

SPI-Module Sputter Coater

1. Sign in log book (date, name, second and amount, sample type) (FOR TIME AND COATING THICKNESS SEE FRONT OF LOG BOOK)
2. Carefully remove Target Head and place in box provided. Be sure not to touch or scrape underside of Target Head. Then remove and place glass chamber on lint free cloth. Place samples on stage area. If coating large samples, please seek assistance for lowering stage. Replace glass chamber making sure it is sitting firmly on O-ring; then carefully place target on top (also being sure that it fits snugly).
3. Press on Mechanical Pump Toggle switch (located on floor). Gently but firmly press down on Target Head to make sure a good seal has been obtained. If it has not, you will hear an obvious deep loud sound (if this occurs immediately shut off pump and reseal Target Head and chamber, then continue).
4. Press SPI-MODULE CONTROL (bottom unit) POWER switch on. Wait until gauge reads slightly below 2 MBAR.
5. Press SPI-MODULE SPUTTER COATER (Top unit) POWER switch to ON. Briefly press and hold TEST Button and adjust GAS LEAK VALVE (located on control unit) to where the milliamps read 15 on PLASMA CURRENT GAUGE (located on sputter coater unit). Turn TIME-SECOND dial to desired amount; then push START. If milliamp needle fluctuates up and down, turn GAS LEAK valve until it remains at the 15 milliamp mark and let coat. If extra coating is desired, simply reset time, push start and continue.
6. Once coating is completed, press both SPUTTER COATER and CONTROL POWER switches OFF. Then press Mechanical Pump switch off. Slowly turn (counterclockwise) VENT VALVE (silver knob located on top of target head) and bleed air into chamber. Do this slowly, so fine grained or small particulate samples will not blow off into the chamber. Once vented, make sure VENT VALVE is snugly closed (DO NOT OVERTIGHTEN) and place target head back on box and glass chamber on cloth. Remove samples. Please replace target head and glass chamber back on coater stage. NOTE: SEEK ASSISTANCE IMMEDIATELY, IF PROBLEMS OCCUR.

***IMPORTANT;** DO NOT TURN GAS LEAK FORCEFULLY. A gentle turn is all that is needed. Abuse of this valve will damage it.

