

IPS Empress® System – Information for Dentists

Confidence

Reliability

Esthetics



# IPS Empress® System

*The world's leading all-ceramic*

ivoclar  
vivadent®

# IPS Empress®



## IPS Empress®

### The world's leading all-ceramic

IPS Empress revolutionized all-ceramic materials and esthetic dentistry more than 15 years ago.

Due to the many advantages of this leucite reinforced glass-ceramic, such as its properties and high precision, IPS Empress has evolved into the "gold standard" for dental professionals and patients, with more than 33 million restorations placed to date.

The system has gained a reputation for producing long-lasting, natural-looking results and maintaining high quality standards.



#### HIGHLIGHTS OF THE IPS EMPRESS SYSTEM

- IPS Empress Esthetic and IPS Empress CAD have the same material composition
- More than 15 years of experience with leucite glass ceramics
- Proven ceramic material with a flexural strength of 160 MPa
- Highly esthetic restorations

# System

## Proven and esthetic...

More than 15 years of clinical success and proven reliability provides dentists worldwide with the confidence they need to prescribe IPS Empress—dentistry's #1 all-ceramic brand.

The IPS Empress material is composed of an extremely homogeneous leucite-based ceramic that scatters light like natural enamel, and blends well with surrounding dentition.

Because the pressed ceramic **IPS Empress Esthetic** and the new ceramic blocks **IPS Empress CAD** are based on the same material composition, the two products demonstrate exceptional optical properties and strength values of 160 MPa. When these materials are used to create highly esthetic all-ceramic single tooth restorations, such as inlays, onlays, crowns and veneers, they blend seamlessly with the surrounding dentition.



SEM images of IPS Empress Esthetic and IPS Empress CAD

Source: R&D Ivoclar Vivadent AG, Schaan, Liechtenstein

### IPS Empress Esthetic Veneers

Adhesively luted with Variolink® Veneer



Pre-operative view



Removal of temporaries and cleaning preparations



Try-in and shade preview



Systemp® desensitizer



Application of Excite® light cure bonding agent



Load restoration with cement & seat



Clean up



Final restorations in place



Post-operative view

Images courtesy of Dr. Ron Ritsco



## Esthetic and true-to-nature

Accurate shade selection is the basis for a true-to-nature restoration. The shade of the prepared tooth, the shade of the restoration and layering ceramic, and ultimately the shade of the selected cement all contribute to the appearance of lifelike restorations.

The Chromascop shade guide and the new Bleach BL shade guide offer valuable support for accurate shade selection. The IPS Natural Die Material shade guide helps determine the shade of the prepared tooth which, together with the desired tooth shade, determines the shade of the final restoration.



OptraGate is a helpful accessory during shade selection. This flexible lip and cheek retractor gives you easier access to the oral cavity and enlarges the treatment field. Furthermore, it is comfortable for patients to wear and latex free.

In response to the growing demand for lighter tooth colors, the IPS Empress System product line now includes materials to achieve modern Bleach shades: BL1–BL4. The new Bleach shades can be reproduced using both IPS Empress Esthetic and IPS Empress CAD.



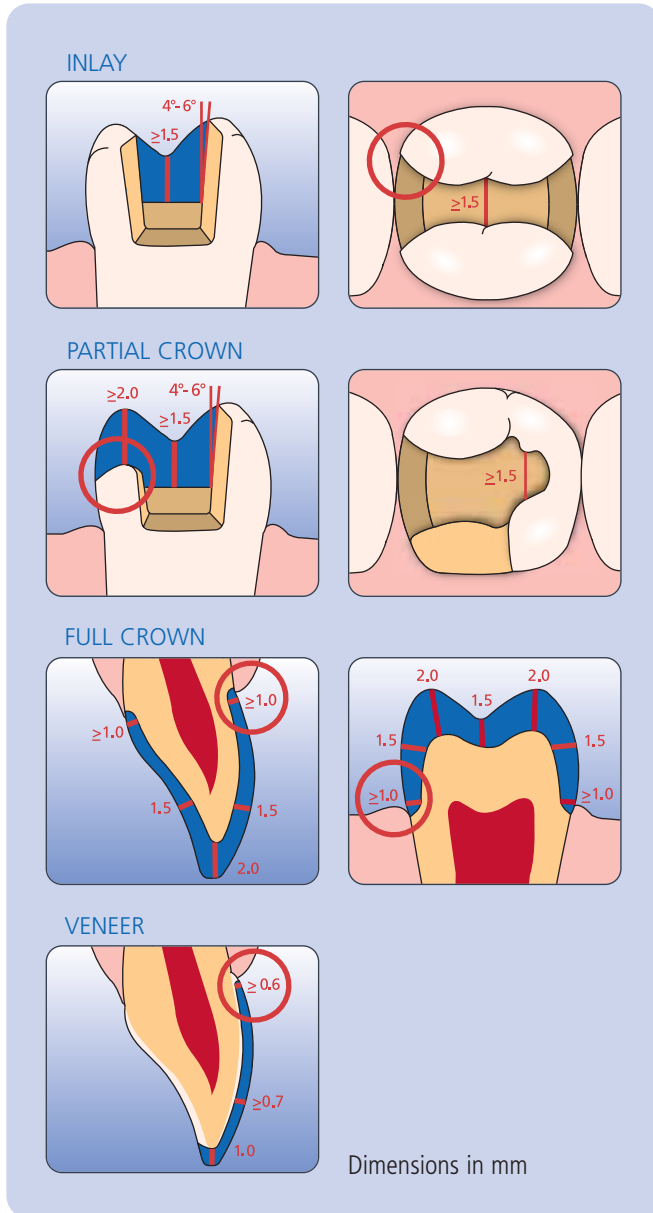
IPS Natural Die Material



New Bleach shades BL1 to BL4

# System

## Minimally invasive



A careful preparation is critical for the durability and accuracy of fit of the restoration.

Therefore, design the margin carefully with a circular shoulder or chamfer preparation with rounded inner edges.

Avoid sharp transitions, inner angles, and feather edges.

Observe the necessary minimum wall thickness in order to ensure the adequate stability of the restoration.

Since the restorations are seated with the adhesive cementation technique, the actual preparation can be restricted to the actual defect thus preserving healthy tooth structure.

**IPS Empress Esthetic Crowns**  
Adhesively luted with Multilink® Automix



Pre-operative view



Check fit



Hydrofluoric etch & silanation of restorations



Application of self-etching primer



Lightly air dry



Load restoration with cement



Seat & remove excess cement



Light cure



Post-operative view

Images courtesy of Dr. Rob Ritter



# IPS Empress® System

## The right choices in adhesive cementation procedures

For the adhesive cementation of your IPS Empress restorations, you can depend on the clinically proven Ivoclar Vivadent cementation materials and accessories.

The **OptraDam** facilitates the adhesive cementation of IPS Empress restorations by fully and gently retracting the lips and cheeks. Therefore, it renders the oral cavity more easily accessible and the treatment field much larger. Simultaneously it isolates all four quadrants.

The **Variolink II** luting cement has been used for more than 10 years and in over 20 million restorations. It's the world's most successful highly esthetic material linking the clinical experience gathered over many years to the proven IPS Empress material.

**Multilink Automix** is the most versatile of the luting composites. It's applied quickly and easily in combination with the self-etching Multilink Primer A/B. Apart from its ease of use and wide range of indications, Multilink Automix demonstrates excellent bonding and dentin sealing properties.



### Brightening Effect



The light-cured **Variolink Veneer Cement** has been specially developed for placing highly esthetic restorations such as veneers. As a result of the simplified "value shade system" glass ceramic restorations can be lightened or darkened in stages.

The high light intensity of the **bluephase 16i** curing unit shortens the light polymerization times when cementing your IPS Empress restorations. The unit has three different curing modes and can be operated without a power cord, which further simplifies your working procedures.



|                               | Variolink®<br>(Variolink II, Variolink Veneer) | Multilink® Automix |
|-------------------------------|--|--------------------|
| Veneers                       | ✓  | ✗                  |
| Inlays                        | ✓  | ✓                  |
| Onlays                        | ✓  | ✓                  |
| Partial Crowns                | ✓  | ✓                  |
| Anterior and Posterior Crowns | ✓  | ✓                  |
|                               | ✓ Indicated                                    | ✗ Contraindicated  |

## The success rate achieved with IPS Empress is convincing!



Dr. Michael Sesemann:  
 "IPS Empress has set the standard for all-ceramic restorations and it has always been my material of choice. With the addition of IPS Empress Esthetic, I can achieve even greater results with its lifelike vitality and its expanded shade range."



Dentistry by Dr. Michael Sesemann / Lee Culp



Dr. John Roberts:  
 "IPS Empress has always given me great results. With IPS Empress Esthetic, I am achieving even better results with more lifelike restorations. The improved ingots and the wider shade range give me the highly esthetic results my patients demand."



Dentistry by Dr. John Roberts / Matt Roberts



Dr. Michael Miyasaki:  
 "In dentistry, we are used to seeing products become obsolete... IPS Empress just keeps getting better. After being a reliable esthetic material that I've used for a decade it has become even more reliable and more esthetic."



Dentistry by Dr. Michael Miyasaki / Jürgen Seger

## Experts agree:

**10-year clinical performance**  
 IPS Empress restorations received high patient and dentist acceptance for resistance to fracture and wear and for excellent aesthetics. "The Dental Advisor" continues to highly recommend IPS Empress after 10 years in service.

The Dental Advisor (2004); 21(3):6



**Clinical evaluation of leucite-reinforced glass ceramic crowns over 11 years**

**Survival rate after 11 years: 95.2%**

M Fradeani, M Redemagni, Quintessenz (2003); 54:379-386

**Leucite-reinforced glass ceramic inlays and onlays after eight years in vivo**

**Survival rate after 8 years: 92%**

N Krämer, A Petschelt, R Frankenberger J Dent Res Spec Iss (2002); 81: Abstr #1696:A-224

**Four-year survival rate study of IPS Empress restorations**

**Postoperative sensitivity with Syntac/Variolink II and Syntac/Dual Cement accounts for less than 1%**

L Pröbster, HJ Ulmer, E Engel Ann Conf DGZPW (1996); Abstr #70:59

**Six-year follow-up with IPS Empress veneers**

**Survival rate after 6 years: 98.8%**

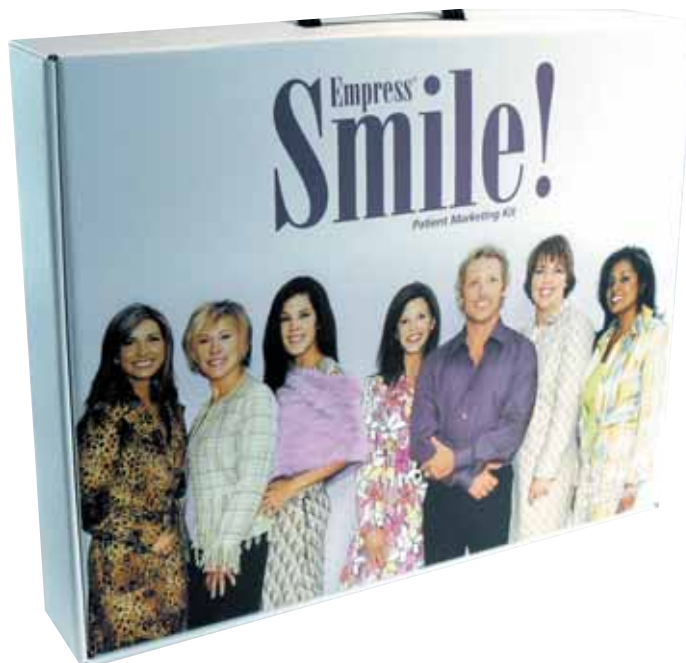
M Fradeani, Int J Periodont Rest Dent (1998); 18:217-225



# IPS Empress® System

A variety of marketing and educational materials are available to help you share the energy and excitement generated by IPS Empress. These resources include the EMPRESS SMILE Patient Marketing Kit and other dentist-to-patient education materials.

Ask your Ivoclar Vivadent consultant for more detailed information about the individual IPS Empress products and cementation systems or visit [www.ivoclarvivadent.us](http://www.ivoclarvivadent.us)



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