# Running Cytometer Setup and Tracking (CST) beads.

Cytometer Set-Up and Tracking beads are used to define the baseline performance of the cytometer. Parameters related to linearity, detector efficiency electronic noise and laser delays, among others, are evaluate. PMT voltages are adjusted to maximize population resolution in each detector.

Once baseline measurements are defined, the beads are used to check the performance of the cytometer and measure variation from those baseline measurements. Laser delays, area scaling factors, and PMT voltages are adjusted if required.

CST beads should be run when starting the cytometer following the steps below:

Click Cytometer from the top menu bar and select CST..
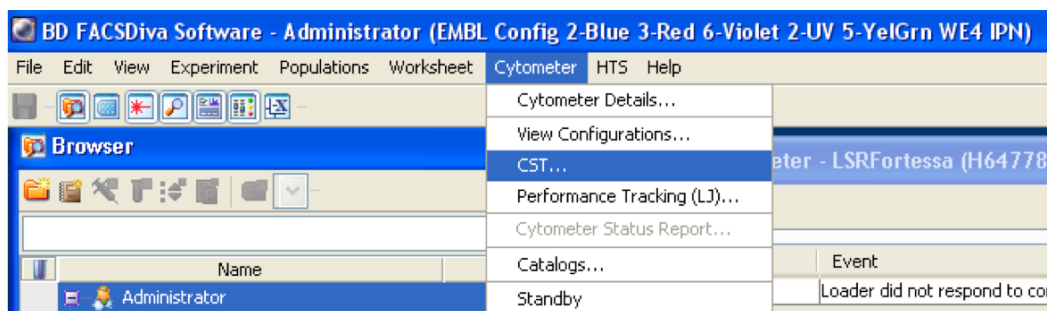
When the CST software opens, the cytometer get disconnected from FacsDiva and connected to CST application. CST window opens after few minutes.
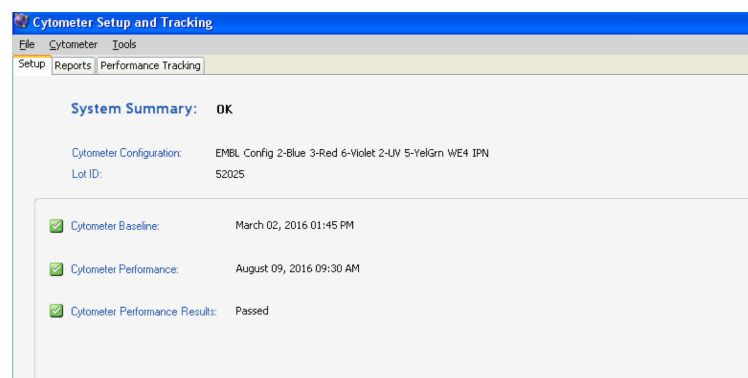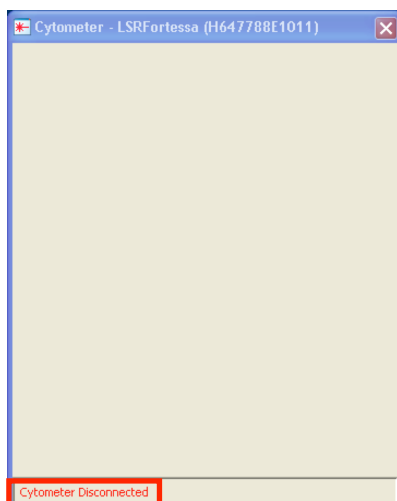
Prepare the beads in a facs tube : Put 1 drop of CST beads in 300ul of PBS 1X filtered (from the syringe next to the cytometer).

Verify in the set up control window, weather the Lot ID match the lot number specified in the bead tube. If not, select the appropriate lot number from the dropdown menu.
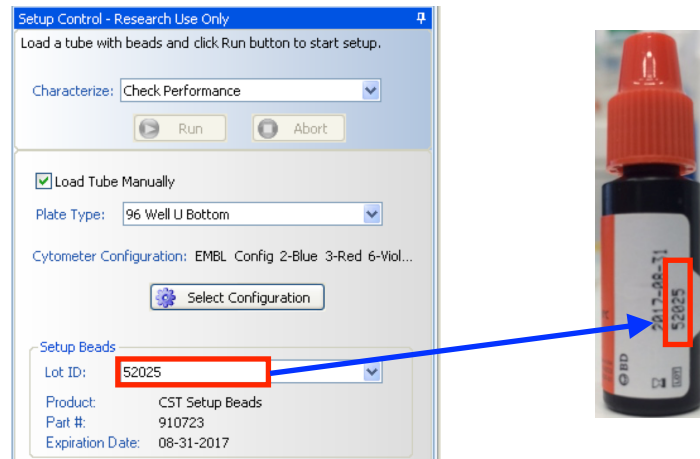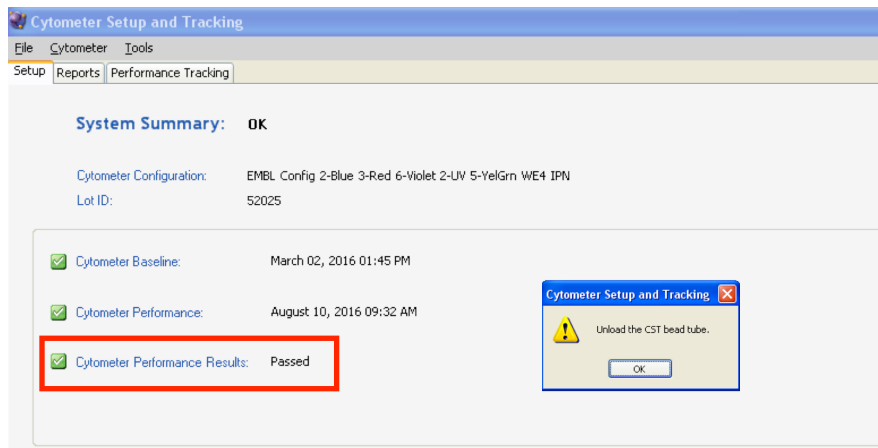

Click on RUN in the set up control window, load the facs tube in the cytometer and press RUN > flow rate LOW. The software will ask whether there is enough sheath fluid to run the beads, press OK.
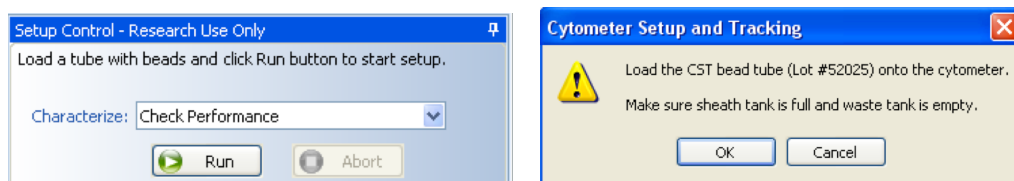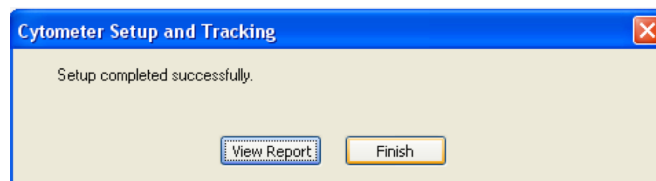

Beads will start running

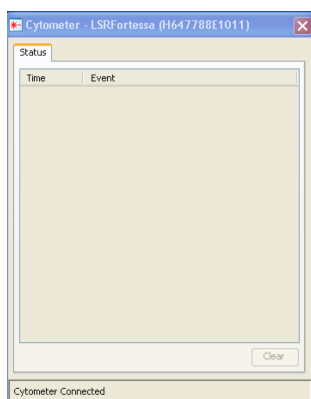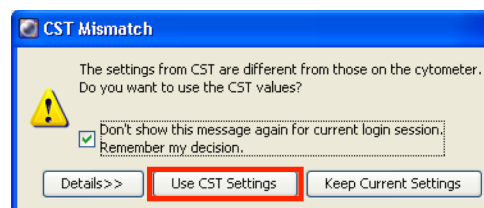After the performance check is done, the Cytometer Performance Result should appear as: Passed. Click OK

CST will inform you that the set up have been completed. Click Finish and close the CST window.

When CST software closes FacsDiva should get connection with the cytometer again.

A Mismatch window will pops up, click: Use CST Settings.

The cytometer is now ready to start the acquisition!.

For more information about sample acquisition refers to: Acquisition Guide document.

Diana Ordonez-FCCF EMBL Heidelberg