Introduction

The Spinner in the lithography hood is used to spin-coat photoresists and polymers on wafers as well as on small samples. There are 2 hotplates for baking resists. The spinner allows for the spin speed, ramp rate and time to be adjusted.

Features and Specifications

- Maximum Spin Speed: 6000 rpm/s
- Maximum Ramp: 30000 rpm/s
- Maximum Substrate: 4”
- Recipe Storage
- Hot Plates: 50 ºC to 325 ºC
- N2 gun and DI water spray gun
- Ultrasonic Cleaner

Safety and Precautions

- Operate spinners with lid closed
- Be careful, Hotplates can cause burns
- Safety goggles should be used
- All chemicals must be clearly marked with chemical name, owner’s name, and date
No waste goes down the drain. All waste must be collected in the waste bottles.

Some chemicals may be hazardous, do not smell or inhale.

Refer to MSDS of chemicals to be used in the hood.

**Operating Procedure**

1. Spinner is operated from the touch screen which is mounted on the hood.

2. Click on Edit to edit the recipes. Input values of Velocity, Ramp, and Time to their fields for each step of your recipe.

3. After entering values, the recipe can be saved with the entered recipe name.

4. Click on the Load button to load your recipe. Select the recipe to run.
5. Make a liner to the spinning bowl with aluminum foil.

6. Choose the appropriate spin chuck for your sample. Sample should cover all the vacuum grooves/holes on the spin chuck.

7. Install the spin chuck on the spinning rod

8. Put your sample on the sample holder

9. Activated the vacuum from touch screen

10. Dispense photoresist in the center of sample using a pipette

11. Discard the pipette into the waste container

12. Close the lid of the spinner. Click Run to start spin recipe.

13. Open the spinner lid and take the sample out.

14. Turn off the vacuum from touch screen

15. Clean the spinner bowl and lid using acetone and wipes after use.

16. Discard the contaminated wipes into the waste bin

17. Use the baking hotplate if a baking process is needed. No chemical beakers allowed on hotplates due to fire hazard

18. To use hotplates, press power and heater. To change the temperature, use the arrows to set the temperature. Turn off power after use.

19. You can also use ultrasonic cleaner by turning on/off power for the control unit. Make sure to fill its tank with the DI water.

20. There is a timer on the hood. To set the time, press the button labeled 1, 2, 3, or 4. Press the Timer Enable button to start. Press the Timer Enable button again to stop.
21. Developing can be done in user provided beakers or containers. Label and collect waste in the waste bottles.