

Confidence

Reliability

Esthetics



IPS Empress® System

The world's leading all-ceramic

IPS Empress®



 IPS Empress® S

A time-tested system offers new possibilities

IPS Empress revolutionized the processing of ceramic materials more than 15 years ago. Due to the many advantages of leucite-reinforced glass-ceramic, for example, its aesthetic properties and high precision, IPS Empress has evolved into the "gold standard" for both dental professionals and patients, with more than 33 million restorations having been fabricated with the material to date. The system has gained a reputation for producing long-lasting, natural-looking results and maintaining high quality standards.



Therefore, the time has come to fulfil this demand by introducing a new IPS Empress material.

IPS Empress System has been continuously further developed to keep abreast of the latest trends. As a consequence, decisive enhancements have been made with regard to its aesthetics and function and its processing properties. New processing technologies, such as CAD/CAM, allow you to fabricate IPS Empress all-ceramic restorations chairside.



Since the expectations of patients with regard to aesthetics and biocompatibility have continued to rise quite considerably, all-ceramics have become very popular.

You will be able to restore the smile of even your most discerning patients. Irrespective of the processing technique preferred, the IPS Empress System continues to be synonymous with highly aesthetic fully anatomic single tooth restorations fabricated with all-ceramics.

HIGHLIGHTS OF THE IPS EMPRESS SYSTEM

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

Proven and aesthetic...

More than 15 years of clinical experience gives you a good feeling. You can depend on the time-tested and aesthetic IPS Empress System.

The IPS Empress material is made of an extremely homogeneous leucite-based ceramic, which scatters light like natural enamel and blends in well with its surroundings. Restorations fabricated with the material exhibit lifelike translucency and a true-to-nature appearance.

As the press ceramic **IPS Empress Esthetic** and the new ceramic blocks **IPS Empress CAD** are based on the same materials composition, the two products demonstrate exceptional light-optical properties and strength values of 160 MPa. The highly aesthetic all-ceramic single tooth restorations, such as inlays, onlays, crowns and veneers blend in 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 Veneer

Adhesively luted with Variolink II/Excite DSC

Dr Dr Andreas Rathke / Urs Spirig



Tooth 21 featuring a discoloured composite build-up



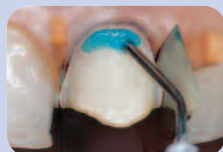
Preparation for IPS Empress Esthetic Veneer



Etch the veneer with IPS Ceramic Etching Gel and rinse



Silanize the veneer with Monobond-S



Etch enamel with phosphoric acid (Total Etch)



Etch dentin with Total Etch



Rinse phosphoric acid with water



Apply Excite DSC on enamel and dentin and disperse with blown air



IPS Empress Esthetic Veneer seated with Variolink II

Aesthetic and true-to-nature

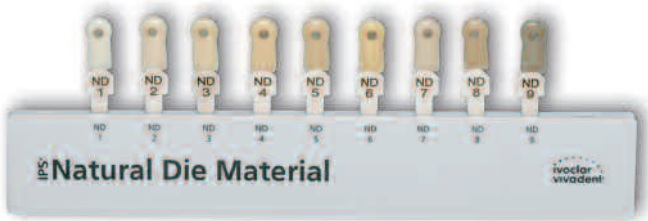
The accurate shade is the basis for a true-to-nature restoration, as the shade of the prepared tooth, the shade of the restoration and layering ceramic and ultimately the shade of the cementation material are decisive for fabricating lifelike restorations.



OptraGate is a helpful accessory during shade determination. This elastic lip and cheek retractor gives the practitioner easier access to the oral cavity and enlarges the treatment field. Furthermore, it is very comfortable for patients to wear.

The Chromascop shade guide offers 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 - is decisive for the shade of the restoration.

In response to the growing demand for lighter tooth colours, the products of the IPS Empress System are also available in four modern Bleach shades: BL1–BL4. The new Bleach shades can be reproduced using both IPS Empress Esthetic and IPS Empress CAD.



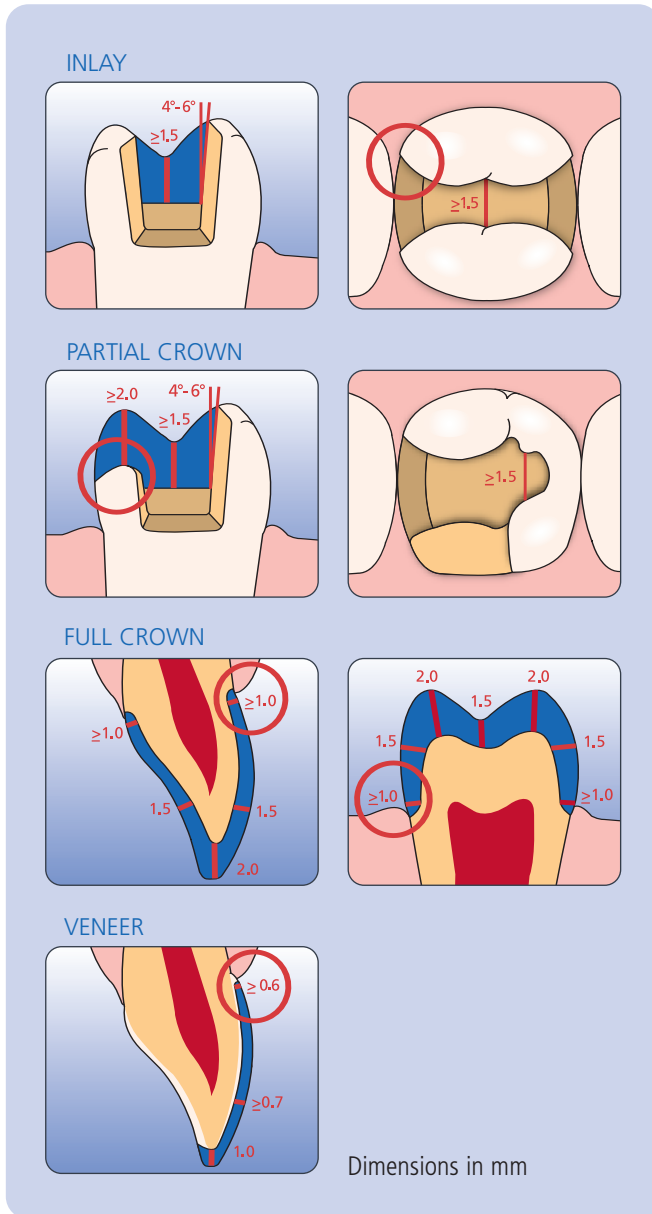
IPS Natural Die Material



New Bleach shades BL1 to BL4

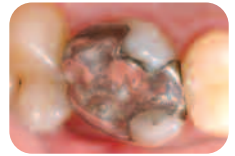
Dr Arnd Peschke / Katja Maier

Defect-oriented and minimally invasive



Careful and defect-oriented preparation is not only decisive for the durability and accuracy of fit of the restoration, it will also be gentle to the tooth structure.

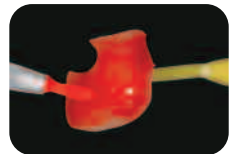
It is important to properly design the margin with a circular shoulder or chamfer preparation and rounded inner aspects. Transitions with sharp angles and feather edge margins should be avoided. In order to achieve a stable restoration, the minimum wall thicknesses have to be observed.



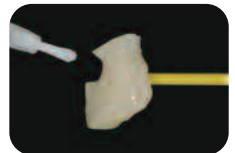
Tooth 16 with defective amalgam filling



Preparation for IPS Empress Esthetic partial crown



Etch partial crown with IPS Ceramic Etching Gel and rinse



Silanize with Monobond-S and apply Heliobond



Etch enamel with Total Etch. If desired, etch dentin too.



Apply Syntac Primer and dry with a stream of air



Apply Syntac Adhesive and dry



Apply Heliobond on enamel and dentin and disperse



IPS Empress Esthetic partial crown seated with Variolink II

The right choice in adhesive cementation procedures

In the adhesive cementation of your IPS Empress restorations you can depend on the clinically proven Ivoclar Vivadent cementation materials.

The **OptraDam** facilitates the adhesive cementation of IPS Empress restorations. It fully and gently retracts the lips and cheeks and therefore renders the oral cavity more easily accessible and the treatment field much larger, while at the same time isolating all four quadrants.

The **Variolink II** luting composite has been used for more than ten years and in over 20 million restorations. It is the world's most successful highly aesthetic material concept, which links the clinical experience gathered over many years to the proven IPS Empress material.



Multilink Automix is the most versatile of the luting composites. It is 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.



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



The high light intensity of the **bluephase** curing unit reduces the light polymerization times in the cementation of your IPS Empress restorations. The unit has three different curing modes and is operated without a power cord, which additionally simplifies working procedures.

	Variolink® (Variolink II, Variolink Veneer)	Multilink® (Multilink, Multilink Automix)
Veneers	✓	✗
Inlays	✓	✓
Onlays	✓	✓
Partial crowns	✓	✓
Anterior and posterior crowns	✓	✓
	✓ Especially recommended	✗ Contraindicated

Experts agree: 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

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



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 aesthetic results my patients demand.»



Dentistry by Dr John Roberts / Matt Roberts

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



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



Dentistry by Dr Michael Miyasaki / Jürgen Seger

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

Additional information on the IPS Empress System is available for dental laboratories and on IPS Empress CAD for chairside use.

For detailed information on our cementation materials please refer to the respective brochures.

You can inform your patients on all-ceramics with the available Patient Information.

Ask your Ivoclar Vivadent consultant for more detailed information about the individual IPS Empress products and cementation systems or have a look at **www.ivoclarvivadent.com**