

# Instructions for use

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## Intensiv ZirconCut Prosthetics: Rotating diamond-coated instruments for zirconia ceramic cutting

Prof. Mutlu Özcan, University of Zurich

### Product description

- Stainless steel instruments with multiple diamond coating, placed in a stainless-steel tray for storage and protection
- Diamond grit-size: range of different sizes from coarse to fine
- Shapes: cylinder edged 90°, cylinder round, cylinder flange
- Available in FG (Friction Grip)
- Colour: black (intensity may change)
- Sterilizable and reusable

### Indications

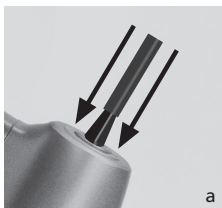
Cutting of zirconia ceramic and other ceramic materials in restorative Dentistry

### Application details

Separation of crowns and bridges made of zirconia ceramic or other ceramic materials

### Instructions for use

- Insert the instrument as deeply as possible into the chuck (FG) (figure a).
- Set the contra-angle at the required working speed up to a maximum value of 200'000 rpm before applying the instrument on the treated area.
- Activate abundant water spray during the entire use (minimum 50 mL/min) for cooling and rinsing away ceramic residues from the instruments.
- Ensure that there is consistent water flow, regulate in case of water shortage.
- Apply intermittently, to allow for a more




thorough rinsing of the instruments and removal of ceramic residues.

- Use the instruments applying a contact force up to a maximum value of 6 N (600 g).
- Use the entire length of the working part in parallel to the surface and do not use just the tip, to allow for homogeneous wearing out of the instrument.
- It is recommended to use a dental dam for better view and safety.
- During usage periodically check that the diamond coating is uniform, intact and sufficiently present on the instrument.
- Once the application has been completed, remove the instrument from the treated area and bring it to a standstill.
- It is recommended to wear gloves and safety glasses.
- The instrument is not indicated to create endo access.

### Maintenance and sterilization

- Instruments are packed non-sterile. They must be disinfected and sterilized prior to first use on the patient and disinfected, cleaned with soft brush or sonic bath and sterilized immediately after each use.
- Pre-clean by disinfection the instruments immediately after each usage.
- Disinfect the diamond-coated instruments separately from other instruments such as polymeric polishers and abrasives stones.
- Use cleaning and disinfection solutions strictly observing the concentrations and reaction times indicated by the manufacturer.
- Clean the instruments and remove possible debris after each use (with soft brush, cleaning rubber Intensiv Diakleen or ultrasonic bath), to maintain their abrasive properties.
- In case of the presence of grinding residues on the instruments it is advisable to use an ultrasonic bath, cleaning rubber Intensiv Diakleen and/or soft brush for cleaning.

 **Intensiv SA**  
Via al Molino 107  
6926 Montagnola  
Switzerland

Tel. +41 91 986 50 50  
Fax +41 91 986 50 59  
info@intensiv.ch  
www.intensiv.ch

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- After disinfection and cleaning, inspect the instruments for residues. If necessary, repeat the disinfection/cleaning procedure.
- Cleaning and disinfection can be also carried out using professional thermodisinfectors.
- Check for possible damage; dispose of oxidized, eccentric or deformed instruments, and instruments where the diamond-coated working part is totally or partially worn-out.
- Hot air sterilizers are not suitable for diamond-coated instruments.
- Sterilization must be carried out using the listed sterilization procedure
  - fractionated vacuum/dynamic air removal procedure (with sufficient product drying)
  - steam sterilizer according to EN 13060/EN 285 or ANSI AAMI ST79 (for USA: FDA clearance)
  - validated according to EN ISO 17665 (valid IQ/OQ (commissioning) and product specific performance qualification (PQ))
  - maximum sterilization temperature 138 °C (280 °F; plus tolerance according to EN ISO 17665)
  - sterilization time (exposure time at the sterilization temperature):
- rotating, as this increases the risk of instrument breakage.
- Never exceed the specified maximum speed, to avoid instrument breakage caused by the generation of powerful centrifugal forces.
- Partial consumption of the diamond-coated working part can cause overheating during usage of these instruments.
- Diamond coating can wear out completely during usage, and this can cause overheating. Pay attention to the state of the diamond coating throughout entire use.
- Avoid applying forces greater than the recommended values, as this could cause damage to the instrument and the treated area.
- To avoid loss of traceability of the instruments, during their entire application it is necessary to keep the outer packaging with indicated lot number.

area	fractionated vacuum/ dynamic air removal	gravity displacement
USA	at least 4 min at 132 °C (270 °F), drying time at least 20 min	not recommended
Germany	at least 5 min at 134 °C (273 °F)	not recommended
other countries	at least 3 min at 132 °C (270 °F) / 134 °C (273 °F)	not recommended

### Risk warnings

- Always apply abundant water spray during usage and make sure that the tip of the instrument is not enclosed in the ceramic and is freely accessible by the water spray, to avoid damaging the diamond coating.
- Avoid torque, jamming or levering actions when
- Intensiv FG ZirconCut Prosthetics Set, 014 Ref. 035A
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder edged 90° 014, 6 mm, Ref. FG Zr01/3
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder round 014, 6 mm, Ref. FG Zr02/3
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder flame 014, 5 mm, Ref. FG Zr03/3
- Intensiv FG ZirconCut Prosthetics Set, 016 Ref. 040A
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder edged 90° 016, 6 mm, Ref. FG Zr05/3
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder round 016, 6 mm, Ref. FG Zr06/3
- Intensiv FG ZirconCut Prosthetics Instrument Cylinder flame 016, 5 mm, Ref. FG Zr07/3