Reusable Optical Telescopes - Instructions for Cleaning and Sterilization

This procedure applies to the LYMOL Medical Optical Telescopes Part Number: 4133, 4135 and 4136

Note:

- All instruments are non-sterile.
- The telescopes are fragile and should be handled with care
- Always hold the telescopes by the eyepiece or by the body, never the tube
- DO NOT bend the tube
- DO NOT drop the telescopes
- If possible store individually

1. Cleaning and Disinfection

Do not use Ultrasonic cleaning process!

Water quality

Water used for cleaning and rinsing telescopes should be de-mineralized and free of any solvents

Manual Cleaning

- The telescopes should be cleaned immediately after use, if not possible, the telescopes should be immersed in a combined cleaning and disinfection solution.
- Removable parts, such as connectors and adapters should be cleaned separately.
- When immersing the telescopes in the disinfecting / cleaning solution, make sure all bubbles escape any cavity by rotating or tipping the device. This will insure that all surfaces are moistened.
- Encrusted material has to be removed carefully, preferably with soft plastic brushes and soft cloths. Never use sharp instruments to remove debris.

- Clean the distal and proximal windows as well as the light post, with a cotton swab moistened in 70% isopropyl alcohol or acetone. As an alternative, a neutral detergent such as hand soap can be used.

- After cleaning, thoroughly rinse the telescope with de-mineralized water and dry it with a soft cloth or compressed air.

- Avoid direct contact with other instruments to protect the optical components from scratches.

- The maximum time for telescopes to be in cleaning solutions is 30 minutes. Long term exposure to cleaning solutions and detergents may damage the telescope.

Machine Cleaning

- Use only washing machine programs, washing machines and solutions that are recommended for use with telescopes and endoscopic instruments by the manufacturer.

- Only thermal-neutral processes should be used and they must work in a pH-neutral environment (e.g. enzymatic cleaning solutions)

- The temperature should not exceed 93ºC / 199ºF. The telescopes must be secured during the washing cycle.

- Allow for cooling to room temperature.

2. Sterilization

- The telescopes need to be cleaned carefully prior to sterilization.

- For sterilization, the telescopes need to be packed in appropriate packaging (e.g. paper bags, sterilization containers). Make sure there is no contact with other instruments or metal surfaces.

2.1 STERRAD® System

LYMOL Medical telescopes are compatible with the STERRAD® 100S, NX and 100NX sterilization systems.

Warning: Consult STERRAD® labeling for lumen size restrictions.
Note: STERRAD® sterilization may cause cosmetic changes to the device that do not necessarily impact the functionality of the device.

Caution:
All telescopes must be thoroughly dried before loading into the STERRAD® system chamber.

Use only STERRAD® instrument trays in the sterilization chamber.

Use only polypropylene sterilization wrap and polyolefin pouches.

Follow STERRAD® system operator's manual for detailed instructions for use.

2.2 Steam Sterilization

The LYMOL Medical telescopes must be processed according to the hospital's specific regulations for steam sterilization. The telescopes can be autoclaved. The following sterilization method has been validated.

Gravity Displacement – Wrapped
Parameters: 270ºF to 274ºF for 15 minutes , followed by 30 minutes dry time

Pre-Vacuum – Wrapped
Parameters: 270ºF for 4 minutes, followed by 30 minutes dry time

Note: After sterilization and prior to opening the package, let the instruments cool at room temperature. DO NOT accelerate the cooling process - it may cause damage to the instruments.

3. Storage

- Storing temperature: minimum: 50°F (10°C) / maximum: 122°F (50°C)
- Store the instruments properly to avoid any damage.