

INFECTION CONTROL SNAPSHOT

Automated Cleaning Equipment Testing



Cleaning is the most important step in instrument re-processing because it reduces bioburden and removes material that can act as a barrier to the sterilizing agent during the sterilization process. Therefore, to assess proper function, users should test automated cleaning equipment (e.g., ultrasonic cleaners, instrument washers, thermal disinfectors) upon initial installation, weekly, during routine use and after major repairs. This should be included as a component of your instrument processing quality assurance program. Commercially-available tests are available to evaluate variables such as water pressure, temperature, pH and drying. It is very important to note that these tests do not replace the requirement to visually inspect instruments after cleaning. Also, users must continue to follow the cleaning of equipment per the manufacturer operating and maintenance instructions, including instrument loading procedures, which are critical to the success of the cleaning process.

For tabletop ultrasonic cleaners, follow the manufacturer instructions. In the absence of manufacturer instructions, a generic test method can be used:

Ultrasonic Cleaner Test

- ⓐ Using standard lightweight or regular household aluminum foil, cut a piece of foil to fit the width of the cleaner chamber. For example: A tank with dimensions of 9 inches long by 5 inches wide by 4 inches deep would require a foil sample measuring 9 inches by 5 inches.
- ⓐ Prepare a fresh solution of ultrasonic cleaning solution and fill the tank according to the manufacturer's instructions. Do not turn the heater on for the test. Follow the manufacturer's instructions for degassing if available.
- ⓐ Insert the foil vertically into the cleaner chamber, with the length of the foil running the length of the chamber and the bottom of the foil suspended about one inch above the floor of the tank.
- ⓐ Holding the foil as steady as possible, turn on the ultrasonic cleaning unit for 20-60 seconds (if the unit is supplied with a high/low switch, it should be set in the high position).
- ⓐ Remove the foil sample and observe for small indentations (pebbling) on the foil. Some holes may also be present.

* With a properly functioning unit, the entire foil surface will be uniformly "peppered" (covered with a tiny pebbling effect). If areas greater than ½ inch square show no pebbling, the unit may require servicing.

Because of the variety of brands and models of instrument washer/disinfectors available, it is recommended to first contact the manufacturer of your equipment to see if they offer or recommend a specific washer test kit. DECS was able to obtain information about commercially-available test kits for several major brands of instrument washer/disinfectors (see below)

Instrument Washer/Disinfectant and Manufacturer*	Compatible Test Kits and Manufacturer*
Getinge USA (800) 950-9912 www.getinge.com	1. Healthmark-TOSI™ Washer Test (800) 521-6224/ (586) 774-7600 www.hmark.com
Miele Inc. (800) 991-9380 www.miele.com	1. STERIS Corporation-Verify™ All Clean™ Washer Indicator (800) 548-4873/ (440) 354-2600 www.steris.com 2. Healthmark-TOSI™ Washer Test (800) 521-6224/ (586) 774-7600 www.hmark.com
STERIS Corporation (800) 548-4873/ (440) 354-2600 www.steris.com	1. STERIS Corporation-Verify™ All Clean™ Washer Indicator (800) 548-4873/ (440) 354-2600 www.steris.com

Just a few things to think about

- Do you test all of your automated cleaning equipment each week?
- Is your ultrasonic cleaner cleaning effectively? How do you know?
- Is your automated washer or washer-disinfectant working at optimal level? How will you know if you are not testing your cleaning equipment?

If you want more info

- CDC Guidelines for Infection Control in Dental Health-Care Settings (www.cdc.gov/oralhealth).
- USAF Guidelines for Infection Control in Dentistry (www.afms.af.mil/decs).

