

## Instruction of use

Orthopaedic saw blades,  
drills, taps and reamers



**Non-sterile! Do not sterilise  
in this outer packaging!**



AS Medizintechnik GmbH • Sattlerstrasse 15, 78532 Tuttlingen, Germany • Tel 07461/966326 • Fax 07461/9663288

Care and sterilisation information for orthopaedic saw blades, drills, taps and reamers made from stainless instrument steels.

### Care and maintenance

The instruments must be maintained and cared for properly in order to preserve them and keep them functioning correctly!

#### Causes of corrosion of stainless instrument steels:

Corrosion is destruction or wear which can be caused by a chemical reaction, for example due to:

1. damaged surfaces
2. the effects of surgical exudate: extended contact between blood, pus or bodily secretions and the instruments
3. overexposure to certain solutions: saline and iodine solutions, chloride and strong acids, alkaline solutions as well as incorrectly used disinfectants
4. Poor water quality when cleaning, steam sterilising or rinsing instruments, e.g., due to rusty water pipes, penetration of rusty metal particles into the steam sterilisation etc.
5. Insufficient maintenance of instruments; if rust forms, this can be transferred to other instruments (contact must be avoided as this is extremely dangerous during sterilisation).

If used constantly, the instruments are subjected to a process of natural wear and tear which shortens their service life accordingly. Instruments which are used frequently should be replaced on a regular basis.

#### Measures to prevent corrosion

1. Carefully compile correctly packed and sterilised instruments prior to the operation; the selection should be based on the nature of the intervention. It is vital that you ensure that the outer packaging is intact and that the instrument is not damaged.
2. Use the sterilisation indicator on the inside of the tray to ensure that the contents have been sterilised.
3. Arrange the instruments according to the order in which they are required during the operation: leave instruments which are not required in the tray; do not prepare the instruments until just before the operation.
4. Remove any blood and other exudate from the instruments during the operation; after use, return the instruments to their designated positions.
5. Rinse out perforated instruments to prevent blood and bone meal from drying onto the surfaces.
6. Use either Lactated Ringer's solution or saline solution to clean the instruments. Do not, however, immerse the instruments in these solutions.
7. Begin the cleaning process immediately after the operation; all of the instruments which were used during the operation are regarded as contaminated. Instruments which were used on patients with possible infections should be disposed of in a similar manner. Wipe off any excess blood, bone meal and tissue.
8. Clean the instruments at a location intended for this purpose within the operating room. If the instruments are taken directly to the central sterilisation area, ensure that these are covered first as there is otherwise a risk of contamination for staff and surroundings. Wear protective clothing when disposing of contaminated instruments.

#### Disinfection

When using chemical disinfectants, the respective manufacturer's instructions must be strictly observed; the solutions must always be diluted prior to use. During the thermal disinfection phase with hot water, the water must be free of foreign bodies.

#### Cleaning

Regardless of whether cleaning mechanically or manually, it should be carefully checked which cleaning agent is used with which method. The dilution and application guidelines must be followed. Recommended pH value between 7.0 & 8.5.

##### 1. Mechanical cleaning

Mechanical cleaning is the preferred method. Please strictly adhere to the instructions supplied by the manufacturer of the cleaning machines. Prepare the instruments for mechanical cleaning. All sharp and sensitive instruments should be cleaned manually. Do not overload wire trays, place heavier instruments at the bottom of the tray. It may be necessary to soak and rinse through heavily soiled instruments (perforated instruments) before placing them in the washer.

## Instruction of use

Orthopaedic saw blades,  
drills, taps and reamers



**Non-sterile! Do not sterilise  
in this outer packaging!**



AS Medizintechnik GmbH • Sattlerstrasse 15, 78532 Tuttlingen, Germany • Tel 07461/966326 • Fax 07461/9663288

### 2. Ultrasonic cleaning (classed as a mechanical cleaning method)

Before placing an instrument in an ultrasonic bath, remove any excess exudate. Ultrasonic baths are recommended, for example, with taps and instruments with deep grooves. Following ultrasonic cleaning, the instrument must be rinsed as normal.

### 3. Manual cleaning

Requires various nylon brushes, blow pipes and nozzles, a clean compressed air system, cleaning agents and solvents as used for mechanical cleaning. When using cleaning additives, observe the manufacturer's instructions. In the case of cannulated instruments, the respective nylon brush (steel wool/wire brushes must not be used) must be rotated around the entire cannulisation several times until all the residue which can be cleaned with the brush has been removed. Compressed air must be used to blow out the cannulisation. The cannulisation must be inspected visually; if any residues are evident the procedure must be repeated.

### 4. Drying

Each instrument must be thoroughly dried on both the inside and outside in order to prevent the formation of rust and malfunctioning, a compressed air system can be used for drying hollow parts.

Please note: drying is not necessary if the instruments are to be used again immediately and sterilised without the packaging.

### **Sterilisation information for the instrument set**

Clean used instruments immediately and dry well, do not use cleaning agents and disinfectants with extremely acidic or alkaline additives (e.g. soda, sodium hydroxide or acids)! Machine (mechanical) cleaning is the gentlest method, as described above in the care and maintenance instructions.

### **Only steam sterilise the instrument set!**

Prior to sterilisation, check the instruments to ensure that they are functioning properly and are not damaged.

**Steriliser:** Steam autoclave, temperature = 121°C to 123°C, pressure = 15 to 17 psi (1-1.2 bar), at least 30 minutes in packaging materials suitable for sterilisation.  
At temperatures of 131°C to 133°C and pressures of 15 to 17 psi (1-1.2 bar), the exposure time shortens to approx. 20 minutes.

**Steriliser:** Autoclave with prevacuum: during the prevacuum phase, the air is firstly evacuated from the chamber before the steam flows in.  
Standard cycle in packaging materials which are suitable for sterilisation: 132°C to 135°C at 27 to 30 psi (2-3 bar) with a minimum exposure time of 4 to 10 minutes.

The instruments supplied by us are not packed in materials which are suitable for sterilisation!

**Important information:** Prior to each use/sterilisation, all the parts of the instrument set are to be checked to ensure they are functioning properly.

Check the instrument for the following prior to each use: damage; bent parts; correct assembly and functioning. Damaged and faulty instruments may no longer be used.

**AS MEDIZINTECHNIK GMBH DOES NOT ACCEPT RESPONSIBILITY IF THIS CUSTOMER INFORMATION HAS BEEN VIOLATED PROVABLY.**