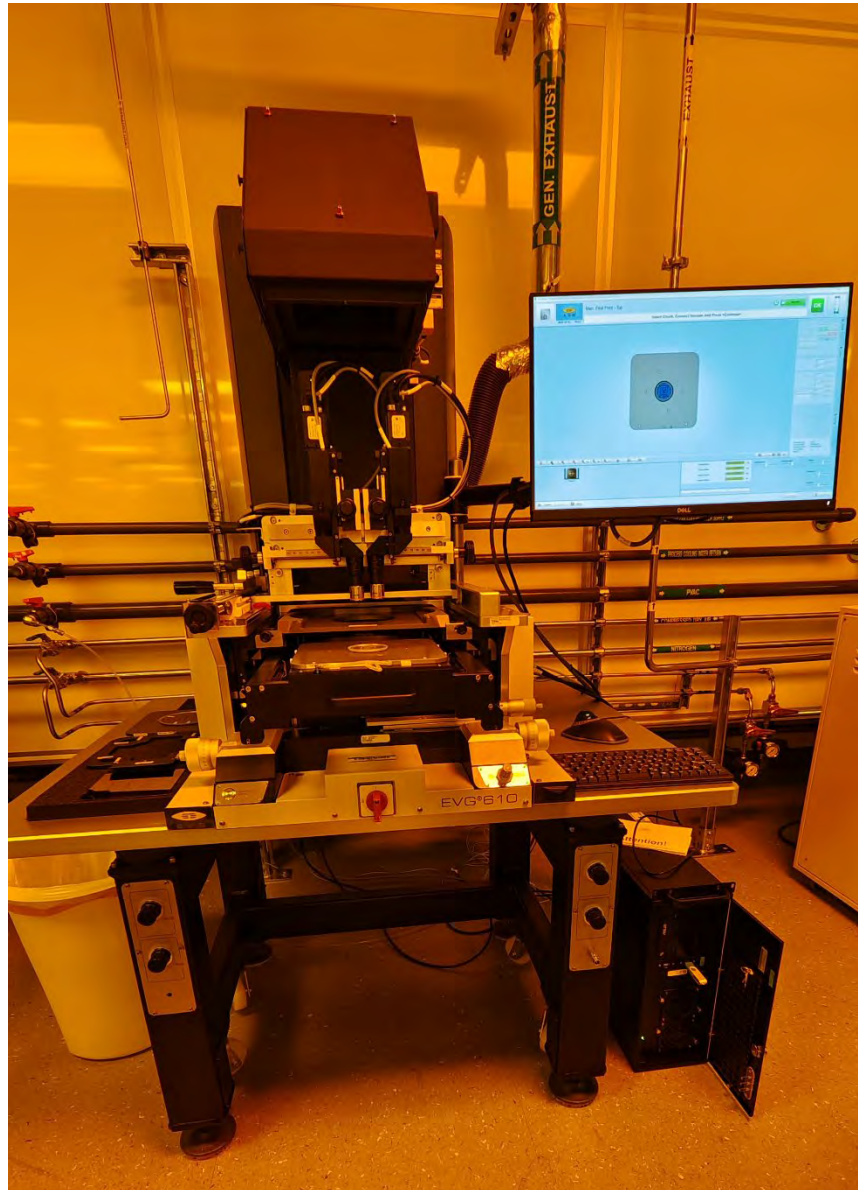


EVG 610 mask aligner SOP

UNT Cleanroom 12/19/2022



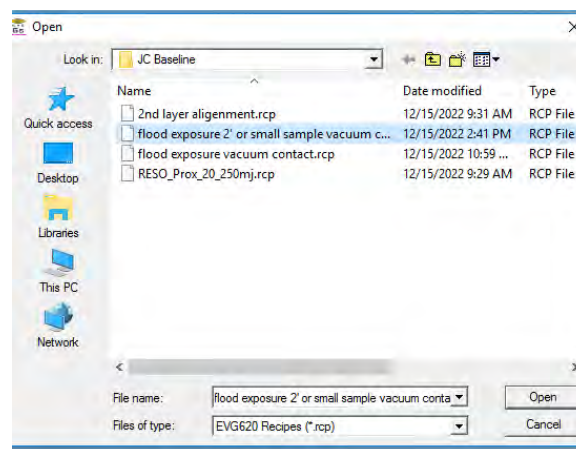
1. Imaging operation:

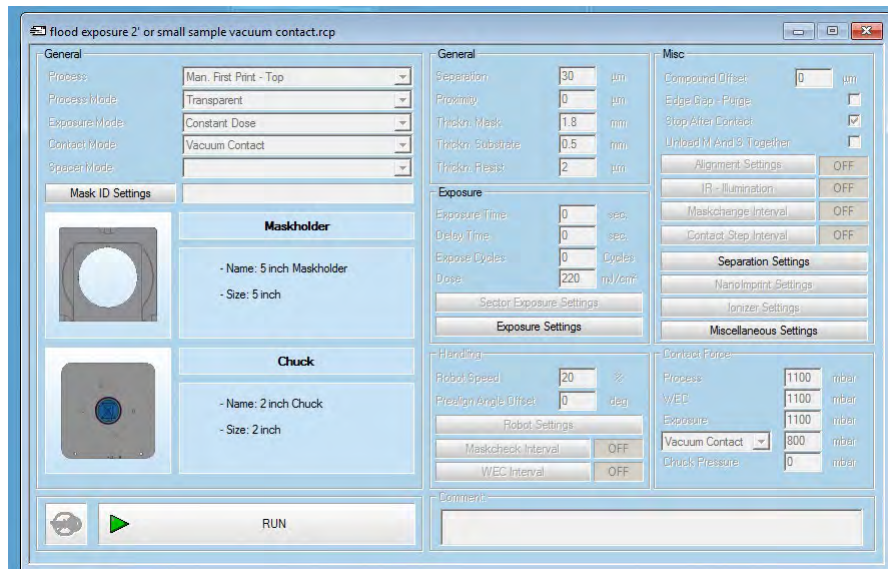
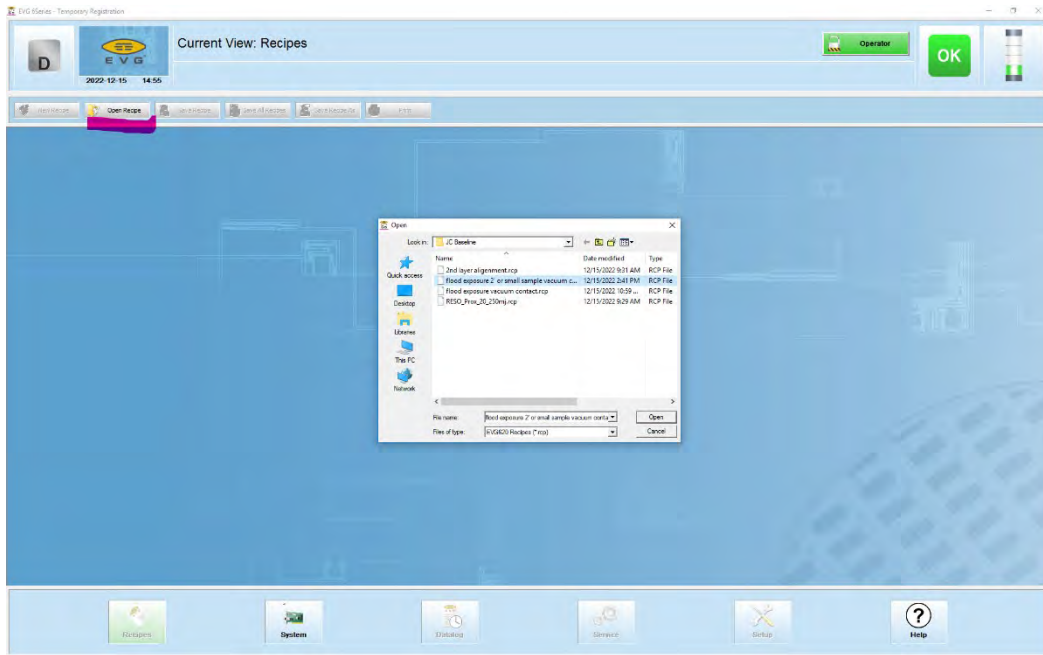
(1) Log in FOM to start the session.

Turn on the CDA, N2 and Vacuum lines. **Turn on** the UV lamp power.



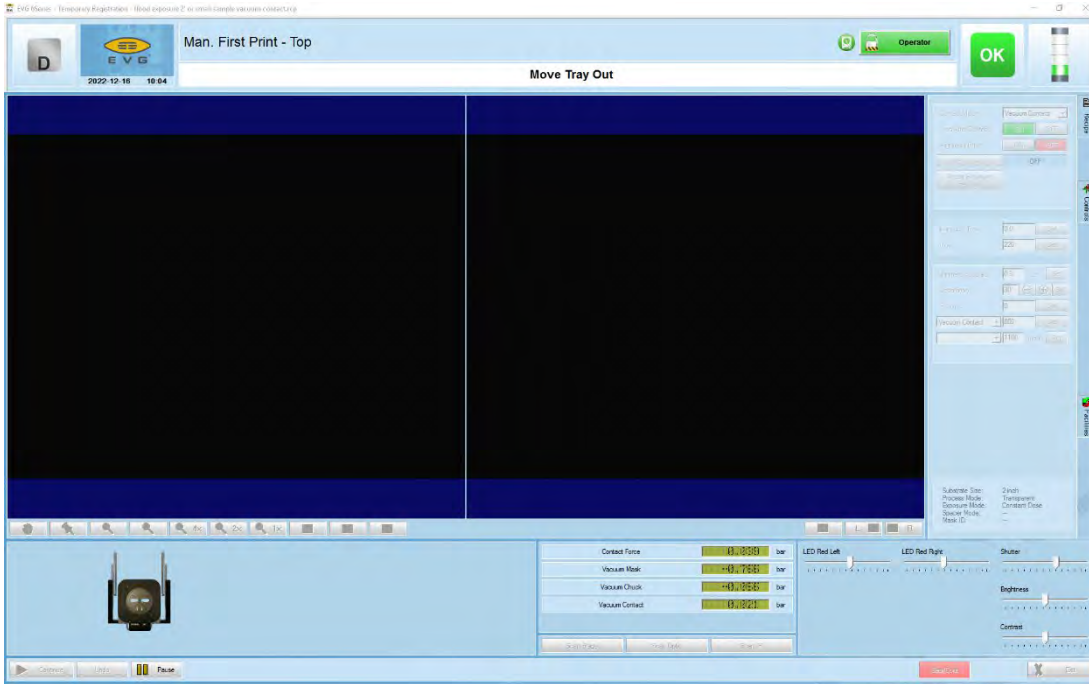
(2) **Skip this step if the recipe window is out.** Click “Open recipe” to choose the process you need under “JC Baseline” folder or your own process folder. This manual is based on 2” chuck and flood exposure process with vacuum contact.



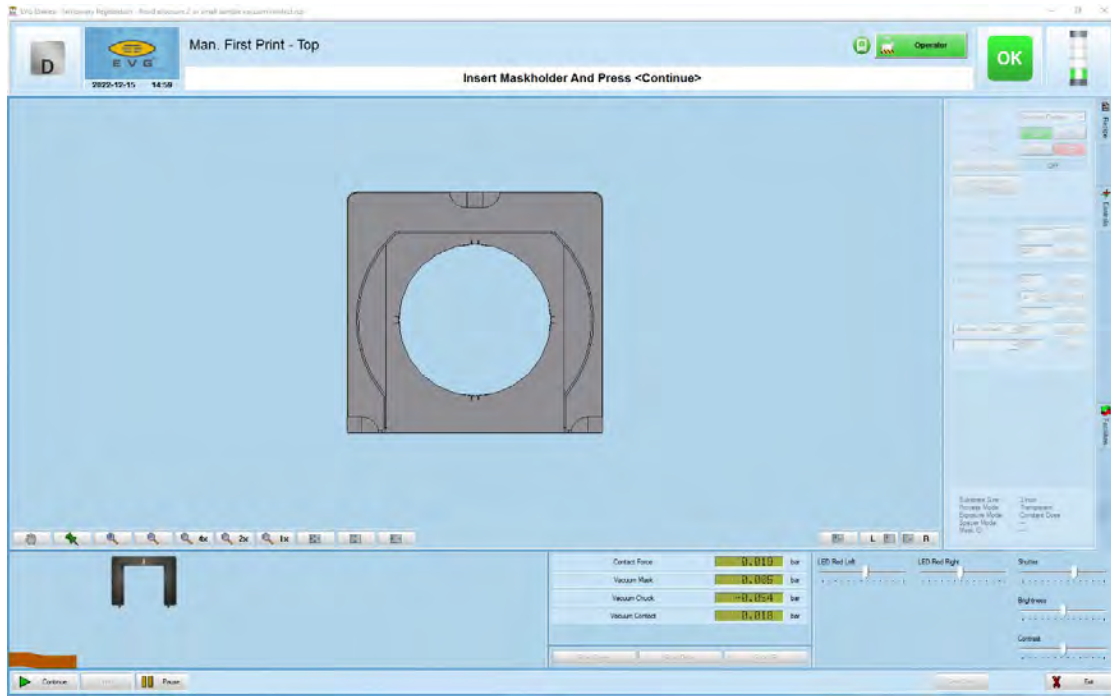


(3) Start the process by clicking “RUN”. Follow the steps and animations:

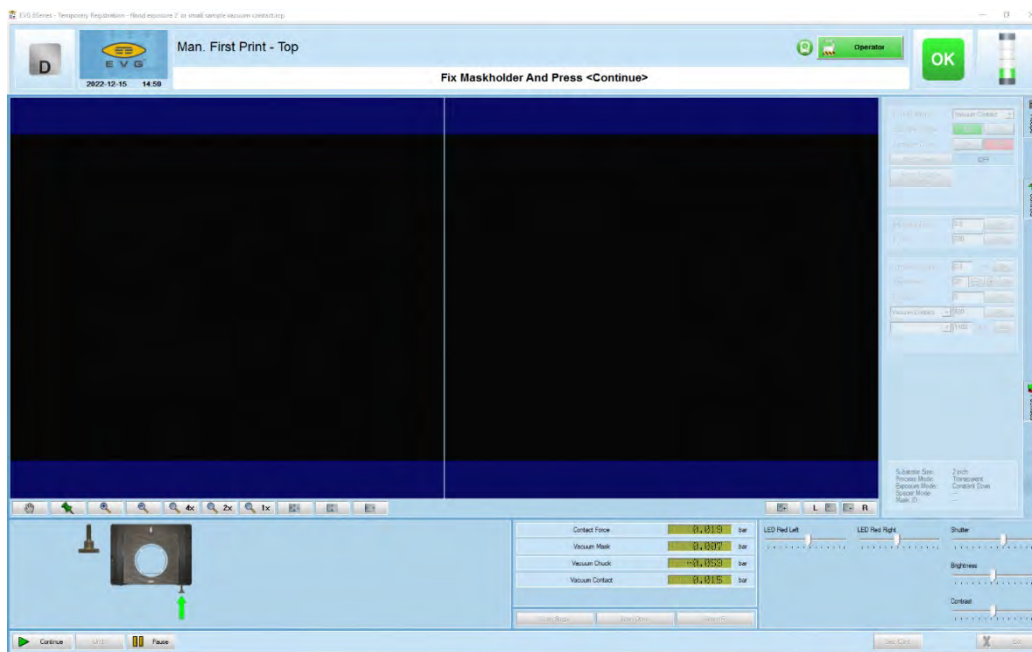
Move Tray Out **until it clicks!**



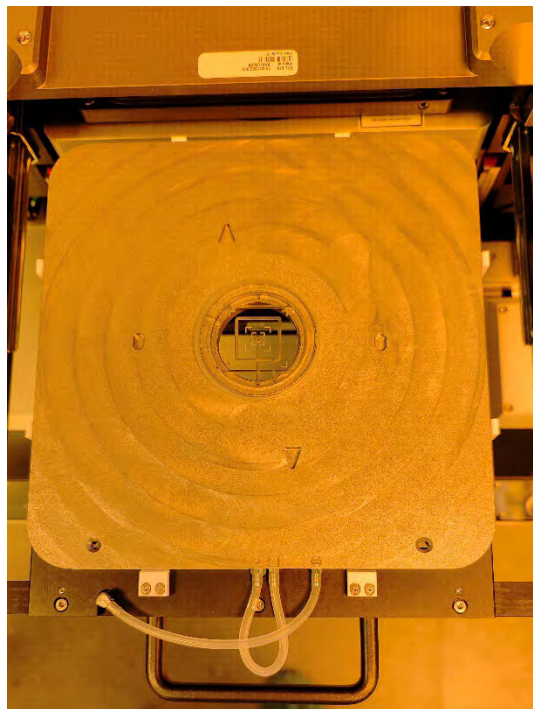
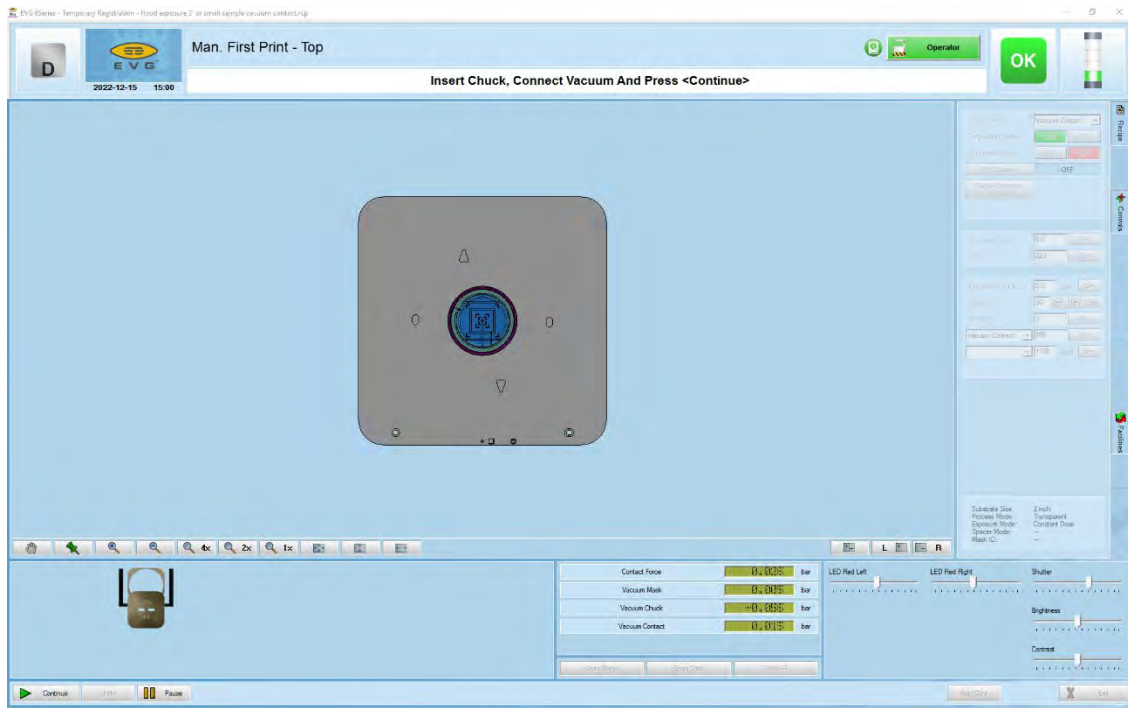
Insert Maskholder (Already Inserted) and Press “Continue”.



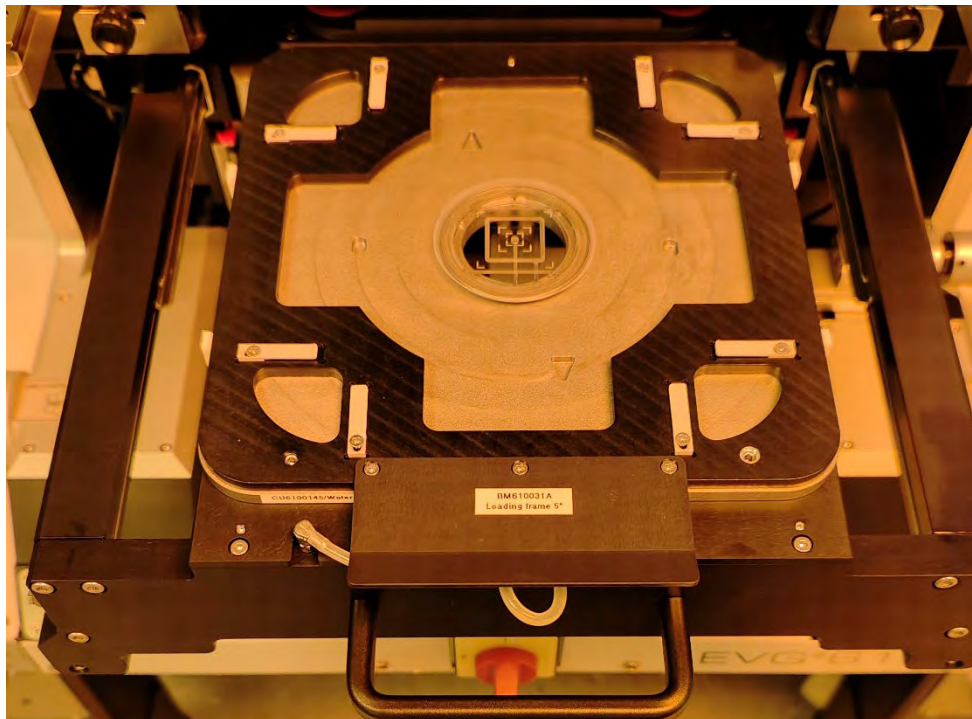
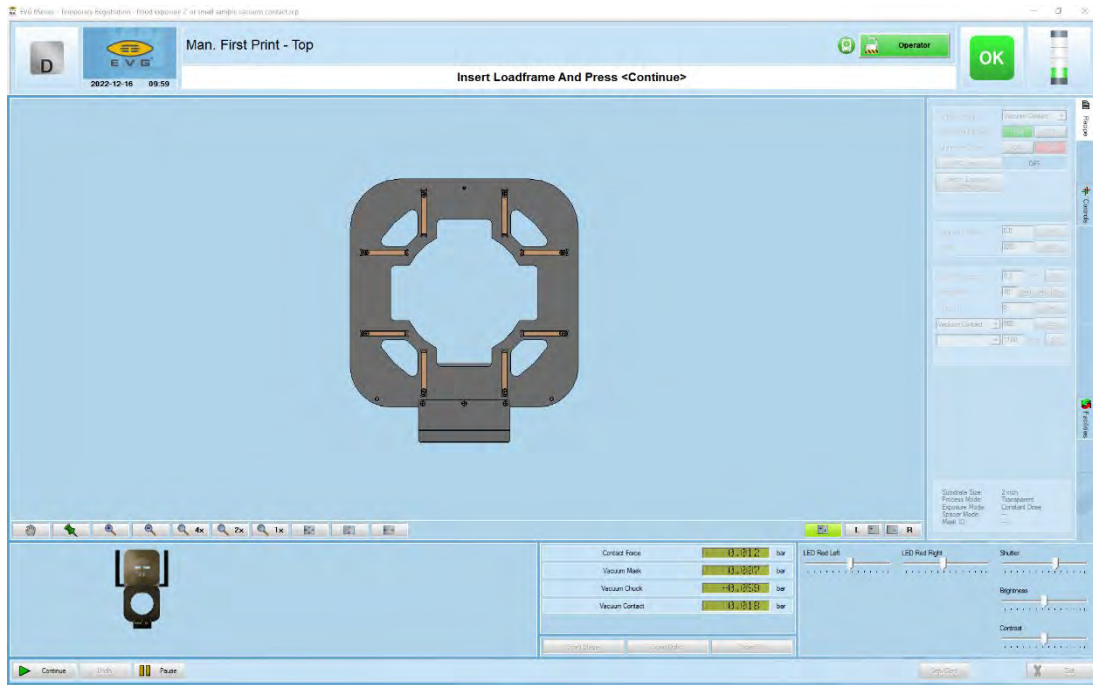
Fix Maskholder (Already Fixed) and Press “Continue”.



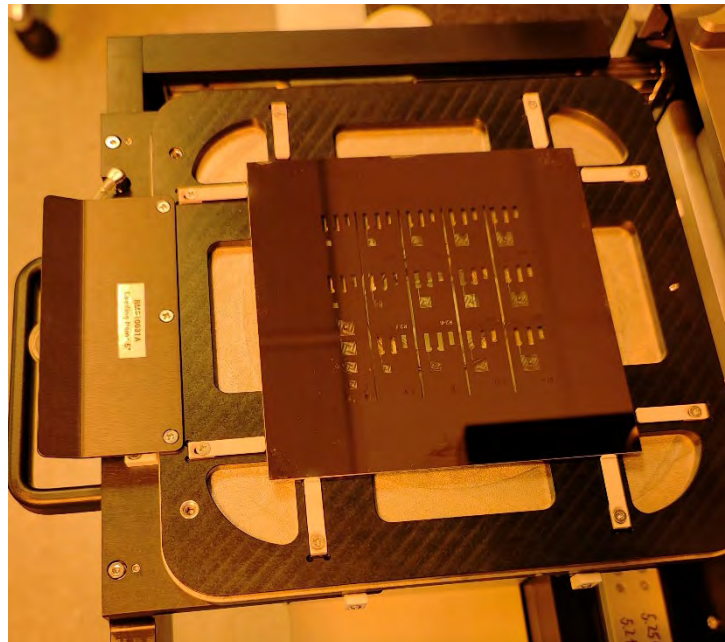
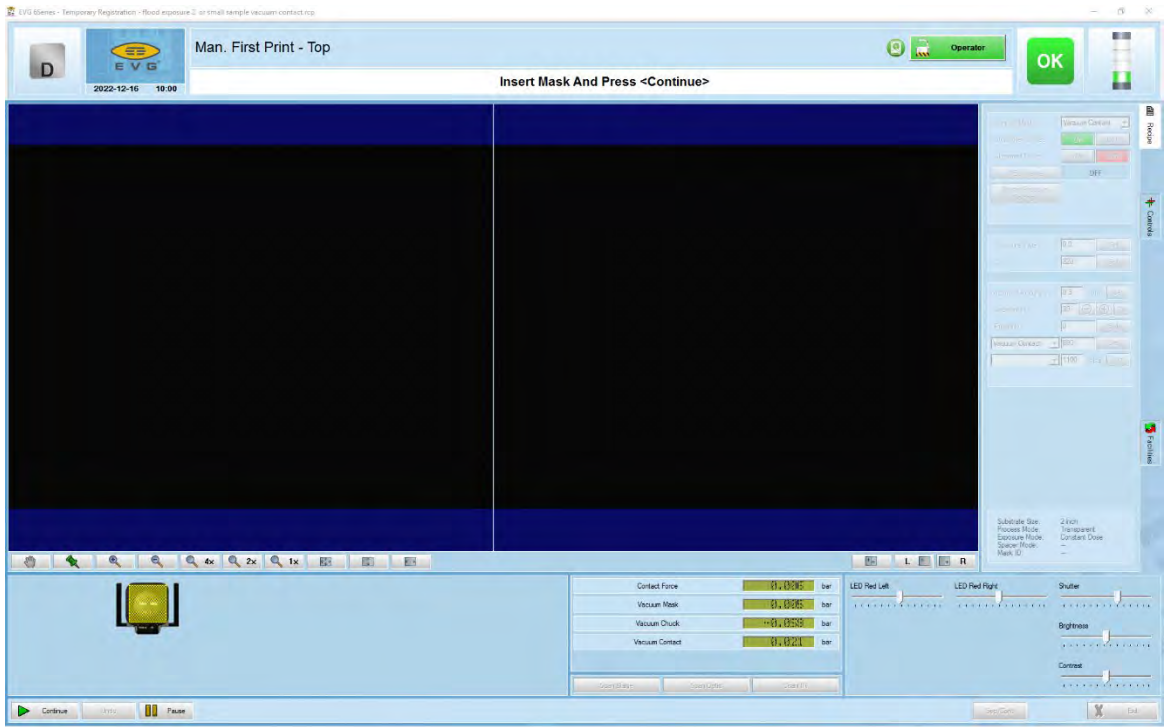
Insert 2" Chuck, Connect Vacuum if needed (eg. Switch to 4" Chuck) and Press "Continue".



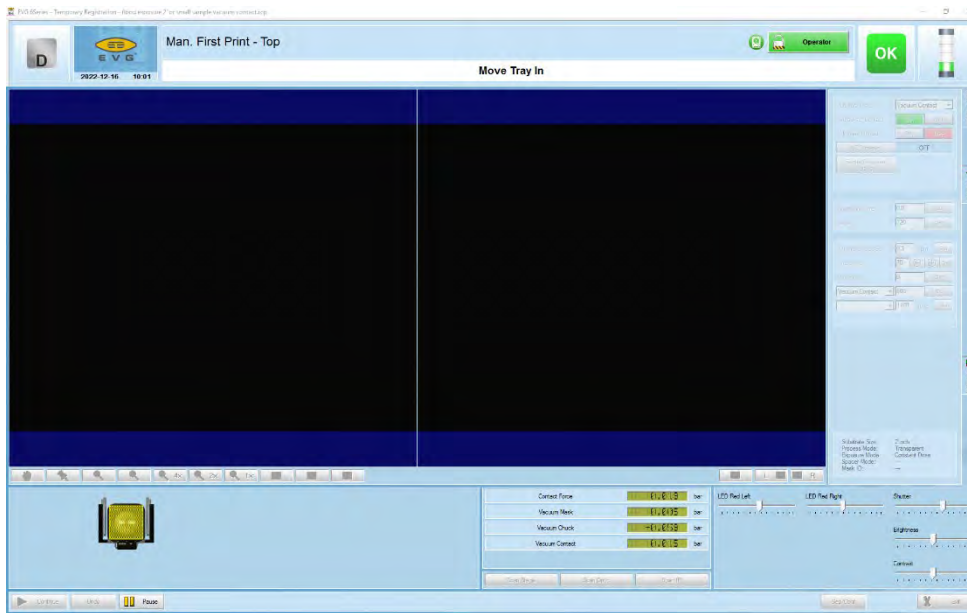
Insert Loadframe and Press “Continue”.



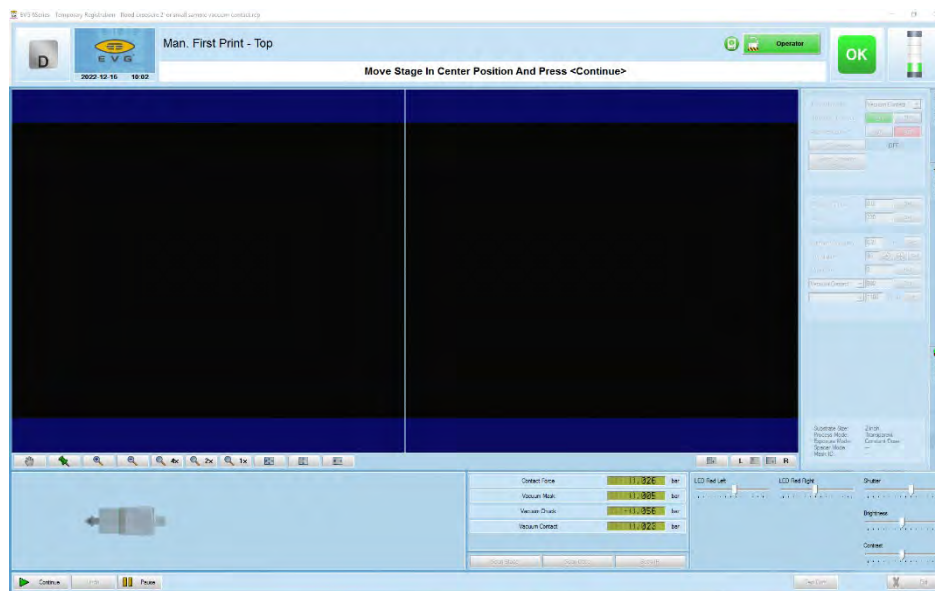
Insert Mask and Press “Continue”.

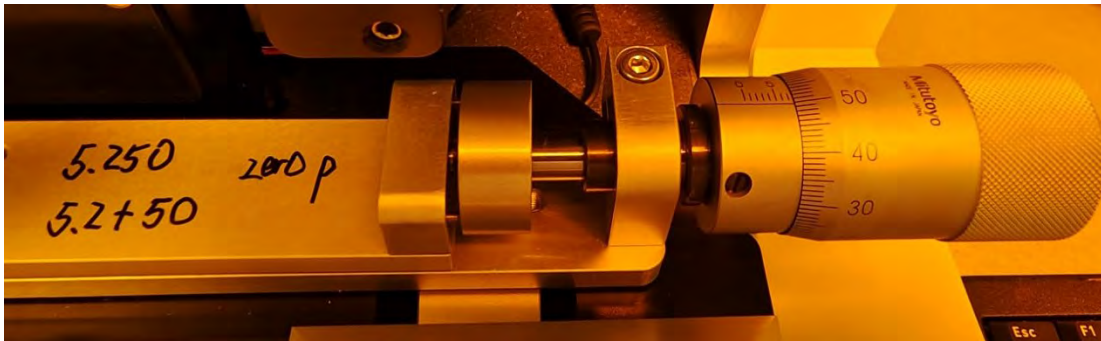
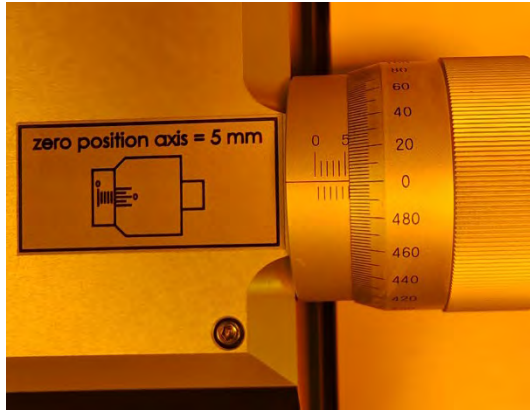


Move Tray in.

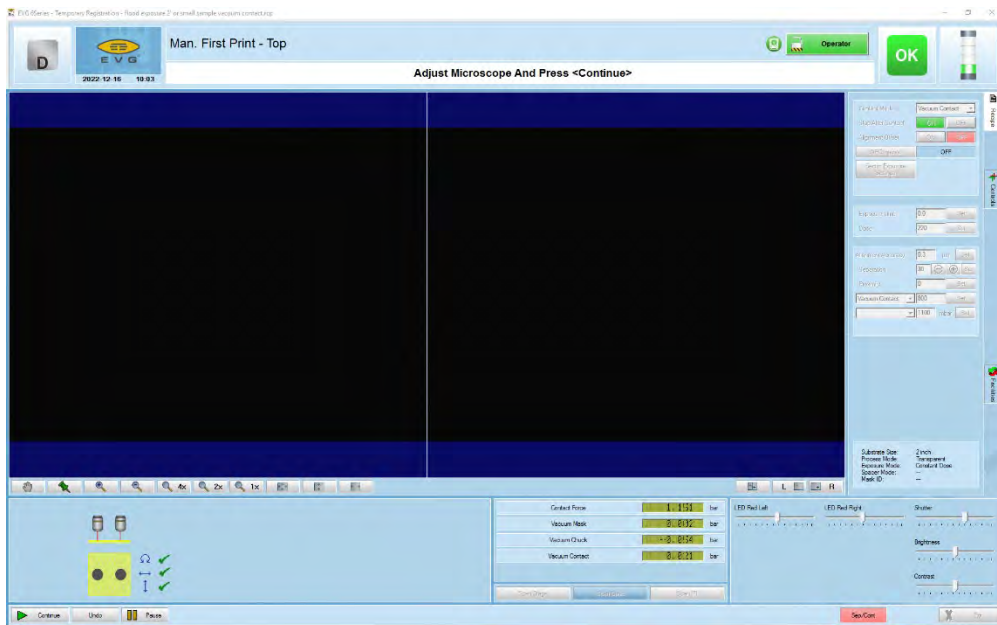


Move Stage in Center Position and Press "Continue". Check the Stage Position Knobs at Left (Y), Right(X) and Rotation (R). 5mm and 0 align at center line show in pic for X,Y knobs. Rotation is at 5.2 and 50 align at the center line.

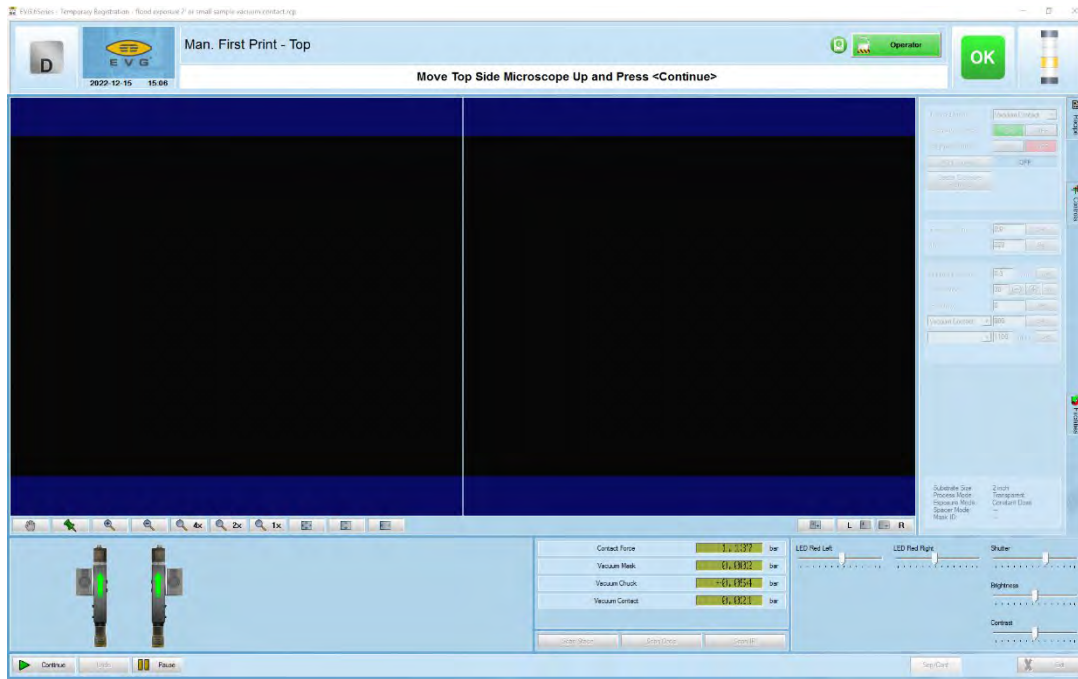




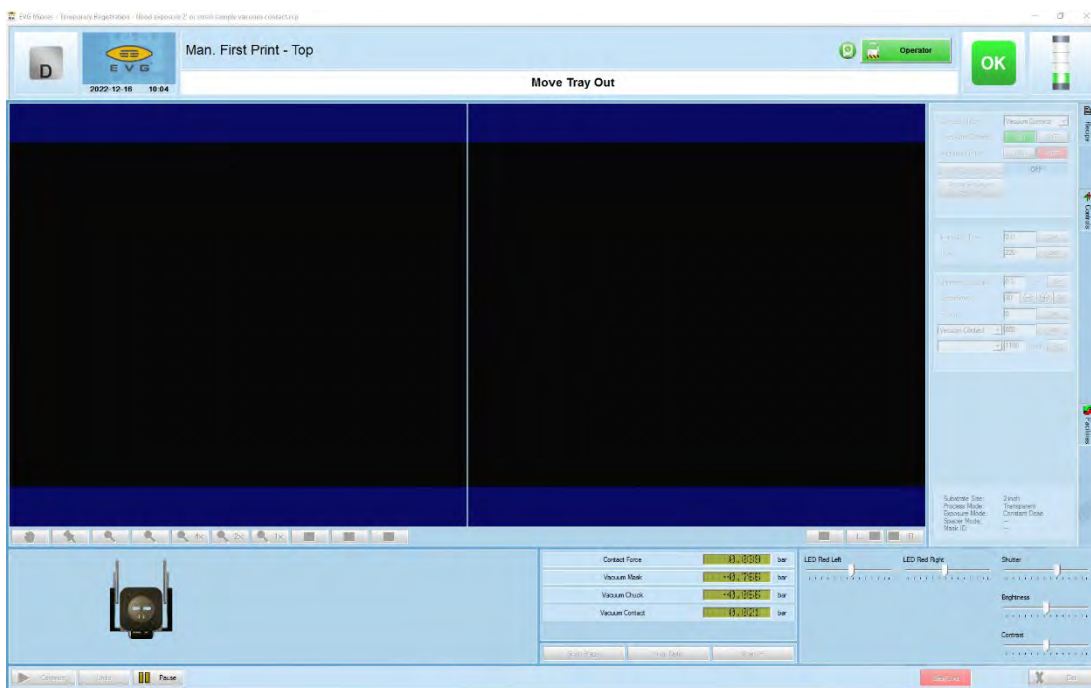
Adjust Microscope and Press “Continue”. Only need to move them if alignment is needed.



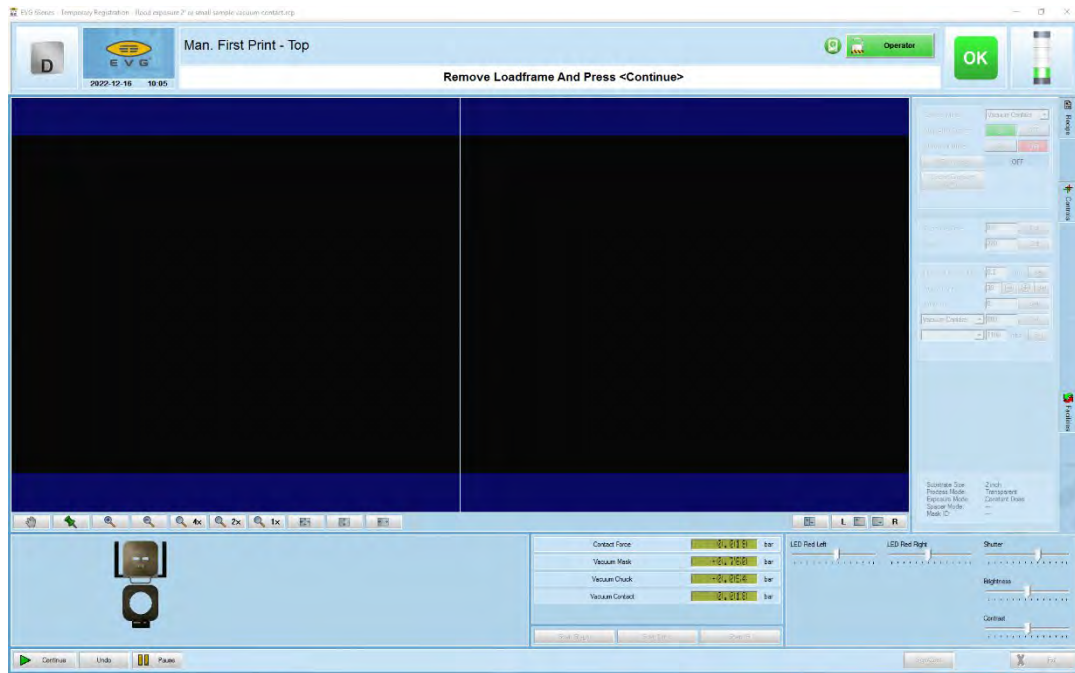
Move Top Side Microscope Up and Press “Continue”.



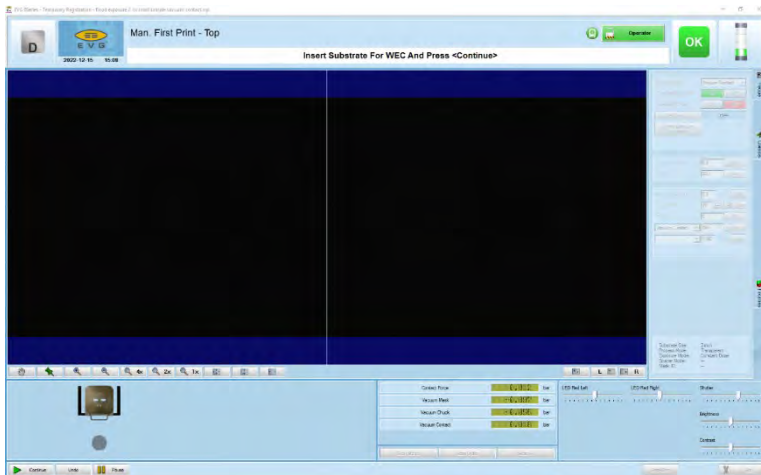
Move Tray Out **until it clicks!**



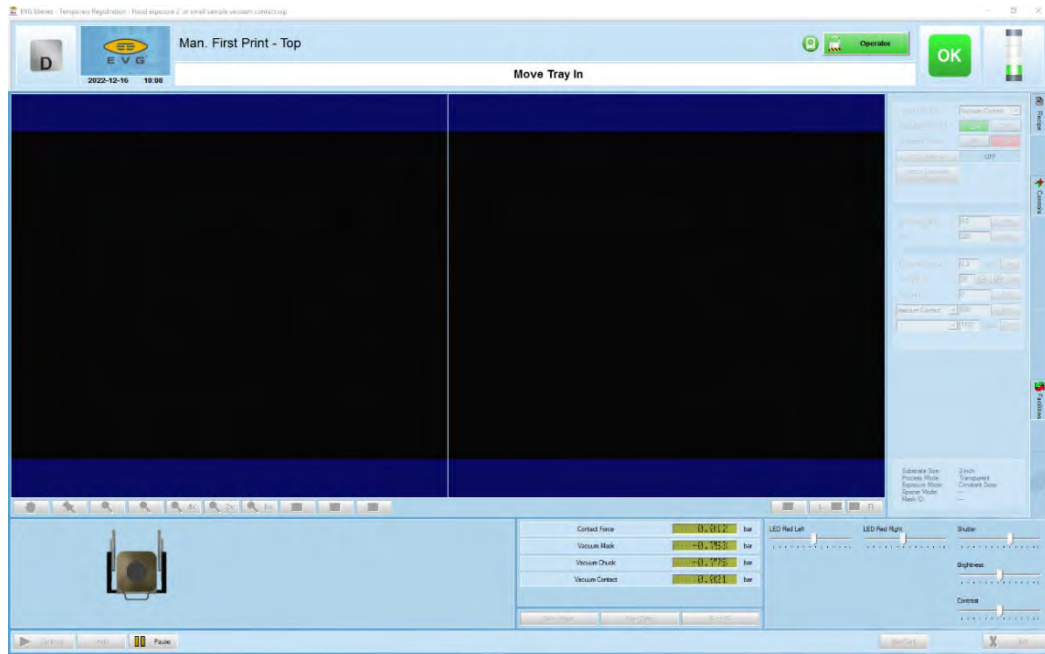
Remove Loadframe and Press “Continue”.



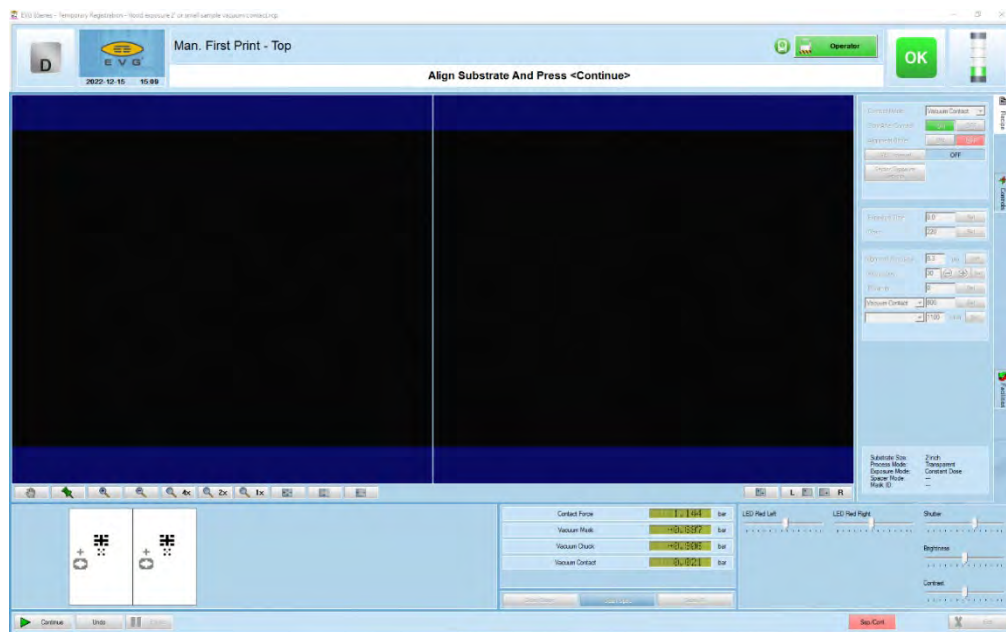
Insert Substrate for WEC and Press “Continue”.



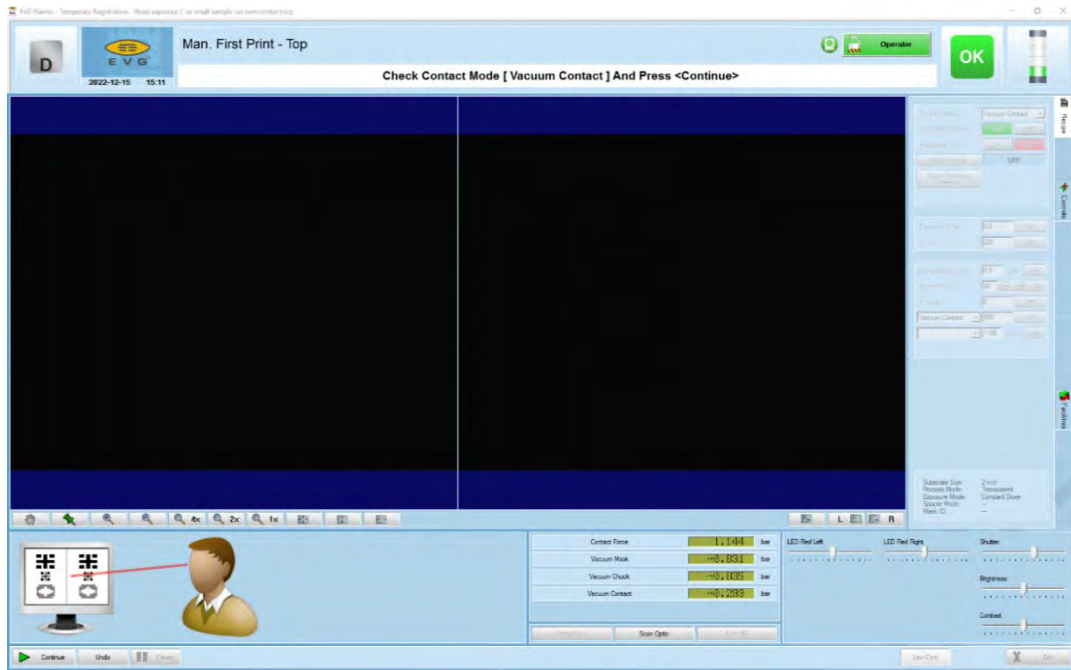
Move Tray In.



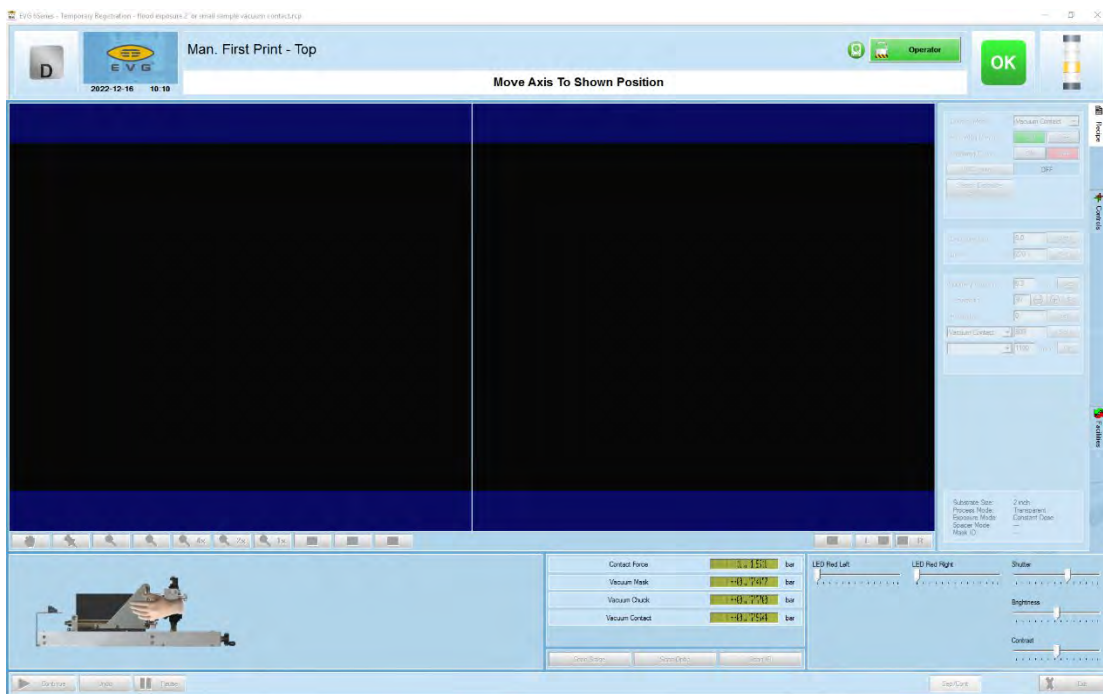
Align Substrate and Press “Continue”. Only need to do the alignment step if alignment is needed. For flood exposure, press “Continue”.



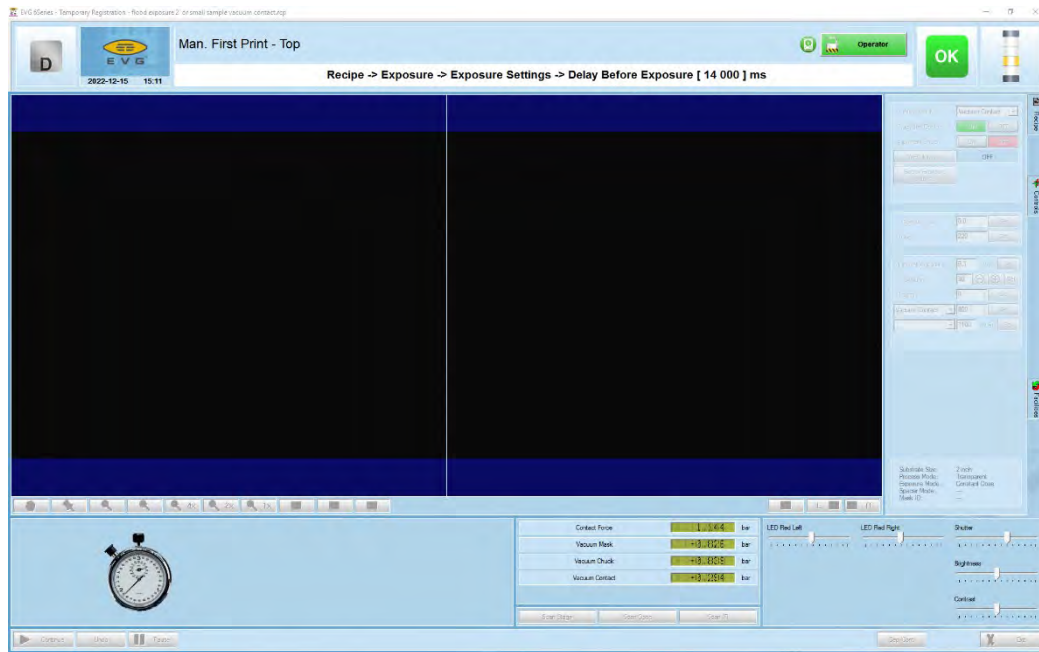
Check Contact Mode and Press “Continue”.



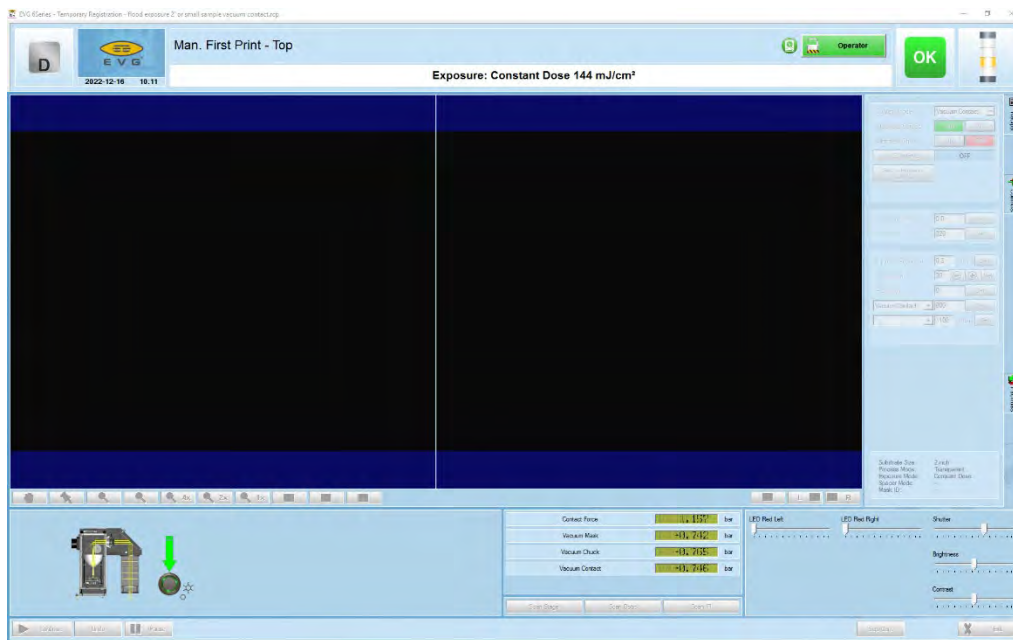
Move Axis to Shown Position for Exposure.



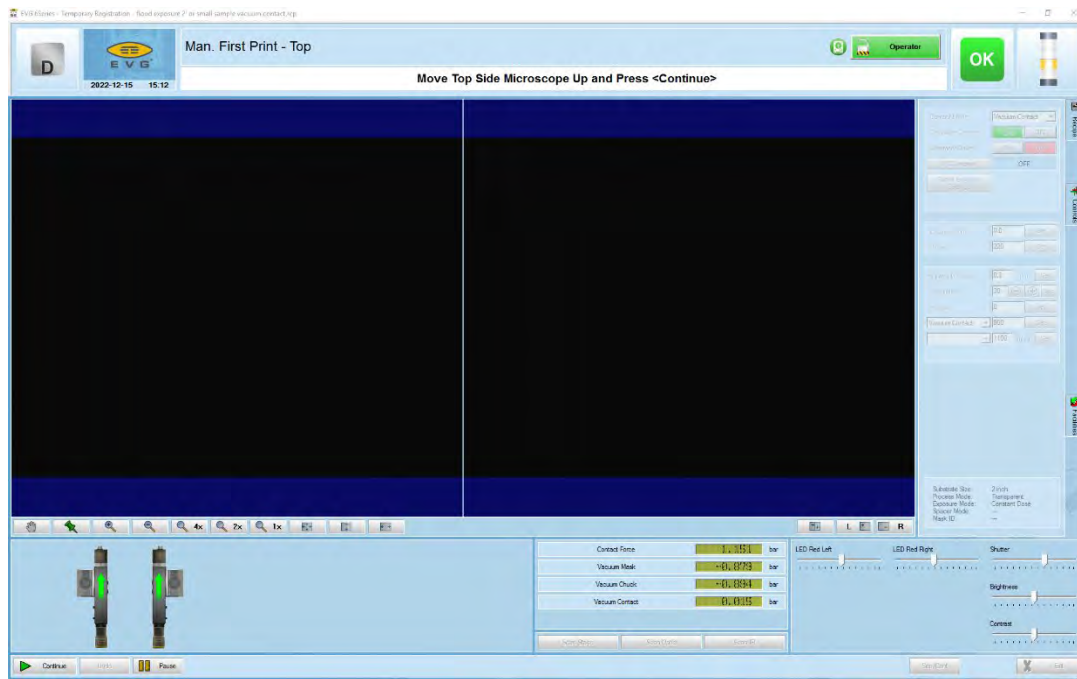
Exposure Step with 14s Delay.



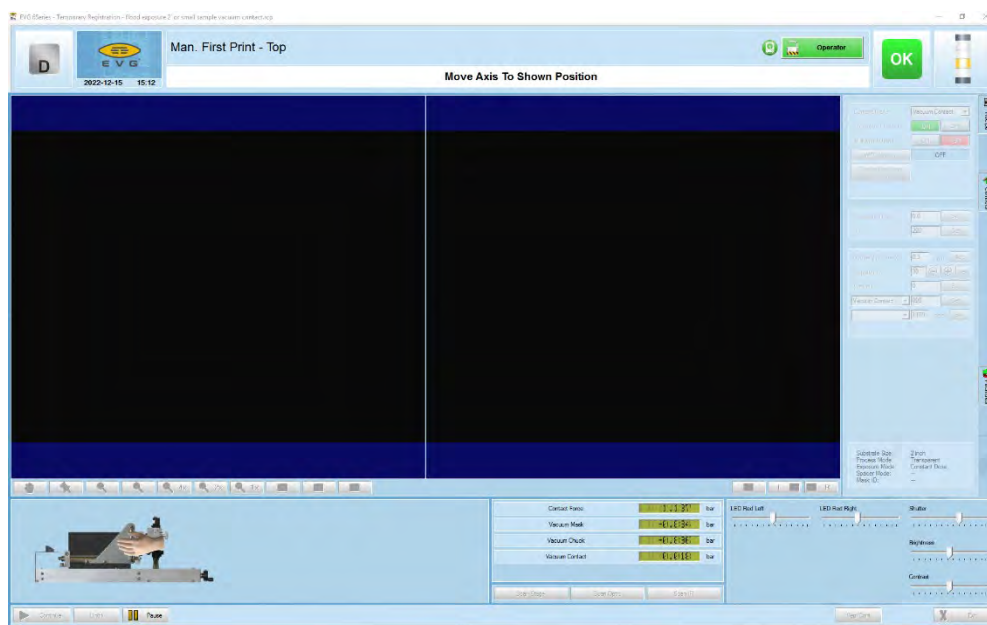
Exposure: Constant Dose



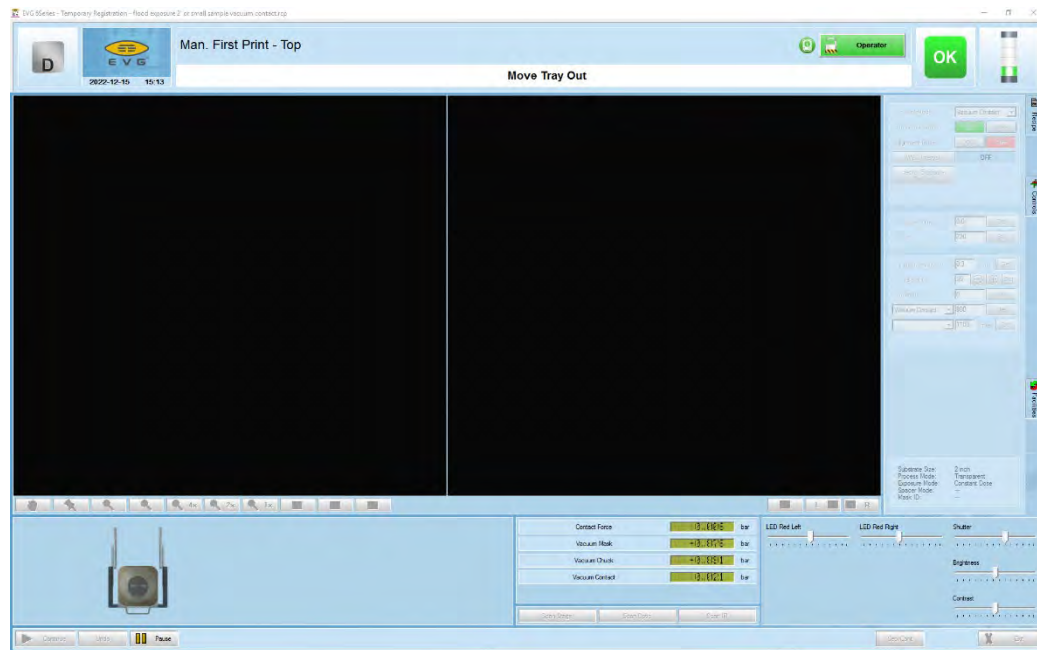
Move Top Side Microscope Up and Press “Continue”.



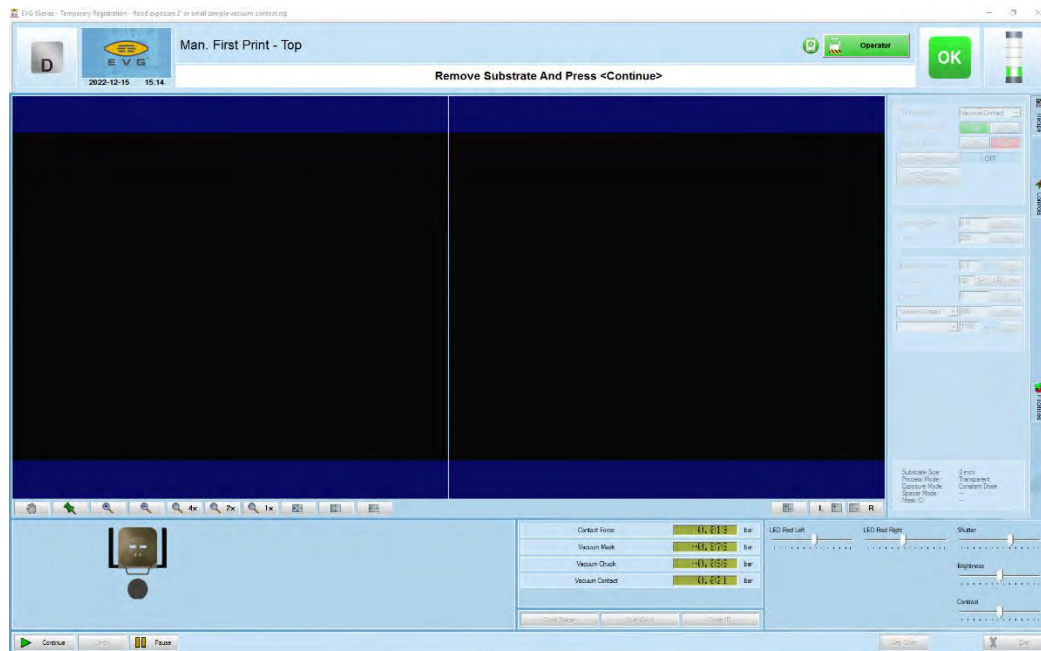
Move Axis Back.



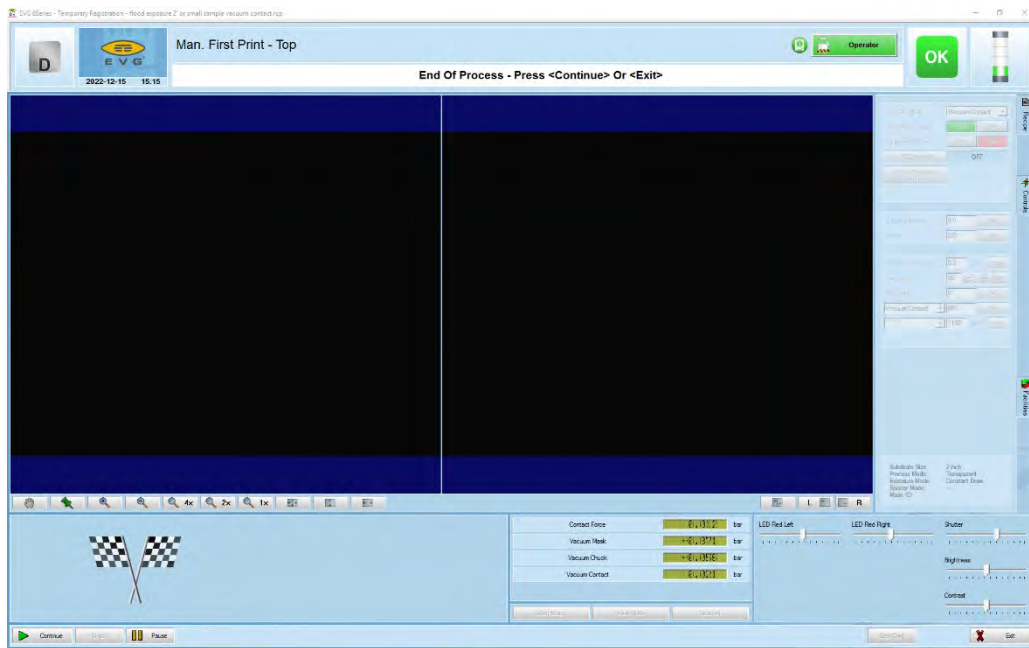
Move Tray Out **until it clicks!**



Remove Substrate and Press "Continue".

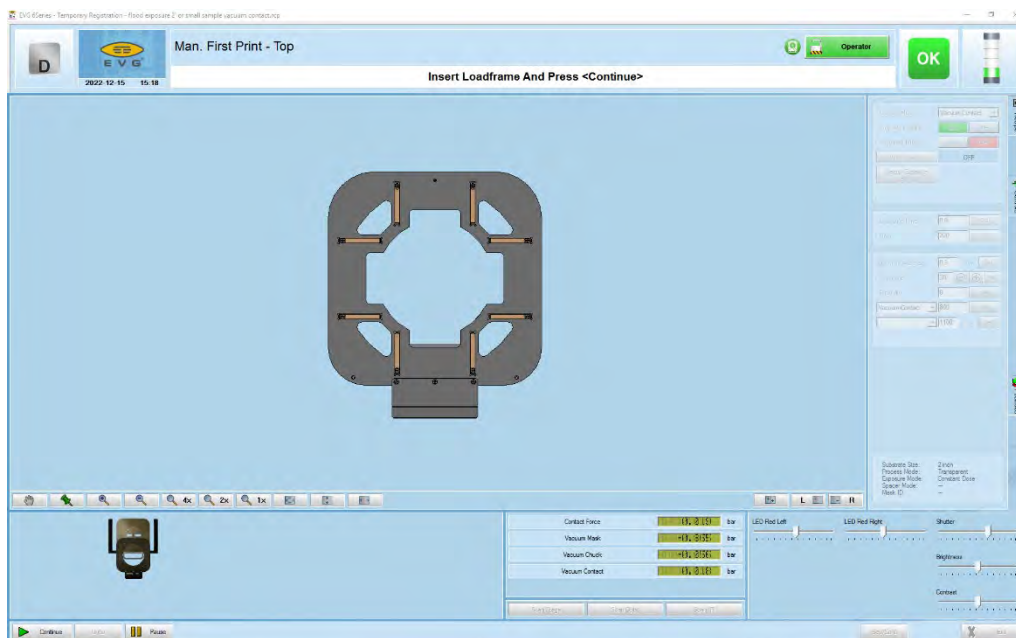


End of Process- Press “Continue” if have another sample for the same exposure.
Pressure “Exit” if done to go through shut off steps.

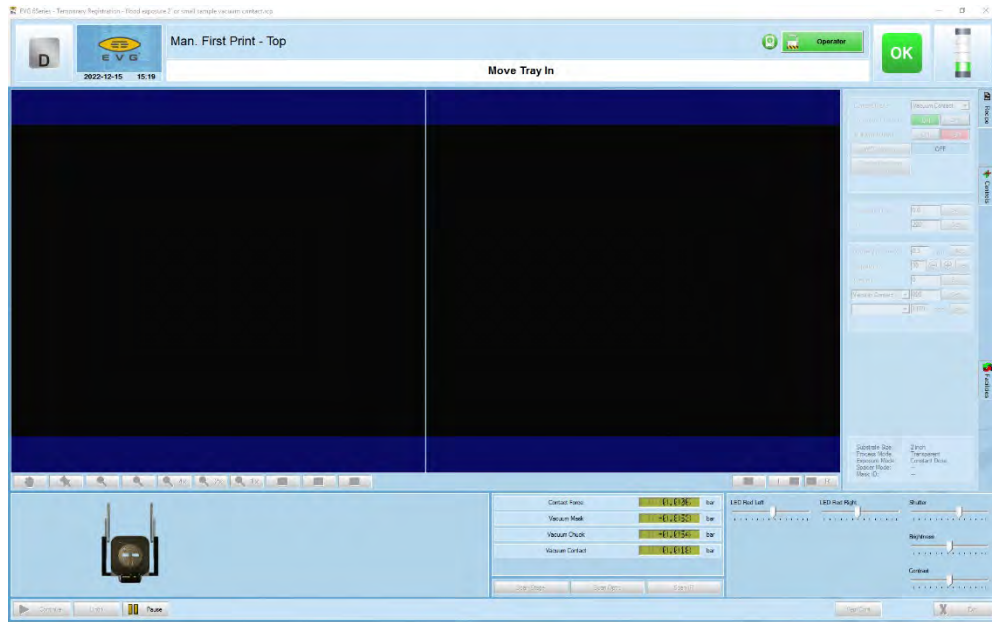


2. Shut off Steps:

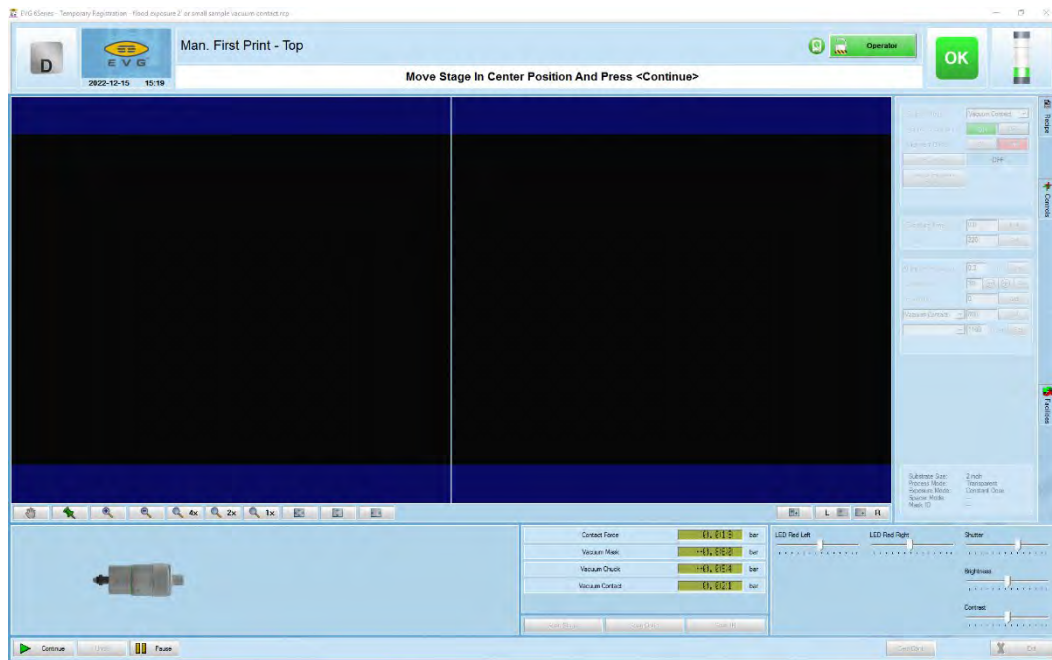
Remove photomask: Insert Loadframe and Press “Continue”.



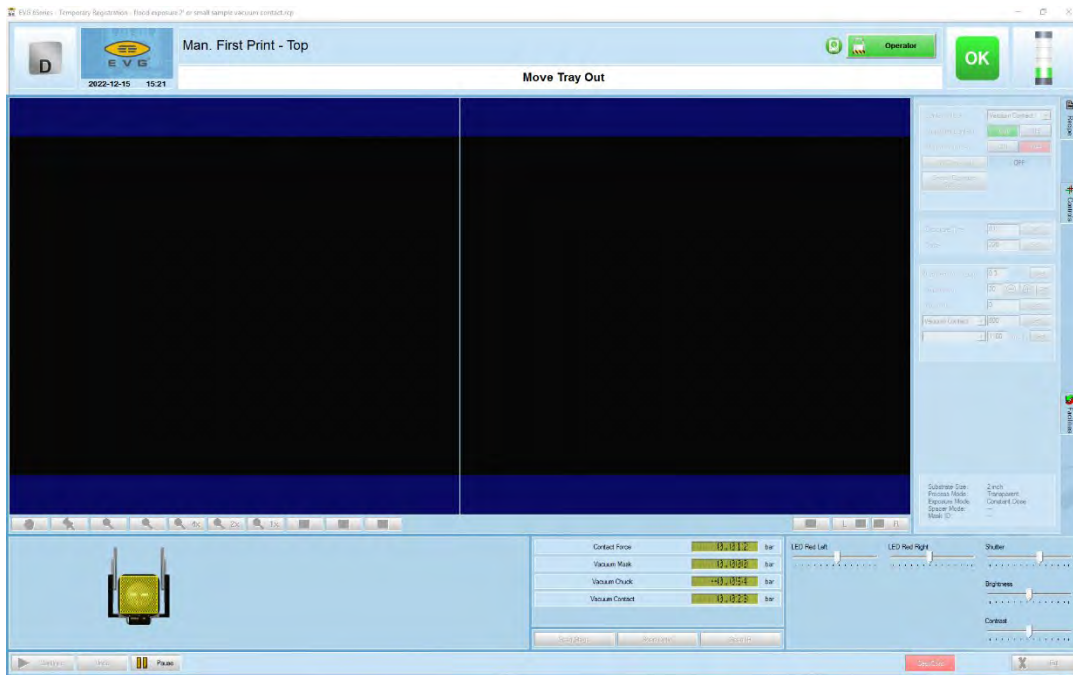
Move Tray In.



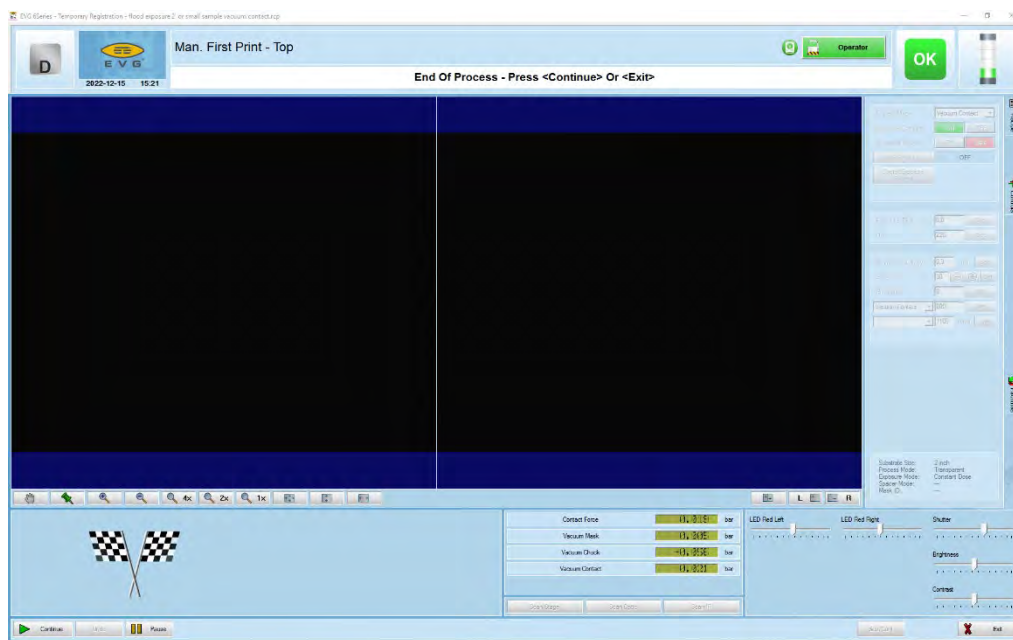
Move Stage In Center Position and Press "Continue".



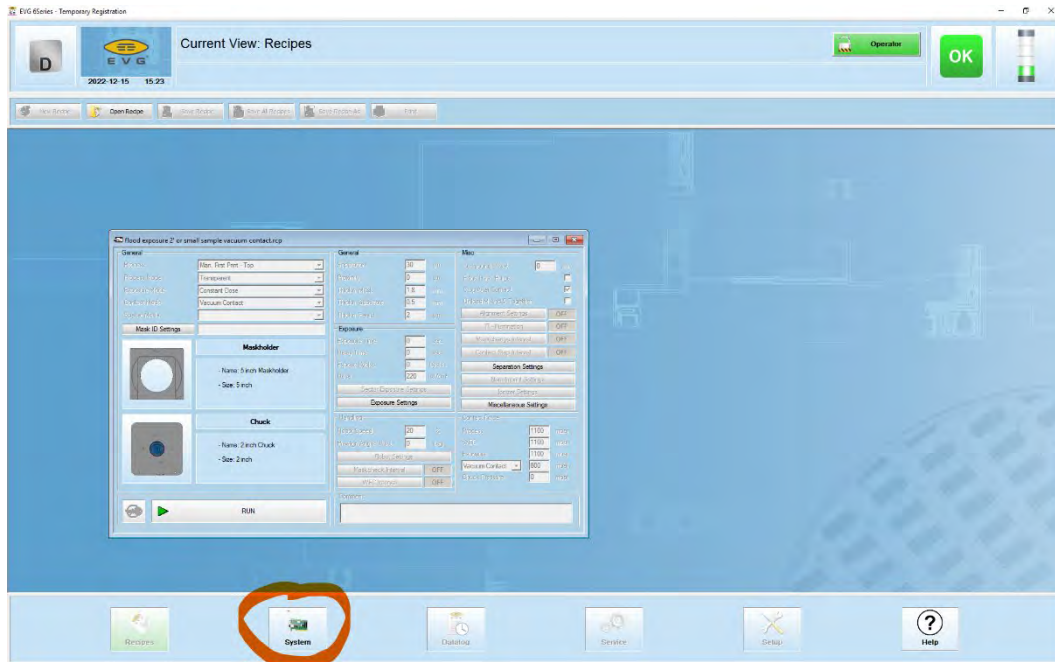
Move Tray Out **until it clicks** and Take Out the photomask.



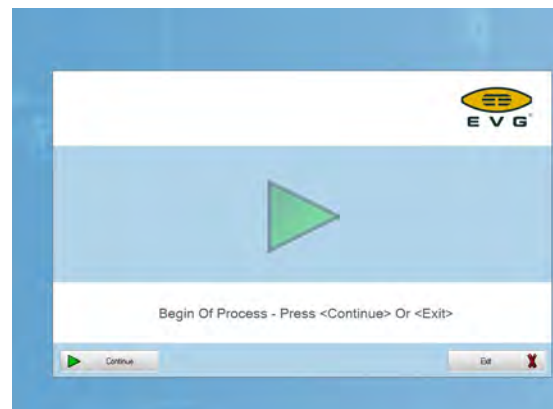
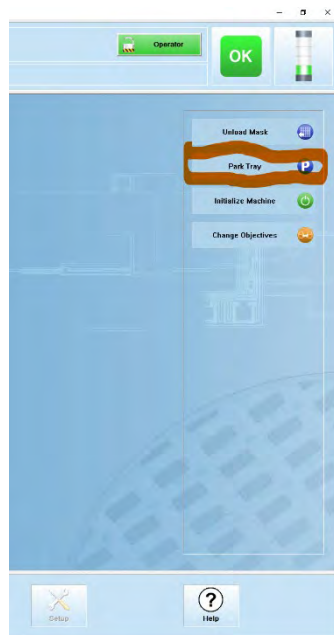
End of Process. Press "Exit".



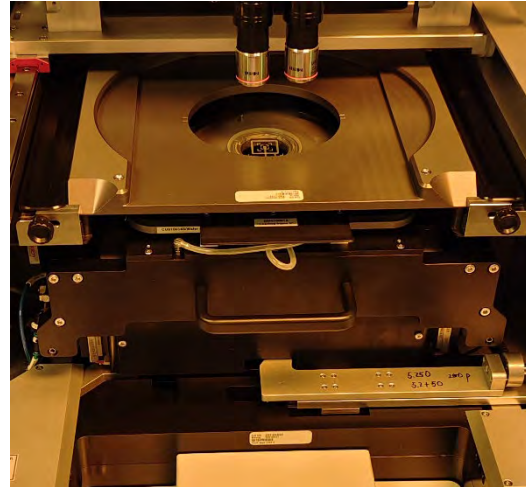
Press "System" on the bottom.



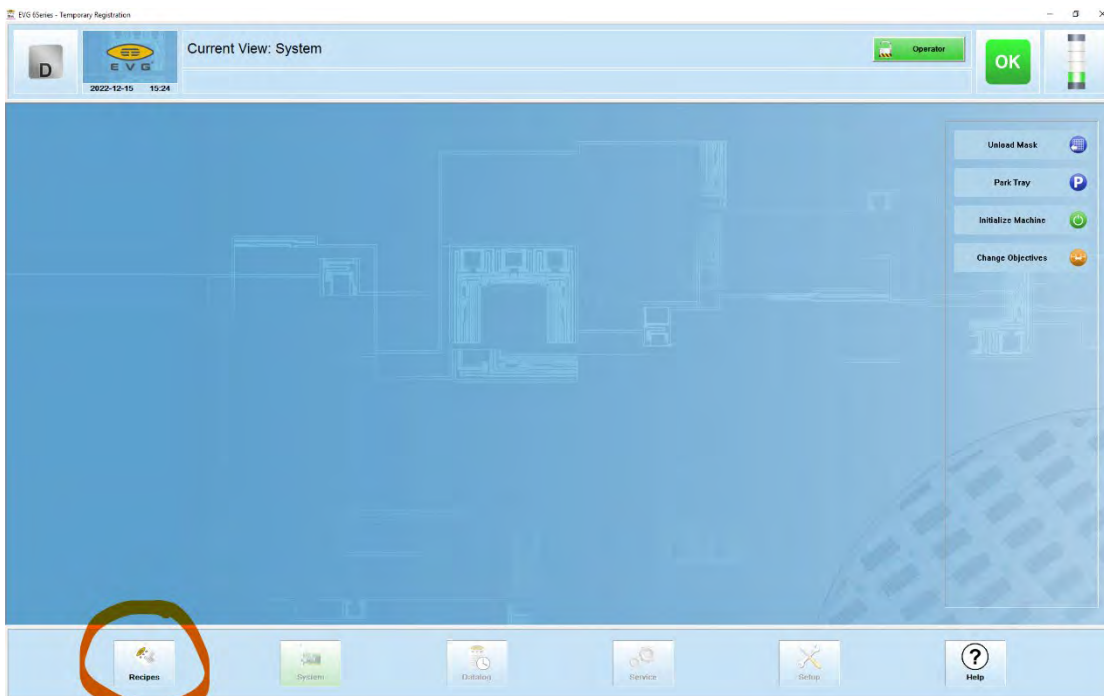
Press "Park Tray". **Make sure the tray is inside the system!**



Press "Exit" after moving tray in.



Press "Recipe" and Leave Recipe Page for next user.



3. Turn OFF all the utilities and Log off FOM:

Turn off the CDA, N2 and Vacuum lines. **Turn off** the UV lamp power.

