

Fiber-optic Cable Autoclave Instructions

Autoclave Methods

- 1. Standard Gravity Sterilizer:** Wrap fiber-optic cable in a surgical towel and place in a clean open tray. Sterilize for: 30 minutes 250° Fahrenheit at (15 psi.) or 121° Celsius at 1 kg/Cm2.
- 2. High Speed Instrument (*Flash*) Sterilizer:** Wrap fiber-optic cable in a surgical towel and place in a clean open tray. Sterilize for: 3 minutes 270° Fahrenheit at (15 psi.) or 132° Celsius at 2 kg/Cm2.

Note: Pressure differential during steam autoclaving may cause small bubbles in the silicone tubing. The bubbles will not affect the fiber-optic cable and will dissipate with time.

Cleaning

Should the fiber-optic cable become contaminated before use, clean thoroughly with a soft bristled brush and hand warm water soap solution to remove possible contaminants. Use a non-oily cleaner or mild soap. Do not use synthetic detergents or oil based soaps as these soaps may be absorbed and may subsequently leach out to cause a tissue reaction. Rinse copiously in hand-warm water. Follow with a thorough rinse in distilled water and resterilize.

Note: Prevent any scratching on the face of the endfitting, which could result in light-transmitting losses.

Important Points to Remember

1. The fiber-optic cable should be utilized without any alterations to its original design or fabrication. Meticulous care must be taken to avoid contact of any sharp edges or pointed objects with the fiber-optic cable; any inadvertent cut or puncture will possibly expose the optical fibers and render the fiber-optic cable unusable.
2. It is extremely important that the aperture (size) of the actual fiber bundle is matched with the instrument where it is being utilized to obtain maximum efficiency in light transmission.
3. Make certain that the autoclave is properly operating regarding maximum temperature. After removal of the fiber-optic cable, it should be cooled down very slowly (approximately 3-5 minutes) to room temperature. Do not immerse or rinse in cold water or any other fluid, to avoid glass breakage. Extensive breakage will result in light transmitting losses.
4. Do not use prevacuum high temperature sterilizer as this type will cause the silicone tubing to bubble excessively.
5. Do not intermix fiber-optic cables with retractors or other “sharp” instruments on top of one another; they can cause extensive fiber breakage.
6. Do not abuse, kink, pull or stretch the fiber-optic cable. The glass optical fibers in the fiber-optic cables can be irreversibly damaged by careless handling, which could result in light transmitting losses.

In addition to our high quality products, we also provide custom service for the maintenance of all of your products under warranty. We can provide free inspection and evaluation of your fiber-optic products which can be cleaned and polished free of charge to our customers.

