



## INITIAL STARTUP

*NOTE: Filters come pre installed in the machine. Please read and become familiar with all instructions in the Operators Manual before starting the unit.*

- Connect unit to an adequate electrical power supply. A dedicated branch circuit is recommended. Do not connect to a GFI or use extension cords.
- Insure that all system isolation valves are open and all drain valves are closed.
- Turn Red/Yellow power switch to the “ON” position.
- Fill the system and purge air using Manual Mode by pulling the Green Knob OUT and HOLDING it OUT for 7-10 seconds until pump runs.
- Bleed the air through the vents of all vessels starting from left, one at a time. This may take up to 15 minutes. Close valves when air stops and oil flows steadily.
- The PLC screen will show the flow. Inspect all fittings, seals, hoses, coupling, and piping for leaks. Document and fix any leaks.
- Once all air is removed, stop Manual Mode by pressing the Green Knob.
- Start NORMAL MODE with a QUICK PULL and RELEASE of the Green Knob. The Green Light will blink for a short period as the flow increases.
- After the fluid flow has stabilized, the system will automatically turn on the high voltage and the Green Light.
- Record all pressure, temperature and flow readings for future reference.



## PRESSURE INDICATIONS

- The difference between the pump output pressure ( $P_1$ ) and the prefilter outlet pressure ( $P_2$ ) is the pressure drop across the prefilter. If this drop is 15 psid [1.0 bard] or more, change the pre-filter and clean the wye strainer.
- The difference between the collection inlet pressure ( $P_3$ ) and the collection outlet pressure ( $P_4$ ) is the pressure drop across the collection filter. If this drop is 10 psid [1.0 bard] or more, change the collection filter.

## **SHUT DOWN**

*NOTE: Before shutting down, record all pressure, temperature and flow readings on the machine log.*

- Check the control box, panel, motor, and pump for defects or leaks. Check motor/pump for abnormal noise. Record any abnormalities.
- Push in the Green Knob all the way.
- Turn Red/Yellow power switch to OFF position.
- Close the inlet isolation valve to the unit and observe pressure (should return to zero). Close the unit outlet isolation valve.

## **CHANGING FILTER CARTRIDGES**

*NOTE: Consult manual to determine filter change interval.*

- Shut down unit as above and allow it to cool, if necessary.
- Use a small container to capture any spill and open the air vent valve on vessels.
- Open the drain valve on the bottom of the vessel to be changed. Drain at least 1 quart [0.8 liter] from the vessel. Save for later use or dispose of properly.
- Close the drain valve and loosen the lid eye-bolts with an open-end wrench or screwdriver.
- Open the lid, remove filter element, and place it in a suitable container for disposal.
- Insert a new element into each vessel. Fully seat element on the standpipe at the bottom. Ensure each vessel's "O" ring is intact and if damaged, replace with a new one. Lubricate new "O" rings using drained fluid. If desired, the drained oil may be poured back into the vessel, otherwise dispose of according to local codes.
- Place the vessel lid centered on top of the "O" ring. Replace eye-bolts and hand tighten. Using an open end wrench or screwdriver, tighten in a rotating pattern.
- Restart unit and purge air from each vessel as on other side of this card.
- Return the machine to service.

## **WYE STRAINER CLEANING**

- After shut down, isolate the machine by closing the inlet and outlet valves. Place at least a 1-liter container under the strainer drain plug.
- Remove the strainer drain plug and allow the fluid to drain.
- Remove the screen plug and clean. Reinstall drain plug in the screen plug.
- Pull the screen from the plug cavity and clean using the appropriate solvent for the fluid being purified.
- Reassemble, replace and tighten. Return the machine to service.