

YES Plasma Strip System Operation

Overview

Plasma strip system for safe, high power photoresist stripping. The system uses a downstream, charge-balanced plasma to prevent plasma, UV, or electrostatic charging damage. Low ion acceleration from RF plasma generation prevents sputter damage. Less than 10mV electron shift in 200A Gate Oxide.

Restrictions & Precautions

- **Only use the labeled white 4" wafer cassette at the system, do not use your own cassette!**
- **The system is configured for 4" wafers only, do not attempt to load a 6" cassette!**
- **Maximum sample thickness on a carrier wafer is <3.3 mm.**
- **Samples with indium on the backside should be avoided, consult with Staff prior to running.**

Operation

1. Make sure you are on the 'Main' tab, if not select it.
2. Verify the system is not in use; in the 'Cassette' section of the screen the 'State' will read 'CassettePlaced' and the light tower will be off.
3. Open the Plexiglass door.
4. Remove the cassette and load your wafer(s)/sample(s) face up starting with the bottom slot (H-bar end). Flat orientation does not matter but make sure the wafers are pushed to the back of the cassette. There are carrier wafers at the system for small pieces.
NOTE: Take care not to cross-slot the wafers. Also do not skip slots as the run will stop and the system will go into an alarm state.
5. Place the cassette back in the cassette holder, H-Bar end down, making sure it is seated properly. 'State' should read 'CassettePlaced'.
6. Close the Plexiglass door.

All software steps can be performed using the touchscreen or keyboard/mouse.

7. Select the 'System Recipe' field. A 'File Select' pop-up window will appear with all the available recipes listed. Select the recipe you require to highlight it and select 'Select'.
8. Verify the correct recipe is displayed in the 'System Recipe' field.
9. Select the 'Lot ID' field and enter the following: last name-first initial, all lower case.
10. Select the '# of Wafers' field and enter the number of wafers in your run. The slots on the cassette map will change from white to cyan.
NOTE: If you enter too many wafers the system will go into alarm state when it reaches the empty slot.
11. Select 'START PROCESS', a pop-up window will appear confirming you want to start processing with the select recipe. Select 'Yes' if everything looks correct and 'No' if you need to make changes.
12. The system will begin processing and the light tower will turn solid green. If the system goes into an alarm state during the run, the light tower will turn blinking red and an alarm message will appear in red near the top of the screen. **DO NOT attempt to acknowledge or clear errors, just contact Staff.**
NOTE: DO NOT abort or stop runs if you realize you selected the wrong recipe! You should only abort or stop a run if you can see that damage to the tool or samples will occur!
13. Once the last wafer has completed processing there will be a short cool down step. DO NOT attempt to open the Plexiglass door until the 'State' reads 'ReadyToUnload'. The door is locked until the cool down has completed.
14. Open the door, remove the cassette, unload your wafer(s)/sample(s), replace the cassette, and close the door.