

**FUSE RIGHT INSTRUMENTS**  
Instructions for Cleaning, Sterilization, and Care

**CLEANING**

Do not allow contaminants to dry on reamers / wire-pass drill as this makes cleaning more difficult. Immediately after use, place instruments under cold, running water to remove contaminants then pre-soak in enzymatic cleaning solution. Follow enzymatic cleaner instructions for concentration, water temperature, and timeframe. Keep pre-soak solutions neutral PH(7) Thoroughly rinse instruments to remove harmful residue from soaking solutions. Be aware to reach concave aspects of the male reamer.

*Caution: Instruments must not be soaked in caustic or physiological saline solutions as this could cause pitting or rust.*

Use a soft brush to help remove remaining contaminants.

*Caution: Do not use metal brushes as this could scratch or deposit metal particles on the instruments which could lead to rusting.*

A pressurized water spray can also be used to remove contaminants. Rinse thoroughly under cold, running water followed by a distilled water rinse to remove tap water residue. Be aware to reach concave aspects of the male reamer. Visually inspect each instrument to insure it is clean. This is also a good time to inspect each instrument for proper condition. Reamers should have sharp, undamaged, and unstained tines.

Place instruments in an \*ultrasonic cleaner and follow the ultrasonic cleaner instructions for detergent, temperature, and time, including performing the fully recommended cycle (usually 5-10 minutes). Do not place instruments with dissimilar metals (copper, chrome plated, etc.) Rinse thoroughly under cold, running water to remove any residue of the detergent once again followed by a distilled water rinse.

*Caution: Ensure that the cutting edges do not butt or knock against other instruments.*

**STERILIZATION: \*AUTOCLAVE (PRIOR TO FIRST USE AND RE-USE)**

Pre-vacuum

*Unwrapped*

132°C (270°F) 3 minutes

135°C (275°F) 3 minutes

*Wrapped*

132°C (270°F) 4 minutes

135°C (275°F) 3 minutes

Gravity

*Unwrapped*

132°C (270°F) 3 minutes

135°C (275°F) 3 minutes

*Wrapped*

132°C (270°F) 15 minutes

135°C (275°F) 10 minutes

Do not overload the autoclave chamber as pockets may form that do not permit steam penetration. Place towel on bottom of pan to absorb excess moisture during autoclaving. This will reduce the chances of getting "Wet packs". Make sure the towels used in sterilization of instruments have no detergent residue and are neutral – PH(7) if immersed in water (laundries frequently use inexpensive but high PH(9-13) detergents and do not properly rinse out or neutralize those detergents in the final wash/rinse cycle. Also, sometimes bleaches such as Clorox are added and are not neutralized).

At the end of the autoclave cycle – before the drying cycle – unlock autoclave door and open it about 3/4". Then run dry cycle for the period recommended by the autoclave manufacturer. If the autoclave door is opened fully before the drying cycle, cold room air will rush into the chamber, causing condensation on the instruments. This will result in water stains on instruments and also cause wet packs. If you have any unusual staining on your instruments during sterilization, contact FootScientific.

### **General Guidelines for Care for Stainless Steel Surgical Instruments**

For stainless steel to be used for surgical instruments, it must contain a specific amount of carbon to allow the steel to become "hardened." Hardening strengthens the steel and allows it to retain sharpness. Carbon also allows steel to be more susceptible to tarnishing and rusting. In manufacturing, this susceptibility is minimized by processing the surface finish of the instrument. This surface finish must be protected. Improper cleaning, disinfection, and sterilizing will contribute more to rusting or staining than the carbon content of the stainless steel.

#### *Common Problems*

1. Improper drying of the instrument after cleaning, disinfection, or sterilizing.
2. Using corrosive or caustic cleaning agents. (Do not use any chemical over 10.5 pH)
3. Improper rinsing to remove the cleaning or disinfecting solutions; Using tap water without following with a distilled water rinse (tap water may contain chemicals and minerals such as iron which can leave deposits on the surface).
4. Faulty autoclave which may leave deposits on the instrument and attack the instrument's surface finish.
5. Use of stiff metal brushes that roughen the surface of the instrument.

\*If you do not have access to either an ultrasonic cleaner or Autoclave, please contact FootScientific, Inc.