

# IPS e.max<sup>®</sup> Press Abutment Solutions

Efficiency and esthetics redefined



**all** ceramic  
**all** you need

## More press ceramic options ...



Press ceramics have been synonymous with the ideal combination of accuracy of fit, shape and function for decades. In addition, the IPS e.max Press lithium disilicate glass-ceramic (LS<sub>2</sub>) offers an outstanding strength of 400 MPa.

The already extensive indication range – from thin veneers (0.3 mm) and monolithic crowns to anterior and premolar bridges – has now been expanded to include hybrid abutment restorations.

With IPS e.max Press, you can fabricate such restorations in combination with a titanium base (Ti base). Two different approaches are available for this purpose:

- hybrid abutments and
- hybrid abutment crowns.

Both solutions show outstanding function, efficiency and esthetics. The durable bond to the Ti base is achieved by means of the self-curing Multilink® Implant luting composite.

IPS e.max Press Abutment Solutions are an integral part of the "Competence in Implant Esthetics" concept of Ivoclar Vivadent.

# ... thanks to hybrid abutment restorations

high esthetics

efficiency

strong bond



## The adequate solution for every case

Generally, pressed abutment restorations can be fabricated in two ways:

### • Efficient and supremely esthetic

In this case, fabricating a customized, tooth-coloured hybrid abutment and subsequently an IPS e.max all-ceramic crown is the right choice. The final outcome features a harmonious, highly esthetic appearance – due to the lifelike shade design of both the abutment and the transition area to the crown.

### • Supremely efficient and esthetic

To meet these requirements, the two-in-one option is recommended: a hybrid abutment crown, which combines the abutment and the monolithic crown in one piece. Thus, innovative implant-supported restorations are fabricated highly efficiently. Intraoral cementation and the bothersome removal of excess material are a thing of the past.

### Hybrid abutment

IPS e.max Press LS<sub>2</sub>



Ti base



### Hybrid abutment crown

IPS e.max Press LS<sub>2</sub>



Ti base



## The highlights

- Pressed hybrid abutment solutions from your laboratory
- High, lasting esthetics, also in cases of gingiva recession, thanks to tooth-coloured hybrid abutments
- Hybrid abutment crowns (two-in-one) for function, efficiency and access to the screw at any time
- Excellent bond strength between LS<sub>2</sub> and the Ti base due to Multilink Implant

# Hybrid abutments for maximum esthetics



Hybrid abutments are individually pressed LS<sub>2</sub> abutments which are luted to a Ti base. The shape, emergence profile and esthetic properties of such abutments can be ideally adjusted to the clinical situation.

## Individualized esthetics

With LS<sub>2</sub> glass-ceramics, the esthetic possibilities are virtually limitless, particularly in the anterior region. Given the material's fluorescence in conjunction with individual characterizations, a lifelike appearance is achieved near the root and the transition area to the crown. With the preparation margin of the crown located on the gingiva level, the geometry of the hybrid abutment allows for an easy integration of the restoration. Excess cementation material can thus be easily removed.

## Flexibility due to laboratory fabrication

The pressed LS<sub>2</sub> abutment is extraorally luted to a Ti base with Multilink Implant, then screwed into place in the oral

cavity and finally provided with a permanent IPS e.max crown. As the hybrid abutment is conveniently fabricated in the lab, the process is time-saving and flexible.

## New possibilities for high-quality restorations

IPS e.max Press hybrid abutments are a new alternative to prefabricated or customized abutments made of other materials. This innovative solution is ideally suitable for durable, highly esthetic restorations also in patients who suffer from gingiva recession.



Initial situation prior to the implantation



Contoured emergence profile



IPS e.max Press hybrid abutment and IPS e.max crown



Screwed-in hybrid abutment



Crown luted to hybrid abutment

# Hybrid abutment crowns for an efficient two-in-one solution



A hybrid abutment crown is an abutment and a monolithic crown in one. This is an efficient two-in-one solution made of lithium disilicate (LS<sub>2</sub>), which is directly luted to a Ti base.

#### Efficient fabrication: two in one

LS<sub>2</sub> glass-ceramics provide strength, durability and efficiency, particularly in the posterior area. Moreover, the material offers the well-known esthetic properties. Restorations can furthermore be characterized with IPS e.max Ceram stains.

#### Luted extraorally, screwed in intraorally

The monolithically pressed hybrid abutment crown is reliably luted to the Ti base by means of Multilink Implant. Then, the restoration is screwed onto the implant – in one piece. Thus, the bothersome task of excess removal is a thing of the past. Subsequently, the screw access channel is sealed with a composite material (e.g. Tetric EvoCeram®). If required, the screw can be accessed at any time, which affords the dental team clinical flexibility.

#### New possibilities for economically efficient restorations

Hybrid abutment crowns made of IPS e.max Press are a new, economically attractive alternative to conventional implant-supported restorations, particularly for the posterior area, where strength, durability and convenient clinical handling matter.



Contoured emergence profile



IPS e.max Press hybrid abutment crown



Screwing in the hybrid abutment crown



Sealing the screw channel with composite material



Seated hybrid abutment crown

## Precision and excellent esthetic integration



“ IPS e.max Press abutments are ideally suited to be used in the field of esthetic implant dentistry. Instead of adding layering ceramic to abutments, pressed ceramic objects are conventionally fabricated and luted to titanium bases. With these abutment solutions, I can achieve a high level of precision, excellent esthetic integration and high fracture strength. In five years of clinical use, not a single failure has occurred. ”

**August Bruguera, dental technician,  
Spain**



Clinician: Oriol Llena, Spain

## Creating optimized emergence profiles



“ I have been successfully using lithium disilicate on titanium abutments for some years now. This material allows me to create an optimized emergence profile quickly and easily, and this contributes to the beautiful appearance of my IPS e.max all-ceramic restorations. ”

**Christian Coachman, dentist and dental technician, Brazil**



Clinician: Mauro Fradeani, Italy  
Eric von Dooren, Belgium

# Biocompatibility and ideal bond



Ronny Watzke, Ivoclar Vivadent, Liechtenstein

## Good biocompatibility

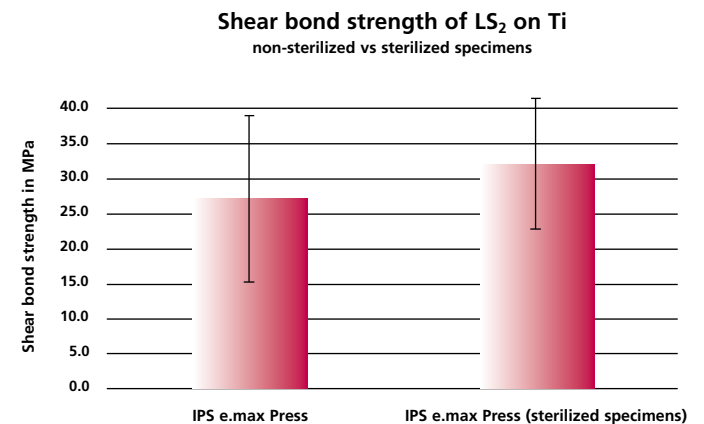
An optimum biocompatibility is decisive for a durable and successful material used in conjunction with abutments and implant-supported restorations. Numerous studies carried out over many years confirm the good biocompatibility of IPS e.max Press (LS<sub>2</sub>) glass-ceramic with the oral soft tissue.

"[...] regarding the periodontal parameters, no significant differences ( $P > 0.05$ , Wilcoxon rank sum test) were found when pocket depth, bleeding on probing and tooth mobility were compared between test and control teeth."

S. Wolfart, S. Eschbach, S. Scherrer, M. Kern (2009). "Clinical outcome of three-unit lithium-disilicate glass-ceramic fixed dental prostheses: up to 8 years results." *Dental Materials* 25(9).

## Cementation: an integral part of the process

The results of bond strength tests confirm the high quality of the adhesive bond between IPS e.max Press (LS<sub>2</sub>) and Ti bases. The quality of the bond is not compromised if IPS e.max Press restorations are sterilized according to the respective guidelines, as impressively shown by the comparison of non-sterilized and sterilized test specimens.



Source: R&D Ivoclar Vivadent, Liechtenstein, 2011



# Seating and aftercare



## IPS e.max® Abutment Solutions CEM Kit

The IPS e.max Abutment Solutions Cementation Kit offers an ideally coordinated range of products for the cementation of hybrid abutments made of  $LS_2$  and  $ZrO_2$  to Ti bases.

It contains all the components that are required to prepare and perform a clinical try-in (e.g. Virtual® Extra Light Body Fast Set) and all the materials that are needed to permanently cement restorations to Ti bases (e.g. Multilink Implant). The self-curing luting composite Multilink Implant has been specifically developed for the permanent cementation of implant-supported restorations. In conjunction with the Monobond® Plus primer, this material yields excellent bonding values.



## Implant Care Program

Implant Care comprises a coordinated range of products for the professional care of patients during the different phases of an implant treatment and the lifelong aftercare.

Products for professional cleaning (e.g. Proxyt®) and bacteria control (e.g. Cervitec®) contribute to maintaining the quality of implant-retained restorations in the long-term. As a result, implant-supported restorations made of IPS e.max Press are treated and maintained in an optimum fashion, with regard to both function and esthetics.

# IPS e.max<sup>®</sup> Press Abutment Solutions

all ceramic  
all you need



This product forms part of our All-Ceramics and Implant Esthetics competence areas. All the products of these areas are optimally coordinated with each other.

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