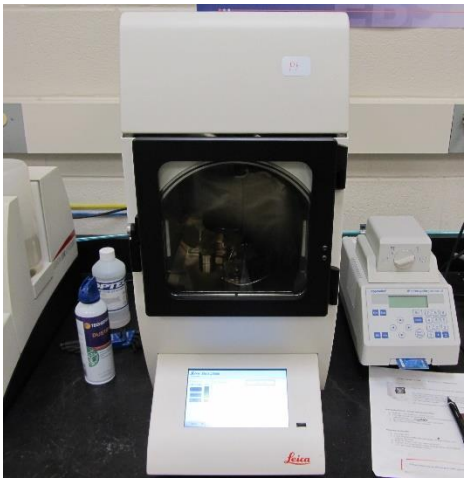
College of Engineering Electron Microscopy Center	Operational SOP	Date	May 16, 2023
	EM ACE600 Coater	Revision	1.0
		Equipment Manager	Nicolas Briot

Purpose: Basic operation of the Leica EM ACE600 Coater

Required PPE:

Nitrile or Latex Gloves



Leica EM ACE600

Potential Hazards:

There is a danger of pinching one's fingers when closing the flange (stage).

Reference Documents:

- Leica EM ACE600 Operating Manual

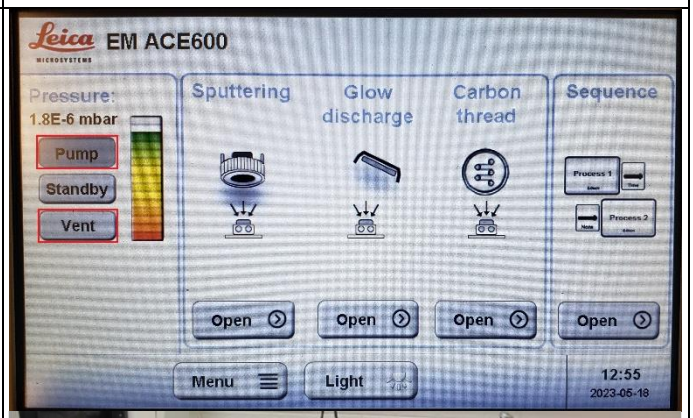
Required Equipment & Materials:

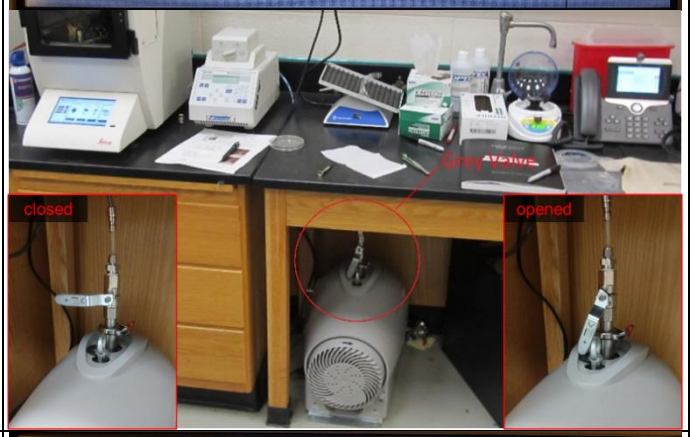
- SEM mounts
- SEM mounting accessories

Steps	Key Points

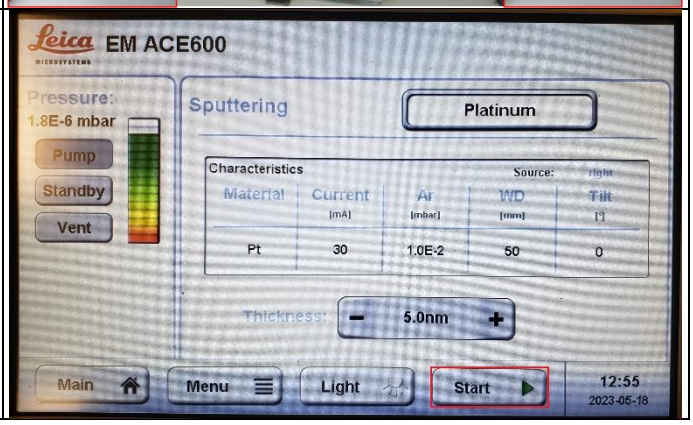
0. Mount sample onto the selected SEM holder (refer to individual training)

1. Sample Loading
   a. Press the “Vent” button on the sputterer. Then, turn the grey valve on the external backing pump to the closed position.
   b. Open the chamber once the internal pressure has reached 7.5E2 mbar. It should open easily (do not force the door open).
   c. Load the sample onto the stage. Do not touch the QCM at the center.
   d. Press the “Pump” button on the sputterer. Then, turn the grey valve on the external backing pump to the open position.





2. Processing
   a. Select a process from the home screen (refer to individual training).
   b. Set the parameters of the selected process (refer to individual training).
   c. Start the process



3. Shutdown Procedure a. Press the “Vent” button on the sputterer. Then, turn the grey valve on the external backing pump to the closed position. b. Open the chamber once the internal pressure has reached 7.5E2 mbar and unload the sample from the stage. c. Press the “Pump” button on the sputterer. Then, turn the grey valve on the external backing pump to the open position.	

History of Revisions			
Revision Number	**Revision Date**	**Revised By**	**Reason for Revision**