VIDENT Dental Technology Update Summer 2005 • Volume 2



Quality Control in the Laboratory with the VITA Easyshade®

The VITA®VM Family of Porcelains

High-Esthetic Temporaries with Ease



3150 E. Birch Street Brea, CA 92821

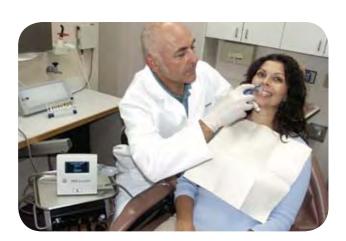




VITA Easyshade - For quality control of prescribed shades in the dental laboratory

The VITA Easyshade offers not only instant chairside patient shades but is also beneficial in the dental laboratory for the shade quality control of ceramic crowns and bridges.

What's really helpful is that ceramists can now verify and check the actual progress of the desired shade even at minimal thicknesses, regardless of whether the restoration is roughly trimmed, wet, dry, or in the glazed stage.



The VITA Easyshade can be applied to all current ceramic choices, including PFM, VITA In-Ceram® and in VizionTM restorations, as well as alternative ceramic restoratives. Highly translucent veneers or pressed ceramics will benefit most when placed over a base color that mimics the underlying preparatory tooth shade.

> "Our ceramists and quality control people find the VITA Easyshade easiest and most accurate and give it a 9 (out of 10).

> > - Rudy Ramirez, CDT General manager Fixed Prosthodontics Glidewell Laboratories Newport Beach, CA

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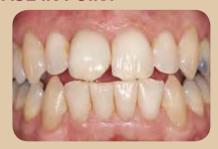
A single incisor crown (from "Case In Point" below) is verified prior to and after glaze and minimally corrected with surface VITA Akzent® stains for characterization.

It is possible to observe and adjust each individual component of the target shade by manipulating its relative Lightness (Value), Chroma (Saturation), and Hue (yellow to reddish). In addition, a rating of 'Good, Fair or Adjust' for both VITA 3D-Master® and VITA Classical shades is clearly displayed.

This feature is particularly helpful when matching the accuracy of the 54 intermediate shades that lay in-between the standard 29 VITA 3D-Master shades.



CASE IN POINT





Patient presented a fractured crown on tooth #8 and chipping to the mesial incisal edge on #9.



Maxillary tooth #8 is restored with an inLab® milled In-Ceram Alumina coping and VM7 veneer matched to VITA 3D-Master shade 2.5M1 (2M1 and 3M1 mixed evenly together).





The completed restoration after tooth #9 mesial restored with Vident 3D-Direct composite.

In conclusion, shade quality control is fast and reliable with the VITA Easyshade, taking only seconds to analyze and report acceptable variations. Verification stickers are also available to attach to your case stating "verified with the VITA Easyshade."

Call today for information regarding current purchase promotions, including a complimentary choice from base kits of VITA®VM porcelain.

Restoration by Mark Baker, CDT, dentistry by Dr. Todd Snyder

The VITAVM® FAMILY



VITAVM®13 **Raises the Metal Ceramic Bar**

VITAVM®13 is a coveted porcelain that truly raises the bar on metal ceramic systems. This beautiful, natural-looking porcelain introduces the industry to a new and unique manufacturing process that produces ceramic materials with extremely small particles. The resultant dense structure means outstanding features and benefits for the lab technician, the dentist and the patient.

The dentist benefits by being able to provide consistent shade matching and extraordinary esthetics. Dentists also love how easily and quickly it polishes. Most importantly, the dentist will experience ease of mind, with the knowledge that they are permanently cementing a restoration for their patient that wears antagonistic dentition at a rate consistent with enamel.

For the ceramist, VITAVM®13 features exceptional handling and modeling characteristics, ideal for any level of experience, from beginner to veteran ceramist. It builds

easily, without the usual slumping present in most other ceramics. It can be fired several times without loss of color control or shape. It has two build-up techniques that enable the ceramist to face the challenge of minimal room with new confidence,

and it shares a comprehensive modifier system with other VITAVM porcelains for consistency and predictability. VM13 has a CTE of 13.1 - 13.6, which is ideal for veneering metal frameworks that have a coefficient of thermal expansion (CTE) in the range of 13.8 - 15.2. That means VM13 is compatible with a wide range of popular alloys, from base metals to high noble. Dental ceramists using VITAVM®13 really like how it grinds and polishes, because, due to its high density, it is easier and faster to produce better results. The VM esthetic build-up techniques, shared by all of the VITAVM porcelains, result in porcelainfused-to-metal restorations with extremely desirable and predictable esthetic results.

Basic Layering Technique:

For the quality-oriented production laboratory, the Basic layering technique consists of just two porcelains - Base Dentine and Enamel. It is ideal in the situation where the wall thicknesses are thin (between 0.5mm and 0.8mm). The more intensive shade effect of the Base Dentine allows a more liberal use of VM13 Enamel porcelains. The result is accurate shade matching in a fraction of the usual space requirements.

tion of the shade-carrying Base Dentine and the more translucent Dentine.

A more natural light play will be possible with this combination of powders. The result will be a more natural looking restoration.

Of course, as with all VITA porcelain systems, modifiers abound to complete a comprehensive porcelain system. Choose from Chroma Plus, Effect Liners, multiple Enamel shades, Mamelon, Gingiva, Effect Pearl and Opal Translucent powders to create the most natural-looking restorations possible.

"Ideal for any level of experience, from beginner to veteran ceramist"

Build-up Layering Technique:

Preparations allowing more room for porcelain enable the ceramist to use the three-porcelain build-up which includes Base Dentine, Dentine and Enamel. This technique allows for a reduced, yet more individual application of VM13 Enamels due to the light modification characteristics created by the combina-



The VITAVM® FAMILY



VITAVM[®]7 **Beautiful Alumina Veneers**

VITA's VM7 alumina veneering material offers the lab technician, the dentist and the patient outstanding features and benefits. VM7, made to veneer the popular alumina substructures, offers outstanding physical properties, handling characteristics and, due to the homogeneous distribution of both glass phases in the fine microstructure, this revolutionary material produces clinical wear characteristics that mimic those of enamel. It is a restorative material that is extraordinarily kind to antagonistic dentition.

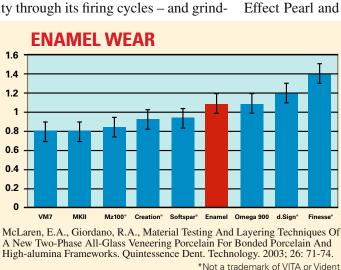
VM7's application is aimed specifically at veneering alumina ceramic frameworks that have a coefficient of thermal expansion (CTE) in the range of 7.2 - 7.9. Ideal substrates include In-Ceram Spinell, In-Ceram Alumina and In-Ceram Zirconia (produced either by hand-slipping or milled by Cerec inLab's unit), Wol-Ceram*, Nobel Biocare's Procera* Alumina, and DCS* In-Ceram blocks.

Dental ceramists will marvel at its modeling characteristics and its structural and color stability through its firing cycles - and grinding and polishing has been made easier and more effective than most other porcelain systems. Even the esthetic build-up technique has been improved over historical systems by introducing a simpler, more logical approach to shading/layering. It shares the unique two and three powder layering techniques and the Effect Powders with all of the VITAVM porcelains for consistency and predictability. Either technique results in consistently accurate shade matches and unsurpassed esthetics.

For the quality-oriented production laboratory, the Basic layering technique consists of just two porcelains - Base Dentine and Enamel. For the laboratory with more discerning clients and more room for porcelain, the three-powder build-up which includes Base Dentine, Dentine and Enamel may be used. Of course, as with all VITA porcelain systems, modifiers abound to complete a comprehensive porcelain system. Choose from Chroma Plus, Effect Liners, multiple Enamel shades, Mamelon, Gingiva,

Effect Pearl and Opal Translucent powders

to create the most natural-looking restorations possible. Whatever combination of powders is used, the end result is always accurate 3D-Master shade matching. For your alumina-veneering needs, you can't beat VITAVM7 for esthetics and clinical excellence.





The VITAVM® FAMILY



VITAVM®9 The Ultimate Esthetic Choice

Every so often a development in dental ceramics comes along that propels the industry to new heights – and VITAVM®9 is the latest. This truly revolutionary material is VITA's veneering porcelain for yttriumstabilized zirconia substructures. Zirconia substructures require a ceramic with matched expansion that complements the extraordinary strength of the substrate.

VITAVM®9 provides compatibility, strength and truly natural esthetics. VITA's In-Ceram YZ, 3M's LAVA*, Nobel Biocare's Procera* Allzircon*, Ceramco's CERCON* and others share something in common . . . thousands of restorations made with VITAVM®9. Dentists everywhere who are prescribing zirconia for strength are demanding VM®9 be used as the veneering porcelain. There are many reasons for this.

Why VITAVM®9?

This extraordinary material offers the ceramist, the dentist and their patients truly outstanding benefits. VM9 exhibits outstanding physical properties, and, like the other VM family ceramics, it produces clinical wear characteristics that mimic those of enamel (see chart below).

Even the esthetic build-up techniques, shared with VITA's other VM porcelains, have been improved over historical systems by introducing a simpler, more logical approach to shading and layering.

The Basic Layering Technique:

The basic layering technique consists of just two porcelains – Base Dentine and Enamel. It is ideal in the situation where the wall thickness is thin (between 0.5mm and 0.8mm). The more intensive shade effect of

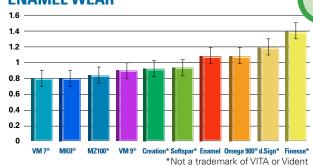
- VITAVM®9 is extraordinarily kind to antagonistic dentition
- VITAVM®9 offers optimum firing stability, preserving shade and morphology even after several firings
- VITAVM®9 produces incredibly life-like results
- VITAVM®9 uses the proven shade matching capability of the VITA 3D-Master® shade system
- VITAVM®9 offers superior flexural strength

the Base Dentine allows the liberal use of VM9 Enamel porcelains, producing a very natural looking restoration.

For certain situations, where room is not a problem, a ceramist may opt for the three-porcelain build-up (Build-up Technique), which includes Base Dentine, Dentine and Enamel. This technique allows for a reduced, yet more individual application of VM9 Enamels, due to the light modification characteristics created by the combination of the shade-carrying Base Dentine and the more translucent Dentine.

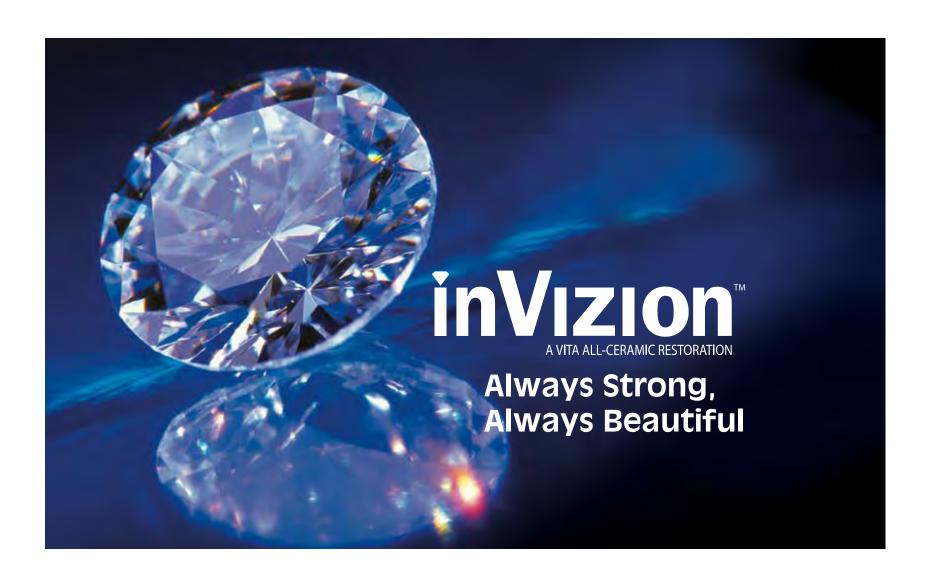
As with all VITA porcelain systems, there is a full, comprehensive line of Effect Powders. These include Chroma Plus, Effect Liners, multiple Enamel shades, Mamelon, Gingiva, Effect Pearl and Opal Translucent powders, which enable ceramists with any level of experience to create the most natural-looking restorations possible.

ENAMEL WEAR



McLaren, E.A., Giordano, R.A., Zirconia-based Ceramics: Material Properties, Esthetics and Layering Techniques of a New Veneering Porcelain: VM9. Quintessence Dent. Technol. 2005: 28: 1-13.





Finally,

An All-Ceramic Restoration That Delivers As Promised



Ceramics and dentistry by Dr. Ed McLaren

inVizion restorations milled on the CEREC® inLab system combine the incredible strength of VITA YZ ceramic with the highly esthetic properties of VITAVM®9 ceramic veneering material.

VITA YZ (yttrium stabilized zirconium oxide) is among the strongest all-ceramic dental material available and is suitable for delicate frameworks, leaving more room for creative ceramic work. Plus, inVizion restorations boast an incredible 900+ MPa flexural strength. This biocompatible restoration is available in 29 primary VITA 3D-Master® shades as well as 52 intermediate shades.

Call today to learn how your lab can benefit from inVizion restorations.

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Prescribe inVizion By Name



VIDENT COURSE

You Are



To visit the VITA Teeth Factory To learn from a VITA Expert **Denture Technician**

To experience Europe while learning

"Hands-On" Clinic by Ms. Martina Rosenbusch, CDT

Aesthetics In The Field Of Full Dentures

BAD SACKINGEN, GERMANY SEPTEMBER 2ND - 8TH, 2005

Seminar Overview Aesthetics In The Field Of Full Dentures Course

The natural appearance of full dentures is gaining more and more significance for your patients. Would you like to achieve enhanced aesthetics in a fast and reliable way? The solution is the set-up in physiological occlusion and articulation according to the example of nature.

During this two-plus day training experience you will learn a uniform concept for removable restorations using VITA Physiodens® teeth. We will start with an analysis of the model to the aesthetic and physiological set-up. These principles can be used for partial and full dentures.

FOR VIDENT COURSE REGISTRATION AND INFORMATION

Call (714) 961-6200 x226 or 800-828-3839 x226 www.vident.com

VITA Physiodens® Denture Teeth Now Available In **BLEACH SHADES**

The demand for high esthetics has reached the denture tooth market. Patients are requesting bleached teeth either as full dentures or in combination cases where

natural teeth have been bleached.

To meet this demand, Vident is pleased to announce the availability of VITA Physiodens® anterior denture teeth in two VITA 3D-Master® bleach shades: OM1 and OM3. The bleach shaded anterior teeth are available in five anterior moulds and the Physiodens posterior bleach teeth are available in four moulds of shade OM3.

Physiodens teeth moulds are designed to match the morphology and size of natural teeth, making them ideal for partial cases and denture cases where the goal is to restore natural function and size. The unique lingual pattern provides proper tongue support and assists in speech. The raised neck of Physiodens teeth provide support for the lips adding to the natural look achieved with a Physiodens denture. Physiodens posteriors have a wide occlusal floor which adapts to



SEE SPECIALS ON BACK COVER

Dennis Purinton, CDT



Esthetic TemporizationFOR HIGHER PATIENT SATISFACTION















One of our biggest esthetic challenges is temporization, because "temporaries" are often not very attractive. A patient's esthetic image may get worse before it gets better. With provisionals made prior to the prep appointment, each step is now a dramatic improvement. The provisionals shown here are made with hollowed acrylic denture teeth and VITA Zeta cold cure acrylic. Here is how it is done:

FIRST DENTAL APPOINTMENT

Take a pre-op alginate impression and select the shade for the final restoration. If you have a Vitapan denture tooth mould guide, you can review the size and shape for the provisional as well as the final restoration with the patient. Send the impression with the shade and material request to your lab.

IN THE LAB

Denture teeth are hollowed from the lingual to a thickness of 1 mm (pontics are not hollowed). Adapt the cervicals to the margins and tissue areas. Secure the teeth in place with wax, creating an esthetic arch form as well as incisal and occlusal planes (Fig. 1-2). Lingual contours and interproximals are waxed in place with an ivory or white wax. A silicon matrix is made on the facial/buccal. Be sure to capture incisal edges and/or cusp tips (Fig. 3-4) as well as some landmarks of adjacent unprepared teeth.

When set, remove the matrix and boil away the wax. Remove any residue from the teeth using the appropriate solvent. Coat the stone model with a foil substitute and allow to dry (Fig. 5-7). Place teeth into matrix, securing with sticky wax at the incisal. Apply Vitacoll to the interior surface of the teeth; this will enhance the bond between acrylic teeth and methyl-methacrylate based acrylics, soak model in water before packing to remove

Using a salt and pepper technique, place acrylic powder/liquid onto the interior surfaces of the teeth and place back on the model. This step ensures that there are no voids on the interior of the provisional. Cover the entire lingual surface with Zeta Cold Cure by pouring pre-mixed material (Fig. 8-10). Finish with just enough dry acrylic powder to absorb excess monomer. Secure matrix to model with a rubber band and place model in a pressure pot with very hot tap water at 20-25 PSI for 10 minutes. When curing is complete, remove the rubber band. It is best to check opposing occlusion and adjust as needed now, before removing provisional from the model.

Once adjustments are made, shape lingual and interproximals and anatomy and polish with pumice and high shine materials. (Fig. 11-13)

SECOND DENTAL APPOINTMENT

When the patient arrives, their provisional will be waiting. It will already be the exact shade of the final restoration. Utilizing this technique, you will be able to provide your patients with an immediate esthetic improvement at the prep appointment. You can also verify contour and shade, which will greatly increase patient acceptance of the final restoration.

















Introducing The inEos® Dental Digitizer For Inlab®: The Fastest Scanner On The Market



With the announcement of the new inLab® inEos® Dental Digitizer, Sirona continues to take the integration of CAD/CAM technology to new levels of production for dental laboratories. The Sirona in Eos Dental Digitizer is easily added as an accessory to any inLab System.

The inEos Dental Digitizer for inLab is faster than any other scanning device on the market

and enables scanning directly from the master model. It substantially increases ease-of-use and data acquisition while being able to scan up to 30 units an hour. One in Eos scanner can serve multiple inLab Systems to accommodate the specific needs of high-volume labs. The inEos Dental Digitizer will further improve and streamline the fabrication process for CAD/CAM inlays, crowns, copings and multiple-unit-bridge frameworks, marking yet another milestone in dental CAD/CAM applications.

"The new in Eos Dental Digitizer allows me to rapidly scan multiple units while other cases are being milled. It has drastically increased my production and was easily integrated into my current laboratory operations."

-Nelson Rego, CDT



Ed Flocken, CDT

The incredible efficiency achieved with inEos® is fully realized when VITA YZ cubes are used to create multiple unit frameworks.

For more information about the in Eos Dental Digitizer please contact your Patterson representative, **local Patterson Branch or call** 1-800-873-7683

To request informational materials please call 1-866-INLAB4U or visit www.inlab.com

IMPAC® SCREW WITH UNIGRIP® HEAD



TORQ CONTROLTM TORQUE WRENCH \$645

IMPAC® SCREW WITH UNIGRIP* DRIVE

Vident is pleased to announce the introduction of a new screw for the Impac line of externally hexed implant abutments that features a screw head with the popular Unigrip fitting. The screw will be available separately or with most existing Impac abutments, including the UCLA and IPA abutments. "Our customers that have been restoring Branemark System® implants now have the option to use a line of customizable abutments with the popular Unigrip drive that is not currently offered in their existing system" asserts Jerry Feeney, Director of Marketing at Vident, "This is the first in a series of new product additions to the Impac line of abutments. Unigrip hand drivers and handpiece inserts will also be available as part of the system."

To order contact Eliza Mok at 800-828-3839 Ext. 232

TORO CONTROL™ TORQUE WRENCH:

PRECISION CALIBRATED TORQUE FROM 10-35 Ncm

Calibrated tightening of abutments can only be reliably produced by using a precision instrument like the Torq Control torque wrench. The Torq Control wrench is a declutching manual instrument that is easily adjustable from 10 to 35 Ncm. Precision calibration stops the screw action when optimal torque is achieved.

The Torq Control is easier to handle than a ratchet-style wrench and allows easier access to the posterior region. And torque adjustment is done directly on the wrench, eliminating the need for removable torque drivers. Its cast, solid design makes it easy to clean and the Torq Control wrench can be autoclaved at 135°C (275°F). The adjusting wheel is easy to turn and the heft of the instrument is substantial yet ergonomic.



In Canada \$838.50

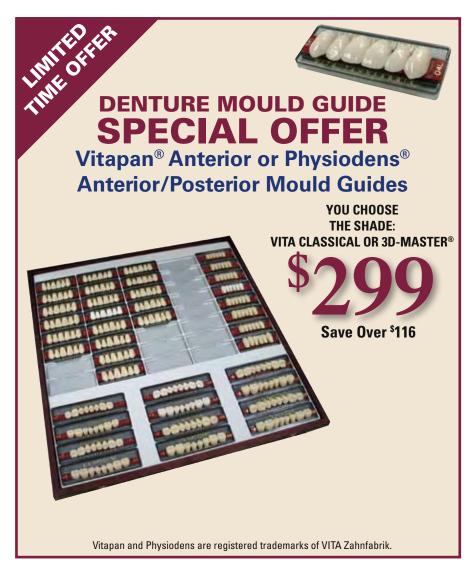
SLIDER THE

The Slider disposable articulator provides true protrusive and lateral movement that simulates the natural condyle. It is compatible with most tray/model base systems, and is designed from strong, flexible material, for super-smooth, sliding action. Your choice of dowel or flat plates.

Call 800-828-3839

Just .39¢ each!

Marketplace Showcase





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\$147

Zeta CC Polymer Intro Kit (K47-001)

Kit Includes:

6 Dentin Shades 19g ea

3 Enamel Powders 10g ea

1 Translucent Powder 10g

1 Liquid, 30ml

Reg. Price \$197

SAVE \$50

VIDENT COURSE SCHEDULE

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