FABLAB - riidl Somaiya Vidyavihar | Standard Operating Procedures

Vinyl Cutter - GRAPHTEC Cutting Plotter CE7000

Step 1: Book the 3D printer through the RIIDL Fab Lab machine booking portal at https://riidl.org/fablab/machine_book.

Step 2: File format

- Step 2a: If you are experienced, prepare your file in .dxf/.svg format and save it to a pendrive or your laptop.
- Step 2b: Access the ThinkPad provided by Sachin for interfacing with the machine. Open your file using Graphtec Pro Studio software.
- Step 2c: If you encounter issues with .dxf files or need assistance, provide a 3D CAD or 2D vector file format and contact Pranav Gawde for help.

Step 3: Graphtec Pro Studio Software

- Step 3a: Connect the laptop to the vinyl cutter using the USB port. Utilize the Graphtec Pro Studio software to send files to the vinyl cutter.
- Step 3b: Install the Graphtec Pro Studio software from https://www.graphteccorp.com/cutting/gs2/.
- Step 3c: Refer to the instructions provided at the same URL for guidance on using the software.

Step 4: Import the File:

- Navigate to File > Open > Select File.
- Verify dimensions and make adjustments if necessary. Add text or simple drawings directly in the software if required.

Step 5: Cut/Plot Dialog Box:

- Click on the Cut/Plot option.
- Set and verify basic specifications such as material input (roll), end-to-end dimensions, position, and number of copies needed.
- Preview the design in the right-side window for estimation.

Step 6: Set the Knife:

- Properly set the knife of the vinyl cutter to ensure a clean cut through the top layer of the vinyl material.
- Adjust the knife tool screw as needed for proper setting.

Step 7: Bring Your Own Material:

- Contact Sachin for assistance with selecting appropriate materials.
- Manually insert the vinyl sheet into the machine.

Step 8: Align the Stoppers:
Flatten the material and align the stoppers with the blue part above.

Step 9: Lock the Handle:
Ensure the handle is locked after aligning the material to prevent movement during cutting.

Step 12: Start Cutting:
Initiate the cutting process. Initially, the paper roll will pass through without cutting to estimate the total size. Then, it will pull back and commence actual cutting.

Note:

- **Follow all safety protocols and guidelines provided by RIIDL Fab Lab staff.**
- **Ensure the 3D printer is operated in accordance with manufacturer instructions.**
- **Clean up your workspace after use and adhere to any additional guidelines provided by RIIDL Fab Lab staff.**