

Safety Instructions

- Ensure that only technically and hygienically perfect turbines, handpieces and contra-angles are used.
- The instruments have to be inserted as far as possible into the chuck.
- The instruments should operate at the correct speed before being placed in contact with the workpiece.
- The maximum speed should not be exceeded otherwise there is the risk of injury for the user and possibly the patient. The recommended speed produces optimal polishing results. The speeds are printed on the packaging and can be found in the table below.
- Use slightly circular movements and apply as little pressure as possible for polishing to avoid indentations. High application pressure results in a high heat as well as rapid wearout and could destroy the polisher. Excessive application pressure could damage the tooth and tissue due to overheating and considerably increase the risk of injury caused by fracture of the instrument.
- Adequate water cooling should be ensured (50ml/min.) to avoid undesired heat.
- Avoid tilting or leverage to prevent fracture of the instrument.
- Bent and damaged instruments have to be sorted out immediately.
- Unassembled polishers have to be centered after reassembling to ensure vibration-free polishing. Only high-quality mandrels should be used to avoid fracture of the shanks and injuries.
- Safety glasses have to be worn.
- Breathing protection is required to avoid inhaling contaminated dust.
- Incorrect use of our instruments leads to poor polishing results and an increased safety risk. Our instruments should only be used by qualified personnel.

Maximum r.p.m. for all POLISHERS: 20 000 rpm

Exceptions: Polishers for acrylics:
(9603, 9641, 9642, 9644) 15 000 rpm

Diamond polishers:
(Diameter 17 to 26 mm) 10 000 rpm

➔ The **recommended speed** by HORICO depends on the material to be polished and is approximately 50% of the max. speed.

Preparation Instructions

(In compliance with DIN EN ISO 17664: 2004 and with the recommendations of the Commission on Hospital Hygiene and Infection Prevention at Robert-Koch Institute (RKI) from 10-04-2006 "Infection Prevention in Dentistry Hygiene Requirements")

The following instructions apply for polishers supplied by us, unless otherwise specified.

Preparation of new instruments

New instruments are packed non-sterile and have to be disinfected and sterilized before use, according to the following instructions.

Preparation of used instruments

According to the RKI's recommendations polishers are to be classified as semi-critical B and therefore after every use they need: 1. cleaning, 2. disinfection and 3. sterilization. Besides they should be 4. approved for use and 5. storage should be done appropriately.

During the preparation protective clothing and gloves should be used.

1. Cleaning

Manually: Rinse off surface contamination under running water. Then apply cleaning agent (NaOH solution, 1mol/ hypochloride solution, 12%/Helipur H plus N 4%) on all surfaces using a brush. A suitable brush should be used for channels and blind holes. Then rinse the instrument for 3 minutes under running water. Ensure that channels and blind holes are also adequately rinsed.

Automatic: Load the cleaning/disinfection machine and set to standard cycle with a minimum of 5 minutes washing and 3 minutes rinsing. After cleaning, check channels and blind holes for visible contamination. Repeat cleaning, if necessary.

2. Chemical disinfection

Manual: NaOH solution 1mol, hypochloride solution 12% or Helipur H plus N 4% can be used in a disinfectant solution with a reaction time of 1 hour.

Automatic: After automatic cleaning, a rinse cycle can be completed for 10 minutes at 80°C.

All instruments have to be rinsed after disinfection using fully desalinated water and after that thoroughly dried, e.g. using compressed air.

Checking

Before sterilization, all instruments have to be checked using a magnifying glass or microscope to ensure cleanliness and functionality. Outworn, bent or damaged instruments have to be sorted out. There should not be any notches on corners or edges. Long, slender instruments should be checked for distortion. Repeat the cleaning and disinfection process, if necessary.

Limitation of reprocessing (influence of the processing on the life span)

Frequent reprocessing has little effect on the instruments. The service life is generally limited due to wear and damage during use.

Packaging

Standard polyethylene bags or multi-purpose sterilization trays are suitable for sterilization, provided the corners and edges of the instruments are protected. Bags must be large enough to prevent them being subjected to stress after closing.

3. Sterilization

Our instruments should be sterilized in trays or racks using a suitable program in an autoclave at 134°C / 2.1 bar and a hold-time of 20 minutes. **Polishers should not be heated above 150°C.** Galvanic corrosion can occur on steel racks in the autoclave. This can result in flash rust on the stainless steel shanks of the instruments. To avoid this, all the holders and inside of the autoclave should be regularly inspected for rust. Our instruments are unsuitable for chemical vapor or hot-air sterilization.

Please adhere strictly to the instructions of the machine and disinfectant manufacturer!

4. Approval

If a QM system is in operation, the preparation procedure have to be documented and the instruments approved for reuse or storage.

5. Storage

Please store all packed instruments clean, dry and at room temperature. Please store used instruments so that the risk of contamination by humans and other instruments is excluded. Before use, repeat the cleaning and sterilization cycle.

Polishers have to be protected against UV radiation, e.g. direct sunlight.

The manufacturer has validated that the instructions for preparation of a machine listed above are suitable for its reuse. It is the responsibility of the person concerned with processing to ensure that the actual, completed reprocessing with the equipment, material and personnel in the reprocessing facility used achieves the required results. Generally, validation and routine monitoring of the procedure are required for this so that the recommended guidelines of the appropriate bodies (e.g. Robert-Koch Institute) are maintained.

Deviations from the instructions provided by the person concerned with processing should be carefully evaluated for their effectiveness and possible adverse consequences.

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