

OPERATING THE CRESSINGTON 208 HR SPUTTER COATER

(For High Resolution SEM, Pt/Pd coating)

1. Wear gloves/do not touch samples with bare hands
2. Lift the lid of the sputter chamber, carefully remove the glass and put it on the cushion pad.
3. Place the samples on the stage
4. Tilt the stage as needed. Make sure the thickness monitor points to the center.
5. If using rotation, make sure the samples have enough clearance not to hit anything
6. Replace the glass, close the lid. Make sure the lid is seated well.
7. Switch on the sputter coater and the thickness monitor (1).
8. Open argon gas main valve (do not change the regulator settings).
9. The unit will start up in auto. Switch to manual (2).
10. Allow full vacuum to be reached (blue mark on the vacuum gauge).
11. Press FLUSH, wait 15-30 seconds, then press FLUSH again to stop (3).
12. Wait until some vacuum recovers, then perform the flush once more.
13. On the thickness monitor, set thickness - hold the Terminator and use the Up and Down buttons.
Confirm the Density is set correctly (19.3 for Pt/Pd), and Tooling set to 1.0. Zero the monitor.
14. When full vacuum is reached **Turn on the Terminator on the Thickness Monitor**
15. switch to Auto (2) and start coating by pressing Cycle/Stop (6).
16. Make sure the paddle shutter in front of the target is open (knob on the top of chamber lid)
17. Turn on the rotation (if needed)
18. After a short automatic flush and pump-down, the coating starts (Blue glow visible).
19. After desired thickness is reached, the generator is automatically switched off.
20. Switch off the coater and the thickness monitor (1) (the chamber will now vent).
21. Wait ~30 seconds before opening the lid. DO NOT force the lid. If you cannot open it, wait some more. Carefully remove the glass and put it on the cushion pad.
22. Remove your sample, replace the glass and close the lid.
23. Close argon supply, Fill in the Log sheet.

