

## Instruction manual



English

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### Indications for use:

TECNO MED MINERAL, TECNO MED MINERAL DENTINE and TECNO MED MINERAL TISSUE are used to create reduced crowns and bridges (max. 2 pontics and min. 13 mm<sup>2</sup> connection cross-section), telescopic primary crowns, copings as well as frameworks for composite veneered bridges. The width of the bridge must not exceed two pontics for reasons of stability.

These devices are based on filled polyether ether ketone (PEEK) and were designed for temporary use.

### Contraindications:

TECNO MED MINERAL, TECNO MED MINERAL TISSUE and TECNO MED MINERAL DENTINE must not be used for the manufacturing of implants, root posts, structures with more than 2 pontics, conical crowns (secondary) and cantilever pontics with a connector cross-section < 17 mm<sup>2</sup>.

If the material is used for indications other than those specified in these instructions for use, Zirkonzahn will not accept any liability for damage.

### Working instructions:

- 1) When milling resin discs, take specific parameters for resin milling into account. Milling burs required for processing: 2 L PMMA Premium, 1 L PMMA and 0,5 S PMMA C/AD/CAM Milling Burs.
- 2) Check milled framework for obvious chips or cracks. Only frameworks in perfect condition must be used for dental restorations.
- 3) Finish framework with a tungsten carbide bur.
- 4) Sandblast with aluminium oxide, 50 µm with 2 – 2.5 bar.
- 5) If the framework is steam cleaned, avoid intense localised heating.
- 6) Clean structure with ethanol and let it dry.
- 7) Apply a bonder and slightly photopolymerise (in order to create a dispersion layer). Duration of the polymerisation varies depending on the manufacturer of the device. Follow the manufacturer's instructions.
- 8) If the polymerized dispersion layer of bonding liquid appears white on the surface, it is overpolymerized and it must be removed. Repeat the preceding operation with reduced curing time.
- 9) Apply opaque dentine (Opaker).
- 10) Layer with photopolymerising resin (manufacturer of the resin can be selected freely).
- 11) Follow the general instructions for use of the manufacturer of the resin.
- 12) Use of adhesive cement.
- 13) Follow the general instructions for use of the manufacturer of the cement.

### Precautions:

Should intolerance to the products be suspected, use them only after an allergy screening test has been performed with issue of medical statement of non-allergy conditions.

Do not drop the resin discs. Product quality and durability can be compromised if handled improperly. Disinfect the milled parts before inserting them into the patient's mouth. It is the dentist's responsibility to ensure proper hygiene.

These instructions for use correspond to the current state of technology and our own experiences. The dentist will be held fully responsible as regards correct use of the products. The manufacturer is not liable for any unsatisfactory results, as he does not have any influence on further processing.

The dental technician must inform the dentist as regards the operations to be performed before inserting the structure into the patient's mouth, making sure that the dentist has received all of the information contained in these instructions for use.

Any claims for damages shall concern exclusively the commercial value of our products.

### Safety Instructions:

Dust from grinding can irritate eyes, skin or mucous membranes, take protective measures. For more information for safe handling, please refer the safety datasheet.

### Dimensions:

Wall thickness (cervical): min. 0.7 mm

Wall thickness (occlusal): min. 1.2 mm

### Technical Data:

|   | Tecno Med Mineral                    | Tecno Med Mineral Tissue             | Tecno Med Mineral Dentine            |
|---|--------------------------------------|--------------------------------------|--------------------------------------|
| Density                                     | 1.49 g/cm <sup>3</sup>               | 1.36 g/cm <sup>3</sup>               | 1.52 g/cm <sup>3</sup>               |
| Coefficient of thermal expansion (23-55 °C) | 45 *10 <sup>-6</sup> K <sup>-1</sup> | 45 *10 <sup>-6</sup> K <sup>-1</sup> | 45 *10 <sup>-6</sup> K <sup>-1</sup> |
| Melting temperature                         | Approx. 340 °C                       | Approx. 340 °C                       | Approx. 340 °C                       |
| Water absorption                            | 7.3 µg/mm <sup>3</sup>               | 7.2 µg/mm <sup>3</sup>               | 6.5 µg/mm <sup>3</sup>               |
| Water solubility                            | 1.2 µg/mm <sup>3</sup>               | 1.2 µg/mm <sup>3</sup>               | 0.6 µg/mm <sup>3</sup>               |
| Flexural strength                           | 201 MPa                              | 189 MPa                              | 198 MPa                              |
| E-modulus                                   | 4100 MPa                             | 5100 MPa                             | 4400 MPa                             |

### Storage and durability:

Store the device in the original packaging, in a dry place at room temperature. Do not expose to physical impact or vibration, avoid contact with liquids, protect discs from contamination.

### Handling:

The product may only be used by specifically trained personnel. Avoid any exposure to humidity. Avoid exposure to dust. Ensure adequate ventilation.

**CAUTION:** US Federal law restricts these devices to sale by or on the order of a licensed practitioner in the dental sector.

### Information:

**Producer:** Zirkonzahn S.r.l.

Via an der Ahr 7 - 39030 Gais - Italy

www.zirkonzahn.com

Emergency Phone: +39 0474 066 660 (Mon. - Fri. 8 am - 6 pm))

N.B.: All medical products and all products with open packaging are nonreturnable.

# Zirkonzahn®

TECNO MED MINERAL,  
TECNO MED MINERAL TISSUE,  
TECNO MED MINERAL DENTINE  
**GS025**

Zirkonzahn S.r.l.

Via an der Ahr 7

39030 Gais – ITALY

Tel +39 0474 066 660 – Fax +39 0474 066 661

E-Mail: info@zirkonzahn.com

## Legend

Explanation of symbols used

# REF

Article number



Read Instructions



LOT number



Date of production



Producer

# Rx only

To be sold by or on the order of  
a licensed dentist