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BCS

Procedure to start 100 lpm Argon Purge in TPC

1. Open MV30 (Ar inlet) located on the wall in mixing room. As Ar pressurizes the line you should hear the opposing check valves (CV15 & CV16) click - this stops the N2 flow and lets the Ar start flowing to the chamber.
2. Reduce the N2 regulator PCV2 to ~18 PSIG (located on the wall.) This further seals the check valves.
3. Open MV6 (Inlet valve for FM3 on rack 2)
4. On right Hastings controller (Rack 1) select FM3 (Channel 3)
5. Using computer, set FM3 to 100 lpm The Hastings response is sometimes ~slow.
6. Close SV11 (use computer) - stops the maintenance purge flow - red light means closed.

Note: Always stop the maintenance flow by closing SV11. NEVER close the manual valve on the flowmeter FI5 itself - this manual valve should remain open to provide the purge flow if the system shuts down automatically during running.

7. Check FM3 command/flow - command should be 100, flow should be 98 - 102. If flow is < 100, increase the delivery pressure for the Ar on PCV5 on the wall.
8. Close MV9 fully - this stops Ar from back-flowing through the compressor bypass valve.
9. To purge the supply stub that goes to the bubbler, open MV14a (bubbler bypass)
10. Read level at Ar tank
11. Note time in logbook.
12. If N2 has been in the chamber, flow Ar at 100 lpm for six volume exchanges. TPC volume is 50,000 l, so this takes ~ 50 hours.

At various times during this purge open MV9 all the way and run each of the big compressors for a few minutes (one at a time!). Leave SV18 OPEN. This gets N2 out of the nooks and crannies. Be sure and close MV9 fully after this or the Ar will short circuit out the vent.

The day before the P10 purge calibrate the methane meters. (Zero and span).

Go to the "Procedure to start high flow P10 purge in the TPC"