

# Customizing the HiddenScript\_M3.m1s File.

There are two tables that represent all of the parameters that may be changed to customize the script for your edge finder characteristics. One table is for Metric measurement users and the other for English measurement users.

They appear near the top of the HiddenScript file after all of the variable declarations. The UnitsMode variable will automatically select the appropriate table for your system 'native units' setup.

The modifiable parameter tables are as follows:

```

RetryLimit = 3                ' === Loop Retry limit ===
'
If UnitsMode = 0 Then        ' === Set Metric Parameters ===
' =====
' ===== CHANGE HERE to set METRIC Mode parameters =====
' =====
Code "(Operating in mm mode.)"
tool_1      = 2.380          ' 3/32"   = 2.380mm      Favorite tool #1 size
tool_2      = 3.175          ' 1/8"    = 3.175mm      Favorite tool #2 size
tool_3      = 6.35           ' 1/4"    = 6.350mm      Favorite tool #3 size
SIDE_X      = 7.720          ' 0.300"  = 7.720mm      finder side width both X
SIDE_Y      = 7.720          ' 0.300"  = 7.720mm      finder side width both Y
CENTER_X    = 00.000         ' mm      Center of hole offset X
CENTER_Y    = 00.000         ' mm      Center of hole offset Y
Z_TOP1     = 3.111          ' mm      Top of edgfinder to workpiece surface
Z_TOP2     = 6.35           ' mm      Top of edgfinder to workpiece surface
BigMove     = 25.4           ' 1.000"  = 25.400mm   move probe this distance looking for edge
SmallMove   = 2.54           ' 0.100"  = 2.540mm   clearance over material
FeedSlow    = 100           ' 4in/min or 100mm/min Faster sacrifices accuracy, slower
max_error   = 0.025         ' 0.001"  = 0.025mm
'
Elseif UnitsMode = 1 Then    ' === set INCH mode parameters ===
' =====
' ===== CHANGE HERE to set INCH modd parameters =====
' =====
Code "(Operating in INCH mode.)"
tool_1      = 3/32           ' 3/32"   = 2.380mm      Favorite tool #1 size
tool_2      = 1/8            ' 1/8"    = 3.175mm      Favorite tool #2 size
tool_3      = 1/4            ' 1/4"    = 6.350mm      Favorite tool #3 size
SIDE_X      = 0.300         ' 0.300"  = 7.720mm      finder side width both X
SIDE_Y      = 0.300         ' 0.300"  = 7.720mm      finder side width both Y
CENTER_X    = 0.000         ' inches  Center hole offset X
CENTER_Y    = 0.000         ' inches  Center hole offset Y
Z_TOP1     = 0.122          ' inches  Top of edgfinder to workpiece surface
Z_TOP2     = 0.250          ' inches  Top of edgfinder to workpiece surface
BigMove     = 1.000         ' 1.000"  = 25.400mm   move probe this distance looking for edge
SmallMove   = 0.100         ' 0.100"  = 2.540mm   clearance over material
FeedSlow    = 4.000         ' 4in/min or 100mm/min Faster sacrifices accuracy
max_error   = 0.001         ' 0.001"  = 0.025mm
'

```

You need change only the entries in the mode table that you intend to use.

- 1) tool\_1, tool\_2 tool\_3 are used to select your favorite tool/probe diameters for side (X & Y) measurement.
  - 2) SIDE\_X and SIDE\_Y parameters are the thickness of your Edge Finder side walls. The X and Y thicknesses may be different from each other.
  - 3) Z\_TOP1 & Z\_TOP2 are two selectable thicknesses for the top of the Edge Finder.
  - 4) CENTER\_X & CENTER\_Y offsets are used to locate the X & Y corner based on finding the center of a hole in the Edge Finder. The Vancura Innovations Edge Finder has the center of the hole directly over the corner X0, Y0.
  - 5) BigMove defines the maximum distance the probe will move to find a TOUCH-OFF condition before giving up.
  - 6) SmallMove establishes a safe clearance for moving the probe above the touch surface.
  - 7) Feed Slow is the feed rate during the touch off process. This should be fast enough to not put you to sleep and slow enough to get a decent reading while not breaking the tool.
  - 8) max\_error: The program will try several times to get two consecutive measurements within this error setting.
  - 9) RetryLimit: The value will limit the number of times it will try to get two consecutive readings that agree within the max\_error limit.
- The parameter changes will be reflected in the input windows when using the Auto Tool Zero functions.

To customize the file, open the script using Mach3/Operator/Edit Script Button, select the 'Auto Tool Zero' button. Make the changes. The editor operates like a typical text editor. Don't forget to save the changes and verify that the changes work.