

SPUTTER COATING INSTRUCTION (*AUTO OPERATION*)

1. Inserting Specimens:

- a. Prepare specimens on stubs, using an approved method.
- b. Carefully raise the vacuum to top plate
- c. Place the stubs on the sample stage using appropriate tools.
- d. Lower the top plate to close the vacuum chamber, making sure that the O-ring is completely sealing the chamber

2. Automatic Mode

- a. Turn on the sputter coater (switch is in the back on the right; turn on the rotator if desired – switch is on the back left, adjust the speed with knob)
- b. Open the **main valve** on the argon tank – pressure should be about 15 Psi
- c. Push the MANUAL/AUTO button so 'AUTO' is illuminated
- d. Set the timer for the required duration by lifting and pressing the +- buttons. (60 sec is standard)
- e. Push the START SEQUENCE button. The chamber pressure will increase and it will go through a series of steps (including leaking/purging the chamber) before deposition begins.
- f. When the process is complete (the plasma is off), the END light will be illuminated.

3. Removing Specimens

- a. Turn off the rotator if you used it (back left)
- b. Press and hold the VENT/STOP button. This will shut off the sputter coating process and allow argon gas to be vented into the chamber.
- c. Once the pressure decreases enough for the top plate to be lifted, then lift and remove coated specimens using appropriate tools.
- d. Lower the top plate to avoid contamination in the chamber
- e. CLOSE the argon tank by turning the main valve and the small black one (Please DO NOT forget or else you will waste the argon gas!)
- f. Turn off the sputter coater (back right)