



PROCEDURE GUIDE

Cleaning, Maintenance & Sterilization of Euro Surg Instruments

Reprocessing guidance for reusable surgical & dental instruments — veterinary and general surgical use

A Immediate Post-Use Rinsing

Rinse instruments under warm running water immediately after use, before blood, tissue, or body fluids dry onto the surface. Prompt rinsing prevents bioburden from hardening in box locks, serrations, and hinge joints.

B Disinfection — Pre-Clean Safety Step

Protects staff from contamination during handling and cleaning.

- Soak instruments in an enzymatic cleaning solution for a minimum of 10 minutes to loosen protein residue, then rinse under running water.
- Fully immerse in a hospital-grade disinfectant approved for surgical instruments for 10+ minutes, then rinse again.



Caution: Do not use bleach or chlorine-based products on stainless steel instruments – this causes pitting and voids the manufacturer's warranty.

C Cleaning

Instruments should be fully submerged in a neutral pH (7) detergent solution.

Ultrasonic Cleaning — preferred method

- Open all hinged instruments; keep sharps separated from other instruments to prevent edge damage.
- Fully submerge; run a complete cycle (typically 5–10 minutes), lid on to prevent aerosolization.
- Never mix dissimilar metals (e.g., stainless steel with copper or brass) in the same cycle – this can cause galvanic corrosion.
- Replace solution per manufacturer guidance; rinse instruments thoroughly after the cycle.

Automated Washer-Disinfector

- Follow the equipment manufacturer's cycle parameters.
- Lubricate instruments with metal-to-metal action both before and after the cycle.

Manual Cleaning — if ultrasonic/automated unavailable

- Use soft nylon brushes only – steel or wire brushes damage the surface finish, except where specifically indicated for serrations or knurled grips.
- Use only neutral pH (7) detergent. Acidic (<6) detergents cause pitting; alkaline (>8) detergents leave a phosphate deposit (often mistaken for rust).
- Handle delicate instruments separately from general sets.
- Inspect during cleaning: forceps tip alignment, hemostat/needle-holder jaw closure and ratchet action, suction lumen patency, retractor function, and blade sharpness/integrity.
- Rinse thoroughly, actuating hinges under running water to flush the joint.

D Drying & Storage

Air-dry fully before storage. Store in a clean, dry environment to prevent corrosion and microbial growth.

E Autoclaving

- Lubricate all metal-to-metal action points with a non-silicone, water-soluble surgical instrument lubricant. Do not use industrial lubricants.
- Package individually (pouches $\geq 4''$ wide for ratcheted instruments, sterilized unlocked) or as sets.
- In sets, place heavier instruments on the bottom layer; avoid overloading the chamber so steam can circulate.
- Use a neutral-pH, detergent-free towel/wrap if wrapping – residual high-pH laundry detergent can stain instruments.
- On tabletop autoclaves, crack the door open ($\sim 1/4''$) after the sterilization phase and run the full drying cycle before fully opening – opening early causes condensation and wet packs.
- Clean autoclave chambers and filters on a regular schedule.



Never autoclave a locked instrument. Steam cannot reach the mated metal surfaces, sterility isn't achieved, and heat expansion can crack the box lock.

F Cold (Chemical) Sterilization

Full sterilization by chemical immersion typically requires ~ 10 hours – this prolonged exposure can be harder on instruments than a 20-minute autoclave cycle. A 10-minute soak achieves disinfection, not sterility. Always check the solution manufacturer's stated contact times, and never use bleach (see Section B).



Note: *Disinfected means bioburden reduced to a safe level; sterile means no viable organisms remain. These terms are not interchangeable.*