

Ideal Partners

Modern cementation materials

SpeedCEM®

Multilink® Automix

Variolink® II

Variolink® Veneer

For all-ceramics,
metal-ceramics
and veneering
composites:

IPS e.max®


IPS Empress®

IPS InLine®/

IPS InLine® PoM

IPS d.SIGN®

SR Adoro®



Coordinated systems

High-quality restorations are worthy of being placed with the best possible cementation material available.

The most important objective of Ivoclar Vivadent research is to develop coordinated systems, which help to achieve an impeccable overall result due to the ideal interplay of the individual components so that patients will be happy with their restorations.

You can rely on metal-free and metal-supported restorative concepts and cementation materials, which have been tried-and-tested for years and which continuously produce impressive results in independent studies and tests.

Dreijährige klinische Bewährung konventionell zementierter Einzelkronen aus Lithiumdisilikat-Keramik

About 80 crowns – 40 IPS d.SIGN and 40 IPS e.max Press – were conventionally cemented in 63 patients.

Böning K, Ullmann U, Wolf A, Lazarek K, Walter M; Dtsch Zahnärztl Zeitschr 61, 604-611 (2006)

An 11-year clinical evaluation of leucite-reinforced glass-ceramic crowns: A retrospective study

Crowns were studied over periods ranging from 4 to 11 years. The probability of survival of the 125 crowns was 95.2% at 11 years.

Fradeani M, Redemagni M; Quint Int 2002, Vol. 33, No. 7, 503–510

Retrospective clinical study and survival analysis on partial ceramic crowns: results up to 7 years

Of the 42 restorations, 40 were still in function without any need of replacement.

Felden A, Schmalz G, Hiller KA; Clin Oral Investig 2000 Dec; 4(4); 199–205

Leucite-Reinforced Glass-Ceramic Inlays and Onlays after Eight Years in vivo

IPS Empress inlays and onlays bonded with Syntac Classic were found to have a 92% survival rate after eight years of clinical service.

Kraemer N, Petschelt A, Frankenberger R; J Dent Res 81, 2002, abstract 1996

Variolink, ...

Variolink® II

"Classic"



Variolink II has been used for more than 15 years in over 20 million restorations throughout the world. Numerous awards (e.g. Reality, Dental Advisor) as best product in the category of adhesive composites and excellent results from clinical long-term studies (study period >10 years) are testimony to this success.

Advantages

- 6 shades and 3 degrees of translucency
- 2 consistencies (adjustable with the help of the catalyst paste)
- Highest radiopacity
- Light- and dual-curing
- Very high strength

Indications

Adhesive luting of indirect restorations (inlays, onlays, crowns, bridges, veneers) made of:

- Translucent all-ceramics
- Composite/FRC



Variolink® Veneer

"Esthetic"



Variolink Veneer offers seven light-curing value shades to enhance the esthetics of indirect all-ceramic restorations. The "Medium Value" 0 (MV 0) shade is very translucent and has little effect on the final restoration. The "High Value" shades allow the clinician to brighten or increase the value, while the "Low Value" shades provide a "warming" effect to the all-ceramic restoration. The Variolink Veneer formulation is amine-reduced providing a high degree of colour stability and ensuring outstanding esthetic results.



Advantages

- Easy clean-up of excess cement
- 7 different value shades for a wide range of translucencies
- 7 Variolink Veneer Try-In shades
- Purely light-curing
- Very high mechanical strength (similar to Variolink II)

Indications

Adhesive luting of highly esthetic ceramic and composite restorations exhibiting a low thickness (<2.0 mm) and high translucency (veneers, inlays, onlays)

... Multilink ...

Multilink® Automix

"Universal"



Multilink Automix is a self-curing luting composite with light-curing option for the adhesive luting of indirect restorations made of metal, metal-ceramic, silicate ceramics, oxide ceramics and composite.

Due to its patented, hydrolytically stable phosphonic acids (acidic monomers), Multilink Automix is capable of meeting your and your patients' expectations regarding high bond strength and efficient, durable adhesion.

Multilink Automix is used in combination with the self-etching and self-curing Multilink Primer A/B. While acting as a sealant for the dentin, it also provides good marginal adaptation and high bond strength.

The system is completed with the new Monobond Plus universal primer, which allows a strong and durable bond to all restorative materials to be established.

Advantages

- Strong bond to all surfaces
- Universal application
- Uncomplicated use
- Three shades: yellow, transparent, opaque

Indications

Cementation of indirect restorations (inlays, onlays, crowns, bridges, endodontic posts) made of:

- Metal and metal-ceramic (PFM)
- Silicate ceramic and oxide ceramic
- Composite
- Fibre-reinforced composite



... and SpeedCEM

SpeedCEM

"Fast"



SpeedCEM is a universal, self-adhesive and self-curing resin cement with light-curing option. It simplifies and speeds up cementation procedures and eliminates the need for conditioning with phosphoric acid and bonding.

SpeedCEM does not have to be mixed by hand. Unlike products supplied in mixing capsules, SpeedCEM does not require any additional working accessories. SpeedCEM is mixed as it is dispensed from the double-push syringe and directly applied to the restoration.

SpeedCEM is easier to use than conventional cements and offers the additional benefits of luting composites.

Advantages

- No primer, bonding agents or adhesives for enamel and dentin
- Quick processing since manual mixing is not necessary
- High strength
- Good bonding values
- Excellent radiopacity
- Easy removal of excess
- Three shades: yellow, transparent, opaque

Indications

- Metal and metal-ceramic
- High-strength all-ceramics (lithium disilicate, zirconium oxide and aluminium oxide ceramic)
- Fibre-reinforced composite



For metal-free...

IPS Empress®

"Classical"



Proven system with new options

The leucite-reinforced glass-ceramic IPS Empress revolutionized the dental world nearly 20 years ago. In the meantime, it has been consistently further developed and continues to set decisive standards with regard to esthetics, function and processing. In addition to the widely used press technique, IPS Empress is now also available for CAD/CAM processing as well as direct restorative therapy.

Since the **IPS Empress Esthetic** press ceramic and the **IPS Empress CAD** ceramic blocks are the same from a materials science point of view, both materials demonstrate excellent strength values of 160 MPa in addition to the light optical properties. The expressive all-ceramic single-tooth restorations, such as inlays, onlays, crowns and veneers, harmoniously blend in with their natural environment.

IPS Empress CAD is also suitable for direct chairside processing. With the polychromatic IPS Empress CAD Multi Block, true-to-nature chameleon effects, brightness values or shade gradients can be achieved, depending on the indication.

The **IPS Empress Direct** restorative composite for direct restorations ideally combines the expressive esthetic appearance of IPS Empress with the convenience of a composite.



Before:
Gold inlay



After:
IPS Empress CAD inlays adhesively luted with
Multilink Automix

Dr G Koike, Japan

IPS e.max®

«Maximal»



One system for every indication

The all-ceramic system for all indications ranging from thin veneers to 12-unit bridges. You select the suitable material in accordance with the indication and the required strength.

Lithium disilicate glass-ceramic (LS₂) can be used for all single-tooth restorations.

Given the true-to-nature shade behaviour and optimum light transmission, LS₂ restorations provide very esthetic results. This innovative ceramic demonstrates a strength that is 2.5 to 3 times higher than that of other glass-ceramics. Depending on the requirements of the patient, the restorations may either be veneered with a highly esthetic material or fabricated to full contour and subsequently stained in a cost-effective fashion.

For larger restorations (e.g. posterior bridges), the IPS e.max ZirCAD **zirconium oxide ceramic (ZrO₂)** is your material of choice.

For combined restorations (LS₂ + ZrO₂) you can profit from a single veneering ceramic.

It ensures an even surface gloss and abrasion properties as well as an overall expressive esthetic appearance, irrespective of the framework material.

IPS e.max also offers you a choice of cementation method depending on the indication; crowns and bridges may be seated using not only the adhesive technique, but they can also be incorporated with a self-adhesive or conventional cementation material.



Before:
Insufficient
pre-operative situation



After:
IPS e.max crowns on a vital preparation and
ZrO₂ abutment

*Dr U. Brodbeck, Switzerland /
J Seger, Ivoclar Vivadent, Liechtenstein*

... and metal-supported restorations

IPS d.SIGN®

"Natural"



Inspired by nature

Pure esthetics thanks to the fluorapatite glass-ceramic material with the true-to-nature properties ranging from the light optical features to the enamel-like wear behaviour.

IPS d.SIGN is available in A-D, Chromascop and in Bleach shades. With the well-balanced and excellently thought-out concept of IPS d.SIGN, the individual possibilities of PFM restorations with IPS d.SIGN are virtually boundless.

IPS InLine® / IPS InLine® PoM

"Economical"



The **accurate, fast and beautiful leucite metal-ceramic** with benefits right down the line.

The **conventional IPS InLine metal-ceramic** helps you to achieve accurate shade matching, fast results and beautiful restorations.

The **IPS InLine PoM Press-on-Metal ceramic** delivers accurately pressed-on-metal frameworks. It is based on the proven press technique, popular alloys and well-established equipment.

SR Adoro®

"Striking"



A reflection of beauty

The combination of natural opalescence, high translucency and enamel-like lustre results in the outstanding esthetic appearance of metal-supported and metal-free SR Adoro restorations.

SR Adoro is available in A-D and Chromascop shades. The excellent intraoral polishability enhances the brilliant esthetics and the true-to-nature effect of the microfilled veneering composite.

Ivoclar Vivadent Alloys

"Matching"

Ivoclar Vivadent offers a wide range of high-quality and biocompatible alloys which are ideally coordinated with the individual metal-ceramic systems and the veneering composite SR Adoro.

The selection ranges from high-gold to predominantly base metal alloys – depending on the veneering material, indication and wishes of your patients.



Before:
Implant to replace tooth 36 with abutment screwed on. Screw opening closed with cement.



After:
IPS InLine crown adhesively luted with Multilink Automix on the implant abutment

Dr Ed Lowe / Nelson Rego, USA

Strong combinations

Combinations by Indication

Cement	Esthetic Luting Composite System		Universal Luting Composite System	Self-adhesive Resin Cement
	Variolink® Veneer	Variolink® II	Multilink® Automix	SpeedCEM
Curing Mode	Light-cure	Light/Dual-cure	Self-cure with light-curing option	Self-cure with light-curing option
Cementation Method	Adhesive: Syntac or ExciTE Total-Etch	Adhesive: Syntac or ExciTE DSC Total-Etch	Adhesive: Multilink Primer A/B Self-Etch	Self-Adhesive
Metal/Metal-based				
Inlays/Onlays	–	–	✓	✓
Crowns/Bridges	–	–	✓	✓
Endodontic Posts	–	–	✓	✓
Maryland Bridges	–	–	✓	–
Glass-Ceramics (eg leucite reinforced)				
Inlays/Onlays	✓	✓	✓	–
Veneers	✓	✓	–	–
Crowns	–	✓	✓	–
Lithium disilicate (L5₂)				
Table Tops (Occlusal Veneers)	✓	✓	✓	–
Thin Veneers/Veneers	✓	✓	–	–
Inlays/Onlays	✓	✓	✓	–
Partial Crowns	–	✓	✓	–
Crowns	–	✓	✓	✓
3-unit Bridges	–	✓	✓	✓
Oxide-Ceramics (Zirconium/Aluminium oxide)				
Crowns/Bridges	–	–	✓	✓
Endodontic Posts	–	–	✓	✓
Indirect Composites				
Inlays/Onlays	✓	✓	✓	–
Crowns	–	✓	✓	–
Endodontic Posts	–	✓	✓	✓

✓ Recommended product combination – Not recommended

Combinations by Products

Cement	Esthetic Luting Composite System		Universal Luting Composite System	Self-adhesive Resin Cement
	Variolink® Veneer	Variolink® II	Multilink® Automix	SpeedCEM
Curing Mode	Light-cure	Light/Dual-cure	Self-cure with light-curing option	Self-cure with light-curing option
Cementation Method	Adhesive: Syntac or ExciTE Total-Etch	Adhesive: Syntac or ExciTE DSC Total-Etch	Adhesive: Multilink Primer A/B Self-Etch	Self-Adhesive
IPS e.max Press	✓	✓	✓	✓*
IPS e.max CAD	✓	✓	✓	✓*
IPS e.max Ceram Veneers	✓	✓	–	–
IPS e.max ZirCAD	–	–	✓	✓
IPS Empress Esthetic	✓	✓	✓	–
IPS Empress CAD	✓	✓	✓	–
SR Adoro ¹ (metal-based)	–	–	✓	✓
SR Adoro ¹ (metal-free)	✓	✓	✓	–
IPS d.SIGN	–	–	–	–
IPS InLine / IPS InLine PoM	–	–	✓	✓
IPS Classic	–	–	–	–
FRC Postec Plus	–	✓	✓	✓
CosmoPost	–	–	✓	✓



Please take note of the corresponding Instructions for Use.

- ✓ Recommended product combination
- * Recommended depending on indication
- Not recommended
- ¹ not available in all countries

Impressive results

"The right material choice is decisive, both for ceramics and cementation materials. I am not prepared to make compromises on the bond strength."

Dr Holger Gleixner, Germany



"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."

Dr Michael Sesemann, USA



"IPS d.SIGN achieves an amazing effect of depth, even in very thin layers. This allows outstanding esthetic results to be achieved, even in situations where space is limited."

Dr Urs Brodbeck, Switzerland



"IPS e.max CAD provides an extraordinary combination of strength and esthetics and, even more important allows the restorations to be conventionally cemented. Moreover, the possibility of applying stains or layering material in the incisal third leaves no wish unfulfilled."

Dr Andreas Kurbad, Germany



For more detailed information please refer to the product-specific advertising tools, the Internet www.ivoclarvivadent.com or your personal Ivoclar Vivadent representative.



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

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