Plasmac Gcode examples

Item	Feature	Example
1.	Begin Cut	M3 $0 S1
2	End Cut	M5 $0
3	select plasma cutting tool.	M3 $0 S1
4	select scribe	M3 $1 S1
5	plasma spotting tool	M3 $2 S1
6	retrieves material number n	M190 Pn
7	wait for material change confirmation	M66 P3 L3 Q1
8	sets the feed rate to that shown in the Run Panel	F#<_hal[plasmac.cut-feed-rate]>
9	Complete example retrieving a material and cut	M190 Pn M66 P3 L3 Q1 F#<_hal[plasmac.cut-feed-rate]> M3 $0 S1 ... M5 $0
10	disable THC (synchronised with motion)	M62 P2
11	enable THC (synchronised with motion)	M63 P2
12	disable THC (immediately)	M64 P2
13	enable THC (immediately)	M65 P2
14	set the velocity to 100% of CutFeedRate Note: set M68 E3 Q0 to your G-Code preamble and postamble	M67 E3 Q0 or M67 E3 Q100
15	set velocity to 60% of CutFeedRate. set velocity to 40% of CutFeedRate.	M67 E3 Q60 M67 E3 Q40
16	Cutter Compensation - left of path Cutter Compensation - right of path Cutter compensation - off	G41.1 D#<_hal[plasmac_run.kerf-width-f]> G42.1 D#<_hal[plasmac_run.kerf-width-f]> G40

17	Example hole cut with 60% reduced speed	G21 (metric) G64 P0.005 M52 P1 (allow paused motion - adaptive feed) F#<_hal[plasmac.cut-feed-rate]> G0 X10 Y10 M3 $0 S1 (start cut) G1 X0 M67 E3 Q60 (reduce feed rate to 60%) G3 I10 (the hole) M67 E3 Q0 (restore feed rate to 100%) M5 $0(end cut) G0 X0 Y0 M2 (end job)
16	Example hole with default 4mm overcut	G21 (metric) G64 P0.005 M52 P1 (allow paused motion) F#<_hal[plasmac.cut-feed-rate]> (feed rate from cut parameters) G0 X10 Y10 M3 $0 S1 (start cut) G1 X0 M67 E3 Q60 (reduce feed rate to 60%) G3 I10 (the hole) M62 P3 (turn torch off) G3 X0.8 Y6.081 I10 (continue motion for 4mm) M63 P3 (allow torch to be turned on) M67 E3 Q0 (restore feed rate to 100%) M5 $0(end cut) G0 X0 Y0 M2 (end job)
19	Specify overcut length	#<oclength> = n
20	Hole diameter for 60% reduction - metric (mm) - Imperial (inches) **Default:** 32mm (1.25”)	#<m_diameter> = nn #<i_diameter> = nn
21	Reduce the speed of holes less than 32mm (1.25") to 60% of CutFeedRate.	#<holes> = 1
22	60% velocity reduction > 32mm hole, turns torch off at the end of the hole and follows the hole path for overcut length	#<holes> = 2
23	Hole cut with 6.5mm overcut at end	G21 (metric) G64 P0.005

		M52 P1 (allow paused motion) F#<_hal[plasmac.cut-feed-rate]> #<holes> = 2 (overcut for holes) #<oclength> = 6.5 (optional, 6.5mm overcut length) G0 X10 Y10 M3 $0 S1 (start cut) G1 X0 G3 I10 (the hole) M5 $0 (end cut) G0 X0 Y0 M2 (end job)
24	Select Scribe and select torch at end of scribing	... M52 P1 (paused motion on) F#<_hal[plasmac.cut-feed-rate]> T1 M6 (select scribe) G43 H0 (apply ofsets) M3 $1 S1 (start plasmac with scribe) ... T0 M6 (select torch) G43 H0(apply ofsets) G0 X0 Y0 (parking position) M5 $1(end)
25	Hole centre spotting. (Requires motion command or nothing happens)	G21 (metric) F99999 (high feed rate) g0 x10 y10 m3 $2 s1 (spotting on) g91 (relative distance mode) g1 x0.000001 g90 (absolute distance mode) m5 $2(spotting off) g0 x0 y0 g90 m30