

# Operating Procedure for Cressington 308 Carbon Coater

1. Fill out the log sheet
2. The unit is in Shutdown mode (= under vacuum), you have to vent the chamber first: Switch the power ON (1) and on the Auto panel press VENT, open the main valve on the nitrogen gas cylinder (under the table).
3. When vented, close the gas cylinder valve again, remove the implosion shield, remove the bell jar and store it in its cradle
4. Sharpen or replace the fixed carbon rod, clean the end of the moving rod, insert them into the rod evaporator. See Fig. 3.
5. Put your samples on the stage.
6. Put the bell jar and the implosion shield back on.
7. Press PUMP (3). **The rotary pump will start, and a little later the Turbo pump will spin up (TMP 60k light will glow steady (4)).**
8. The vacuum gauge will show chamber pressure. Pump until vacuum has reached the proper level ( $7 \times 10^{-7}$  mbar range) (5), gauge hand in the middle of the range (6), see Fig.1. **This may take several hours or overnight.**
9. On the Evaporator Supply, Press the START button (7), then turn the knob (8) so that the line points straight up (~55% on the OUTPUT display) , current gauge should be at ~100A . Leave for 6-8 s then turn OFF (7) and turn the knob (8) all the way to the left again.
10. Vent the chamber, **remove the samples, replace the bell jar and shield and push PUMP. Wait few minutes, then switch to SHUTDOWN. When pressure is stabilized, turn the power OFF(1).**

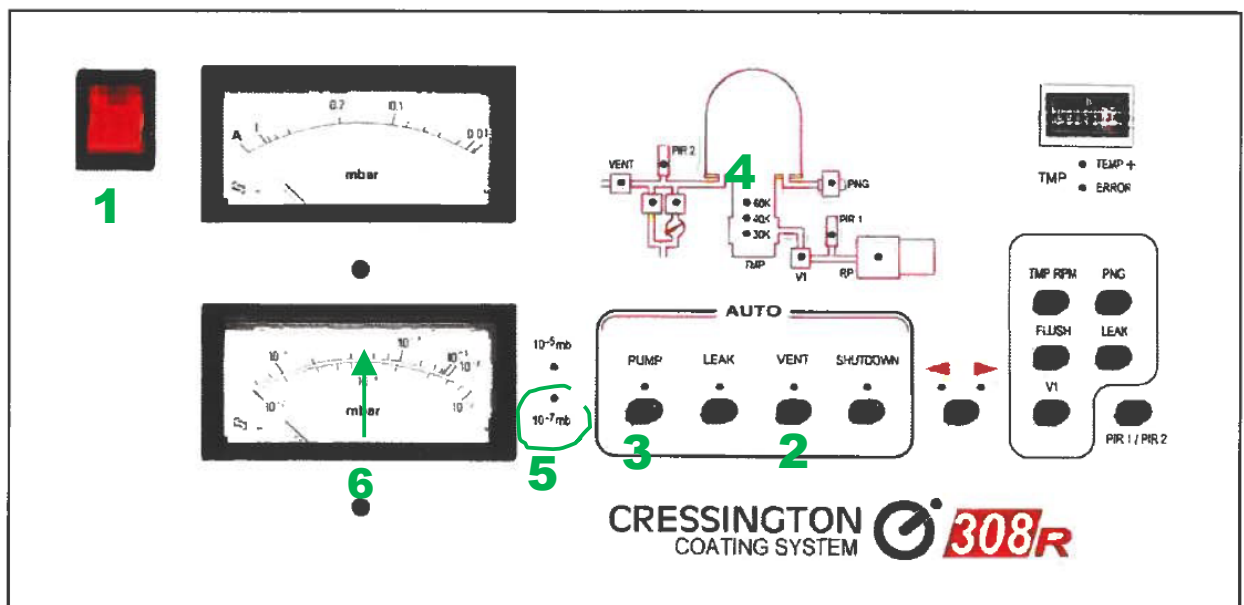


Figure 1

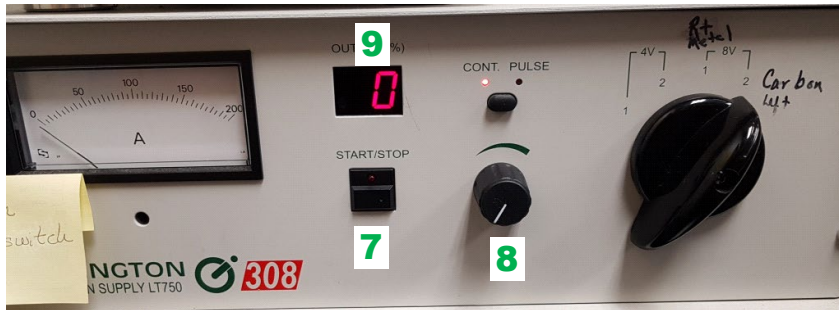


Figure 2

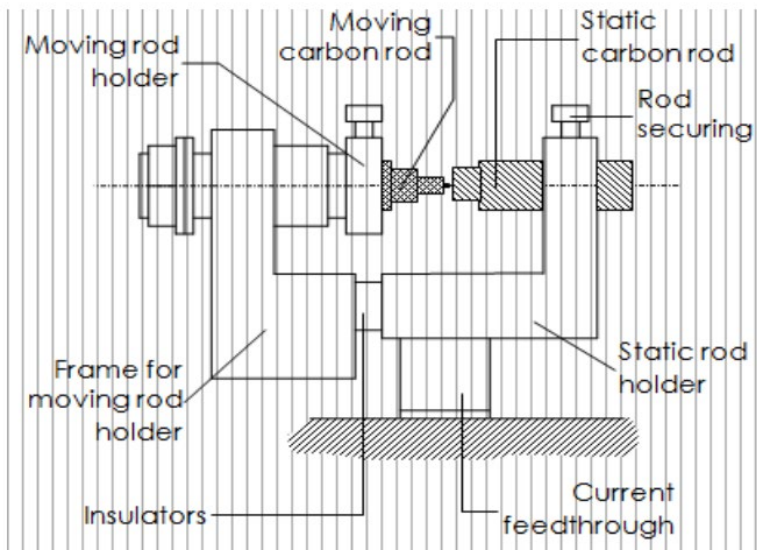


Figure 3