

**APSX-NANO Swiss**

<b>G-CODES</b>	<b>Description</b>
G0	Motion at Rapid Move Rate
G1	Motion at Feed Rate - Linear Move
G2	Helical Motion at Feed Rate CW - Arc Move
G3	Helical Motion at Feed Rate CCW - Arc Move
G4	Dwell - Pause (P)
G7	Diameter Mode (lathe)
G8	Radius Mode (lathe)
G10 L1	Set Tool Table
G10 L2	Set Coordinate System
G10 L10	Set Tool Table
G10 L11	Set Tool Table
G10 L20	Set Coordinate System
G17	XY-plane designation
G18	ZX-plane designation
G19	YZ-plane designation
G20	Imperial units of input
G21	Metric units of input
G28, G28.1	Go to Factory Position - stored in parameters 5161-5166
G30, G30.1	Go to Predefined Position - stored in parameters 5181-5186
G33	Spindle Synchronized Motion
G33.1	Rigid Tapping
G40	Cutter radius compensation cancel
G41	Cutter radius compensation - left (D)
G43	Use Tool Length Offset from Tool Table (H)
G49	Cancel Tool Length Offset
G53	Move in Machine Coordinates
G54-G59.3	Select Work Coordinate System (1 - 6)
G64	Path Bending - Best possible speed
G76	Multi-pass Threading Cycle (Lathe)
G90	Absolute Dimension
G91	Incremental Dimension
G90.1	Absolute Arc Dimension
G91.1	Incremental Arc Dimension
G92	Coordinate System Offset
G92.1 G92.2	Cancel G92 Offsets
G92.3	Restore G92 Offsets
G93	Inverse time mode
G94	Units per minute mode
G95	Units per revolution mode
G96 G97	Spindle Control Mode
<b>CANNED CYCLES</b>	
G80	Cancel Motion Modes - Canned Cycle
G81	Drilling Cycle
G82	Drilling Cycle with Dwell (Spot-Drilling)

G83	Drilling Cycle with Peck (Deep Hole)
G85	Boring Cycle, No Dwell, Feed Out
G86	Boring Cycle, Stop, Rapid Out
G89	Boring Cycle, Dwell, Feed Out
G98 G99	Canned Cycle Z Retract Mode

#### M-CODES

M0 M1	Program Pause
M2 M30	Program End
M3	Spindle rotation normal (CW for R/H tools)
M5	Spindle stop
M6	Tool Change
M7	Mist ON
M9	Mist OFF
M48 M49	Feed & Spindle Overrides (Enable/Disable)
M50	Feed Override Control
M51	Spindle Override Control
M52	Adaptive Feed Control
M53	Feed Stop Control
M61	Set Current Tool Number
M101	Angle Mode
M102	Spindle Mode

#### DESIGNATORS

X	X axis of machine
Y	Y axis of machine
Z	Z axis of machine
A	A axis of machine
D	Tool radius compensation number
F	Feed rate
G	General function
H	Tool length offset index
M	Miscellaneous function
N	Line number
S	Spindle speed
T	Tool selection