Tool Changes and Auto/Manual Tools

This document will help with getting you familiar with changing tools and setting your tools to Manual or Auto (in ATC). First, find the TOOL CHANGER hard keys on your control. The AUTO hard key under TOOL CHANGER is what we will use to initiate tool changes.
Tool Changes and Auto/Manual Tools

Manually loading a tool into the spindle, then, into the ATC

- Press the **MANUAL** hard key under MACHINE MODE. This takes you to the Manual Screen which allows manual motion and tool changes.
- Press the **TOOL MANAGEMENT** soft key on the touch screen.
- Is there physically a tool in the spindle? If not, make sure the TOOL IN SPINDLE field reads 0.
- In the NEXT TOOL field, enter the tool number of the tool you want to load or that you want to associate with your new tool. Make sure to press ENTER.
- You can either press the **MOVE TOOL TO SPINDLE** soft key on the touch screen or press the **AUTO** hard key under TOOL CHANGER, then the **START CYCLE** button to initiate a tool change.
- You will then be prompted to insert a Manual Tool into the spindle if there is not an Auto tool associated with that tool number. Physically insert your new tool. This is still a Manual Tool and will NOT be loaded into the ATC.
- Next to TOOL IN SPINDLE it will either say “Auto” or “Manual”. A Manual Tool will allow you to set height and geometry for the tool but will need to be physically loaded and removed before and after use. An Auto Tool will allow you to set height and geometry and will be stored in the ATC between uses.
- To make this an Auto Tool and give it a spot in the ATC, press the **TOGGLE AUTO/MANUAL** soft key on the touch screen. You can also do this by changing your NEXT TOOL field to match your TOOL IN SPINDLE field, then hitting your **AUTO** hard key under TOOL CHANGER.
- Once your TOOL IN SPINDLE is set to “Auto,” change the NEXT TOOL number to the next tool you wish to load into the spindle and press your **AUTO** hard key under TOOL CHANGER to move that tool into the ATC and load another tool into the spindle.
- If you just want to load that tool into the ATC and do not want to load another tool, you can press the CLEAR TOOL IN SPINDLE soft key and hit **START CYCLE**.
- When you enter a tool number into NEXT TOOL, it will also either say “Manual” or “Auto” next to it. If “Auto,” it is in the ATC, and when you initiate the change, it will load it from the ATC into the spindle. If “Manual,” when you initiate the change, the spindle will be cleared and you will be prompted to manually load a tool into the spindle.
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Changing tools while in TOOL SETUP

- Enter the Tool Setup screen
- Press the **MANUAL** hard key under MACHINE MODE
  - Press **TOOL MANAGEMENT** soft key
  - Press **TOOL SETUP** soft key

OR

- Press the **INPUT** hard key
  - Press **TOOL REVIEW** soft key
  - Press **TOOL SETUP** soft key

Note: the TOOL IN SPINDLE field is still visible

- If the TOOL IN SPINDLE field matches the TOOL NUMBER field, pressing the **AUTO** hard key under TOOL CHANGER will toggle that tool between “Auto” and “Manual.”
- You can initiate a tool change without leaving this screen by entering the tool number of the tool you want in the TOOL NUMBER field, pressing the **AUTO** hard key under TOOL CHANGER, then **CYCLE START**.
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Verifying Auto Tools and Their Location in the ATC

- Enter the Tool Management screen
- Press the **MANUAL** hard key under MACHINE MODE
  - Press **TOOL MANAGEMENT** soft key
  - Notice the AUTO tab at the top of the page

![Tool Management Screen](image)

- Select that tab to view and manipulate your ATC map.

![Tool Management Screen with Details](image)

**NOTE:** At the top, there are checkboxes to “Show only occupied pockets.” There is also a box to “Disable even numbered pockets.” If you want to place large diameter tools into your ATC, checking that box will create room on either side for a large tool.