

Montana Microfabrication Facility

Laurell Spin Coater

Safety

- Properly center your substrate on the chuck to prevent shattering
- Keep resist and cleaning solvents away from the vacuum inlets on chuck

Allowed Materials and Processes

The Laurell spin coater can be used to spin coat all MMF-approved resists (e.g. SU-8 series, AZ1500 series, KMPR series, NR9 series). If you would like to use a new resist or material, please get prior approval from the facility manager.

Restricted Materials and Processes

The Laurell spin coater is not approved for spin coating PDMS and other materials that might permanently cure in the equipment.

Operating Procedures

- 1. Check the recipe list on the Laurell logbook to find a program # that is unclaimed. Choose the first program number that is unclaimed (i.e. if 13 is claimed, choose 14) and write the number and your name next on the logbook list. From now on, this program number is yours. DO NOT EDIT OTHER USERS' PROGRAMS.
- 2. Press "EDIT MODE" and select your program number. Change the parameters of the program to meet your specifications. Use "pg up" and "pg down" to edit each category.
- 3. Center your substrate on the chuck.
- 4. Turn on the substrate vacuum by pressing the "Vacuum" button.
- 5. Press "Run Mode" and select your program number.
- 6. Press "Start".
- 7. After the spin sequence is complete, lift lid slowly to allow resist to run off the backside of the cover to prevent drops on your substrate.
- 8. (Optional) Use a "clean q-tip" wetted with acetone (or other solvent) to clean the edge bead off of the substrate.
- 9. Switch off vacuum by pressing "Vacuum" button.
- 10. Remove substrate.

Shutdown and Cleanup

- **11.** Clean the Laurell with acetone (if you use SU-8 the SU-8 developer tends to clean better than acetone)
- 12. After the bowl is cleaned take the drainage waste on the back of the spinner and dump into solvent waste. Wash the waste container with acetone and replace.
- 13. Close the lid to the spin coater bowl



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Troubleshooting

- The Laurell spin coater will not spin when I press start
 - Has the vacuum button been pressed?
 - Is the vacuum valve to the spin coater on the back of the bench turned on?
 - Is the house vacuum pump turned on?