

Code	Function
G00	Rapid positioning
G01	Linear interpolation (cutting)
G02	Clockwise arc
G03	Counter-clockwise arc
G04	Dwell (pause)
G17	XY plane selection
G18	ZX plane selection
G19	YZ plane selection
G20	Set units to inches
G21	Set units to millimeters
G28	Return to machine home
G40	Cancel cutter radius compensation
G41	Cutter comp left
G42	Cutter comp right
G43	Tool length compensation (+)
G49	Cancel tool length compensation
G54–G59	Work coordinate systems
G80	Cancel canned cycle
G81	Drilling cycle
G82	Drilling cycle with dwell
G83	Peck drilling cycle
G90	Absolute programming
G91	Incremental programming
G94	Feedrate per minute
G95	Feedrate per revolution

Code	Function
M00	Program stop
M01	Optional stop
M02	End of program
M03	Spindle on clockwise
M04	Spindle on counterclockwise
M05	Spindle stop
M06	Tool change
M08	Coolant on
M09	Coolant off
M30	Program end and rewind

Letter	Used For
A	Rotary axis (often around X)
B	Rotary axis (often around Y)
C	Rotary axis (often around Z)
D	Tool diameter offset number
E	Used in some cycles (often peck depth in lathes)
F	Feedrate (in/min or mm/min)
G	G-code function
H	Tool length offset number
I	Arc center (X offset) or incremental X
J	Arc center (Y offset) or incremental Y
K	Arc center (Z offset) or incremental Z
L	Loop count or repetitions in some cycles
M	M-code function
N	Line number (optional in most modern machines)
O	Program name or number
P	Dwell time (seconds), or subprogram number
Q	Peck depth in canned cycles
R	Arc radius or retract height
S	Spindle speed (RPM)
T	Tool number
U	Incremental X (lathe)
V	Incremental Y (lathe)
W	Incremental Z (lathe)
X	X-axis coordinate
Y	Y-axis coordinate
Z	Z-axis coordinate