

Electric Handpieces, Attachments and Batteries

Sterilization & Cleaning

Handpieces and Attachments

Heavy Duty



Micro



*Sternum Saws are not pictured but are included in sterilization protocol.

Sterilization Recommendations for Handpieces and Attachments

Flash Autoclave

- Gravity Displacement Sterilizer
- 270-272°F (132-134°C)
- Unwrapped in an instrument tray in vertical position so steam can flow through cannula.
- 10 minute minimum exposure¹

ETO:

- 100% ETO
- Wrapped in an instrument tray or fully perforated sterilization box.
- 120-135°F (49-57°C)
- 1 hour minimum exposure
- 8 hour minimum aeration time

Hi Vac:

- Pre-Vacuumed sterilizer
- 270-272°F (132-134°C)
- Wrapped or unwrapped
- 4 minute minimum exposure
- 8 minute minimum dry time

Riley Flash Pack:

- 270°F (132°C)
- 20 minute minimum exposure

250°F Gravity

- Gravity Displacement Sterilizer
- 250-254°F (121-123°C)
- Wrapped in an instrument tray or fully perforated sterilization box.
- 50 minute minimum exposure
- 8 minute minimum dry time

270°F Gravity

- Gravity Displacement Sterilizer
- 270-272°F (132-134°C)
- Wrapped in an instrument tray or fully perforated sterilization box.
- 35 minute minimum exposure
- 8 minute minimum dry time²

Sterrad® Sterilizer

Stryker has validated all heavy duty and Micro handpieces and their attachments for Sterrad® Sterilization.

1. Add a 3-5 minute dry time for all Micro Handpieces and Attachments.
2. Dry times listed are for single handpieces or attachments. When increased numbers are sterilized, the dry time may need to be extended to 20-30 minutes per load.

Cleaning Recommendations for Handpieces and Attachments

Handpieces, attachments and batteries must be cleaned and sterilized before first and every use.

- ▲ **CAUTION! DO NOT** immerse handpiece, attachments or battery pack.
- ▲ **CAUTION! DO NOT** use solvents, lubricants, or other chemicals unless otherwise specified.

Refer to the disinfectant's Material Safety Data Sheet to verify pH range. Disinfectants with pH levels higher than 10.5 cause the housing material to crack.

Handpieces and Attachments:

1. Remove batteries, cords and attachments from the handpiece.
 2. Use a stiff bristle brush and mild enzymatic detergent, safe for use with aluminum and with a pH of <10.5 to scrub debris from the handpiece and attachments. Pay close attention to seams, joints, and details around the retainer and trigger areas. Use a bottle brush to clean out the cannula.
 3. To clean a handswitch, wipe clean with a mild detergent and water. Extend finger rest and rinse with water. Dry with medical grade compressed air or a lint-free towel.
- ▲ **CAUTION! DO NOT** allow water to run directly into the battery contact or electrical connection areas.
4. Heavy Duty Handpieces: Rinse instruments under running water. Hold the handpiece upright to prevent water from running into the battery contact. Flush the cannula with running water.

Micro Handpieces:

Hold on an incline, distal tip pointing down, flush with running water to rinse away cleaning solution. When cleaning cannulated handpieces use a stiff bristle brush to remove debris from the cannula.

5. If water leaks into the handpiece or attachment, tip the handpiece or attachment back to allow drainage from the battery contact or electrical connection area.

Long Attachments:

Place in a small beaker or cup filled with detergent and allow to contact for 5-10 minutes.

6. Dry handpiece and attachments with a lint-free towel.
7. After cleaning, sterilize as directed at left.

Periodic Maintenance:

Inspect handpieces to assure that they are in proper working order and that there are no loose or missing components. Check all moving parts for free movement.

Test handpieces by assembling system and running. Install battery pack and accessories, then operate. Be aware of unusual sounds or vibrations and note operating speed.

Batteries



Cleaning Recommendations for Batteries

- ▲ **CAUTION! DO NOT** immerse battery packs.

Refer to the disinfectant's Material Safety Data Sheet to verify pH range. Disinfectants with pH levels higher than 10.5 cause the housing material to crack.

Battery Packs:

1. Remove battery pack from the handpiece.
2. Inspect battery housing for cracks or damage.
3. Use a sponge to wipe battery clean with a hospital grade disinfectant having a pH range of 6.5 to 10.5.
4. Rinse battery thoroughly under running water, and wipe dry.
5. Dry handpiece and attachments with a lint-free towel.
6. After cleaning, charge battery.
7. Sterilize as directed below.

To Sterilize Batteries

Flash Autoclave

- Gravity Displacement Sterilizer
- 270-272°F (132-134°C)
- Unwrapped in an instrument tray so steam can flow around it or placed in a Battery Sterilization Rack. Make sure nothing is touching the terminals.
- 3 minute minimum exposure, 5 minute maximum.

ETO:

- 100% ETO
- Wrapped in an instrument tray or fully perforated sterilization box.
- 120-135°F (49-57°C)
- 1 hour minimum exposure
- 8 hour minimum aeration time

Hi Vac:

- Pre-Vacuumed sterilizer
- 270-272°F (132-134°C)
- Wrapped or unwrapped
- 4 minute minimum exposure

Riley Flash Pack:

- 270°F (132°C)
- 4 minute minimum exposure
- Release steam immediately after sterilization

Sterrad® Sterilizer

- **Stryker has validated all batteries for Sterrad® Sterilization.**
- Follow Sterrad® protocol instructions.