

X SERIES™ Power System

Sterilization and Cleaning Guidelines



Preparation for Cleaning

- 1 Place the handpiece in the “safe - off” position.
- 2 Disconnect power cords and remove the batteries.
- 3 Remove and dispose of single-use cutting consumables in an appropriate container.
- 4 Remove all attachments.
- 5 If using the Aseptic battery, open lid and remove battery from housing.

Cleaning Tip:

For complete information about dismantling the device, refer to the instructions included with your specific Zimmer Biomet X Series Power System.

REQUIRED WASHING VALIDATION

Cleaning and Disinfection Procedure



Contamination Removal

Rinse product with RO or distilled water, removing any visible organic material. Apply detergent with a non-shedding cloth and, as necessary, with a soft bristle to remove any visible soil paying attention to exposed parts, narrow cavities and difficult to reach areas.

1



Rinse

Rinse carefully with RO or distilled water for a minimum of 30 seconds so that all detergent is fully removed.

2



Drying

Dry the device utilizing a dry, non-shedding cloth. Medical-quality filtered air may be utilized if available.

3



Disinfection Application

Apply the recommended pH value detergent disinfectant to a non-shedding cloth. Cover the device's surface area with the saturated cloth.

4



Manual Disinfection

After 30 minutes contact time, wipe the device contact surfaces, joints, and mated areas utilizing the cover cloth.

5



Final Rinse

Rinse carefully with RO or distilled water so that all the detergent is fully removed.

6



Final Drying

Dry the device utilizing a dry, non-shedding cloth. Medical-quality filtered air may be utilized if available.

7

OPTIONAL AUTOMATED WASH

Cleaning and Disinfection Procedure



Contamination Removal

Rinse product with RO or distilled water, removing any visible organic material. Apply detergent with a non-shedding cloth and, as necessary, with a soft bristle to remove any visible soil.



Rinse

Rinse product with RO or distilled water.



Drying

Dry the device utilizing a dry, non-shedding cloth. Medical-quality filtered air may be utilized if available.



Automated Washer

Place entire device into the automated washer, placing implements so that holes are aligned downward. Detergent should not exceed a pH value of 10.8.

Warning:

Never immerse or submerge your Zimmer Biomet X Series Power System in water or cleaner.

Validated Automatic Washer Cycle

Step	Minimum Time	Recommended Temperature
Pre-Wash	2 Minutes	Water Temperature 20°C (68°F)
Cleaning	5 Minutes	Water Temperature 55°C (131°F)
Neutralizing	2 Minutes	Water Temperature 20°C (68°F)
Rinse I	2 Minutes	Water Temperature 20°C (68°F)
Rinse II (Final)	5 Minutes	Water Temperature 93°C (200°F)
Drying	35 Minutes	Chamber Temperature 99°C (210°F)

Sterilization Validation

Steam Cycle Type	Temperature (Celsius/Fahrenheit)	Steam Dwell Time	Minimum Dry Time**
Pre-Vacuum	132° C/270° F	4 Minutes*	30 Minutes
Pre-Vacuum	134° C/273° F	3 Minutes*	30 Minutes
Gravity	132° C/270° F	15 Minutes	45 Minutes
IUSS	132° C/270° F	4 Minutes	No Dry Time
IUSS	134° C/273° F	3 Minutes	No Dry Time

* Steam Dwell Time may be extended to a maximum 18 minutes.

** Dry Time is highly dependent on sterilization load size. Dry Time may need to be increased in 5-minute increments for larger loads.

Note: Sterilization parameters on this document are not intended for Sterilizable battery.

The referenced sterilization cycle parameters listed in this manual have been validated and provide a sterile result by steam sterilization according to ANSI/AAMI/ISO 17665-1:2006, Sterilization of Health Care Products. Part 1: Moist Heat. The steam sterilization process for these products has been validated to provide a sterility assurance level (SAL) of 10⁻⁶ or better when using the prescribed sterilization case.

Packaging used in the sterilization of these devices shall: follow EN ISO 11607; be suitable for the chosen sterilization method; provide sufficient protection of the device as well as protection of the packaging to prevent mechanical damage; be the appropriate type/grade for weight of device.

This documentation is intended exclusively for physicians and is not intended for laypersons. Because this information does not purport to constitute any diagnostic or therapeutic statement with regard to any individual medical case, each patient must be examined and advised individually, and this document does not replace the need for such examination and/or advice in whole or in part. Please refer to the package insert and User Manual for important product information, including, but not limited to, indications, contraindications, warning, precautions, and adverse effects. ©2016, 2022 Zimmer Biomet