## Dwell Timing Configuration

Category	Custom	M Codes												
Machine Tool Homing	M-Codes to Control Output Lines (For Line Columns: '1' = Turn On '0' = Turn Off '-' = No Action)													
Feedrate/Ramping Reference Points Fixture Offsets Input Lines	M Code	Description	Ln. 1	Ln. 2	Ln. 3	Ln. 4	Ln. 5	Ln. 6	Ln. 7	Ln. 8	Execute Bef./Aft. Move	Delay (sec)	Delay Bef./Aft Set Ln.	-
Output Lines	50	Plasma On	1	•	•	-	-	-	-	-	Before	4.250	After	
Custom M Codes	51	Plasma Off	0	-	-	-	-	-	-	-	Before	1.500	After	
Motor Signals			-	-	-	-	-	-	-	-	Before	0.000	After	
G-Code			-	-	-	-	-	-	-	-	Before	0.000	After	
Cutter Compensation			-	-	-	-	-	-	-	-	Before	0.000	After	
Threading Import			-	-	-	-	-	-	-	-	Before	0.000	After	
Viewports			-	-	-	-	-	-	-	-	Before	0.000	After	
Communications			-	-	-	-	-	-	-	-	Before	0.000	After	-
System Options Tooling Files Messages	M-Codes to Execute Macros  M Particle Macros  M Par													
	Code	Description	Mac	oro		Bef./Aft Move				C Basic				
			Before							Start (After Hold): M				
<u>0</u> K			Before											
						-	efore				Fe	ed Hold	: M	
Cancel							efore			~	<b>F</b>			
			Before							• Eull				
		1	Before Feedrate Move: M 50											
	T-Code Macro: Edit									All Other Times: M 51				

Depending on which version of the Torchmate driver software you are using, either V1.61 or V 2.09, you will locate the setup file as follows.

Version 1.61; Setup, Output Lines.

Version 2.09; Configuration, Custom M Codes.

Click on the appropriate heading and select the folder. Toward the bottom half of the page you will see the M Codes area. As you can see there are two areas for setting your dwell times, under the headings of M50 and M51. The delay times are shown at the end of each column, and these are the areas where you may change the dwells for your machine.

Check with your Plasma Cutter Manual for more information about dwell times and suggestions.

If you are using the height control unit to maintain the arc voltage during your cutting, your M50 dwell will be closer to 3 to 5 seconds. If not you may use the default setting of 1.5 sec. This will depend on the thickness of material, federate or speed of cutting, and amperage used. You may want to start at 3 seconds, then +/- .25 seconds depending on how the cut actually performs. Try .25 sec intervals until you see your desired cut achieved. The M51 is the time after the torch turns off that it will remain idle while the compressed air cools off the tip of the torch, before moving to the next cut. If you are using the height control unit you may wish to adjust this to 1.5 sec., if not use these default settings for manual cutting.

These are the only areas you will need to change on this page, everything else should remain as is.

For more information, please call Tech Support Toll Free: 1-866-571-1066 International: 775-673-2200.