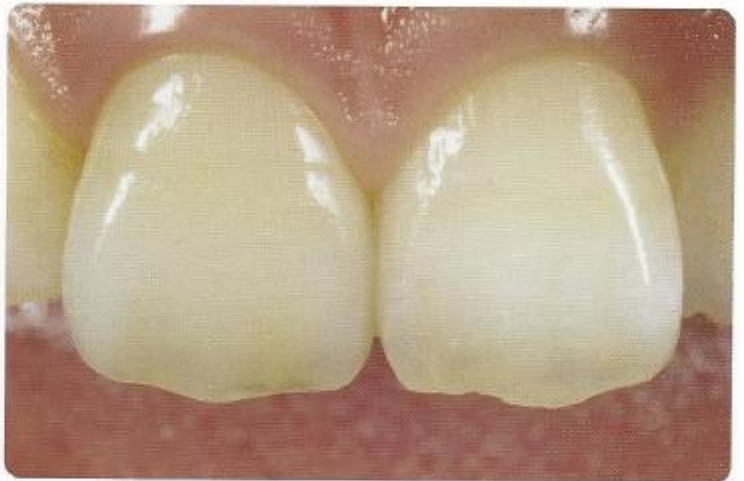


3. METAL-FREE TEETH



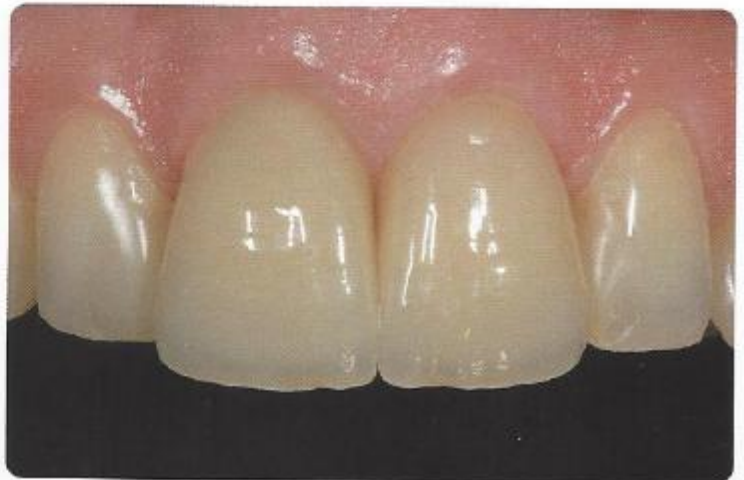
IPS e.max Press and IPS e.max Ceram
IPS e.max Press veneers and crowns were veneered with IPS e.max Ceram and adhesively cemented using Variolink Veneer.

Dr. Kohei Ogura | Shoji Sasaki, Japan



IPS e.max Press and IPS e.max Ceram
IPS e.max Press crowns veneered with IPS e.max Ceram and adhesively cemented

Dr. A. Kurbad | Kurt Reichel, Germany



IPS e.max CAD and IPS e.max Ceram
The crowns milled from IPS e.max CAD were layered with IPS e.max Ceram in the incisal area and subsequently self-adhesively cemented.



IPS e.max CAD and IPS e.max Ceram

The restorations milled from IPS e.max CAD were layered with IPS e.max Ceram in the incisal area using the cut-back technique and subsequently self-adhesively cemented.

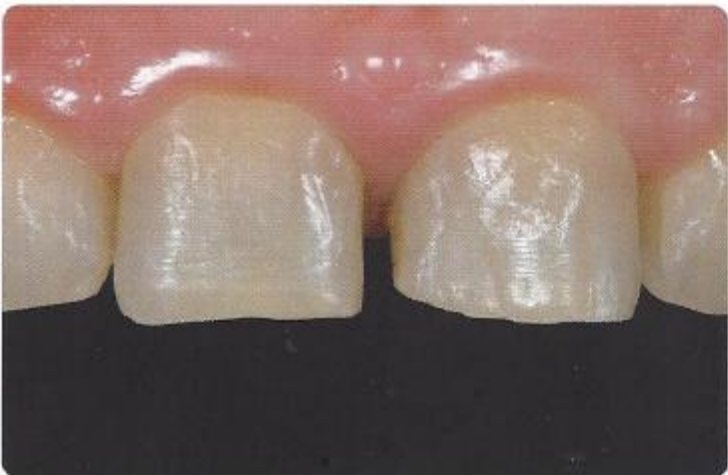
Dr. Sidney Kina, Brazil | Gérald Ubassy, France



IPS e.max Press and IPS e.max Ceram

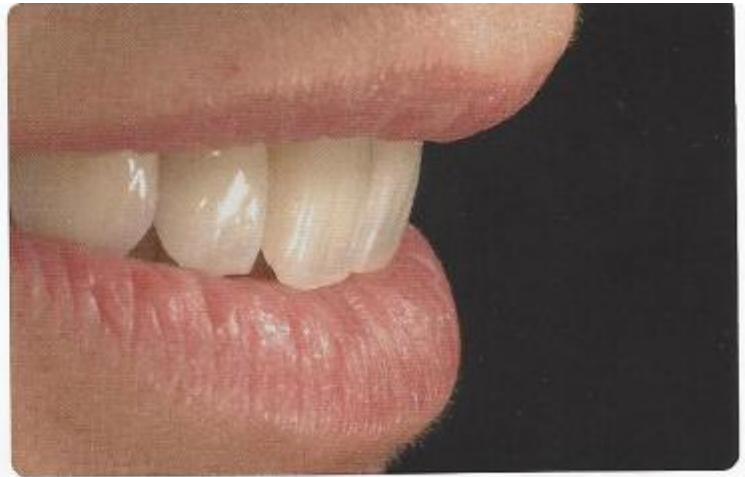
The lithium disilicate glass-ceramic veneers made of IPS e.max Press were layered in the incisal area with IPS e.max Ceram and adhesively cemented using Variolink Veneer.

Dr. Sidney Kina, Brazil | August Bruguera, Spain



IPS e.max Press and IPS e.max Ceram

IPS e.max Press crowns veneered with IPS e.max Ceram and adhesively cemented



IPS e.max Press/CAD/ZirCAD/ZirPress and IPS e.max Ceram

Copings and bridge frameworks made of IPS e.max CAD/Press/ZirCAD and ZirPress characterized and veneered with IPS e.max Ceram. The glass-ceramic restorations made of IPS e.max CAD and Press were cemented with Variolink II, while for the IPS e.max ZirCAD bridges Multilink Automix was used.

Prof. Sidney Kina, Brazil | August Bruguera, Spain



IPS e.max Press and IPS e.max Ceram

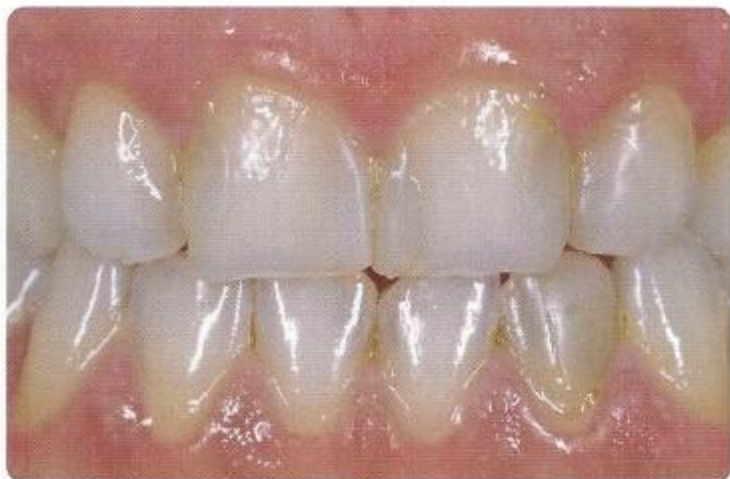
Lithium disilicate glass-ceramic copings made of IPS e.max Press were veneered with IPS e.max Ceram and conventionally cemented.

Dr. Klaus Hoederath | Volker Brosch, Germany

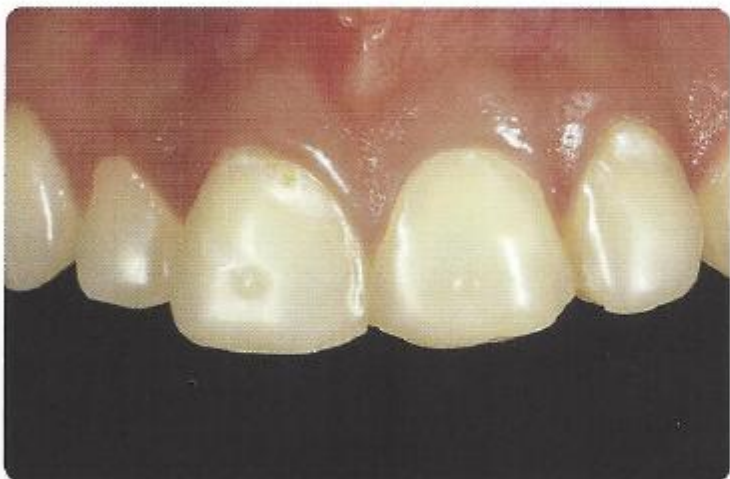


IPS e.max CAD and IPS e.max Ceram

Adhesively cemented restorations made of IPS e.max CAD lithium disilicate glass-ceramic and veneered with IPS e.max Ceram.



Complete restoration of both dental arches with IPS e.max
Adhesive cementation in the anterior region using Variolink Veneer, and Multilink Automix in the posterior region.



IPS e.max ZirCAD/IPS e.max Ceram
The zirconium oxide copings were veneered with IPS e.max Ceram and conventionally cemented.



IPS e.max CAD/IPS e.max Ceram
The copings milled from IPS e.max CAD lithium disilicate glass-ceramic blocks were veneered with IPS e.max Ceram and cemented with Multilink Automix.

IPS e.max ZirCAD | ZirPress inlay-retained bridge ...



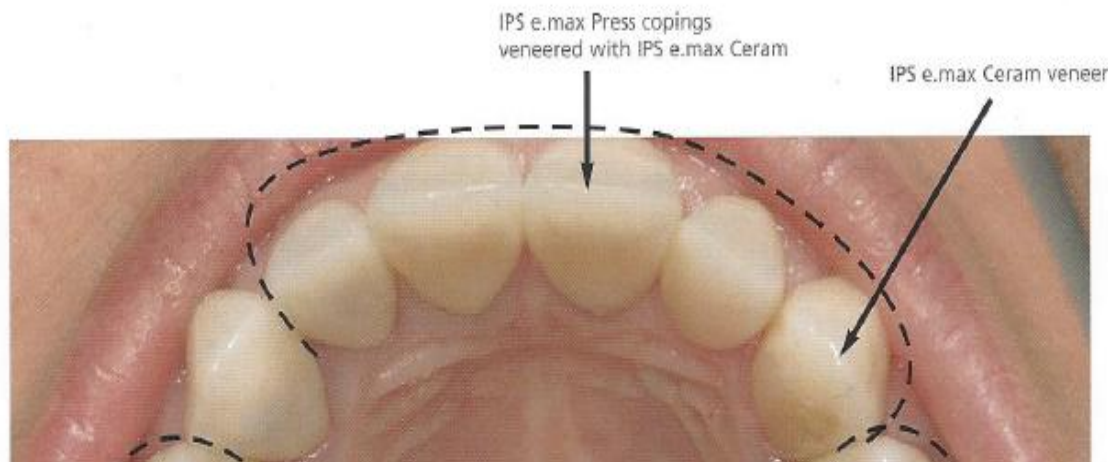
... adhesively cemented with Multilink.

Pictures courtesy of PD Dr Daniel Edelhoff / Oliver Brix, Germany

The completed IPS e.max Press | Ceram crown in place



Pictures courtesy of Prof. Dr Daniel Edelhoff / Oliver Brix, Germany



Zirconium oxide – high strength and high performance



IPS e.max Ceram on IPS e.max ZirCAD
Prof. Dr D. Edelhoff/ O. Briz, Germany

You can depend on zirconium oxide in situations where high strength is required, for example, in long-span bridges.

Zirconium oxide is presently the strongest all-ceramic available for dental applications. It is additionally characterized by excellent biocompatibility and low heat conductivity. Because of its excellent final strength, IPS e.max ZirCAD also fulfills clinical requirements. For example, it stands up to the strong masticatory forces in the posterior region without difficulty. Zirconium-reinforced restorations are veneered with the IPS e.max Ceram layering ceramic. Alternatively, IPS e.max ZirPress can be pressed onto them. The IPS e.max CAD-on technique now also allows users to "veneer" zirconium frameworks with the IPS e.max CAD material. In this technique, the ZrO_2 framework and the IPS e.max CAD veneering structure are joined by means of a fusion glass-ceramic.

Your dental technician can even fabricate a conventional inlay-retained bridge with all-ceramic materials according to minimally invasive principles. This type of restoration optimally combines the strength of IPS e.max ZirCAD frameworks with the esthetics and precision fit of pressed ceramics.



WIK-Keramik, Austria

The Straumann® Anatomic IPS e.max® Abutment

The new Straumann Anatomic IPS e.max Abutment has been specially developed for use with the Straumann Bone Level Implant (Regular CrossFit) and the components of the IPS e.max system. Therefore, your dental laboratory can fabricate an indirect IPS e.max restoration for the abutment, for example, using lithium disilicate. Alternatively, you may choose to have the abutment veneered or a ceramic material pressed directly onto it.

The Straumann Anatomic IPS e.max Abutment is a high-strength, anatomically shaped zirconium oxide abutment that exhibits exceptional fit. It is supplied in two shades: MO 0 and MO 1.

All your work will benefit from the smooth shade transition between the abutment and the crown, which further enhances the esthetics of your IPS e.max restorations.



The abutment is exclusively available from Straumann.

The highlights

- High performance even in the posterior region thanks to unrivalled strength and high fracture toughness
- Excellent biocompatibility and low heat conductivity
- High-strength bridge restorations by combining ZrO_2 and LS₂

IPS e.max® Ceram – vibrant and natural



IPS e.max Ceram on four different materials (from left to right):
IPS e.max Press, IPS e.max ZirPress, IPS e.max ZirCAD, IPS e.max CAD
(MDT T. Michel, Germany)

You will appreciate the benefits offered by the fact that the IPS e.max system features only one layering ceramic. You can choose a suitable framework material, for example, lithium disilicate ceramic or zirconium oxide, depending on the indication to be treated and the required strength. Your dental technician will veneer all the different IPS e.max frameworks with the highly esthetic IPS e.max Ceram layering ceramic to impart the restorations with individual character and natural-looking vibrancy.

Irrespective of the framework material, IPS e.max Ceram allows a wide range of types of restorations. Since the veneers have the same properties as the frameworks, they have the same wear and uniform esthetic appearance.



IPS e.max restoration with gingival parts
(MDT T. Michel, Germany)



"The difficulties associated with restoring complex patient cases in an esthetic manner by means of different all-ceramic materials are a thing of the past with IPS e.max and IPS e.max Ceram. Thanks to only one layering ceramic, optimum integration is possible, no matter which framework material is chosen. The clinical properties as regards polishing, surface gloss and wear behaviour are the same for me as a dentist but also to patients. The choice between adhesion and cementation for the different materials considerably facilitates routine dentistry."



IPS e.max Ceram on IPS e.max Press
(Prof. Dr D. Edelhoff / O. Bris, Germany)

The highlights

- One layering ceramic for lithium disilicate and zirconium oxide frameworks
- Predictable shade results and consistent clinical behaviour as regards wear, independent of the framework material
- Nano-fluorapatite for highly esthetic properties

Lithium disilicate – esthetic and versatile



before



after

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

The lithium disilicate ceramic (LS₂) of the IPS e.max system shows that esthetics and strength can be successfully combined. This is particularly true in single-tooth restorations, because this innovative ceramic produces esthetic results, while offering a flexural strength that is 2.5 times higher than that of other glass-ceramics.

IPS e.max lithium disilicate has many uses. Its indication spectrum ranges from thin veneers (0.3 mm) and minimally invasive inlays and onlays to partial crowns, full crowns and three-unit anterior bridges as well as implant superstructures. If the IPS e.max CAD-on technique is applied, LS₂ can also be used with a zirconium oxide framework for posterior bridges with up to four units.

Because of its high flexural strength of 360–400 MPa, restorations fabricated with this material can be cemented with different methods. Due to their natural-looking shades

and optimal light transmission, lithium disilicate restorations offer highly esthetic solutions. Depending on the needs of the patient, the restorations can be veneered with a highly esthetic material or they can be monolithically fabricated (i.e. to full contour) and then economically characterized.

Even if the tooth's core is dark in colour (e.g. discoloured preparations or titanium abutments), you no longer have to resort to zirconium oxide or metal-ceramic solutions. You can inform the dental laboratory about the colour that needs to be masked and the dental technician in charge will choose the IPS e.max lithium disilicate material with the required opacity to restore the natural esthetic appearance of the tooth.

