

## RapidChange ATC Setup on Masso cnc

\* All examples assume the z home position is 0 at the highest position

Use Manual NC to call a tool

Use pass through m98 to pick and drop tools

All pick and drop codes (1 2 3 4 5 11 12 13 14 15 must be in the same masso folder as the gcode

The screenshot displays the CAM software interface with several panels:

- Top Panel:** Manufacturing process tabs (MILLING, TURNING, ADDITIVE, INSPECTION, FABRICATION, UTILITIES) and a toolbar with icons for G1, G2, 2D, and 3D.
- Left Panel (BROWSER):** A tree view showing a 'Manual NC' folder under 'Setups'. A context menu is open over this folder, listing options: New Setup, Create NC Program, New Folder, New Pattern, Manual NC, Probe WCS, Create Manufacturing Model, and Setups.
- Manual NC : MANUAL NC2 Panel:** Shows 'Manual Type' set to 'Comment'. A dropdown menu is open, listing various actions: Comment (selected), Stop, Optional stop, Dwell, Tool break control, Measure tool, Start chip transport, Stop chip transport, Open door, Close door, Calibrate, Verify, Clean, Action, Print message, Display message, Alarm, Alert, Pass through, and Force tool change.
- Manual NC : MANUAL NC3 Panel:** Shows 'Manual Type' set to 'Pass through' and a 'Message' field containing: 'M98 PX', '(X is the pocket number)', '(1 is pick tool in pocket 1)', and '(11 is drop tool in pocket 1)'. A 'Setups' button is at the bottom.
- Operation List Panel:** A list of operations under a 'Setup1' header. The first operation is 'Manual NC1 [Pass-through=M98 P2]'. Other operations include Face3, 2D Adaptive, 2D Contour, and Trace.
- Manual NC : MANUAL NC1 Panel:** Shows 'Manual Type' set to 'Pass through' and a 'Message' field containing 'M98 P2'. 'OK' and 'Cancel' buttons are at the bottom.

## RapidChange ATC Setup on Masso cnc

Add this line to close the cover using the esp32

```
writeBlock(mFormat.format(64), "P" +(1) )// cover close atc
```

```
893     if (insertToolCall) {  
894         forceWorkPlane();  
895  
896         onCommand(COMMAND_STOP_SPINDLE);  
897         setCoolant(COOLANT_OFF);  
898  
899         if (!isFirstSection() && getProperty("optionalStop")) {  
900             onCommand(COMMAND_OPTIONAL_STOP);  
901         }  
902  
903         if ((tool.number < 0) || (tool.number > 31)) {  
904             warning(localize("Tool number should be between 0 and 31."));  
905         }  
906         writeBlock("T" + toolFormat.format(tool.number), mFormat.format(6));  
907         writeBlock(mFormat.format(64), "P" +(1) )// cover close atc  
908         if (tool.comment) {  
909             writeComment(tool.comment);  
910         }
```

## RapidChange ATC Setup on Masso cnc

## RapidChange ATC Setup on Masso cnc