

| Code | Usage             | Description   | Code | Usage     | Description  |
|------|-------------------|---|------|-----------|--|
| G00  | G00               | Rapid move  | M08  | M08       | Coolant on   |
| G01  | G01Fn             | Feed move   | M09  | M09       | Coolant off  |
| G02  | G02XnZnInKnFn     | Arc -Clockwise                                      | M12  | M12       | Collet clamp   |
| G02  | G02XnZnRn         | Arc -Clockwise                                      | M13  | M13       | Collet unclamp   |
| G03  | G03XnZnInKnFn     | Arc -Counter Clockwise                              | M19  | M19       | Spindle Positioning; lock at home (optional C-Axis only)       |
| G03  | G03XnZnRn         | Arc -Counter Clockwise                              | M25  | M25       | User assigned on (Note: Four additional codes available)       |
| G04  | G04Fn             | Dwell   | M26  | M26       | User assigned off (Note: Four additional codes available)      |
| G10  | G10XnZn           | Work Shift  | M30  | M30       | End of program - cancels all active "M" functions              |
| G33  | G33XnZnInKnAnCaPO | Threading cycle                                     | M31  | M31       | Cancels Cycle Repeat mode                                      |
| G40  | G40               | Cancels Tool Nose Radius Compensation               | M84  | M84       | Locks feedrate & spindle speed override pots at 100%           |
| G41  | G41               | Left hand Tool Nose Radius Compensation             | M85  | M85       | Re-enables override pots (M30, M02, T# also re-enables)        |
| G42  | G42               | Right hand Tool Nose Radius Compensation            | M87  | M87       | Real-time Work Shift from digital indicator                    |
| G70  | G70               | Inch mode   | M88  | M88       | Spindle Positioning; lock at home; high res (opt: C-Axis only) |
| G71  | G71               | Metric mode   | M89  | M89       | Spindle Positioning; lock at arbitrary home (opt: C-Axis only) |
| G72  | G72               | Diameter programming mode                           | M91  | M91       | Wait for HDR111 to be open circuit                             |
| G73  | G73               | Radius programming mode                             | M92  | M92       | Wait for HDR111 to be shorted                                  |
| G74  | G74XnZnInUnFn     | Box Roughing cycle                                  | M93  | M93       | Wait for HDR110 to be open circuit                             |
| G75  | G75InUnFnPn       | Box Contour Roughing cycle                          | M94  | M94       | Wait for HDR110 to be shorted                                  |
| G76  | G76Sn             | Minimum spindle speed for constant surface feet     | M95  | M95       | Jump to subroutine 1 if HDR112 is shorted                      |
| G77  | G77Sn             | Maximum spindle speed for constant surface feet     | M97  | M97InCnPn | Jump to subroutine, conditional (optional: PLC option)         |
| G78  | G78UnFnPn         | Rough Contour Cycle                                 | M98  | M98Pn     | Jump to subroutine   |
| G81  | G81ZnFn           | Drill cycle   | M99  | M99       | End subroutine   |
| G83  | G83ZnKnFn RnLnCn  | Peck drill cycle                                    | CI   | CInnn.nn  | Incremental spindle angle (optional: C-Axis only)              |
| G90  | G90               | Absolute mode selection                             | CA   | CAnnn.nn  | Absolute spindle angle (optional: C--Axis only)                |
| G91  | G91               | Incremental mode selection                          | C    | XnZnCn    | Automatic chamfer at intersection                              |
| G92  | G92XnZn           | Preset axis position                                | D    | Dn        | Secondary offsets, axis correction or TNR comp value           |
| G94  | G94Fn             | Inches per minute mode                              | F    | Fn        | Feedrates, dwell   |
| G95  | G95Fn             | Inches per revolution mode                          | LS   | LSn       | Loop start   |
| G96  | G96Sn             | Spindle speed set as surface feet                   | LF   | LF        | Loop finish  |
| G97  | G97               | Spindle speed set as RPM                            | P    | P         | Start any move in sync with spindle                            |
| M00  | M00               | Program stop - does not cancel active "M" functions | R    | XnZnRn    | Automatic radius at intersection                               |
| M01  | M01               | Optional stop                                       | S    | Sn        | Spindle speed selection, SFM or RPM                            |
| M02  | M02               | End program - does not cancel active "M" functions  | T    | Tn        | Tool offset call command                                       |
| M03  | M03Sn             | Spindle on, forward (top coming)                    | /    | /         | Block delete   |
| M04  | M04Sn             | Spindle on, reverse (top going)                     | }    | }n        | Begin subroutine   |
| M05  | M05               | Spindle off, stop                                   |      |           |  |