STATPURE

Water Filtration System

SWP400

Operator's Manual

SciCan

SD-690 NA EN R1

Contents

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Installation Guide and Owner's Manual

STATPURE water filtration system delivers high-purity water for autoclaves, dental bottles, ultrasonic cleaners, and instrument washers.

- Eliminates the need for staff to store and handle bottled water.
- Fast filling from the ergonomic autoclave fill wand; more efficient than pouring heavy water jugs.
- Simple design cuts filter change times in half.
- Various autofill options to connect to all SciCan instrument reprocessing equipment.
- Lowers clinic operational costs long-term by eliminating bottled water purchases. And its four-filter system produces high-purity water without the need for extra filters.

1. System Overview

The STATPURE™ is a proprietary water filtration system designed to produce multiple grades of process water for dental and medical equipment. The system operates using municipal water pressure and does not require electricity.

The system produces:

Deionized / Demineralized (distilled-quality) water (0–4 ppm TDS)

Used for:

- Autoclaves
- Sterilizers
- Equipment requiring ultra-pure water

Low-TDS water (~10–50 ppm TDS)

Used for:

- Instrument washer/washer-disinfector rinse cycles
- Dental bottle filling
- Ultrasonic cleaners

For System Owners

- Please read this manual fully prior to use.
- Never use distilled-quality water or distilled water in dental bottle units or instrument washers, as extremely low-TDS water can be corrosive to certain metals.
- It is strongly recommended that a professional technician or plumber familiar with dental/medical offices perform the installation since connection with a cold water line and drain is involved. They should be familiar with local plumbing codes for successful dental/medical equipment installations.
- Please keep this manual for future reference and ensure that anyone responsible for operation and maintenance of the system is familiar with all details contained in this manual.

Important! It is strongly recommended that the system is turned off at the end of each workday by closing the valves on the system, water storage tank, and autoclave fill wand.

2. Included with Every STATPURE System

1. STATPURE filtration unit with installed filters
2. Water storage tank
3. Chrome Faucet
4. Autoclave fill wand with 10′ (3 meters) coiled tubing
5. VersaCheck® QC Dual Check Backflow Preventer
6. Dual system-mounted TDS meter
7. Handheld TDS meter
8. All required tubing (12′ / 3.7 meters each)
9. Inline Shut-Off Valve
10. Tank Valve

Not shown	
11.	Drain saddle clamp
12.	Injection Port Assembly
13.	Syringe
14.	Angle stop valve for source (supply) water connection
15.	3/8″ Swivel Elbows (x3)
16.	1/4″ Swivel Elbows (x2)
17.	Mounting Cable Ties (x2)

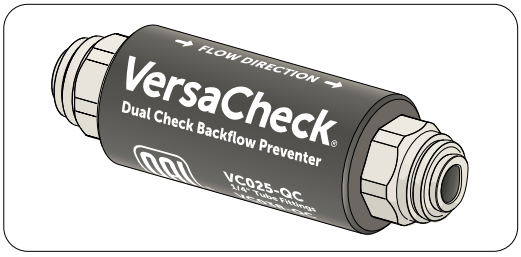
3. Installation Guidelines

Important Information

- Installation should be performed by a **qualified technician or plumber familiar with dental or medical offices**.
- Always follow **local plumbing codes**.
- Read this manual fully before beginning installation.
- The STATPURE is typically installed inside the sterilization center sink cabinet but may be installed anywhere a potable water supply and drain are accessible.
- Mount the system where it is accessible for easy filter replacement and system maintenance.
- Install the system no farther than **10–12 feet (3-3.7 meters) from the faucet and autoclave fill wand location**.
- Keep the system and water storage tank at the same level.

Backflow Prevention

A certified **VersaCheck® QC dual check backflow preventer** is included and must be installed in the **¼" red inlet tubing** between the source water valve and the STATPURE inlet.



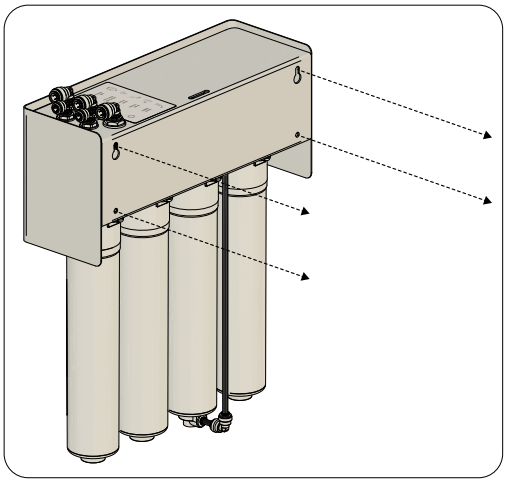
The VersaCheck® QC meets:

- ASME A112.18.1 / CSA B125.1
- ASME A112.18.3
- NSF 61 / 372
- California Health and Safety Code 116875

Important! Ensure the flow direction arrow points toward the STATPURE.

4. Installation Instructions

4.1 System Mounting



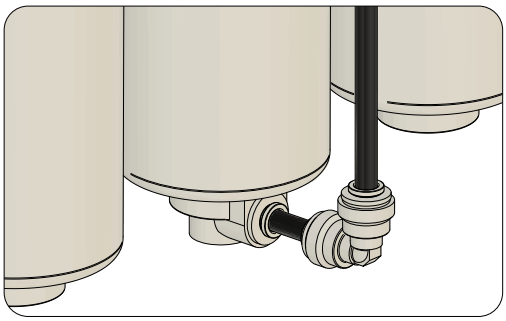
Mount the STATPURE in the desired location using the provided drill template. Installer must supply appropriate mounting screws (recommended **#10 screws**).

Note: For best stability it is recommended to use four mounting screws.

1. Using the included template, tape it to the mounting surface, level, then mark hole positions.
2. Drill pilot holes to match screw size.
3. Install the TOP two screws and drive them in leaving about 1/8" space behind the head.
4. Hang the system on the TOP screws using the keyholes on the back of the system.
   Note: installing only the two TOP screws allows the system to be easily unmounted.
5. To install the LOWER two screws, remove the system cover.
6. Carefully install the screws around the tubing in the lower round holes and snug. Snug the top screws. Replace the cover after mounting.

The system may also be installed:

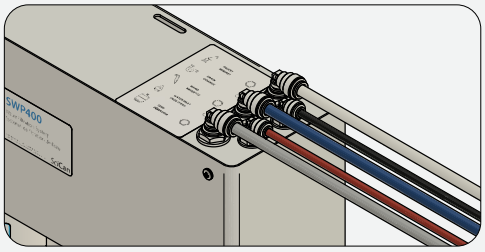
- Vertically (recommended)
- Horizontally (90° orientation) with filters pointing out towards the cabinet opening (for easy access during filter changes)
- Lying flat or resting on cabinet decking if mounting is not possible.



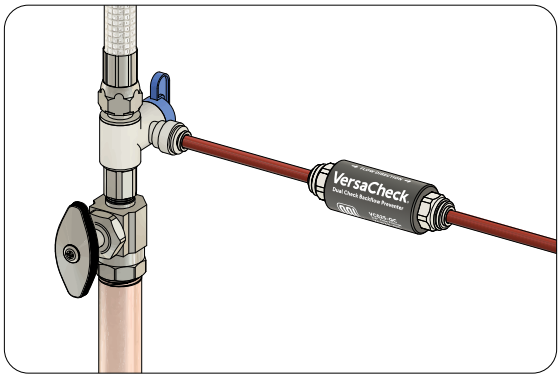
Included swivel elbow fittings allow flexible routing of the tubing.

TIP Depending on how much space there is to maneuver within the cabinet, it may be easier to keep filter #2 Hyperfiltration installed in the manifold during the mounting process, uninstalling the remaining filters until after the system is mounted and tubing is routed.

Important! When attaching tubing to the push-type fittings, make certain all tubing cuts are straight and free from excess material. Tubing must be firmly inserted into the fitting (push in until you feel the click) to avoid leaks. The typical plunge depth into fittings is 11/16" and it may be helpful to mark that length on the tubing prior to inserting to make certain it is engaged all the way into the fitting.



4.2 Water Supply Connection

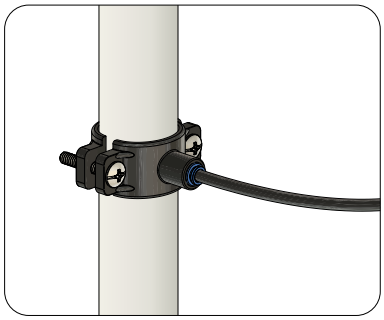


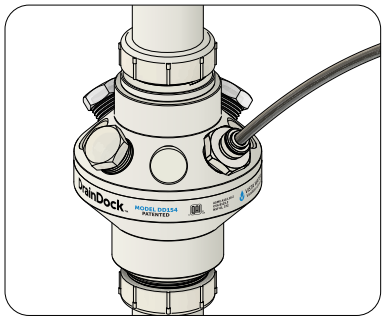
1. Turn off the cold water supply.
2. Provide for a 1/4" connection to the cold water supply. A **¼" angle stop valve** is supplied with the STATPURE system. Check local codes.
3. From the provided **¼" red LLDPE tubing**, cut a short piece approximately 5 cm / 2" and install one end to the angle stop valve (or alternative fitting). Install the other end into the VersaCheck QC, ensuring the VersaCheck's flow direction arrows are pointing towards the STATPURE unit.
4. Connect remaining red tubing from the VersaCheck QC to the STATPURE inlet on the system manifold.

4.3 Drain Connection

Install a drain connection using one of the following:

- Included **drain saddle clamp**
- DrainDock® Multi-Port Drain Adapter (optional accessory)





IMPORTANT!:

- Install above the P-trap
- Position as **low as possible**

Connect the **¼" black tubing** from the STATPURE drain outlet to the drain connection.

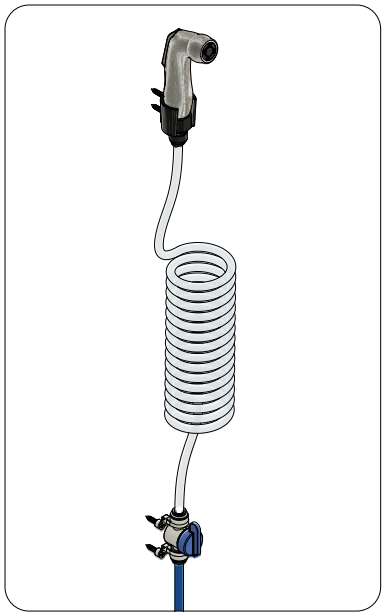
NOTE: Local codes can vary greatly, so it is important to verify the preferred method prior to installation. Every STATPURE has a pressurized drain discharge and multiple check valves in the system to prevent backflow from drain connections.

4.4 Faucet Installation

It is mandatory to install the chrome faucet, as this provides an efficient method for fully draining the system & water storage tank for regular maintenance.

1. Mount the bottle filling faucet in the desired location.
2. It may be necessary to drill a **0.50–1.00 inch diameter hole** if required.
3. Install all provided washers and gaskets.
4. Thread the faucet adapter fitting to the faucet base.
5. Connect the **3/8" white tubing** from the faucet to the STATPURE faucet outlet on the manifold.

4.5 Autoclave Fill Wand Installation



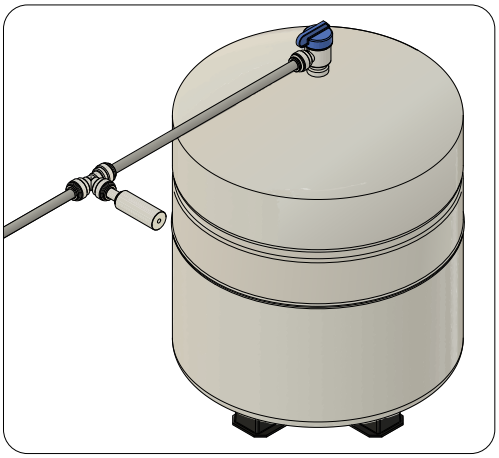
1. Select a convenient mounting location for the included fill wand clip.
2. **Ensure adequate length of 3/8" blue tubing** is provided to ensure the coiled fill wand tubing is not stressed when in use.
3. Secure the **3/8" inline valve** (using the provided mounting cable ties) to the 3/8" blue tubing.
4. Connect:
   a. **Coiled tubing** to the inline valve
   b. **3/8" blue tubing** to the STATPURE autoclave fill wand outlet labelled on the system manifold

Important! To protect the longevity of the autoclave fill wand, ensure it is not dropped or banged. When not in use, it is strongly recommended to always turn the in-line valve to the CLOSED position.

4.6 Storage Tank Installation

1. Place the tank in the desired location.
2. Attach the **3/8" elbow tank valve**.
3. Connect the **3/8" natural tubing** from the tank valve to the STATPURE tank port on the manifold.

NOTE: Position the water storage tank as near as possible to the STATPURE. The system and storage tank can be separated by up to 30 feet (9 meters), as they're on the same level and there are no significant "dips" in tubing, which can create back pressure.

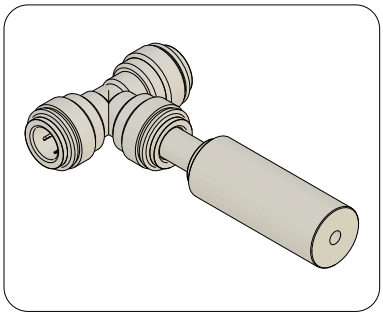


Tank Pre-Charge

The tank air bladder is factory pre-charged to **7 psi**. Verify pressure (see section 12) before installation.

4.7 Injection Port Installation

1. Cut the **3/8" natural tank line** approximately **4–12 inches (10.2-30.5 cm) from the tank valve**.
2. Install the **Injection Port Assembly** in the cut section.
3. Ensure the injection port remains **accessible for maintenance and sanitization** (section 13).



4.8 Filter Installation

1. Reinstall all four filters into the system manifold (if they were removed during mounting).
2. To install, **push the filter up into the manifold and turn clockwise**. Make certain the filters are fully engaged to prevent any leaks.
3. For filter #**2 Hyperfiltration**, insert the **black ¼" drain tubing and elbow** into the bottom of the filter. Ensure it is fully inserted to prevent any leaks.

5. System Startup

After installation:

1. Turn on the cold water supply.
2. Open the angle stop valve (or alternative fitting used).
3. Allow the system to operate and fill for 10 minutes while checking for leaks.
4. The permeate pump should produce an audible clicking sound, indicating water production.
5. Allow the system to operate for at least 30 minutes total.
6. Open the faucet to release trapped air.
7. Close the faucet once water flows steadily.
8. Activate the autoclave fill wand briefly to remove air.
9. Proceed with tank and faucet sanitizing procedure (see Section 13).
10. The system should run 1–2 hours prior to first use to allow the storage tank to fill completely.

6. Daily Operation

Water flows through the system as follows:
Supply water (city) > Prefilter (#1) > Hyperfiltration (#2)

From there:

- Treated water flows to the **storage tank**
- Wastewater flows to the **drain**

When water is dispensed to the faucet:
Tank > Polishing Filter (#4) > Faucet

When water is dispensed to the autoclave fill wand:
Tank > Deionization Filter (#3) > Wand

Produces deionized, also referred to as demineralized, water that is distilled quality.

The system automatically begins producing new purified water whenever water is used.

7. Monitoring Water Quality (TDS)

Total Dissolved Solids (TDS) measures all dissolved substances in water.

Typical municipal water: **150–300 ppm**

Recommended water quality:

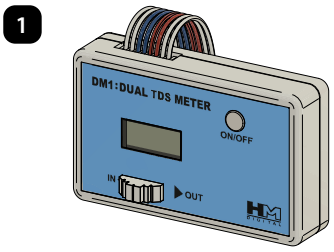
Application	TDS Range
Autoclaves (deionized water)	0–4 ppm
Bottle filling / Final rinse (RO water)	~10 ppm
Ultrasonic cleaners	10–50 ppm

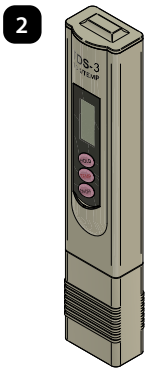
High TDS water can cause **scale buildup and equipment maintenance issues**.

8. Using the TDS Meters

STATPURE includes:

- System-mounted dual TDS meter (1)
- Handheld TDS meter (2)





System-Mounted Meter

1. Lock faucet open.
2. Discharge autoclave fill wand for 5–10 seconds.
3. Once the pump clicks, read the meter.

Position	Measurement
IN	TDS after Hyperfiltration (#2)
OUT	TDS after Deionization (#3)

4. Turn the faucet off (closed position) once TDS meter measurements have been recorded.

Handheld Meter

1. Fill a cup with sample water.
2. Remove meter cap.
3. Turn meter on.
4. Submerge probe.
5. Record reading.

Both meters use: **Two LR44 (1.5V) batteries**

9. Interpreting TDS Readings

Example:

Stage	Reading
City Supply Water	200 ppm
After Hyperfiltration	10 ppm
After Deionization	0 ppm

The Hyperfiltration should **remove ~95% of TDS**.

Remember, the above table is only an example. The reading on the "IN" should generally be about 5% or less of the inbound city supply water TDS. The Deionization filters remove the balance remaining to achieve the 0-4 ppm TDS level.

10. Filter Replacement Schedule

Filter	Replacement Criteria
#1 Prefilter	At least annually
#2 Hyperfiltration	When efficiency drops below 90%. On average this is when TDS readings show greater than 50 ppm.
#3 Deionization	When OUT reading > 4 ppm
#4 Polishing	At least annually

The average lifespan of STATPURE filters are as follows:

- Prefilter & Polishing filter: **1 year**
- Hyperfiltration: **3–5 years**
- Deionization (DI) filter: **3–9 months**

NOTE: The average lifespan of filters is dependent on the volume of usage and quality of local inbound water supply. The above stated filter lifespans are intended to be used as a reference guide only.

11. Changing Filters

Water does not need to be turned off, though minor drips may occur. It is recommended to place a towel (or paper towel) under the STATPURE unit to catch any potential drips during the filter replacement process.

Filters #1, #3 and #4

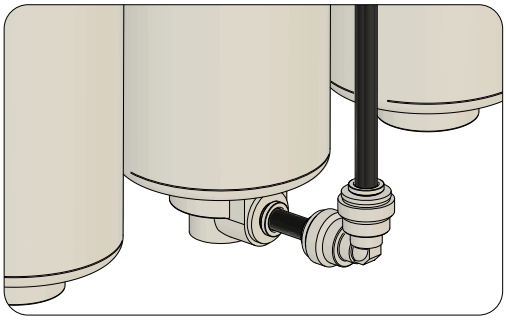
1. Turn filter counterclockwise.
2. Pull downward.
3. Insert replacement filter.
4. Push up and turn clockwise.
5. Check for any leaks.

Filter #2 - Hyperfiltration

1. Remove black **¼" drain tubing and elbow**.
2. Twist filter counterclockwise.
3. Install replacement filter.
4. Reconnect tubing.

   Important! Ensure the tubing is fully seated into the filter.

5. Check for any leaks.



12. Storage Tank Maintenance

Checking Air Pressure

Perform annually.

1. Turn off the water supply.
2. Open the faucet to drain the tank completely.
3. Remove blue valve cap at the bottom of the tank.
4. Use a digital tire gauge to check the air pressure pre-charge.
5. To add air to the tank, use a compressor or bicycle tire pump. To remove air, press in gently on the valve needle. Use the air gauge to check for desired pressure.
6. When finished, thread the blue cap back onto the air valve, close the faucet and sanitize the tank and faucet line (section 13).

Correct pressure: **6.5–7.5 psi (ideal: 7 psi)**

NOTE: If air exits the water valve or water exits the air valve, the tank diaphragm has failed and the tank must be replaced.

13. Sanitizing the Tank and Faucet

Perform:

- At least once per year
- Whenever filters are changed

Time required: **~1 hour**

Materials:

- 1 oz unscented chlorine bleach
- 35 cc syringe
- Cotton swab

Procedure:

1. Turn off water supply.
2. Open the faucet to drain the tank completely.
3. Swab faucet opening with bleach.
4. Inject **30 cc bleach** into injection port at the tank.
5. Inject one syringe of water to push bleach into tubing.
6. Turn on water supply and run system for **10 minutes**.
7. Open faucet until bleach odor is detected.
8. Allow system to operate for **20 minutes**.
9. Turn off the water supply valve and drain the tank completely.
10. Refill and flush the system (may require multiple rinses) until the bleach smell disappears.

14. Daily Shutdown Recommendation

Important! To reduce risk of water damage, turn off the system at the end of each workday by closing:

- Source water diverter valve
- Storage tank valve
- Autoclave fill wand in-line valve

Reopen each valve at the start of the next workday.

15. System Specifications

Description	Specification
System Model	SWP400
Prefilter (Filter #1)	SWP01F
Hyperfiltration (Filter #2)	SWP02F
Deionization Filter (Filter #3)	SWP03F
Polishing Filter (Filter #4)	SWP04F
System Dimensions (L x W x H)	15.1″ × 5.4″ 18.8″ (38.4 cm x 13.7 cm x 47.8 cm)
Tank Dimensions (Dia. x H)	11.4″ × 17.75″ (28.9 cm x 45.1 cm)[K
Shipping Weight	36 lbs (16.33 kg)
Max Output	100 gallons (378.5 L) per day
Max Source Water TDS	500 ppm
Max Hardness	10 grains (171 ppm)
Max Iron	0.1 ppm
Max Manganese	0.05 ppm
Max Chlorine/Chloramine	2 ppm
Acceptable pH	5.5–9.5

16. Limited Warranty

The legal manufacturer warrants to the original purchaser that the STATPURE systems (the "Product"), when new and properly installed, will be free from defects in materials and workmanship under normal use and service for a period of two (2) years from the date of installation.

At its discretion, the distributor SciCan Ltd. and Coltene/ Whaledent Inc. (the "Distributor") will replace any component determined by the legal manufacturer to be defective in materials or workmanship during the warranty period, provided that the Distributor receives written notice of the defect within thirty (30) days after discovery of the failure.

This warranty applies only to Products that are installed, operated, and maintained in accordance with the instructions and guidelines provided in the applicable user manual.

The Distributor shall not be responsible for the cost of field labor or other charges incurred by any party in removing, reinstalling, or servicing the Product or its components unless otherwise expressly authorized in writing by the Distributor.

The remedies described above shall be the purchaser's sole and exclusive remedies under this warranty. The Distributor's liability under this warranty is limited to repair or replacement of defective components at The Distributor's discretion.

This warranty does not apply to consumable items, including filters. This warranty also does not apply to defects or failures resulting from: improper installation, operation, or maintenance; abuse, misuse, negligence, accident, or unauthorized modification; failure to follow the printed instructions, specifications, or guidelines provided by the Distributor; normal wear and tear; damage caused by chemical exposure or adverse water-quality conditions; unauthorized repair, relabeling, or repackaging by any dealer, redistributor, installer, or third party; or installation that does not comply with applicable local codes, ordinances, or accepted trade practices, or moving Product from its original installation location, or used for purposes other than those for which it was designed.

To obtain warranty service, the purchaser must provide proof of purchase and date of installation from an authorized dealer and notify the Distributor or its authorized service provider of the alleged defect. The Distributor may require that defective components be returned prepaid for inspection.

EXCEPT AS EXPRESSLY PROVIDED ABOVE, THE DISTRIBUTOR DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

STATPURE System Information

Thank yoau for choosing the STATPURE system for your practice!

The following chart is for necessary information for future reference. Please fill it out completely and keep this manual in a convenient place.

SWP400

Model Number

Authorized Dealer

Manufactured Date (see No. on unit)

Installer Name

Installation Date

Installer Phone

Monthly Performance Log

Change Filter 1 & 4	Annually
Change Filter 2	When **C** > 10%
Change Filter 3	When **D** or **E** = 4 ppm

Date	**A - City Water Supply** (Handheld TDS Meter)	**B – After Hyperfiltration** (Mounted TDS Meter "IN")	**C – % TDS Remaining** C = B/A x 100 **OR** C = F/A x 100	**D – After Deionization** (Mounted TDS Meter "OUT")	**E – Water From Fill Wand** (Handheld TDS Meter)	**F – Water From Faucet** (Handheld TDS Meter)