

## Water Line Treatment and Testing

### Regular Water Line Treatment

Dental delivery systems require regular water line maintenance to minimize the build-up of biofilm and maintain treatment water quality. There are a variety of EPA registered and approved products that are formulated for this purpose that are available from your dealer. It is very important to select a product and begin an ongoing treatment schedule. Popular waterline treatment agents are available in tablet, solution, and powder form. (Note: DO NOT USE Bleach)

Example:

- A. Purge dental unit handpiece waterlines and syringe(s) with the Flush Switch.
- B. Turn Master Switch to the OFF position
- C. Remove the water bottle from dental unit and drain water in a sink or cuspidor bowl.
- D. Add a waterline treatment product to bottle. (If using tablets or powders, make sure they are fully dissolved in distilled water.)
- E. Cover bottle opening, shake/invert bottle to coat and treat all surfaces inside of the bottle.
- F. Re-install water bottle with dissolved waterline treatment agent.
- G. Turn Master Switch to the ON position  
Flush waterline treatment agent solution through dental handpiece waterlines and syringes, then follow
- H. manufacturer's recommended time to allow waterline treatment agent to remain inside waterlines
- I. Turn Master Switch to the OFF position  
Remove the water bottle from dental unit and drain waterline treatment solution in a sink or cuspidor
- J. bowl.
- K. Rinse water bottle and fill with distilled water
- L. Re-install water bottle and turn unit Master Switch to the ON position.
- M. Flush out handpiece hoses, and syringe in a sink or cuspidor bowl with clean water until all waterline treatment agents are removed from water system

This process should be repeated at start of every morning the unit is used.

### Monitor Water Quality

Each office should monitor the water quality from the dental unit on a regular basis. Frequency of testing depends on the test results and the water quality goal. Begin testing monthly. If water quality testing results meet the established goal for 3 consecutive months, testing can be reduced to a quarterly basis. There are several companies that can be found online that will perform this type of testing.

Example of testing in water bottle:

- 1-Remove handpiece attachments, couplers, and detachable motors. Replace syringe tips, then wipe all handpiece tubing outlets, syringe tips with disinfectant wipes to eliminate external contamination.
- 2-Collect a water sample from each handpiece tubing and syringe.
- 3-Follow the test kit instructions on how to collect, handle, store and process the sample.

The results from the test kit will show the water quality of that unit and determine what action should be taken

### Shock Treatment of Water Lines

The CDC recommends 500 CFU/ml (colony forming units/ milliliter) as the maximum level for acceptable water quality. If the testing results exceed this ceiling, then a water line shock treatment should be performed. Dental unit waterline shock treatment products are available through dental dealers and products must be registered and approved by the EPA.

Follow steps A-L above. After the shock treatment is completed, flush all lines thoroughly with water, then continue the normal daily water treatment protocol.