

Intended use: Fixed and removable partial dental prosthesis, abutments (where a virtual library is available).

Indications:

- 4-part bridge up to 2 pontics for the posterior area.
- 6-part bridge up to 2 pontics for the anterior area.
- Removable partial dentures.
- Telescopic work and secondary crowns.
- Individual temporary abutment and healing abutment in the anterior region.
- Fixed prosthesis, all-on 4 over implants.
- Reinforcement of total dentures (in the alveolar ridge region).
- Maryland bridges, inlay supported pontic.
- Endo-crowns.
- Root posts.

Contraindications:

- Where minimal dimensions for prosthetic appliances cannot be achieved.
- Possible allergic reactions to product content- PEEK.
- Bruxism.

Intended users: The product is intended to be used by professionals – dental technicians.

Patient selection criteria: Totally or partially edentulous patients.

Requirements for dimensions:

Removable partial dentures: Frame design 1.5 times more massive than in alloy. 0.5 mm of undercut of clasp design. Clasp activation is not possible. The material is recommended in case of known allergies to alloys and as a temporary solution.

Fixed dental prosthesis:

Crowns & bridges:

- Thickness: min 0.6 mm, possible thinner part in the cervical area up to 0.3 mm.
- The basal part of the crown must be out of PEEK and not veneering material.
- Connector anterior: 11–12 mm².
- Connector posterior: 14 mm².
- The cutting back technique and garlands are recommended.
- The design of the frame must follow the end shape of the teeth.

All-on 4 rehabilitation on implants:

- Occlusal-cervical height: min. 5 mm.
- Buccolingual width anterior: min. 4 mm.
- Buccolingual width in the area of titanium sleeve abutment: min. 6 mm.

Procedure:

Design preparation: Make the design based on the model scan or digital impression of statues in the patient's mouth. Based on the design dimension, use the right thickness of the disc CAD/CAM milling machine. The design is transferred to CAM SW on the milling machine and the prosthetic appliance is milled out.

Processing and polishing: Use separating discs to cut the sprues. Use cross-sectioned carbide burs for removing any excess material. Parts that will not be covered by composite should be polished to high gloss. Use a diamond polishing rubers for ceramic and goat brushes in combination with diamond polishing paste. You can polish larger objects with pumice and cotton-based brushes. Process and polish with minimal pressure and at a slow speed (max. 8000 rpm). Carefully polish delicate and fragile parts with a lower speed and with smaller polishing brushes. The use of a hand piece is recommended.

Veneering: Sand-blast the surface that you want to veneer with 110 µm Al₂O₃ (REF 405- Interlox 110 µm) under a pressure of 2–3 bar, and clean with compressed air. Do not touch sand-blasted surfaces anymore and do not use steam under pressure. Apply a bond to the surface (such as Visio.link, Bredent GmbH) according to the instructions for use. Use a composite that is appropriate for PEEK, and work according to the instructions for use.

Safety precautions: Use a suction unit, wear gloves, goggles, and a protective mask with an FFP1 filter when processing the material.

Storage: At room temperature, dry, protected against direct sunlight!

Side effects: Possible allergic reaction to the PEEK material.

Notice: Any serious incident that has occurred in relation to the device must be reported to the manufacturer and to the competent authority of the Member State in which the user and/or patient is established.

Warranty: Whether given verbally, in writing, or by practical instructions, our recommendations for use are based upon our own experience and trials, and can only be considered as reference values. Our products are subject to further development. Therefore, alterations in the structure and composition of the instructions for work are reserved.