

## TOOL SETUP

Should a user want to use the generic lathe tool screen / page, it is provided with the addition of tip direction / position per the Mach3 Turn Manual. Tool input and information is similar / same as the generic lathe screen, but, numerous buttons have been added to manipulate the tool table information.

Tool probing is provided to automatically find X lathe center and Z end based on a four surface tool setter. The user defines the setter basic dimensions and probes the appropriate surface. Tool offset adjustment is provided for tools such as a drill, reamer, or tool with a user defined tip radius.

Thus one can populate a tool table, alter a tool, find X=0, touch off to a part, reset the DRO's and create a home position or tool change position using keyboard, mouse or MPG.

The screenshot displays the Mach3 TOOL SETUP SCREEN with the following components:

- Top Menu:** File, Config, Function Cfg's, View, Wizards, Operator, PlugIn Control, Help
- Left Panel:**
  - Mode Selection:** DIA MODE, IMP, MM
  - Axis Zeroing:** X (+0.0000 ZERO), Z (+0.0000 ZERO)
  - Buttons:** Program, Machine, Part, Zero World X/Z, Home X/Z/ALL, Set Home X/Z, DE-REF ALL AXES
  - JOG ON:** Jog Mode, Cont, Step, MPG, Jogging Mode (MPG Axis X, Z), Cycle Step (1.0000)
  - Feed Rate:** 6.00, Slow Jog % (100.000)
  - Directional Keys:** Z-, X-, Z+, X+
  - Buttons:** MAIN SCREEN, DIAG. SCREEN, RESET, Emergency STOP
- Right Panel:**
  - TOOL DESC:** Empty, Lathe -> G15 G80 G18 G40 G20 G90 G94 G54 G49 G99 G61
  - Tool No:** 0, Tip Dir: 0, Tip Radius: +0.0000, Turret Deg: +0
  - Offsets:** X OFFSET (+0.000000), Z OFFSET (+0.000000), X WEAR (+0.0000), Z WEAR (+0.0000)
  - TOOL TABLE (TT):** OPEN TT, SAVE TT, EXPORT TT, IMPORT TT, RESET TT, QC Tool Table, BUTTON HELP
  - TOOL SETTER / PART PROBING:** Z1 CLEAR (0.6000), SETTER DIA. (1.0000), SLOW PROBE DIS (-0.3000), SETTER WIDTH (0.2500), X1 CLEAR (0.2000)
  - Probe Settings:** Probe Feedrate (+1.00), PROBE ACTIVE, Tool No (0), PROBE X1, X2, Z1, Z2
  - Offsets:** OFFSET ADJUSTMENT VALUE X (+0.0000), Z (+0.0000)
  - Buttons:** SET TC LOCATION, RESERVED, RESERVED, Auto Tool Adjust, Tool Adjust
- Bottom Panel:** VMR LATHE, TOOL SETUP SCREEN, CLEAR