Waterline maintenance: Why does it matter?

Patients trust that the water you are using in their oral cavity is of the highest quality. Unfortunately, that may not be true. The small diameter and low flow rates of dental unit waterlines (DUWL) can promote bacterial growth, resulting in water at the output that’s densely populated with microorganisms.

Research has demonstrated that microbial counts can exceed 200,000 colony-forming units per milliliter within 5 days. In fact, bacteria counts ranging as high as 1,000,000 CFU/mL have been reported. Unless you take steps specifically designed to prevent and eliminate microorganisms, there is little reason to believe that any dental unit can avoid bacteria colonization.


Guidelines or requirements for dental unit water quality vary by region and are usually specified in colony forming units per milliliter (CFU/mL).

- **100 CFU/mL** UK, EU
- **200 CFU/mL** Australia
- **500 CFU/mL** United States

*Follow the most recent recommendations in your location.*
Maintain. Monitor. Shock. **Three steps to clean.**

What can you do to deliver the highest quality water to your patients? Along with a daily waterline maintenance protocol, it’s important to monitor water quality and periodically shock the lines to clear deposits and contamination. These three steps help maintain your dental unit waterlines.

**1. MAINTAIN**

Maintain waterlines daily.

A-dec® ICX® waterline treatment tablets are specially formulated to maintain dental unit waterlines and prevent the accumulation of odor and foul-tasting bacteria, maintaining dental unit waterline effluent of ≤10 CFU/mL. It’s easy. Just drop a fresh ICX tablet into the empty self-contained water bottle every time you refill. ICX remains active in the system for at least two weeks.

**2. MONITOR**

Monitor water quality regularly.

Your shock treatment levels will be based on the water quality requirements in your area, and specifically, in your clinic. The frequency of this important step will depend on your test results. Initially, test water once per month. If the results pass your specified action level for three successive months, reduce the testing frequency to once every three months. This test should provide a quantitative measurement of heterotrophic bacteria.

Ask your dealer to recommend a water monitoring test kit or laboratory service to help with this step.

**3. SHOCK**

Shock waterlines as needed.

When waterline bacteria levels exceed your established water quality action level, it’s time to shock. Shock treatment clears deposits and removes odor and foul-tasting bacteria from dental unit waterlines. A-dec recommends shocking the dental unit waterlines with ICX Renew® before you first use the system. After first use, shock the waterlines whenever test results indicate a bacteria level greater than your water quality action level. Resume using ICX tablets for your ongoing waterline maintenance.
performing a shock treatment when dental unit waterline bacteria levels exceed the recommended action level.

A-DEC RECOMMENDS

If CFU/mL test results are < water quality standards = continue daily maintenance with ICX

A-dec ICX tablets for daily treatments

If CFU/mL test results are > water quality standards = shock your dental waterlines with ICX Renew

A-dec ICX Renew for shock treatments

WHEN YOU SHOCK, LET ICX RENEW

sit overnight

flush lines to

CLEAR
A-dec’s waterline treatment solution.

Maintain
ICX Waterline Treatment Tablets

Effervescing ICX tablet does the work for you, so there’s no measuring or mixing. Simply add one tablet to an empty self-contained water bottle before each filling. As the tablet dissolves, it releases ingredients into the water that help maintain less than or equal to 10 (CFU/mL), preventing the accumulation of odor and foul-tasting bacteria. ICX continues working in the system with each treatment, protecting the waterlines from further contamination and reducing the need for frequent shock treatments.

The Benefits of ICX

- Maintains dental unit waterline effluent ≤ 10 CFU/mL.
- Reduces build-up of deposits.
- Continuously present in water; provides a preventive, proactive solution.
- Remains active in water for at least two weeks during periods of equipment nonuse.
- Eliminates the need to purge waterlines at night.
- Compatible for use with restorative bonding materials. Will not affect bond strength.
- Gentle on dental equipment.

Available in two sizes. Sold in boxes of 50.
When used in conjunction with regular testing and adherence to protocols, A-dec ICX and ICX Renew help simplify your waterline maintenance routine. Ready to use and formulated without harsh chemicals, treating dental unit waterlines with ICX products help protect your investment.

**Shock**

ICX Renew Dental Unit Waterline
Shock Treatment

Fast-acting liquid shock solution removes odor and foul-tasting bacteria in dental unit waterlines. Just mix the two solutions together into an empty water bottle, run through the lines, and soak overnight. The blue color improves visibility, so you know that the solution is in the waterlines. After completing the shock treatment, flush the lines with water and resume your regular use.

The Benefits of ICX Renew

- Penetrates and removes the build-up of odor and foul-tasting microbial contamination bacteria.
- Blue color lets you know the solution is hard at work in the waterlines.
- Non-corrosive and gentle on equipment.
- Will not corrode or clog waterlines.
- Odorless formula.

ICX products are distributed exclusively through A-dec’s worldwide authorized dealer network.

Visit a-dec.com or contact your authorized dealer for more information.
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