# **ULTRA**life

The dental magazine by Ultradent Products



#### TRIED AND TRUSTED

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#### It's All About Impeccable and Long-Lasting Restorations!

The deep understanding of the daily challenges in a dental practice is what sets Ultradent Products apart in the industry. Our products are made by dentists for dentists and seek to provide the best care and user experience possible. One of our main goals is not only to provide singular products, but also holistic concepts and seamless treatment solutions.

- Our new Restorative Solution features some of our most loved and proven products for every step of the restorative procedure. Being perfectly harmonized, they help to simplify your workflow while creating high-quality, long-lasting aesthetic restorations from start to finish. With the Ultradent Products Restorative Solution you will benefit from more than just products. You will instead gain a trusted partner, reliable outcomes, and happy patients. Discover how the Restorative Solution can enhance your practice in the **NEW IN** section.
- The visual inspection of the treatment area might be one of the most common diagnostic methods in restorative dentistry. Each clinician uses it frequently, but certainly has been equally faced with the limits of this method. But what could be an efficient and reliable alternative? The answer is: a curing light. In this regard, a curing light is not just a curing light. Equipped with the proper diagnostic accessories, it can improve the longevity of your restorations significantly. Have a look at the **SOLUTION CIRCLE** section and find out, how the new VALO™ X curing light goes far beyond light polymerization, diving deeply into the diagnostic process. The user report shows impressively that the key to long-lasting restorations and thus to satisfied, loyal patients is a proper diagnosis, which enables clinicians to visualize and notice truly everything.
- Anterior composite restorations with just one shade? In case you think this is a daring idea, you should quickly refer to the **TRIED AND TRUSTED** section, in which Dr. Petteri Viljakainen describes in detail the overwhelming results he achieved with this approach and how Transcend™ universal composite is ahead of its time in many respects.

Maybe you have already been working with one or more of the product highlights and solutions in this ULTRAlife magazine? Enjoy discovering how they can facilitate your practice life and read more about countless benefits for you, your patients, and your teams.

Your Ultradent Products Team





**NEW IN** 



### SIMPLY TRUSTWORTHY

Your Complete System for Quality Restorations

The new Ultradent Products Restorative Solution includes everything clinicians need to create beautiful, high-quality restorations - from prep to polish!

The importance of restorative dentistry goes far beyond the treatment of immediate issues, as it has long-term consequences for the patients' well-being. Being aware of the challenges, not only are a thorough diagnosis and treatment plan crucial, but also the careful selection of trustworthy materials to enhance quality, efficiency, and esthetics. If even one component fails, the entire restoration will be insufficient and require another treatment. That's why Ultradent Products developed its new Restorative Solution based on a range of proven and entirely harmonized products, which are designed to work perfectly together. The systematically adjusted concept facilitates restorative treatment protocols, supporting dentists in creating long-lasting, minimally invasive and beautiful restorations – for more reliability, confidence and happy patients.



#### **Step 2: ETCHING** A superior bond starts with a superior etchant.

Etching builds the basis for a proper adhesive technique. Ultra-Etch™ etchant reliably stays in place, while penetrating even the smallest fissures. It is the only etchant needed for total-etch procedures. The 35% phosphoric acid gel with an ideal viscosity prevents premature drying and gives the perfect amount of stability. While it can be cleaned and rinsed off guickly and easily, Ultra-Etch etchant does not run. It is designed to facilitate precise placement and total control. Studies show that Ultra-Etch etchant's unique self-limiting chemistry on dentin creates an optimal surface.1



## **Step 3: BONDING**

The gold standard in bonding.

The purpose of a bonding agent is not only the achievement of a strong and durable bond. In an ideal world it helps manage common issues like sensitivities or bond degradation over time. Peak™ Universal Bond adhesive features Dymetech™ phosphate monomer blend for enhanced strength and greater versatility. Plus, patients experience less post-op sensitivity after being treated with the light-cured Peak Universal Bond adhesive.<sup>2</sup> With 7.5% filler, its viscosity has been optimized for minimal film thickness (2µm) and superior strength. The best is yet to come: the use of Ultra-Etch 35% phosphoric acid and Peak Universal Bond will achieve the highest bond strengths to dentin and enamel.3



#### **Step 6: FINISH**

#### The guarantee for brilliant patients' smiles.

Unparalleled esthetic results and patient satisfaction can be achieved with the dynamic duo: Jiffy™ Natural Polishers and Transcend composite. Like a secret weapon, Jiffy Natural Polishers enhance the natural luster and finish of Transcend composite restorations, ensuring every smile is flawless and radiant. The Jiffy Natural composite finish and polishing system ensures lasting impressions of brilliance and care. It consists of spiral-shaped wheels that easily conform to the tooth to re-create the luster of natural enamel.

#### Step 5: CURING

#### **The Curing Light Reimagined**

The purpose of a curing light is not only about polymerizing restorative materials. It's all about controlling composite shrinkage to prevent microleakage, marginal gaps, or cracks. The VALO™ X LED curing light is meant to be the most innovative curing light on the market. Users will experience a new level of confidence with the consistent, uniform curing power of the extra large 12.5 mm lens. It ensures every treatment is reliable and efficient, including improved curing depth, beam collimation, and thermal management. The VALO X curing light offers two power modes and two diagnostic aid light modes (black and white light). The one-button activation provides a user interface with an Accelerometer Function, so users can cycle between the power and diagnostic modes with just the wave of the wand, a light drum tap, or the push of a button. The VALO X comes with five accessory lenses, which further enhance its capabilities. Composite restorations have never been easier than with Transcend composite and the VALO X curing light.



Transcend™ universal composite is a genuine one-shade composite, ensuring unprecedented shade matching with just one Universal Body shade - without the need for a blocker or opaquer. Ultradent Products' Resin Particle Match™ technology provides balanced refractive indices between resin and filler particles and a perfect transillumination. Transcend composite can blend into most surrounding dentition with just one shade. The Universal Body shade is self-adjusting, e.g. during a whitening process. Transcend composite is ideally suitable in anterior as well as posterior regions. For cases in which a layering technique is appropriate, a simple complementary shade system (four dentin and two enamel shades) is available. Practice inventory management has never been so easy, ecological and economical.



Easy combination, flawless procedures, impeccable results. Combining the products of the cutting-edge Restorative Solution from Ultradent Products will make every user an architect of success and elevate the level of patient care. Each component synergizes to produce strong, long-lasting restorations with impeccable esthetics. With these tools and materials users will achieve unparalleled confidence and exceed the patients' expectations.

Let's get started!

#### **Step 1: PREPARATION** The first step for long-lasting restorations.

Successful composite restorations require tight interproximal contacts and natural contours to ensure the natural anatomy. With rings lasting more than 1.000 uses, the Halo™ matrix system is a highquality, long-lasting system for durable restorations. The easy-to-use system allows the creation of consistent, beautiful, and anatomically contoured composite restorations in less time. It offers all necessary components, such as nitinol rings, stainless steel matrix bands, and plastic wedges, which work together perfectly and are suitable for most of the clinical challenges.

02 1, 2, 3. Data on file. **SOLUTION CIRCLE USER REPORT** 

## TRANSILLUMINATE YOUR **DIAGNOSTIC PROCESS**

How a Curing Light Can Improve the

**Longevity of Your Restorations** 

ongevity is without any doubt a fundamental characteristic of any restoration. However, some dentists might also find this elusive. This article presents a clinical case of diastema closure performed in 2011, and highlights how proper transillumination and polishing techniques contribute to its maintenance over the years.

Fourteen years ago, a 35-year-old female patient presented in my practice, unhappy with her diastema (Fig 1). After the usual steps of the restorative treatment protocol, I applied a layering technique and created the composite restoration for the diastema closure with four different shades. Finally, I performed the curing process with the first generation of the VALO™ LED curing light, which since then has always given me reliable, well-cured restorations. The result looked great and blended in nicely into the natural dentition (Fig. 2).



Fig. 1 & 2: Diastema Closure in 2011

In 2024, after some check-up appointments over the years (fewer than recommended), I felt that the case would require a better clinical revision. Starting the diagnosis with a visual inspection, I noticed some enamel cracks, a normal situation for a 48-year-old patient (Fig. 3). However, I got the feeling that some micro-leakage between the different composite layers might have occurred, especially on the restoration on tooth #11.



Dr. Rafael Beolchi Clinical private practice since 2001, specialized in Operative Restorative Dentistry; invited teacher in dental institutions around the world.



A good method to further explore is to use transillumination techniques, as visual inspection alone can be guite limited in this regard. In my case I relied again on the VALO curing light family: after 13 years, now working with the third generation of my original VALO LED curing light, a new model called VALO X. The new VALO X light not only incorporates light modes for the typical curing protocol, it also offers diagnostic aid light modes with black and white light, plus some helpful diagnostic accessory lenses.

I decided to follow a specific transillumination process for a proper diagnosis. First, I attached the Diffuser Lens to my VALO X light on Black Light Diagnostic Aid Mode for the detection of fluorescent particles in the composite and for an easy differentiation from the natural enamel. It became obvious that tooth 11 showed some black lines on the composite restoration, which backed my initial suspicion that there must be something between the layers of the different composite shades (Fig. 4 & 5).



Fig. 4 & 5: Visualization with the Diagnostic Aid Light Mode

facilitate and intensify the visualization of potential enamel cracks, black stains, or defects by the means of orange light (Fig. 6 & 7).



Fig. 6 & 7: Visualization with the TransLume Lens

Finally, I worked with the Interproximal Lens, which allows balanced white light to be placed between the teeth from different angles and which makes the visualization of enamel cracks even more dynamic. This step verified that the black stains were somehow fixed at the same place, regardless of the angle (Fig. 8 & 9). This is an indicative that those should be superficial.



Fig. 8 & 9: Visualization with the Interproximal Lens

The sequence from the black over the orange and the white light from different angles granted me a perfect view, an enhanced prediction and a better feeling of how to read the different signs. With a good clinical indication that the stains and colorations were superficial, I opted to use a sequence of the Jiffy™ Spin shaping and finishing disk, followed by the spiralshaped Jiffy™ Natural composite polisher to create a great luster (Fig. 10).



Fig. 10: Polishing with the liffy System

Subsequently, I switched to the TransLume Lens, to At the end of the treatment protocol, I used the Ultradent™ Diamond Polish for an unsurpassed esthetic finish (Fig. 11).

> Even today, most of the practitioners do not work with a dedicated device for diagnosis and transillumination: in some cases, light from the turbine may be used. However, this case showed impressively that one of the keys for knowing what a good method for maintaining long-lasting restorations - and thus for satisfied, loyal patients – can be a proper diagnosis (Fig. 12). The VALO curing light family not only delivers unmatched cured composites - something evident after years of use but also offers exceptional diagnostic capabilities as a transillumination device.



In my opinion it is striking how the VALO light evolved over the years from a reliable curing light to today's VALO X light, offering curing and diagnostic aid modes likewise. It helps me tremendously to provide highquality and more durable, long-lasting restorations. Thus, my recommendation to every colleague is: if you want your composite restorations to last longer, make sure you're bringing more light into your diagnostic

> Learn more about the **new VALO™** X curing light!



TRIED AND TRUSTED

USER REPORT

## Anterior Composite Restorations with Just One Shade

A Daring Idea with Overwhelming Results



**Dr. Petteri Viljakainen**Dentist and partner at the eSmile practices in Espoo and Helsinki, Finland

When it comes to composite restorations, I personally prefer to work with a number of different materials and systems. According to the requirements of the individual clinical case, I am thus able to choose the most suitable product and technique. Besides the conventional multi-shade composite systems in combination with a layering technique, I have had very good clinical results with a simplified approach and one shade composites for some time now.

When a 66-year-old female patient presented herself in my practice with five restorations that had to be replaced due to age and stains, I was eager to see what kind of results I could achieve with a novel one shade composite in the anterior region.



-Before

Initially, we performed a tooth prophylaxis treatment. Afterwards, I replaced the five Class IV and Class V restorations on teeth 12 to 23. Transcend™ universal composite (Ultradent Products) was the material of my choice for this case, as with Transcend composite I effectively only had to use one single shade, called Universal Body. Additionally, there is not even a need to apply any blocker or opaquer.



When I started my restorative protocol, I was well aware that it might be a daring idea to use only one single shade for esthetic restorations in the anterior region, as the composite is expected to blend seamlessly with any tooth color. If it did not work out properly, I would have to redo the entire treatment. Despite my doubts, I decided to follow my approach and was entirely surprised and equally overwhelmed by the result.



Replacement of old restorations
(pictures under a polarized filter)

## Transcend Universal Body blends perfectly with the natural dentition



The Transcend composite shade Universal Body blended perfectly with the surrounding tooth color and my patient was more than happy with her new esthetic appearance. The entire result looked very appealing so that you would hardly notice the difference between the restoration and the natural tooth. Additionally, Transcend composite shows a great balance between opacity and translucency, due to the specific Resin Particle Match™ technology.



The regults

Apart from the beautiful outcomes, Transcend composite is extremely easy to handle and to manipulate. I like to heat all composites prior to using them for anterior restorations. Some of them will turn a bit more liquid and others remain stiffer. Transcend composite reacted very well to the heating procedure, which made it even more comfortable to handle. The simplified treatment protocol without the time-consuming layering protocol positively contributes to the concept of streamlined and efficient practice processes. Furthermore, Transcend composite shows great stability regarding color and shrinkage and only requires a minimal polishing effort.

From an economic point of view, Transcend composite is equally interesting as I do not have to keep a broad range of different composite colors in stock. I can reduce my inventory significantly, which facilitates the entire organization and ordering process for me and my team. Composite material has its price, and it is always embarrassing when you have to throw away capsules or syringes that have barely been used, but cannot be applied anymore due to the expired shelf-life. Thus, Transcend composite helps me to avoid the waste of material and money.

Transcend composite is ahead of its time in many respects. As it blends impeccably with the anterior teeth it is also equally suitable for restorations in the posterior regions of the mouth. I even have closed diastemas up to 2 mm with the Transcend composite Universal Body shade and have to say, it worked perfectly. For me, Transcend composite is an innovative, future-proof product, which I will keep using in my practice. I highly recommend my dentist colleagues try it themselves and see how it works.



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CONNECT CONNECT

## Webinar Series with Petteri Viljakainen

### **Expert in Esthetic Dentistry**

We are proud to present an exclusive webinar series featuring Dr. Petteri Viljakainen, a dentist with more than 15 years of experience in esthetic dentistry. During four engaging and educational lectures, Petteri will share his most effective techniques and insights into minimally invasive dentistry.

#### First Lecture: Treatment Planning and Whitening MAY 20 | SEPTEMBER 2

- From consultation to final outcome: How to create long-lasting and esthetically pleasing results, from the first patient contact to the completed treatment. How to manage timetables and workflows.
- Treatment planning in minimally invasive restorative treatments: Strategies for maximizing results and minimizing intervention, including the use of tooth whitening before restorations
- Tooth whitening and restorations expected results and best techniques from my experience.

#### **Second Lecture: Adhesive and Restorative JUNE 12 | SEPTEMBER 18**

- The right etching and bonding techniques: Essential techniques for long-lasting durability and optimal
- Anterior restorations with Transcend™ composite indications and techniques: Methods for creating durable and naturally beautiful restorations.

Don't miss this opportunity to deepen your knowledge and take your dental practice to the next level!



Register now and secure your spot in this inspiring and practical webinar series!

Scan the QR code

## About Petteri Viljakainen

Petteri Viljakainen is a leading expert in esthetic dentistry with over 15 years of experience in advanced techniques for both esthetics and minimally invasive dentistry. He is an internationally recognized speaker and has treated thousands of patients with a focus on delivering both functional and esthetic outcomes. As an accredited member of both the American and the British Academies of Cosmetic Dentistry (AACD, BACD) and with a strong international network, he is a respected educator and lecturer worldwide.



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- **Behind-the-Scenes:** get an insider's view of Ultradent Products. From product to team dynamics, witness the passion and precision that drives us.
- **Product Highlights:** explore our cutting-edge dental solutions that revolutionize From innovative tooth whitening systems advanced endodontic treatments, we are here to advance your practice.
- Innovations & Insights: stay ahead with our latest developments and insights. We're not just about products; we're about shaping the future of dental care.

Join us: follow **Ultradent Products Europe** on LinkedIn today. Together, let's shape the future of dentistry.



Any questions about our products or just want to get connected? We would love to hear from you!



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