

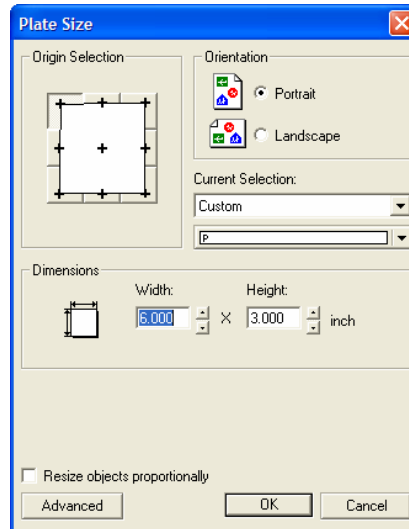
# Setting up the Roland EGX-300 and EngraveLab to cut IkonicsMetal

## Setting Up the Roland EGX-300:

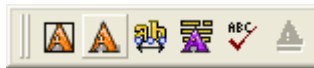
1. Power unit off
2. Remove any existing tools and install the 11/64" solid collet to the bottom of the spindle unit.
3. Remove cutter and Install the brass cutter knob to the top of the spindle.
4. Load material on the table (lower left hand side).
5. Power on the EGX-300 and press the ENTER key to initialize the unit.
6. Once the unit finishes initializing, press the ←, →, ↑, ↓ keys to move the carriage to the lower left corner of the material.
7. Looking through the cutter knob, position the spindle just over the lower left corner of the material that is loaded on the table.
8. Press the ENTER key to display the POSITION SET menu.
9. Using the arrow keys, move the blinking cursor over the XY-Axis and press the ENTER key (the display should read SET HOME POS).
10. Press the ENTER key, the display will ask if you are sure. Move the cursor over the "Y" and press the ENTER key to set the home position. Once set, press the MENU key until you get to the default menu (X, Y, Z menu)
11. Using the arrow keys, move the carriage over a flat spot on the material (anywhere other than the corner).
12. Press the Z- key to bring the Z Axis to roughly 0.5" above the surface of the material (key is to have enough distance for the cutter to cut all the way through the material).
13. Insert the cutter into the cutter holder until the tool touches the surface of the material.
14. Press the ENTER key to display the POSITION SET menu.
15. Using the arrow keys, move the blinking cursor over the Z-Axis and press the ENTER key (the display should read SET Z1 Z0 Z2).
16. Move the cursor over the Z0 position and press the ENTER key, the display will ask if you are sure. Move the cursor over the "Y" and press the ENTER key to set the home position.
17. Press the Z+ key to bring the tip of the cutter above the material about .125" then using the arrow keys, move the cursor over the Z2 position and press ENTER to set your clearance height.
18. Once set, press the MENU key until you get to the default menu (X, Y, Z menu).

## Setting Up EngraveLab Software and Driver for Roland EGX-300:

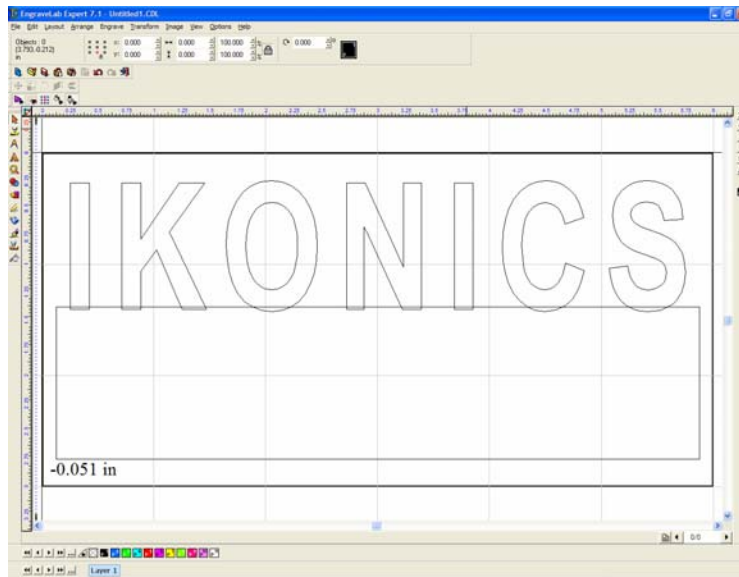
1. Launch EngraveLab.
2. Click on Layout and Plate Size to set up the material size you will be working with.



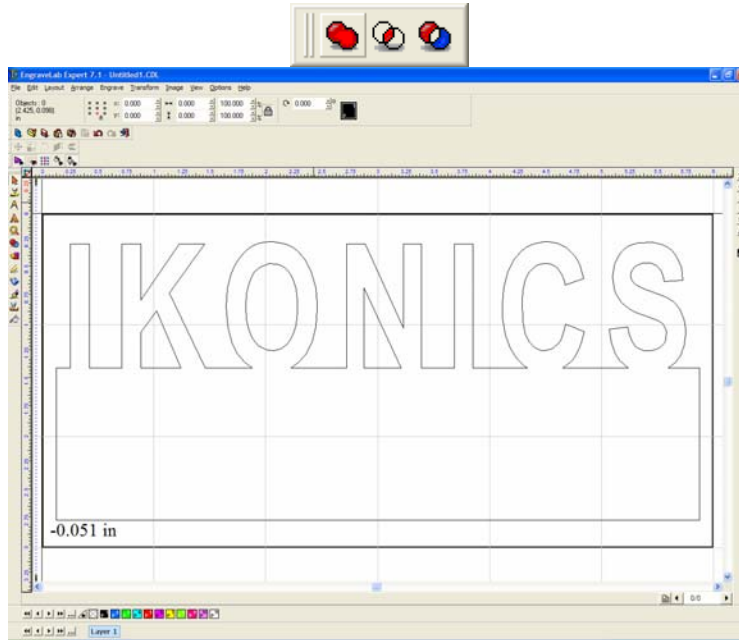
3. Select Text Compose.



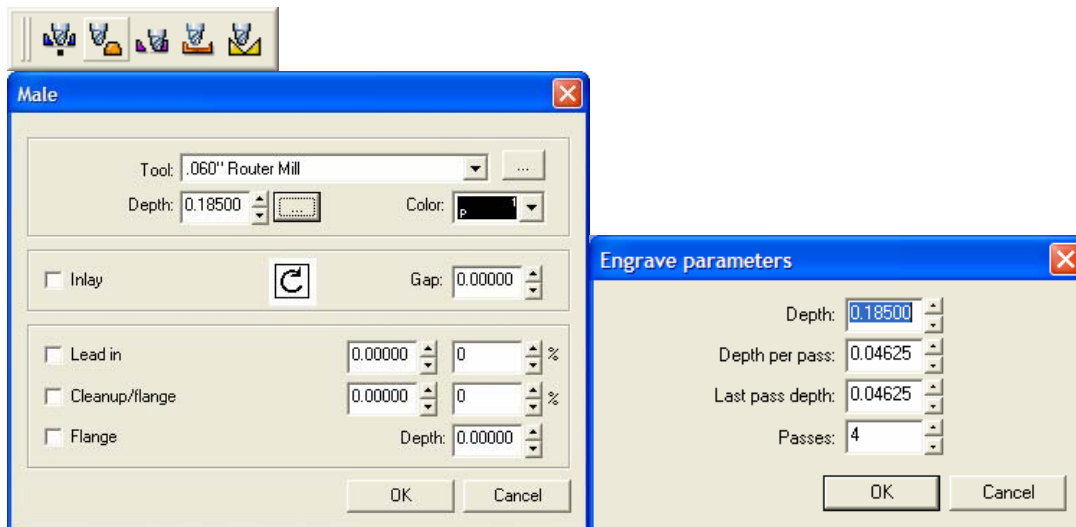
4. Click and drag to create the text field and type in your desired text and resize as necessary. Also, select a shape tool to create the rectangular shape to weld the text onto.



- Overlap the rectangle over the text slightly and select both objects you want to weld.
- Using the Weld tool, do a basic Weld to combine the text with the graphic rectangle.

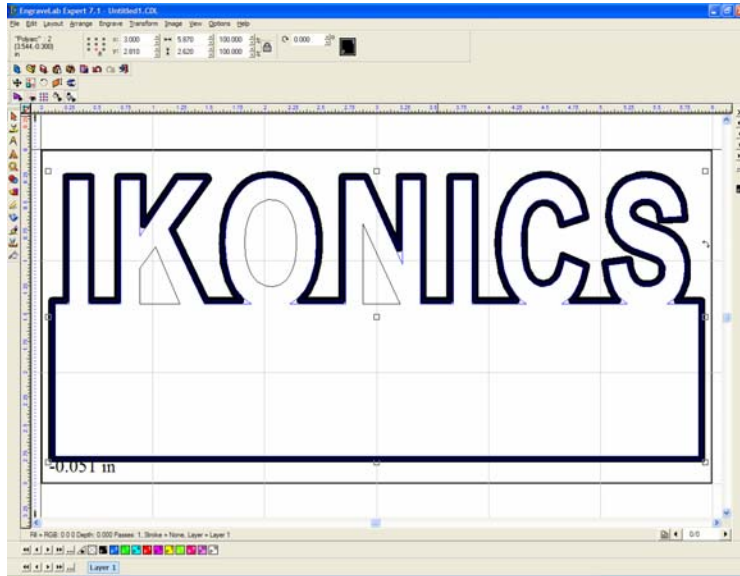


- Select the graphic and click on Arrange and Break Path. This will break up the polylines in order to arrange and apply both Male and Female Tool Paths.
- Select the outside line and click on Arrange and Make Path.
- Click on the Toolpath Icon from the toolbar menu and select Male Toolpath.

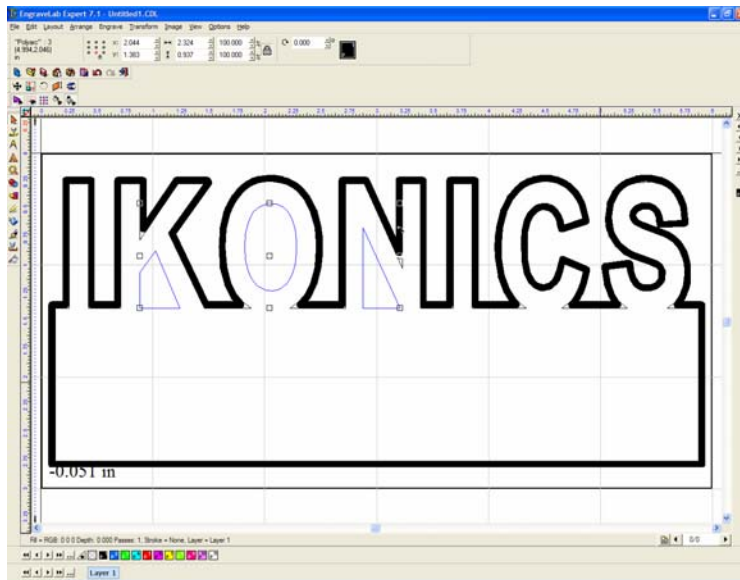


- In the Male Window, select the appropriate tool to engrave and set the depth. Click on the box to the right of the depth and set the passes to 4 and click OK and OK.

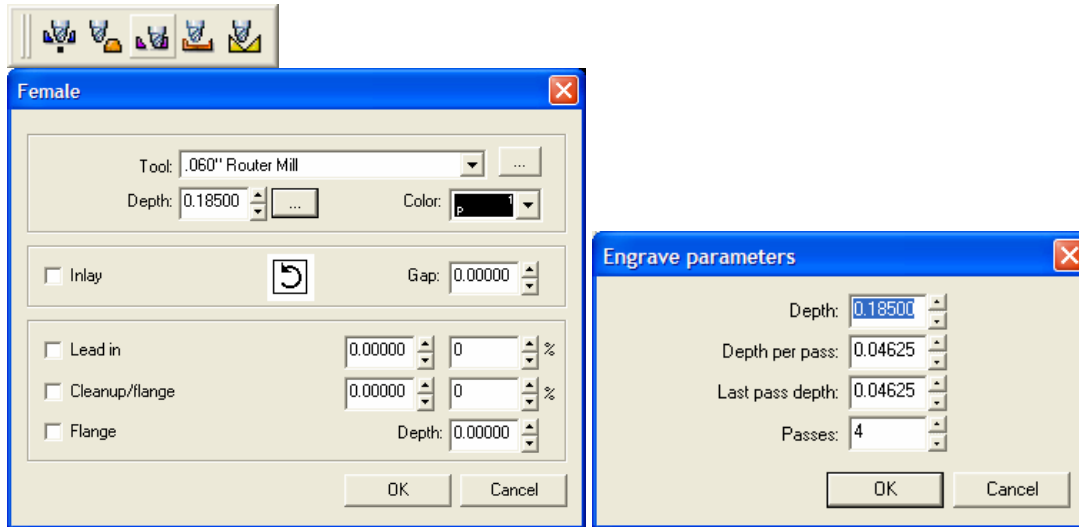
11. When you come back to the screen, your file should have the Toolpath applied to it. If the Toolpath does not show, this means that the tool is too big for the Toolpath.



12. Select the inner lines (hold the shift key to select multiple objects), then click on Arrange and Make Path to combine the lines.

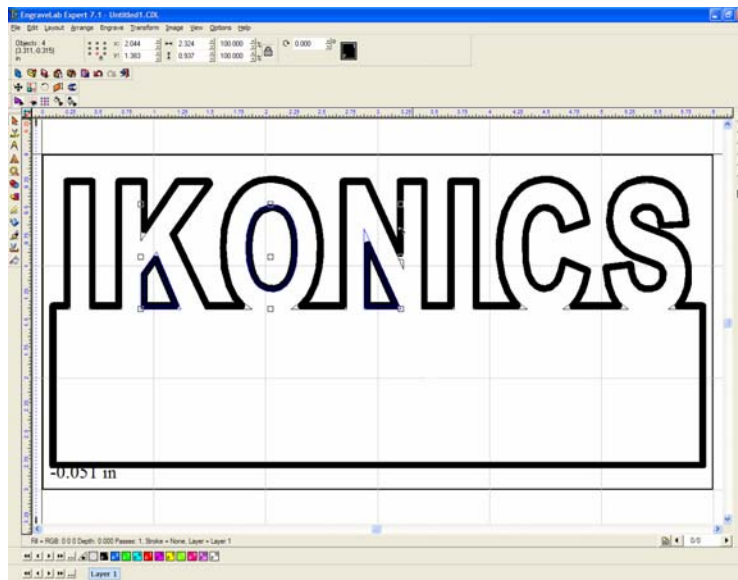


13. Click on the Toolpath Icon from the toolbar menu and select Female Toolpath.



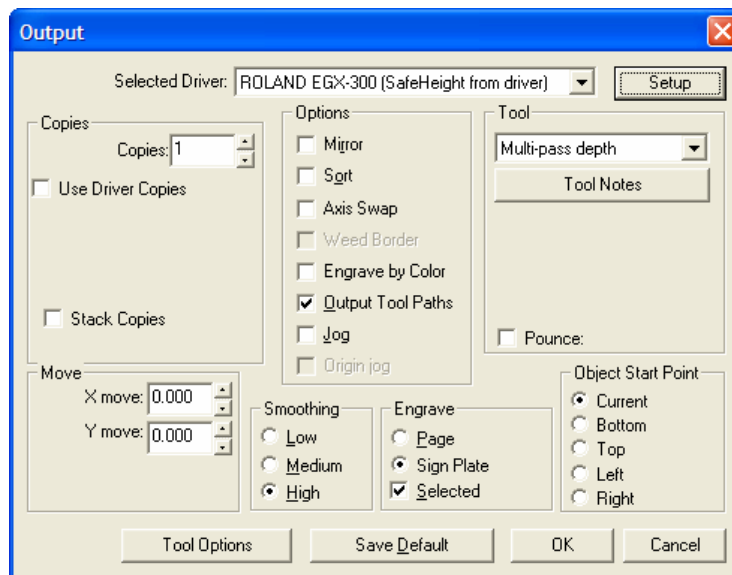
14. In the Female Window, select the appropriate tool to engrave and set the depth. Click on the box to the right of the depth and set the passes to 4 and click OK and OK.

15. When you come back to the screen, your file should have the Toolpath applied to it. If the Toolpath does not show, this means that the tool is too big for the Toolpath.

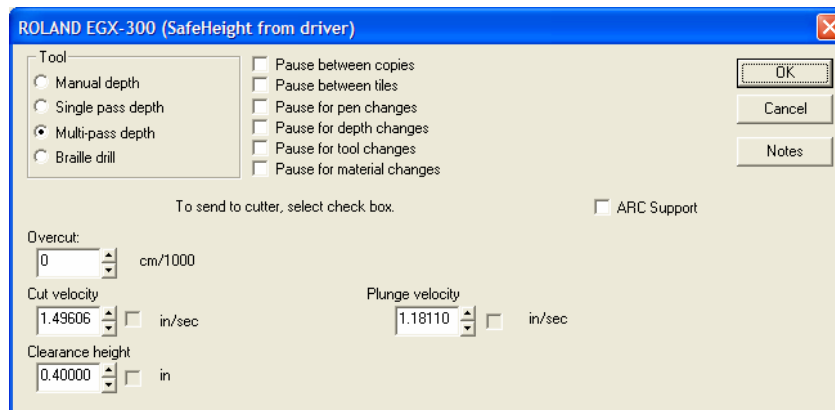


### Configuring the Roland EGX-300 Driver:

1. Click on Engrave and Engraving Defaults. This will bring up the Output window.
2. Click on Setup and select the appropriate Driver (Roland EGX-300 SafeHeight from driver) from the Plotter tab and click on the Port tab and ensure you have the appropriate port selected (COM or LPT) and click OK.
3. In the Output window, ensure the following options are set and click Save Default.
  - a. Tool = Multi-pass depth
  - b. Options = Output Tool Paths
  - c. Smoothing = High
  - d. Engrave = SignPlate and Selected
  - e. Object Start Point = Current

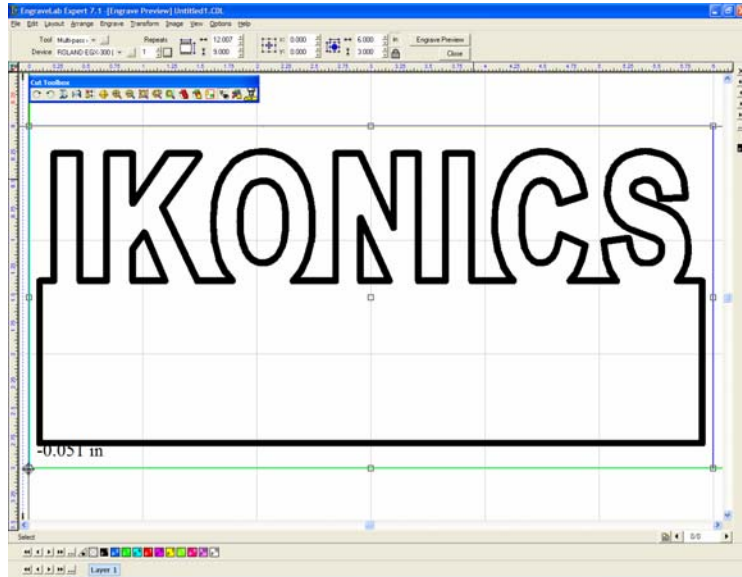


4. Click on Tool Options to set the feeds and speeds for the engraver. The settings will vary with the depth and number of passes for cutting and click OK.





5. Click OK at the Output window.
6. To engrave your objects, sweep select all of the items you want to engrave, click on Engrave and Output.



7. All the data that was selected should now show on the Engrave Preview screen. If all the data/toolpaths are present, you can now click on the Engrave icon located in the the Cut Toolbox to output the file (picture of the tool).