

## Installation Reference

### Topic: Permeate storage tank with multi-level sensor

These instructions include the need for a workman to enter a 'confined space'. You must abide by your Safety Manual when entering a 'confined space'. For example, a gas meter must be used to make sure that the air is breathable and does not contain hazards. Other safety matters or protocols are also observed when entering a 'confined space'

*Please read all the instructions listed below carefully to familiarize yourself with the project before attempting to perform any of the work or unpacking any further.*

#### Required Materials

- Step ladder
- Wire & conduit to extend the sensor leads.
- Electrical junction box as required.

#### Required Tools

- Electrical wiring hand tools.
- Tools to install electrical conduit.

The permeate storage tank is designed to act as a reservoir for permeate, which is generally feed to the 'last' permeate stage rinse. Fresh permeate is then counter flowed back into the ED bath and so are the ED paint solids that are rinsed off during the rinsing of the ware. The multi-level sensor is shipped loose since it can be damaged by excessive movement during shipment. Look for this in another container separate from the permeate storage tank. In many cases the permeate storage tank will already have bulkhead fittings installed at the desired locations above the bottom of the ED tank.

1. Move the tank to its approximate location. Remove the Permeate Storage tank from the shipping skid and remove the wrap that was placed on the tank to keep it clean.
2. The tank must be placed on a flat level concrete surface. Do not use shims to level the tank as the entire bottom of the tank must be fully supported. Rotate the tank so the bulkhead fittings are pointed towards the proper orientation. Note access to the top lid of the tank – Is access un-restricted? If yes then the tank is in a good position. If not move and or rotate as required.
3. Inspect the bulkhead fittings and insure that they are loose then they must be

tightened first before any piping is attached to them. See photo below.



4. To install the multi-level float switch assembly (UFS PN 280030) a person will have to be lowered into the tank. Follow your confined space requirements before proceeding.
5. Remove any packaging used to protect float switch assembly. Unscrew the nut of the  $\frac{3}{4}$ " Bulkhead fitting and make sure the EPDM gasket stays in place. Lower the assembly to the person inside the tank.
6. Feed the wires through the hole in the top side of the tank. Next push the male PVC threads of the Bulkhead fitting through the hole. Screw the PVC nut onto the PVC threads and hand tighten. Before the fitting is tight, rotate the floats so that are facing opposite of where permeate will be entering the tank so that the in-rush of permeate will not cause the floats to go horizontal and provide a false reading.



7. Use AWG #18 or larger wires to extend each of the sensor wires to an electrical junction box.
8. Leak check as possible and tighten fittings as required to stop the leaks.



PN 280030 assembly

**For more information** see the original manual that came with the equipment or call UFS<sub>c</sub> at the phone number shown above.