



Flexible Endoscope Decontamination Process

The decision on the reprocessing method must be made in accordance with material compatibility, manufacturer’s recommendations, and national standard and guidelines. For thermostable equipment, sterilization should be preferred to disinfection.

Always consult the manufacturer’s IFU/manual for clarifications.

Step 1 – PRE-CLEANING post procedure
<ul style="list-style-type: none"> Standard Precautions must be followed and appropriate PPE should be worn (e.g. gloves, gown, eyewear etc.).
<ul style="list-style-type: none"> Prepare an area in procedure room to perform pre-cleaning (e.g. counter area).
<ul style="list-style-type: none"> After procedure, open an enzymatic endoscope bedside pre-cleaning kit, squeeze excess solution from the sponge and wipe down the outside of the device.
<ul style="list-style-type: none"> Inspect the vent port area and remove any visible debris on the external surface.
<ul style="list-style-type: none"> Discard basin/bin (IF unserviceable) and any “Single use items” that were used in regular trash.
<ul style="list-style-type: none"> Place the flexible fiberscope into a covered tray or container to transport the fiberscope to the reprocessing area.
<ul style="list-style-type: none"> Transport device and all detachable parts in a leak-proof, puncture resistance container with a tight-fitting lid from procedure room to reprocessing room. Make sure container has a visible biohazard tag to allow easy identification that inside contents are contaminated and therefore hazardous.
<p>NOTE: Complete cleaning of the patient-used flexible endoscope should be started within the recommended time set by the manufacturer. If the bedside pre-cleaning or transit time is a greater than 2 hours, ensure that additional manual cleaning (see Manual Cleaning Section) is performed if visible residual debris is still present.</p> <ul style="list-style-type: none"> If the flexible fiberscope is performed on day that will delay the sterilization process past 24 hours, perform steps 2 through 5 below.
Step 2 – LEAKAGE TEST , performed in reprocessing room
<ul style="list-style-type: none"> If present, remove the pressure compensation cap from the flexible endoscope.
<ul style="list-style-type: none"> Inspect the vent port to confirm the area is clean. Remove any debris if present as recommended by the manufacturer.
<ul style="list-style-type: none"> Ensure the flexible fiberscope vent port and the leakage tester are completely dry before conducting the leak test.
<ul style="list-style-type: none"> Secure the leakage tester using the adaptor at the end of the tubing to the fiberscope’s vent port by using a clockwise push and turn motion until it stops.
<ul style="list-style-type: none"> Pump the leakage tester to the recommended pressure as stated by manufacturer. Reduce the pressure as recommended by the manufacturer instructions. <p>WARNING: If pressure decreases on the leakage tester, do not continue with reprocessing. Refer to Endoscope Return Instructions for return instructions.</p> <p>WARNING: Do not perform a wet leak test in water containing detergent as bubble observation is difficult to perform with detergent present.</p>
<ul style="list-style-type: none"> While pressurized, submerge fiberscope into a basin containing recommended water amount (no detergent). The leak tester should be outside the basin and should not be immersed. Ensure the fiberscope is COMPLETELY submerged. If surface bubbles are visible on the fiberscope after submerging, use a syringe filled with tap water to remove them.
<ul style="list-style-type: none"> Keep the fiberscope submerged per the manufacturer’s stated time. Fully articulate the distal tip in the direction stated in the manufacturer’s IFU.
<ul style="list-style-type: none"> Observe for a formation of bubbles on the exterior of the fiberscope or a stream of air bubbles.



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<ul style="list-style-type: none"> • If the flexible fiberscope has a leak as determined by a fall in pressure as seen on the leakage tester or if bubbles are discovered per the steps above, immediately remove the fiberscope from the water. • Press the pressure release button on the leakage tester to reduce the pressure to 0. • Detach the leakage tester from the fiberscope and refer to the "Endoscope Return Instructions" for further instructions.
<ul style="list-style-type: none"> • If the fiberscope does not leak, remove it from the water bath and release the pressure on the leakage tester • Follow the air pump's manufacturer instructions for releasing pressure from the fiberscope.
<ul style="list-style-type: none"> • After the pressure drops to "0", detach the leakage tester from the fiberscope and proceed to manual cleaning.
<p>Step 3 – MANUAL CLEANING and DECONTAMINATION</p>
<p><u>NOTE:</u> The exterior of the flexible fiberscope must be meticulously cleaned, this is vital to the effectiveness of subsequent processes used for disinfection or sterilization.</p> <ul style="list-style-type: none"> • Standard Precautions should be followed at ALL times and appropriate PPE should be worn (e.g. goggles or face shields, long sleeved gown, surgical mask, heavy duty gloves etc.).
<p><u>NOTE:</u> If necessary, pre-soak fiberscope per manufacturer's recommendations.</p> <ul style="list-style-type: none"> • Fill a clean, large basin with the mild/neutral detergent solution at the temperature and concentration recommended by the manufacturer. <ul style="list-style-type: none"> - Dilute 5 ml of solution per 2 Liter of warm tap water. • Completely immerse fiberscope in the prepared detergent solution.
<ul style="list-style-type: none"> • While immersed, thoroughly brush or wipe all external surfaces using the manufacturer's recommended cleaning supplies (lint-free clothes, brushes, or sponges). • A minimum of one complete wipe of the fiberscope exterior should be performed. • If visible debris remains, continue cleaning until no debris is visible.
<ul style="list-style-type: none"> • Use a brush to remove any exterior debris from the fiberscope's handle, including the interface areas between the deflection lever and handle. • Brush the entire handle surface if visible debris remains, repeat brushing steps until no debris is visible or until the manufacturer's required times have been performed.
<ul style="list-style-type: none"> • Keep the fiberscope immersed for the manufacturer's recommended contact time.
<ul style="list-style-type: none"> • Remove the fiberscope from the cleaning solution.
<ul style="list-style-type: none"> • Discard any "Single use items" after use.
<ul style="list-style-type: none"> • Discard any used enzymatic detergent solution after each use.
<p>Step 4 – RINSING</p>
<ul style="list-style-type: none"> • Ensure a second basin is thoroughly rinsed with water to remove any disinfectant chemicals.
<ul style="list-style-type: none"> • Fill the basin with the minimum required temperature rinse water to immerse the flexible fiberscope per manufacturer's recommendations.
<ul style="list-style-type: none"> • COMPLETELY immerse fiberscope in the water.
<ul style="list-style-type: none"> • Wipe or sway the fiberscope thoroughly to perform rinsing per manufacturer.
<ul style="list-style-type: none"> • The rinse water should be discarded at the end of each rinse, as it will be contaminated with the cleaning solution. • Repeat the rinsing process with fresh clean water as many times as required by the manufacturer if indicated.
<p><u>NOTE:</u> Thoroughly rinsing of the fiberscope is necessary for removing any debris or detergent residue that could interfere with the efficacy of the HLD process.</p>
<ul style="list-style-type: none"> • Discard all disposable cleaning accessories.



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Step 5 – DRYING
<ul style="list-style-type: none"> Remove the flexible fiberscope from the water and dry the exterior with a fresh soft, lint-free cloth.
Step 6 – INSPECTION
<ul style="list-style-type: none"> Visually inspect the flexible fiberscope for cleanliness. <ul style="list-style-type: none"> Look for cuts, dents, or scratches that may trap residual debris. Do not proceed with sterilization if residual debris is visible. Repeat all steps of the manual cleaning if residual debris is observed. If damage is found, the flexible fiberscope should be immediately tagged and labeled as damaged to prevent any further patient use. Refer to the “Endoscope Return Instructions” for further guidance. If no damage is found on visual inspection, perform circular movements to clean the distal lens using a 70% isopropyl alcohol wipe if necessary.
Step 7 – DOCUMENTATION
<ul style="list-style-type: none"> Log device/instrument that will be transported to external SPD for sterilization as appropriate.
Step 8 – STORAGE
<ul style="list-style-type: none"> Store devices in a manner that will protect them from damage and contamination. If it is not possible to hang the fiberscopes, store in a protected and well-ventilated area. <p>NOTE: There is insufficient data offering the maximal outer duration for the use of appropriately cleaned, reprocessed, dried, and stored endoscopes.</p> <ul style="list-style-type: none"> TTUHSC EP has chosen the maximum storage interval before reprocessing to be 21 days. Flexible fiberscopes will be reprocessed prior to next use, if previous reprocessing exceeds the 21 day mark.
ADDITIONAL NOTES
<ul style="list-style-type: none"> Always follow manufacturer’s instructions for all devices and/or solutions. Do not mix other cleaning or disinfecting products together. Utilized Air and Water channel cleaning adapters per manufacturer’s instructions.