ME158 Winter 2013 Laser Cutting Lab

- 1. Start Corel Draw icon on desktop
- 2. Start Trotec Job Control software icon on desktop
- 3. At the laser
 - a. Turn on the laser (power switch is on the top left of the back side if you are standing in front of the laser. The air filter starts automatically when needed and does not need to be started separately.
 - b. After completing the startup cycle place your stock on the laser bed
 - c. Focus the laser
 - i. Balance the focusing bar on the lens holder
 - ii. Jog the bed up until the focusing bar drops off of the lens holder
 - d. Connect the laser to the job control software
- 4. In Corel Draw
 - a. Clear Quick Start menu
 - b. Set page size to 6" x 6"
 - i. Below top icon bar select custom page size and then set width and height to 6"
 - c. Open your graphics file
 - d. Set the page size
 - e. Convert all lines to be cut to red outline with no fill and hairline width
 - i. Select the arrow icon on the left to select graphics items
 - ii. Select the pen nib icon on the left to adjust width and color
 - f. If it's important to you which contour is cut first move them in Corel forward of the contour you want cut next.
 - g. Print the file to the laser
 - i. File>Print
 - 1. Select TrotecEngraver v9.4.2 as the printer
 - 2. Select the print button
- 5. The Trotec Job Control software icon at the bottom of the page should be blinking yellow indicating that there is a job ready.
 - a. Open the Trotec software
 - b. Your job should be listed at the bottom of the information screen at the right. Make sure that the job type and resolution pull down menus are set to "all".
 - c. Drag your job onto the screen and the select the WYSISYG icon on the top tool bar. This looks like a red square with three horizontal white lines.
 - d. Using the cursors on the laser position the red laser at the location that you want to use as the part reference.
 - e. Drag your model to this location.
 - f. Connect the geometrical elements in a continuous cutting path "Plate, Vector ordering". A new copy of your print file will be generated with "_sorted" appended to the end.
 - g. Check the power settings
 - i. Red (cutting) should be 100% power, 0.5 ips, 5000 ppi
 - ii. Black (engraving) 12% power, 10 ips, 1000 pps
 - h. Cut the part
- 6. Shut down Job Control, Corel Draw and power down the laser.