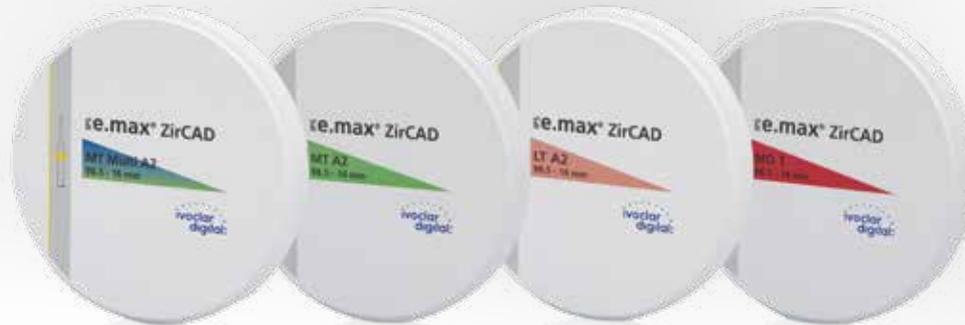


IPS e.max[®]
IPS

Dental technicians

IPS e.max[®] ZirCAD

INNOVATIVE AND **VERSATILE** ZIRCONIUM OXIDE



Groundbreaking **innovations.** Impressive **reliability** and **esthetics.**

IPS e.max is a valued product that has been used in laboratories and dental practices for more than ten years. It is the most widely used¹ all-ceramic system. The name stands for innovative strength, reliability, long-term clinical success and versatility.

The material fascinates and impresses users and patients alike with its esthetic qualities. With good reason: They can be confident that the restorations made of this material will stay in good condition for many years. Long-term studies have confirmed the reliability of IPS e.max.



IPS e.max® – the most used all-ceramic system¹ in the world

96.6%
Survival rate²

More than 10
years
of clinical evidence

Over 100
million restorations¹

98%³
customer satisfaction

¹ Based on sales figures

² IPS e.max, Scientific Report, Vol. 02/2001-2013

³ Corporate Market Insight Ivoclar Vivadent, Schaan, Liechtenstein

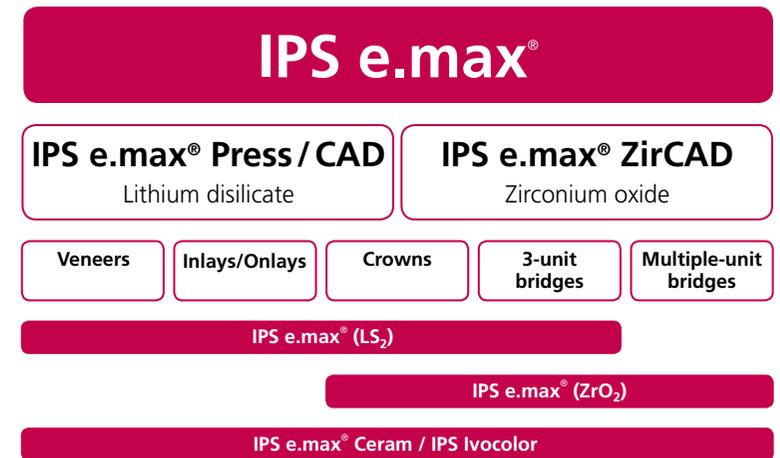
More all-ceramics. More choice.

More IPS e.max[®].

IPS e.max is a highly esthetic and high-strength all-ceramic system that covers the entire range of indications and esthetic requirements.

The range encompasses the reliable IPS e.max CAD and IPS e.max Press **lithium disilicate glass-ceramics** (LS₂), the **innovative IPS e.max ZirCAD zirconium oxide ceramic** (ZrO₂), the matching IPS e.max Ceram veneering ceramic, the IPS e.max ZirPress press-on ceramic and the universal IPS Ivocolor assortment of Stain and Glaze materials. The materials supplement each other ideally.

Both monolithic and layered restorations can be efficiently and expeditiously produced using the CAD/CAM or press technology.



IPS e.max[®] all ceramic – all you need



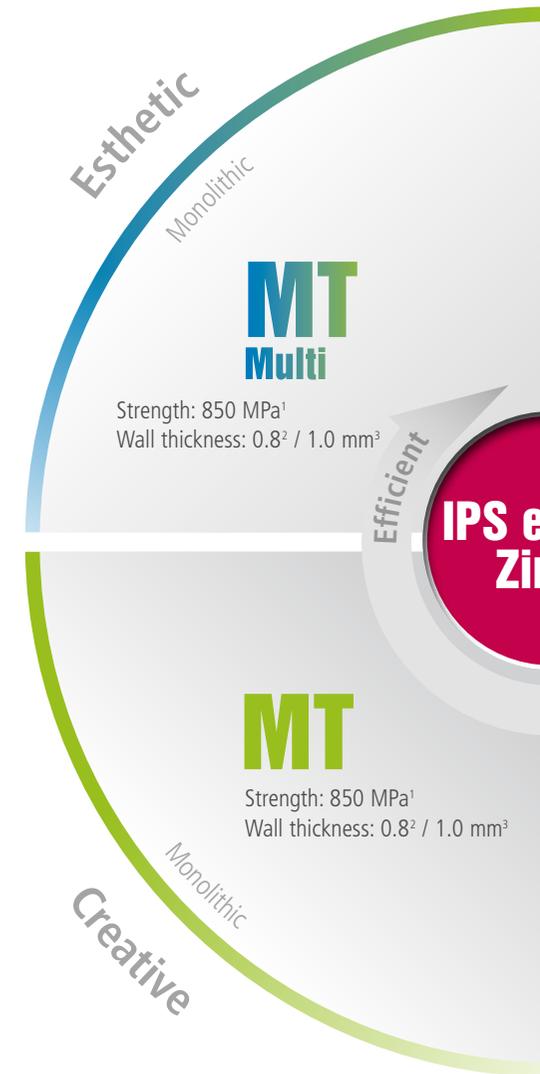
NEW

High **strength**. Natural **esthetics**. Versatile **processing options**.

IPS e.max ZirCAD is the material of choice for cases in which high mechanical stability, thin restoration walls and natural-looking esthetics are of the essence. It is exactly with regard to these aspects that the IPS e.max zirconium oxide portfolio sets new standards.

Restorations with considerably reduced wall thicknesses can be created as the material provides both high strength, ranging from 850 to 1,200 MPa¹, and high fracture toughness. A trade-off in translucency is not required.

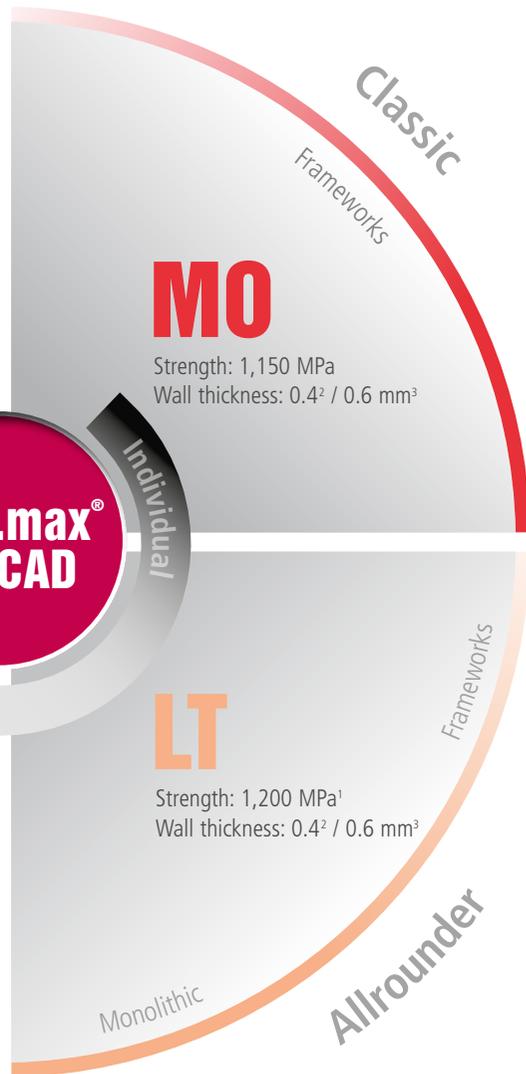
A finely honed balance between low wall thickness and optimum translucency allows the fabrication of restorations that are tooth preserving and natural looking.



Benefits at a glance

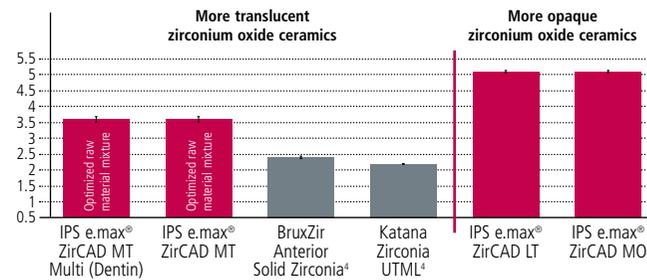
- High strength and fracture toughness allow low wall thicknesses – for even less invasive preparations than before
- Natural esthetics due to a coordinated system of shades and translucencies
- Optimized raw material mixture to increase the stress-bearing capacity of IPS e.max ZirCAD MT Multi and IPS e.max ZirCAD MT
- Individual freedom due to versatile processing options

Maximum flexibility in anterior and posterior restorations



Fracture toughness [MPa · m^{1/2}]

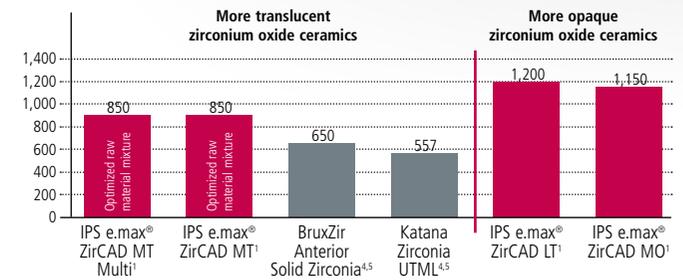
A high fracture toughness increases the ability to resist crack propagation. The higher the measured value, the better the long-term clinical performance.



Fracture toughness measured by the Vickers indentation method
R&D Ivoclar Vivadent AG, Schaan, Liechtenstein (2017).

Flexural strength [MPa]

A high flexural strength is of significant importance for restorations in stress-bearing areas. Flexural strength is calculated on the basis of the fracture load, or the force applied to a material just before it yields.



IPS e.max[®] ZirCAD

IPS e.max® ZirCAD MT Multi – the esthetic disc

IPS e.max ZirCAD MT Multi is designed for the anterior and posterior region. An optimized raw material mixture provides the material with enhanced mechanical properties (850 MPa¹). The progression of shade and translucency maximizes the appearance of monolithic crowns and bridges without necessitating the application of characterizations and optimizes the efficiency in the lab.

Reproducing the tooth shade is made easy by the polychromatic discs in the A–D shades.

Indications:

- Monolithic crowns
- Monolithic three-unit bridges
- Implant-supported superstructures

Processing options

- Staining
- Glazing



Benefits at a glance

- Especially suited for highly esthetic monolithic restorations
- Efficient due to fewer manual processing steps
- Possibility of fabricating three-unit anterior and posterior bridges due to high strength and fracture toughness

¹ Mean biaxial flexural strength, R&D Ivoclar Vivadent, Schaan, Liechtenstein



Glazing is all that it takes to finish the highly esthetic restoration.

Delivery form

Shades: 8 polychromatic discs with graduated level of shade and translucency in the shades BL1, A1, A2, A3, B1, B2, C2, D2
Translucency: MT Multi (Medium Translucency Multi)
Ø: 98.5 mm
Thicknesses: 16 and 20 mm

IPS e.max® ZirCAD MT – the creative disc

IPS e.max ZirCAD MT is the creative one in the portfolio. The material combines sound mechanical stability (850 MPa¹) with impressive esthetic properties as a result of an optimized raw material mixture.

It lends itself to various processing options and offers a high degree of flexibility. The A–D shade system enables an efficient fabrication of esthetic monolithic or layered restorations.

The A–D Colouring and Effect Colouring Liquids are designed for maximum customization prior to sintering.

Indications:

- Crowns
- Three-unit bridges
- Implant-supported superstructures

Processing options

Depending on which disc is used, the following processing options are available:

- Brush infiltration
- Staining
- Cut-back
- Glazing



Benefits at a glance

- Especially suitable for esthetic monolithic anterior and posterior restorations
- Maximum customization due to individual characterization before sintering

¹ Mean biaxial flexural strength, R&D Ivoclar Vivadent, Schaan, Liechtenstein



Simply stained and glazed with IPS Ivocolor



Crowns customized by basic-scheme infiltration



Crowns customized by advanced-scheme infiltration

Delivery form

Shades: 1 Bleach and 7 monochromatic discs in shades BL, A1, A2, A3, B1, B2, C2, D2
Translucency: MT (Medium Translucency)
Ø: 98.5 mm
Thicknesses: 14 and 18 mm

Liquids: IPS e.max ZirCAD MT Colouring Liquids
– 16 A–D shades, 60 ml
– 5 Effect shades, 15 ml (blue, violet, grey, orange, brown)

IPS e.max ZirCAD Colouring Liquids
– 3 Indicators, 15 ml (blue, red, yellow)
– Diluter, 60 ml



IPS e.max® ZirCAD LT – the all-round disc

IPS e.max ZirCAD LT is the allrounder in the portfolio. The material combines high mechanical stability (1,200 MPa¹) with pleasing esthetics. These properties make IPS e.max ZirCAD LT suitable for the fabrication of minimally invasive single-tooth restorations and stable multi-unit framework structures. Implant-supported superstructures supplement the offering. Restorations can be produced using a variety of techniques: monolithic method, infiltration, partial veneering and complete veneering.

Indications:

- Monolithic crowns
- Monolithic bridges with three or more units
- Implant-supported superstructures

- Framework structures with three or more units
- Crown frameworks

Processing options

Depending on which disc is used, the following processing options are available:

- Brush infiltration
- Staining technique
- Layering technique
- Glazing



Benefits at a glance

- **Tooth-preserving preparation due to low wall thicknesses**
- **Minimally invasive crowns**
- **Especially suitable for long-span bridges due to an excellent flexural strength of 1,200 MPa¹ and high fracture toughness**

¹ Mean biaxial flexural strength, R&D Ivoclar Vivadent, Schaan, Liechtenstein



Restoration veneered with IPS e.max® Ceram Power Dentin and Incisal materials



Maximum customization by infiltration

Delivery form

Shades: 1 Bleach and 6 monochromatic discs in group shades 0, 1, 2, 3, 4, sun, sun chroma and 8 A–D-shades BL, A1, A2, A3, B1, B2, C2, D2

Translucency: LT (Low Translucency)

Ø: 98.5 mm

Thicknesses: 10, 12, 14, 16, 18, 20 and 25 mm

Liquids: IPS e.max ZirCAD LT Colouring Liquids
 – 16 A–D shades, 60 ml
 – 6 Effect shades, 15 ml (blue, violet, grey, orange, brown)

IPS e.max ZirCAD Colouring Liquids
 – 3 Indicators, 15 ml (blue, red, yellow)
 – Diluter, 60 ml

Blocks: for PrograMill, CEREC/inLab¹ and PlanMill¹
 Shades: LT BL, A1, A2, A3, B1, B2, C2, D2
 Block sizes: C 17, B 45

¹ These brands are no registered trademarks of Ivoclar Vivadent AG.



IPS e.max® ZirCAD MO – the classic disc

IPS e.max ZirCAD MO has been developed for application in the classic veneering technique. Even discoloured preparations and metal cores can be effectively concealed due to the material's heightened opacity. It allows the fabrication of customized, highly esthetic restorations.

Indications:

- Crown frameworks
- Framework structures with three or more units
- Implant-supported superstructures

Processing options

- Layering technique
- Press-over technique
- CAD-on technique



Benefits at a glance

- Especially suitable for the fabrication of multiple bridges due to an excellent flexural strength of 1,150 MPa¹ and high fracture toughness
- Tooth-preserving preparation due to low wall thicknesses
- Effective masking of discoloured tooth structure and metal cores

¹ Mean biaxial flexural strength, R&D Ivoclar Vivadent, Schaan, Liechtenstein



Bridge veneered with IPS e.max® Ceram



Pressing over with IPS e.max® ZirPress ingots



Combined with IPS e.max® CAD veneering structures

Delivery form

Shades: 1 Bleach and 4 monochromatic discs
in group shades 0, 1, 2, 3, 4
Translucency: MO (Medium Opacity)
Ø: 98.5 mm
Thicknesses: 10, 14, 18, 20 and 25 mm

Blocks: for inLab*
Shades: 3 monochromatic blocks in group shades 0, 1, 2
Block sizes: C 13, C 15, C 15 L, B 40, B 40 L, B 55, B 65, B65 L-17, B 85 L-22

*This brand is not a registered trademark of Ivoclar Vivadent AG.

Precision fabrication, designed for **IPS e.max®**

The innovative and modern PrograMill milling machines for wet and dry processing are fully tailored to the IPS e.max range of materials. The 5-axis machines enable the fabrication of IPS e.max ZirCAD and IPS e.max CAD restorations that are characterized by precision, accuracy of fit and efficiency due to the material data stored on the units and the material-optimized milling strategies.



PrograMill PM3/PM5/PM7

Programat® S1 1600 is a light-weight, compact sintering furnace that offers a speed sintering program.

All IPS e.max ZirCAD restorations milled in the course of a day can be sintered overnight in the Programat S1 1600 with an overnight program. And if now and again the restorations have to be completed quickly, a speed sintering program is available.



Programat® S1 1600

A perfect match

The following products are especially suited for use in combination with the IPS e.max range of materials for both efficient and high-end applications:

IPS Ivocolor

Universal range of Stain and Glaze materials for all the ceramic materials from Ivoclar Vivadent.



IPS e.max® Ceram

For the veneering of frameworks made of lithium disilicate (LS₂) and zirconium oxide (ZrO₂). The Power Dentin and Incisal materials are especially coordinated with IPS e.max ZirCAD.



IPS e.max® ZirPress

For the press-over technique on IPS e.max ZirCAD MO frameworks.



IPS e.max® CAD Veneering Solutions

For the CAD-on technique on IPS e.max ZirCAD MO frameworks.



IPS e.max® Shade Navigation App is the intelligent app which assist you in finding the most suitable shade. Just 5 clicks to find the right solution - for an optimum shade match.



Ideal luting partners

We recommend the following products for the placement of IPS e.max ZirCAD restorations:

Ivoclean®

Cleaning paste for the cleaning of the bonding surfaces after the try-in.



SpeedCEM® Plus

For easy and fast self-adhesive cementation



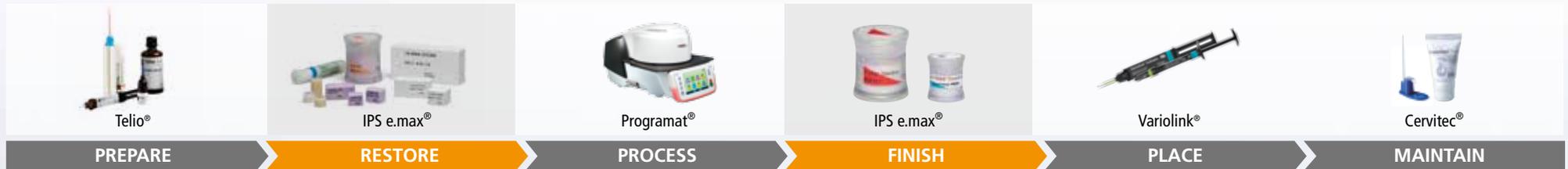
CNS

The Cementation Navigation System offers practical orientation and guidance in questions relating to cementation.



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.



THESE ARE FURTHER PRODUCTS OF THIS CATEGORY:

Programat® S1 1600

The exceptional sintering surface



Sintering ZrO₂ restorations has just become faster

- Ideally coordinated with the IPS e.max® ZirCAD materials
- Excellent sintering results in a short time
- Compact dimensions and low weight

SpeedCEM® Plus

The self-adhesive resin cement



A big plus for zirconium oxide

- Excellent self-curing performance, ideal for zirconia and metal-ceramics
- User friendly handling and easy clean-up
- Efficient process with just one component

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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