

Trotec Speedy 400 Lasercutter



- CO2 Laser
- 100W
- Table Size 1016 x 610 mm
- No external materials allowed

Plywood

3 mm

5 mm

MDF

3 mm

5 mm

Acrylic

1 mm

2 mm

3 mm

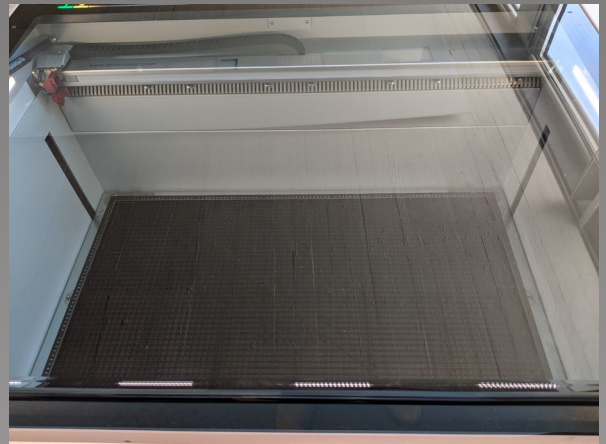
5 mm

Machine

After logging into the machine you will need to start it up. To do so turn the key all the way to the right.



The machine will run several self checks and calibrate the axis. This process will take a few seconds and will cause the table to move all the way down.



Using the buttons on the right the table can be moved up and down.



Machine

Move the table upwards to a comfortable position and place your material on the table.



If your material is bended and lifts up at some point you need to tape it down. Make sure to place it on the machine so that the edges are lifting up and the middle is touching the table. Then use painters tape to secure the lifting edged to the table.

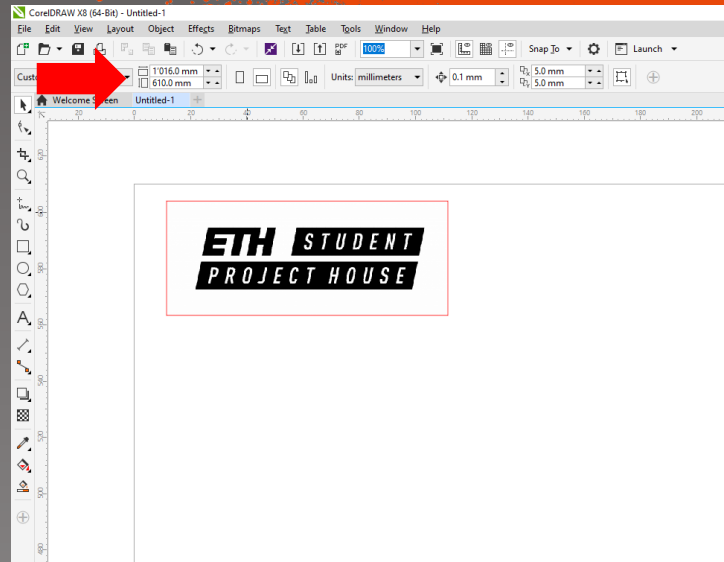


Now move the laser to a location above the material using the X & Y Arrows and then run the auto focus routine by pressing the Z up and down buttons at the same time.

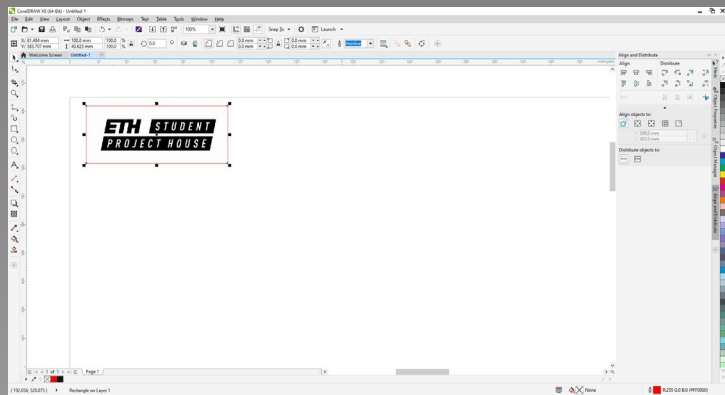


CorelDraw

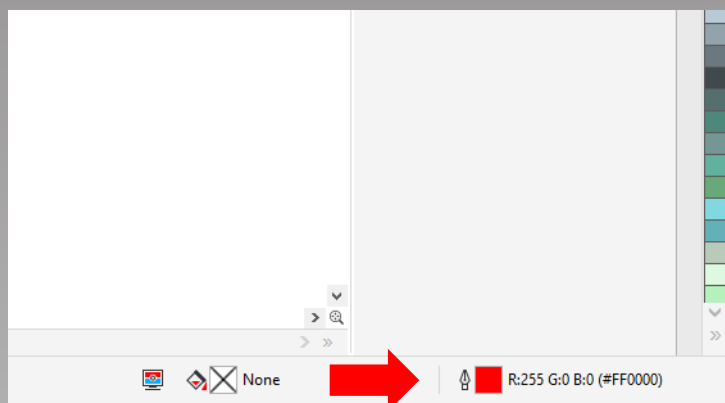
*Open CorelDraw and create a new design.
Make sure the dimensions are 1016 x 610 mm.*



*You can import vector files by
Drag'n'Drop or create your own
in CorelDraw.*



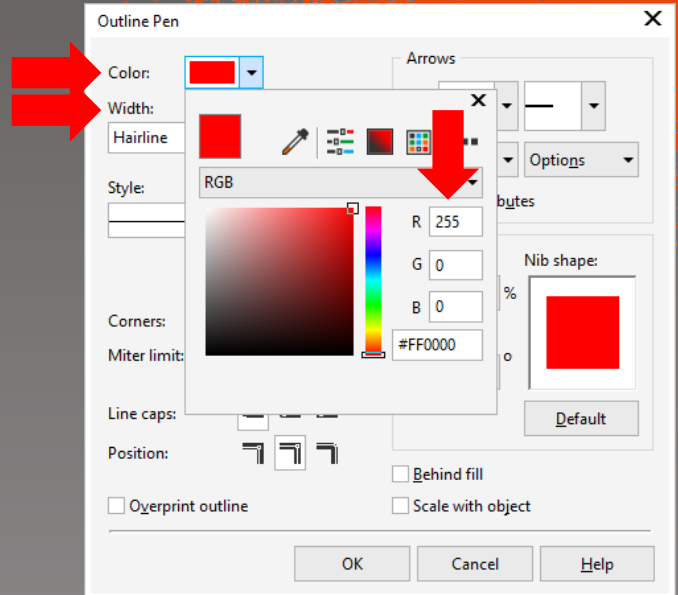
*Lines to be cut need to be red
hairlines. Double Click in the
lower right corner to change the
line width and color.*



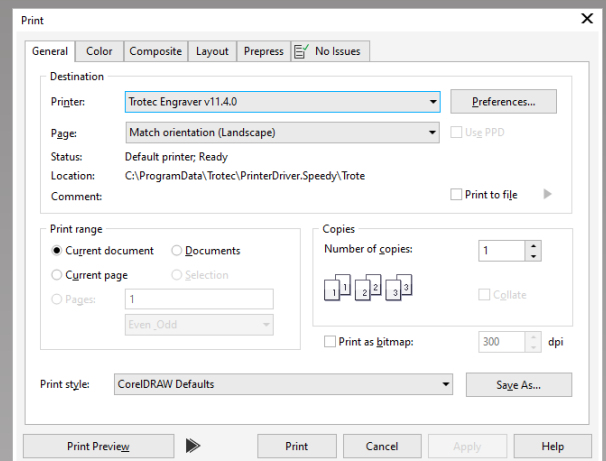
**ETH STUDENT
PROJECT HOUSE**

CorelDraw

Make sure that lines that need to be cut are set to a width of "Hairline" and the color is red (exactly R: 255, G: 0, B: 0)



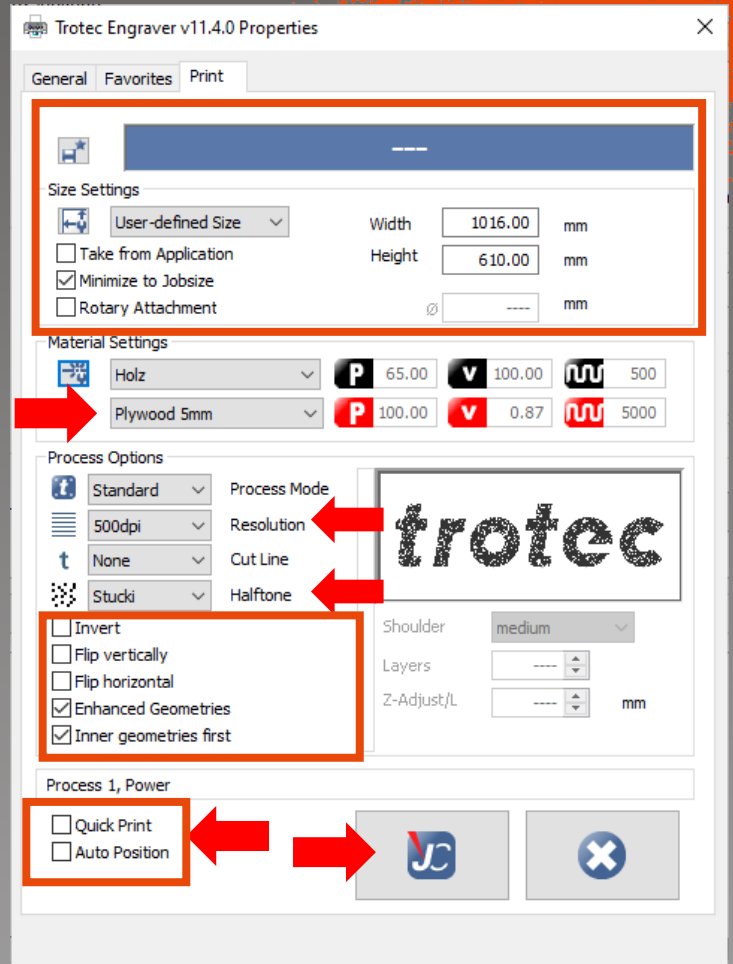
Once you are done either press Ctrl + P or click on print under the file tab. Then select the "Trotec Engraver" and click "Preferences".



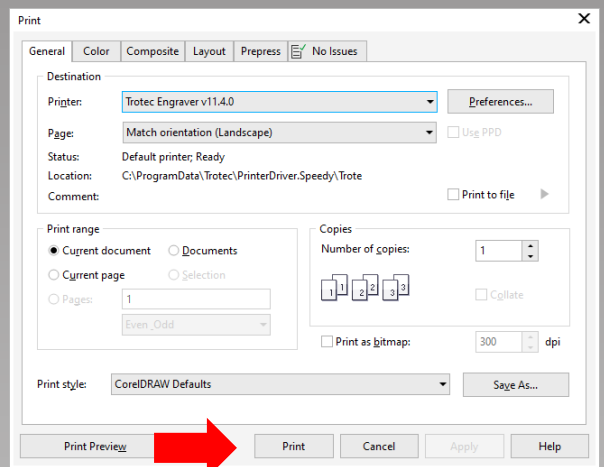
Printer Setup

In the overview that pops up ensure the points listed bellow.

- *Ensure the settings are the same as shown in the 3 red boxes on the right.*
- *Select the material you want to use.*
- *The following 2 settings may be adjusted. The engraving Resolution and the engraving pattern (Halftone).*
- *Once you are done press the big “JC” button.*

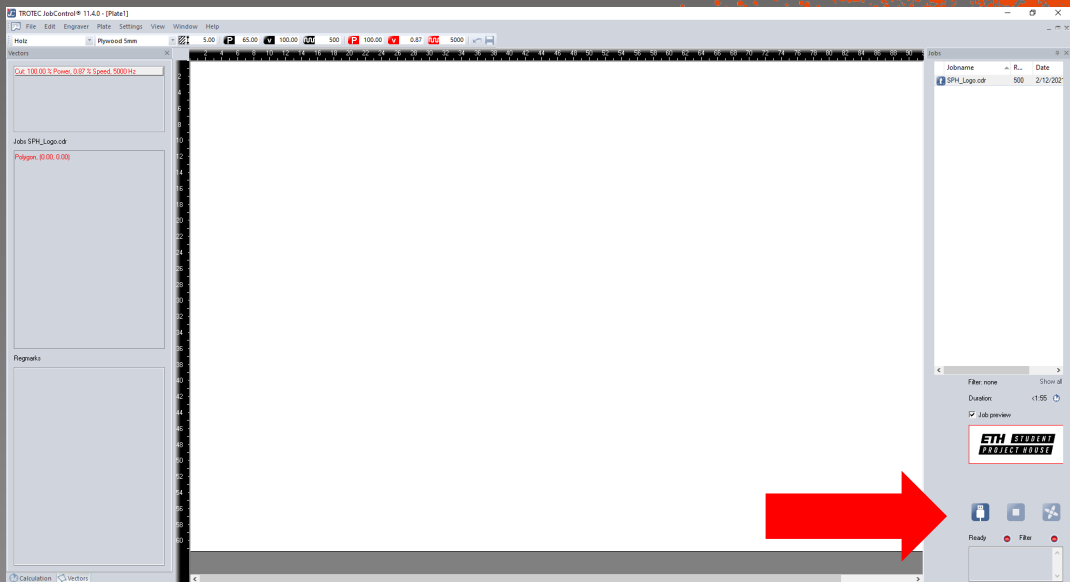


Lastly press the “Print” button to send your file to the cutter software.

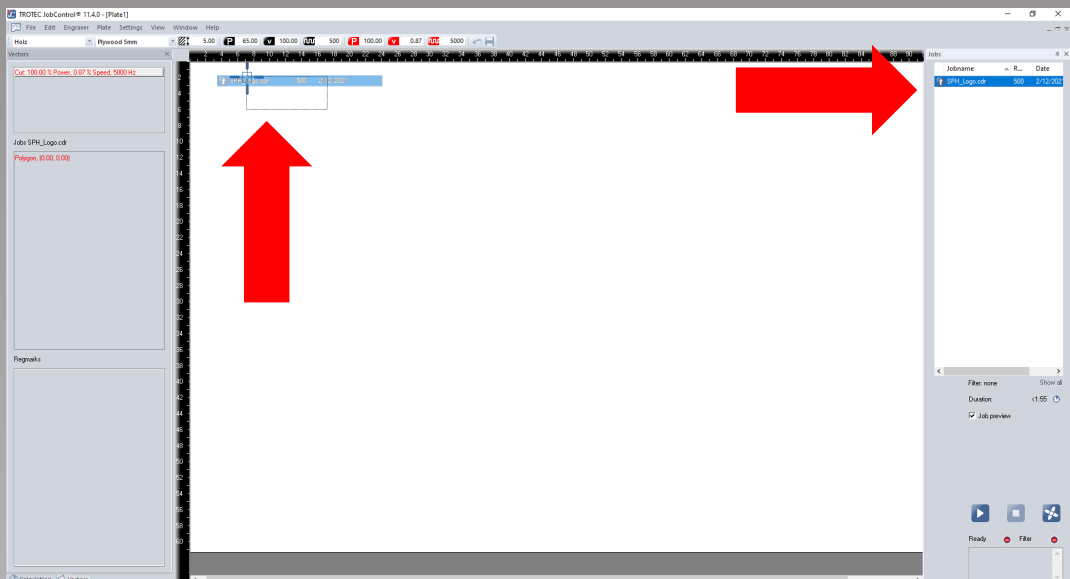


Job Control

A new software named “Job Control” opens. The first step is to connect the software to the machine by pressing the small USB plug on the right side. The machine will take a second to synchronize.

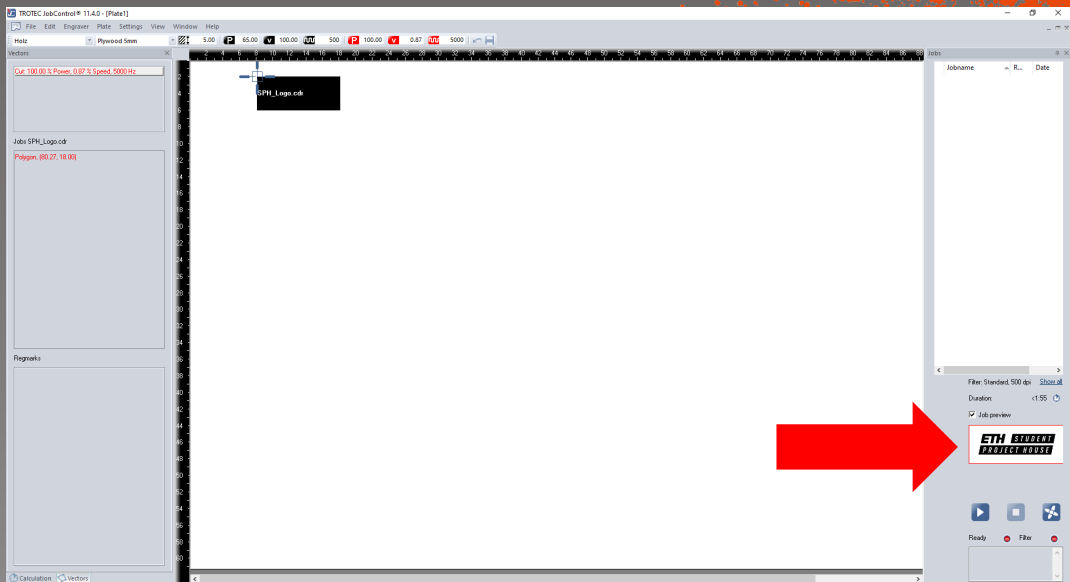


Select your job from the list on the right and drag it onto the virtual machine table left to it. The current laser position is indicated with the small crosshair. You can use it to position your job on the print bed.

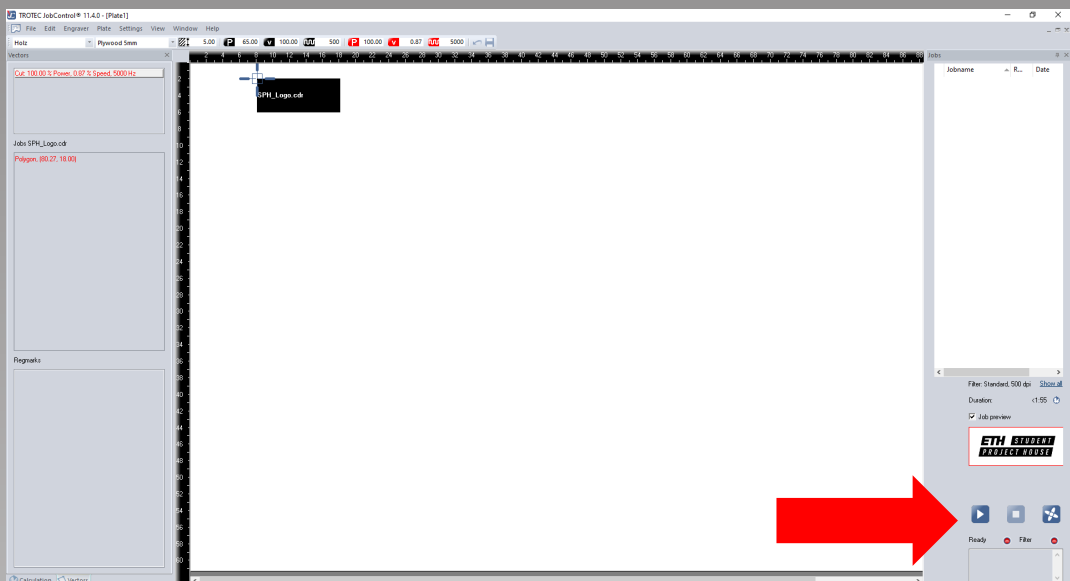


Job Control

When clicking on your job on the table you can see a small preview on the right to verify you selected the correct job.



By pressing the small play button on the right, the job will be sent to the machine. The ventilation will turn on automatically and the job will start after 5 seconds.



Safety

Dead Man Switch



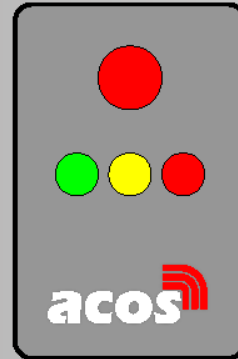
All good!



Please press button



Press button or machine will auto turn off



A job can be stopped using the stop button on the control panel. In case of emergency press the safety off on top of the control panel.



Safety Rules

- *NEVER leave the cutter unattended*
- *ALWAYS use our presets*
- *NEVER change the presets*
- *NEVER use unknown materials*
- *ALWAYS ask when in doubt*
- *Keep the door closed for one minute after the job is done*