

```

1  function m6()
2
3      local inst = mc.mcGetInstance()
4
5      --Start tool change
6      mc.mcCntlGcodeExecute(inst, "G90 G53 G0 Z0.0");--Move the Z axis to Reference 0.0
7      mc.mcCntlGcodeExecute(inst, "M3 S15") --Rotate spindle slowly
8      locateSpindle = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT6) --Turn ON spindle
      lock
9      mc.mcSignalSetState (locateSpindle, 1) --Spindle lock ON
10     wx.wxSleep (5) --Wait 5 seconds
11     mc.mcCntlGcodeExecute(inst, "M05") --Turn OFF spindle
12     wx.wxSleep (1) --Wait 1 second
13
14     --Carousel OUT to hold tool
15     CarouselOut = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT5) --Push carousel OUT
      to engage tool
16     mc.mcSignalSetState (CarouselOut, 1) --Carousel OUT motor ON
17
18     --PNP input 5 switch activated to turn OFF OUTPUT5
19     --To turn output5 off:
20
21     if mc.mcSignalGetState (mc.mcSignalGetHandle (inst, mc.ISIG_OUTPUT5)) == 1 then
22     mcSignalWait(inst, ISIG_INPUT5, WAIT_MODE_Low, 0)
23     mc.mcSignalSetState(CarouselOut, 0)
24
25     end
26
27     wx.wxSleep (1) --Wait 1 second
28
29     --Release tool from spindle
30     releaseSpindle = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT7) --Turn ON air to
      release tool from spindle
31     mc.mcSignalSetState (releaseSpindle, 1) --Air ON
32     wx.wxSleep (1) --Wait 1 second
33
34     --Move Z axis up 4 and down inches to clear then engage tool
35     mc.mcCntlGcodeExecute(inst, "G90 G53 G0 Z4.0");--Move the Z axis up 4"
36     wx.wxMessageBox ("CHANGE TOOL THEN CLICK OK TO CONTINUE")
37     mc.mcCntlGcodeExecute(inst, "G90 G53 G0 Z0.0");--Move the Z axis down 4"
38     wx.wxSleep (1) --Wait 1 second
39
40     --Engage too in spindle
41     releaseSpindle = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT7) --Turn OFF air to
      grab tool in spindle
42     mc.mcSignalSetState (releaseSpindle, 0) --Air OFF
43     wx.wxSleep (1) --Wait 1 second
44     locateSpindle = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT6) --Turn OFF spindle
      lock
45     mc.mcSignalSetState (locateSpindle, 0) --Spindle lock OFF
46     wx.wxSleep (1)
47
48     --Carousel retracted to clear tool
49     CarouselRetract = mc.mcSignalGetHandle (inst, mc.OSIG_OUTPUT4) --Pull carousel
      IN to disengage tool
50     mc.mcSignalSetState (CarouselRetract, 1) --Carosel IN motor ON
51
52     --PNP input 4 switch activated to turn OFF OUTPUT4
53     --To turn output4 off:
54     hsig = mc.mcSignalGetHandle(inst, mc.ISIG_INPUT4);
55     SigState = mc.mcSignalGetState(hsig);
56     if SigState == 1 then
57     mc.mcSignalSetState(CarouselRetract, 0) end
58     if SigState == 0 then
59     wx.wxMessageBox ("INPUT 4 not triggered OFF")    end
60     wx.wxSleep (1)
61
62     end
63

```

```
64   if (mc.mcInEditor() == 1) then
65     m6()
```