



ZirCAD

Prime

IPS e.max[®]

All ceramic,
all you need.

IPS e.max® ZirCAD Prime – advanced zirconium oxide

IPS e.max® ZirCAD Prime is redefining all-ceramics:

- as esthetic as lithium disilicate (LS₂)
- as strong as zirconium oxide
- a material combining exceptional properties

Your dental laboratory will be pleased to inform you about our innovative all-ceramic solution for fabricating highly esthetic crowns and multi-unit bridges.

As a result of its versatility, IPS e.max ZirCAD Prime is the material of choice in many different cases.

Very high stability

Flexural strength⁽¹⁾: 1200 MPa
Fracture toughness⁽²⁾: > 5 MPa · m^{1/2}

High-end esthetics

Comparable to LS₂

Easy cementation

Conventional
or self-adhesive



M. Spanopoulou, Greece

¹ Typical mean value of the biaxial strength (dentin), R&D Ivoclar Vivadent AG, Schaan, Liechtenstein

² Measurement of the fracture toughness according to the Vickers indentation test (dentin), R&D Ivoclar Vivadent AG, Schaan, Liechtenstein (2018)



A unique manufacturing technique called **Gradient Technology (GT)** is at the heart of this innovative, highly esthetic and strong all-ceramic made from zirconium oxide raw materials.

The result: optimized translucency, a smooth progression of the shade and translucency within the material as well as exceptional accuracy of fit of the restorations.

All indications

From crowns to multi-unit bridges
on natural teeth and on implants –
for utmost flexibility



Suitable for wide-span restorations on implants

Your dental laboratory will use IPS e.max ZirCAD Prime to fabricate multi-unit bridges with up to two pontics: also suitable for sophisticated implant-supported restorations.



Nine-unit anterior bridge (13–26), IPS e.max® ZirCAD Prime, anterior teeth partially veneered with IPS e.max® Ceram, monolithic posterior teeth
Dr K. Lechner / C. Wohlgenannt, Austria

For esthetic restorations on dark prepared teeth

Due to the reduced translucency in the dentin part of IPS e.max ZirCAD Prime material, exceptionally esthetic results are achieved even on dark prepared teeth.



Single tooth crown (21), IPS e.max® ZirCAD Prime BL 1, veneered with IPS e.max® Ceram
Dr C. Savas / Y. Momma, USA

For lifelike esthetics and precise shading

The layer-free IPS e.max ZirCAD Prime is optimally translucent and it offers a seamless progression of shade and translucency including precise shading. This provides the ideal basis for premium esthetics in monolithic, fully and partially veneered restorations.



Three-unit posterior bridge (45–47), IPS e.max® ZirCAD Prime, monolithic restoration
Dr F. Narducci / G. Narducci, Italy

For many different needs due to versatile applications

Your dental technician can use various techniques to create your restorations with IPS e.max ZirCAD Prime. The results will always look exceptionally lifelike.

Different techniques may even be used to fabricate one restoration: for example, the anterior part of a bridge may be veneered for a highly esthetic outcome, while the posterior part is produced in monolithic form to minimize the risk of chipping.

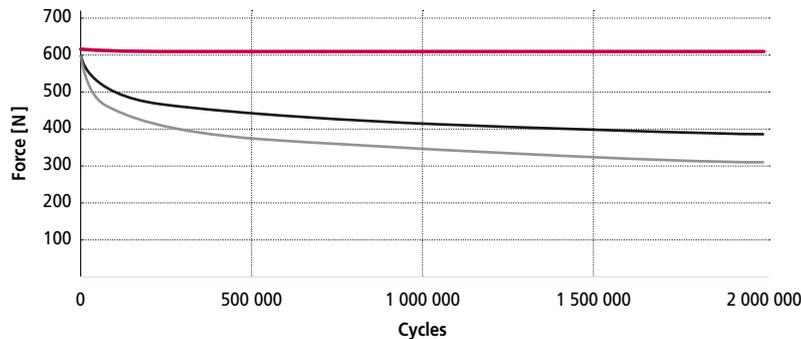


12-unit bridge, IPS e.max® ZirCAD Prime, 13–23 partially veneered with IPS e.max® Ceram, 14–16 and 24–26 monolithic
D. Vinci, Switzerland

High stability for utmost reliability

Due to the material's high fatigue resistance, the risk of failure is low and the service life of the restorations is expected to be high. The IPS e.max ZirCAD Prime trial bridge showed higher fatigue resistance compared with other products, despite the minimal width of the connector.

Fatigue resistance ⁽¹⁾



- IPS e.max® ZirCAD Prime**
3-unit molar bridge
(3 × 3 mm connector, 1.0 mm abutment)
- IPS e.max® ZirCAD MT Multi**
Three-unit molar bridge
(4 × 4 mm connector, 1.0 mm abutment)
- Ultra-translucent competitive zirconium oxide**
Three-unit molar bridge
(4 × 4 mm connector, 1.0 mm abutment)

Fatigue resistance defines the highest stress that a material can withstand without showing any signs of fatigue or failure.

¹ Measurement of fatigue resistance, R&D Ivoclar Vivadent AG, Schaan, Liechtenstein (2018–2019)

² Typical mean value of the biaxial flexural strength, R&D Ivoclar Vivadent AG, Schaan, Liechtenstein

³ Measurement of the fracture toughness according to the Vickers indentation test (dentin), R&D Ivoclar Vivadent AG, Schaan, Liechtenstein (2018)

1200 MPa

Flexural strength ⁽²⁾ in the dentin zone

Very high flexural strength in areas where the stress is highly concentrated in bridge restorations, showing lifelike opacity.

650 MPa

Flexural strength ⁽²⁾ in the incisal zone

High strength and lifelike translucency

> 5 MPa · m^{1/2}

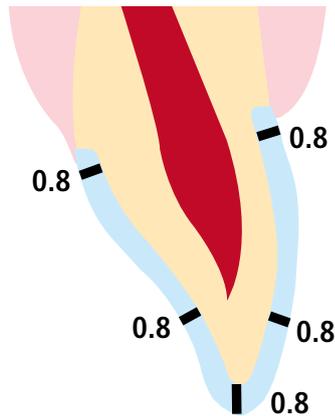
Fracture toughness ⁽³⁾

Resistance to fracture propagation: the higher the reading, the better the clinical long-term behaviour

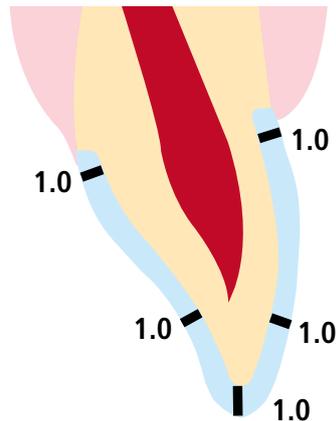
Conventional preparation for reliable processes

In preparing teeth for restorations made of IPS e.max ZirCAD Prime, it is important to observe the general guidelines for all-ceramics, for example, rounded angles and edges, in addition to the required minimum wall-thickness (specifications in mm for monolithic restorations).

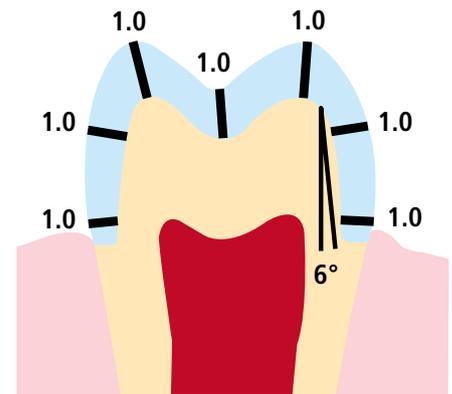
Anterior crowns



**Anterior bridges
(abutments)**



**Posterior crowns
and bridges**



Detailed information regarding
preparation, cementation and polishing:

www.ipsemax.com

Easy cementation

IPS e.max ZirCAD Prime can be cemented conventionally, self-adhesively or adhesively. Speedcem® Plus offers an ideal combination of high performance and user-friendliness.



Cleaning paste **Ivoclean®**

Optimum cleaning of saliva-contaminated restorations after try-in for a strong, long-lasting bond



Composite cement **Speedcem® Plus**

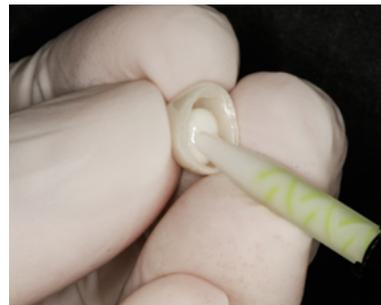
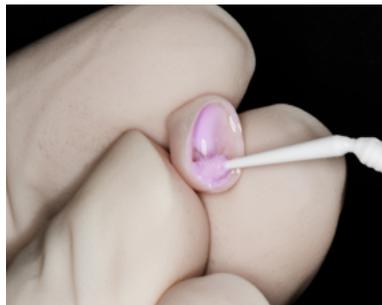
Efficient self-adhesive cementation of zirconium oxide due to high bond strength and easy clean-up of excess material



Detailed cementation instructions:

Cementation Navigation System

www.cementation-navigation.com



Efficient polishing for shining results

Smooth surfaces reduce plaque formation and the risk of abrasion of the antagonists.

After extraoral or intraoral occlusal contouring, the contact points of IPS e.max ZirCAD Prime restorations can be polished to a high gloss in a very short time.

OptraGloss® is ideal for this purpose.

Universal polishers **OptraGloss®**

Two-step polishing
without any polishing paste
achieves a smooth
glossy surface finish



Dr L. Enggist / R. Baiao Bartolomeo, Ivoclar Vivadent AG, Liechtenstein



ipsemax.com

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