

Treatment Cycle For Dental Unit Water Lines

For stationary and mobile dental unit water lines



When to Increase Testing?

- After observing a change in bacterial contamination (foul odors/tastes)
- After stopping a regular disinfection cycle for more than 2 weeks
- After two consecutive fails in a single area
- After receiving complaints of foul tasting water

When to Decrease Testing?

- After 4-6 consecutive passes for the whole area
- After lines are replaced (but keep cleaning them!)

Monitoring your Dental Unit Water Line







Dip the slide into the sample so that the agar surface is completely submerged. Gently agitate for 3 – 15 seconds before removing.

Remove the dipslide from the sample, and allow the excess water to drain for approximately 3 seconds.

Place the dipslide back into its labeled vial, being careful to not touch the agar surface, and screw the cap back on lightly. Unscrew the lid by 3/4 of a turn to ventilate.

Place all dipslides into the incubator set to 33°C. Incubate for 24 – 48 hours.

Detailed Instructions: (Please read <u>ALL</u> instructions <u>BEFORE</u> taking water samples)

The maxill H₂O system includes a method for quick monitoring of DUWL output water for microbial contamination. This method uses a non-selective growth medium to allow growth of all bacteria that may be found in DUWL. The sensitivity of this product is such that it is meant to show if the disinfection and best practice processes are in control, or not. It should be interpreted as a hygiene monitoring system. Any bacterial growth shows up as easy to read red spots.

Collection of water samples should be completed **ONE** operatory at a time.

- 1. Ahead of time, label the required dipslides and make the necessary notes in the log book. Include the area of sample collection, the water source and the slide number of the sample.
- 2. Prepare a glass or plastic container for each sample being taken. Ideally the containers should be sterile. Alternatively, spray clean containers with 70% Isopropyl Alcohol (IPA), shake out any excess liquid and allow to sit for a minimum of 2 minutes.
- 3. While wearing gloves, first wipe the nozzle of the DUWL handpiece with a disinfecting wipe. Allow to sit for 1-2 minutes.
- 4. Flush water through the hand-piece for 60-90 seconds, (rinse residual IPA from the sample collection container with the source water) then collect enough sample water to submerge the dipslide.
- 5. Unscrew the dipslide cap, withdraw the dipslide from its vial being sure to avoid touching the agar surface.
- 6. Dip the slide into the water sample so that the agar surface is completely submerged.
- 7. Gently agitate for 3 15 seconds before removing.
- 8. Remove the dipslide from the sample, and allow the excess water to drain for approximately 3 seconds.
- 9. Place the dipslide back into its labeled vial, being careful to not touch the agar surface. Screw the cap back on lightly. Unscrew the lid by 3/4 of a turn to ventilate.
- 10. Repeat Steps 4 to 10 for each hand-piece being tested, and a negative control (sterile water) if desired. If the negative control exhibits growth, the test is to be preformed again.
- 11. Place all dipslides into the incubator set to 33°C. Results may be observed after 24 48 hours of incubation for bacteria.



Troubleshooting Guidelines and Best Practices

Use the following guidelines to record the action codes used in your log.

Observation	Result	Action code	Steps	
All slides 1 colony or less	PASS	1	Continue with best practices (Refer to 7-Day cycle)	
Some slides have 2-3 colonies	CAUTION	2	 Perform a pre-clean with Zymax Perform a disinfect with Aqua-FX Continue monitoring (you may want to sample again) 	
One slide has 4 or more colonies	CAUTION / FAIL	3	 Perform a pre-clean with Zymax and a disinfect with Aqua-FX OPTIONAL: Sample the water source that produced the fail result again to confirm the fail reading Continue best practices 	
Some slides have 4 or more colonies	FAIL	4	 Perform a pre-clean with Zymax and a disinfect with Aqua-FX Retest the water sources after disinfection Ensure the water source and water bottle are clean Continue best practices 	
All slides have 4 or more colonies	FAIL	5	 Perform a pre-clean with Zymax and a disinfect with Aqua-FX. Multiple treatments may be necessary Consider source water testing and dental water line unit maintenance activities OPTIONAL: Save the FAIL slides, sealed, and at 4°C – 8°C for further identification testing of potential pathogens by a laboratory CAUTION: If repeated observations of high bacterial counts occur when using best practices, consult with your DUWL service technician 	

maxill DUWL Treatment Kit

ITEM #81325

The maxill DUWL Treatment Kit was designed with both cleaning and best practice maintenance in mind. This weekly, 2 Step system includes a Zymax pre-cleaning step to erode biofilms and an Aqua-FX Peroxyacetic Acid (PAA) disinfection treatment to oxidize bacteria in the DUWLs. Zymax should be used daily for best practice maintenance. Use in combination with maxill DUWL in-office or lab testing options for a complete end-to-end monitoring and maintenance solution.

NO Tablets	NO Silver	NO Reverse Osmosis Units
NO Chemicals	NO Zinc	NO UV Lighting Units
NO Filters	NO lodine	NO Inline Disks

Kit Includes:

- Zymax 128 Enzymatic Cleaning Solution
- Zymax Chairside Bottle
- maxill Aqua-FX
- maxill Aqua-FX Measuring Cup
- Peracetic Acid Test Strips
- Aqua-FX Chairside Bottle
- Cleaning log & Instructions





Interpreting the Results





Detailed Instructions:

- 1. Results may be observed after 24 48 hours of incubation. Final count should be taken after 48 hours.
- Result interpretation information is in the log book
 0 1 colonies is considered a PASS
 2 3 colonies is considered a CAUTION
 - 2 3 colonies is considered a CAUTION
 - Greater than 3 colonies is considered a FAIL
- 3. Performing the dipslide test a second time is recommended in the event of a CAUTION or FAIL result
- 4. Repeating the test is also recommended if a negative control exhibits any growth.

Disposal of the Dipslides

- 1. Dipslides are to be sterilized before being disposed of in accordance with any local or national regulations.
- 2. Sterilization may be accomplished by chemical soak of the dipslide agar surface and vial.
- 3. To chemically sterilizing the dipslides, use an appropriate concentration and soaking time before final disposal. A prepared solution of Aqua-FX may be used.
- 4. Prepare the Aqua-FX solution by making a 1 in 100 dilution. For 1 L of solution, measure 10 mL of Aqua-FX into 990 mL of water.
- 5. Soak the dipslide agar surface and vial in the Aqua-FX solution for 5 to 6 minutes.

