XP Sharpen-Free

Hand Instrument Reprocessing Instructions

The surface engineering of XP Technology offers dental professionals the unique capabilities of an instrument that does not require sharpening or "touching up" for the life of the tool. However, due to the proprietary nature of their unique design, XP Instruments require that certain cleaning and maintenance processes be followed in order to maintain the integrity of the instrument, thereby maximizing its life cycle.

Reprocessing and Cleaning of XP Instruments:

- Although it is not necessary, an attempt to keep the debris (biologic soil) from drying prior to reprocessing helps when it comes time to remove the debris and reduces the opportunity for staining. Minimize the amount of time the instruments remain submerged–longer than 60 minutes is excessive and ultimately could prove detrimental to the instrument.

  NOTE: *The instruments should not sit drying for longer than 90 minutes following use. In this case a pre-soak spray may be used to avoid caked-on, dried debris (see list of approved cleaning solutions on AEI's website).*

- Using the proper personal protective equipment (PPE), manually remove any visible debris from the instrument using a long handle, soft-bristle, nylon brush in a bowl or tub of water (filtered water, either RO or deionized is preferred, but tap water will serve as well at this stage).

- Carefully and gently blot excess rinse water with a lint-free towel and verify the instrument is entirely free of any visible debris. Take note of any nicked edges or staining. Nicked or stained instruments should be removed from use.

  NOTE: *Nicked edges from aggressive use compromise the integrity of the XP coating which will inevitably result in corroded, dull instruments. Please refer to AEI's website for the proper method for using XP instruments.*

- Repeat brushing step as needed. The more debris removed at this stage is more likely to result in a better quality cleaning and disinfection in the ultrasonic unit.

- Carefully towel-dry the instruments and again inspect for any debris or staining.

- Load the instruments into a cassette or gently place them into the basket of the ultrasonic unit.

  NOTE: *The basket should be lined with a nylon mesh in order to avoid the instruments coming into direct contact with the metal. Points can be damaged if allowed to poke through the mesh.*

- Verify that the cleaning solution is fresh and mixed to the manufacturer's recommended concentration and being used within the prescribed temperature range. The ultrasonic unit should operate in the ultrasonic cycle for a minimum of 10 minutes, but no longer than 20 when not specified by the ultrasonic unit's manufacturer, otherwise adhere to the manufacturer's recommendation. Remove the instruments from the cleaning solution as soon as possible after the end of the ultrasonic cycle.

  NOTE: *Verify the effectiveness of the ultrasonic unit by periodically conducting either an Aluminum Foil or Glass Slide test.*

- Using filtered water (RO or deionized source) thoroughly rinse any solution from the instruments.
- Carefully and gently blot excess rinse water with a lint-free towel and verify the instruments are completely free of any visible debris. Repeat manual and ultrasonic cleaning/disinfection cycle as necessary.

  NOTE: *Stains should be inspected to ensure they are not caked on debris or corrosion.*

- Verify that the instruments are thoroughly dried. Instruments can be placed in a low-heat drying unit to remove any remaining moisture.
- Place instruments into the steam autoclave unit and process the instruments according to the manufacturer's recommendations, but minimally in accordance with CDC guidelines (see below).

  NOTE: *Run the appropriate program for either loose instruments, bagged (sterile pouches), or within a cassette.*

- Remove the instruments from the autoclave as soon as possible following completion of the sterilization-drying cycle. Allow to fully dry before handling or storing.

  NOTE: *It is very important to verify the functionality of a steam autoclave at regular intervals by having it serviced and calibrated according to the manufacturer's recommendation.*

Type of Autoclave	Item	Exposure Time at 250°F (121°C)	Exposure Time at 270°F (132°C)	Drying Time
Gravity Displacement	Wrapped instruments	30 min	15 min	15-30 min
	Textile packs	30 min	25 min	15 min
	Wrapped utensils	30 min	15 min	15-30 min
Dynamic Air Removal	Wrapped instruments	–	4 min	20-30 min
	Textile packs	–	4 min	5-20 min
	Wrapped utensils	–	4 min	20 min