

Etching Mugs, Glasses and Cups with the Laser Cutter

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Introduction

Cylindrical objects such as cups, glasses, water bottles, etc can be etched using the rotary attachment. Any graphic element in your artwork will be treated as a 1000 dpi image and etched into the material.

The lasercutter appears to most software as a printer named VLS2.3DT. When you print your image, the job is queued to the UCP (Universal Control Panel). The UCP is used to setup and control the lasercutter.

Installing the Rotary Attachment:

1. Press the DOWN button on the laser cutter control panel to lower the cutting bed to the bottom,
2. Carefully remove the honeycomb fixture by pulling straight up using the thumbscrews.
3. Carefully insert the rotary attachment. Be sure it plugs into the bottom socket fully.
4. Measure the diameter and thickness of the object to be etched. You will need these values later.
5. Insert the open end of the glass, mug, etc, into the “cone” of the fixture (on the right side).
6. Be sure the item is level and straight.

In Adobe Illustrator:

1. Open your graphic file in Illustrator.
2. Select File > Document Setup and set the units to inches.
3. Select View > Rulers > Show Rulers to display the rulers.
4. Click on your graphic.
5. Select Object > Transform to display the dimensions of the image.
6. Set the size of the rectangle to fit the height of the item to be etched.
7. Select Object > Transform > Rotate
8. Rotate the image as desired. Typically the top is on the right side of the artboard.
9. Save file under name of your choosing.
10. Click File > Print.
 1. Check “Ignore artboards.”
 2. Click on the Setup button
 3. Click on the Preferences button to open the Laser Setting Window
 1. Set Fixture type to Rotary
 2. Set Diameter to diameter of the item to be etched
 3. Set Material Thickness to the thickness of the item
 4. Select the Material as appropriate.
 5. Click Apply
 6. Click OK

4. Click Print
11. Click Print
12. Exit or minimize Illustrator.
13. Open the UCP and follow the steps described below.

Using the UCP

1. Click on the *UCP icon* on the desktop to open the Universal Control Panel
2. The name of your print file should appear at the top of the screen. Note: previous jobs remain in the queue. Use the arrow icons to scroll through the file names.
3. Click the *Settings* button.
4. *Be sure the fixture is set to Rotary, the diameter and thickness values and material type are correct. If not, you need to set them in Illustrator's Print Preferences.*
5. Click the *OK* button.
6. Notice the horizontal line in the center of your image.
7. Open the lid of the cutter to see the red alignment laser.
8. Click the *Focus View icon* (next to the magnifying glass icon).
9. Click on the line at the left side of your image on the screen. The laser will position to that location.
10. Click on the line at the right side of your image. Be sure the two points fit within the top and bottom of your item.
11. If not, either move the graphic within the UCP program or resize the image in Illustrator and "Print" again.
12. Close the lid.
13. Ensure that the exhaust filter is turned on. (Power switch located in the rear.)
14. Click the green *Start Arrow* to begin the engraving.
15. When finished, open the lid and remove the item. Then close the lid.
16. If finished with the cutter, turn off the exhaust filter and lasercutter.

Re-installing the Rotary Attachment:

1. Press the DOWN button on the laser cutter control panel to lower the cutting bed to the bottom,
2. Carefully remove the rotary attachment by pulling straight upwards.
3. Carefully insert the honeycomb attachment. Be sure it plugs into the bottom socket fully.
4. Press the UP button to raise the honeycomb bed.
5. Turn off the laser cutter.