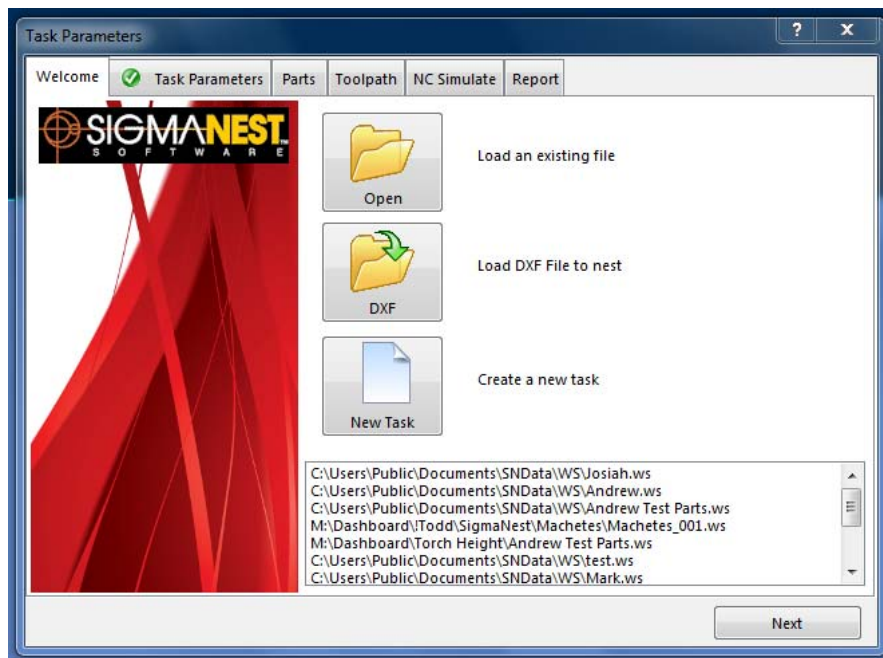


SigmaNEST

QUICK-START GUIDE



1 INTRODUCTION

1.1 Overview

This guide will discuss the basic steps in using SigmaNEST to create a cut file for use with MachMotion’s 1150P plasma control. Users have the option to either import a .dxf file or select from the SigmaNEST shape library.



FIGURE 1 1050P PLASMA CONTROL

2 SigmaNEST

2.1 Software Startup

Double-click the SigmaNEST icon on the control desktop.

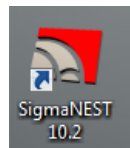


FIGURE 2 SIGMANEST ICON

Once opened, there is the option to import a .dxf or create a new task and use the SigmaNEST shape library.

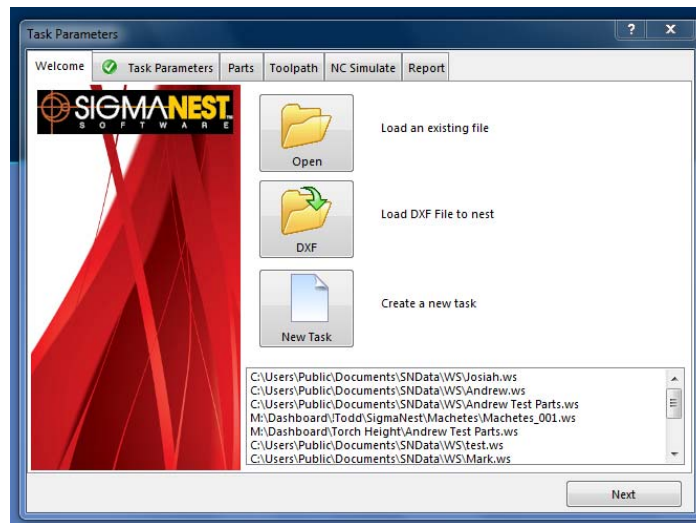


FIGURE 3 WELCOME SCREEN

Begin by selecting **[Create a new task]**.

Set task parameters (material type, sheet/job size, thickness, clearance, etc...) on the next tab.

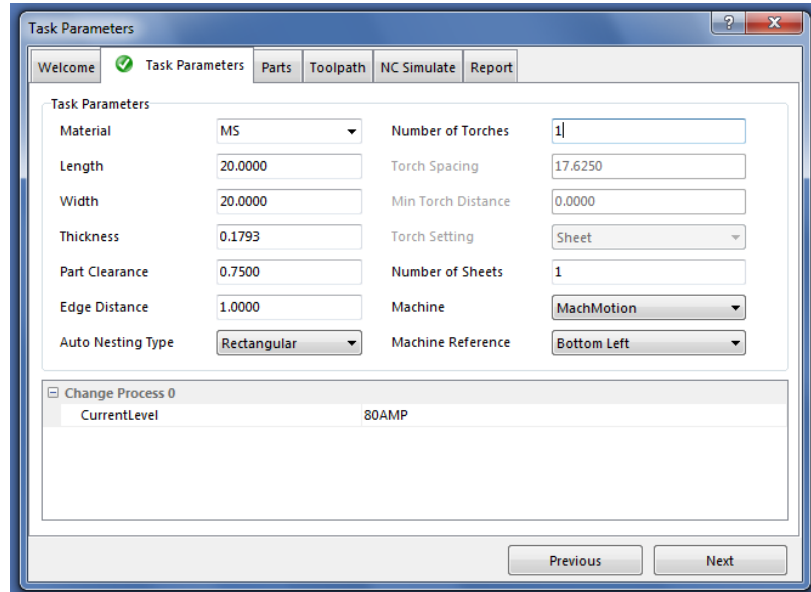


FIGURE 4 TASK PARAMETERS TAB

Next, select the Parts tab.

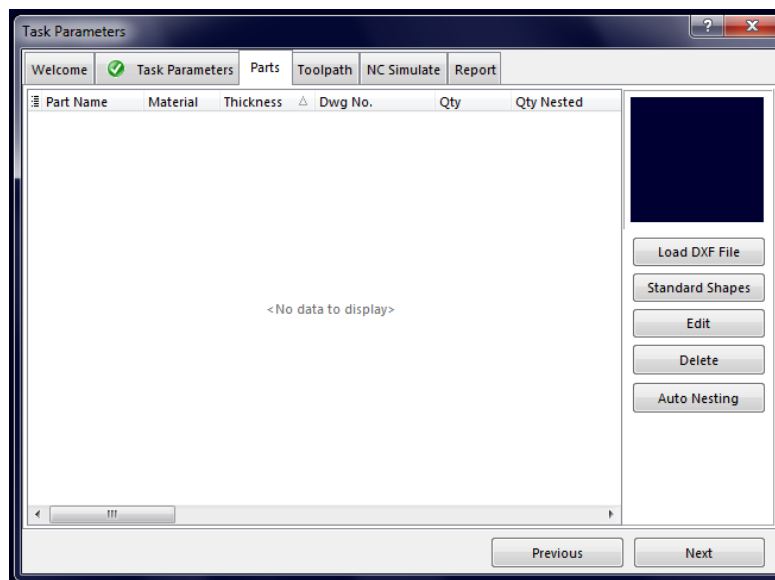


FIGURE 5 PARTS TAB

Select either **[Load DXF File]** or **[Standard Shapes]**.

2.2 Shape Library

The following shapes are currently available in the shape library. Select a shape and press [Ok].

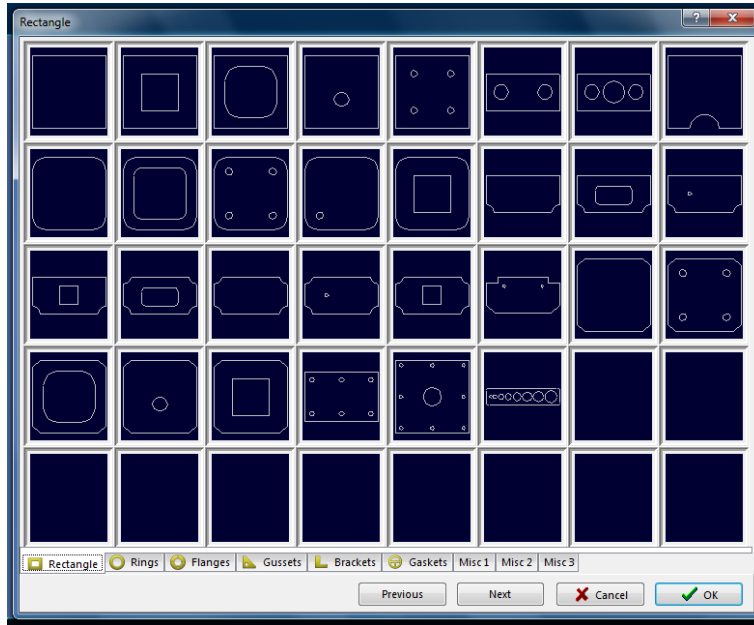


FIGURE 6 RECTANGLES

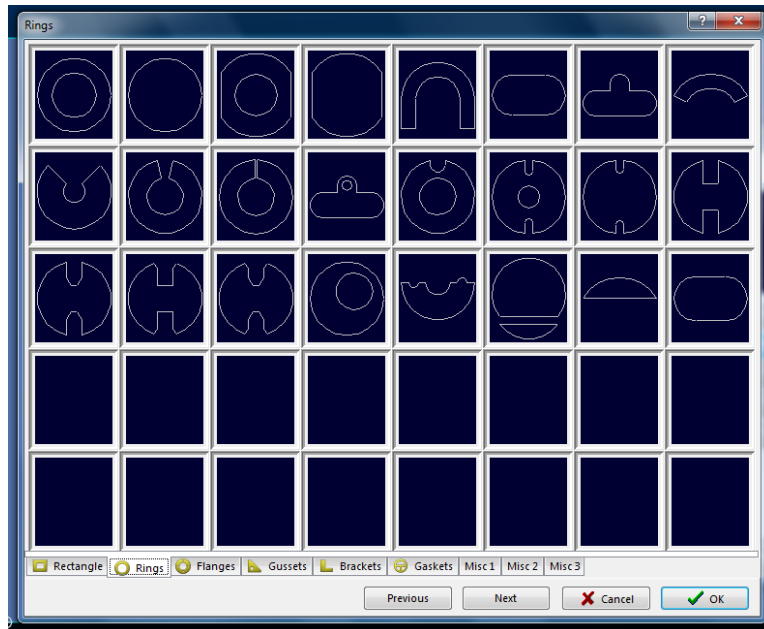


FIGURE 7 RINGS

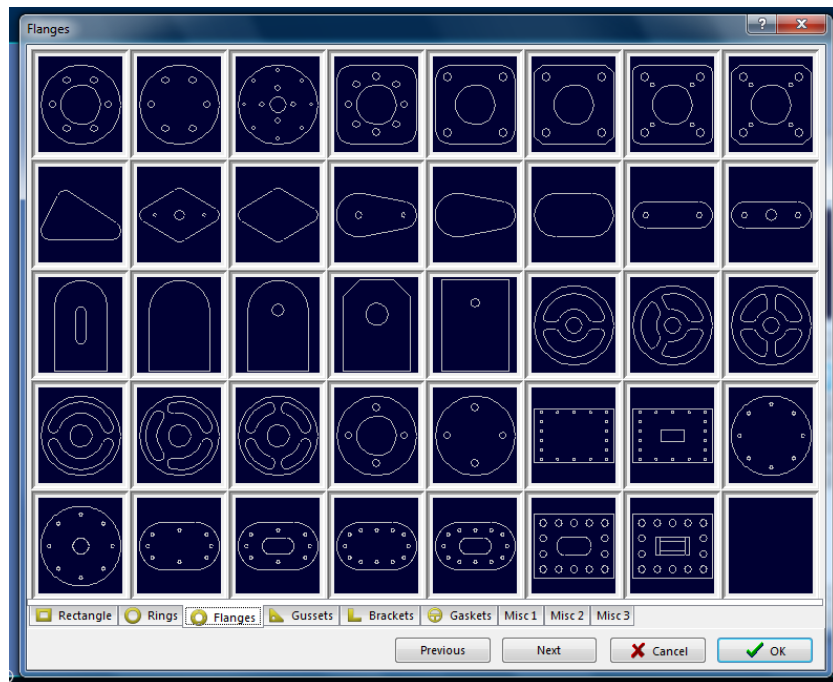


FIGURE 8 FLANGES

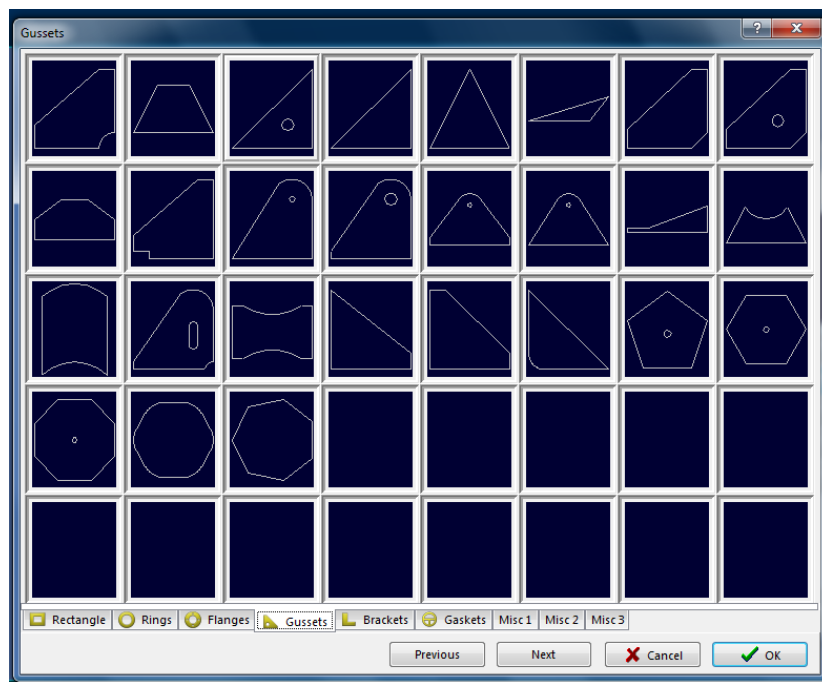


FIGURE 9 GUSSETS

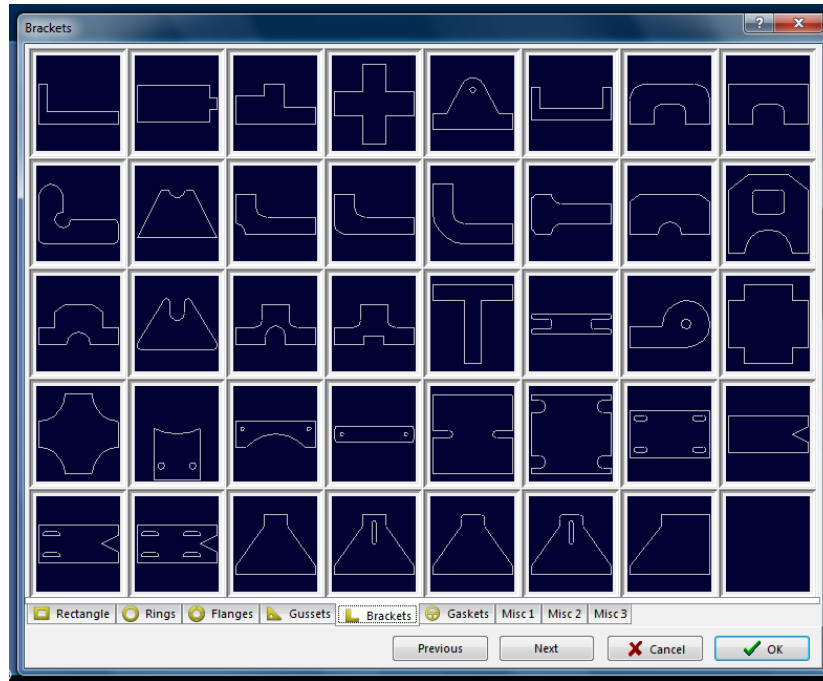


FIGURE 10 BRACKETS

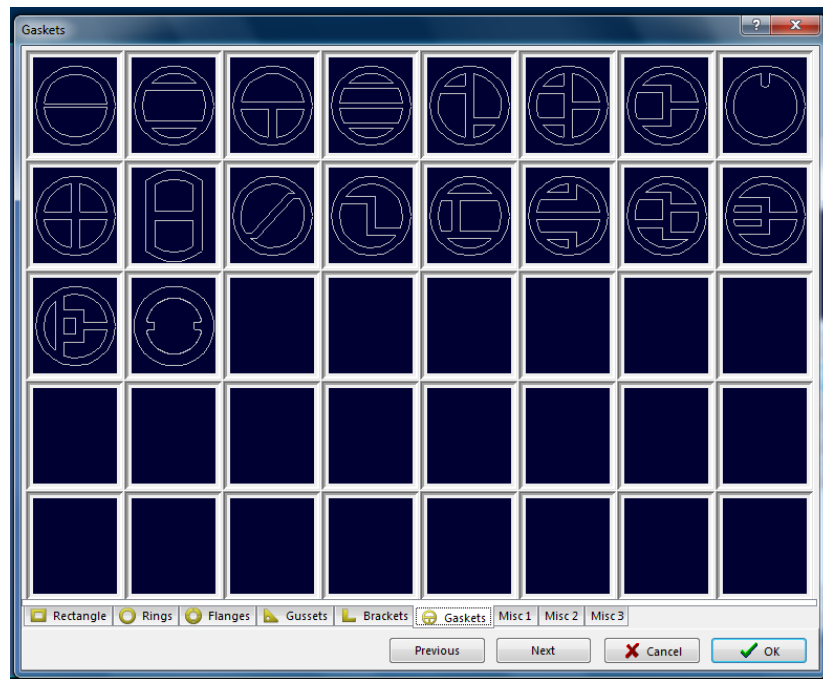


FIGURE 11 GASKETS

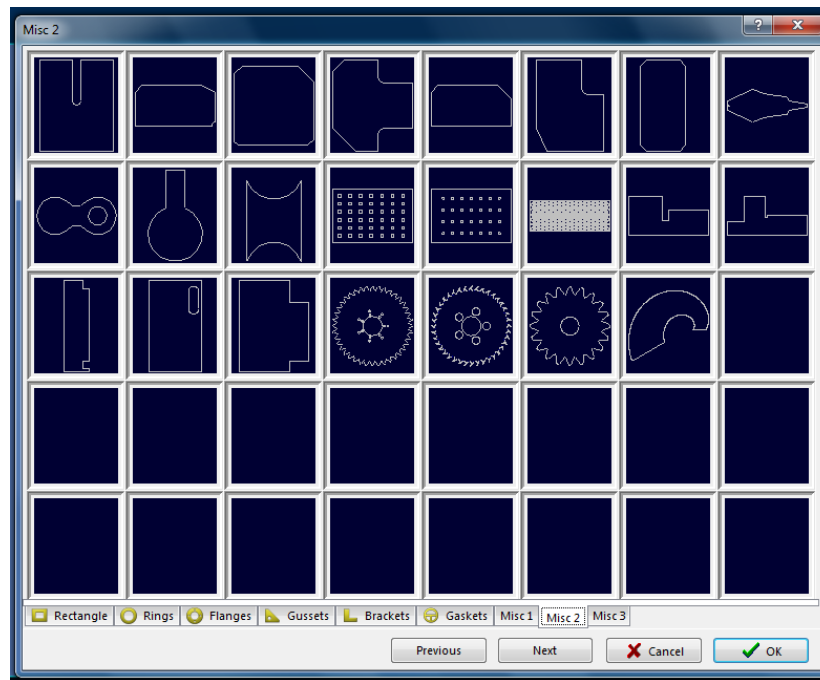


FIGURE 12 MISCELLANEOUS

2.3 Part Control and Nesting

From the Parts tab, the part(s) can then be edited to adjust leadins/outs and other parameters.

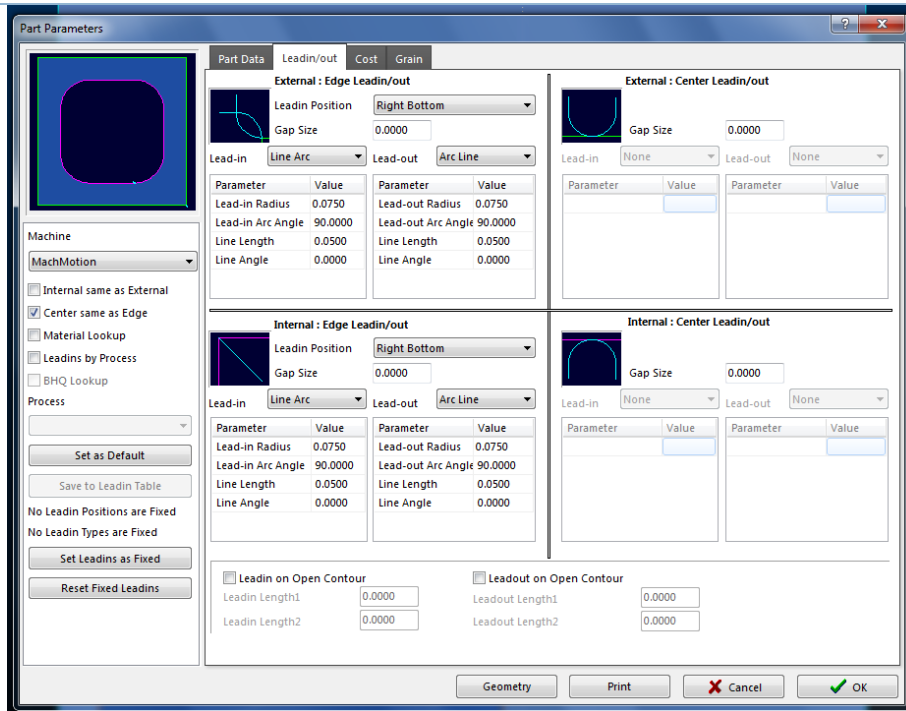


FIGURE 13 LEADIN/OUT CONTROL

Auto nesting is also available from the Parts tab.

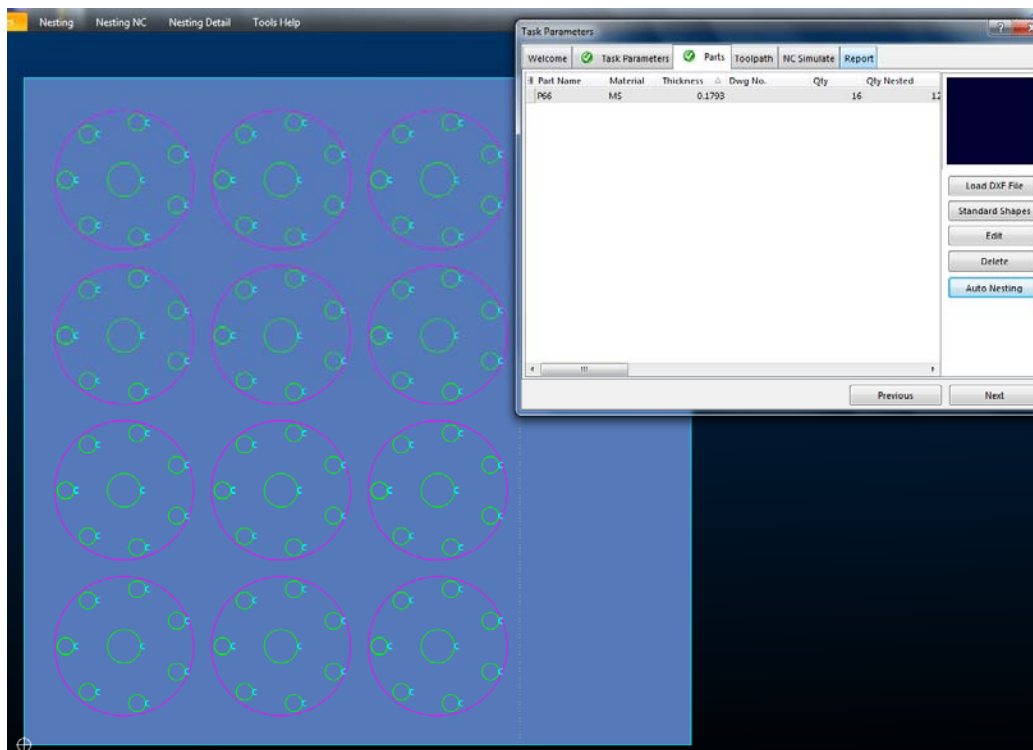


FIGURE 14 AUTO NESTING

The Toolpath tab will show the current file's toolpath after selecting **[Generate Toolpath]**.

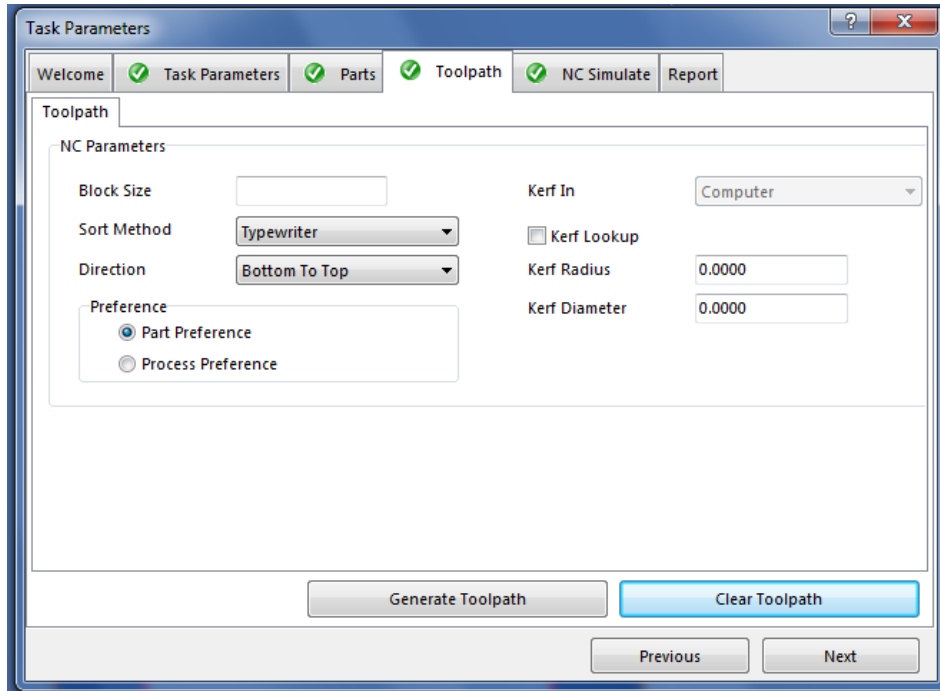


FIGURE 15 TOOLPATH TAB

NC Simulate will simulate the part file in SigmaNEST. Select **[Generate NC Code]** to post and save g-code file to the control software.

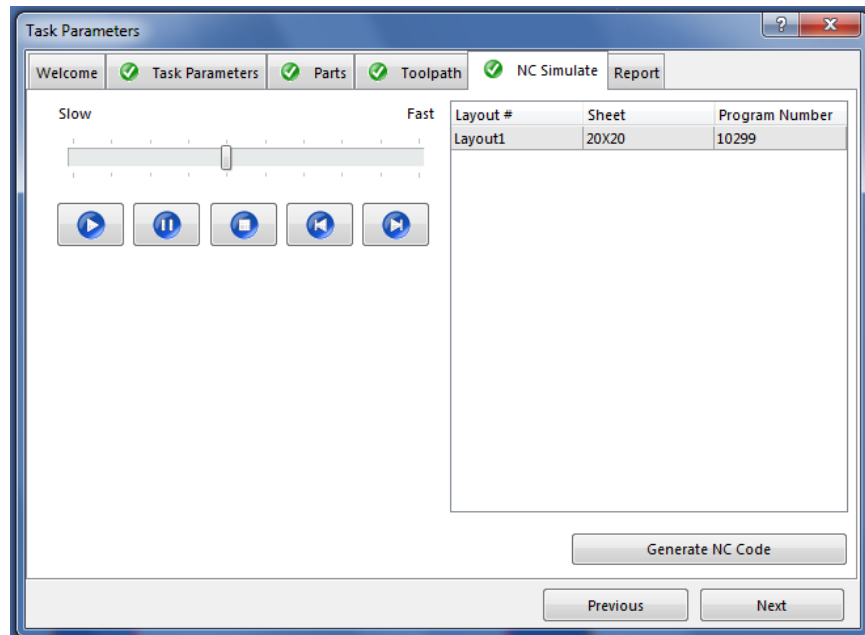


FIGURE 16 NC SIMULATE TAB

3 USING THE CONTROL

3.1 Running a Program

Once the NC file has been posted from SigmaNEST, the control software will automatically load the part file and generate the toolpath.

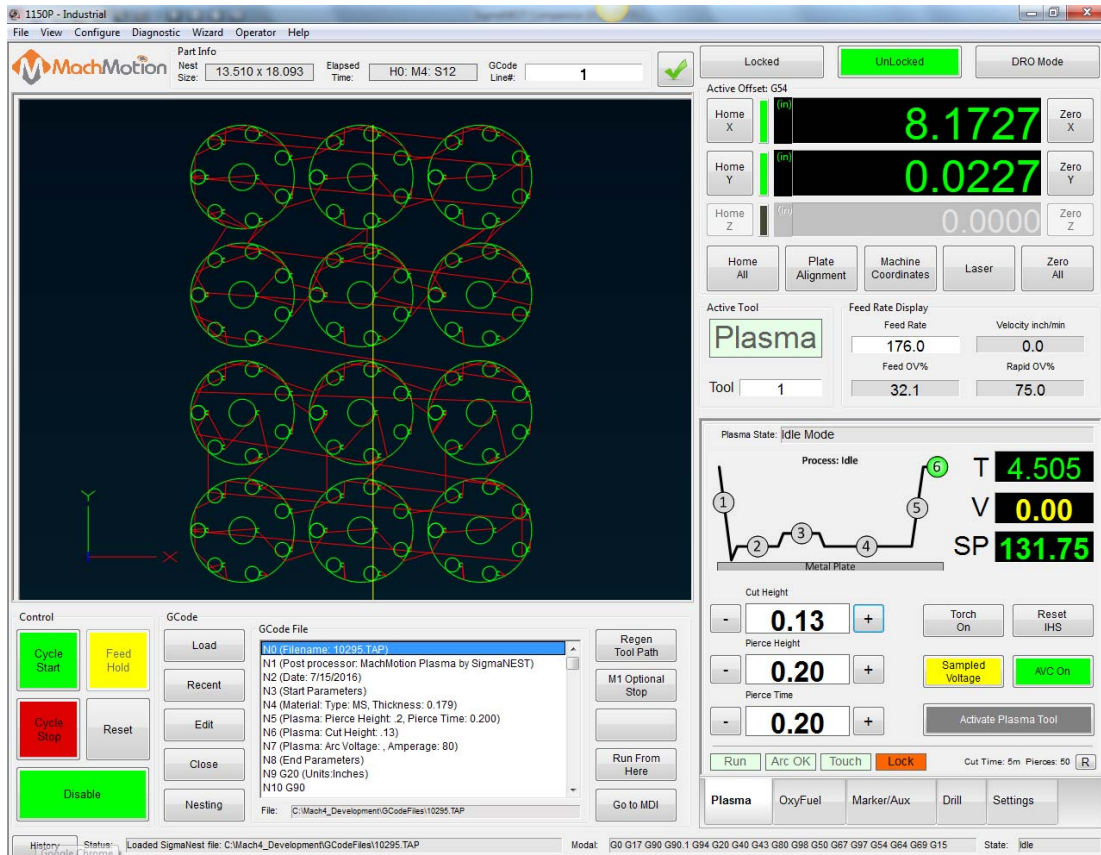


FIGURE 17 CONTROL TOOLPATH

Edit the necessary cut parameters on the lower right of the control (Cut Height, Pierce Height, and Pierce Time) and set your part zero.

When ready to cut, press **[Cycle Start]**.