

Speed Settings Setup

This manual describes setting up the Rapid Rate (G0) and the Feed Rate (G1/G2/G3) in the Custom Machine Settings.

Upon opening the Custom Machine Settings, you are presented with the following window:



The screenshot shows the Custom Machine Settings window with a gear icon on the left and a red double-headed arrow icon on the right. The window is divided into four main sections:

- Speed**: A table with columns for XY, mm/min; Z, mm/min; and A, degree/s.

	XY, mm/min	Z, mm/min	A, degree/s
Feed Rate	10000	10000	180
Rapid Rate	10000	10000	180
Jog Rate	12000	6000	180
Acceleration	600	600	500
- Spindle**: A table with settings for On Delay, Spindle Off Delay, Lift Programming, Lift Height, and Lift Speed.

On Delay, sec	0.5	Spindle Off Delay, sec	0.5
Lift Programming	ABS	Lift Height, mm	0.0
Lift Speed, mm/min	1000		
- Step-Dir Coolant control**: A table with Rate and Ratio settings.

Rate, ml/hour	0.0	Ratio	1359
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- Mileage/Oil Change**: A table with X, Y, and Z Trip counters, each with a reset button and a limit of 3.

X Trip counter	269.588	[Reset]	of 3
Y Trip counter	219.572	[Reset]	of 3
Z Trip counter	212.623	[Reset]	of 3

The rates are set in mm/min, and are useful if the hardware setup requires a different feed rate for cutting versus a rapid rate used primarily for movement. The values set here are default values for G0 and G1/G2/G3 and can also be changed through setting the speed to an Fxxx value manually either in the MDI mode or in the G Code program that the machine will be executing.

If a different value for the Feed Rate or the Rapid rate has been inputted by either of these methods, it is important to note that the behaviour for the two default rates is different. If a

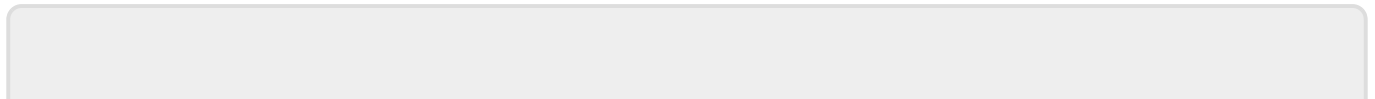
G0 Fxxx

command is issued in one line of the program code, the Rapid Rate of the machine will change back to the default Rapid Rate as set in the Custom Machine Settings window.

However, for the Feed Rate (G1/G2/G3), if a

G1 Fxxx

command is issued, the feed rate will persist to be at Fxxx in the following lines of code. This is done to keep the cutting speed of the machine at a consistent rate.



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