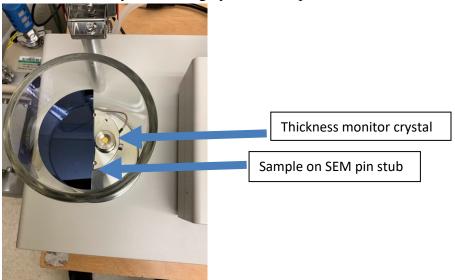


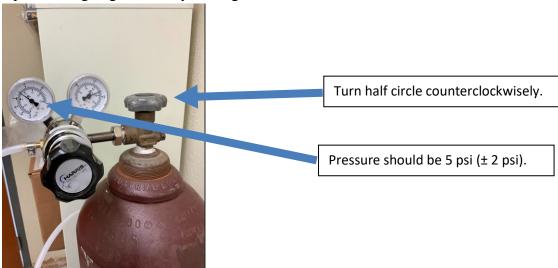
Operation manual for

Cressington Sputter Coater 108 AUTO(with gold target)

1. Place samples for sputtering on the SEM pin stub. Mount the stub inside the sputter coater chamber. Using gloves to avoid direct contact with any surface inside the vacuum chamber, including samples, stubs, and holders. Any solvent-based adhesive should have been allowed to dry out thoroughly. The example is shown below:



- 2. Close the Sputter Coater chamber and make sure the top edge of the glass cylinder is in closely contacted with the rubber gasket O-ring.
- 3. Open the Argon gas valve by turning half circle counterclockwise. Shown below:



4. Switch on the power of the main unit and thickness monitor. The dual-stage rotary vane pump is turned on immediately.





- 5. Tune the **TIMER** as needed. The recommended setting is 30 sec on the timer panel. This gives 5.0 nm of Au. **ZERO** the thickness on Thickness Monitor. If ran for more than the 300s maximum time, they should be given at least a 5min rest before operating again. It is recommended to deposit the least amount of coating needed to prevent charging for a specific application.
- 6. Under the **MANUAL** mode, press **FLUSH**, wait for 3 5 seconds, and press **LEAK**. Wait for the pressure to stabilize. Pressure should stabilize to 0.05 mbar.



- 7. Press **HT ON/OFF**. When the coating is complete, the plasma will stop, and the timer will reset to 30 seconds.
- 8. Flip the main **POWER** switch OFF to vent. When vented, lift the Top-Plate, and remove the sample to inspect. Turn off the power switch on the thickness monitor. Close the Argon gas valve. Close Top-Plate of the chamber.



9. Fill in your name, date, and time on the logbook.

Learning materials

[1] <u>User manual</u> from the manufacturer. Including system information and working principles.