

AME 40462: Creating a .dxf File in Creo 3.0

To send CAD part files in Creo 3.0 to one of the Stinson Remick laser cutters, a .dxf file must be created for each part to be cut. This document details the process to create a .dxf file which can be opened in the laser cutter software.

- 1:** Create an assembly drawing in Creo with each part to be cut. The assembly should be constrained by the piece of wood that will be cut.
- 2:** Create a new drawing for this assembly and uncheck "Use default template"
- 3:** Specify "Empty" for the template, "Variable" for the orientation, and choose the dimensions of the wood piece. This will ensure that the assembly will fit in the machine and on the wood.
- 4:** Right click in the drawing and insert a general view (select "No Combined State"). Select the plane that shows the correct orientation of the parts to be cut.
- 5:** Set the scale factor in the bottom left corner of Creo to 1. This ensures the parts are scaled to size for proper cutting. Ensure that the assembly fits in the drawing.
- 6:** Turn off all displays for Planes, Axes, Points, and Csys. Also ensure that no text or other markings are visible in the drawing. This is because all features visible will be interpreted as cuts by the laser cutter.
- 7:** Right click and select "Sheet Setup" while on the Layout tab. Uncheck the "Show Format" box. This will delete the page edges visible, as these would also be cut out otherwise.
- 8:** Change the display style to "no hidden lines".
- 9:** Choose File, Save As, Save a Copy. In the dropdown menu choose a .dxf file.
- 10:** Change the "DXF Version" to 2010 on the Entities tab.
- 11:** In the properties tab, change the geometry color to red. This will allow us to easily adjust the power and speed of the laser during cutting, depending on the type of wood being used.
- 12:** The .dxf file can now be sent to the computer attached to the laser cutter.