

Advanced Vacuum PECVD #2 Operating Instructions

- 1) Login to your group/company directory.
- 2) Ensure you are on the Process & Start Job tabs on the bottom left side of the screen.
- 3) Start a coat (seasoning) recipe based on the material you want to deposit. Select recipe, Select Start Job.
- 4) When coat recipe is complete, Vent the chamber by selecting Vent on left side of screen.
- 5) Select Open Lid on the left side of the screen.
- 6) Using metal tweezers, load samples. To prevent whole wafers from moving, place 3-4 Si pieces around the wafer.
- 7) Select Close Lid on left side of screen.
- 8) Select Pump Down on left side of screen.
- 9) Select the deposition recipe. Select Start Job. Enter deposition time if prompted.
- 10) When process is complete, vent chamber by selecting Vent Chamber on left side of screen.
- 11) Select Open Lid on the left side of the screen.
- 12) Using metal tweezers, remove samples.
- 13) If total deposition time exceeded 29 minutes, wet clean only the upper chamber wall with DI water followed by Isopropyl. Do not touch/wipe the showerhead.
- 14) Select Close Lid on left side of screen.
- 15) Select Pump Chamber from the left side of menu.
- 16) Run a Cf₄/O₂ clean based on total (Coat + dep) length of deposition times.
- 17) Logout.
- 18) Record depositions and clean time in logbook.

Clean times:

DI water & Isopropyl upper+ chamber wall if total (Coat + dep) time exceeded 29 minutes.

SiO₂ = 1 minute of clean for every 1 minute of deposition.

SiN = 1 minute of clean for every 7 minutes of deposition.