Cenon CAM - G-Code / NC Overview

2020-05-28, Revision 2

cenon

Motion, Mode	Codes	Parameter Description
Interpolation (G-Codes)		
Arc (cw / ccw)	G2/G3 X Y A B	center x, y, angle start, end
	G2/G3 R A B	radius, start angle, end angle
	G2/G3 X Y R	end X end Y radius
	G2/G3 X Y I J	end x, end y, offset x, offset y
Helix (cw / ccw)	G2/G3 X Y Z R	TODO: future enhancement
	G2/G3 X Y Z I J	TODO: future enhancement
Curve	N/A	X1, Y1, X2, Y2, X3, Y3
Move (Rapid Motion)	G0 X Y Z	X, Y, Z or X, Y, or Z
Line (Coordinated Motion)	G1 X Y Z	X, Y, Z or X, Y, or Z
Line + Tangential axis	G1 X Y A	X, Y, tangential axis

If a high level interpolation command is not configured in Cenon, Cenon will interpolate, using a lower level interpolation: A Helix will be replaced by arcs, Arcs will be replaced by lines.

Other NC commands		
Change Tool	T	tool number / remove tool
Spindle Revolution	S M3 / S0 M5	[1/min]
Feed (set Speed)	F	[units/min]
Switches	M7 / M9	Cooling on/off
	. . .	etc.
Change Feed, Rev		
Halt, Continue, Break		
Query commands		
Init	G21 G90 G94	MM, absolute coordinates, units per minute

Notes

All commands can be configured in a device configuration file.
Mode settings can be added to commands as desired.
Output resolution can be configured to MM, Inch, etc.
Coordinates are always absolute. Units for speeds and revolutions are per minute.

The Cenon CAM manual, chapter "device configuration" describes the configuration of output devices.

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