

# update

01|2012



## IPS e.max<sup>®</sup> Press Abutment Solutions

### Efficiency and esthetics redefined

When it comes to implant-supported restorations, a clear trend has been observed towards customized abutments. This trend has been recognized by IPS e.max<sup>®</sup> Press Abutment Solutions, which represent a new way of fabricating implant-supported restorations directly in the dental laboratory.

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Vast range of products

#### COMPETENCE IN ALL-CERAMICS



Using IPS e.max Press, you can now fabricate pressed implant-supported restorations by combining a titanium base (Ti base) with lithium disilicate (LS<sub>2</sub>) glass-ceramic.

There are two options:

- hybrid abutments and
- hybrid abutment crowns

#### IPS e.max Press hybrid abutments

In addition to featuring an optimum design of the emergence profile, customized, tooth-coloured hybrid abutments offer long-lasting esthetics, even in cases of gingiva recession. With the fluorescence of the LS<sub>2</sub> glass-ceramic and individual characterizations, you can achieve a lifelike appearance. The hybrid abutment's geometry facilitates the seating procedure and the removal of excess cementation material.



#### IPS e.max Press hybrid abutment crowns

A hybrid abutment crown is an abutment and a monolithic crown in one. This is an efficient two-in-one solution, which is directly luted to the Ti base. The LS<sub>2</sub> glass-ceramic provides for strength, durability and efficiency, particularly in the posterior region.

Hybrid abutment crowns are screwed onto implants intraorally – in one piece. Thus, the bothersome task of excess removal is a thing of the past. Finally, the screw access channel is sealed with composite material (e.g. Tetric EvoCeram<sup>®</sup>). If required, the screw can be accessed at any time.



The IPS e.max Abutment Solutions CEM Kit, which contains a range of coordinated products used for the cementation procedure, completes the system. This kit comes with all the components that are necessary to prepare and conduct a clinical try-in (e.g. Virtual Extra Light Body Fast Set) and all materials that are required for the permanent cementation to a Ti base (e.g. Multilink<sup>®</sup> Implant).

# Editorial



## Dear Reader

The technological advances we are seeing today not only provide a continuous flow of new and improved high-quality materials – they also ensure innovative, time-saving and safe processing procedures dental professionals can rely on.

Dental laboratories are now in a position to use the time-tested press technique for the creation of unique, implant-supported prosthetic restorations. The IPS e.max Press Abutment Solutions range allows the clinically proven lithium disilicate glass-ceramic to be used in the fabrication of custom-pressed abutments – a further new prosthetic option that is bound to increase the productivity and efficiency of dental labs.

With the same objective in mind, Ivoclar Vivadent has launched a new composite resin for direct restorative procedures: Tetric EvoCeram Bulk Fill. One filling, one material, one increment – bulk filling without compromise.

Find out more about these and other stunning new options in this issue of Update.

Sincerely

Christian Brutzer  
Global Region Head Asia/Pacific  
Ivoclar Vivadent AG

The self-curing luting composite Multilink Implant has been specifically developed for the permanent cementation of implant-supported restorations. When used in combination with Monobond Plus primer, excellent bond strength values are achieved.



IPS e.max Press Abutment Solutions represent a new, efficient alternative to prefabricated or customized abutments created with other materials.

Some products are not yet approved for sale/available in some markets. Please contact your local Ivoclar Vivadent organization for more details on the current status.

More information and a video on IPS e.max Press Abutment Solutions are available at [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com)

## Proper cleaning after try-in

**Ivoclean effectively cleans the bonding surfaces of prosthetic restorations after try-in. The cleaning paste is universally applicable and easy to use.**

During intraoral try-in, the contamination of restoration surfaces with saliva cannot be avoided. However, this contamination can pose a problem when the lab-fabricated restorations are adhesively cemented afterwards. Ivoclar Vivadent's solution to this problem: Ivoclean, the universal cleaning paste that allows you to effectively clean the bonding surfaces of prosthetic restorations and thus creates an optimum basis for adhesive luting procedures.

### Universal and easy to use

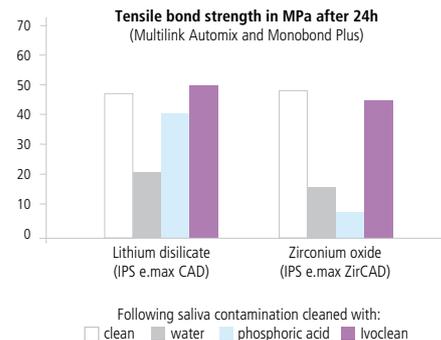
Ivoclean is suitable for all types of restorative materials, including glass-ceramic, zirconium oxide ceramic, aluminium oxide ceramic, precious metal and base metal alloys as well as lab-fabricated composite restorations. The cleaning paste is easy to use: Simply apply it to the bonding surface of the restoration, leave it to react for 20 seconds and then rinse it off thoroughly with water. Subsequently, dry the bonding surface with oil-free air.



Ivoclean: Universal cleaning paste for the effective cleaning of restorations after try-in



Application of Ivoclean to the bonding surfaces of the restoration



Bond strength tests illustrate the effective cleaning performance of Ivoclean on IPS e.max lithium disilicate (LS,) glass-ceramic and zirconium oxide ceramic.

Source: R&D Ivoclar Vivadent AG, Schaan, Liechtenstein, 2011



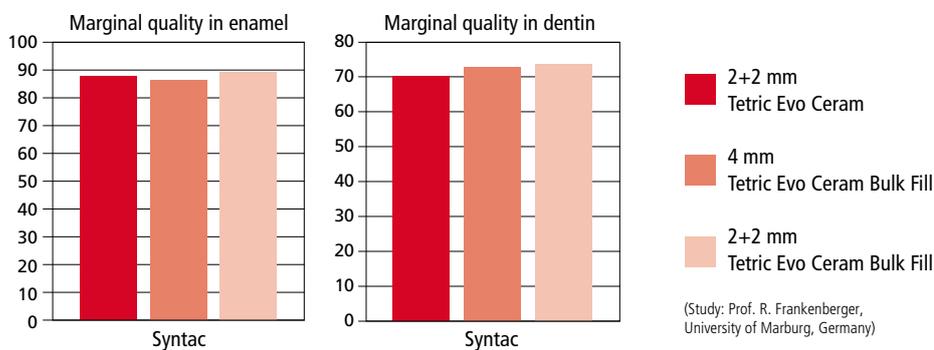


# Tetric EvoCeram® Bulk Fill:

## Scientifically proven benefits

**Tetric EvoCeram® Bulk Fill is a sculptable nanohybrid composite suitable for the 4-mm bulk filling technique. It matches "conventional" universal composites in every way. This has been scientifically proven.**

In a study conducted only recently, Professor Roland Frankenberger compared the marginal quality of incremental composite resin restorations (consisting of 2-mm layers of Tetric EvoCeram) and bulk-filled composite restorations (consisting of one 4-mm layer of Tetric EvoCeram Bulk Fill). The adhesive used in this trial was the clinically proven Syntac from Ivoclar Vivadent, which is considered to be the gold standard among the adhesive systems. The combination of Syntac and Tetric EvoCeram composite resin, with which more than 90 million restorations have been fabricated worldwide to date, was taken as a reference due to the very high portion of intact margin it generally achieves. The study revealed that when using the bulk filling technique with Tetric EvoCeram, the same marginal quality is attained than when using the tried-and-tested Tetric EvoCeram system.



Tetric EvoCeram Bulk Fill restorations do not require a final covering layer, and no special application instruments need to be used. All the important properties of a composite, such as sculptability, polishability, shrinkage, shrinkage stress, strength and curing time have been optimized in Tetric EvoCeram Bulk Fill with one goal in mind: to take the filling of posterior teeth to a new level of efficiency.

These physical properties are the result of the targeted further development of Tetric EvoCeram composite resin. A new, patented polymerization booster or accelerator enhances the standard initiator system. It ensures the complete and fast cure of 4-mm thick increments. Due to a light sensitivity inhibitor, Tetric EvoCeram Bulk Fill remains in a sculptable state for a long time under operator light conditions. Moreover, a shrinkage stress reliever reduces the shrinkage and shrinkage stress within the material to a minimum during polymerization.

A detailed overview of all the studies and tests conducted with Tetric EvoCeram Bulk Fill can be found in the Scientific Documentation of Tetric EvoCeram Bulk Fill, which is available at [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com).

**Tetric EvoCeram Bulk Fill** – The bulk composite without compromises providing a new level of efficiency in posterior tooth restoration.

**One filling:** Teeth are filled and contoured without requiring a final layer.

**One material:** The composite's smooth consistency enhances adaptation.

**One increment:** The 4-mm bulk increment technique streamlines filling procedures.



Two delivery forms, a strong result: Tetric EvoCeram Bulk Fill.

## Navigating the maze of cementation on your mobile

**The Cementation Navigation System is now also available as an app for iPhone and iPad. The new app allows users to gain an overview of the cementation options any time on their mobile.**



Since December 2011, CNS has been available for download in the iTunes Store. The new version additionally features a "Cementation on implant abutments" section. Moreover, all the cementation procedures that can be conducted with Ivoclar Vivadent luting materials are now explained in detail by means of more than 200 animations.

Those who wish to playfully gain an overview of the advantages of CNS can do so by playing "CNS – The Game". The navigation apps and the game can be found in the iTunes App Store under the search term "Ivoclar".

# bluephase® redefined

**Progress results from a combination of proven and new technologies. Following this principle, Ivoclar Vivadent has modernized the classic bluephase®.**

The high standard of the cordless bluephase curing light is equally appreciated by dentists, scientists and renowned test institutes.

## bluephase style – now comfortable to fit every hand

Whilst offering a comparable light intensity (1,100 mW/cm<sup>2</sup> ± 10%), bluephase style is smaller in design and therefore more comfortable to hold in the hand than its predecessor. Whether man or woman, small or big: the compact design of the bluephase style



bluephase style (bottom) with state-of-the-art design: It's slimmer, more lightweight and fits even more snugly in the hand.

curing light comfortably fits every hand; the light can be held like a pen or gun. Its well-balanced lightweight design reduces the strain on arms and hands – irrespective of the size of your hand.

## LED for every indication

Small and compact, bluephase style offers all the distinguishing advantages of the existing

bluephase such as the Click & Cure function (enabling a quick change from battery to mains operation) and the proven proprietary polywave® LED technology. Consequently, bluephase style is suitable for all photoinitiators and materials which cure in the wavelength range of 385 to 515 nm, which is not the case with second-generation LED light units.

## Shorter 10-mm light probe

The light probe of bluephase style is clearly different from all known light probes: it is

shortened to allow easy access to all tooth surfaces without extreme opening of the mouth. In addition, the probe's large diameter of 10 mm illuminates the entire area even of large cavities, eliminating the need for time-consuming multiple exposures in MOD restorations in particular.



# Proxyt®

## Gentle care of composite surfaces

**New study results demonstrate the surface effects of prophy pastes on composite materials. The Proxyt® fine paste was found to be particularly gentle to composites.**

The effects prophy pastes have on the surfaces of composite-based restoratives is an important criterion for their use. This effect has been analyzed under standardized con-

ditions. In the study, various pastes, advertised by the manufacturers as "fine" or "one-step" products, were applied on different composite materials. Cleanic® and

CleanPolish (KerrHawe), Nupro® (Dentsply) and Proxyt® (Ivoclar Vivadent) were used.

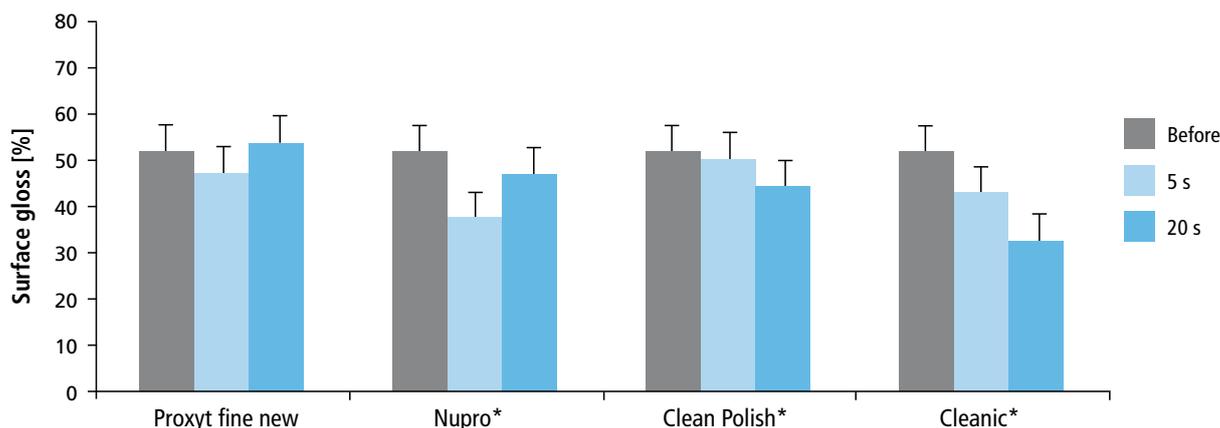


Fig. 1: Surface effects of different fine prophy pastes on Tetric EvoCeram® (Ivoclar Vivadent) after a polishing time of 5 or 20 seconds. \* Not registered trademarks of Ivoclar Vivadent AG. Results from the study: Lendenmann U, David G, Gigerl S, Schwenninger M, Roulet JF: Effects of Prophy Pastes on Composite Resin Surfaces. prophylaxe impuls 2011; 15: 71-76

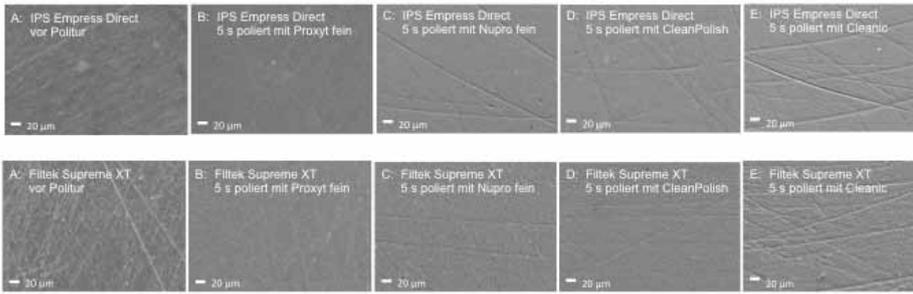


Fig. 2: SEM images of the surface structure before and after 5-second polishing with various prophylactic pastes: of IPS Empress Direct® (Ivoclar Vivadent, top row) and Filtek™ Supreme XT (3M Espe).

Results from the study: Lendenmann U, David G, Gigerl S, Schwenninger M, Roulet JF: Effects of Prophylactic Pastes on Composite Resin Surfaces. prophylaxe impuls 2011; 15: 71-76

Scanning electron microscope images and surface gloss measurements highlight the different effects caused by the various pastes used on the restoratives. Contrary to some of the prophylactic pastes, Proxyt fine was able to maintain or even optimize the gloss of all composites (Fig. 1). The scanning electron microscope images show largely smooth surfaces after the application of Proxyt fine (Fig. 2).

# i-Kids – Pediatric Dental Solutions

## Quick restorations for children



Tetric EvoCeram Bulk Fill, shade IVW

**When it comes to treating children, direct restorative procedures must be speedy. For this reason, the new Tetric EvoCeram® Bulk Fill plays an important role within the i-Kids program.**

It can be placed in increments of 4 mm, excellently contoured and quickly cured and polished – these advantages make Tetric EvoCeram Bulk Fill predestined for use in the treatment of children. In addition, the requirement of allowing quick procedures while ensuring a high quality is also met.

For children's teeth, the recommended shade is IVW, a white shade which readily adapts to the bright natural appearance of children's teeth. Additional selected i-Kids products support the efficient and conve-

nient treatment with Tetric EvoCeram Bulk Fill: for instance OptraGate® Junior, an auxiliary which retracts lips and cheeks and thus creates an enlarged treatment field. Or the one-step polisher OptraPol®, which creates smooth surfaces that reduce the formation of bacterial biofilm. To protect restored and healthy teeth, you can use the fluoride varnish Fluor Protector. The Certificate of Bravery has been designed to offer children an incentive to look forward to the recall appointment after the successful treatment with the bulk composite.



## i-Kids: HeliOSEAL® – superiority clinically confirmed

**A current study\* shows that the HeliOSEAL® sealant from Ivoclar Vivadent is superior to the competitor product Embrace™ (Puldent) with regard to retention and quality.**

The moisture-tolerant fissure sealant Embrace showed significant weaknesses both with regard to retention and quality. Taking also the occurrence of caries into account, the clinical investigation took place immediately after the application and after one year both palpably and optically based on images.

| Result<br>[tactile or optical based on images] | HeliOSEAL                          | Embrace  |
|--|------------------------------------|--|
| Rough surfaces [optical]                       | 0%                                 | 78.2%  |
| Rough surfaces [tactile]                       | 0%                                 | 37.7%  |
| Tooth/sealing interface [tactile]              | Slightly palpable in 7.3% of cases | - Slightly palpable in 36.4% of cases<br>- Clear step palpable in 14.5% of cases |
| Caries in the marginal area                    | 0%                                 | 3.6%   |

\* Schlüter N, Klimek J, Ganß C: Klinische Beurteilung eines feuchtigkeitstoleranten Fissurenversiegler im Vergleich zu HeliOSEAL. DGZ 2011, Kongressbuch p. 75



# Implant Esthetics

## A vast range of products for esthetic restorations

**In the world of dental medicine, the term "implant restoration" is often used to denote the integration of an implant in the bone, and the prosthetic part of the restoration is often ignored. This omission is quite remarkable, as the prosthetic superstructure is the visible part, which matters most to patients.**

The prosthetic part of implant restorations is only slowly gaining the attention it deserves – and about time too, as it is the important component, which not only determines the functional requirements which a dental restoration must meet, but also the esthetic appearance.

In this day and age, ever more patients are provided with implant restorations; the prerequisite for a successful treatment is a sound preparation and implementation of the prosthetic work. Suitable planning of the surgical treatment and appropriate material systems are a viable aid to considerably prolong the lifespan of a lifelike prosthetic restoration.

Ivoclar Vivadent has enjoyed an excellent reputation in the field of esthetic fixed and removable restorations as well as direct restoratives for many years. In this context, the Implant Esthetics competence area represents a vast range of products that are suitable for esthetic and functional implant-supported restorations.

Ivoclar Vivadent looks back on an in-depth and long-standing expertise in the fields of metal-supported, all-ceramic and removable implant-supported restorations. This makes us your expert partner in all matters of implant-supported dental prosthetics and esthetics.

### New communication tool for the Implant Esthetics competence area

Multimedia with a twist: The contents of the Implant Esthetics CD-ROM are now available as a USB stick in the shape of a credit card. This new communication tool contains information on all the products which are suitable for use in conjunction with implant-supported restorations. Furthermore, the CD-ROM contains additional information on implant restorations. You can order the tool, which is available in German and English, from Ivoclar Vivadent.



# Spot-on calculations

## The alloys Callisto® 84 and Callisto® 86 afford dental labs more economic efficiency.



There are still many situations and indications in which metal-supported restorations are the treatment of choice. In many cases, precious metal alloys still offer clear benefits, which include the warm colour, the processing properties and the biocompatibility. In view of the soaring metal prices, however, the choice of a suitable alloy is decisive. After all, this choice greatly affects the price of the alloy framework, and consequently the final restorations. Thus, you are advised to consider more economical alternatives already when purchasing the materials.

The new ceramic alloys Callisto 84 and Callisto 86 offer you an attractive option: They feature the above benefits of precious metal alloys and yet are very attractively priced due to the carefully defined composition. These two high-gold alloy compositions feature a high quality and excellent handling properties. You can thus benefit from the decades of experience in the production of high-quality dental alloys offered by Ivoclar Vivadent.

### Accurate calculations with the bottom-line calculator

Use our bottom-line calculator as a helpful tool to determine the absolute costs of two alloys. With this tool, you can not only compare the purchase price of two alloys, but also their density. This is a decisive factor that determines the quantity you need and therefore the costs. This is the only way to calculate the actual costs of an alloy.

The bottom-line calculator is integrated into our comprehensive alloy configurator, which you can find on the Internet at: <http://alloycfg.ivoclarvivadent.com>

# Benefit from a rich tapestry of experience

Ivoclar Vivadent is regularly conducting internationally renowned seminars and congresses. These events tend to be eagerly awaited by experts and interested participants alike. On 16 and 17 August 2012, the 17<sup>th</sup> Seminario will be held in Mexico.

This seminar, which is organized by Ivoclar Vivadent Mexico, is regarded as the largest dental event organized by a private dental company in all of Latin America. More than 5000 dentists and dental technicians gather for the event every year at the Mexico City World Trade Center.

Twenty of the most renowned national and international speakers, including Paulo Kano

and Sidney Kina, will attend the event. They will share the latest developments and insights in the realm of high-end dental esthetics and provide the audience with tips for the daily work.

The Ivoclar Vivadent Mexico seminar has become a high-quality scientific forum, which is mainly dedicated to one overriding issue: valuable experience.

## Upcoming Ivoclar Vivadent events:

**16 and 17 August 2012:  
17<sup>th</sup> Seminario by Ivoclar Vivadent  
Mexico, Mexico City**

**15 September 2012:  
Expert Symposium Berlin,  
Germany**



## Distinguished by innovation

Healthy teeth produce a radiant smile. We strive to achieve this goal on a daily basis. It inspires us to search for innovative, economic and esthetic solutions for direct filling procedures and the fabrication of indirect, fixed or removable restorations, so that you have quality products at your disposal to help people regain a beautiful smile.

## Contact us

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