



Imaging and Flow Cytometry Core

BD FACSymphony™ A1 Standard Operation Protocol **Machine Startup and Shutdown Procedures (For Experienced users only)**

Machine Start up:

- Refill the sheath tank and empty waste tank if necessary, make sure all the tubings are connected properly.
- Turn on the computer and log into “User” account. (Please find the password posted under the bottom of the computer screen).
- **Wait until Tracker is initiated, login onto Tracker.**
- Turn on the Power button at the upper right of Symphony A1.
- Remove air bubbles from the sheath filter.
- Load a tube of Rinse solution (Solution 2) and run the solution at HIGH speed for about 30 minutes to clean the flow cell.



- Double click the BD FACSDiva Software → login to “OCleaning” account, no password required.
- The system is ready to use when it shows “Cytometer connected”.
- After 30 minutes of cleaning, change the flow rate to “LOW” and set the machine at “Standby” mode.
- Go to “Cytometer” → “CST”.
- Get the well-prepared CST beads from the fridge (prepare a new batch if needed: vortex the CST tube vigorously followed by adding 1 drop of the beads into 350 uL PBS → mix well before loading). The CST tube must be labeled with CST, lot number and date.
- Once entering CST mode, BD FACSDiva software will be disconnected automatically.
- Double check with the CST lot number and check the box “Load tube manually”.
- Click “Run” to initiate the CST test. When the CST test is completed → exit from the CST mode so that BD FACSDiva software can be connected.
- Log out from the “OCleaning” account and log in to your own account for sample acquisition.
- If some parameters could not pass CST test, cleaning flow cell for longer period is needed.
 - a) Prepare one tube of 2 mL FACS Rinse
 - b) Prime 2 times with FACS Rinse
 - c) Run 10 mins at “HIGH” flow rate
 - d) Run CST again

Machine Shutdown:

- After running through the whole process of machine cleaning, exit BD FACSDiva software, then shutdown computer. (No need to logout Tracker)



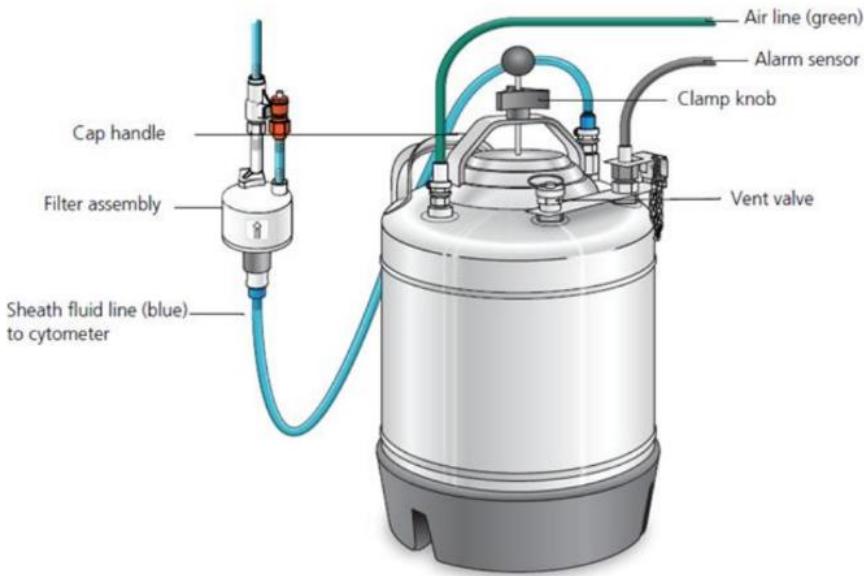
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- Turn off the POWER button at the upper right of Symphony A1.
- Refill sheath and discard the waste.

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Refill Sheath Container

1. Make sure the flow cytometer is in STANDBY mode.
2. Disconnect the air line (green) and fluid line (Blue) from the sheath container.
3. Depressurize the sheath container by pulling up on the vent valve.



4. Remove the sheath container lid.
5. Unscrew the clamp knob and push down to loosen, if necessary.
6. Tilt the cap to the side to remove it from the tank.
7. Add Milli Q Water (on the trolley) to the sheath container.
8. Fix the sheath lid and tighten the clamp knob to finger-tight.
9. Reconnect the air line (green) and fluid line (Blue).
10. Please pay attention to fluid line (Blue) to make sure it is not twisted or stretched.
11. Remove air bubbles from the sheath filter.



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Empty Waste Tank

1. Make sure the flow cytometer is in STANDBY mode.
2. Disconnect the orange waste tubing and the black level sensor line from the waste container.
3. Take the waste tank to the sink.
4. Remove the lid of waste tank.
5. Empty the waste container.
6. Add approximately 0.5 L of bleach to the waste in which it could cover the bottom layer of the container and tighten the lid.
7. Reconnect the orange waste tubing and level sensor line.

