

AGS Reactive Ion Etcher (dielectric) SOP

Utility check:

- ❖ Chiller valve is open.
- ❖ Chiller switch is on.
- ❖ N2 supply to the roughing pump.
- ❖ Process cooling water for the dry pump is on



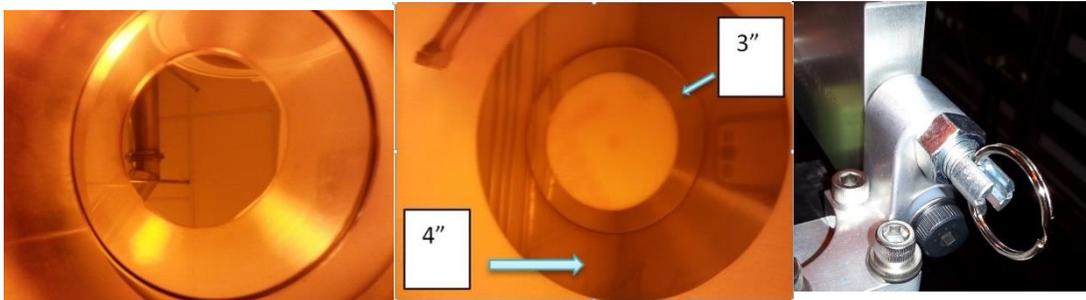
1. The power should be on. If not, turn on the power by pushing . The lights should be on.



2. Log onto the PlasmOps program with username “guest” and password “guest”



3. Select donut shape chuck cover for 3” or 4” wafer (chuck cover is to protect the chuck being ion bombarded through time)

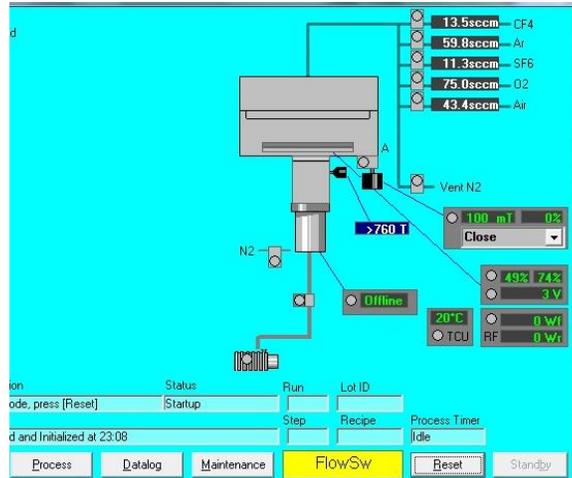


Pull the ring pin out and lift the chamber lid to 90 degree and release the pin into the chamber lid slot to hold the cover.

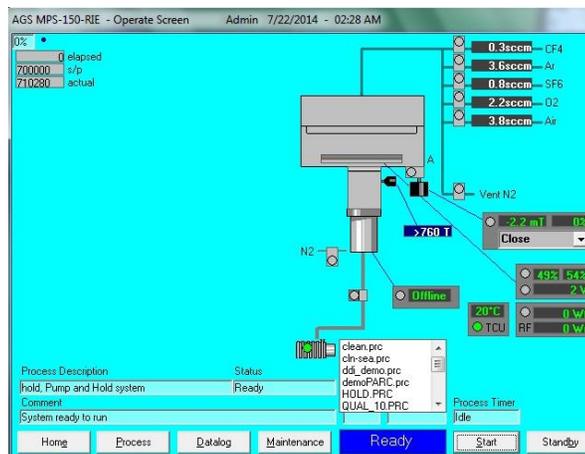
4. Click “operate” at the home page



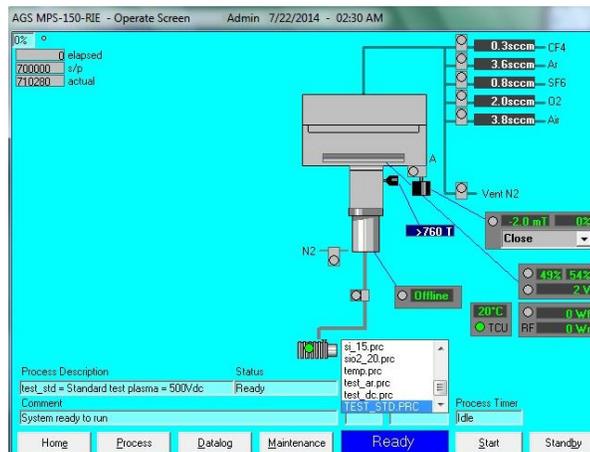
5. To turn on the Chiller first by clicking . It will turn green. Clear the “Flow Sw” by double click on it. Then turn on the roughing pump by clicking . It will turn green. If it shows red, contact cleanroom staff. Run the “Reset” (bottom right) to pump down the chamber. Click “yes” and “ok” for two pop warnings.



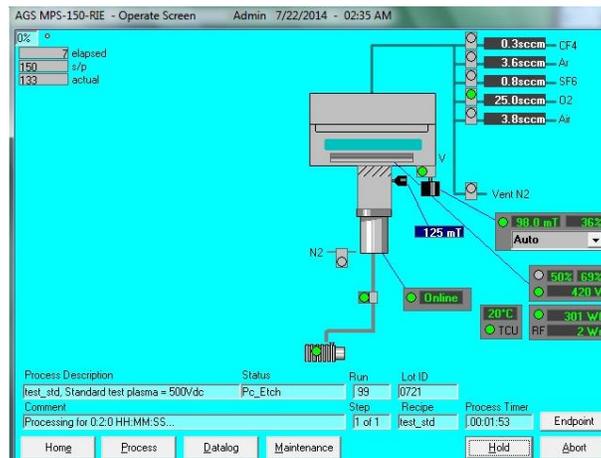
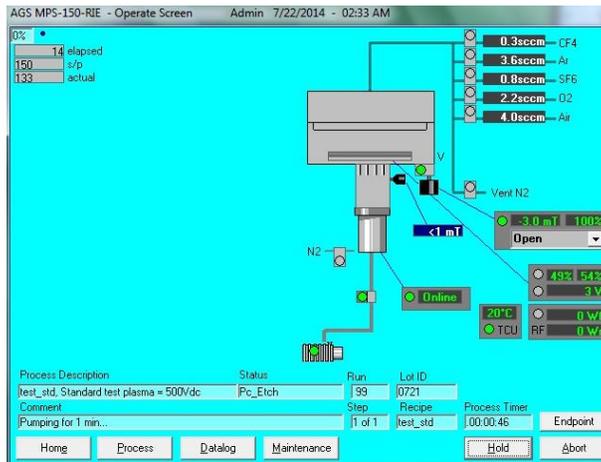
6. The system shows “Ready” once chiller and pump are on line. Recipes can be chosen through a recipe window. Click the recipe you want to run. Then click start to run. It will ask you to put a Lot ID. Use your initials.



7. The system will run the recipe automatically. It will show the process steps under “comment”



Power data and plasmas indication will be shown when the etching process step starts



8. Once the recipe is over. The chamber should be vented and ready for unload. Unload your sample and close the cover.

9. Shutting down the system:

1. on operation page, turn off the roughing pump by clicking .
2. turn off the Chiller by clicking .
3. Click "Home" to go back to home page and click "LOG OFF"
4. Turn off the RF power supply from the front panel. LEAVE main power panel ON!