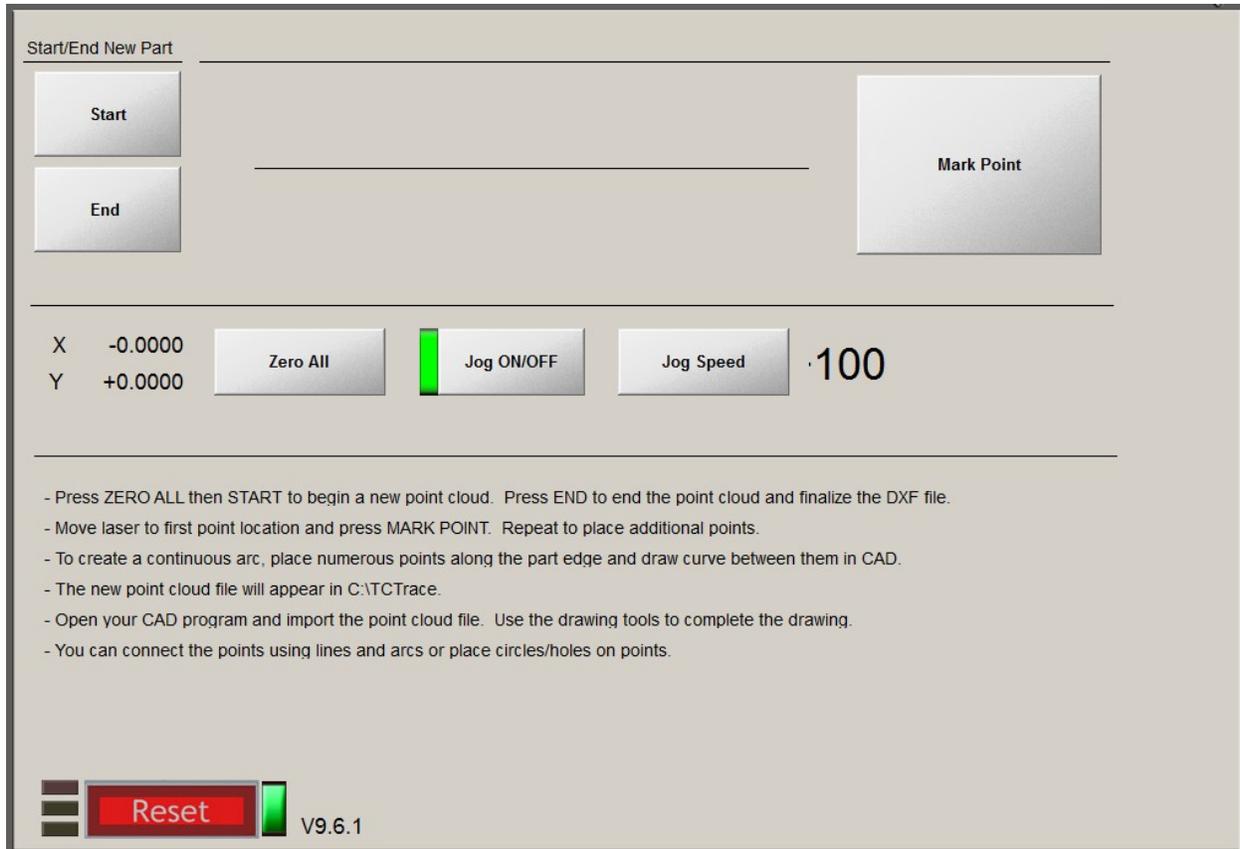# Trucut Tracing Wizard

The Trucut Tracing Wizard is a utility built into the controller that allows the operator to place points around a part on the table. This is called a point cloud. The operator would place points at key locations on the part, such as a corner, a hole center, etc.
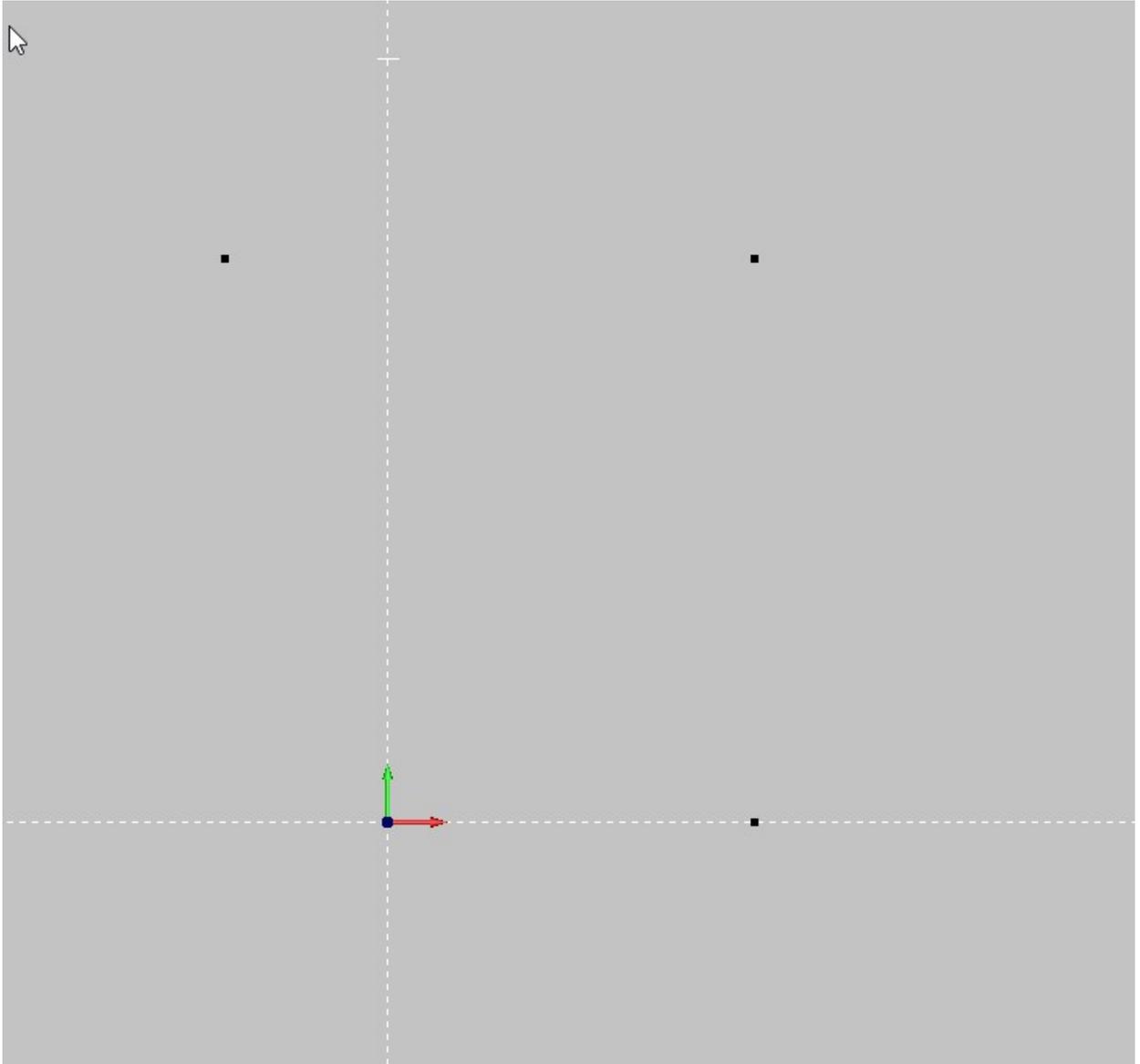
The Tracing Wizard is accessed by pressing the TRACE button at the top of the Mach3 screen and brings up a screen like the one below.

Instructions are included on the Trace screen, but we'll go over the process here step by step.
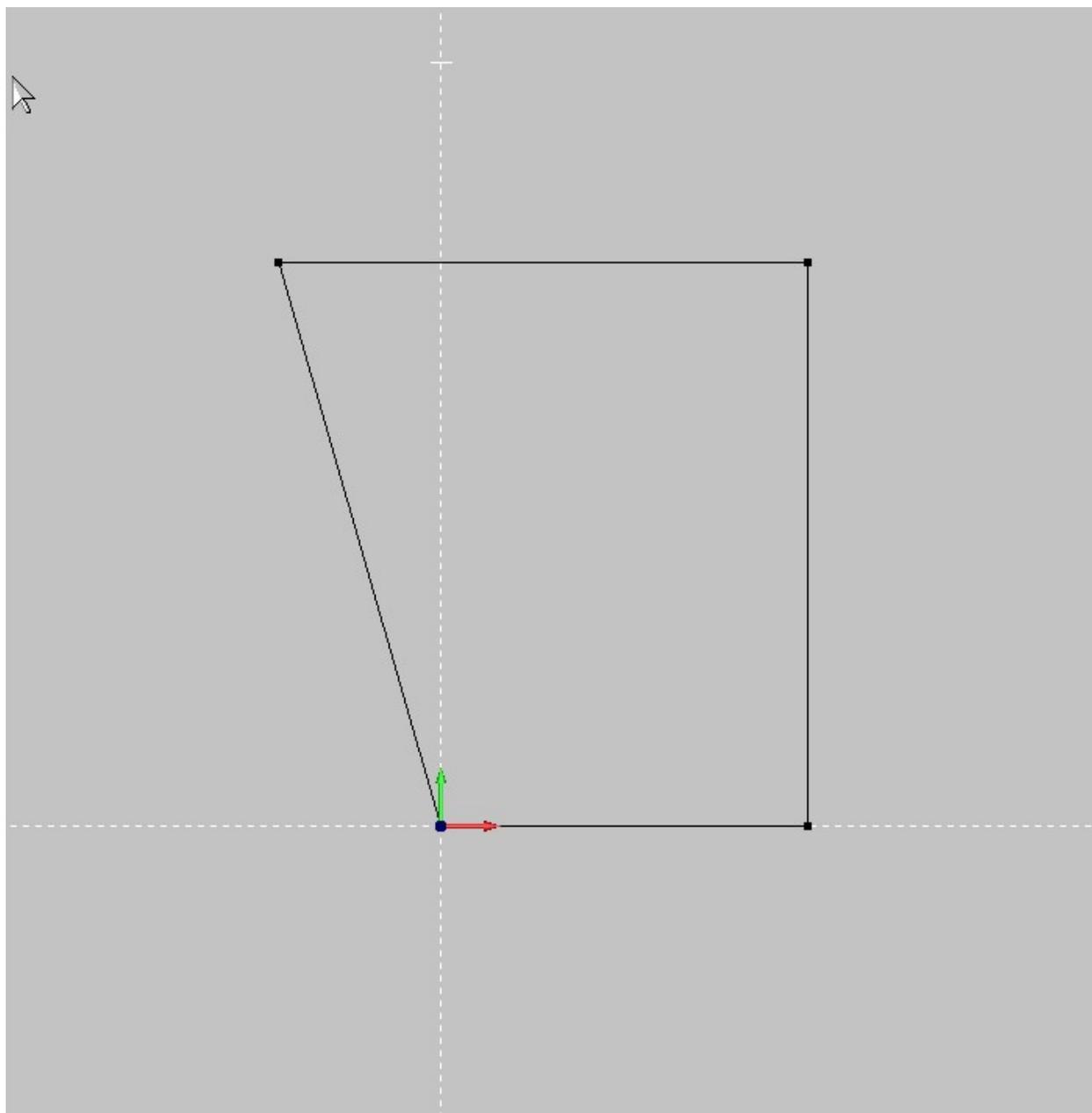
(1) Press Zero all. This aligns part zero to the current machine location. The trace will still work if you miss this step, but zero will be offset, which can be corrected in your CAD software.

(2) Press START and choose a name for the new point cloud file. Do not enter an file extension. For instance, enter "FILE1" not "FILE1.DXF". The point cloud file will be saved as a DXF file and the extension will be automatically added.

(3) Move the laser or camera, if so equipped, to the first point on the part and hit MARK POINT. This creates a point at the current location.

(4) Move to the next point and repeat. Repeat this process until the part has been laid out.

(5) Press END. This writes the file footer and closes the DXF file. The new file will be in C:\TCTrace. This completes the Mach3 portion of the Trace Wizard. We will now open the point cloud file in BobCAD.

(6) Start BobCAD, or your preferred CAD program and open the point cloud file you just created. It will look something like this…
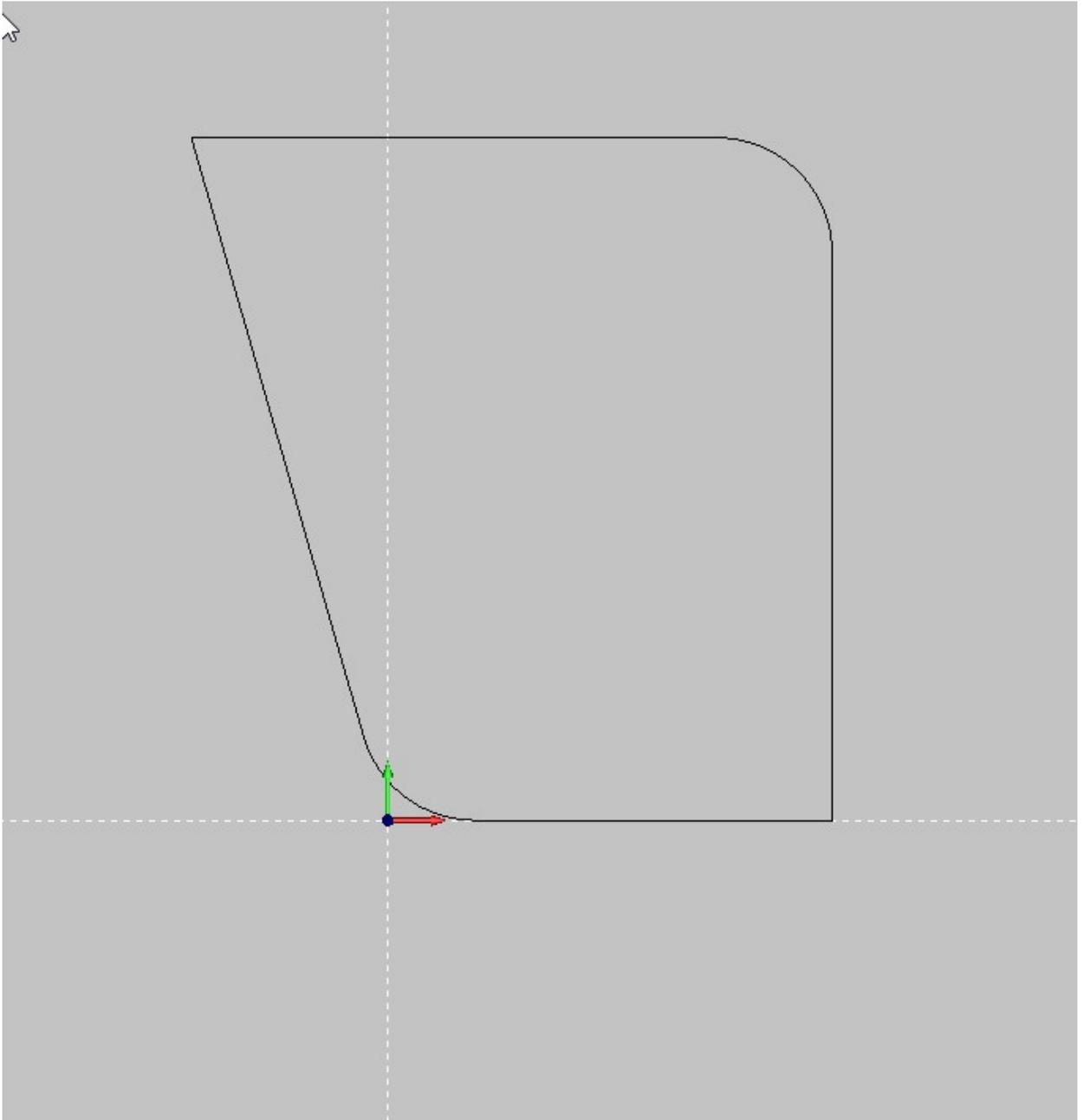
You can now use the points as a guide to complete the part. Connect the points with lines or arcs.

You could end up with something like this.

Now you can add details such as corner radii, like this.

Once the part is done to your satisfaction, save it as a DXF file, import into SheetCAM and cut.