IPS e.max®

Dental technicians

THE POPULAR AND VERSATILE ALL-CERAMIC SYSTEM

ivoclar vivadent®
passion vision innovation

More **all-ceramics**. More **choice**.
More **IPS e.max®**

Treat yourself to the world's most popular*all-ceramic system – the highly acclaimed IPS e.max®! This comprehensive, high-quality all-ceramic system is suitable for all types of fixed prosthetic restorations. IPS e.max is backed by the reliable IPS e.max Press and IPS e.max CAD lithium disilicate ceramics, the innovative IPS e.max ZirCAD zironium oxide, the matching IPS e.max Ceram veneering ceramic and the IPS e.max ZirPress press-on ceramic.

IPS e.max®
all ceramic – all you need

* Based on sales figures

C. D. Lucio A. Quevedo Hernández / Ramón A. Sánchez Hernández, Mexico
IPS e.max Smile Award 2016, America, 3rd place

Impressive **reliability**. Clinically **proven**.

IPS e.max is based on more than ten years of experience, profound expertise and innovative strength. Dental professionals benefit from the system's reliability and versatility as well as from ongoing product development. IPS e.max restorations have been successfully used for more than a decade. Numerous long-term studies confirm the outstanding reliability and safety of the material. The overall survival rate of IPS e.max restorations in the mouth of patients is 96.6 per cent[1]. Therefore, patients can depend on restorations that will last for many years.

Preoperative view

After seating the restorations

After 10 years in situ

Dr Sidney Kina, José C. Romanini, Brazil

> Why IPS e.max? Because of its predictability, the balance between strength and esthetics and its versatility and precision. Quite simply, because it is more than a product: it is a passion.

Dr Sidney Kina, Brazil

Over 100 million restorations[2]

More than 10 years of clinical evidence

1 system
The most used all-ceramic system in the world[2]

98 % customer satisfaction[3]

[1] IPS e.max Scientific Report Vol. 02/2001-2013
[2] based on sales figures
[3] Corporate Marketing Insight Ivoclar Vivadent AG, Liechtenstein

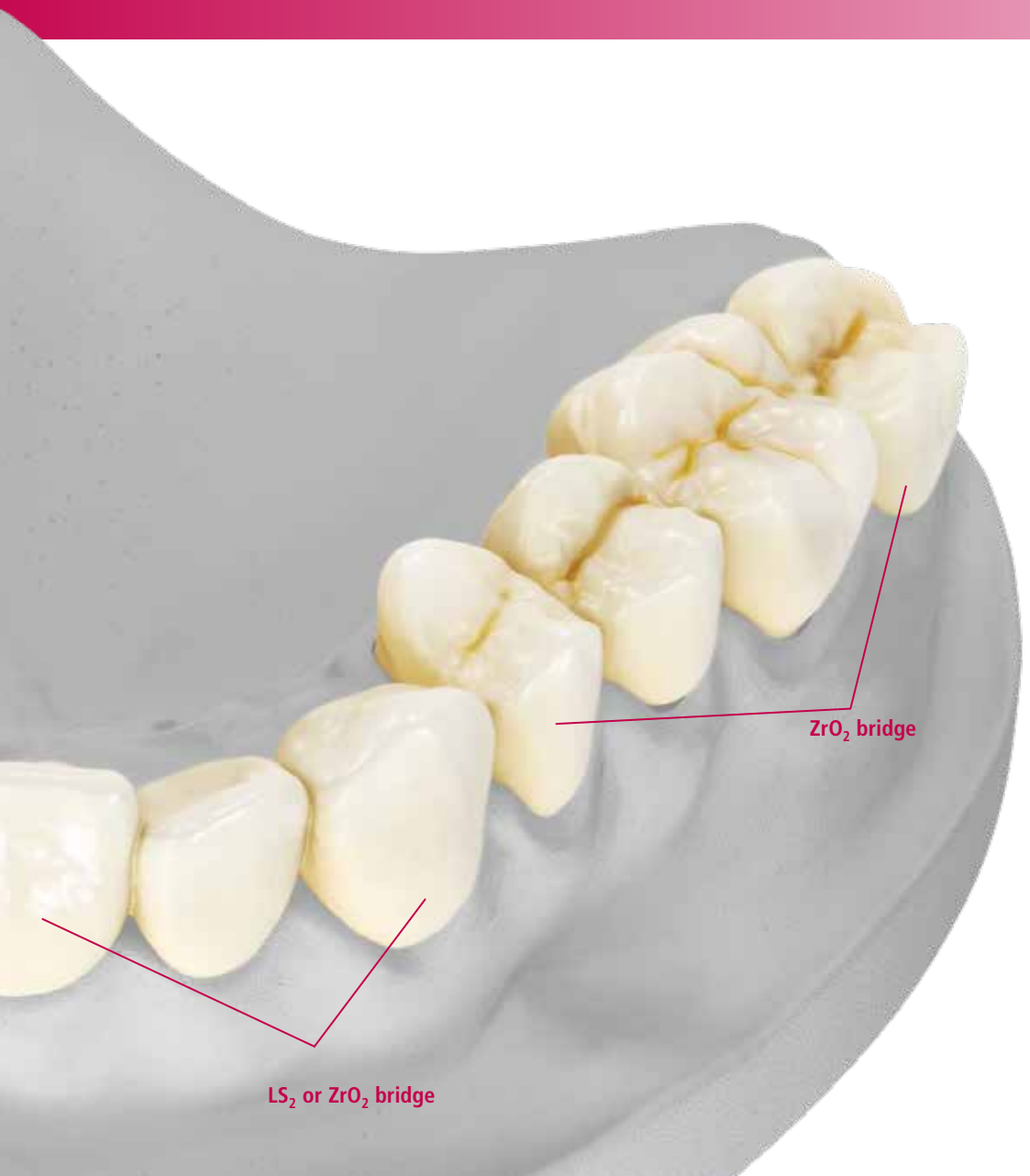
IPS e.max®
all ceramic – all you need

IPS e.max is the only all-ceramic that combines lithium disilicate glass-ceramic (LS_2) and zirconium oxide (ZrO_2) in one system. These two types of material ideally complement each other. They offer a wide array of possibilities to fabricate the restoration that suits best the case at hand. One system to cover all indications in fixed prosthodontics:
that's IPS e.max!

IPS e.max® lithium disilicate

- High stability and reliability of the material confirmed by clinical studies
- Outstanding flexural strength of 500 MPa*
- Amazing esthetics, in the anterior region in particular
- Comprehensive product range (various levels of translucency and shade)
- Minimally invasive restorations such as thin veneers (≥ 0.3 mm) or adesively cemented crowns (≥ 1 mm)

* Mean biaxial flexural strength R&D Ivoclar Vivadent, Schaan, Liechtenstein



IPS e.max® zirconium oxide

- Robust and long lasting
- Strength between 850 and 1,200 MPa* depending on the translucency level
- Multi-unit bridges and crowns
- Polychromatic Multi discs for impressive esthetic results
- Low wall thicknesses for minimally invasive restorations

* Mean biaxial flexural strength R&D Ivoclar Vivadent, Schaan, Liechtenstein

IPS e.max® Press **Unrivalled** versatility.

Geared to the **future**.

Once you have tried the IPS e.max Press lithium disilicate glass-ceramic, you will never want to be without it again. Stable, precision-fit restorations and unrivalled versatility are its hallmarks.

Your benefits

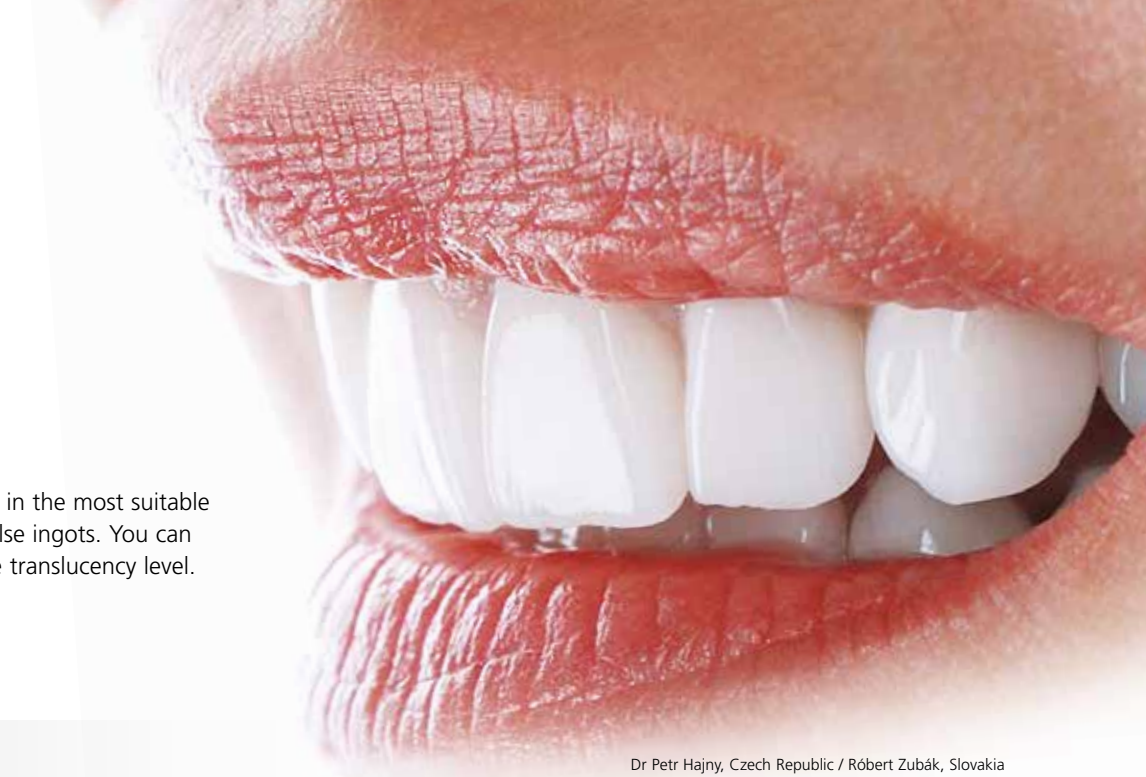
- Reliable, high-strength (470 MPa*) material
- Minimally invasive crowns of a thickness of only 1 mm or 0.3-mm thin veneers
- Unmatched extensive indication range for pressed ceramics
- Single-tooth restorations, hybrid abutment restorations and three-unit bridges**
- Depending on the indication, it can be cemented with the adhesive, self-adhesive or conventional technique.

IPS e.max Digital Press Design is based on the design software from 3Shape. It consists of two separate add-ons. The "Wax Tree" add-on has been especially developed for 3D printing. It enables the computer-aided spruing of several single-tooth restorations to a wax tree, ready for pressing. The "Press Multi" add-on allows the colour transitions of IPS e.max Press Multi restorations to be controlled in an easy and reliable fashion, including the final spruing. Both add-ons enhance the reliability and speed of the entire pressing process.

* Mean biaxial flexural strength of IPS e.max Press, R&D Ivoclar Vivadent, Schaan, Liechtenstein
** Up to the second premolar as the terminal abutment

Dr Luis Sanchez, Mexico / Alen Alić, Croatia
IPS e.max Smile Award 2016, America, 1st place

Sophisticated assortment. **Esthetic** properties.



Dr Petr Hajny, Czech Republic / Róbert Zubák, Slovakia

An advanced product range simplifies the search for the best possible ingot in the most suitable colour. IPS e.max Press is available in five levels of translucency and as Impulse ingots. You can choose between group shades, A–D or Bleach BL shades, depending on the translucency level.

IPS e.max® Press Multi – a world's first!

Take a step into the future with the press technique and start pressing high-strength, polychromatic restorations. The unique IPS e.max Press Multi ingots produce restorations with smooth shade transitions: high chroma and opacity in the cervical/dentin region and the desired translucency in the incisal region. Impart your monolithic restorations with a highly esthetic appearance:
Press in multicolour – glaze – and you're done!

You can choose to fabricate your restorations efficiently with the staining technique, individually with the cut-back method or highly esthetically with the layering technique – everything is possible with IPS e.max Press. The restorations are characterized with the universal staining and glazing system IPS Ivocolor or the veneering ceramic IPS e.max Ceram; alternatively crowns can simply be polished.

IPS e.max® CAD **Dependable** stability. **Minimally invasive** restorations.

The extremely popular IPS e.max CAD is a versatile and dependable lithium disilicate ceramic for CAD/CAM work in the laboratory. The material is characterized by amazing esthetics, exceptional light-optical properties, high precision and outstanding stability.

Your benefits

- Unrivalled large indication spectrum in the CAD/CAM glass-ceramics range
- Unique materials structure and high flexural strength (530 MPa*) for maximum reliability
- Suitable for single-tooth restorations, hybrid abutment restorations and three-unit bridges**
- Crowns of only 1-mm thickness (placed with the adhesive technique) for more possibilities in conservative dentistry
- Depending on the indication, it can be cemented with the adhesive, self-adhesive or conventional technique.

Sound clinical evidence on IPS e.max CAD offers you peace of mind and the assurance that you can create long-lasting, natural-looking restorations.

IPS e.max CAD is available for the following laboratory CAD/CAM systems: PrograMill (Ivoclar Digital) and inLab® (Dentsply Sirona). The restorations are crystallized in the Programat® ceramic furnaces.

* Mean biaxial flexural strength of IPS e.max CAD, R&D Ivoclar Vivadent, Schaan, Liechtenstein
** Up to the second premolar as the terminal abutment

Sophisticated assortment.
Versatile possibilities.

Finding a suitable IPS e.max CAD block in the right shade has never been easier. IPS e.max CAD is available in four levels of translucency and as Impulse blocks. You can choose between group shades, A-D or Bleach BL shades, depending on the translucency level and block size.

Many different possibilities
Results are obtained efficiently by simply polishing IPS e.max CAD crowns. Restorations are characterized with the versatile IPS Ivocolor staining and glazing system or the highly esthetic IPS e.max Ceram veneering ceramic.

More options
IPS e.max CAD is used to create individualized, esthetic hybrid abutments and hybrid abutment crowns in the laboratory.

In the fabrication of multi-unit bridges, frameworks made of IPS e.max ZirCAD zirconium oxide can be optimally combined with IPS e.max CAD veneering structures (Veneering Solutions technique). You will benefit from extremely strong and impressive esthetic results.

Dr Andreas Kurbad, Kurt Reichel, Germany

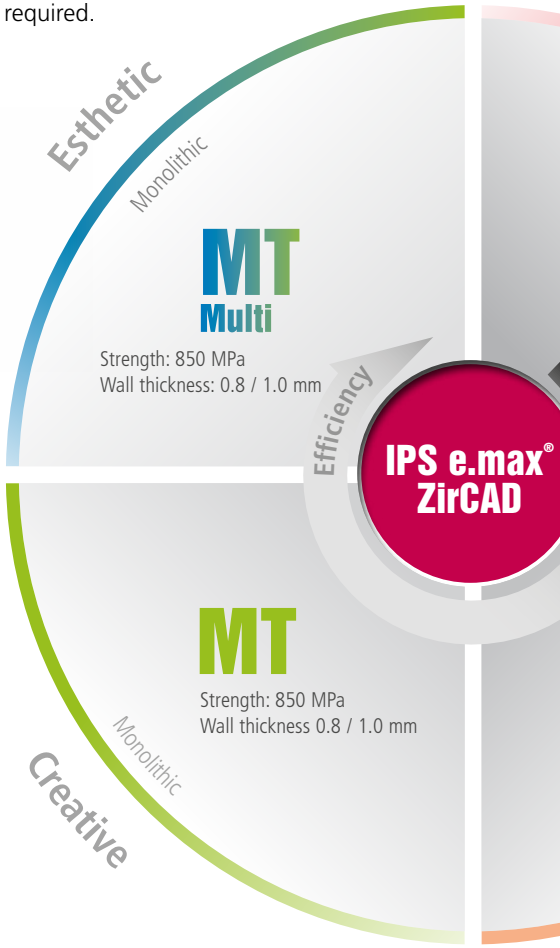
IPS e.max® ZirCAD **Innovative** material.

Amazing **strength**.

IPS e.max ZirCAD is a versatile and innovative zirconium oxide material with a large indication range. IPS e.max ZirCAD is suitable for fabricating copings and frameworks as well as full-contour crowns and bridges. Dental professionals benefit from the material's high performance, versatility and function. IPS e.max ZirCAD is the material of choice when high strength, thin restoration walls and natural-looking esthetics are required.

Your benefits

- High strength (between 850 and 1,200* MPa depending on the translucency level) and toughness
- Monolithic and veneered crowns and bridges
- Reduced material thicknesses for a tooth-structure preserving preparation
- Restorations with natural-looking colour transitions due to polychromatic IPS e.max ZirCAD MT Multi discs
- Optional brush infiltration with colouring liquids for maximum customization prior to sintering



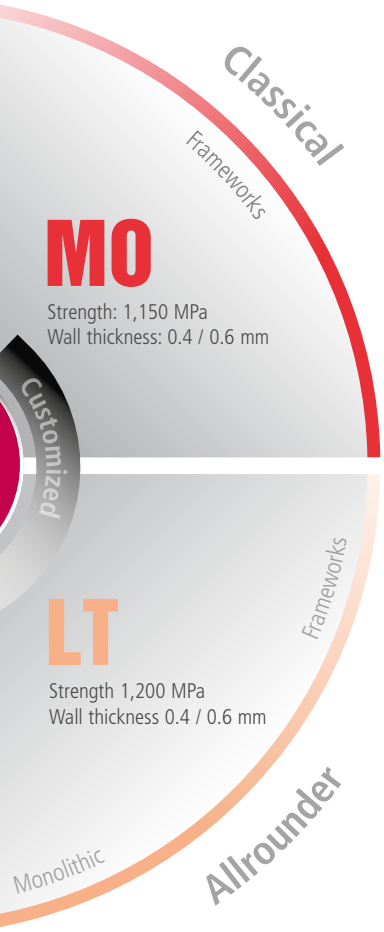
IPS e.max ZirCAD discs are available for the following laboratory CAD/CAM systems: PrograMill (Ivoclar Digital) and all CAD/CAM milling machines capable of processing discs with a diameter of 98.5 mm and a circumferential groove.

IPS e.max ZirCAD blocks are available for the following laboratory CAD/CAM systems:
PrograMill (Ivoclar Digital) and inLab® (Dentsply Sirona).
The restorations are sintered in the Programat® S1 1600.

* Mean biaxial flexural strength of IPS e.max ZirCAD MO and LT: 1,200 MPa; IPS e.max ZirCAD MT and MT Multi: 850 MPa
R&D Ivoclar Vivadent, Schaan, Liechtenstein

Lifelike **colour transitions**.
Many different possibilities.

Dr T. Uchiyama, M. Manaka, Japan
IPS e.max Smile Award 2016, Asia/Pacific, 1st place



IPS e.max ZirCAD discs are available in three levels of translucency and as polychromatic Multi discs. Depending on the translucency level, these discs are supplied in group shades, A–D and/or Bleach BL shades. The LT and MO blocks* supplement the assortment.

IPS e.max ZirCAD MT and MT Multi combine a special powder formulation with innovative colour technology. They offer high strength and amazing esthetics at the same time. Crowns made of IPS e.max ZirCAD can be finished quickly and efficiently by simply glazing them to obtain the desired final appearance.

Many different possibilities
IPS e.max ZirCAD Multi crowns exhibit lifelike transitions of the shade and translucency between the dentin and incisal areas, even without staining. If the case being treated demands it, IPS e.max ZirCAD restorations can, of course, be characterized. For this purpose, the staining and glazing assortment IPS Ivocolor or the highly esthetic veneering ceramic IPS e.max Ceram are used. The IPS e.max Ceram Power materials have been specially developed for veneering translucent substructures. They allow you to achieve the desired, natural-looking brightness with minimal effort.

More options
You can combine IPS e.max ZirCAD frameworks with the IPS e.max ZirPress press-on ceramic or with IPS e.max CAD veneering structures. IPS e.max ZirPress simplifies workflows in the fabrication of long-span bridges in particular, as the waxed up models are reproduced in ceramic with precision detail.

* depending on the respective range for authorized CAD/CAM systems

IPS e.max® Ceram **Versatility** at its best. **Intuitive** handling.

Do you like to be creative? Is it important for you to produce exceptionally esthetic restorations? Would you like to have more creative freedom, yet is efficiency also a priority for you? IPS e.max Ceram fulfills all these requirements. IPS e.max Ceram is suitable for efficient standard layering as well as for demanding high-end layering with lifelike play of light.

Your benefits

- Versatile layering ceramic for lithium disilicate and zirconium oxide
- Integrated layering scheme, standardized working procedure and consistent esthetics on different types of materials
- Intuitive modelling and appealing stability for easy handling
- Excellent firing behaviour showing minimal shrinkage reduces the need for adjustments and saves valuable time
- Stable shade and opacity throughout multiple firing cycles, including compact surfaces.

Modern, translucent framework materials reflect less light. This reduces the brightness of the restorations. The IPS e.max Ceram Power Dentin and Power Incisal materials have been developed to impart these types of substructures with the required brightness. The layering scheme remains unchanged. On opaque frameworks that reflect more light, the classical Dentin and Incisal materials achieve an ideal shade match with the A–D shade guide.

Creative Freedom.
Natural-looking colours.

Impressive light-optical properties
IPS e.max Ceram Selection opens up even greater creative opportunities with its wide selection of Margin, Impulse and Opal materials. The Enamel and Effect materials are characterized by their impressive light-optical properties. They ideally complement the existing range of products and they are capable of increasing or reducing the brightness of the restoration with the objective of achieving a very natural-looking appearance.

A superb combination
IPS e.max Ceram is complemented by IPS Ivocolor, an innovative staining and glazing system. It can be used with all the IPS ceramics from Ivoclar Vivadent. The selective colour compositions give you the freedom you need to effectively characterize your restorations.

Dr Luis Sanchez, Mexico / Alen Alić, Croatia
IPS e.max Smile Award 2016, America, 1st place

PrograMill **Designed for** IPS e.max®. Precision **fabrication.**

PrograMill One

The advanced and innovative milling machines of the PrograMill range offer future proof, open solutions for the economical fabrication of restorations. Geared to the requirements placed upon modern dental technology, the PrograMill machines combine the machining of innovative materials with coordinated processes. They deliver the right solution for virtually every situation. PrograMill machines offer impressive industrial features, state-of-the-art design and integrated workflows.

Your benefits

- Short processing cycles
- Five-axis milling
- Outstanding surface quality and excellent fit
- Versatile machinery for wet and dry machining of dental materials*
- Large selection of machinable materials

The PrograMill machines are optimally matched to IPS e.max CAD and IPS e.max ZirCAD. In addition, the PrograMill models PM3, PM5 and PM7 can be used to machine other types of glass-ceramic, e.g. IPS Empress® CAD as well as acrylic resin, e.g. SR Vivodent® CAD for Digital Denture, wax, e.g ProArt® CAD and metal, e.g. Colado® CAD CoCr4.

*Dry machining is not possible with PrograMill One.

PrograMill PM3 / PM5 / PM7

IPS e.max® Shade Navigation app (SNA)

Finding the right ingot or block. **An easy guide.**

Finding the right shade for an ingot, block or disc has never been easier. The IPS e.max Shade Navigation app (SNA) finds the correct solution in next to no time. Simply enter the necessary data, such as the shade of the prepared tooth and the desired final shade, and the app will present the best possible solution. The app is ideal for all situations where esthetics, efficiency and reliability are of the essence.

Enter the relevant parameters in five easy steps:

1. **Tooth shade**
2. **Indication**
3. **Shade of the preparation**
4. **Layer thickness**
5. **Material**

Almost immediately, the app will recommend the shade and translucency of the IPS e.max material that are the most suitable. A visual representation allows you to compare the restoration shade with the A–D shade guide and evaluate whether or not the recommendation meets your expectations.

A strong combination.
Modern **cementation materials**.

When they place restorations, dentists can choose between adhesive, self adhesive or conventional cementation methods, whichever technique best suits the indication being treated. The Cementation Navigation System (CNS) supports dentists in the selection of the most suitable cementation material and shows the possibilities offered by the cementation materials provided by Ivoclar Vivadent.

www.cementation-navigation.com

Dr Federico Brunner/Petr Mysicka, UK

Popular cementation materials

Variolink® Esthetic
The esthetic luting composite is suitable for the permanent cementation of demanding ceramic and composite resin restorations. It combines unparalleled esthetics with user-friendly handling.

Multilink® Automix
In combination with the universal bonding agent Monobond® Plus, this universal luting system is suitable for the placement of indirect restorations made of silicate and oxide ceramics, metal and metal-ceramics as well as composite resins. The effectiveness of the product has been proven in numerous short and long-term studies. For example, the survival rate in terms of restoration adhesion has been shown to be 99 %*.

SpeedCEM® Plus
The self-adhesive, self-curing resin cement featuring optional light curing is particularly suitable for the placement of zirconium oxide restorations and metal-ceramic restorations as well as for the cementation of restorations on implant abutments.

* Source: Multilink Automix Scientific Report, Vol. 01/2012

Programat® press and ceramic furnaces

Dependable partners. **Optimum** firing results.

The Programat® furnaces are matched to the Ivoclar Vivadent materials. They are characterized by their innovative spirit, high quality and decades of uninterrupted success. The current furnace platform includes the popular furnaces Programat P310, Programat P510 and Programat P710 as well as the Programat EP 3010 and Programat EP 5010 which combine pressing and firing. Pressing of IPS e.max Press has become much easier and more economical due to the new fully automatic press function (FPF) of the Programat press furnaces. You simply press the FPF button, place the press ring in the furnace and start the program. The press chamber will heat up automatically and the press process will start at the right time.

Short sintering processes

The high-performance Programat S1 1600 sintering furnace operates quickly and efficiently with a sintering temperature of up to 1,600 °C. It is designed to sinter IPS e.max ZirCAD and achieve fast, excellent results which offer a high accuracy of fit.

The firing and press results of the Programat furnaces are bound to impress you.

Fixed Prosthetics

IPS e.max® forms a part of the "Fixed Prosthetics" product category. The products of this category cover the procedure involved in the fabrication of fixed prosthetic restorations – from temporization to restoration care. The products are optimally coordinated with each other and enable successful processing and application.


Telio®


IPS e.max®


Programat®


IPS e.max®


Variolink®


Cervitec®

PREPARE | RESTORE | PROCESS | FINISH | PLACE | MAINTAIN

THESE ARE FURTHER PRODUCTS OF THIS CATEGORY:

Programat®

Press and ceramic furnaces for demanding requirements

Packed with proven technology and advanced innovations

- Outstanding press and firing results
- Ideally coordinated with the ceramic materials of Ivoclar Vivadent
- Easy operation

Variolink® Esthetic

The esthetic luting composite

The luting composite for exceptional esthetics and user-friendly processing

- Balanced and concise Effect shade system
- Excellent shade stability due to amine-free composition
- Easy, controlled excess removal

Would you like to know more about the products of the "Fixed Prosthetics" category? Simply get in touch with your contact person at Ivoclar Vivadent or visit www.ivoclarvivadent.com for more information.

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