

IPS Empress[®] SYSTEM
Information for
DENTISTS

Confidence

Reliability

Esthetics



IPS Empress[®] SYSTEM

The ultimate esthetic restorative system


ivoclar
vivadent[®]
passion vision innovation

IPS Empress®

A TIME-TESTED SYSTEM...

For nearly 20 years, IPS Empress® has been associated with the highest level of esthetics in the reconstruction of dental defects. More than 40 million restorations speak for the durable lifelike appearance, the continuing success and the high quality standard of the material.

The IPS Empress System has been further developed and continues to enthuse users with decisive improvements in terms of esthetics, function and processing.

In 2004, the system was further expanded and optimized with the introduction of the new **IPS Empress Esthetic** pressable ceramic.

This was followed by the release of **IPS Empress CAD** in 2006, creating an opportunity for esthetic restorations to be milled using CAD/CAM technology now also at the chairside.



... WITH MANY OPTIONS



IPS Empress Direct®, which was introduced in 2009, is the latest addition to the IPS Empress System. This composite material for direct restorative procedures provides dentists with the esthetics of a ceramic with the convenience of composite.

The 3 flowable **IPS Empress Direct Flow "Art"** materials have been launched in 2010 in order to enable users to optimally refine restorations fabricated with this material by adding individual characterizations. In 2011, **IPS Empress Direct Color** will be introduced and supplied in 7 characterization shades. The opaquer **IPS Empress Direct Opaque** will round off the system range.

HIGHLIGHTS

- Highly esthetic all-ceramic restorations
- Proven ceramic material with a flexural strength of 160 MPa
- 20 years of experience with leucite glass-ceramics
- Same materials composition for IPS Empress Esthetic and IPS Empress CAD

IPS Empress® System		
DENTAL TECHNICIANS	CAD/CAM USERS	DENTISTS
IPS Empress Esthetic	IPS Empress CAD	IPS Empress Direct
		
Lab-fabricated ceramic restorations	Lab- or chairside-fabricated ceramic restorations	Direct composite restorative therapy

IPS Empress®

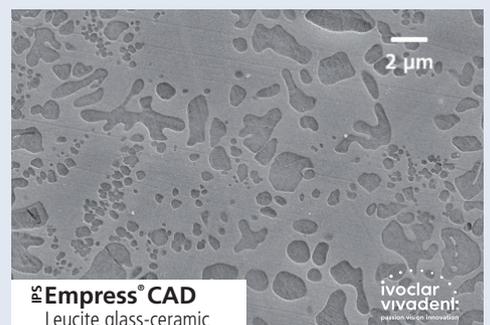
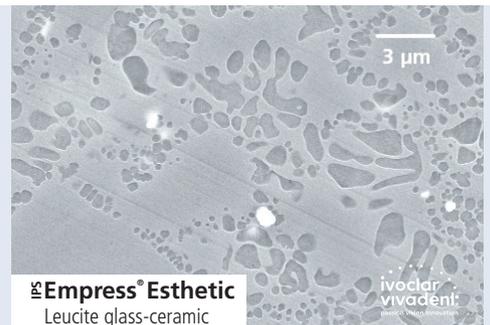
THE MATERIAL PROVEN AND ESTHETIC

Twenty years of clinical experience give you a good feeling. You can depend on the time-tested and esthetic IPS Empress system.

The IPS Empress all-ceramic material is made of an extremely homogeneous leucite-based ceramic, which scatters light like natural enamel and blends in well with its surroundings. This material impresses users with its lifelike translucency and true-to-nature esthetic properties.

As the press ceramic **IPS Empress Esthetic** and the 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 esthetic 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, 2006

SHADE SELECTION

ESTHETIC AND NATURAL-LOOKING

The accurate shade is the basis for a true-to-nature restoration, as a lifelike appearance depends on:

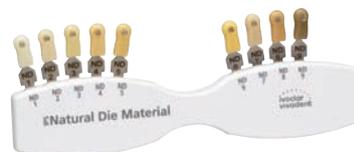
- The shade of the preparation
- The shade of the restoration (ingot/block/layering material)
- The shade of the cementation material

The IPS Natural Die Material shade guide helps determine the shade of the prepared tooth. The shade of the restoration results from the determined shade of the preparation and the desired tooth shade.

In response to the growing demand for lighter tooth shades, 4 bright, modern Bleach shades (BL1 to BL4) are available.



OptraGate is a helpful accessory during shade determination. The 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.

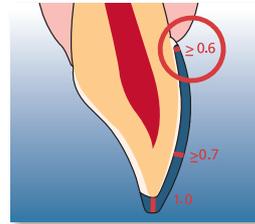


PREPARATION MINIMALLY INVASIVE AND CONSERVATIVE

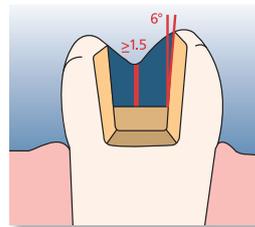
Careful preparation is decisive for the durability and fit of the restoration. Minimally invasive preparation helps to preserve tooth structure.

It is important to properly design the margin with a circular shoulder or chamfer with rounded inner edges. Transitions with sharp angles and feather edge margins must be avoided.

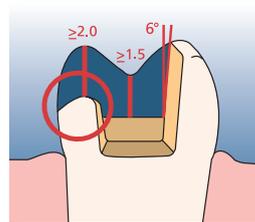
In order to achieve a stable restoration, the minimum wall thicknesses have to be observed.



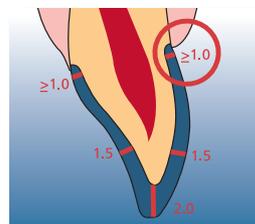
Veneer



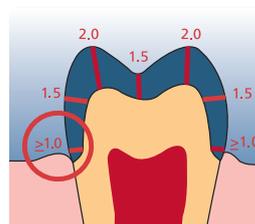
Inlay



Onlay



Anterior crown



Posterior crown

IPS Empress Esthetic

Veneer adhesively
cemented with
Variolink® II / Excite® DSC

Tooth 21 with
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®
Plus



Etch the enamel
with phosphoric
acid (Total Etch)



Etch dentin
with Total Etch



Rinse off phos-
phoric acid with
water spray



Apply Excite DSC
to the enamel and
dentin and dis-
perse with air

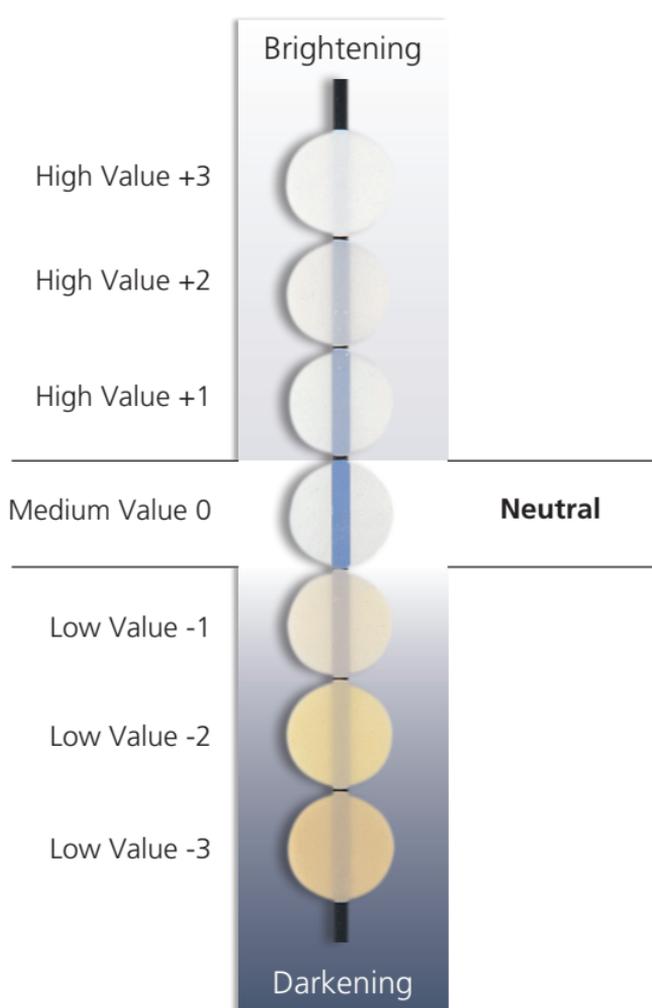


IPS Empress
Esthetic Veneer
seated with
Variolink II



CEMENTATION ADHESIVE AND PROVEN

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



The light-curing **Variolink[®] Veneer** has been specially developed for placing highly esthetic translucent restorations, such as veneers.

As a result of the value shade concept, this material allows the shade to be brightened or darkened in several steps.

IPS Empress CAD

onlay adhesively cemented
with Variolink® II / Syntac®

Tooth 26 with
amalgam
filling



Preparation for
an IPS Empress
crown



Etch crown with
IPS Ceramic
Etching Gel and
rinse



Silicize crown
with Monobond
Plus



Etch enamel
with phosphoric
acid (Total Etch)



Application of
the Syntac
adhesive system
(3 steps)



Adhesive
cementation
with Variolink II



Polishing with
the OptraFine
polishing system



IPS Empress CAD
Multi crown
seated with
Variolink II



The **Variolink® II** luting composite has been used for more than 10 years and in over 20 million restorations. It is thus the world-leading material concept for highly esthetic applications and links the clinical experience gathered over many years with the proven IPS Empress all-ceramic.



The **OptraDam** facilitates the adhesive cementation of IPS Empress restorations. As the lips and cheeks are gently retracted around the entire circumference of the mouth, much easier access to a considerably enlarged working area is created. At the same time absolute isolation is achieved.



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 wide range of indications, Multilink Automix demonstrates excellent bonding and dentin sealing properties.

The high light intensity of the **bluephase®** curing unit reduces the light-polymerization times.

The unit has three different curing modes and is operated without a power cord, which additionally simplifies working procedures.

	Variolink®	Multilink®
	Variolink II, Variolink Veneer	Multilink, Multilink Automix
Veneers	✓	—
Inlays	✓	✓
Onlays	✓	✓
Anterior crowns	✓	✓
Posterior crowns	✓	✓

✓ Especially recommended — Not recommended

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THE SUCCESS RATE ACHIEVED WITH IPS EMPRESS



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.



Ronald D. Jackson
DDS, FAGD, AFAACD, DABAD



Because of its natural, lifelike beauty, IPS Empress has always been in a class by itself.

Not anymore. It's been matched by a composite, IPS Empress Direct.



ESS® IS CONVINCING!



Restorative work by Dr John Roberts / Matt Roberts



Restorative work by Dr Ron Jackson

Large, defective restorations in teeth 12 and 11



Extensive lesions after excavation and bevelling of the margins



Conditioning with Total Etch



The palatal enamel wall is rebuilt with IPS Empress Direct Enamel



Polymerized palatal enamel shell after removal of the silicone matrix



Reconstruction of the anatomically shaped dentin core



Reconstruction of the distal surface with a lighter enamel shade



Reconstruction of a large part of the facial surface



Completed and polished IPS Empress Direct restoration





IPS Empress® System

Additional information is available about IPS Empress Direct, the chairside application of IPS Empress CAD and the IPS Empress System in the dental laboratory.

Moreover, detailed information about our cementation materials can be found in the respective product brochures.

We offer a special patient information brochure which provides patients with information about the subject of all-ceramics.

For more detailed information, you can also contact your personal Ivoclar Vivadent consultant or visit our website at:

www.ivoclarvivadent.com



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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Printed in Germany
© Ivoclar Vivadent AG, Schaan, Liechtenstein
603237/0311/e/W

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