



Zirkonzahn®

Human Zirconium Technology

MATERIAL DIVERSITY

Materials for the best solutions



A MATTER OF HONOUR

Just as carpenters carefully choose the best wood for the job, matching shades, textures and other properties, dental technicians must choose the most suitable material for the best possible patient solution. Not all raw materials available on the market are of the same quality. While it is possible that from an objective point of view, using the best available material is not always necessary, the question of which material quality to choose for customers and patients is rather an expression of personal attitude and appreciation.

Andreas Steger

Florian Steger



Slowness – wood that grows slowly, forming narrow growth rings; strength and physical properties grow along with them.

WE ASSUME RESPONSIBILITY FOR EVERYTHING

When manufacturing our products, we put all our efforts into quality, precision, easy handling and smart solutions at a fair price. Materials, elaboration tools, CAD/CAM systems, software and sintering furnaces – we develop and manufacture all necessary components for the creation of a high-quality dental restoration here in South Tyrol. We perfectly know the raw materials used, the properties, the technical possibilities and the interferences. This is important to us, because it is the only way we can ideally coordinate all components with each other, precisely control the results and guarantee the quality of our products. All our products comply with international quality standards and guidelines.



Prettau®



Prettau® 2



Prettau® 2 Dispersive®



Prettau® 3 Dispersive®



Prettau® 4 Anterior®



Prettau® 4 Anterior®
Dispersive®



ICE Translucent



Anatomic Coloured



Zirconia Creative



Abro® Basic Mono



Abro® Basic Multistratum®



Denture Gingiva Basic



Prime



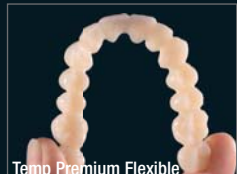
Prime Multistratum®



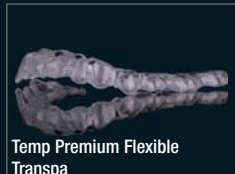
Prime Transpa



Multistratum® Flexible



Temp Premium Flexible



Temp Premium Flexible
Transpa



Temp Premium Flexible Bleach



Temp Basic



Temp Basic Tissue



Temp Basic Transpa



Temp Basic X-Ray



Therapon Transpa



Screw Blank



Tecno Med



Tecno Med Mineral



Tecno Med Mineral Tissue



Tecno Med Mineral Dentine



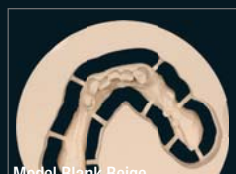
Burnout



Try-In & Burnout



Try-In I, II and III



Model Blank Beige



Sinternit /
Sinternit Postcore



Cocronit Superior /
Cocronit Basic



Titanit 5



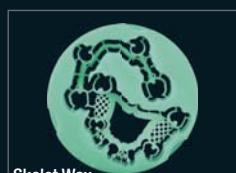
Raw-Abutment®



Wood



Wax

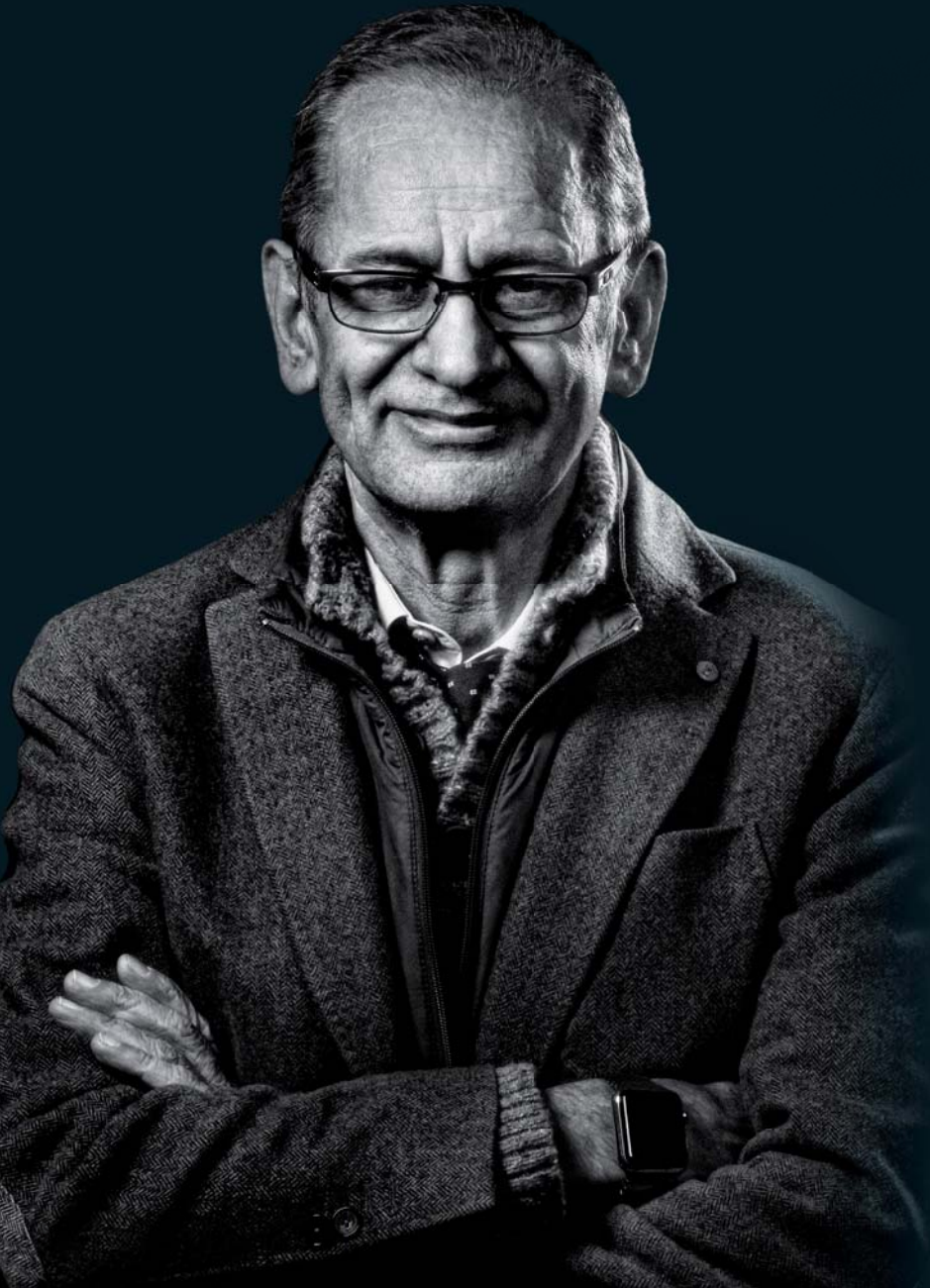


Skelet Wax

Zirconium ($ZrSiO_4$) is a mineral that was created up to 4.4 billion years ago. It is the earth's oldest known mineral. It is also the material from which zirconium dioxide (ZrO_2), commonly known as zirconia, is obtained: a high-performance ceramic for the production of dental restorations.



ZIRCONIA



PRETTAU® – THE MOST EXPENSIVE

Without zirconia there would be no Zirkonzahn. Strongly convinced of the base properties of this material, I decided to make the best of it for us dental technicians. To achieve that, much more was necessary than initially thought – premium raw materials, expensive manufacturing and cleaning processes, colouring concepts, processing tools, milling strategies once manual and now digital, sintering furnaces and consistently new solutions. But we never gave up.

The Prettau® Bridge has been used for patients all over the world for 15 years now. We are persistently pushing the path of our Prettau® zirconia towards monolithic design. Our Prettau® Dispersive® zirconia types are provided with a smooth, natural colour transition. In order to achieve a particularly smooth shade transition after the sintering process from dentine to enamel, it is important that the colours are not blended into layers but dispersed evenly during the manufacturing process.

Prettau® – a name deeply connected to my South Tyrolean homeland. A commitment and a promise at the same time. Zirconia is and remains our passion – and our pride.




ZIRCONIA FROM THE DOLOMITES


PRETTAU®


THE MOST EXPENSIVE – FOR THE PATIENTS YOU VALUE

Natural appearance, stability, wearing comfort and excellent biocompatibility – zirconia meets all the demands of high-quality and long-lasting restorations.

However, not all zirconia materials are the same. For our quality zirconia we use only the highest quality raw materials. The special manufacturing technology ensures special purity, low porosity and uniform shrinkage. This is an essential prerequisite for the perfect fit of the subsequent tooth restoration.

PRETTAU®

Translucency ★☆☆☆
Flexural strength ★★★★ (up to full-arch bridges)
1200 MPa*
Without colour transition
Individual colouring with Colour Liquids
Sintering temperature 1600 °C
Monolithic design in the posterior area possible

PRETTAU® 2

Translucency ★★★★
Flexural strength ★★★★ (up to full-arch bridges)
1200 MPa*
Without colour transition
Individual colouring with Colour Liquids
Sintering temperature 1600 °C
Monolithic design in the anterior area and in the posterior area possible

PRETTAU® 2
DISPERSIVE®

Translucency ★★★★
Flexural strength ★★★★ (up to full-arch bridges)
1200 MPa*
With natural colour transition
Optional: Individualisation with Colour Liquid intensive colours
Sintering temperature 1600 °C
Monolithic design in the anterior area and in the posterior area possible

****Gradual-Triplex-Technology:** The zirconia is already provided with colour, translucency and flexural strength gradients during the production process. This ensures a natural colouring, a highly translucent cutting edge and an extremely high flexural strength at the tooth neck.

<p>PRETTAU® 3</p>	<p>PRETTAU® 4 ANTERIOR®</p>	<p>PRETTAU® 4 ANTERIOR®</p>
<p>DISPERSIVE®</p>		<p>DISPERSIVE®</p>
		
<p>Translucency ★★★★☆</p>	<p>Translucency ★★★★★</p>	<p>Translucency ★★★★★</p>
<p>Flexural strength ★★★★☆ (up to full-arch bridges, bar-supported)</p>	<p>Flexural strength ★★☆☆☆ (up to three-unit bridges)</p>	<p>Flexural strength ★★☆☆☆ (up to three-unit bridges)</p>
<p>Incisal area 670 MPa* – Cervical area 1200 MPa*</p>	<p>670 MPa*</p>	<p>670 MPa*</p>
<p>Gradual-Triplex-Technology**: with colour, flexural strength and translucency gradient</p>	<p>Without colour transition</p>	<p>With natural colour transition</p>
<p>Optional: Individualisation with Colour Liquid intensive colours</p>	<p>Individual colouring with Colour Liquids</p>	<p>Optional: Individualisation with Colour Liquid intensive colours</p>
<p>Sintering temperature 1500 °C</p>	<p>Sintering temperature 1500 °C</p>	<p>Sintering temperature 1500 °C</p>
<p>Monolithic design in the anterior area and in the posterior area possible</p>	<p>Monolithic design in the anterior area and in the posterior area possible</p>	<p>Monolithic design in the anterior area and in the posterior area possible</p>

*Average value of the biaxial bending strength from several test series

PRETTAU® ZIRCONIA

All Prettau® zirconia materials are ideal for use in cases where space is limited, or where implant supported restorations or restorations with gingiva reconstruction are required. Experience has shown that Prettau® zirconia materials harmonise excellently with natural tissue, which is why missing gingival tissue parts can be designed very well. Prettau® materials are non-abrasive to the antagonist when densely sintered. The material properties also permit monolithic design, which means that ceramic chipping can be avoided. Prettau®, our zirconia classic, combines aesthetics with a high flexural strength (1200 MPa). The high flexural strength remains unchanged even after simulated ten-year ageing (Bergler, MDT, University of Pennsylvania, 2016). Restorations can be left unveneered in the posterior region, while in the anterior only a minimal layering with ceramics is sufficient. The manual colouring technique with Colour Liquid Prettau® Aquarell and Intensive colours as well as the use of ICE Ceramics and Stains results in a high degree of individualisation. The result are long-lasting, aesthetic and patient-individual full zirconia restorations.

COLOURS

White, can be characterised individually by manual colouring

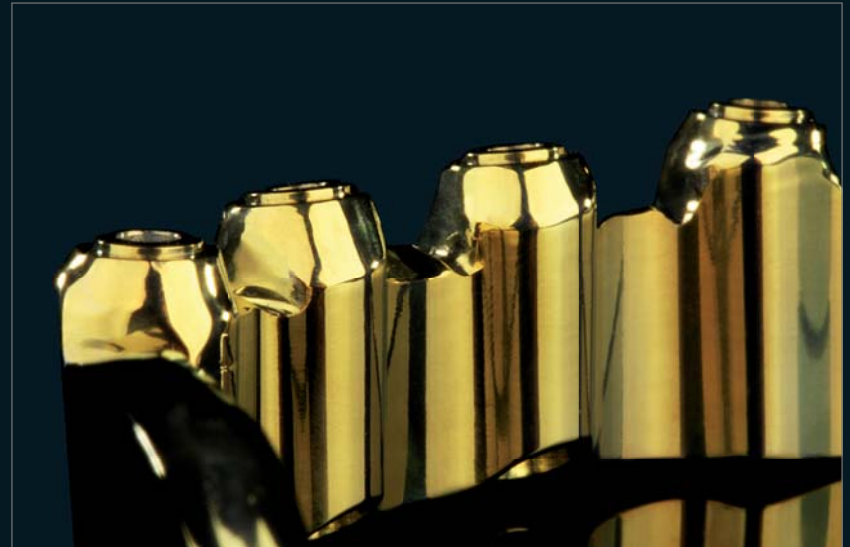
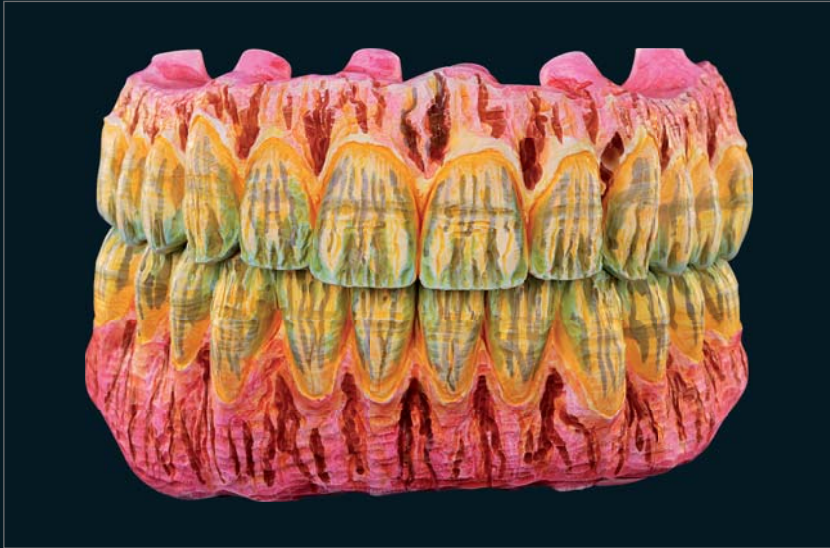
INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, veneers, large to full-arch screw-retained bridges (full contour restorations or reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, colour individualisation (optional), sintering (1600 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)
- *Processing tools:* CAD/CAM Milling Burs Zirconia
- *Characterisation:* Colour Liquid Prettau® Aquarell and Intensive, ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains, ICE Stains Prettau® and ICE Stains 3D by Enrico Steger







PRETTAU® 2 & PRETTAU® 2 DISPERSIVE®

Exceptional flexural strength and excellent translucency have been successfully combined in this material. Thanks to its special combination of properties, Prettau® 2 is ideal for monolithic full-arch restorations. The translucency values allow monolithic design both in the anterior and posterior region. Ceramic chipping can therefore be avoided. The colouring can be individualised with staining liquids and colours. Prettau® 2 Dispersive® is already provided with a natural colour transition during the manufacturing process, the manual colouring with stains is therefore not necessary, but can be carried out, if desired.

COLOURS

- *Prettau® 2: White, can be characterised individually by manual colouring*
- *Prettau® 2 Dispersive®: Pre-coloured with natural colour transition, restorations can be refined by manual accentuation*

INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, multi-unit up to full-arch bridges (full contour restorations or reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps: CAM dry processing, manual elaboration, colour individualisation (optional), sintering (1600 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)*
- *Processing tools: CAD/CAM Milling Burs Zirconia*
- *Characterisation: Colour Liquid Prettau® Aquarell and Intensive, ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains, ICE Stains Prettau® and ICE Stains 3D by Enrico Steger*



Prettau® 2 Dispersive®, designed monolithically (13–23)





PRETTAU® 3 DISPERSIVE®

With the Prettau® 3 Dispersive® zirconia, we have now developed a zirconia material characterised by a triple gradient using the Gradual-Triplex-Technology. In addition to the colouring, also translucency and flexural strength levels change. While the incisally increasing translucency results in a highly translucent incisal edge, the cervically increasing flexural strength results in an extremely high flexural strength at the tooth neck. Accordingly, Prettau® 3 Dispersive® can be used for all kind of zirconia restorations, although it is particularly suitable for monolithic restorations.

COLOURS

- Prettau® 3 Dispersive®: *Pre-coloured with natural colour transition, restorations can be refined by manual accentuation*

INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, veneers and bar-supported multi-unit bridges (full contour restorations or reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type. Especially suited for monolithic design

PROCESSING

- Processing steps: *CAM dry processing, manual elaboration, colour individualisation (optional), sintering (1500 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)*
- Processing tools: *CAD/CAM Milling Burs Zirconia*
- Characterisation: *Colour Liquid Prettau® Aquarell Intensive, ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains, ICE Stains Prettau® and ICE Stains 3D by Enrico Steger*







PRETTAU® 4 ANTERIOR® & PRETTAU® 4 ANTERIOR® DISPERSIVE®

With its excellent translucency properties, Prettau® 4 Anterior® was specially designed for use in the anterior region, but it can also be used in the entire jaw area. With the comparatively high flexural strength values (600 MPa), it represents an ideal alternative to lithium disilicate for up to three-unit restorations. The flexural strength remains constant even after simulated ten-year ageing (Bergler, MDT, University of Pennsylvania, 2018). The material allows fully anatomical design in the anterior and posterior region and is thus a guarantor against ceramic chipping. Restorations made of Prettau® 4 Anterior® can be individually coloured with the new Colour Liquid Prettau® 4 Anterior® Aquarell and provided with particularly vibrant luminosity. The polychromatic Prettau® 4 Anterior® Dispersive® is provided with a smooth, natural colour transition already during the sintering process. After sintering, a smooth, merging colour pattern is created from dentine to enamel. If desired, the colour can be individualised manually.

COLOURS

- *Prettau® 4 Anterior®: White; can be characterised individually by manual colouring*
- *Prettau® 4 Anterior® Dispersive®: Pre-coloured with natural colour transition, restorations can be refined by manual accentuation*

INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, maximum three-unit bridges (full contour restorations or reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps: CAM dry processing, manual elaboration, colour individualisation (optional), sintering (1500 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)*
- *Processing tools: CAD/CAM Milling Burs Zirconia*
- *Characterisation: Colour Liquid Prettau® 4 Anterior® Aquarell and Intensive, ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains, ICE Stains Prettau® and ICE Stains 3D by Enrico Steger*







ANATOMIC COLOURED

Anatomic Coloured is a pre-coloured zirconia material, where the shades correspond to the Vita shade system. The colouring substances are added to the zirconia powder already during the first production steps. This results in a comprehensive homogeneous colouring of the material. No manual characterisation is required before sintering. The material can be densely sintered immediately after milling. The range of indications of Anatomic Coloured varies from individual crowns to full-contour, 14-unit bridges.

COLOURS

Pre-coloured, can be characterised individually by manual colouring

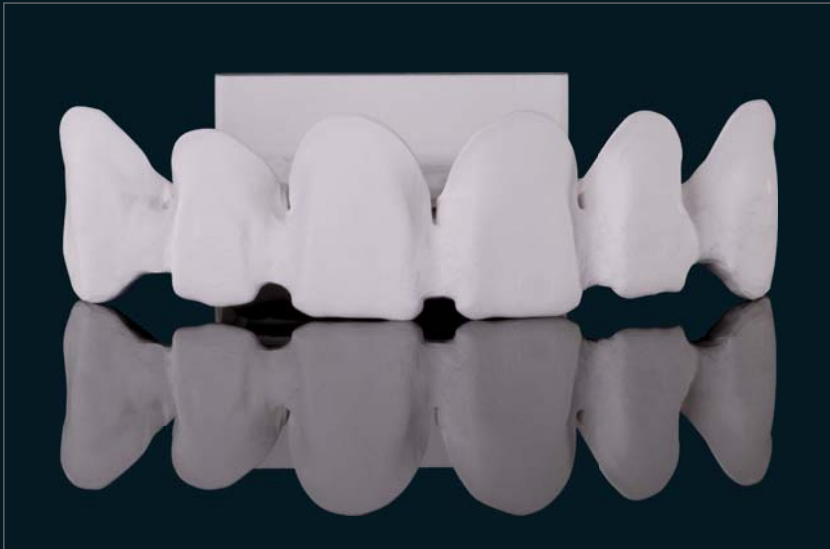
INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, veneers and up to full-arch bridges (full contoured or reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, colour individualisation (optional), sintering (1500 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)
- *Processing tools:* CAD/CAM Milling Burs Zirconia
- *Characterisation:* ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains, ICE Stains Prettau® and ICE Stains 3D by Enrico Steger







ICE TRANSLUCENT

Zirconia restorations made of ICE Translucent dispose of a particularly high flexural strength. With a flexural strength of up to 1400 MPa our zirconia is considered as one of the strongest available on the market. The material is used for the manufacture of aesthetical, high-quality and well-fitting dental prosthesis, which are veneered with ceramics.

COLOURS

White, can be characterised individually by manual colouring

INDICATIONS

For the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges (reduced structures for ceramic layering); frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, colour individualisation, sintering (1500 °C), ceramic layering (optional), colouring, cementation or screwing (with titanium bases)
- *Processing tools:* CAD/CAM Milling Burs Zirconia
- *Characterisation:* Colour Liquid, Colour Liquid Waterbased, ICE Ceramics, ICE Ceramics Dynamic Dentine and Fresco Ceramics (optional), ICE Stains and ICE Stains 3D by Enrico Steger







ZIRCONIA CREATIVE

With this zirconia, creativity knows no boundaries: jewellery, pendants, figures and other creative ideas can be created with this coloured zirconia. The final colour appears after the sintering process.

COLOURS

Green, violet, pink, lavendel, light-blue, dark-blue, black

INDICATIONS

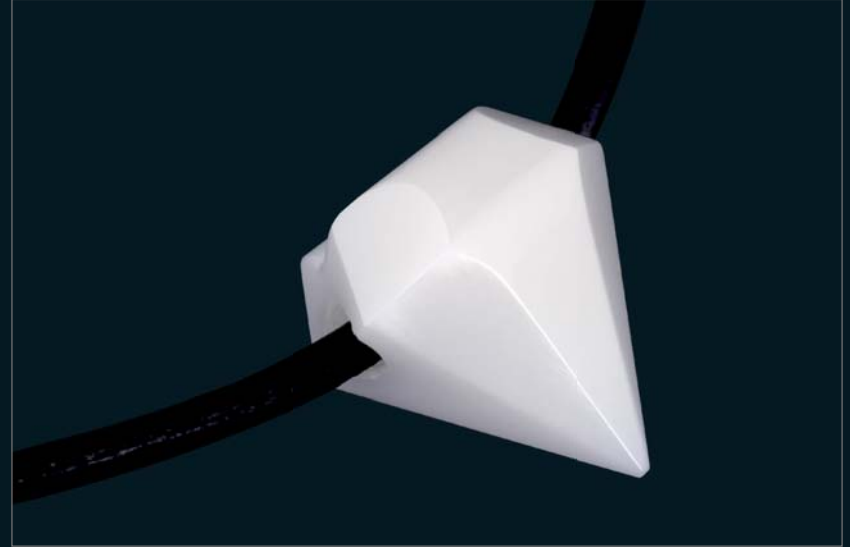
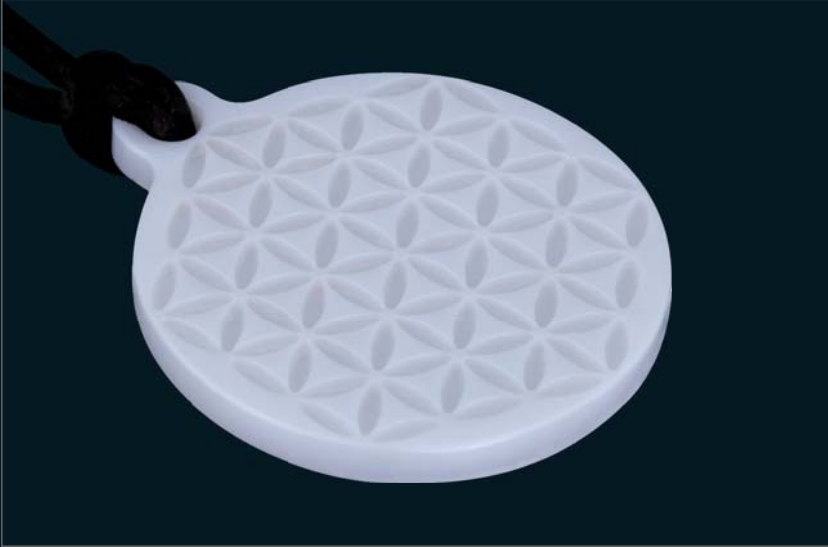
Coloured zirconia for the manufacturing of your own jewellery (e.g. rings, pendants) and other creative works

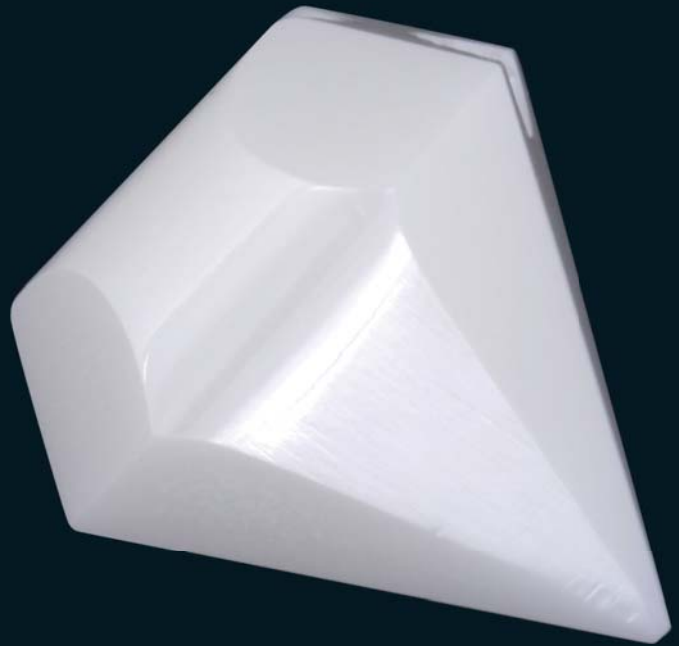
PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, sintering (1400 °C), colouring
- *Processing tools:* CAD/CAM Milling Burs Zirconia

Attention: No medical device!







The forerunners of today's plastics or artificial resins existed in all cultures, long before the industrial revolution. In 1531, an Augsburg priest used a complicated procedure to create artificial horn from skim cheese, which was used for the production of drinking vessels and jewellery.





RESIN

RESIN

The use of resin provisionals is the method of choice when it comes to quality control and patient satisfaction. They can be used both as an immediate restoration and as an important control step for the fabrication of the final restorations. They ensure planning reliability during the manufacture of each restoration and can be realised quickly and easily with CAD/CAM systems and different resin materials by Zirkonzahn. The patient wears the provisional to check fitting, functionality and aesthetics.

Resin provisionals can be aesthetically designed with veneer resins in the gingival area. In this way, both dentist and patient are able to get an immediate aesthetic impression of the final restoration already with the provisional. In addition, the patient is provided with an aesthetically pleasing resin temporary until the final restoration is ready.



PRIME

With its improved material properties, Prime resin is characterised by high strength properties and good translucency values. This makes the material suitable for a wide range of secondary and tertiary structures and it can be used for short-term as well as long-term temporary. The transparent Prime Transpa resin can be used for bite splints. Due to the resin's flexibility, slightly diverging insertion directions can be compensated.

COLOURS AND INDICATIONS

- *Prime:* A1–B1, A2–A3, B2–B3, C2–C3, A1, A2, A3, B2, B3; for the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges as short-term or long-term provisionals as well as different secondary and tertiary structures; removable, partially removable or fixed restoration type
- *Prime Transpa:* Transparent resin for the manufacturing of bite splints; removable restoration type
- *Prime Multistratum®:* Resin with natural colour gradient (A1-A2, A2-A3); for the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges as short-term or long-term provisionals as well as different secondary and tertiary structures; removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, stratification in the gingival area (optional), colouring, high-gloss polishing, cementation or screwing
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium
- *Characterisation:* Stratification with Gingiva-Composites (optional); application of light-curing stains possible







Prime Transpa

MULTISTRATUM® FLEXIBLE

Flexibility, easy processing, high quality, high durability, low plaque adhesion as well as unique aesthetics are characteristics of the high-performance Multistratum® Flexible resin. Due to the fact that it has no residual monomers and with up to 10 years of oral durability, the material is considered particularly biocompatible. The extremely high flexibility of the material reduces the risk of fracturing to a maximum, which results in very high-quality resin restorations. The smooth colour transition reproduces the natural colours from dentine to enamel and gives single crowns as well as 14-unit bridges an aesthetic effect.

COLOURS

A1–A2, A3; pre-coloured with natural colour transition

INDICATIONS

Flexible high-performance resin with natural colour transition for aesthetic resin restorations from single crowns to 14-unit bridges; removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, stratification in the gingival area (optional), colouring (optional), high-gloss polishing, cementation or screwing
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium
- *Characterisation:* Stratification (optional); application of light-curing stains possible







TEMP PREMIUM FLEXIBLE

Temp Premium Flexible resin has a particular natural-looking translucency, a stable surface density and is very flexible at the same time. These properties combined with the different colour variants lead to a wide range of applications. The material can be used both as short-term and long-term provisional.

COLOURS AND INDICATIONS

- *Temp Premium Flexible:* *For the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges for short-term or long-term provisionals and bite splints; A1–B1; A2–B2; A3–B3; removable, partially removable or fixed restoration type*
- *Temp Premium Flexible Transpa:* *Flexible transparent resin for the manufacturing of bite splints; removable restoration type*
- *Temp Premium Flexible Bleach:* *Particularly flexible bright and white resin for the manufacturing of single crowns and bridges*

PROCESSING

- *Processing steps:* *CAM dry processing, manual elaboration, stratification in the gingival area (optional), colouring (optional), high-gloss polishing, cementation or screwing*
- *Processing tools:* *CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium*
- *Characterisation:* *Stratification (optional)*







Temp Premium Flexible Transpa

ABRO® BASIC MONO & ABRO® BASIC MULTISTRATUM®

Abro® resin is characterised by improved translucency values, high flexural strength as well as fracture and abrasion resistance. Specifically designed for the production of single crowns, this resin is also well suited for the manufacture of long-term temporaries as well as different secondary and tertiary structures.

COLOURS

- *Abro® Basic Mono:* *Pre-coloured resin in dentine shades A1, A2, A3, B2, B3*
- *Abro® Basic Multistratum®:* *Pre-coloured resin with natural colour gradient in dentine shades A1–A2, A2–A3*

INDICATIONS

Specifically designed for the production of denture teeth, long-term temporaries as well as secondary and tertiary structures.

PROCESSING

- *Processing steps:* *CAM dry processing, manual post-processing, stratification in the gingival area (optional), high-gloss polishing, cementation or screwing*
- *Processing tools:* *CAD/CAM Milling burs PMMA and CAD/CAM Milling Burs PMMA Premium*
- *Characterisation:* *Stratification with Gingiva-Composites (optional)*







DENTURE GINGIVA BASIC

The gingiva-coloured Denture Gingiva Basic resin has been specially developed for the manufacture of denture bases. The flexibility combined with the high stability of the material leads to a maximally reduced breakage risk and very good processing properties. The resins are free of residual monomers, have a long-term stability and a long oral durability. It is therefore ideal for denture bases, long-term provisionals and prototypes.

COLOURS

Gingiva-coloured

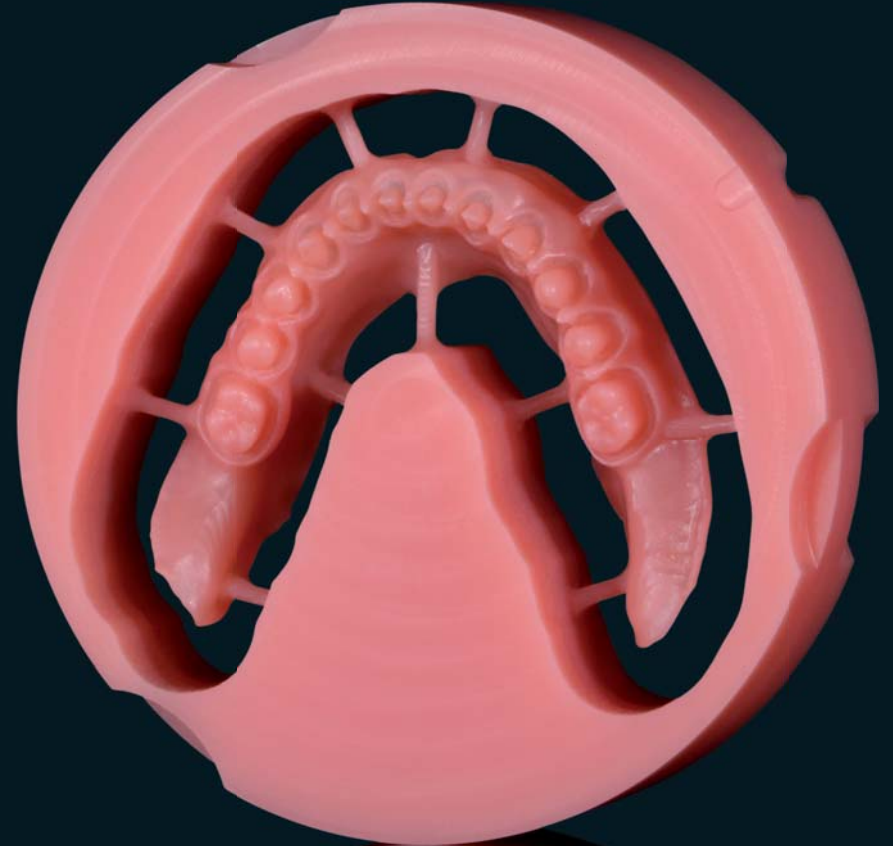
INDICATIONS

For the manufacturing of gingiva-coloured denture bases; removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual post-processing, stratification in the gingival area (optional), high-gloss polishing, cementation or screwing
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium
- *Characterisation:* Stratification with Gingiva-Composites (optional)







THERAPON TRANSPA

Therapon Transpa resin has been developed especially for the production of bite splints, orthodontic splints and occlusal splints for bruxism and is suitable for long-term use in the patient's mouth. The high transparency of the resin results in an unobtrusive aesthetic. The material is particularly biocompatible and stable in the mouth. The resin can be processed easily and polished very well. It shows low abrasion and is particularly deformation resistant. Furthermore, Therapon Transpa is extremely appealing to patients due to its simple usage and easy cleaning.

COLOURS AND INDICATIONS

Highly transparent resin for the manufacturing of surgical guides, bite splints, orthodontic splints and occlusal splints; removable restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, high-gloss polishing
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium





*MDT Michael Bergler, Philadelphia, PA
Dr. Brian Kasten, Philadelphia, PA*



TEMP BASIC

Temp Basic resin is ideal for the manufacture of provisional single crowns and bridges in the anterior and posterior region with a maximum time in situ of 6 months. The radioopaque Temp Basic X-Ray variant allows the try-in of any kind of restorations. Temp Basic Transpa was developed for bite splints. The gingiva-coloured Temp Basic Tissue material can be used for resin primary structures.

COLOURS AND INDICATIONS

- *Temp Basic:* For the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges for short-term provisionals; A1–B1, A2–B2, A3–B3; removable, partially removable or fixed restoration type
- *Temp Basic Transpa:* Transparent resin for the manufacturing of bite splints; removable restoration type
- *Temp Basic Tissue:* Gingiva-coloured resin for the manufacturing of primary structures; Tissue A, Tissue B, Tissue C, Tissue D
- *Temp Basic X-Ray:* X-ray opaque resin for the try-in of any kind of restorations

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, stratification in the gingival area (optional), high-gloss polishing, cementation or screwing
- *Processing tools:* CAD/CAM Milling Burs PMMA
- *Characterisation:* Stratification with Gingiva-Composites (optional)





Temp Basic Tissue



SCREW BLANK

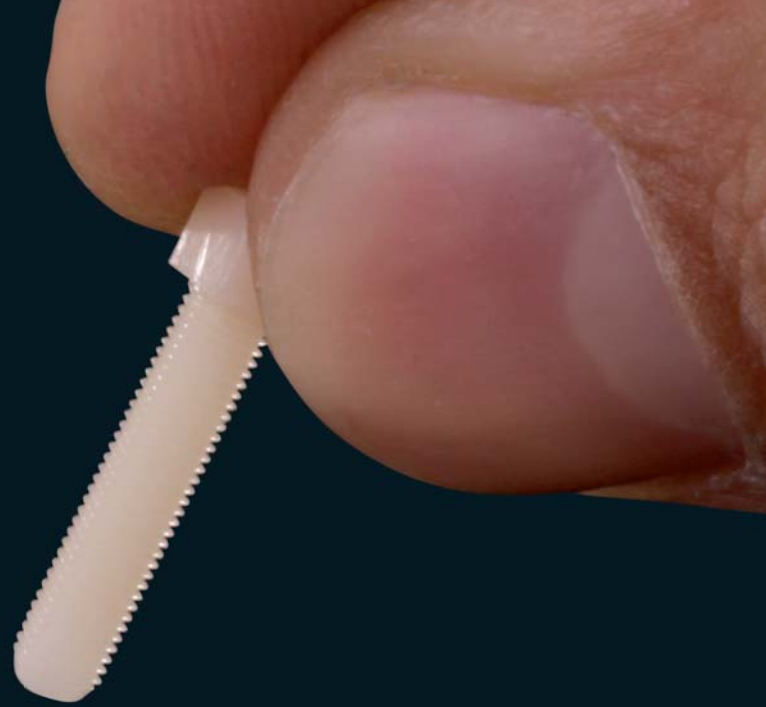
With special milling burs for threads, zirconia structures can be provided with screw channel threads for the simple and clean insertion into the patient's mouth. For sealing, the appropriate sealing screws are milled out of the Screw Blank material. The sealing screws also exert uniform counterpressure on the implant seat, which provides additional stability for implant-supported restorations. To remove the restoration, the dentist loosens the resin screws with an extractor fixed to the turbine. The screw channel remains intact and can be sealed easily using new resin threads when reinserting the restoration.

COLOURS AND INDICATIONS

Dentine-coloured resin in the colours A1–B1, A2–B2, A3–B3; especially for the manufacturing of sealing screws to seal zirconia structures with threaded screw channels in the patient's mouth

PROCESSING

- *Processing steps: CAM dry processing, screwing of the screw channel in the zirconia structure with the milled sealing screw in-situ, removal of the structure with the extractor fixed on the turbine (optional)*
- *Processing tools: Sealing screw: CAD/CAM Threads Milling Burs 1,8 G PMMA; removal: extractor for sealing screws*



Zirkonzahn®





TECNO MED

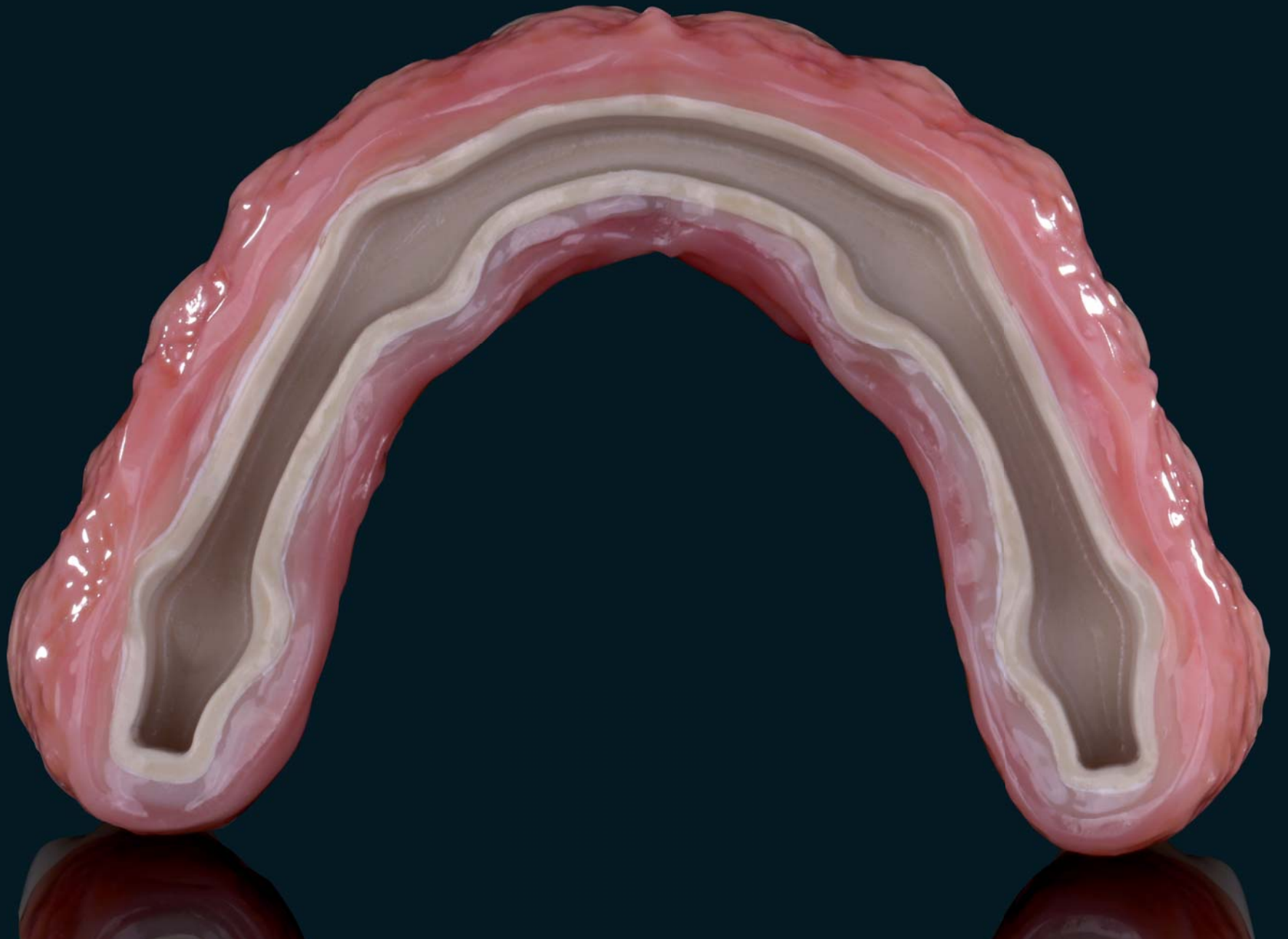
The high-performance Tecno Med resin has a high plaque resistance and an excellent biocompatibility. This makes it an ideal material for the treatment of allergy patients. Tecno Med is specifically designed for the manufacture of friction copings on telescopic crowns or attachments. A study carried out in September 2017 by the Polyclinic for Dental Prosthetics at the Ludwig-Maximilian University of Munich recommends – on the basis of the collected data – the use of CAD/CAM manufactured Tecno Med secondary parts as an alternative to the reliable electroformed secondary parts in the field of removable implant prosthetics.

COLOURS AND INDICATIONS

Grey-brown, for the manufacture of friction elements on telescopic restorations, bars or attachments

PROCESSING

- *Processing steps: CAM dry processing, manual elaboration, high-gloss polishing, cementation*
- *Processing tools: CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium*







TECNO MED MINERAL, TECNO MED MINERAL DENTINE, TECNO MED MINERAL TISSUE

Due to their first-class material properties, these high-performance resins are particularly suitable for the manufacture of permanent dentures. The semicrystalline arrangement of molecular chains results in excellent stability and chemical resistance (completely resistant to discolouration). The special ceramics reinforcement of Tecno Med Mineral makes it highly flexural and break resistant. Thanks to its gingival colour, Tecno Med Mineral Tissue is well suited for substructures of high-gingival percentage. Tecno Med Mineral Dentine enables an easy and natural imitation of bone and dentine colours.

COLOURS

- *Tecno Med Mineral:* *White*
- *Tecno Med Mineral Dentine:* *Dentine-coloured, for the natural imitation of bone and dentine colours*
- *Tecno Med Mineral Tissue:* *Gingiva-coloured, particularly suited for structures with a high-gingival percentage*

INDICATIONS

Reduced crowns and bridges (max. 2 pontics and 13 mm² connection cross-section), copings, frameworks for composite veneered bridges with Gingiva-Composites as well as secondary structures on bars or telescopic crowns; removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* *CAM dry processing, manual elaboration, ceramic veneering, high-gloss polishing, cementation or screwing*
- *Processing tools:* *CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium*
- *Further processing:* *Stratification with Gingiva-Composites*







BURNOUT

Burnout is a 100% residue-free combustible resin for the try-in of any restorative design and the subsequent use for casting and pressing technique. The structures are milled, finished, coated with conventional masses and sintered according to the specific parameters for resin milling.

COLOUR

Green

INDICATIONS

100% residue-free combustible resin for metal casting and pressing technique

PROCESSING

- *Processing steps:* CAM dry processing, manual finishing, coating, sintering, casting
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium







TRY-IN & BURNOUT

With Try-In and Burnout Zirkonzahn combines the properties of two different resins. On the one hand, thanks to its aesthetics and its favourable processing qualities, it is the ideal material for any try-in structure in the patient's mouth. The duration of the try-in in the mouth should not exceed 60 minutes. The tried-in structures can be subsequently scanned and transferred into the CAD/CAM software. On the other hand, it is 100% residue-free combustible which makes it suitable for casting or pressing techniques.

COLOUR

White

INDICATIONS

100% residue-free combustible burnout resin for any try-in in the patient's mouth as well as for the subsequent digitisation or in combination with investment material for casting or pressing techniques

PROCESSING

- *Processing steps:* CAM dry processing, manual post-processing, try-in in the mouth, digitisation or CAM dry processing, coating, sintering, casting
- *Processing tools:* CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium







TRY-IN

Try-In has been developed for the try-in of crown and bridge frameworks in the patient's mouth as well as for subsequent scanning and transferring of data into the CAD/CAM software. The tooth-coloured Try-In III resin can be used to carry out an initial try-in. The milled structures must not be left in the patient's mouth longer than 24 hours.

COLOURS

- *Try- In I:* *Bluish white colour*
- *Try- In II:* *White*
- *Try-In III:* *Similar to the tooth colour*

INDICATIONS

For the try-in of crown and bridge structures as well as for the subsequent scanning and transferring into the CAD/CAM software

PROCESSING

- *Processing steps:* *CAM dry processing, manual post-processing, try-in in the mouth, digitisation*
- *Processing tools:* *CAD/CAM Milling Burs PMMA and CAD/CAM Milling Burs PMMA Premium*







MODEL BLANK BEIGE

With the CAD/CAM Model Maker software module, different models (e.g. Geller models, models with implant analogues, dies, full-arch bridges) can be digitally created and articulated using intraoral scan data as well as impression scans or model scans. In the software it is possible to combine different model types with each other and to select a variety of base plates. The realisation of the CAD planning data is carried out in the Zirkonzahn milling units with Model Blanks. These are available in different sizes depending on the milling unit. With the extra large Model Blank M4 (39 x 17 cm) up to 20 full-arch bridges can be manufactured in one milling process in the M4 Wet Heavy Metal milling unit. Precise production is a prerequisite for the accuracy of the models. Short milling times and a high manufacturing precision can be achieved with the Zirkonzahn CAD/CAM system by marking those areas on the digital 3D model that need to be worked out with particular precision. In other areas, large quantities of material can be quickly removed with the CAD/CAM 6 T PMMA milling bur.

COLOURS AND INDICATIONS

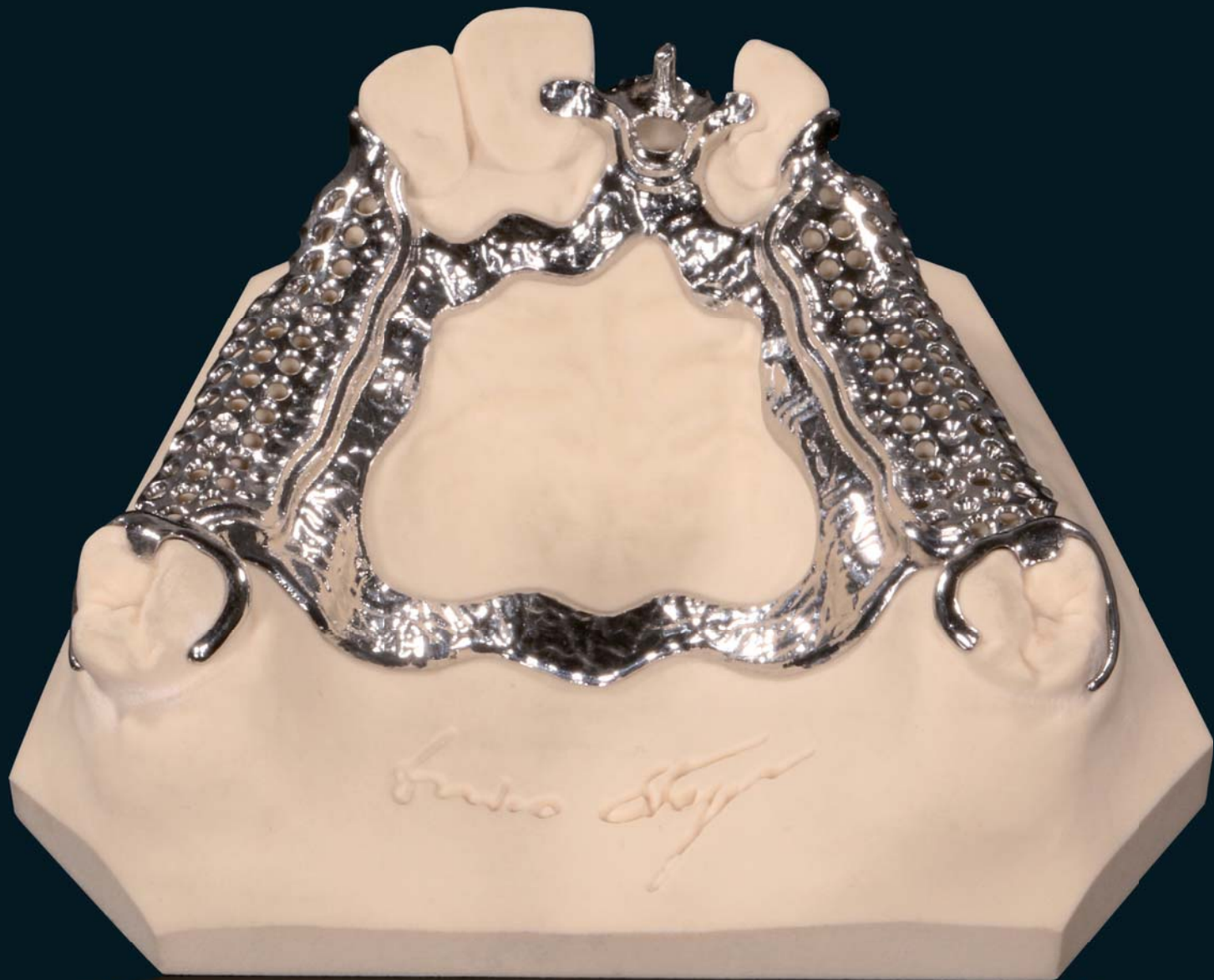
Beige resin for manufacturing models on the basis of intraoral scan data as well as impression scans or model scans

PROCESSING

- *Processing steps:* CAM dry processing
- *Processing tools:* CAD/CAM Milling Burs PMMA, especially CAD/CAM Milling Burs 6 T PMMA to remove large material quantities
- *Software:* CAD/CAM Model Maker software module; Zirkonzahn.Nesting







According to Greek mythology, Daedalus, father of Icarus, created wings from feathers and wax and attached them to his and his son's arms so they could fly like birds. However, Icarus came too close to the sun, which melted the wax; he crashed and drowned in the sea.

WAX

WAX & SKELET WAX

Wax can be used to create inlays, onlays, single crowns and even multi-unit bridges for casting or pressing techniques. Wax is not a medical device; the waxes vary in terms of hardness and finishing properties. The harder a wax, the stiffer; the softer a wax, the easier it is to elaborate. Thanks to their low melting interval, wax burns off without residue. Skelet Wax is a 100% burn-out wax with high stability for casting technique. It is particularly suitable for the production of partial dentures and combined structures (telescopes and attachments).

COLOURS

- Wax:



Hard

The harder, the more warp resistant it becomes

Soft and stiff

The softer it is, the easier it is to process

- Skelet Wax:



INDICATIONS


Wax can be used for the manufacturing of partial and single crowns, inlays, onlays, veneers, multi-unit to full-arch bridges for casting or pressing techniques. Skelet Wax has been specially developed for the manufacturing of partial dentures and combined structures such as telescopes and attachments

PROCESSING

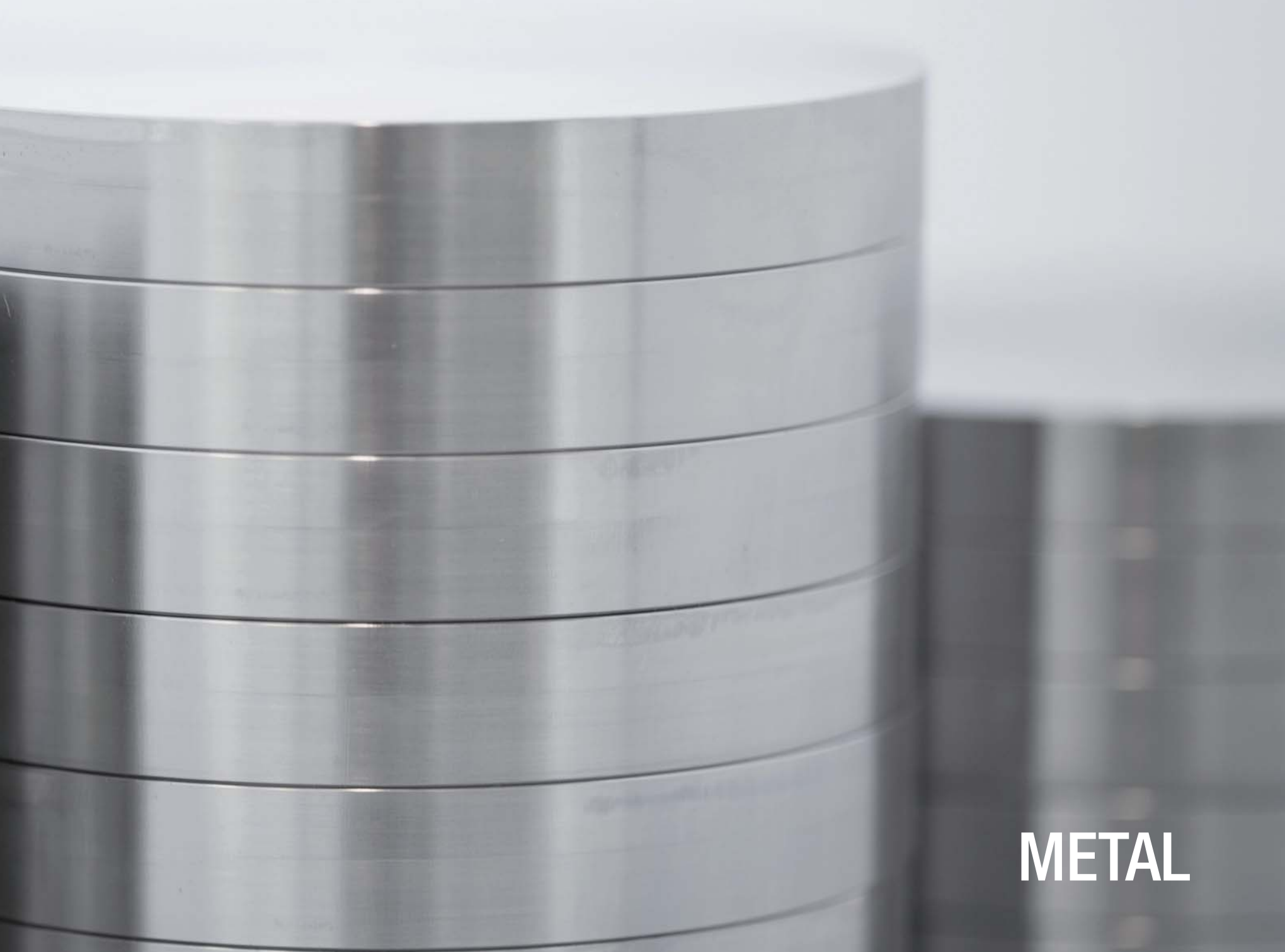
- Processing steps: CAM dry processing, manual finishing, coating, sintering, casting
- Processing tools: CAD/CAM Milling Burs WAX

Attention: No medical device!





Already periods of prehistory and early history are named after metals, for example Bronze Age and Iron Age. This illustrates the outstanding importance of robust materials for the development of mankind and technical progress.



METAL

METAL

With the arrival of the CAD/CAM technology, it became possible to design also metals more efficiently in the own laboratory. The processing of titanium in particular was extremely time-consuming over a long time. Today, structures made of sinter metal, cobalt-chrome or titanium can be manufactured in a large variety. The advantages of the materials can be used particularly well in combination with aesthetic materials such as zirconia, resin or ceramics.



SINTERNIT & SINTERNIT POSTCORE

The blanks made from a cobalt-chrome alloy (non-precious metal) are highly pre-compressed and slightly sintered, which enables the milling of all dental restorations using a pre-sintered material. The material has a shrinkage factor of just 7%, which makes the torsional stability during the sintering process very high. All dental restorations can be sintered with a total lack of stresses and are swing-free. The specially developed sintering technology with high vacuum enables sintering without shielding gas and residual oxidation.

COLOURS

Metallic, can be covered with Metal Opaquer or characterised through galvanisation (optional)

INDICATIONS

Dimensionally stable Sinternit for the manufacturing of single crowns up to 14-unit bridges, metal structures, telescopes, bars, dowels and attachments; removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM dry processing, manual elaboration, sintering without shielding gas, application of the light-curing composites Metal Opaquer, metal ceramics or galvanisation (optional), high-gloss polishing, cementation or screwing
- *Processing tools:* CAD/CAM Milling Burs Sintermetall, tungsten-carbide burs







COCRONIT BASIC & COCRONIT SUPERIOR

The metal alloy Cocronit Superior is at the same time hard and elastic, therefore it is particularly suited for the manufacture of delicate structures, metal frameworks which can be veneered with ceramics, dental restorations with friction elements or telescopic partial dentures. Especially the slightly softer Cocronit Basic material can be recommended for restorations with friction elements. Already existing structures can be easily connected or expanded with basic parts using soldering or laser technology.

COLOUR

Metallic, can be covered with Metal Opaquer (optional)

INDICATIONS

For the manufacturing of reduced and fully anatomic metal frameworks as well as for bar constructions and telescopic partial dentures; frictionally removable, partially removable or fixed restoration type

PROCESSING

- *Processing steps:* CAM processing: Cocronit Superior: dry; Cocronit Basic: wet; manual elaboration, application of the light-curing composites Metal Opaquer or all commercially available veneer ceramics for metal (optional)
- *Processing tools:* CAD/CAM Milling Burs CrCo, tungsten-carbide burs







TITANIT 5

Titanium combines material hardness with low weight and is therefore used in a wide variety of applications, e.g. in aerospace technology. The material is considered as very health-friendly and it is also used in medicine for many years now, especially in the implant surgery. This is due to the corrosion resistance of the material and the naturally emerging oxide layer on the surface, which, among others, favours the solid growth of the bone on the implant (osseointegration). These properties are also used in dental technology. Our Titanit 5 (titanium alloy Ti-6Al-4V ELI according to ASTM F136; ISO 5832-3) is suitable for the fabrication of stabilising substructures such as titanium bases, bars or metal frameworks. Using the Titanium spectral-colouring Anodizer, titanium structures can be anodised in the desired colour (e.g. golden). In this way, the grey value of the titanium is reduced and the primary structures are less visible under zirconia abutments.

COLOURS

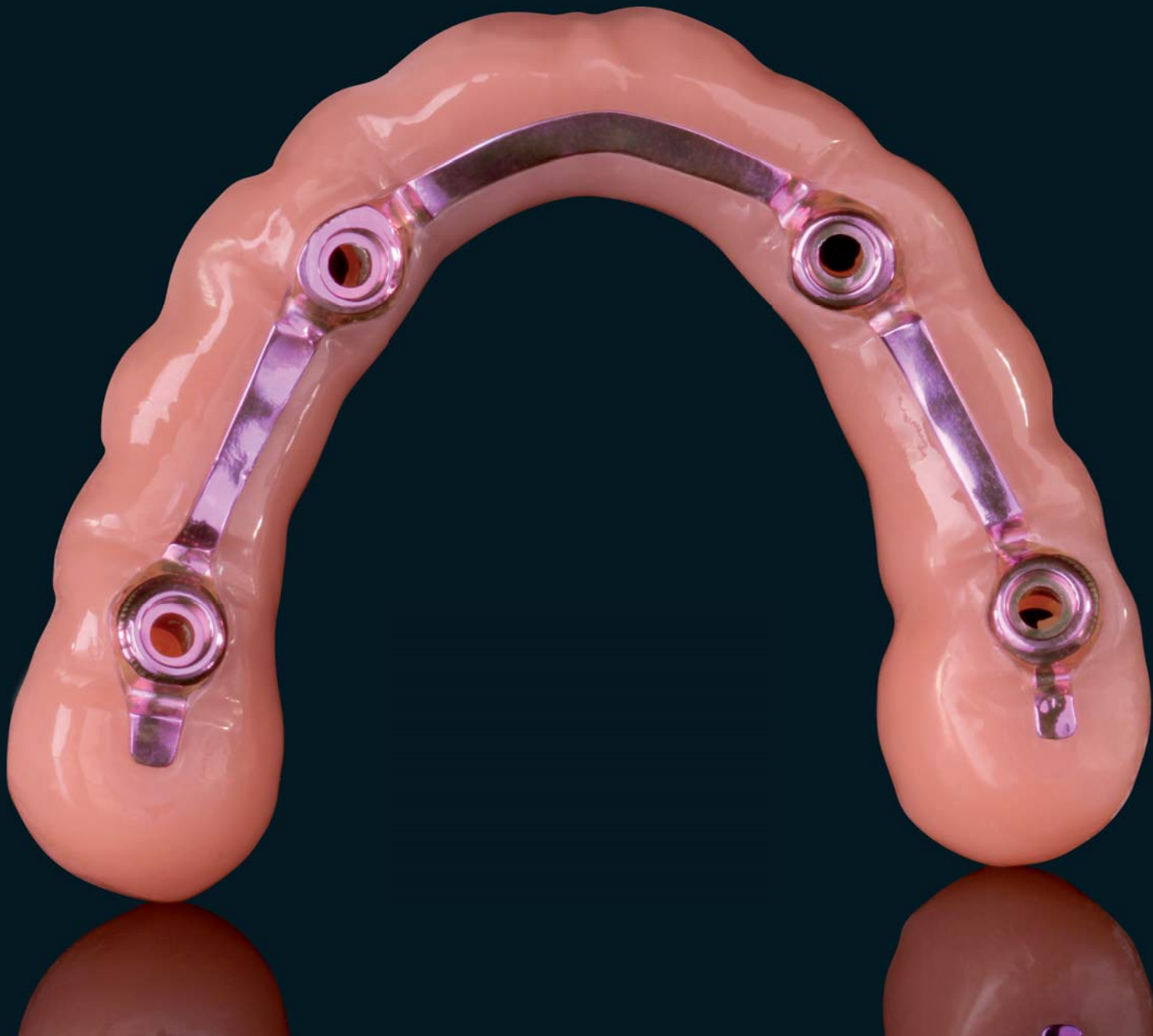
Metallic, can be anodised in different colours (e.g. golden) with the Titanium spectral-colouring Anodizer or covered with Metal Opaquer (optional)

INDICATIONS

- *Titanit 5 blanks:* *For the manufacturing of metal structures for veneering with ceramics as well as bars and implant constructions; frictionally removable, partially removable or fixed restoration type*
- *Raw-Abutments®:* *Precast abutment blanks for the manufacturing of individual abutments with precast implant connections*

PROCESSING

- *Processing steps:* *CAM wet processing, manual elaboration, application of the light-curing composites Metal Opaquer or titanium ceramics (optional), high-gloss polishing, anodisation (optional), cementation or screwing*
- *Processing tools:* *CAD/CAM Milling Burs Titan, tungsten-carbide burs*







It used to be said that wood was the primary substance from which the universe was created. Today, wood is a symbol for nature, a symbol with which humankind feels closely connected.



WOOD

WOOD

Wood stands in an incomparable way for genuineness, well-being and design variety.

There are more than 25,000 types of wood worldwide. We have used some of them to create material blanks for individual art works and collector's items.

COLOURS

Maple, acacia, apple, pear, bubinga, ebony, oak, cherry, nut, olive, cedar, swiss pine

INDICATIONS

For the manufacturing of your own jewellery (e.g. rings, pendants) and other creative works

PROCESSING

- *Processing steps:* CAM dry processing
- *Processing tools:* CAD/CAM Milling Burs PMMA

Attention: No medical device!











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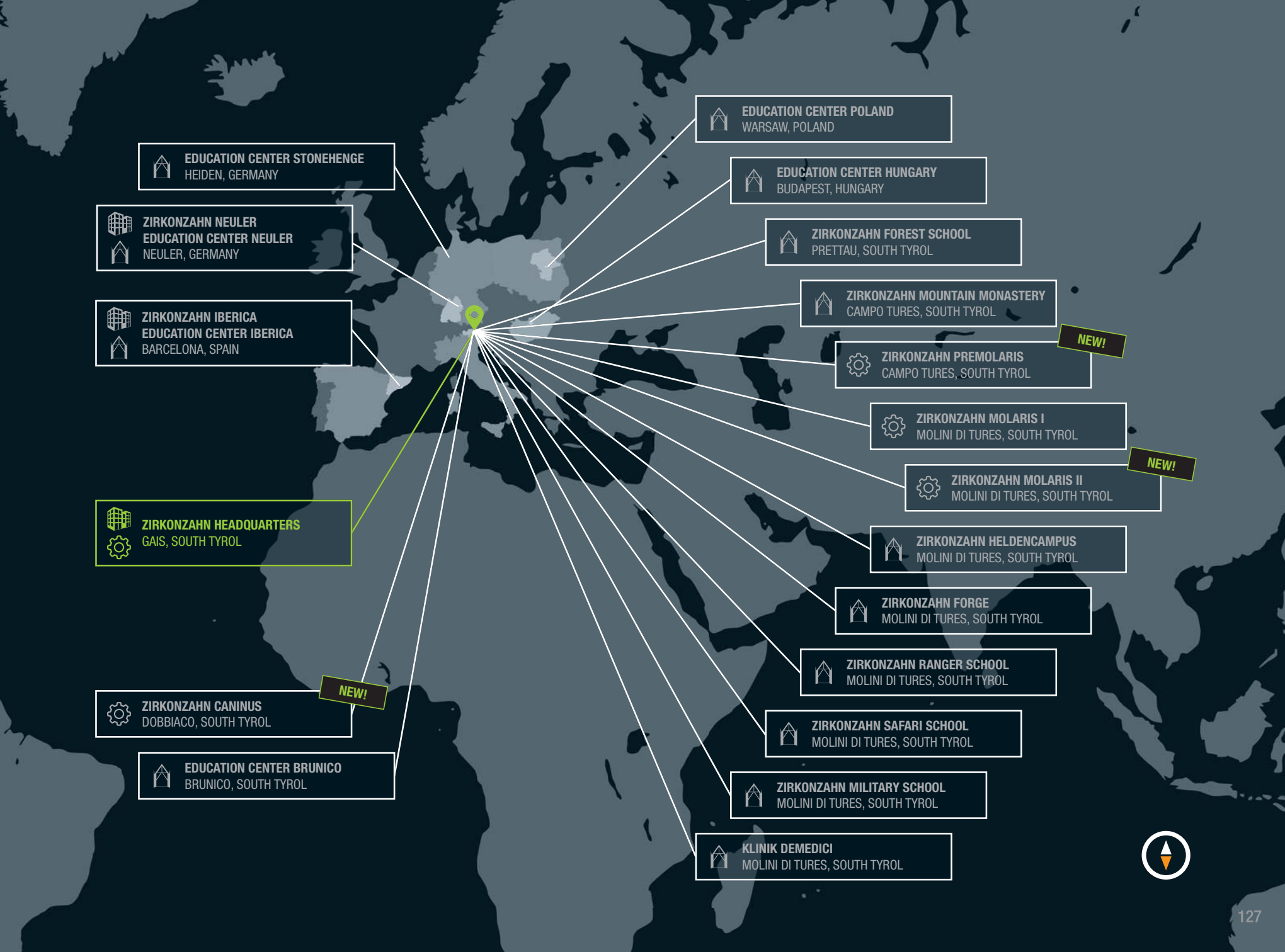
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WE FORGE HEROES – OUR EDUCATION CENTERS



We love what we do and we care about passing on what we know. We want to convince other people to do as we have done, and for this reason we have created an extraordinary educational programme and built training centers all over the world. Our aim: helping our clients to be among the very best and sharing with them our innovative solutions.





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NEW!

NEW!



MATERIAL DIVERSITY

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