

1 NOTES

Stainless steel instruments must not be placed in physiological saline (NaCl) solution; prolonged contact can lead to pitting or stress corrosion. Instruments may only be sterilized after prior cleaning and disinfection. To ensure safe use, proper maintenance and care of the products is essential. Therefore, a functional or visual inspection should be performed before each use.

2 PREPARATION INSTRUCTIONS

During processing, the temperature acting on the instrument should not exceed **140°C** exceed. In principle, mechanical cleaning and disinfection are always preferable to manual cleaning and disinfection. Mechanical cleaning and disinfection offer greater safety. Never use metal brushes, metal sponges, or abrasive cleaning agents for manual cleaning/pre-cleaning. Strongly alkaline cleaning agents will damage plastics and anodized coatings.

2.1 Preparation at site

Remove coarse dirt from the instruments immediately after use. Do not use fixatives or hot water (>40°C), as this will cause residues to set and may impair the cleaning results. For heavy, fixed soiling, dissolve it with a 3% H₂O₂ solution (hydrogen peroxide) and wipe it off with a disposable cloth. Rinse thoroughly with deionized water. The instruments should be reprocessed as quickly as possible immediately after use.

2.2 Transport

Safe storage in a closed container and transport of the instruments to the processing site to avoid damage to the instruments and contamination of the environment.

2.3 Preparation for cleaning / decontamination

If possible, the instruments must be disassembled or opened for processing. The instruments must be stored on machine-safe instrument carriers in a manner that is suitable for cleaning. The design of the instrument carriers must not impair subsequent cleaning and disinfection by creating acoustic or rinsing shadows.

2.4 Manual pre-cleaning

Soak instruments in cold, deionized (DI) water for at least 5 minutes. If possible, disassemble the instruments and clean them under cold water with a soft brush until no residue is visible. Place the instruments in an ultrasonic bath at 40°C containing 0.5% alkaline or enzymatic cleaner and sonicate for 15 minutes. Remove the instruments and rinse with cold water.

2.5 Mechanical cleaning

Step	parameter	
Pre-flushing	Flushing temperature + water quality	Cold city water
	Exposure time	60 seconds
Pre- flushing	Flushing temperature + water quality	Cold city water
	Exposure time	180 seconds
Clean	Cleaning temperature	45°C
	Water quality	city water
	Exposure time	300 s (worst case condition)
	Cleaning products	Neodisher Medizym
	Concentration	0.50%
Neutralization	Rinse temperature	40°C
	Water quality	city water
	Exposure time	180 seconds
	Neutralizing agent	Neodisher Z
	Concentration	0.10%
Flushing	Flushing temperature	40 °C
	Water quality	demineralized water
	Exposure time	120 seconds

2.6 Mechanical (thermal) disinfection

Step	parameter	
Thermal disinfection	Disinfection temperature	90°C (A ₀ 3000)
	Water quality	demineralized water
	Exposure time	300 seconds
Drying	Dry the exterior of the instruments using the washer-disinfector's drying cycle. If necessary, additional manual drying can be achieved using a lint-free cloth. Dry the cavities and channels of the instruments with sterile compressed air. Allow the products to cool to room temperature.	

2.7 Functional test

The products must be macroscopically clean after each cleaning, i.e. free from visible contamination. Stained products must be immediately sorted out and subjected to special treatment. All moving parts must be inspected with particular care. If defects or damage are found, the products must be immediately discarded. All plastic components must be inspected before sterilization. The plastic parts must not be cracked, brittle, or worn. In these cases, the instrument must be replaced.

2.8 Care of the instruments

Products with movable jaws, joints, locks, or metallic sliding surfaces must be treated with steam-sterilizable, paraffin-based care products. The care product should comply with the applicable pharmacopoeia and be physiologically safe.

2.9 Sterilization

Sterilization of products using fractionated pre-vacuum processes, taking into account the respective national requirements.

Pre-vacuum	3 times
Sterilization temperature	134 °C
Sterilization time	5 minutes
Drying time	20 min.

2.10 Storage

Sterilized instruments should be stored in suitable packaging in a dry, clean, and dust-free environment with consistent humidity. The distance between the floor and the shelf should be at least 30 cm. Protect from sunlight!