

Fischione NanoClean M1070 Procedure

Start-Up

1. Turn on the main power, which is located on the back left side of the instrument (next to the power cord). The front panel will light and the tuning network will initialize.
2. Press **CLEAR** on the screen to initialize the vacuum system, pump the main chamber, open the gate valve and start the turbomolecular pump.

Clean TEM Grids

1. Press **VENT LOCK** on the **Main** tab. The chamber will vent, the **Main** tab display will show the load **lock at atmosphere** and the pressure displayed will be close to atmosphere (760 Torr).
2. Pull the chamber lid handle straight up, at about 30mm a lever is released that holds the lid up, rotate the lid to show the bulk sample chamber.
3. Load the metal mesh box that contains TEM grids onto the multi-specimen holder and gently insert the multi-specimen holder onto ledge of chamber (Picture below).



4. Rotate the lid to align it with the chamber. While holding the chamber lid handle, push the lever in toward the post and gently lower the lid into place. (DO NOT DROP THE LID)
5. Verify that the chamber lid is closed properly and press **PUMP LOCK** on the **Main** tab to pump the chamber until "HIGH VACUUM" appears on the **Main** tab display.
6. Configure processing gas type and ratio on the **Gas Mix** tab:
 - Gas 1: no selection
 - Gas 2: Argon 75 part
 - Gas 3: Oxygen 25 part
7. Select the power percentage and gas flow on **Plasma** tab:
 - 70% power
 - 30 sccm gas flow (for Argon-Oxygen mix)
8. Set the clean time on the **Main** tab.
9. Press **START** on the **Main** tab and wait for the process to finish.
10. Press **VENT LOCK** on the **Main** tab to vent the chamber to atmosphere.
11. Open the chamber lid and remove sample.

Shut-Down

1. Close the chamber lid and press **PUMP LOCK** on the **Main** tab to pump the chamber to high vacuum.
2. Turn off the main power.