Importance of Pre-cleaning the Evacuation Lines

With the quickly-approaching EPA dental amalgam rule deadline of July 14, 2020, the number of new amalgam separator installations is also on the rise. It has come to our attention that, regardless of make and model, failure to properly prepare the evacuation lines prior to the installation of an amalgam separator could make the amalgam separator filter (or canister) fill up very quickly, leading to frustration for some offices.

To ensure a smoother experience, please note that evacuation lines should be thoroughly flushed with evacuation line cleaner prior to installation. Thoroughly flushing the evacuation lines will go a long way in preventing the premature clogging of the amalgam separator filter.

ALL SEDIMENT GOES THROUGH THE FILTER so anything sitting in the line when the separator is installed will be captured and fill the canister upon initial startup.

Evacuation Line Buildup

For optimal performance of suction tubing, many evacuation line cleaner manufacturers recommend using cleaners either daily or after each patient. However, not following this recommended protocol can cause biofilm and other materials to build up over time in the evacuation lines.

When an amalgam separator is first installed, the buildup in the evacuation line can be disrupted and this could clog the amalgam separator system. In amalgam separators that have a top chamber and canister, the top chamber may fill with dark materials.

Evacuation Line Cleaner Properties

EPA Best Management Practices (www.epa.gov/eg/dental-efficient-guidelines) state evacuation line cleaners must have a pH between 6 and 8. Acidic (low pH) evacuation line cleaners have been known to hinder the operation of amalgam separators. Basic (high pH) cleaners can cause premature wear on materials used in amalgam separators. Please contact your Midwest Dental products specialist for information on cleaning solution and atomizer evacuation system options.

Pre-cleaning Instructions

Run the vacuum lines with hot water along with a neutral pH evacuation cleaner every day for 30 days prior to the installation of the amalgam separator. This will ensure that sediment is flushed out, thus allowing the amalgam separator filter cartridge to last its maximum life cycle (In some cases a full 12 months). See Proper Flushing Technique in the next section.

Proper Flushing Technique

Routine evacuation maintenance is required after the amalgam separator has been installed. A minimum of once a week, the lines need to be flushed with a neutral pH evacuation cleaner along with HOT water.

The appropriate steps for the proper flushing technique depend on whether the office has a wet ring vacuum or a dry vacuum system. If you do not know, please ask your Midwest Dental products specialist during the next visit.

Wet Ring Vacuum System

Mix up a minimum of 1 gallon of hot water and cleaning solution.

Start at the closest operatory to the mechanical room, and flush (alternating both the HVE and SVE saliva ejectors in the solution, alternating between air and solution. You do this by submerging the valve tip in the solution, then pull it out, submerge into the solution, pull back out, and repeat until the whole gallon is consumed as this creates pulsation or scrubbing action on the lines (the air acts as the scrub brush).

Repeat this in every operatory, and ending with the last room. Once all rooms have been flushed, open the last operatory’s HVE valve and leave open for 5 minutes. This will allow all of the solution to be evacuated from the system. Continuously run the pump until finished. Then change the disposable vacuum canister on the pump.

Dry Vacuum System

For dry vacuum systems, perform the same process as above, but only for a maximum of 5 rooms. Shut the vacuum off and let set for a few minutes so it can drain.

Continue with the remaining operatories in 5-room increments (rooms 6-10, 11-15, etc.) until done. Don’t forget to shut down the vacuum and allow the system to drain in between each 5-room increments.

Our team is ready to assist you with your amalgam separator needs and questions. Call us today at (800) 766-2025!