BWS350 Simple Install
Steps 1-19

Refer to Installation, Operation & Maintenance Manual for More Details
General Information

• System must be installed indoors easily accessed for service and maintenance.
• Water supply is cold water only at a minimum of 50 psi, maximum of 80 psi.
• A ½” Water Supply with Full Flow Ball Valve and Pressure Gauge, Drain and 120VAC power supply is required within 4’ of installation.
• Installation must conform to all local codes and regulations.
• Keep tubing and hoses as short as possible and avoid loops or kinks in tubing. Do not cut tubing with wire crimpers or dikes.
• Install System as close as possible to the equipment served.
• Never restrict flow of water from system to drain during operation. This flow is necessary to carry contaminants away from membrane.
Mount the Processor

Step 1
Select a secure mount location with access to a dedicated cold water supply, drain & 120VAC power supply.

Step 2
Attach Water Processor at the upper and lower keyhole mounts.
DO NOT PLUG IN.

Step 3
Connect Water Supply to “A” Water Processor Feedwater Inlet – Green Tubing.
Make the Drain Connection

Step 4a
Connect ¼” Black Tubing to “D” Reject Water Outlet.

NOTE: Optipure Airgap shown in picture, any approved airgap can be used.

Step 4b
Connect Black Tubing from “D” Reject Water Outlet to an Approved Air Gap and Drain Line.
Step 5a
Connect 3/8” Blue Tubing to “B” Optimized Water To Storage Tank.

Step 5b
Route Blue Tubing to Optimized Water Storage Tank.

Step 5c
Connect 3/8” Blue Tubing to Inlet of Tank Inlet Divert Valve.

NOTE: See Appendix A for remote RP install
Make the Storage Tank to Processor Connection

Step 6a
Connect ½”ID Gray Hose to ½”Hose Barb Adapter & Clamp. Connect to “J” Tank Repressurization Return.

½” Hose Barb Adapter & Clamp (Included).

Step 6b
Route Gray Hose to Optimized Water Storage Tank.

Step 6c
Connect ½”ID Gray Hose to ½”Hose Barb Adapter and Clamp. Connect to Repressurization Assembly outlet.
Optional Chlorammine Reduction Filter

If you are using an FXPT-11CR chlorammine reduction filter

Install it on the 3/8” (blue) ‘Optimized Water to Storage Tank’ line:
Inlet – From the Processor
Outlet – to the Storage Tank

The system includes 3/8” push-connect fittings for simple installation.
**Make the Optimized Water Outlet Connection**

*Step 7*

Connect ½”ID Gray Hose to ½”Hose Barb Adapter & Clamp. Connect to “E” Optimized Water Outlet.

The Optimized Water Line will be connected directly to equipment, or (optional) post-Treatment Filter and then on to equipment.

DO NOT CONNECT THE LINE TO THE EQUIPMENT AT THIS TIME.
Install Membrane & Pre-Filter Cartridges

Step 8a
Install AMS-QT Membrane into the QT Head and turn to align arrows.

Step 8b
Remove plug from elbow at bottom of AMS-QT by pushing in on grey collar and pulling on plug. Connect ¼” black reject tubing.

Step 8c
Install two CTO-Q cartridges into QT heads 1&2 starting from the left side of the processor and turn to align arrows.
Step 9
Connect Tank Switch Cable connector.

Make the Float Switch Connection

Do NOT connect pump to power until tank is at least half full of water.

Overall View of completed installation – Next Steps describe System start up.
Step 10
Turn Emergency Bypass valve to the “SYSTEM BYPASS” mode. While holding the Optimized Water Line over a drain, Turn on the water supply valve (user supplied). Allow to flush until water runs clear and free of air.

Step 11
Turn Emergency Bypass Valve to the “SERVICE” mode and plug in the processor. Allow Pre-Filters and the membrane to purge air and flush. After several minutes water will start flowing to drain and Optimized water will start filling the tank. (Optimized water flow rate is less than 0.25 gpm)
Check the Tank Float Switch & Set the Blend TDS

Step 12
Check Tank Float Switch operation. Remove tank lid, raise float (point upward) and listen for solenoid valve to click off and watch water flow to tank and drain stop. Lower the float to resume normal operation.

Step 13
Set Blending Valve to desired Optimized Water TDS.
- Turn on power to Water Quality Indicator.
- Press the IN button to determine Optimized Water TDS.
- Adjust Blending Valve to user specified TDS.
- Make ½ turn adjustments and wait 30 seconds until TDS responds on meter.
Rapid Fill the Storage Tank

**Step 14a**
While holding the Optimized Water Line over the tank opening, turn the Emergency Bypass Valve to the “BYPASS” position.

**Step 14b**
DO NOT PLUG IN THE PUMP AT THIS TIME.
Allow the tank to reach half full.

**Step 14c**
When the tank is half full, turn the Emergency Bypass Valve to the “SERVICE” position to resume normal operation.

**VERY IMPORTANT—PRIME REPRESSURIZATION PUMP before connecting Optimized Water Line to equipment. To prime the pump the Storage Tank must be at least half full!**
Step 15a
Open Buffer Tank Valve

Step 15b
Holding Optimized Water Line over tank opening, plug in RP pump and allow to run until water flow is steady and free of air.

Step 15c
After flow is steady close Buffer Tank Valve and allow Buffer Tank to fill and RP Pump should turn off. If the RP Pump does not turn off air is present. Repeat Step 15b.

❖ Prime the Repressurization Pump
Step 16
Connect Optimized Water Line to Post-Treatment and downstream equipment.

Step 17
Open Buffer Tank Valve and start downstream equipment. Check for leaks.
Complete the Installation

Step 18
Secure tubing, hoses and wires as needed to assure the installation is neat and not susceptible to damage.

Step 19
Complete the “Post Installation Check List” and the “Service Log” and leave them with the operator/owner.

Access manuals, spec sheets and additional educational materials for foodservice water treatment at our website.

www.optipurewater.com
Appendix A – Remote RP Connections

Use Remote RP configuration when installing tank in a location that has limited height. For example, under a steam oven or counter.

Step A-1
Insert Stem Elbow in Pick-Up Tube Connection

Step A-2
Insert Red Tubing in top Push-To-Connect on Divert Valve.

Rubber Feet – 4 places.
Appendix A – Remote RP Connections

Step A-3
Insert Red Tubing into inlet of Check Valve.

Step A-4
Connect Grey Hose to ½” Hose Barb and Clamp.
Appendix A – Remote RP Connections

Step A-5
Connect Grey Hose to $\frac{1}{2}$” Hose Barb and Clamp.

Note: All other connections are the same as when the RP assembly is installed on top of the tank.
Remote RP Buffer Tank Low Level Switch

1. Feed the grey cable from the low water level switch on the tank threw the bottom of the relay box.

2. Attach wires to terminals marked “D” and “C”

NOTE: It does not matter which wire goes where.

Low Level Switch Wiring Diagram