IPS e.max®

# FOR IMPRESSIVE ESTHETICS AND LIFELIKE LIGHT SCATTERING



## IPS e.max® CERAM

THE VERSATILE LAYERING CERAMIC FOR LITHIUM DISILICATE AND ZIRCONIUM OXIDE

ivoclar vivadent®
passion vision innovation

# Versatile and modern

Veneering ceramics play a key role in the esthetics of a restoration. Only a subtle interplay of shade, translucency, opalescence, fluorescence and brightness allows for a lively appearance of the natural and restored dentition.

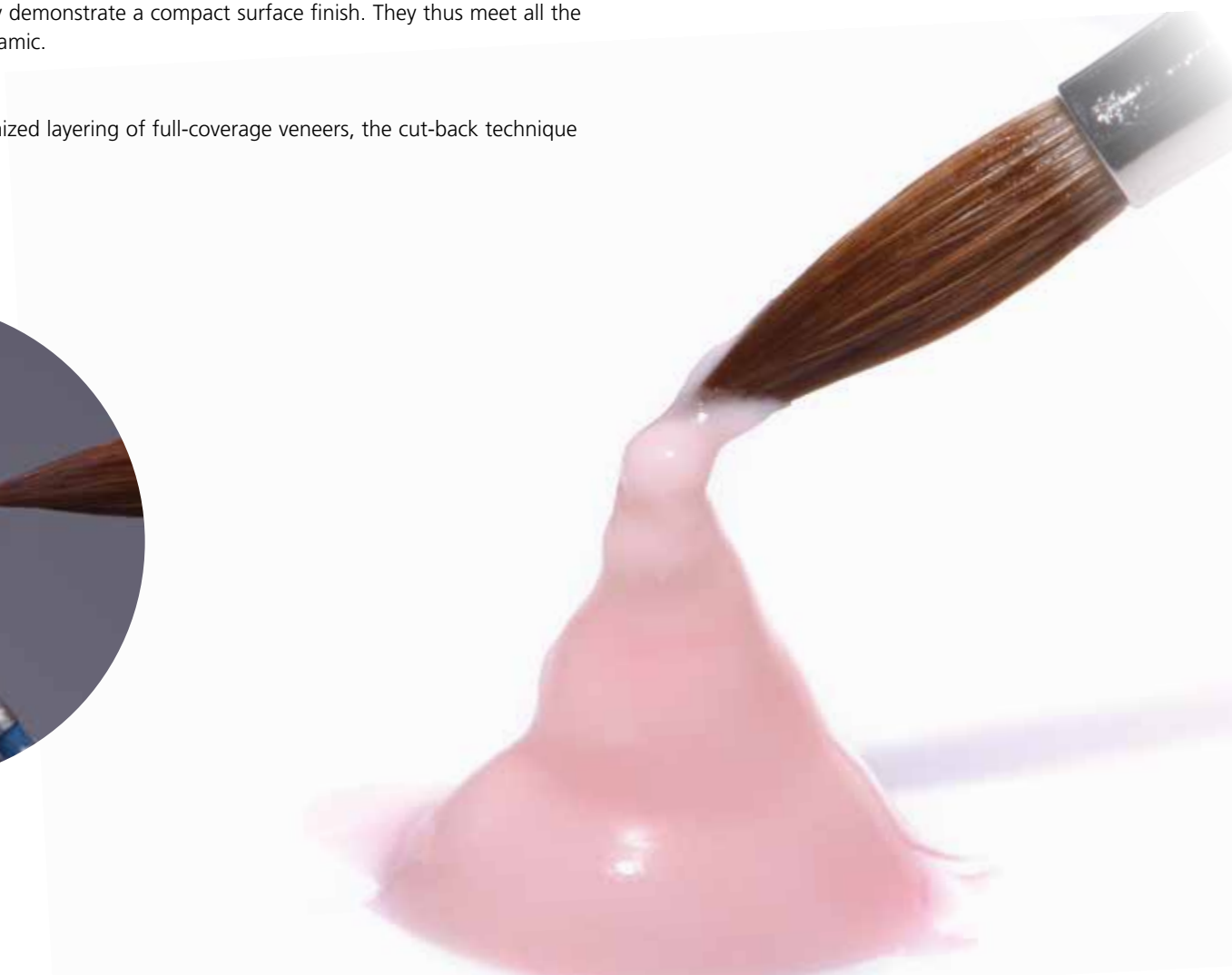
IPS e.max® Ceram is a highly esthetic fluorapatite layering ceramic that offers a proven track record of over ten years. The material forms part of the IPS e.max system and is designed for the veneering of frameworks made of IPS e.max lithium disilicate glass-ceramics ($LS_2$) and zirconium oxide ($ZrO_2$), e.g. IPS e.max ZirCAD and Zenostar®*.
A consistent layering scheme allows the technician to achieve a harmonious shade match in no time at all, regardless of the substructure. This increases the efficiency in everyday lab work.


* Manufacturer: Wieland Dental, Germany

# Efficiency and ease of handling

Intuitive modelling properties and a pleasant stability are characteristics that have delighted users for many years. Exceptional firing behaviour and low shrinkage minimize the need for adjustments. The materials do not change their shade even if they are fired several times and they demonstrate a compact surface finish. They thus meet all the expectations placed on a state-of-the-art veneering ceramic.

IPS e.max Ceram materials are designed for the customized layering of full-coverage veneers, the cut-back technique and the layering of veneers.



# IPS e.max Ceram – a 10-year success story

In addition to the innovative lithium disilicate glass-ceramic, zirconium oxide is an equally essential material in dentistry. The IPS e.max Ceram veneering ceramic has successfully bridged the gap between these two all-ceramic systems for ten years.

**Natural-looking restorations**

Until a few years ago, lithium disilicate and zirconium oxide were only available in medium or high opacity versions. For many years, these materials have been successfully used to provide frameworks that are more opaque than recently developed variations and reflect large amounts of light. The amount of light reflected causes the restorations to look brighter. The classic IPS e.max Ceram Dentin and Incisal materials are tailored to the brightness of these frameworks and are therefore ideally suited for the veneering of these more opaque substructures. The result is a balanced relationship between brightness and chroma. An ideal match with the A-D shades can be achieved.


> IPS e.max has been on the market for more than 10 years by now. Hardly any other material system with such a comprehensive product portfolio has been able to get established that quickly.
> The clinical successes of IPS e.max convince the entire dental team. Dentists particularly value the adhesive cementation option and the final strength of the material in situ. In my opinion, the light optical effects that I can achieve with the IPS e.max Ceram Opal materials are sensational. The restorations maintain their opalescence and their beautiful effects even after several firing cycles.

Thorsten Michel, MDT, Germany

IPS e.max® Ceram on IPS e.max Press (Thorsten Michel)

# Extended range of possibilities with IPS e.max Ceram

Recent years have seen the development of all-ceramic framework materials that offer an increased translucency and this has a considerable effect on the veneered restoration. A general trend towards restorations with increased brightness also comes into play.

**Increased brightness with "Power Dentin" and "Power Incisal"**

Today's translucent substructures reflect less light, reducing the brightness of the completed restoration. To redress the reduction in brightness, the IPS e.max Ceram range has been extended to include two new materials: "Power Dentin" and "Power Incisal". These two materials provide a natural brightness on translucent frameworks without necessitating a modification of the customary layering scheme. What is more, the specially coloured materials can be used on opaque frameworks to achieve restorations with significantly increased brightness - for situations that demand it.


Oliver Brix, DT, Germany

"To imitate the shade nuances of natural teeth as well as their build-up, the brightness value and the in-depth effects must be matched first and foremost. We want to create a balance between opacity, depth and shade.
After 10 years of experience with IPS e.max Ceram and various personal optimizations, the new IPS e.max Ceram layering materials are now available and I have had the privilege to be included in the process to design them. The materials with the newly adjusted brightness values represent a useful and indispensable complement to the IPS e.max Ceram assortment."

IPS e.max® Ceram (Power) on IPS e.max Press (Oliver Brix)

# Flexible solutions to meet different expectations

**Vitality and individuality**
IPS e.max Ceram offers a broad range of additional ceramic materials in powder form, such as Margin, Impulse and Opal materials.  It does not matter whether an efficient standard layering scheme or a high-end layering design to produce lively dynamic optical effects has been chosen, IPS e.max Ceram allows exceptional flexibility and versatility and provides natural-looking veneers.

**Strong bonding to zirconium oxide**
IPS e.max Ceram ZirLiner is applied to restorations comprising a zirconium oxide framework before they are veneered with IPS e.max Ceram. The liner promotes a reliable bond to zirconium oxide and establishes ideal conditions for the longevity of esthetically veneered restorations.
Given its fluorescence, the ZirLiner imparts a natural glow to zirconium oxide frameworks. This enhances the restoration's in-depth effect and supports the desired dynamic optical characteristics.

# Ideal pink esthetics

A crown or bridge looks esthetic only through the interplay with the (natural) gingiva. "Pink esthetics" plays a pivotal role in implant-supported restorations in particular.


**Shade nuances**
The IPS e.max Ceram Gingiva materials are available in a range of shade variations. They are utilized to reconstruct gingival structures that reflect the patient's age and characteristics. The shade variations range from orange and reddish to bluish. This range allows the natural gingiva to be easily imitated.

**Extended offering**
The existing range of IPS e.max Ceram Gingiva materials has been extended to include the two shades BG 34 and IG 5. Furthermore, the range includes the IPS e.max Ceram ZirLiner Gingiva, which is especially designed for use on zirconium oxide. Gingival portions can be customized with IPS Ivocolor Essence powders in shades rose, coral and basic red.

Thorsten Michel, Germany

# Innovative range of stains

IPS Ivocolor is an innovative range of Stain and Glaze materials for use in conjunction with the IPS e.max Ceram range of ceramic materials. Given its universal characteristics and low firing temperature (710 °C/ 1310 °F), IPS Ivocolor is also suited for use in conjunction with various other Ivoclar Vivadent ceramic materials such as IPS e.max Press, Zenostar* and IPS Style®. This increases the effectiveness and economic efficiency of the lab.

- Versatile options for expressive characterizations
- For esthetically outstanding restorations
- Suited for high- and low-fusing ceramic materials
- Single assortment of stain materials for both all-ceramics and metal-ceramics


* Manufacturer: Wieland Dental, Germany

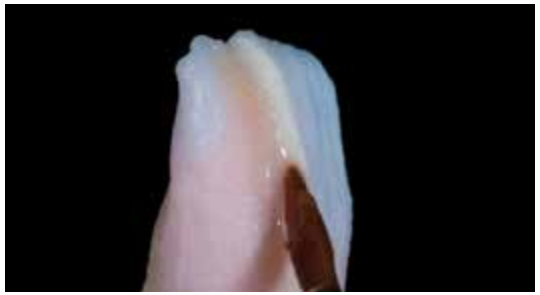
# Versatile individualization options

The IPS Ivocolor assortment comprises Shade pastes, Essence powders and Glaze materials.

The ready-to-use Shade pastes include nine dentin and three incisal shades and are designed for the characterization of ceramic frameworks, in particular for adjusting the shade of layering materials and for achieving shade effects in conjunction with the layering technique.

The IPS Ivocolor Essence powders are available in 23 shades and offer versatile processing options. They are suitable for applying surface characterization, for customizing IPS e.max Ceram layering materials and for individualizing unfired ceramic layers.

The IPS Ivocolor pastes and powders are available in fluorescent and non-fluorescent versions.



# Exclusive design combined with intelligent technology

The latest generation of Programat® ceramic furnaces are ideally tailored to the firing of the IPS e.max Ceram layering ceramic. The furnaces impress with excellent firing results. Additionally, the Programat P510 and P710 furnaces are equipped with an infrared thermal camera, which automatically controls the pre-drying and closing processes. This feature enhances the process reliability of the firing protocol.

**Digital Shade Assistant**
The Programat P710 comprises a patented, innovative shade assistant - DSA - that allows the tooth shade of the patient to be digitally determined. Special image processing software compares the shade of the tooth in question with three pre-selected shade-guide teeth on an image and identifies the closest shade match in the A–D shade range.

Digital Shade Assistant

1. Pre-select the three closest tooth shades.

2. Take a photograph of the teeth and shade guide and transfer the data to the furnace using a SD card, USB flash drive or WLAN.

3. Select the shade analysis mode, scan photographs and start the digital shade selection mode. Brightness and saturation values (L-, A- and B-values) can also be displayed.

# The world speaks e.max – not least because of IPS e.max Ceram!

Dr Christian Coachman, Dentist and DT, Brazil

It is not only the design of individual incisors that requires a material that is capable of imitating nature in all its subtleties. I need a high-quality layering ceramic to recreate the optical properties and surface characteristics of natural teeth. Given its natural-looking fluorescence and opalescence, IPS e.max Ceram meets all my requirements.

Michele Temperani, DT, Italy

Surface texture and brilliance give the tooth a unique appearance. It is important for me to work with a reliable layering material to be able to achieve an adequate surface finish. Given its high firing stability, coordinated effects and natural appearance, IPS e.max Ceram fulfils all my requirements. Even after ten successful years on the market, ongoing additions ensure that the material remains on the cutting edge and keeps pace with contemporary trends.

IPS e.max Press crown on pressed hybrid abutment and veneered with IPS e.max® Ceram
Dr Mauro Fradeani, Italy / Dr Eric van Dooren, Netherlands / Dr Christian Coachman, Brazil

IPS e.max Press crown veneered with IPS e.max® Ceram
Dr Marko Jankovic / M. Temperani, Italy

# Fixed Prosthetics

IPS e.max® Press Multi 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®


Multilink®


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

### Multilink® Automix

The adhesive cementation system


A strong bond, proven performance

- Strong hold – both dual and self-curing
- Universal – suitable for silicate and oxide ceramics as well as metal
- Clinically proven – numerous long-term studies

**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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