

# update

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## Multilink® Automix

### The ideal cementation material for IPS e.max® - now even better

The Multilink® Automix adhesive cementation system, which has been used a million times over, has been reformulated. Users now benefit from improved handling and an additional white shade.

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Now available in a denture cleaning set

#### COMPETENCE IN ALL-CERAMICS



Multilink Automix has a long and successful track record in the cementation of indirect restorations. It generates a strong bond to a wide variety of dental materials.

The “balanced performance” initiator system is responsible for establishing a well-balanced and sound bond between the restoration and the tooth structure – irrespective of whether the material is light cured or chemically cured. Due to the innovative universal primer Monobond® Plus, Multilink Automix generates an excellent and long-lasting bond to IPS e.max® and all kinds of other restorative materials. A number of long-term studies have confirmed the

clinical success of this cementation system. A 99% survival rate in terms of the adhesion of the restorations (9 studies, 291 restorations) additionally underlines the success of the Multilink Automix System.

#### The latest generation

Due to the advanced initiator system, excess material can now be cleaned up even more easily with the “quarter technique”. Depending on the performance of the curing light used, excess cement can be light-activated for one to three seconds per quarter surface. Within this time, the material attains a gel-like state, which makes it easy to remove with a scaler.

The shade range now also includes a white material featuring medium translucency. Matching water-soluble glycerine-based try-in pastes are also available for simulating and checking the shade effect of the restorations. The system is rounded off with Air-Block Liquid Strip, which is used to cover the cement line during curing to prevent the formation of an inhibition layer. The resulting completely cured cement margins create the ideal prerequisite for restorations without marginal discoloration. The Multilink Automix components can now also be stored at room temperature.



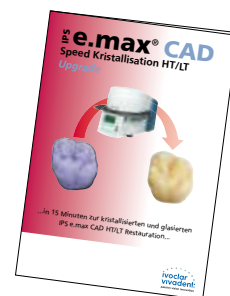
#### Multilink Automix at a glance:

- Strong bond, irrespective of the curing method used: dual or chemical curing
- Universal use; can be used to cement silicate and oxide ceramics as well as metal
- Clinically proven in numerous long-term studies
- New optimized handling and a white shade

# IPS e.max<sup>®</sup> CAD Speed Crystallization

## Crystallized and glazed restorations in less than 15 minutes

**Even more expeditious: IPS e.max<sup>®</sup> CAD restorations can now be crystallized even more rapidly in the Programat<sup>®</sup> CS furnace due to a newly designed, smaller crystallization tray and new firing parameters.**



The new firing parameters of the Speed Crystallization program allow IPS e.max<sup>®</sup> CAD restorations (HT/LT) to be crystallized in an even shorter time than before. Together with the new, small IPS e.max CAD Speed Crystallization Tray, restorations can now be crystallized in less than 15 minutes in the Programat<sup>®</sup> CS ceramic furnace. This tray is requisite to perform the Speed Crystallization process and to achieve high-quality restorations. Up to two restorations can be crystallized and glazed

simultaneously. A specially designed Glaze Spray is used for glazing. This spray ensures that the IPS e.max CAD restorations exhibit a high-quality glaze even if they are fired in a very short firing process.

### **A faster process while offering the same quality**

The new crystallization process, applied in combination with the new tray, enables the lithium metasilicate crystals to reliably and completely convert into lithium disilicate.

This ensures highly esthetic restorations offering optimal physical properties. High-quality properties form the basis for the outstanding long-term clinical success of IPS e.max CAD restorations.

The software update and the new tray are offered together in a package as IPS e.max CAD Speed Crystallization Upgrade for Programat CS.



# Programat<sup>®</sup> S1

## Sintered ZrO<sub>2</sub> restorations in only 75 minutes

**The Programat<sup>®</sup> S1 furnace ensures reliable and rapid sintering of ZrO<sub>2</sub> materials. It now sinters restorations in as little as 75 minutes, offering even more efficiency.**

As early as in 2009, Ivoclar Vivadent revolutionized the dental market by reducing the sintering process of the Programat S1 from the usual six to eight hours down to a mere 90 minutes. Now the sintering process has been reduced by a further 15 minutes due to the new software version V2.0. Sintering now takes only 75 minutes, cooling phase included. As a result, ZrO<sub>2</sub> frameworks can be completed even more quickly and efficiently.

### **New software**

The new V2.0 software enables even more efficient sintering processes. From now on, fully anatomic restorations can be sintered in the Programat S1 using the newly added sintering programs. Even up to 4-unit bridges can be completely sintered in as little as 90 minutes. Users who already have a Programat S1 furnace can download the new software version from the Download Center free of charge.





# Tetric EvoCeram® Bulk Fill

## The new direct restorative procedure

With Tetric EvoCeram® Bulk Fill, posterior fillings can now be placed even faster.

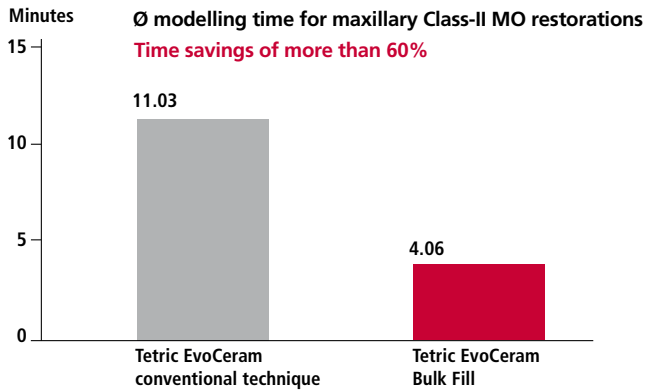
In the past, placing posterior restorations involved considerable effort and time. In order to compensate for the polymerization shrinkage, several 2-mm layers had to be applied and cured. What is more, a complete cure of thick composite layers was impossible to achieve.

A new technique has now found its way into today's dental practices: the bulk-filling technique. Tetric EvoCeram Bulk Fill allows large 4-mm increments to be placed in posterior teeth, rendering the application of various layers and intermediate curing unnecessary. This makes the direct restorative procedure with composite extremely efficient and economical.

### The new opportunities opened up by the bulk-filling technique

Application, sculpting and curing are accomplished up to 60% faster than with conventional 2-mm composites when the 4-mm bulk increment technique with Tetric EvoCeram Bulk Fill is used. This was confirmed in a hands-on workshop attended by 32 dentists. The considerable time savings are due to the application in only

### Posterior efficiency, zero compromise



Source: 32 experienced dentists from 21 countries, ICDE Schaan (2011)

one layer and the shorter curing time of Tetric EvoCeram Bulk Fill. The easy handling and sculpting and contouring are an additional asset of Tetric EvoCeram: The material's smooth yet packable consistency facilitates placement and modeling and ensures excellent adaptation to cavity walls. Even cusps are easy to build up. Neither a

cavity liner nor a capping layer is required. Moreover, the material features low volumetric shrinkage and shrinkage stress.

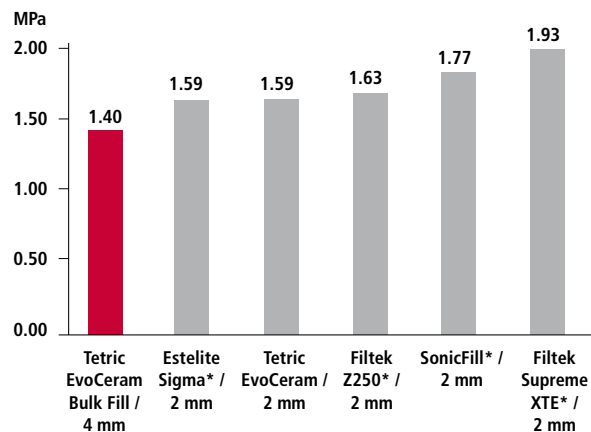
\*32 dentists filled the MO cavities of a model using the conventional 2-mm technique and the bulk-filling technique with Tetric EvoCeram Bulk Fill. ICDE Schaan, 2011.

### Shrinkage stress relievers

In order to avoid marginal leakage, volumetric shrinkage and shrinkage stress must be kept low. Therefore, special shrinkage stress relievers are integrated into the filler composition of Tetric EvoCeram Bulk Fill. Due to their size and relatively low elastic modulus, they act like microscopic springs and thus attenuate the shrinkage stress. A comparison between the shrinkage forces occurring in proven composites and those in Tetric EvoCeram Bulk Fill illustrates the effect of the shrinkage stress relievers.

### Shrinkage stress: 4 mm vs. 2 mm

In MPa: pulling forces acting on the cavity walls via the surface



Measurement acc. to Watts in 2-mm and 4-mm layers, R&D Ivoclar Vivadent, June 2011

\*These brands are not registered trademarks of Ivoclar Vivadent AG.

# Tetric EvoCeram® Bulk Fill and Bluephase® Style

The new Special Edition "Warning: highly addictive!" by Dr Markus Lenhard provides interesting background information about the use of Tetric EvoCeram Bulk Fill and Bluephase Style and presents related case reports.

Which new possibilities are opened up for dental practices by Tetric EvoCeram Bulk Fill, the sculptable 4-mm composite? This is one of the questions explored by Dr Markus Lenhard in the publication entitled "Warning: highly addictive!". Apart from providing scientific details and clinical images, comparisons with competitive products are made. Dr Lenhard's personal opinion about Tetric EvoCeram is a very positive one. The reasons he states are, among others, the material's excellent handling and the possibility of using a greatly simplified and more efficient layering technique.

The new Special Edition is available in English and German. Please ask your field sales rep for the publication, or order a copy by phone at +423 235 3636.



# IPS Empress® Direct Color

## The art of natural characterization

IPS Empress® Direct Color comprises seven selected shades for the creation of natural-looking characterizations.

With a range of seven shades, IPS Empress Direct Color is suitable for customizing highly esthetic restorations in the anterior and posterior region. The material can be used for direct composite restorations, CAD/CAM restorations and for the masking of discoloured tooth structure. IPS Empress Direct Color can be applied directly to composite and ceramic surfaces without needing to be thinned down. The ultra-fine tips of 0.4 mm allow the material to be applied with ease and high precision.



Available in the following shades:  
white, grey, blue, purple, honey, ochre, brown

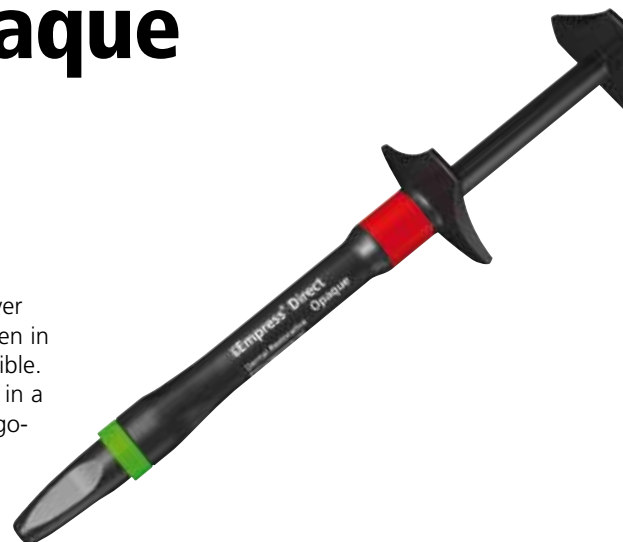
# IPS Empress® Direct Opaque

## The simple art of masking

**IPS Empress® Direct Opaque is the ideal opaquer to mask undesired shade effects.**

The light-curing opaque IPS Empress Direct Opaque reliably masks undesired tooth discolorations, exposed metal surfaces and core build-ups in the anterior and posterior region. Due to the opaquer's outstanding masking ability, the application of a

thin layer is sufficient to effectively cover unsightly stains and metal surfaces. Even in deeper layers, no discolorations are visible. IPS Empress Direct Opaque is available in a universal shade and supplied in the ergonomic LuerLock syringe.



Initial situation



Pre-treated cavity



Masking with IPS Empress Direct after the application of Heliobond



Characterization with IPS Empress Direct Color



Final result

Photos: Dr Ronny Watzke, Ivoclar Vivadent AG, Liechtenstein.

# i-Kids – Pediatric Dental Solutions

## Oral health management for children and adolescents

**The new "Seal&Fill" i-Kids Kit is made up of coordinated products for preventive and restorative treatment measures.**

The new Seal&Fill i-Kids Kit featuring Helioclear® F and Tetric EvoCeram® Bulk Fill comprises coordinated products that are suitable for preventive and restorative dental treatment in children. Pits and fissures in children's teeth are particularly susceptible to caries. Sealing these at-risk areas with Helioclear F protects them with an impermeable layer and prevents bacteria from adhering to them. Long-term clinical experience with Helioclear F attests to the effective protection offered by the varnish against caries in deciduous and permanent teeth.

If a filling has to be placed nevertheless, Tetric EvoCeram Bulk Fill is available. Since this restorative can be placed in bulk increments of 4 mm, it is ideal for treating children. Furthermore, the material is easy to contour and it polymerizes quickly under the light of Bluephase® Style, for example.

Apart from the two products mentioned, Helioclear F and Tetric EvoCeram Bulk Fill, the i-Kids Kit also contains the new i-Kids Buttons for girls and boys.



# OptraGate®

## High scores for patient comfort

**A patient satisfaction survey clearly shows: the innovative lip and cheek retractor OptraGate® is equally popular among dental professionals and patients.**

The lip and cheek retractor enables the treatment field to be enlarged effectively and comfortably. Dentists, assistants and patients all benefit from the improved view provided by this gentle auxiliary. Customers surveyed in a recent study gave OptraGate 96 percentage points out of a possible 100 for comfort of wear. OptraGate reduces treatment times and can be worn in the mouth without needing the application of additional instruments – features that

contribute to the high level of customer satisfaction. With enhanced access to the treatment field, dental procedures are optimized and, according to the estimates of the surveyees, treatment times are reduced by an average of six minutes. For some treatments OptraGate may be applied by a single person without the need for additional assistance. The lip and cheek retractor is suitable for many different applications, combining efficiency and comfort in dentistry.



# Cervitec® Plus

## Beneficial varnish for the protection against root caries

**The protective varnish Cervitec® Plus effectively controls the bacterial activity on exposed root surfaces.**

The risk of root surfaces becoming exposed increases with age and so does the risk of root caries, as bacterial biofilms can form directly on the sensitive root cement and dentin. Recent findings from a study conducted at the University of Leipzig show that the application of the protective varnish Cervitec Plus, which contains 1% chlorhexidine and 1% thymol, significantly reduces the occurrence of cariogenic mutans streptococci in bi-

ofilms. In the study, 40 patients aged between 35 and 55 were treated with Cervitec Plus. The preparation was applied repeatedly to exposed surfaces and the germ spectrum was investigated microbiologically.

Literature: Eckert F-R, Eschrich K, Kneist S, Jentsch H: Beeinflussung der bakteriellen Besiedlung der Wurzeloberflaeche durch Cervitec- und Cervitec Plus-Lack. Oralprophylaxe & Kinderzahnheilkunde 2011; 34: 66-73.



Application of Cervitec Plus on exposed root dentin at the crown margin (Picture: Dr. R. Watzke)



Cervitec Plus in the free-standing single dose delivery form



# Cervitec® Gel

## Assists in the daily care of removable dentures

**Cervitec® Gel, an oral care gel containing chlorhexidine and fluoride, helps prevent inflammation and is suitable for looking after dentures. The gel is now also available in a new denture cleaning set.**

Quality removable dentures need the same meticulous care as natural teeth. Cervitec Gel is recommended for keeping dentures as free from germs as possible. The gel reduces the formation of plaque and the bad breath that accompanies it and minimizes inflammation and the formation of caries in natural teeth.

The new denture cleaning set from Ivoclar Vivadent is specially designed for denture wearers. It contains Cervitec Gel and a convenient denture storage container. The enclosed leaflet provides clear instructions on how to use the gel. A patient information brochure on Cervitec Gel, which focuses on the topic of denture cleaning, is available for dental practices.



# Alloy Configurator – now also available as an app

**The proven Alloy Configurator from Ivoclar Vivadent competently assists users in selecting the appropriate alloy. The Configurator is now also available as an app for iPhones and iPads.**

The Alloy Configurator has been enhanced and is now available free of charge as an app, providing valuable guidance and assistance in selecting the appropriate alloy. Different criteria such as indication, composition, group and colour can be entered quickly and easily. The Configurator shows the alloys that match the criteria entered and displays detailed information about the individual search results. In addition, users can conduct cost comparisons between two alloys. For this purpose,

the density and purchase cost of the alloys in question are typed in and the system calculates the unit cost on the basis of this information.

### Two new alloys

The new Alloy Configurator app also includes the two newly introduced alloys from Ivoclar Vivadent: Harmony® 2 and Callisto® CPG. Harmony 2 is one of the most affordable gold-coloured Crown & Bridge alloys in the



Ivoclar Vivadent range and is ideally suited for the fabrication of full cast crowns and short-span bridges. Callisto CPG is a cobalt-chromium-based ceramic bonded alloy containing palladium and a reduced gold content. All alloys are biocompatibility tested and certified.

The Alloy Configurator app can be downloaded and installed from the App Store.

# Reflect article now also available for the iPad

For the first time, Ivoclar Vivadent is offering a digital version of an article in Reflect, the magazine for dental professionals.

The article entitled "Harmoniously integrated – All-ceramic restorations with IPS e.max Press Abutment Solutions" by Dr Fernando Manfroi and MDT Yunus Sert can now also be viewed interactively on the iPad. The two authors provide a step-by-step explanation of how they succeeded in unobtrusively restoring the teeth of their patient by placing an implant-supported restoration and several tooth-supported crowns. The digital edition of the article is much more comprehensive than the printed one. The authors give additional details about the starting situation, the clinical pre-treatment measures, the preparation of the model, the technical implementation, the luting of the abutment and the finishing procedure employed. The viewers of the iPad version will be able to enjoy amazing image sequences. Moreover, they are offered the opportunity to obtain more information about the products used and learn more about the authors.



To go directly to the Reflect magazine app (in English and German):

Scan the QR code with your iPad or enter the following link:

<http://www.ivoclarvivadent.com/reflect>



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