



## **CLEANING, STERILIZATION & MAINTENANCE OF INSTRUMENTS**

### **Proper Usage**

Instruments are designed for a particular purpose and they should be used only for that purpose. It is important to choose the proper instrument for the task to be accomplished. These instruments were designed for use by licensed physician with proper training and experience.

### **Water**

Because tap water contains many minerals, which may cause discoloration and staining, we recommend the use of distilled water for cleaning, disinfecting, sterilizing and rinsing of instruments. To avoid staining, use a cleaning solution with a pH near neutral (7). If you do use tap water for rinsing make sure you dry the instruments thoroughly to avoid staining.

### **Brand New Instruments**

Newly purchased instruments must be cleaned, lubricated and sterilized before use.

### **Manual Cleaning**

When handling instruments, be very careful not to damage their fine tips and mechanisms. We recommend that micro-surgical instruments be handled separately from regular instruments. Instruments that consist of more than one part should be disassembled and cleaned separately. If instruments have been exposed to blood, tissue, saline, or other foreign matter, you must rinse them in warm (not hot) water before these substances are allowed to dry. After rinsing, immerse them in a cleaning solution.

A number of compounds, such as certain chemicals are highly corrosive to stainless steel. To be on the safe side, rinse and dry instruments immediately in case they have come in contact with any potentially harmful substances. If no ultrasonic cleaner is available, clean the instrument very carefully. Pay particular attention when cleaning the box locks, serrations, hinges and all other hard to reach areas. Use nylon (not wire) brushes and warm cleaning solutions. For bone rasps and files as well as serrated parts of instruments, use a wire brush. Follow the manufacturer's instructions for preparation of the cleaning solutions. Change these solutions at least once daily.

### **Ultrasonic Cleaning**

This is by far the most effective and efficient way to clean your instruments. Follow the manufacturer's recommendation for mixing the solution and the duration of the cleaning cycle.

Before putting soiled instruments into an ultrasonic clear, we recommend that they be cleaned, in a cleaning solution, of all visible debris clinging to them.

Please observe the following:

- Do not mix dissimilar metals (like chrome and stainless) in the same cycle.
- Open all instruments so ratchets and box locks are accessible.
- When loading, avoid piling instruments on top of each other. This could damage the delicate instruments.
- After the cycle is finished, remove instruments immediately and rinse them off. Dry instruments immediately after rinsing and allow to air dry thoroughly.

### **Sterilization**

Prolonged immersion in disinfection or sterilization can be detrimental to surgical instruments. We recommend that you do not immerse the instruments longer than 20 minutes. To render the instruments sterile and ready for use, we recommend using pre-vacuumed conditioning style at 132°C (270°F) for 4 minutes. The Sterility Assurance Level should be 10<sup>-6</sup>. The recommended validation method is the use of a Class I process indicator.

**Validation of any alternate sterilization method is the user's responsibility.**