

# Dorschel KG

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## User Information for rotating dental and surgical Instruments

- Use of improper instruments can cause insufficient preparation results.
- Excessive speeds while using instruments with overly large heads endanger the stability of the instruments.
- Excessive speeds applied near to the dental pulp can endanger its vitality. The same can be the result when using an inadequate supply of water spray.
- Observe permissible speeds indicated on packaging.
- The handpiece must be in proper working condition. The use of an adequate supply of water spray of a minimum of 50 ml/min on the working part is necessary in the 1.500 min-1 speed range to ensure reliable cooling of the material being worked on.
- Additional external cooling is needed for instruments with a total length of >19 mm and a head diameter of 1,8 mm (ISO-018).
- Moistening of the surfaces to be prepared must not be impaired by an incorrect suction extraction system. Deflection of the coolant jet can also cause heat related damage.
- The recommended applied contact pressure range is 0.3 – 2 N (30 – 200 p) depending on the kind of preparation.

- Avoid tilting, levering, or blocking the instruments up by using too much contact pressure. (increased danger of fracture).
- Insert the Instruments as deeply as possible without excessive use of force into the chuck and check to ensure that they are secure.
- Extremely tapered instruments will wear faster at the tip due to the smaller size. To maintain the longevity of these instruments, careful preparation with less contact pressure is important.
- Apply Turbo instruments over their entire grinding surface.
- Roughness obtained with a diamond coating > ISO 524 has to be finished.
- Immediately remove any instruments that are damaged, bent or no longer run concentrically.
- Depending on the application, the use of protective goggles is recommended. Rotating instruments have to be disinfected, cleaned, dried and sterilised before the first application on the patient and immediately after every use.

Cleaning and Desinfection				Preparation for sterilization	Sterilisation	Approval for use and storage
Instruments	Process	Substance	Exposure time			
Diamond grinding tools TC Cutters / burs Steel burs  Polishers 1) Abrasives with ceramic bond	After mechanical cleaning, chemical disinfection and cleaning	Aldehyde-free disinfectant DGHM or FDA approved an CE mark, may be used with ultrasonic cleaner, 2) concentrations according to the manufacturer's instructions	According to manufacturer's instructions	Remove residual disinfectant with water and dry. Visual check and functional test; if necessary reclean and condition steel drills with anti-corrosion spray. Packaging complies with EN 868	Steam sterilisation 121°C/1,1 bar; 20 min. 134°C/2,1 bar; 5 min.  Steam sterilizer should comply with  DIN EN 13060 or DIN EN 285	Approval or rejection in the case of an incorrect procedure to be carried out by specialist, storage in suitable sterile packaging

Detailed recommendations for preparation in accordance with DIN EN ISO 17664

1. Sterilisation for polishers at 134°C/2,1 bar for 5 min is recommended.
2. The use of bur stands or trays is necessary to avoid contact damage. The use of inappropriate disinfectants and/or keeping the instruments too long in the disinfectant can result in corrosion (increased danger of breakage) and discolouration of the instruments or the colour coding can come off. No alkaline disinfectant must be used for the disinfection of silicon rubber polishers. Do not place polishers in alcohol!

**Storage and Keeping Conditions:** in dry conditions and protected against contaminants. Protect instruments in general against chemicals, acids, heat and extreme temperature variations.

**Observe guidelines from Robert-Koch Institut – ch. E3! (Hygiene Requirements in Dentistry) or the valid legal and hygiene regulations in the respective country!**