

ICP #1 Rules & Important Notes

1. Enter all runs and errors in logbook.
2. The standard set point for the etch chamber chuck chiller (located in the chase) is 10°C. You should always verify this before making any runs. If you change the temperature on the chiller you need to change it back.
3. Gas Changes:
 - Always follow the gas change procedures as written. Failure to do so could cause gas cross contamination.
 - If you switch CF₄ to SF₆, you have to switch it back to CF₄.
 - If you switch N₂ to He, you have to switch it back to N₂.
 - The CHF₃/Ar line can be left in either configuration.
 - A gas change takes ~10 minutes, so for a gas line that has to be switched back you need to plan for an additional 20 minutes of reservation time. Going over your reservation time due to poor planning on your part is a policy violation and can be grounds for suspension from the lab.
4. You must run a clean after your etch:
 - 1 minute of O₂ clean for each minute of etching with a 5-minute minimum for CHF₃, CF₄, or SF₆ based etches.
 - 1 minute of CF₄ clean for every 2 minutes of etching with a 5-minute minimum for Cl₂ and BCl₃ based etches.
 - Not running these cleans or going over your reservation time due to poor planning on your part is a policy violation and can be grounds for suspension from the lab.
5. Ashing Chamber Rules:
 - Oil is only allowed for temps <50°C.
 - Kapton tape is allowed for temps up to 150°C, although you may get some outgassing from the adhesive at that temperature.
 - For temps >150°C you will just place your sample on the carrier wafer. Always make sure to slide the sample back and forth a little to get any air out from under, or else your sample may slide off during transfer.
6. The wafers in the cleaning wafer box are for just that, making cleaning runs. Mounting your sample to these wafers is not allowed and can be grounds for suspension from the lab. If you need carrier wafers, ask a Staff member.
7. Never put a wafer in the tool that is non-reflective (dull appearance). The standby chamber's interferometer will not see the wafer and the system will error for a wafer not present. You will not be able to perform a wafer collect to resolve this and attempting to will possibly cause more problems. You can run a non-reflective sample on a carrier wafer as long as it is not in the center of the carrier wafer.
8. Always make sure the back of your wafer is **extremely clean**.
9. Oil is messy - Please clean up after yourself and make sure there is no oil on the bottle or the working surface when you are done.
10. Make sure you place your carrier wafer in the bottom slot of the cassette.
11. It is recommended that you condition the chamber before your etch.

12. Wafer removal instructions after a He Error:

1. Wait until ESC Voltage is zero
2. Press SYSTEM RESET soft key
3. Press PREP soft key
4. Press TEST soft key
5. Press F6 [TEST]
6. Press F1 [WAFER TRANSFER]
7. Press F2 [COLLECT]
8. Press START soft key and wait until the routine has finished
9. Press F5 [RETURN] to get back to the main menu

1 LOT= Both cassettes in operation/multi-wafer

SLICE= Single cassette in operation/single wafer

Z 5200 SEMI

Z 4500 JEDIA

1 Pa= 7.5 mTorr