OptiPure
Foodservice Filtration Systems

Installation, Operation & Maintenance Manual

Reduce Particulate, Chlorine, Taste , Odor & Remove Hardness
For QTSFT Series Models: QTSFT-1, QTSFT-3

DO NOT DISCARD - GIVE THIS MANUAL TO THE OWNER AFTER INSTALLATION

- Installation must conform to all local plumbing codes and regulations.
- Do NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- Connect system to cold water supply only! Water temperature must not exceed 100°F/38°C.
- Do NOT solder plumbing connections attached to the filter housing or inlet valve. High temperature will damage these components.
- Do NOT over-tighten fitting connections into inlet valve or housing outlet. Always back-up valves and fittings with a wrench to avoid turning the valve.
- Allow a minimum of 3" under the housing to allow for sump removal and filter replacement.
- Do NOT mount the system near a heat source or above the electrical wiring or any device or area that would be adversely affected by water.
- Do NOT mount the system behind equipment. The unit must be easily accessible for filter replacement.
- Failure to change cartridges per recommended intervals with OptiPure replacement cartridges may lead to system failure and property damage.

Introduction

Your new OptiPure QTSFT-Series FoodService Filtration System will cleanse and condition the tap water providing optimum water characteristics for their specified applications. The result is reduced equipment maintenance requirements, longer equipment life and improved quality & consistency of your products. The OptiPure System is built with the finest, most advanced materials and each system is quality inspected and pressure tested prior to shipment. Proper system installation and routine filter changes will ensure years of trouble-free operation and performance.

Please refer to this manual when performing routine filter changes. The instructions make periodic maintenance quick and easy, and ensure you will receive maximum benefit from your system.

System/Operating Specifications &Dimensions

Maximum Pressure: 125 psi/8.6 bar **Maximum Temperature:** 100°F/38°C, Min.: 35°F/2°C
Capacity: Change filters before hardness removal capacity has been depleted.

IMPORTANT - Use Enclosed Water Hardness Test Strips To Measure Water Hardness and Document.

Date Installed:_____ **Feed Water Hardness:**_____ **gpg**

Treated Water Hardness:_____**gpg** **Projected Filter Change Date:**_____

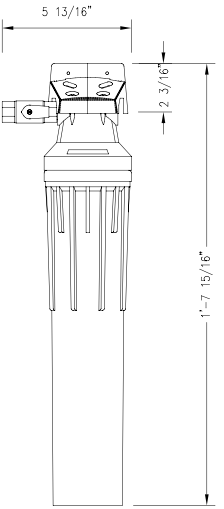
Hardness Conversion: 1 grain per gallon equals 17.1 ppm or mg/l. e.g. 10 grains of hardness is equal to 171 mg.l of hardness.

The formula to determine cartridge life span is:

(Grains Capacity of Filter/grains per gallon) x (ounces per gallon/ounces per serving)

An example: If the QTSFT-3 was installed on a system with feedwater that contains 10 grains of hardness and the serving size is 2 ounces, the expected life spane would be: (4500 grains/10 grains) X (128 ozs./2ozs.) = 450 gallons treated x 64 servings/gallon = 28,800 servings. Or you could simply say 450 gallons of water is treated regardless of serving size.

Caution: If the equipment has an automatic cleaning cycle or other use for the feedwater, the amount of water used must added to the treated water consumption and the grains of capacity. In cases where the water has above normal sediment or chlorine, or the hardness varies due to seasonal changes or drought, the rated capacity of the cartridges may be reduced. To acheive the maximum protection for the equipent it is recommended that the hardness be monitored until a standard can be established.



Model QTSFT-1
Capacity: 1800 grains
Service Flow Rate: 0.5 gpm/1.9 lpm
5.8"W x 19.9"H x 4"D
Inlet/Outlet: 3/8" FNPT

Model QTSFT-3
Capacity: 4500 grains
Service Flow Rate: 1.0 gpm/3.8 lpm
16" W x 21"H x 4" D
3/8" True-Seal Push-In Connection

Installation Precautions

- Do **NOT** install system on line pressure above 125 psi.
- Do **NOT** install the system backwards with the feed water line connected to the outlet.
- Do **NOT** use liquid pipe compounds for fitting connections. USE two to three wraps of Teflon tape.
- Do **NOT** allow system to freeze. Turn off water supply to housing and drain housing if temperature falls below 33°F.
- Do **NOT** install system in direct sunlight or where system is exposed to harsh chemicals or may be subjected to being struck by moving equipment, carts, mops or any other item that may cause damage.
- **IF** water hammer is evident, install water hammer arrestors before OptiPure unit.

Installation Procedure

1. Turn off all equipment to be fed by the OptiPure System.
2. Locate water supply cut-off valve and turn off.
3. Install a minimum 3/8" full-flow ball valve on the water supply side that will feed the water system.
4. Anchor the OptiPure System on a wall stud or suitable mounting material spanning wall studs.
5. Run 3/8" Polyethylene tubing from the full-flow ball valve at the tap water source to the inlet ball valve on the left side of the OptiPure system. The connection is a 3/8" Parker True-Seal connection that is a push fit.

   NOTE: Make sure tubing is cut square and clean with no burrs before inserting into True-Seal connection.
6. Select the appropriate size tubing for the equipment being fed and connect it to the outlet of the OptiPure System. NOTE: DO NOT connect the tubing to the equipment at this time. Prior to making connection to the equipment this line will be used to facilitate flushing the system. As an option, a flush valve in a tee on the outlet side of the OptiPure system can be installed in the line to facilitate flushing when changing filters.
7. With OptiPure inlet valve closed, slowly open the full-flow ball valve at the tap water source. Check for leaks.
8. If a flush valve was not installed on the outlet side of the system, hold the tubing that will connect to equipment in a clean bucket or over sink or drain. Open the system inlet feed valve and allow water to flush through system for 10 minutes at the specified system flow rate to allow air and any carbon fines to escape. **NOTE: NO ACTIVATION IS REQUIRED FOR THE OPTIPURE SYSTEM TO PERFORM PROPERLY. FLUSHING IS**

RECOMMENDED TO ALLOW AIR TO ESCAPE THE SYSTEM AND REMOVE ANY CARBON FINES and COLOR PRIOR TO CONNECTING TO EQUIPMENT.

9. Make certain that the end of the tubing to be connected to the equipment is clean and sanitized.
10. Connect tubing to equipment. Open all water supply valves and check for leaks.
11. If no leaks turn on equipment and check for normal operation.
12. **IMPORTANT: Document installation date; measure water hardness of water supply and filtered water. Calculate projected filter cartridge change date and document.**

Operation

With adequate pressure, normal operation of the OptiPure System is completely automatic. Dependable operation involves only monitoring of water hardness, periodic filter changes and service documentation.

Maintenance

The only routine maintenance your OptiPure System should ever require is periodic filter cartridge changes. Filter changes are necessary for optimum performance of your foodservice equipment. If the system sizing recommendations have been followed the OptiPure System is designed to provide soft water for the rated capacity of the system.

Filter Change Frequency

Several situations will mandate filter changes. Complete filter sets should be changed when any of the following apply:

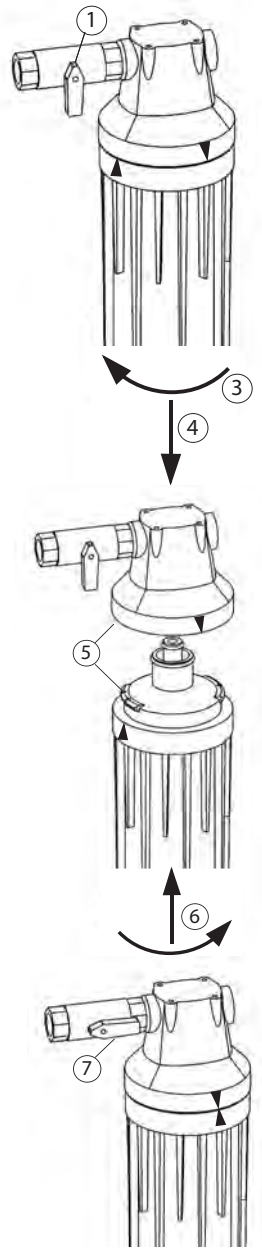
- Six (6) Months have passed since unit installation or previous filter change.
- Reduced water flow.
- When hardness minerals are no longer removed.

If filter change frequency is less than capacity to remove hardness, it may be necessary to add additional prefiltration or evaluate system sizing recommendations.

Filter Cartridge Replacement Procedure

IMPORTANT: Determine whether all equipment connected to the OptiPure System must be turned off prior to shutting off water supply from filters.

1. Close inlet ball valve.
2. Relieve pressure downline by opening flush valve or briefly actuating equipment.
3. Turn cartridge to the left 1/4 turn until it stops.
4. Pull down on the cartridge until it clears head. Discard old cartridge.
5. Line up the upward-arrow on the new cartridge with the upward pointing arrow on the head.
6. Push cartridge up into head until it stops and turn to right until it stops. (The upward-arrow on the cartridge should align with the downward-arrow on the head).
7. Open the inlet ball valve.
8. Open down-stream flush valve to flush new cartridge at the specified flow rate for a minimum of ten (10) minutes.



Replacement Parts for: QTSFT-1, QTSFT-3

Part #	Description
300-05899	Head, Qwik-Twist - 3/8" I/O
520-12215 520-12218	Valve, Inlet Ball -QTSFT-1 Valve, Inlet & Flush - QTSFT-3
550-01210	Connector - 3/8"Tubing
160-52912	Flush Kit -3/8" (Optional)
180-80106	Hardness Test Strip (2/pk)

Hardness Testing

For your convenience we have included two hardness test strips in this installation kit for determining the hardness of your feedwater. Due to the fact that tap water varies dramatically even within the same city we strongly recommend the you test the hardness and calculate the capacity of the system. This will provide you with the maximum protection for your equipment. The test procedure is very simple and will only take a few seconds to complete. Furthermore, it would be prudent to periodically measure feedwater and treated water hardness to confirm that the feedwater hardness has remained consistent and that your system has not exceeded capacity.

Test Procedure:

1. Flush wter from the supply line that you will be using to supply the QTSFT for several minutes.
2. Fill a clean cup with the water from the line after flushing.
3. Dip the test strip into the water sample for one (1) second, remove and immediately match with the closest color on the strip package for total hardness (TH) as parts per million (ppm) or grains per gallon (gpg). Color is stable for 1 minute.
4. After installation of the QSFT and the unit has been flushed, check the hardness of the treated water using the same procedure in steps 1-3. It should be zero-1 grain per gallon.

Doing this test will confirm that the QTSFT is performing and will provide you with the peace of mind that your equipment is protected from hardness scale.

Replacement Cartridges

System	Cartridge	Qty.
QTSFT-1	SFT-Q	1
QTSFT-3	CSFT-Q SFT-Q	1 2

Replacement Filter Cartridges

OptiPure Filter Systems are designed, tested, and certified with OptiPure filter cartridges with proven performance, size and operating capacities. Use of replacement cartridges other than those specified will void warranties, certifications and may compromise equipment protection, water quality and cartridge life.

FilterTrak - Filter System Management Resource

The single biggest problem with filter systems is the lack of attention after the system is installed. Many times the equipment supplied by the filter systems has a service problem related to water because the filter system has not been maintained. This is simply because personnel in the establishment change and it becomes difficult to keep track of what filters are needed and when. FilterTrak eliminates this problem since it automatically notifies users when a scheduled filter change is due and what filter cartridges are needed via mail, fax, email or autoship.

OptiPure warrants the quality of workmanship of their system components and assembly, except for replacement cartridges and membranes, for a period of 36 months. OptiPure Systems are designed, tested and certified with OptiPure cartridges. Use of replacement cartridges or parts other than those specified will void warranties and Certifications, and compromise equipment protection, water quality and cartridge life.

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