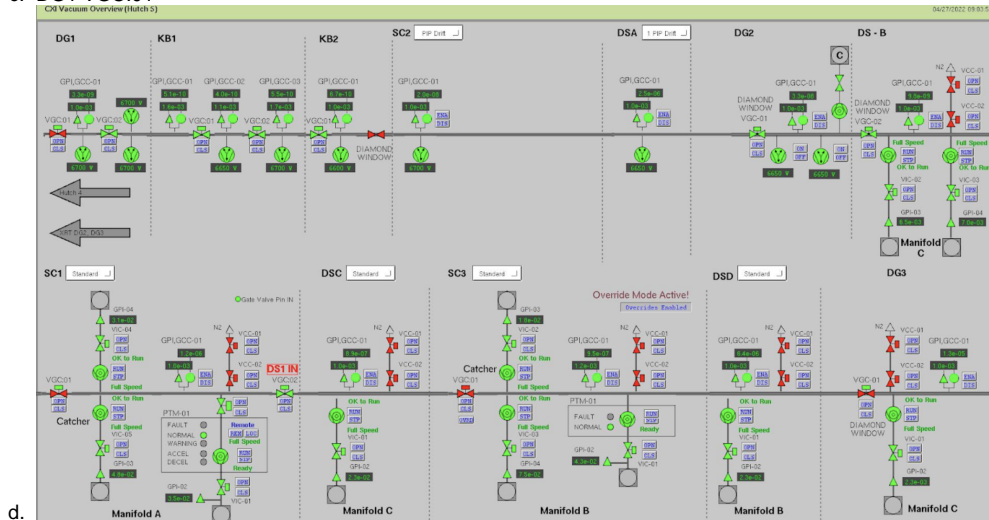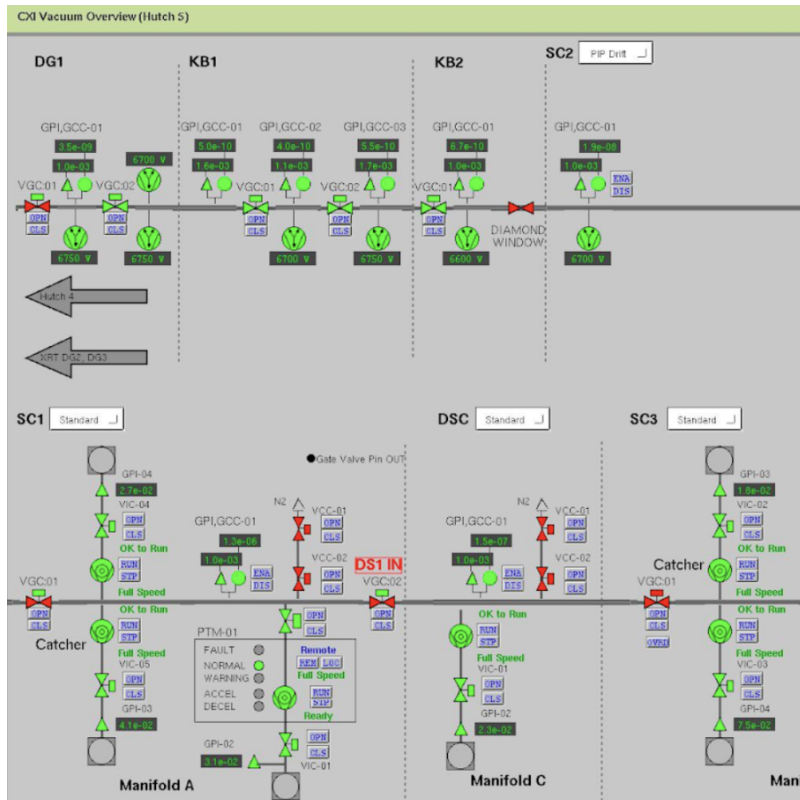# End of Shift SOP

NOTE: Step 6 and 7 can be skipped if we have back-to-back shifts and would like to keep JungFrau in the running position. In this case, we will wait until all shifts are finished and complete them at the end of the last shift.

NOTE: We now also have a hutch python function `gp_end_of_shift()` to close DIA, the laser shutter, upstream gate valves, put in DG1 and DG2 YAGs and move lxt_ttc back to 0.

1. Close DIA (X-ray shutter/pulse picker) and the pump laser shutter
2. Pump out samples
   a. Close the valve to the sample
   b. Keep needle valve at the current running position (sample delivery value)
   c. Open valves to the foreline
   d. Check and make sure the pressure goes down, then fully open the needle value (1.2e3 input)
   e. Close the needle valve once it reaches the base pressure
3. Close the following gate valves (or all upstream gate valves):
   a. SC1 VGC:01
   b. SC3 VGC:01
   c. DG1 VGC:01

   d.
4. Move JungFrau detector back (downstream) to 0 mm position
5. Log all current motor positions for the gas cell
6. After confirming JungFrau detector position, remove the screw protection
7. Close the gate valve SC1 VGC:02

a.

8. Close all manual valves of the sample
    a. Cylinders
    b. Bubblers
    c. The manual valve before the top flange of the SC1