

Instrument care

The following advice and care instructions have been drawn up to achieve the maximum utilisation and optimal length of life from Stille's surgical instruments. In addition, one of the conditions of Stille's guarantee commitments is that instruments are handled and cared for according to the instructions stated below.

The greatest risks for instruments are careless handling before, during or after use, and that they are not used for their intended purposes. This can lead to damage to the instruments or corrosion resulting in expensive repairs or even that instruments must be discarded.

The word corrosion is derived from the Latin word *corrodere*, which means "eat away". This is what happens if an instrument is allowed to remain in a humid environment and perhaps, in addition, is poorly cleaned or damaged. The protective surface, due to the properties of the metal, is destroyed and the result is corrosion, i.e. rust.

Instructions for Central Sterilisation Service

1. Instruments should only be used for their intended purpose.
2. Always handle instruments carefully. They must never be dropped or otherwise roughly handled. This applies to instruments in general but particularly to micro instruments.
3. Clean instruments manually or by machine as soon as possible after use -
 - if the instruments are kept in a dry state before cleaning is possible - do not keep the instruments in this condition for too long, since the contaminants might be difficult to remove.
 - if the instruments are emerged into a disinfecting solution before cleaning is possible - only use an appropriate solution. Do not just use water.
4. Do not allow instruments to remain under mechanical stress since this increases the risks for corrosion and damage. For example, instruments must not be allowed to lie in a disorganized manner, and instruments with ratchets must be left open. Arrange the heaviest instruments on the bottom with lighter instruments above. Microsurgical instruments should never be laid on top of each other.
5. Water and steam used for cleaning, disinfection and autoclaving may contain salts, metals and minerals that can cause corrosion and discoloration. Check the quality of the water; hard water should be softened. Final rinsing of instruments with demineralized water is recommended.
6. Always follow the manufacturer's instructions when using disinfectants and detergents. Dosing of detergents is very
7. For manual cleaning, only use disinfection solutions intended for this purpose. Follow the manufacturer's instructions carefully regarding dosing and time. Rinse, ideally with demineralized water. Dry the instruments immediately.
8. When using ultrasound for cleaning, instruments should be opened and completely covered with cleaning solution. Rinse, ideally with demineralized water. Dry carefully. Follow the manufacturer's instructions.
9. Check instruments for contaminants, scratches, discoloration, cracks and corrosion.
10. Check the function of each individual instrument:
 - Scissors - check cutting edges, the blades should glide smoothly against one another, test cut cloth or gauze.
 - Needle holders - check that the jaws are not worn or damaged and that locking/unlocking is smooth.
 - Vascular clamps and haemostats - check that the jaws are not worn or damaged and that locking/unlocking is smooth.
 - Forceps - check that they hold well, close symmetrically and that the teeth are intact.
 - Rongeurs - check cutting edges and test cut thick paper.
 - Chisels - check edges and sharpness.
11. Use only instrument brushes. Steel wool should never be used since it can both scratch the surface and leave iron filings on instruments, which in turn can cause corrosion.

important and must be adapted to conditions such as the degree of contamination of the instruments and the quality of the water.

Instrument care

Instructions for Central Sterilisation Service contd.

12. After the cleaning process, lubricate the instruments where metal is in contact with metal. Use preferably Stille instrument oil. The oil must have a flashpoint above 135°C. Use only small amounts of oil on surfaces that are in contact during function (scissors edges, box locks, screws). Clean off excess oil to avoid oily instruments and oily stains on autoclave packaging. If a water-soluble lubricant is used instead of instrument oil, the solution should be diluted with demineralized water. Follow the manufacturer's instructions.
13. Carefully follow the manufacturer's instructions for autoclaving. Be careful not to pack instruments too closely together. Instruments should be autoclaved open to allow steam to gain access to all parts of the instruments.
14. Hot air sterilisation is not recommended, as high temperature will affect the metal.
15. Hydrogen peroxide sterilisation is not recommended for black chrome plated instruments. These can become stained although function will not be affected.
16. New instruments must be cleaned, inspected, lubricated and sterilised before they are used for the first time.
17. Use only a professional instrument engineer/workshop for service and repairs. For example, Super Cut scissors must be ground in a special way otherwise the edges may be destroyed. If repairs/service are incorrectly carried out, Stille's guarantee commitments no longer apply!

Instructions for Clinics

1. Handle instruments carefully before, during and after use. They must never be dropped or otherwise roughly handled. This applies to instruments in general but particularly to microsurgical instruments.
2. Instruments should only be used for their intended purpose.
3. Clean instruments manually or by machine as soon as possible after use -
 - Dry storage - do not keep the instruments in this condition for too long, since the contaminants might be difficult to remove.
 - Wet storage - only use an appropriate solution. Do not just use water.
4. Do not allow instruments to remain under mechanical stress since this increases the risks for corrosion and damage. For example, instruments must not be allowed to lie in a disorganized manner, and instruments with ratchets must be left open. Arrange the heaviest instruments on the bottom with lighter instruments above. Microsurgical instruments should never be laid on top of each other.