raster images are within 1” from each other, they will be rastered at the same time as a group. All raster images are automatically dithered around the edges.

The filling of raster parts is simple. FabCreator uses Island Detection to determine what areas will be filled and what areas wont. If you have a circle within a circle in the raster folder, only the area between those two circles will be filled.

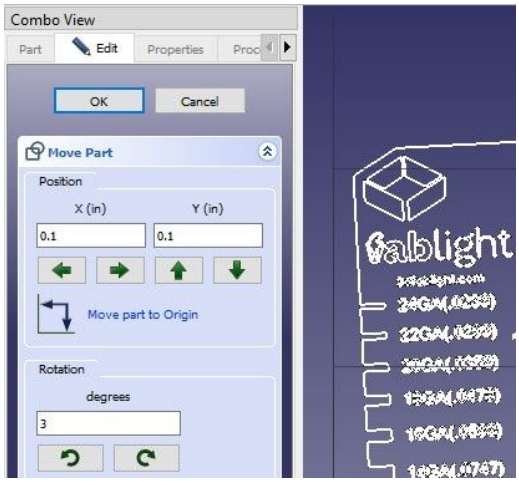
The Raster DPI (dots-per-inch) can be set for X and Y under Edit > Preferences... > General tab, at the bottom. The X-axis DPI is the one that determines the speed of the raster, with higher dpi meaning it will go slower and take longer. The Y-axis DPI can be arbitrarily high, since the laser is just turning on and off as it scans across the image. You can experiment with different settings to get the image quality you want.

4.2. Edit Tab

After the geometry items are all in the appropriate Groups, click to the next Edit tab, revealing four possibilities: Move Part, Move to Origin, Delete and Text.

4.2.1. Move / Rotate Part

Move / Rotate part lets you change the position and orientation of parts.



4.2.1. Move to Origin

If on import the “Move to Origin” checkbox was unchecked, or you have since moved a part, clicking on Move to Origin gives you four options for repositioning the part relative to the origin: Move to Origin, Move to X Origin, Move to Y Origin, and Reset Position.

NOTE: Moving the part to the origin in FabCreator is different from where on the machine the part will be cut. The origin in FabCreator will end up being the lower-left corner of the “bounding box” for the part, the soft home. The part itself can still be placed anywhere on the bed of the machine by jogging the cutting head.

4.2.2. Deleting Items

Directly clicking on geometry in the image and then clicking Delete will remove it, as will double clicking geometry then pressing the Delete key.

4.2.3. Editing Text

If text is imported as part of a DXF, it is automatically assigned to the Engrave group. Under the Edit tab, if you select the text and then click the Text option (or click the Text option and then select the text), it will bring up a box that allows editing. This includes bold, italic, alignment, font size, and font itself.

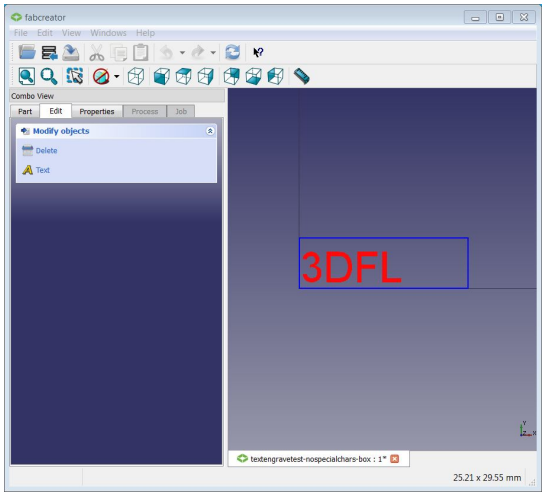
The Bold and Italic buttons will only be available if the font supports it. For a single selection, all edit features are available. For multiple selections, you will not be able to change the text or the alignment, only the size, font, bold or italic settings.

For multi-line text, if you change the font size, the space between the lines will be adjusted based on the new font size. For multiple selections of single line text, the space between the lines is not adjusted.

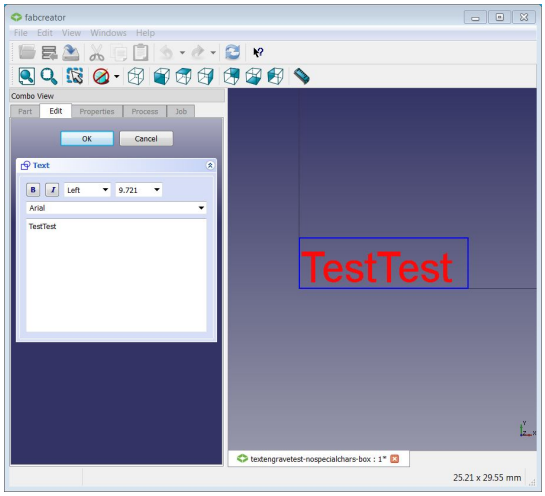
For fonts, oblique is treated the same as italic.

Click OK to accept any changes.

NOTE: Not all fonts work in this version and there is currently no feature to add new text in FabCreator.



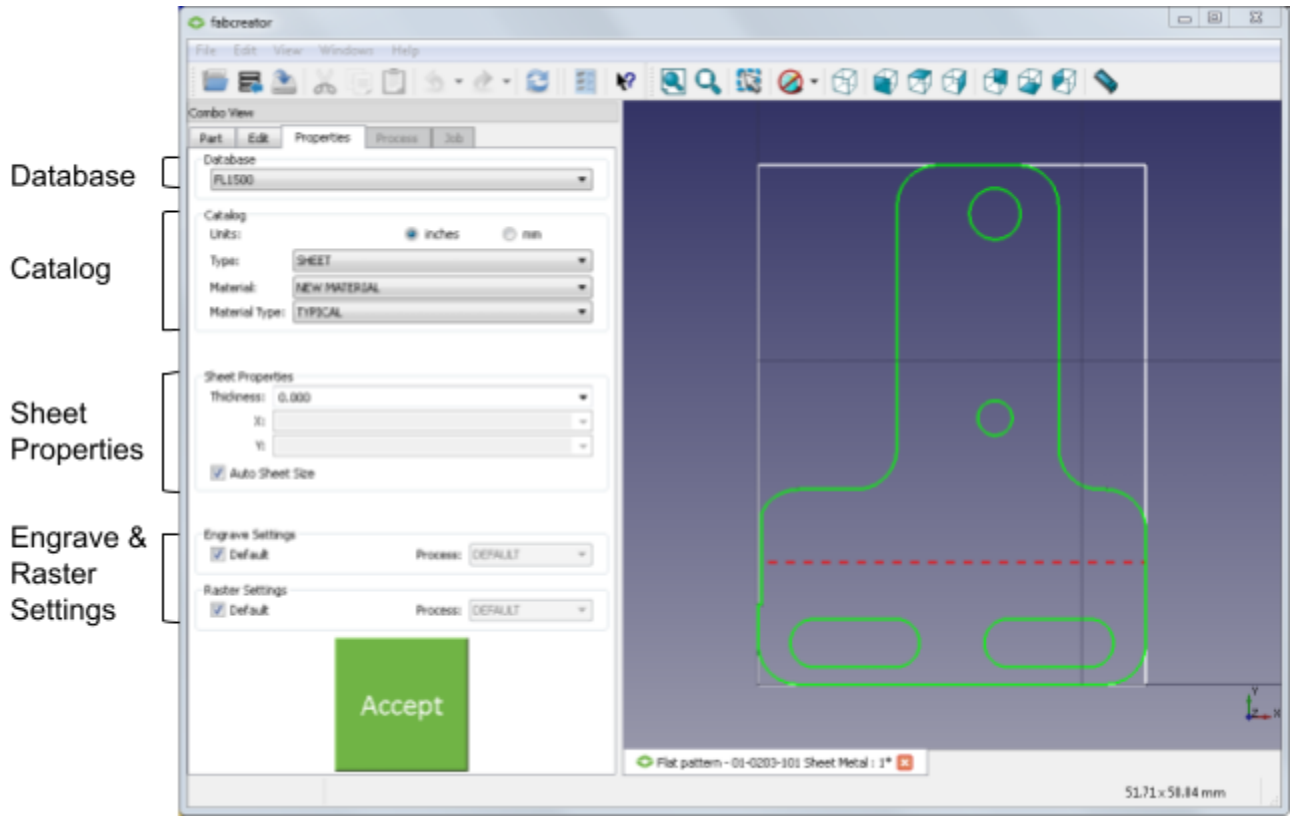
Left: Text imported from DXF (“before”)



Right: Text selected and edited (“after”)

4.3. Properties Tab

The Properties tab is where the material the part will be made from is specified. There are four main sections: Database, Catalog, Sheet Properties, and Engrave & Raster Settings.



4.3.1. Database

In the Database section there is a drop-down menu with the three FabLight models: FL1500, FL3000, and FL4500. Pick the FabLight model you have, and FabCreator will remember it until you change it (even after closing FabCreator).

If you choose a model and FabCreator can't find the database for it, a file location dialog box will appear.

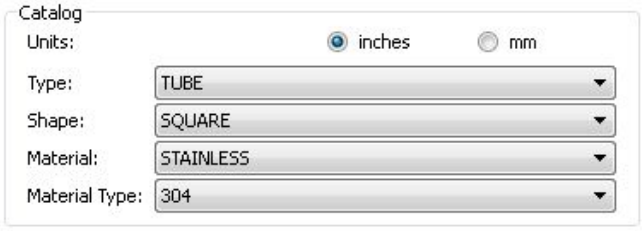
To edit a Database, see "Editing Materials In a Database" later in this section.

4.3.2. Catalog

The Catalog section allows you to pick a material from the chosen database. The choices include:

- Units: inches or mm. Refer to section “3.3.4. Units” for details on how this selection differs from the unit system you selected in Preferences.
- Type: Sheet or Tube
    - Shape (tube only): Rectangle, Round, or Square
- Material: This is the overall material such as stainless steel, copper, aluminum, etc.
- Material Type: This is the specific material variation, such as 304 Stainless

Sheet Catalog

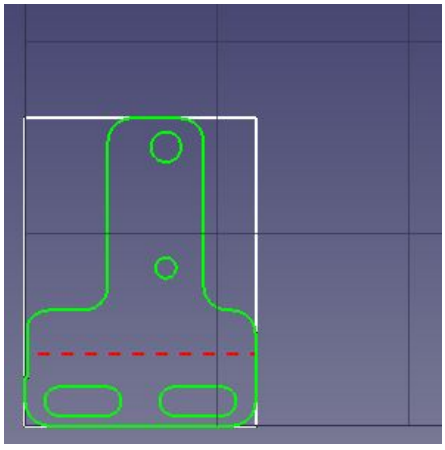


Tube Catalog

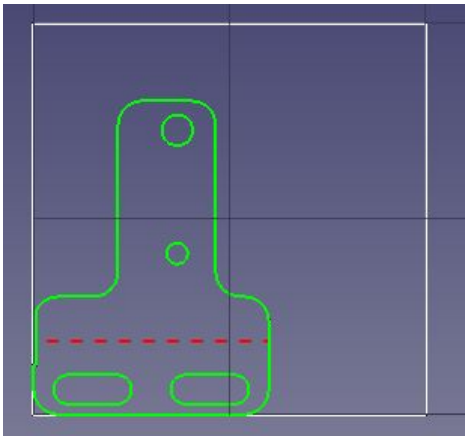
4.3.3. Sheet Properties

When the Sheet Type is chosen in the Catalog section, the Sheet Properties section lets you choose the material thickness.

By default, the “Auto Sheet Size” box is checked. The bounding box is shown in white as the minimum rectangle needed to enclose the part (see below left). To see if your part will fit onto a specific sized sheet of material, uncheck the box and type in the X and Y dimensions of the sheet (below right).



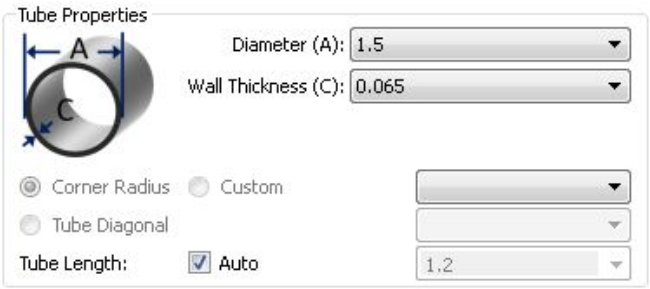
Auto Sheet Size

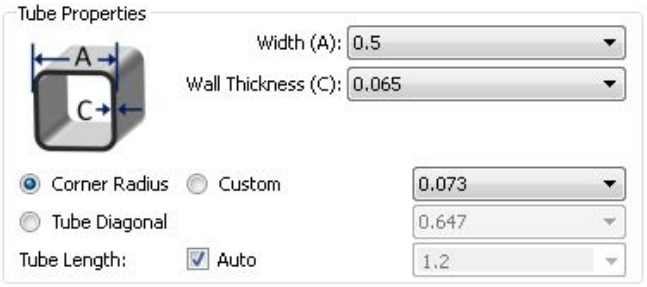


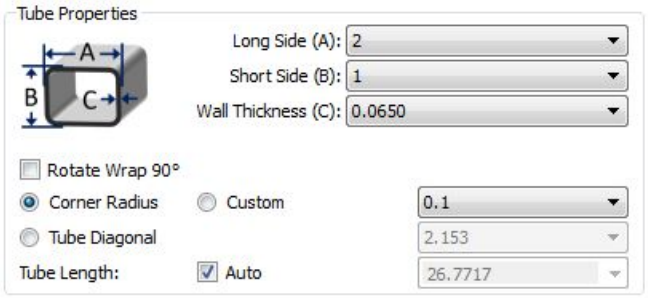
Specified Sheet Size

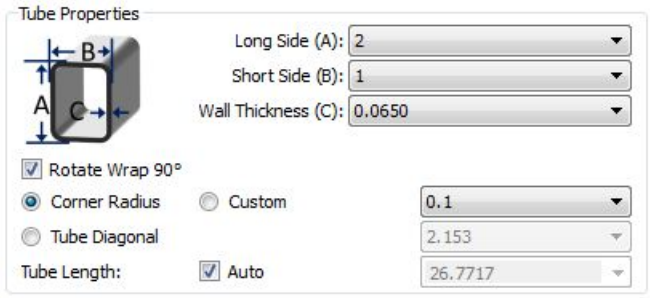
4.3.4. Tube Properties

When the Tube Type is chosen in the Catalog section, the Tube Properties section lets you pick the tube dimensions, wall thickness, and other properties depending on the tube shape.

<table>
<tr>
<td> 
</td>
<td>Round: Only the Diameter and Wall Thickness can be specified.

For all tube types (round, square, and rectangle) the Tube Length is optional, and can be used for previewing the job in a way similar to Auto Sheet Size, as described in Sheet Properties above.</td>
</tr>
<tr>
<td> 
</td>
<td>Square: The Width and Wall thickness can be specified.

In addition, the Corner Radius should be pre-defined based on the type of material. It is possible to override the corner radius by choosing Custom and filling in a value. An alternative is to pick a Tube Diagonal (or enter one in), which grays out the Corner Radius (and vice versa).</td>
</tr>
<tr>
<td> 


</td>
<td>Rectangle: This is very similar to Square, except the Long Side (A) and Short Side (B) are entered separately.

There is also a check box to Rotate Wrap 90 degrees. The A and B values stay the same, but they are essentially swapped on the wrap. You'll see the corner lines in the drawing adjust appropriately.</td>
</tr>
</table>

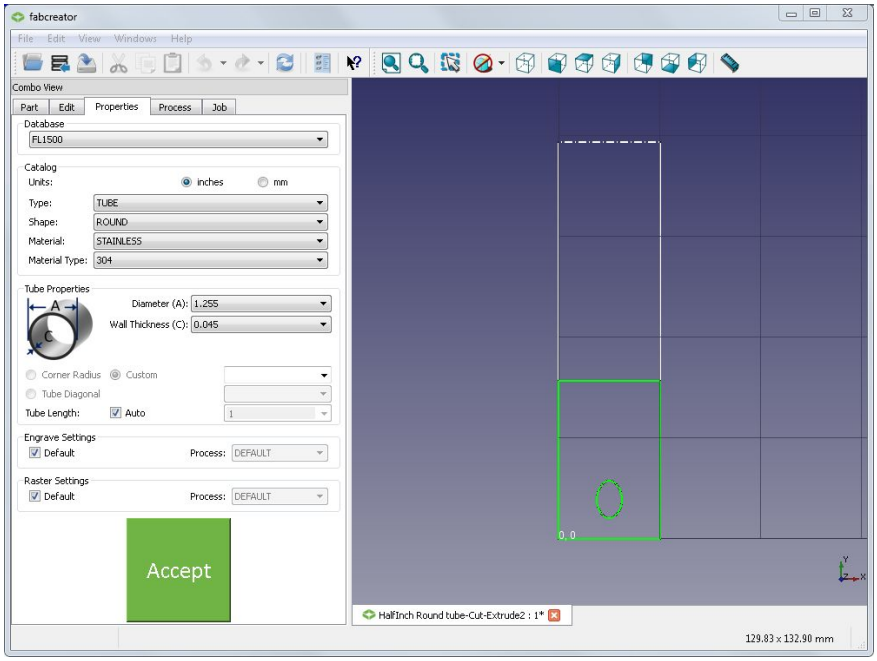
A Note on Corner Radius: The actual value of a corner radius can vary greatly from one tube manufacturer to another, especially for stainless steel and steel square tubes. The default value is meant to be a value that works for many tubes. It can be changed if your part is having trouble cutting on square corners.

If you use the Weldment Library we provide with the Solidworks Plugin, the corner radius is predetermined for square tubes as follows, based on the wall thickness:

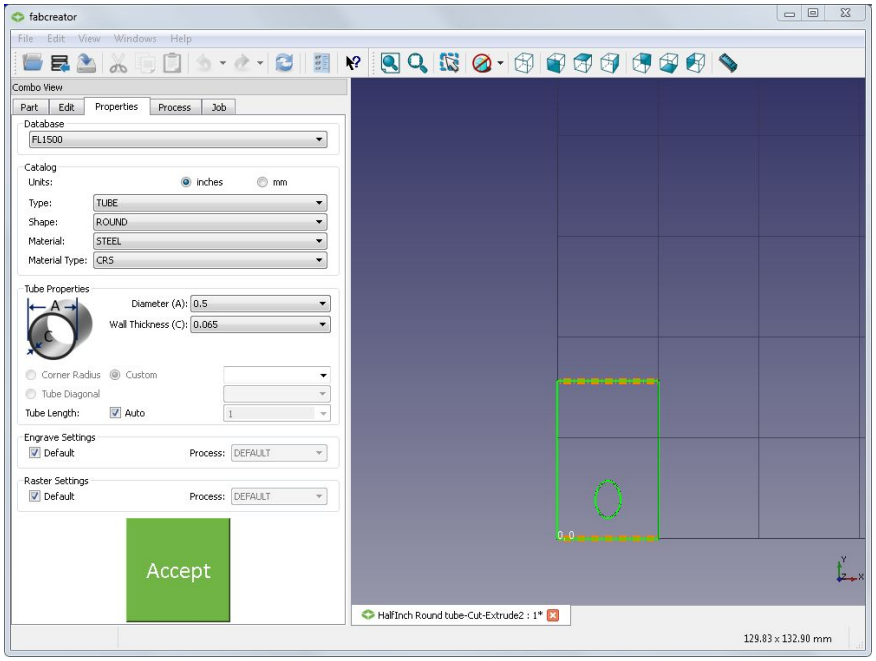
Wall Thickness (in)	Corner Radius (in)
0.065	0.07
0.120	0.13
0.180	0.25
0.250	0.38

If you are not using our weldments you may need to calculate your own geometry.

Since FabCreator imports 2D drawings, the “height” of the part drawing for an unwrapped tube must match the perimeter of the tube it will be cut on. In order to help visualize this, FabCreator shows a white box to represent the unwrapped dimensions of the tube as chosen in Tube Properties. In the images below, there is a 0.5-inch round tube file shown, first with a 1.255-inch tube selected (note white box is way too long), and then with the correct 0.5-inch tube selected. Also note the orange dashed line that FabCreator overlays onto the part to indicate that it will wrap exactly around the tube.



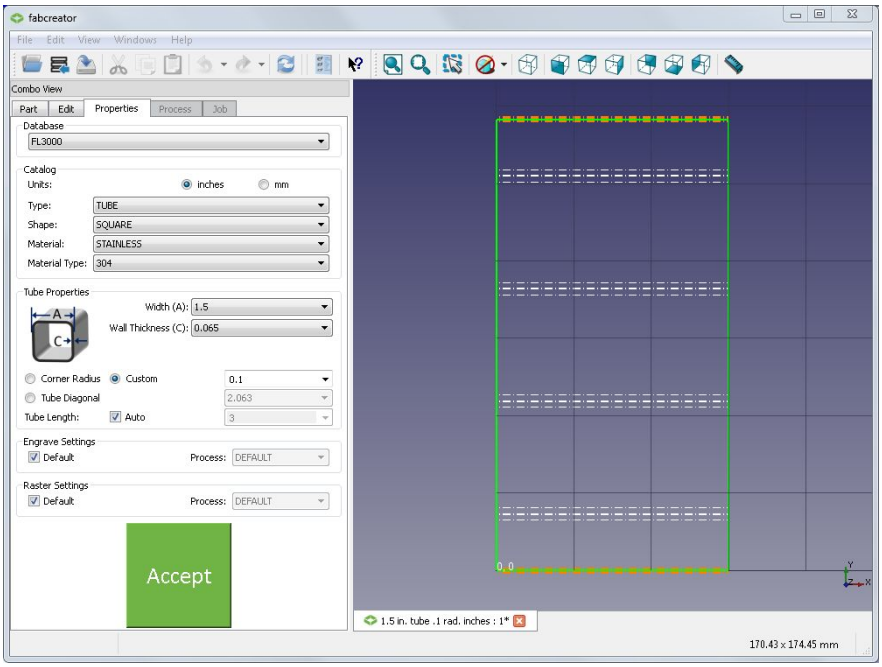
0.5-inch Round Tube file with 1.255-inch Round Tube selected -- Way too big!



0.5-inch Round Tube file with 0.5-inch Round Tube selected -- Just right!
Note the orange dashed lines on each end indicating the exact fit.

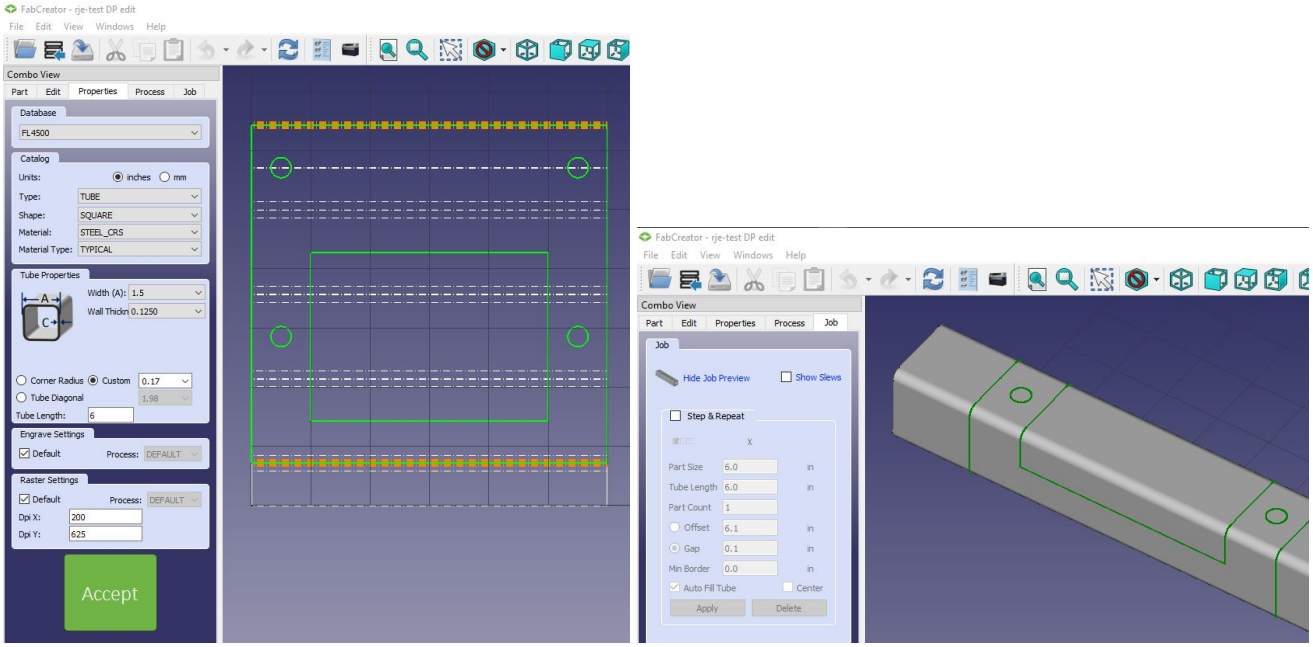
For Square and Rectangle tubes, FabCreator shows the corners, and the start and finish of each corner radius, as groups of three dashed lines. For the example shown, the split line for the unwrap is in the middle of one of the flat faces, and the four corners can be clearly seen. This is helpful for seeing where features will show up for each face of the cut.

Again note the orange dashed lines on the two ends that indicate the 1.5-inch square tube is the correct choice for this part.



1.5-inch Square Tube unwrapped, with corners represented as white dashed lines,
and the wrapped edge as orange dashed lines.

A note on square tubes: If you're having trouble with geometry along the slit, you can edit your cad so that the slit is anywhere on the tube, then move the geometry up with the edit tab an appropriate amount.



Slit located on the corner moved up via the edit tab so that it is still geometrically correct.

4.3.5. Engrave & Raster Settings

The settings for engrave or raster will be set depending on the material chosen. The Default box is checked to choose settings that provide good, general results. By unchecking the Default box, an alternative setting can be chosen. For example, you might create a process for a darker appearance option for raster on stainless. These can be added in the materials database (see Section 5. Editing Materials In a Database below).

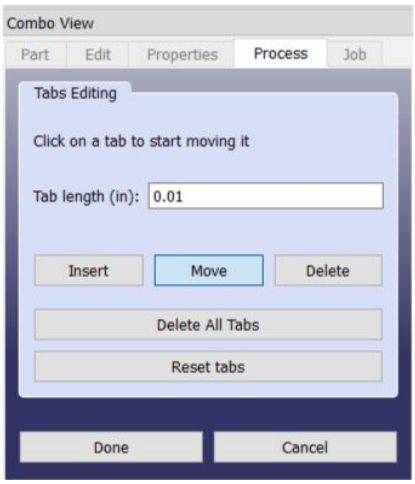
4.3.6. Accept

After all settings have been chosen, click the green Accept box at the bottom. This will activate the Process and Job tabs.

4.4. Process Tab

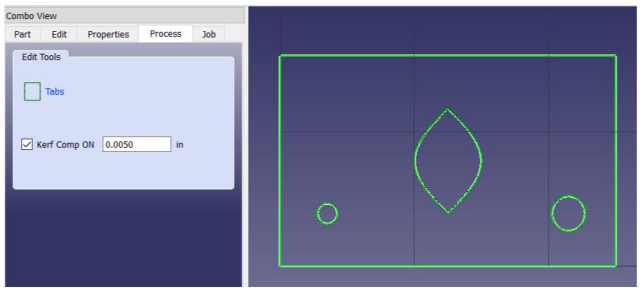
The Process tab currently allows editing of cut “tabs,” which are small breaks in the cut outline that either keep 2D parts from falling out of thin material, or keep tubes from collapsing as cuts are made.

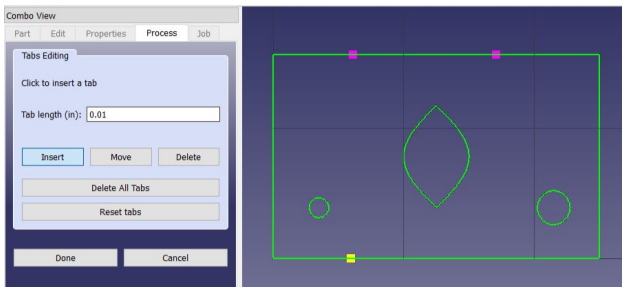
Clicking on the “Tabs” button reveals a number of options. The default Tab Length is 0.1mm or 0.01in. This can be made bigger or smaller depending on the application. When you switch unit systems in Preferences, tab lengths will be automatically converted, including for any changes you had made to the default value.



4.4.1. Tabs on Sheets

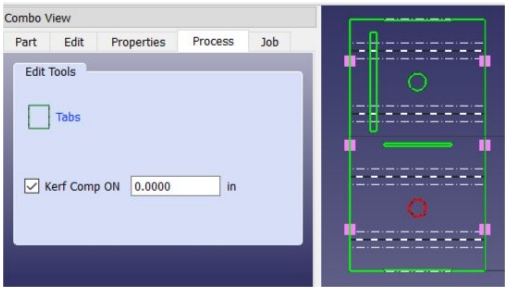
Tabs can be added to sheet parts by choosing the “Insert” button, then clicking on cut outlines where you want tabs to appear. They can be deleted by choosing the “Delete” button, then clicking on the tabs to be removed. Similarly, they can be moved by choosing the “Move” button, and clicking and dragging on tabs.

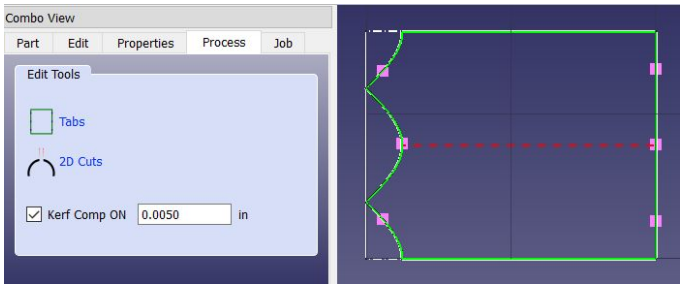




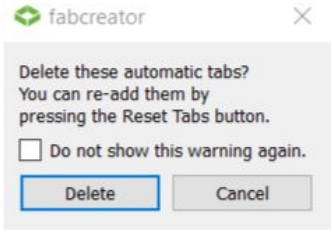
4.4.2. Tabs on Tubes

For all tubes, tabs are automatically added. These tabs can be moved together, or deleted. Additional tabs can also be added as needed, especially on cut out pieces that may fall during cutting. The images below show examples of automatically added tabs for square (left) and round (right) tubes.



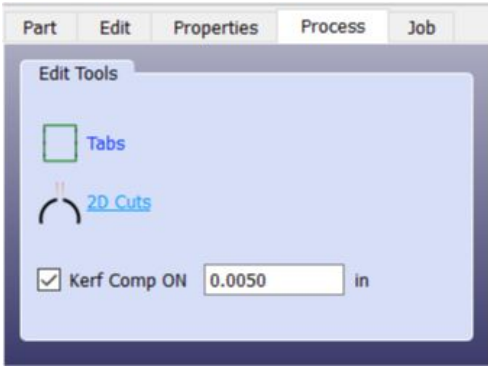


NOTE: If you try to delete the automatically added tabs, a warning pops up. If you choose to delete all tabs, they can be restored by choosing the “Reset Tabs” button.

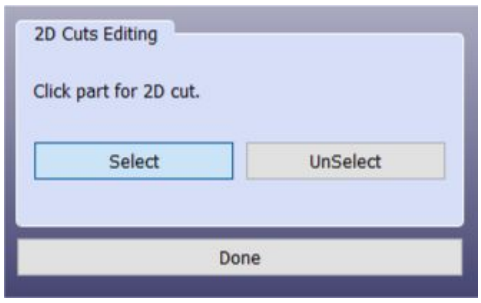


4.4.3. Round Tube 2D Cuts

Holes and other cutouts on round tubes will be cut by rotating the tube by default. To create a hole or cutout that is comparable to a drilled or milled hole, there is a button under Edit Tools for round tubes called “2D Cuts.”

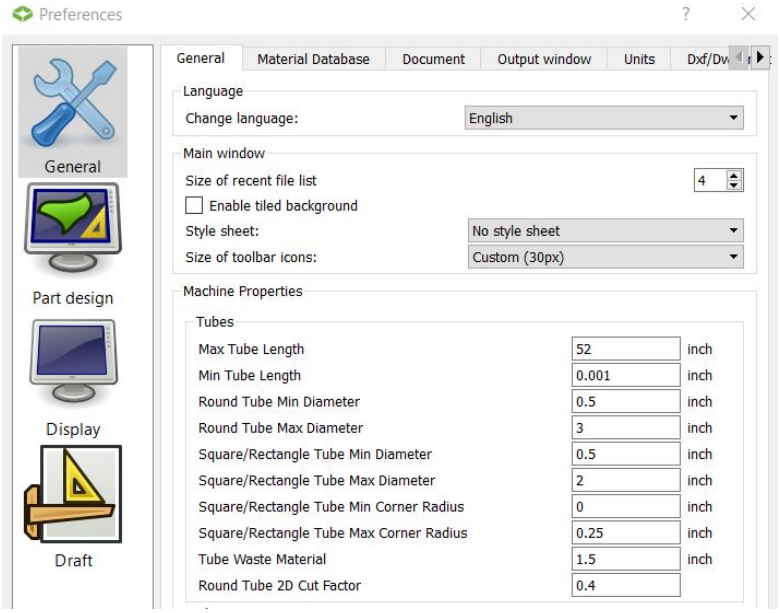


Clicking the 2D Cuts button brings up a “2D Cuts Editing” section.



Clicking on Select and then on geometry such as holes will outline them in black, which indicates that they will be cut WITHOUT using the rotation of the tube for the Y-axis direction. That is, the holes will be through-holes in the tube, much like a drilled hole. Clicking on “UnSelect” and then choosing geometry will return it to the original green.

NOTE: You can only choose entities in the Cut group.
ALSO NOTE: By default, geometry must be less than the radius of the tube in order to be selected. This can be increased under Preferences > General > Properties > Round Tube 2D Cut Factor



Click on Done when finished selecting 2D cuts, or Cancel to discard selections.

4.4.4. Kerf Compensation

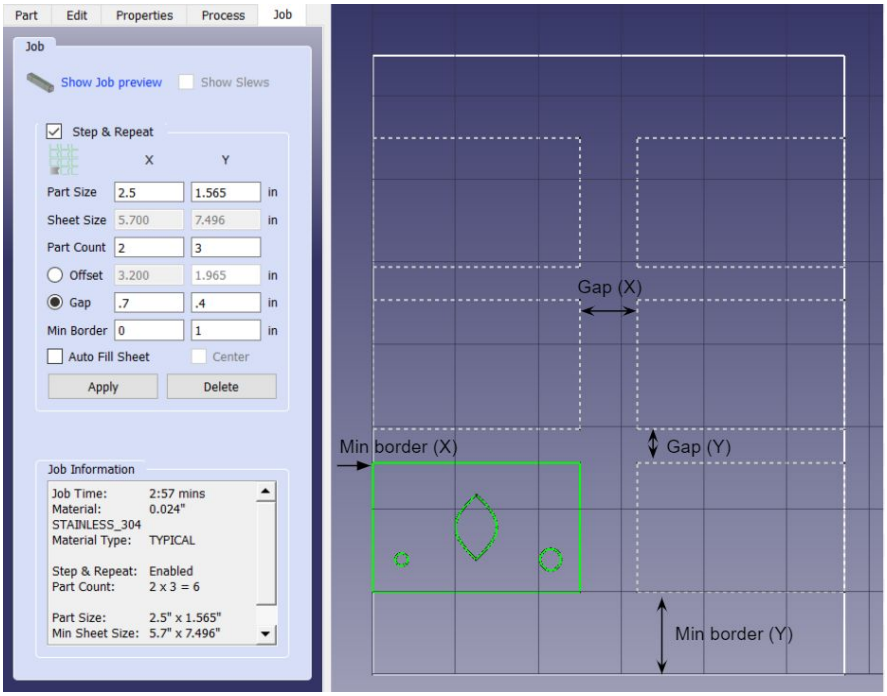
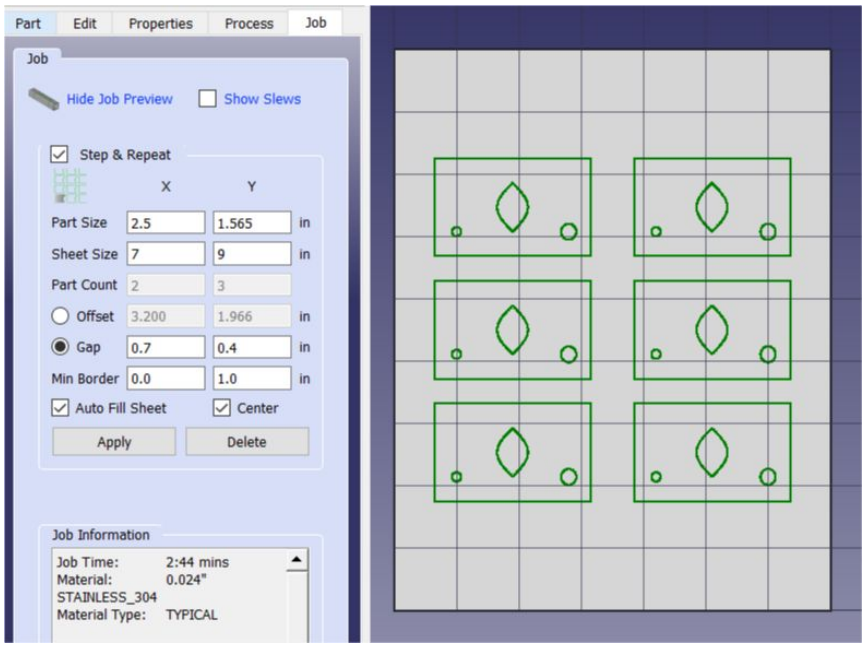
Kerf compensation can be turned on by entering a desired value if you want the laser to account for the width of metal it removes while performing the cut. A recommended value is 0.005 in, or 0.127 mm. You must hit the Enter button on your keyboard after entering the kerf value for it to be registered and saved to the Process tab before you switch to another tab. The white outline indicating the bounding box should offset from the outer green cut lines of the part according to the entered kerf compensation value.

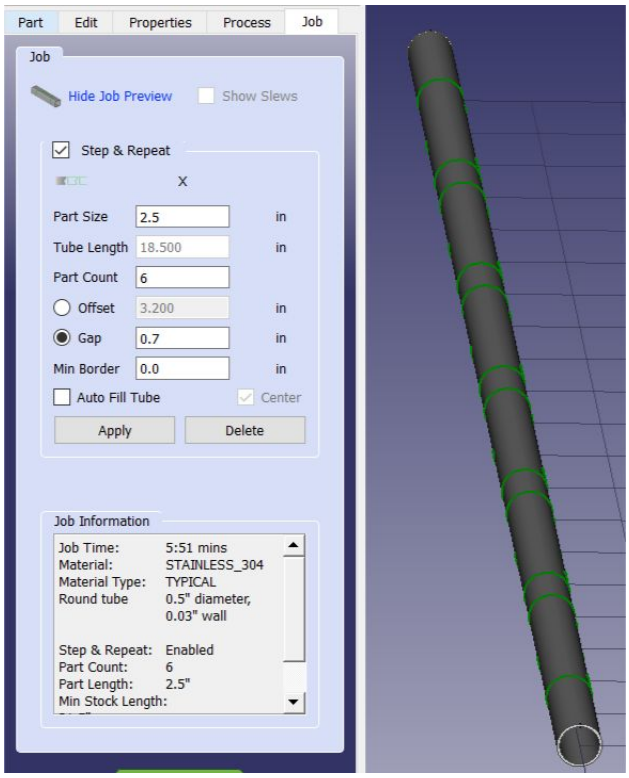
Kerf Compensation direction is determined via island detection. The outermost cut will have the kerf on the outside, the next cut inside that cut will have the kerf on the inside. This island detection includes reference geometries from the Part tab, so you may have to delete or add reference bounding boxes in order to get the kerf compensation on the correct side

4.5. Job Tab

After all the geometry has been processed, the final Job tab allows the file to be previewed by clicking on “Show Job preview”. For 2D pieces, it will highlight the overall part cutout. For tubes it will render what the wrapped tube part will look like. By clicking show Slews in Job Preview, it will show the paths that the cut head will take between features.

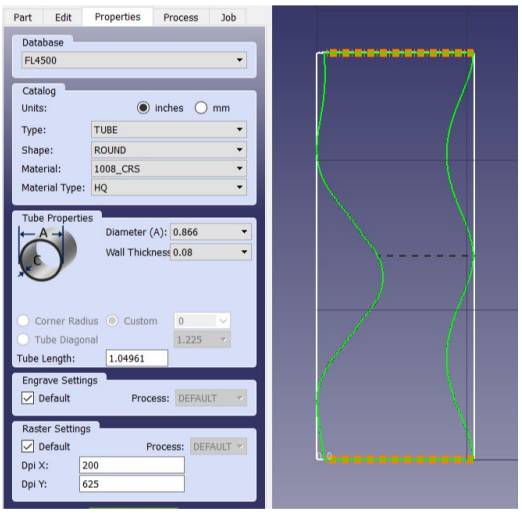
4.5.1. Step & Repeat a Part

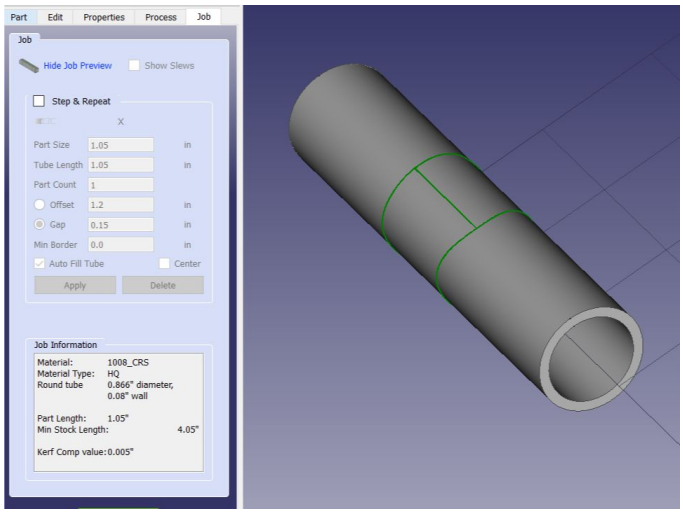
A single imported part can be arrayed across the sheet by turning on Step & Repeat. Sheets take both a X and Y value for array dimensions while tubes only take an X value. For example, if you want six identical sheet cuts, you could enter values of 2 for X and 3 for Y and hit Apply to see the white bounding box update to create a 2x3 array of parts. You can also set the gap between parts and margin between the array and the bounding box. See image to see locations of those variables.	
If you want to maximize the number of parts you can cut out of a specific sheet dimension, click Auto Fill Sheet and enter the sheet size. FabCreator will automatically set up an array within the sheet size according to your Gap and Min Border values. For Auto Fill Sheet, you can choose to center the generated array within your sheet space. Clicking on Show Job preview will allow you to see the job and its cut, raster, and engrave lines repeated to fill each box in the new array.	

Similarly, if you want six identical parts cut from one tube in the same job, you can Step & Repeat with just an X value and any other settings or Auto Filling you'd like.	

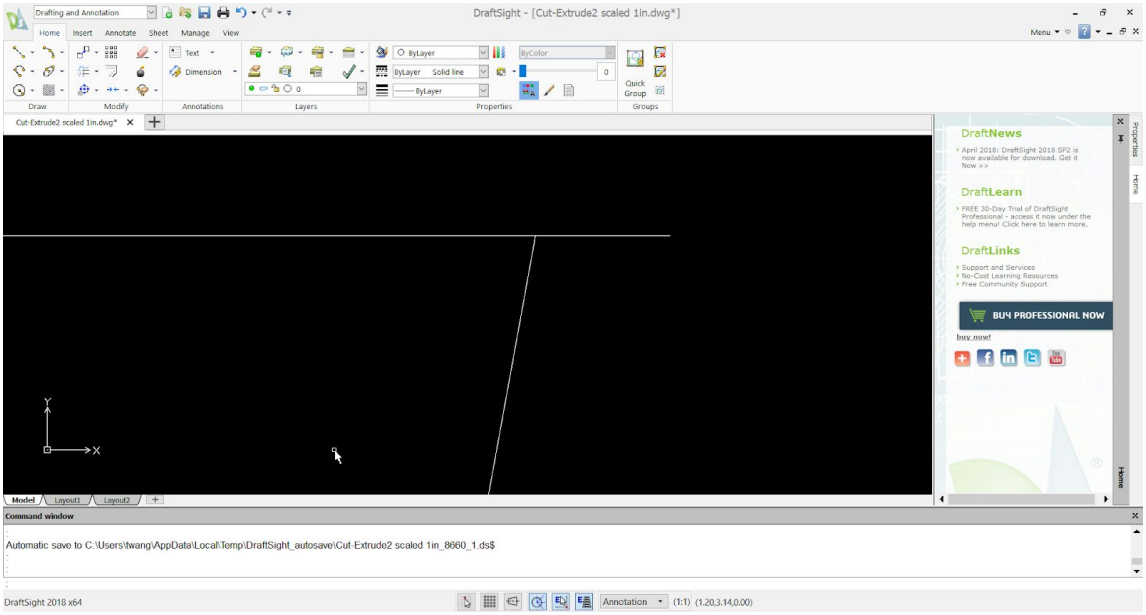
4.5.2. Incorrect Tube Wrapping

Something to look for when you Show Job Preview for a tube file is that the tube hasn't completely been wrapped, resulting in an unintended cut where the edges meet. This can happen even if the edges of the tube bounding box turn orange on the Properties tab, which indicates a size match.

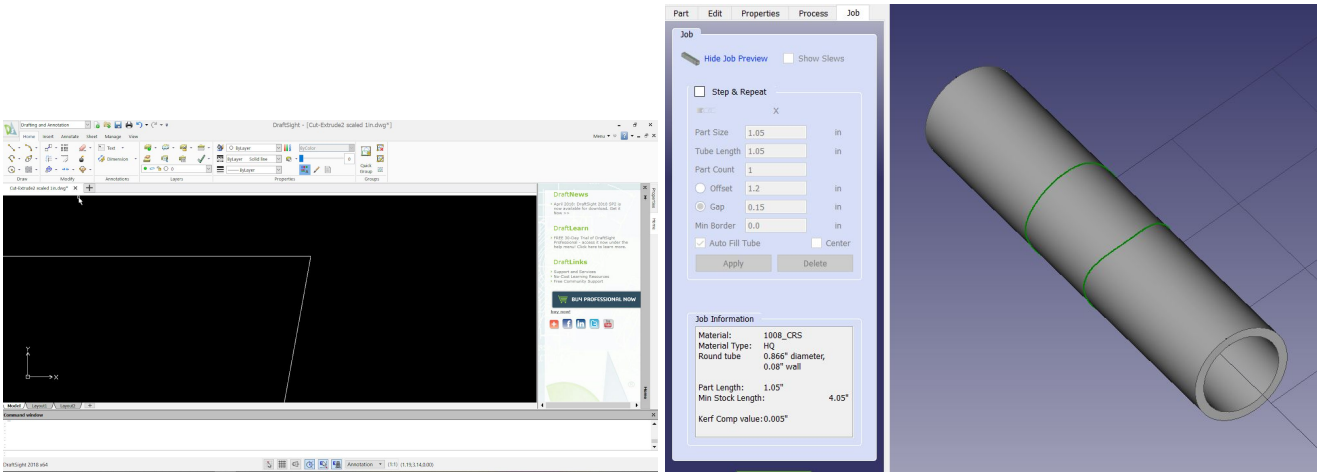




This mismatch might be caused by an unidentified error in the DXF in the edge areas. For example, the polylines may not be properly joined or extend past the corner where they meet.

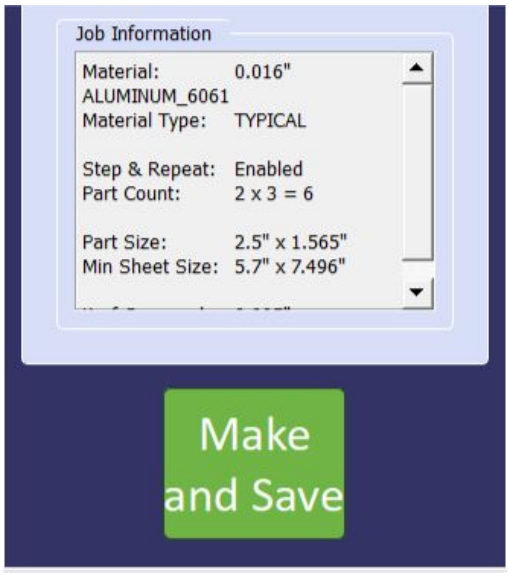


Zoom into the edges of your file and check for any mistakes in the design. Once those are corrected and all edge lines meet and close properly, the tube should wrap successfully.



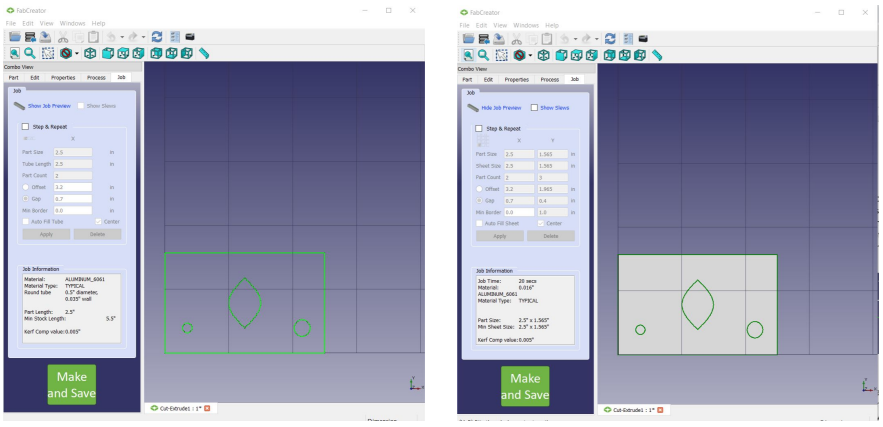
4.5.3. Make and Save the .FAB File

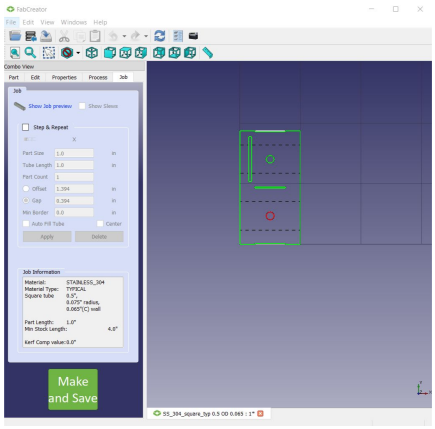
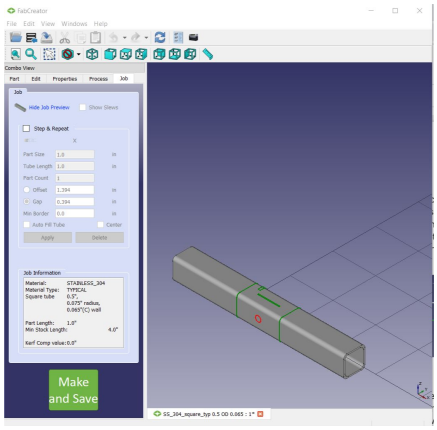
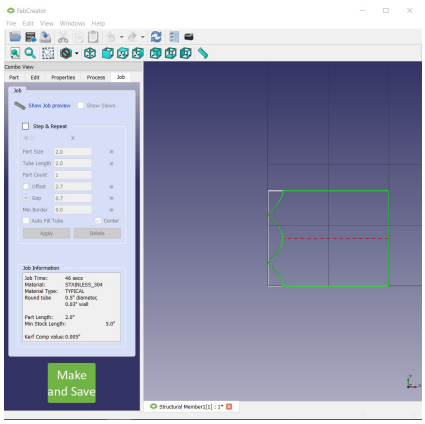
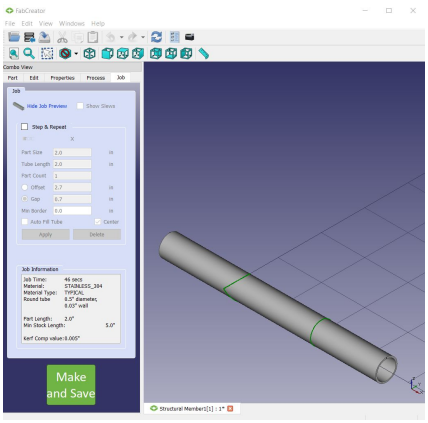
After viewing the preview, clicking on the MAKE AND SAVE button will prompt you to save the FabCreator file.



As described in Mouse Navigation, the preview can be:

- panned in the X-Y plane by using the Mouse Scroll Wheel (or Middle Button) to click and drag.
- rotated around by holding down the Shift key + right-clicking and moving the mouse.

Sheet metal part & preview:	

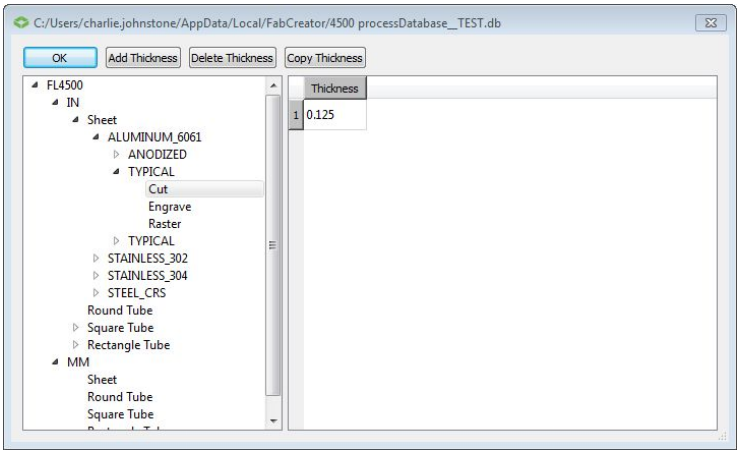
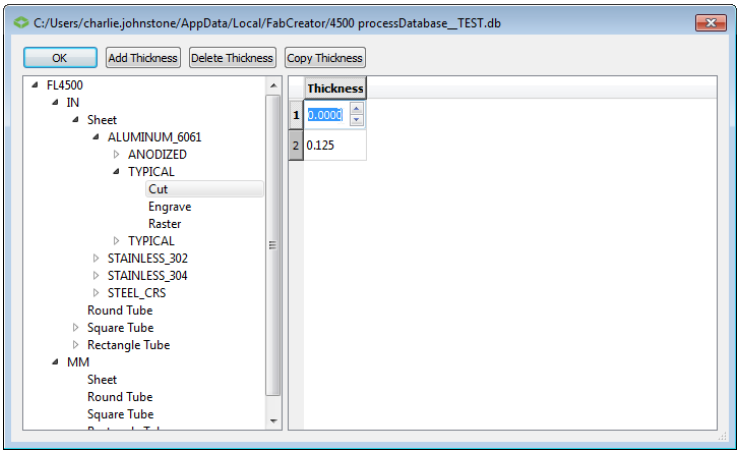
Square & rectangle tube part & preview:	 
Round tube part & preview:	 

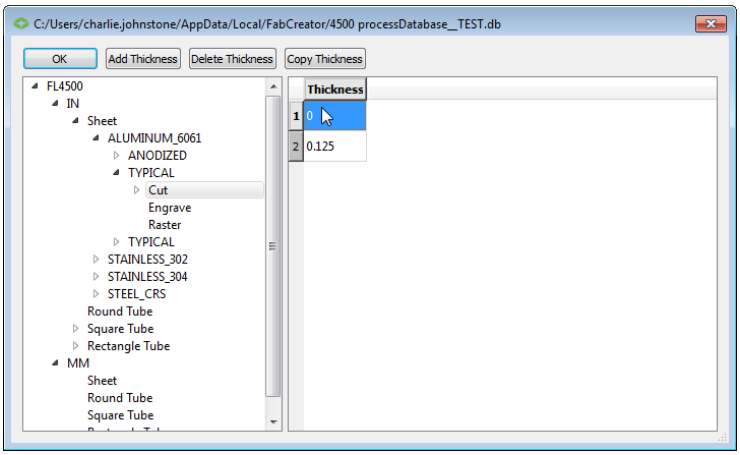
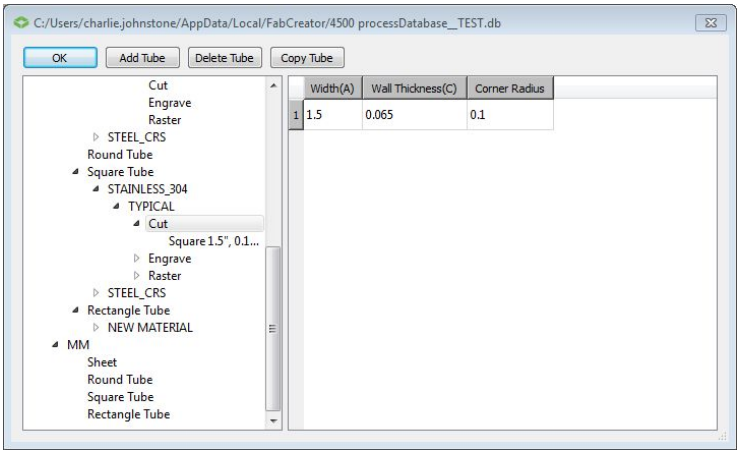
5. Editing Materials in a Database

If you want to add or remove a material, you can edit the database by clicking on the icon in the toolbar. This will edit the database currently selected in the Database section of the Properties tab. Alternatively, you can go into the Edit > Preferences… menu, and in the general section under the Material Databases tab click the button to edit that database.

<table>
<tr>
<td>The database is a tree structure that follows the Catalog hierarchy from the Properties tab. In this example, it is showing:

Database: FL4500
Units: IN
Type: SHEET
Material: ALUMINUM_6061
Material Type: TYPICAL
Process: CUT
Thickness: 0.125

</td>
<td> 
</td>
</tr>
<tr>
<td>To add another thickness, click on the Add Thickness button , and a new line appears with a 0. If you double-click in that box, you can enter a new thickness. This is how you can build up a list of custom thicknesses.</td>
<td> 
</td>
</tr>
</table>

If you single-click the box, you can click the Copy Thickness or Delete Thickness buttons (to copy or delete the thickness). This same principle of adding, editing, deleting, and copying works across most elements of the database. For Cut, various thicknesses can be added. For Engrave and Raster, there is always a DEFAULT process, but variations such as DARK and PRECISE can be added, with variations in the processes.	
The Tube processes are very similar, except that Cut values require a dimension, a wall thickness, and a corner radius (for square and rectangular). And things are exactly the same for metric (MM), except the values are entered in millimeters instead of inches.	

5.1. Stock Properties DB File Location & Management

You can point to a DB file in another folder by clicking on and finding one. It doesn't need to be in that hidden AppData folder. But it can be useful to know how to find it.

5.2. A Note About the Materials on the Machine

When you add materials in FabCreator, the process table on the machine's HMI will not know about them. When you load the file onto the HMI, you will be presented with the opportunity to create a new process by either copying an existing process for adaptation, or by entering a new process entirely. See the FabLight Operator's Manual for more on creating processes on the HMI.

6. Running a FAB File

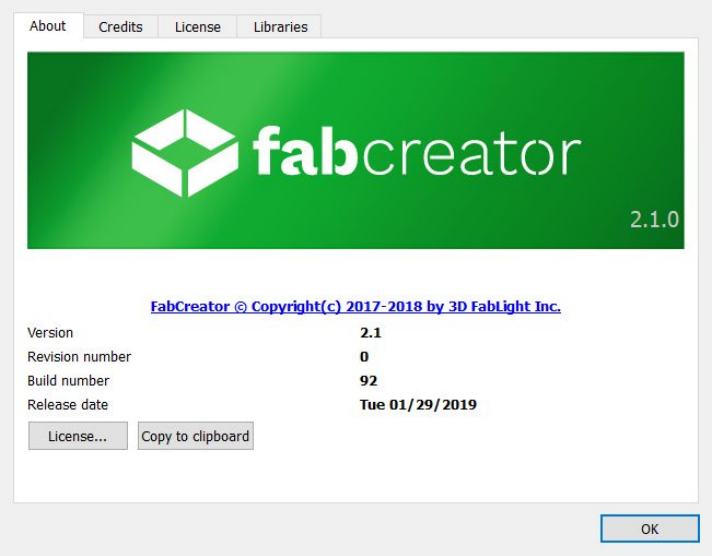
Copy the FAB file to a USB flash drive, and bring it over to the FabLight. Refer to the FabLight Operator's Manual for instructions on how to run the job on the machine.

7. Installing a Newer Version of FabCreator

New releases of FabCreator will be provided by a FabLight technician.

NOTE: We don't yet have automatic checks for newer versions.

To find out what version you currently have installed, go to the Help > About FabCreator menu. There you will find the version number and release date of your install.



8. Service Through Freshdesk

If a file is giving you trouble, or you need help processing it, you can attach it to a ticket on Freshdesk. Please include any relevant Solidworks or imported DXF files. You may also submit tickets about FabCreator bugs or feature requests through Freshdesk.

You can create an account here: https://3dfablight.freshdesk.com