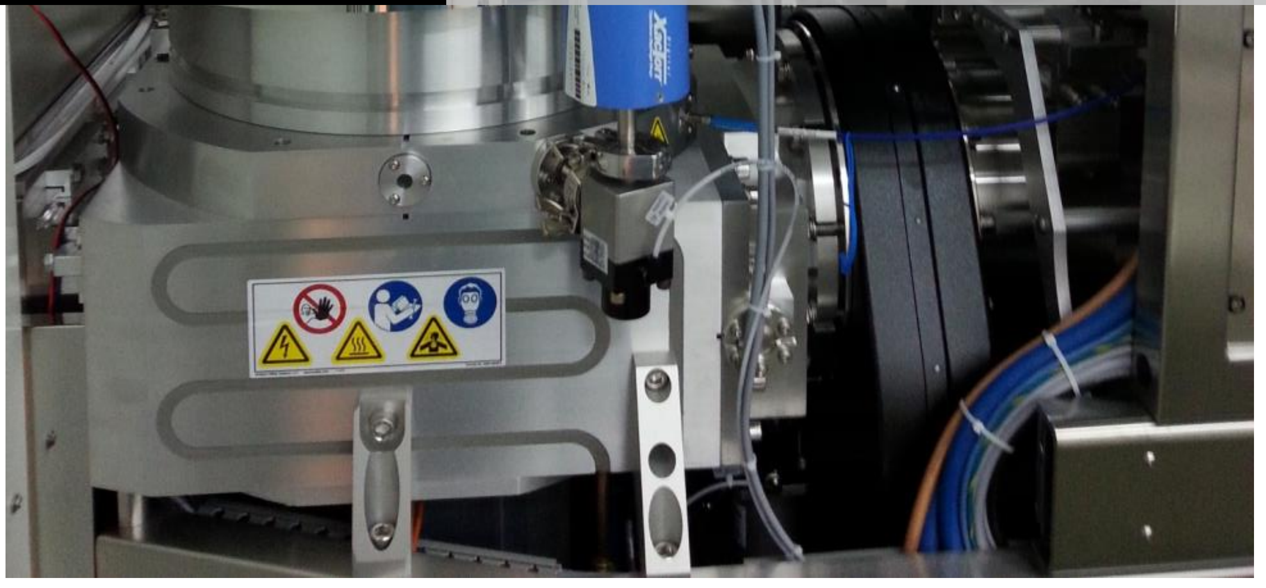
User's Guide

THE CENTER FOR NANOSCIENCE AND NANOTECHNOLOGY

VERSALINE DEEP SILICON ETCH



Initial Checks (1)

1	Login to Control System with your username and password	
2	Verify that the **PM** (Production Modul) and **AL** (Auto Load) are in **production** mode (Green).	
3	Select recipe, and press the **“Go to recipe temperature”** button. Wait until the actual temperatures reach the set point temperatures While you wait continue to step four	

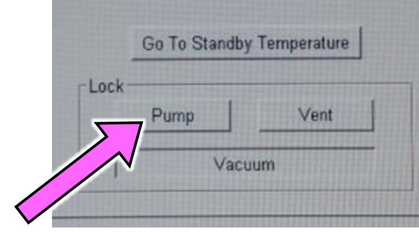
Initial Checks (2)

4	Double check that you removed the photoresist from the wafer's outer ring (wafer edge) completely	Poorly removed resist Unremoved resist
5	If necessary, use acetone on swab to remove all of the resist	Properly cleared of resist
6	After removing resist at edge with acetone, place the wafer on hot plate for ~30 sec @ 90C	

Loading Samples into the Load Lock

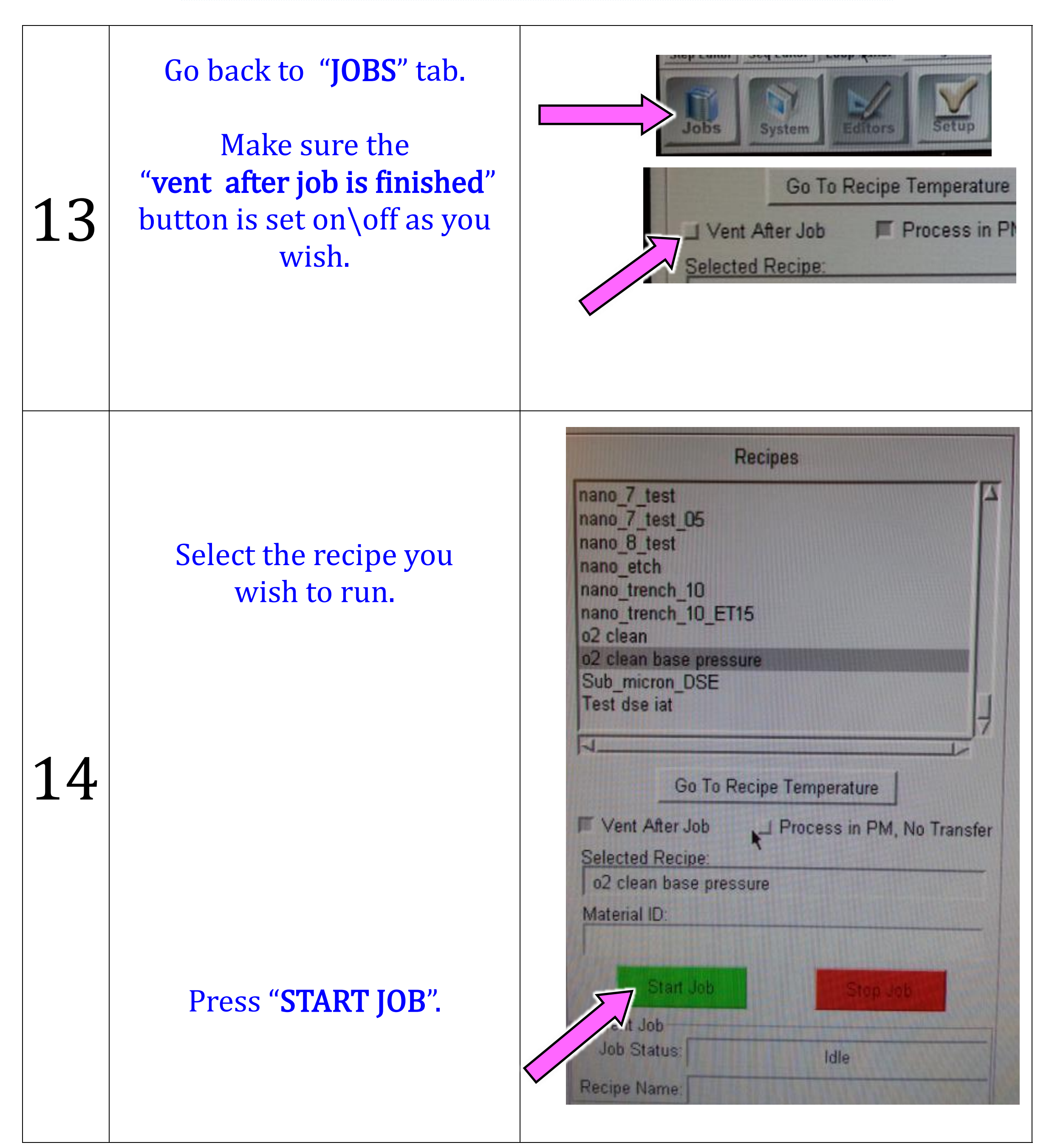
7	Click on the "**VENT**" button. Wait for atmospheric pressure.	Go To Standby Temperature Lock Pump Vent Vacuum
8	Raise the load lock's lid.	
9	Place wafer on arm Make sure the wafer's flat is aligned with the arm's flat	
10	When placing the wafer on the arm, stand to the side of the load lock. If you view the chuck at another angle it is highly likely that the wafer's flat will not be properly aligned to the arm's flat.	

Loading Samples into the Load Lock

11	Holding the lid handle, move latch from detents (stops) and close the load lock	
12	Press the "**pump**" button	

Running a Recipe

13	Go back to "**JOBS**" tab. Make sure the "**vent after job is finished**" button is set on\off as you wish.	
14	Select the recipe you wish to run. Press "**START JOB**".	



Modifying recipes

15	If the desired number of loops is not already available for the recipe of your choice, you may create a new one. Start by going to the "**EDITORS**" and selecting "**LOOP EDITOR**" Do not use: "**Step Editor**" or "**Seqence Editor**"	
16	Select the recipe you wish to run in "**Stored Recipe**".	
17	Under "**Loop To Step**" table select the first step of the loop. Input the desired number of loops ("**iterations**").	
18	Under "**Recipe Steps**" table select the last step of the loop.	
19	**Rename the recipe accordingly and save.**	

CLEANING THE CHAMBER IS MANDATORY		
20	Remove your wafer from the load lock Insert the sapphire wafer	
20	Make sure the machine **will not vent** after the job is finished (unclick "vent after job" if marked)	Go To Recipe Temperature Vent After Job Process in PM, No Transfer Selected Recipe:
21	Choose “**O2_clean_base_pressure**” recipe. Press “Start Job” to run it	Start Job Stop Job Current Job
22	Log off the control system	