

## Haas G Code list

G00 RAPID POSITIONING MOTION (X,Z,U,W,B) (SETTING 10, 101)  
G01 LINEAR INTERPOLATION MOTION (X,Z,U,W,B,F)  
G01 CHAMFERING AND CORNER ROUNDING (X,Z,U,W,B,I,K,R,A,F)  
G02 CW CIRCULAR INTERPOLATION MOTION (X,Z,U,W,I,K,R,F)  
G03 CCW CIRCULAR INTERPOLATION MOTION (X,Z,U,W,I,K,R,F)  
G04 DWELL (P) (P=seconds...milliseconds)  
G05 FINE SPINDLE CONTROL MOTION (X,Z,U,W,R,F) (LIVE TOOLING)  
G09 EXACT STOP, NON-MODAL  
G10 PROGRAMMABLE OFFSET SETTING (X,Z,U,W,L,P,Q,R)  
G14 MAIN-SPINDLE SHIFT TO SUB-SPINDLE  
G15 MAIN-SPINDLE SHIFT TO SUB-SPINDLE CANCEL  
G17 CIRCULAR MOTION XY PLANE SELECTION (G02,G03) (LIVE TOOLING)  
G18 CIRCULAR MOTION ZX PLANE SELECTION (G02,G03) (SETTING 56)  
G19 CIRCULAR MOTION YZ PLANE SELECTION (G02,G03) (LIVE TOOLING)  
G20 VERIFY INCH COORDINATE POSITIONING (SETTING 9 needs to be INCH)  
G21 VERIFY METRIC COORDINATE POSITIONING (SETTING 9 needs to be METRIC)  
G28 MACHINE ZERO RETURN THRU REF. POINT (X,Z,U,W,B) (Fanuc)  
G29 MOVE TO LOCATION THROUGH G29 REF. POINT (X,Z) (Fanuc)  
G31 FEED UNTIL SKIP FUNCTION (X,Z,U,W,F)  
G32 THREAD CUTTING PATH, MODAL (X,Z,U,W,F)  
G40 TOOL NOSE COMPENSATION CANCEL G41/G42 (X,Z,U,W,I,K) (SETTING 56)  
G41 TOOL NOSE COMPENSATION, LEFT (X,Z,U,W) (SETTING 43, 44, 58)  
G42 TOOL NOSE COMPENSATION, RIGHT (X,Z,U,W) (SETTING 43, 44, 58)  
G50 SPINDLE SPEED MAXIMUM RPM LIMIT (S)  
G51 RETURN TO MACHINE ZERO, CANCEL OFFSET (Yasnac)  
G52 WORK OFFSET COORDINATE POSITIONING (Yasnac)  
G52 GLOBAL WORK COORDINATE SYSTEM SHIFT (Fanuc)  
G53 MACHINE COORDINATE POSITIONING, NON-MODAL (X,Z,B)  
G54 WORK OFFSET COORDINATE POSITIONING #1 (SETTING 56)  
G55 WORK OFFSET COORDINATE POSITIONING #2  
G56 WORK OFFSET COORDINATE POSITIONING #3  
G57 WORK OFFSET COORDINATE POSITIONING #4  
G58 WORK OFFSET COORDINATE POSITIONING #5  
G59 WORK OFFSET COORDINATE POSITIONING #6  
G61 EXACT STOP, MODAL (X,Z)  
G64 EXACT STOP G61 CANCEL (SETTING 56)  
G65 MACRO SUB-ROUTINE CALL  
G70 FINISHING CYCLE (P,Q)  
G71 O.D. / I.D. STOCK REMOVAL CYCLE (P,Q,U,W,I,K,D,S,T,R1,F) (SETTING 72, 73)  
G72 END FACE STOCK REMOVAL CYCLE (P,Q,U,W,I,K,D,S,T,R1,F) (SETTING 72, 73)

G73 IRREGULAR PATH STOCK REMOVAL CYCLE (P,Q,U,W,I,K,D,S,T,F)  
G74 FACE GROOVING, or *HIGH SPEED PECK DRILL CYCLE* (X,Z,U,W,I,K,D,F) (SETTING 22)  
G75 O.D. / I.D. PECK GROOVING CYCLE, (X,Z,U,W,I,K,D,F) (SETTING 22)  
G76 THREAD CUTTING CYCLE, MULTIPLE PASS(X,Z,U,W,I,K,A,D,F) (SETTING 86, 95, 96, 99)  
G77 FLATTING CYCLE (I,J,L,R,S,K) (LIVE TOOLING)  
G80 CANCEL CANNED CYCLE (SETTING 56)  
G81 DRILL CANNED CYCLE (X,Z,W,R,F)  
G82 SPOT DRILL / COUNTERBORE CANNED CYCLE (X,Z,W,P,R,F)  
G83 PECK DRILLING CANNED CYCLE (X,Z,W,I,J,K,Q,P,R,F) (SETTING 22, 52)  
G84 TAPPING CANNED CYCLE (X,Z,W,R,F)  
G85 BORE IN, BORE OUT CANNED CYCLE (X,Z,U,W,R,L,F)  
G86 BORE IN, STOP, RAPID OUT CANNED CYCLE (X,Z,U,W,R,L,F)  
G87 BORE IN, STOP, MANUAL RETRACT CANNED CYCLE (X,Z,U,W,R,L,F)  
G88 BORE IN, DWELL, MANUAL RETRACT CANNED CYCLE (X,Z,U,W,P,R,L,F)  
G89 BORE IN, DWELL, BORE OUT CANNED CYCLE (X,Z,U,W,P,R,L,F)  
G90 O.D. / I.D. TURNING CYCLE, MODAL (X,Z,U,W,I,F)  
G92 THREADING CYCLE, MODAL (X,Z,U,W,I,F) (SETTING 95, 96)  
G94 END FACING CYCLE, MODAL (X,Z,U,W,K,F)  
G95 END FACE LIVE TOOLING RIGID TAP (X,Z,W,R,F)  
G96 CONSTANT SURFACE SPEED, CSS ON (S)  
G97 CONSTANT NON-VARYING SPINDLE SPEED, CSS OFF (S) (SETTING 56)  
G98 FEED PER MINUTE (F)  
G99 FEED PER REVOLUTION (F) (SETTING 56)  
G100 MIRROR IMAGE CANCEL G101  
G101 MIRROR IMAGE (X,Z) (SETTING 45, 47)  
G102 PROGRAMMABLE OUTPUT TO RS-232 (X,Z)  
G103 LIMIT BLOCK LOOKAHEAD (P0 - P15 max. for number control looks ahead)  
G105 SERVO BAR COMMAND  
G110-G111 WORK OFFSET COORDINATE POSITIONING #7- #8  
G112 CARTESIAN TO POLAR TRANSFORMATION  
G113 CARTESIAN TO POLAR TRANSFORMATION CANCEL  
G114-G129 WORK OFFSET COORDINATE POSITIONING #9 - #24  
G159 BACKGROUND PICKUP / PART RETURN  
G160 APL AXIS COMMAND MODE ON  
G161 APL AXIS COMMAND MODE OFF  
G184 REVERSE TAPPING CANNED CYCLE (X,Z,W,R,F) (SETTING 130)  
G187 ACCURACY CONTROL FOR HIGH SPEED MACHINING (E) (SETTING 85)  
G194 SUB-SPINDLE / TAPPING CANNED CYCLE  
G195 LIVE TOOLING VECTOR TAPPING (X,F)  
G196 LIVE TOOLING VECTOR TAPPING REVERSE (X,F)  
G200 INDEX ON THE FLY (X,Z,U,W,T)