Instructions for Use
Reusable Monopolar Electrodes
IFU-2014.07.21

All electrosurgical instruments and accessories must be only used for their intended purpose and only using monopolar or bipolar RF current as specified. These instruments and accessories are only for use by qualified physicians fully trained in both electrosurgery and the operation of electrosurgical units (ESU). The instruments and accessories must be inspected prior to each use to make certain they are in proper working order. All removable instruments and accessories must be sterilized before each use. Selecting the proper technique will help to preserve the function and extend the life of your surgical instruments.

Cleaning Your Electrosurgical Monopolar Electrodes
Please adhere to specific cleaning instructions for electrosurgical instruments and accessories. All accessories may be cleaned by conventional procedures, including ultrasonic cleaning. The only exception to ultrasonic cleaning are handswitching (BI-CO-MATIC) bipolar forceps and handswitching unipolar handles, which must not be immersed in ultrasonic cleaner, to protect their RF-switching devices. Also, it should be noted that ultrasonic cleaning over extended periods of time can deteriorate the delicate joints of micro forceps. Again, it is important that electrosurgical accessories be dry when put into use, otherwise intermittent performance will be obtained.

Autoclaving Methods
ETO Sterilization
With a pressure reading not to exceed 12psi and a temperature not to exceed 68.3°C (155°F), the electrosurgical accessories can be sterilized by EtO in any standard cycle.

Concerning humidification, vacuum, cycle time, gas concentration, and temperature, we recommend following the manufacturer's instructions for the EtO sterilization unit.

Steam Autoclaving with Prevacuum and Gravity Sterilizers
If a wrapping method is used, make certain that the instruments are individually wrapped or sealed in a sterile pack. Other metal objects should never come into contact with the insulating material of forceps and handles, or with RF-connection cables. Such points of contact may cause melting of the insulation.

We recommend the following parameters and values but we also suggest following the manufacturer's instructions for steam sterilization.

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Sterilizing Temp</th>
<th>Sterilizing Time</th>
<th>Drying Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevacuum/Wrapped</td>
<td>270°F (132°C)</td>
<td>4 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Gravity/Wrapped</td>
<td>250°F (121°C)</td>
<td>30 minutes</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Gravity/Wrapped</td>
<td>270°F (132°C)</td>
<td>15 minutes</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>

It is important that the longest drying cycle possible is employed, to prevent build up of moisture inside the instrument and RF-cables. If the cycle of your autoclave allows a 30 minute dry time, we recommend using it. Corrosion, pitting, or intermittent operation are usual signs of a moisture induced corrosion problem.
Flash Autoclaving (fast heating/cooling cycle)
Flash sterilization: Minimum exposure time - 4 minutes. Average drying time - 8 to 15 minutes.

Important! Flash autoclaving will reduce the useful life of the instrument particularly when it is constructed of various materials, encompassing different expansion rates.

Cold Soaking
There is nothing detrimental about the use of glutaraldehyde or other cold soaking solutions, as long as the accessories are dried completely prior to use.

Sterrad Sterilization Process Including Sterrad NX
The sterilization process is a multiple sterilization process that uses a combination of exposure to hydrogen peroxide vapor and plasma to affect sterilization. The Sterrad NX sterilizer can sterilize instruments which have diffusion restricted spaces, such as hinged portions of forceps and scissors.

Adhere to the sterilization instructions provided by the manufacturer. (Advanced Sterilization Products, a Johnson & Johnson company).

Chemiclaving
This is the most destructive method to the insulation and silicone materials of electrosurgical accessories and can cause rapid deterioration and failure.

Testing and Maintenance
It is most important that all electrosurgical instruments and accessories be inspected prior to each surgical procedure for signs of deterioration. Also, all accessories must be thoroughly inspected and tested by a qualified biomedical technician to insure proper performance. Having an extra set of accessories on hand is always recommended.

Electrosurgical cables particularly are considered wear and tear items, and during heavy usage. Electrosurgical cables which have cracks or breaks in their insulation should be repaired or replaced upon any observation of cracked or peeling insulation, intermittent performance, or when any corrosion is present. Any such instrument should be immediately forwarded for repair or replaced.

When unplugging cables from equipment or instruments, grab the jacket of the plug and do not pull on the wire. The latter will break the union between the plug and the cable.

WARNING:
Many electrosurgical accidents have been caused by faulty accessories, by failure to check for and identify these accessories prior to each procedure, and by careless use. The use of the device with safely functioning and compatible handles, cords, generators, and accessories is the user's responsibility. Read and understand all precautions and instructions before attempting to use any electrosurgical device.

Warning: If this device is/was used in a patient with or suspected of having Creutzfeldt-Jakob Disease (CJD), the device cannot be reused and must be destroyed due to the inability to reprocess or sterilize to eliminate the risk of cross-contamination!