

A. Purpose

To fill the assembled cell using the vacuum filling system

B. Equipment set-up

The machine is the vacuum filling chamber.

C. Process

1. Check if the log sheet outside the vacuum chamber has the required liquid crystal mixture.
2. Sign the log sheet with the details of the liquid crystal mixture if it is not available.
3. Clean the holder inside the vacuum chamber with acetone.
4. Clean the channel with acetone.
5. Pour the prepared liquid crystal mixture in an empty channel.
6. Put the glass in the holder and place them in the channel with the hole directly above the liquid.
7. Close the door of the vacuum chamber.
8. Make sure the vacuum valve is open and the air valve is close.
9. Close all vacuum switches except the vacuum chamber.
10. Turn on the vacuum.
11. Wait until the pressure counter counts to less than 1Pa.
12. Level up the channel until it touches the hole of the liquid crystal cell.
13. Turn on the vacuum relief valve to allow the atmospheric pressure to push the liquid in.
14. Open the door and pick the glass out when it has been completely filled.

