

Post Processors for CAM Software

Overview

Our Mach software runs gcode and can be in various file types such as .txt, .nc, and .tap.

Our software does not convert the drawings such as DXF into gcode. A CAM software package is needed for that. For many of our systems, SheetCAM or SigmaNEST Companion is used.

If you are not using our CAM options you will need a post-processor from your CAM software vendor to output into g-code format for Mach. MachMotion does not provide the post processor but this page should help assist you in obtaining the needed post. Machmotion also offers a service of updating your current post-processor. Please contact us for more details and pricing information.

Common CAD CAM Packages

CAM Package	Description	Cost
Fusion 360	Basic	Low
BobCAD	Basic	Low
MasterCAM	Advanced 3D Options	Medium
SigmaNest	3D Options Amazing Nesting	High

Integrating to a Post

Many companies already have the needed post so you can contact them directly and see. Some posts are available already at Mach software vendor's site:

<https://www.machsupport.com/downloads-updates/cam-post-processors/>

The following documents can help your CAM vendor determine the fanuc style g-code needed:

<https://support.machmotion.com/books/software/page/mach4-g-code-and-m-code-reference>

Lathe: <https://support.machmotion.com/books/software/page/mach4-lathe-g-code-and-m-code-reference>

Attached to this page are example g-code files that can help them as well. The THC test file is for Plasma.

Some common items are:

Mist can be turned on with M7 and Flood/Coolant with M8. M9 turns these off.

Spindle on FWD is M3, REV is M4. M5 turns it off. S command sets the speed: M3 S500.

M6 is for tool change with a T for the tool number to use: M6T3 for example.

Outputs 0-5 can be turned on and off with M-codes. See the following table for reference:

Custom M-Codes	Functions	Default Output
M200	Output 0 on	Y2
M201	Output 0 off	
M202	Output 1 on	Y3
M203	Output 1 off	
M204	Output 2 on	Y4
M205	Output 2 off	
M206	Output 3 on	Y5

M207	Output 3 off	
M208	Output 4 on	Y6
M209	Output 4 off	
M210	Output 5 on	Y7
M211	Output 5 off	

Machine Type Requirements

Mach3 Waterjet and Mach4 Plasma require the following:

- Absolute IJ Arcs (For example, "G90.1 G03 X1.0192 Y2.0162 I1.0192 J1.4866")
 - Absolute positioning (G90)
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