



G-COMMANDS FOR TURNING

G CODE MODE	EFFECT
Modal	Remain in effect for all blocks unless replaced by another modal G code
Non-Modal	Only effect the block in which it appears

MODE	COMMAND	FUNCTION
None-Modal	G04	Dwell
Modal	G07.1	Cylindrical interpolation
None-Modal	G10	Data setting
None-Modal	G11	Data setting off
None-Modal	G28	Return to reference point
None-Modal	G72	Finishing cycle
None-Modal	G73	Stock removal in turning
None-Modal	G74	Stock removal in facing
None-Modal	G75	Pattern repeating
None-Modal	G76	Deep hold drilling, cut-in cycle in Z
None-Modal	G77	Cut in cycle in X
None-Modal	G78	Multiple threading cycle
Modal	G92	Coord. syst. set., Spindle speed limit
Modal	G00	Positioning (rapid traverse)
Modal	G01	Linear interpolation (feed)
Modal	G02	Circular interpolation clockwise
Modal	G03	Circular interpolation counterclockwise
Modal	G20	Longitudinal turning cycle
Modal	G21	Thread cutting cycle
Modal	G24	Face turning cycle
Modal	G33	Thread cutting
Modal	G96	Constant cutting speed (<i>m/min</i>)
Modal	G97	Direct spindle speed programming (<i>rpm</i>)
Modal	G94	Feed per minute (<i>mm/min</i>)
Modal	G95	Feed per revolution (<i>mm/rev</i>)
Modal	G70	Inch data input
Modal	G71	Metric data input
Modal	G40	Cancel cutter radius compensation
Modal	G41	Cutter radius compensation left
Modal	G42	Cutter radius compensation right
Modal	G80	Cancel cycles
Modal	G83	Drilling cycle
Modal	G84	Tapping cycle
Modal	G85	Reaming cycle
Modal	G17	Plane selection XY
Modal	G18	Plane selection ZY
Modal	G19	Plane selection YZ
Modal	G12.1	Polar coordinate interpolation ON
Modal	G13.1	Polar coordinate interpolation OFF

**M-COMMANDS FOR TURNING**

COMMAND	FUNCTION
M0	Programmed stop
M1	Programmed stop, conditional
M2	Program end
M3	Spindle ON clockwise
M4	Spindle ON counterclockwise
M5	Spindle OFF
M8	Coolant ON
M9	Coolant OFF
M13	Driven tools ON clockwise
M14	Driven tools ON counterclockwise
M15	Driven tools OFF
M20	Quill forward
M21	Quill backward
M23	Collecting tray backward
M24	Collecting tray forward
M25	Clamping device OPEN
M26	Clamping device CLOSE
M30	Main program end
M32	Program end for loading operation
M52	Round axis operation (C-axis ON)
M53	Spindle operation (C-axis OFF)
M57	Spindle oscillate ON
M58	Spindle oscillate OFF
M67	Bar feed / loading magazine feed ON
M68	Bar feed / loading magazine feed OFF
M69	Bar change
M71	Blow-out ON
M72	Blow-out OFF
M90	Manual clamping chuck
M91	Tensile clamping device
M92	Pressure clamping device
M93	Final position monitoring OFF
M94	Bar feed / loading magazine feed activate
M95	Bar feed / loading magazine feed deactivate
M98	Subroutine call
M99	Subroutine end, jump command