# Stainless Steel Surgical Instruments
## *Instructions for Cleaning, Sterilizing, and Care*

## Cleaning

Do not allow contaminants to dry on instruments as this makes cleaning more difficult. Immediately after use, place instrument under cold, running water to remove contaminants.

***Caution: Instruments must not be soaked in a caustic or physiological saline solutions as this could cause pitting or rust.***

Use a soft brush or wipe, to help remove remaining contaminants.

***Caution: Do not use metal brushes as this could scratch or deposit metal particles on the instrument which could lead to rusting.***

Visually inspect instrument to insure it is clean.

## Sterilization: Autoclave

| Pre-vacuum | Gravity |
|---|---|
| *Unwrapped* | *Unwrapped* |
| 132°C (270°F) 3 minutes | 132°C (270°F) 3 minutes |
| 135°C (275°F) 3 minutes | 135°C (275°F) 3 minutes |
| *Wrapped* | *Wrapped* |
| 132°C (270°F) 4 minutes | 132°C (270°F) 15 minutes |
| 135°C (275°F) 3 minutes | 135°C (275°F) 10 minutes |

## Sterilization: Cold

Place pre-cleaned instrument in a bath of 2.5% glutaraldehyde (Wavicide) or 7.5% Hydrogen Peroxide (Sporox) and follow label instructions for terminal sterilization. Do not leave instruments in solution longer than prescribed, and rinse thoroughly. Dry instruments with paper towel.

## Caring for Stainless Steel Surgical Instruments

For stainless steel to be used for surgical instruments, it must contain a specific amount of carbon. Carbon is required in order to allow the steel to become "hardened." Hardening strengthens the steel and allows it to retain sharpness. Carbon also allows steel to be more susceptible to tarnishing and rusting. The effect of the carbon is minimized by processing the surface of the instrument. As the name implies, the material stainless steel, will STAIN LESS, but is not stain-free. Products such as Miltex Instrument Stain Remover can restore instruments. Instrument lubricants can be used to keep joints and lock boxes free.

Improper cleaning, disinfection and sterilizing will contribute more to rusting or staining than anything else.

## Common Problems

- Leaving instruments submerged in liquid longer than the prescribed period of time
- Improper drying of the instrument after cleaning, disinfection, or sterilizing especially in joints and lock boxes
- Improper rinsing to remove the cleaning or disinfecting solutions
- Faulty autoclave which may leave deposits on the instrument and attack the instrument's surface finish
- Use of stiff metal brushes that roughen the surface of the instrument and leaves it susceptible to rust and stains