Abutment Solutions

For customized implant restorations fabricated with CEREC and inLab



passion vision innovation

The digital treatment workflow



Digital impression taking



Digital planning



3D X-ray



Fabrication of the drilling template



Implantation*

Coordinated digital workflows in CAD/CAM technology open up new possibilities for

taking to the final restoration – and ensure functional, highly esthetic, innovative and

cost-efficient results.

implant-supported prosthetics – from impression



Implant design



Placement / Check-up*







Temporary restoration made of Telio[®] CAD A16*

Permanent restoration made of IPS e.max[®] CAD*

Shaped emergence profile following a temporary restoration*

> Together with Ivoclar Vivadent's innovative restorative materials, the CAD/CAM technique facilitates the planning and fabrication of implant-supported restorations – from temporary to permanent implant prosthetics.

The following products are available for the fabrication of Abutment Solutions:

- Telio[®] CAD A16
- IPS e.max[®] CAD A14 / A16
- Multilink[®] Hybrid Abutment



Telio CAD A16 and IPS e.max CAD blocks optimally complement each other. Therefore, CAD/CAM users are provided with a complete digital workflow which enables them to reliably fabricate temporary restorations and permanent hybrid abutment crowns. "



Dr A. Kurbad, Germany

Telio CAD A16 blocks close the gap in the system chain of the proven IPS e.max CAD Abutment Solutions by including the temporization stage. The temporary restoration can be incorporated immediately after the implantation procedure or after the healing phase. Furthermore, it offers many options in terms of soft tissue management. Therefore, Telio CAD A16 forms the basis for an esthetic and functional treatment result.

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The temporary – treatment



Hybrid abutment crown made of Telio CAD A16:

- Cemented to the TiBase, suitable for immediate load-bearing or after the healing phase
- Easily designed emergence profile
- Visualization of the permanent restoration
- Blocks are available in the size A16 and in the six LT shades (BL3, A1, A2, A3, A3.5, B1)

With Telio[®] CAD A16 from the temporary...

Telio® CAD A16 is intended for the CAD/CAM-supported fabrication of temporary hybrid abutment crowns. This 2-in-1 solution, i.e. crown and abutment combined, is used after the insertion of the implant and before the placement of the permanent restoration made of IPS e.max[®] CAD in the anterior and posterior region.

Telio CAD A16 supports the reconstruction of the gingiva during the first treatment phase. The surrounding soft tissue is individually formed.

The homogeneous, highly cross-linked PMMA block Telio CAD A16 features a predefined interface of size S or L for the direct cementation with the Sirona TiBase.



Hybrid abutment crown



Telio[®] CAD

TiBase

Digital, individualized patient treatment in detail:



Clinical situation: Preparation for the digital, intraoral impression taking



Temporary hybrid abutment crown made of Telio® CAD A16





Optional: Design of the emergence profile by composite layering

...to the final implant-supported IPS e.max[®] CAD restoration

Once a permanent solution is required, IPS e.max[®] CAD can be used to fabricate individual, implant-supported hybrid structures for single-tooth restorations using CAD/CAM technology.

Depending on the indication, a tooth-shaded hybrid abutment with separate crown or a monolithic hybrid abutment crown can be fabricated. The particularly strong (360 MPa) lithium disilicate glass-ceramic ties in seamlessly with the temporary Telio CAD restoration.

The IPS e.max CAD blocks A14 and A16 feature a predefined interface of size S or L for the direct cementation of the restoration with the Sirona TiBase.

all you need The permanent restoration – flexibility during treatment

all ceramic

Hybrid abutment and hybrid abutment crown made of IPS e.max CAD:

- Excellent fit due to CAD/CAM processing technology
- High and durable esthetics due to tooth-shaded hybrid abutment
- Hybrid abutment crown (2-in-1) offers functionality and efficiency
- High biocompatibility with oral soft tissue





Shaped emergence profile after removal of the temporary



Milled abutment crown made of IPS e.max[®] CAD



Clinical try-in



Final, seated IPS e.max® CAD hybrid

abutment crown

Multilink[®] Hybrid Abutment – strong bond and esthetics

Telio[®] CAD and IPS e.max[®] CAD restorations are cemented to the TiBase in only a few steps.

Multilink[®] Hybrid Abutment

The self-curing luting composite Multilink Hybrid Abutment is used for the permanent cementation of ceramic and PMMA structures made of IPS e.max CAD or Telio CAD, for example, to TiBases.

This results in:

- a permanent cementation due to high bond strength values;
- optimal esthetics due to two available opacity levels;
- easy handling due to the convenient Automix syringe.



IPS e.max[®] CAD







The opacity of other cementation materials is significantly too low.

SR Connect

Multilink[®] Hybrid Abutment Self-curing dental luting composite

> The bonding agent conditions the temporary restoration made of Telio CAD A16 and prepares it for the cementation with Multilink Hybrid Abutment.

Monobond[®] Plus

The universal primer conditions the TiBase and IPS e.max CAD restoration and prepares both for the cementation with Multilink Hybrid Abutment.









Optimum esthetics is achieved as the TiBase is entirely masked with Multilink Hybrid Abutment.

IPS e.max[®] CAD Abutment Solutions – biocompatible and reliable

Physicochemical and biological study on the properties of polished versus glazed lithium disilicate ceramics (IPS e.max[®])

University of Reims, France

The surface of the specimens made of IPS e.max (LS_2) glass-ceramic was treated with one of the following three methods: untreated, manually polished or glazed. Thermanox served as control. The cell reaction on the polished and glazed surfaces was analyzed using a cell culture model based on chicken epithelium.

Study examining the reliability and failure types of ceramic abutments

New York University, USA

Specimens which were made of an IPS e.max (LS_2) hybrid abutment and screwed to an implant were prepared. IPS e.max (LS_2) crowns were cemented to the abutment.

Result

Cell adhesion and proliferation (i.e. density) were higher on the polished than on the glazed surfaces. No cytotoxicity occurred in any of the specimens. Therefore, the high-strength lithium disilicate ceramic is not only a promising solution for esthetic implant abutments but it is also particularly suitable for sealing the periimplant bond.



Result

During the stress test in a universal testing machine, 100% of the hybrid abutments and hybrid abutment crowns made of IPS e.max (LS_2) glass-ceramic withstood a load of 280 N before fracture. The implant screw represented the system's weak point in all specimens. The screw fractured before any damage to the crown or abutment occurred.

Source: V.P. Thompson et al., see IPS e.max® Scientific Report Vol. 02/2001-2013

Source: C. Brunot-Gohin et al., see IPS e.max[®] Scientific Report Vol. 02/2001-2013

Fixed Prosthetics

Products for the fabrication of Abutment Solutions form part of the "Fixed Prosthetics" category. The products of this category cover the procedure involved in the fabrication of fixed prosthetic restorations – from temporization to restoration care. The products are optimally coordinated with each other and enable successful processing and application.

	A REAL PROPERTY AND A REAL				
OptraGate ®	IPS e.max®	Programat®	IPS e.max [®]	Multilink®	Cervitec®
PREPARE	RESTORE	PROCESS	FINISH	PLACE	MAINTAIN

THESE ARE FURTHER PRODUCTS OF THIS CATEGORY:



- The comprehensive solution covering all indications
- Highly esthetic, high-strength materials for the press and CAD/CAM technique
- Unique lithium disilicate (LS₂) and zirconium oxide (ZrO₂) ceramics for restorations ranging from thin veneers to long-span bridges
- Flexibility of cementation: adhesive, self-adhesive and conventional

Cervitec[®]

The protective varnish containing chlorhexidine and thymol



Maintaining the quality of restorations

- Targeted Professional application in risk areas
- Effective Intensive care for high-quality restorations
- Efficient Optimum pink-white esthetics

Would you like to know more about the products of the "Fixed Prosthetics" category? Simply get in touch with your contact person at Ivoclar Vivadent or visit www.ivoclarvivadent.com for more information.

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