Handpiece’s light is dual-wavelength
A 405 nm LED light turns caries red, restorative material yellow and healthy dentin green.
»Page 4

Universal composite ‘breakthrough’
Microscaled, well-defined spherical superstructures, composed of submicron glass: Here’s how it’s done.
»Page 20

Live dentistry in the Exhibit Hall
Five procedures are scheduled for today and Friday on the hall’s live-dentistry stage.
»Pages 3 and 12

What type of denim are you?

Welcome to PDC2018, with more than 655 exhibiting booths to visit, 150 open sessions, five live dentistry presentations and up to 20 hours of C.E. credits.
(Photos/Provided by Pacific Dental Conference)

Friday night: ‘PDC After Hours’
Enjoy drinks, snacks and a live dance band at the legendary Commodore Ballroom

Tickets ($25+GST) are available at registration for Friday's PDC After Hours. The downtown venue opens at 8 p.m., but for early access, you can visit event-sponsor KaVo Kerr in the Exhibit Hall (booth Nos. 909, 911, 919, 1009, 1010, 1011 and 1109) to also pick up an exclusive invitation to the KaVo Kerr VIP Lounge.

The $25 ticket to PDC After Hours includes a drink, late-night snacks and all the live music you can dance to from the Famous Players Band, which is described as being “a group of insanely talented musicians who, collectively, change the way people experience live music.” It’s known in Vancouver as one of the area’s best live bands, and PDC organizers encourage you to join in on the fun to find out why.

The iconic Commodore Ballroom has been hosting musical events and other celebrations since 1929.

Vancouver casual takes on official status this year, with PDC organizers encouraging attendees to deck themselves out in their best-looking, best-feeling or just best-broken-in denim.

But don’t let the casual attire mislead you — there’s as much serious business and education as ever on the agenda.
Today and Friday, more than 265 exhibitors representing virtually every sector of the industry will be...
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Scan Here for Instructional Video
See live dentistry in Exhibit Hall

Five procedures to be on stage today and Friday

- The Live Dentistry Stage, on the west side of the PDC Exhibit Hall, is sponsored by A-dec and Sinclair. Each session also has co-sponsors.


  At 11:15 a.m., Mark Kwon, DMD, and Mark Lin, DDS, FRCD(C), perform “3D Digital Navigation Live Implant Surgery,” co-sponsored by BioHorizons Canada.

  Friday has three sessions. At 8:30 a.m., Bobby Birdi, DMD, Dip Perio, Dip Pros, FRCD(C), FACP, DABP, and Ron Zokol, DMD, present “Today’s Tooth In One Day: Digital Anterior Immediate Implant Placement,” co-sponsored by Nobel Biocare Canada.

  At 11 a.m., Sonia Lezisy, DDS, Dipl Perio, FCDS(BC), FRCD(C), presents “Digital Dentistry and the Small Implant Bridge. How, Why, Everywhere,” co-sponsored by BioHorizons Canada.

  At 2 p.m., Jonathan Ng, DDS, MSc, Dip Pros., FRCD(C), presents “How Digital Dentistry Makes Life Better: Bridging Dentist and Lab Communication: Implant Surgery,” co-sponsored by Henry Schein.

Source: Pacific Dental Conference

Available to meet with practitioners and team members. Attendees will be able to test out the latest products and take advantage of show specials offered by some of the industry’s most innovative companies. There’s also a lunch and happy hour in the Exhibit Hall on both days.

For the majority of attendees, C.E. credit is given for general attendance (up to five hours) and hour-for-hour course attendance. It’s possible to earn up to 20 C.E. credits total.

PDC Lab Expo expands

Saturday’s PDC Lab Expo brings together dental technicians and dentists to meet with a selection of top companies to exchange information and forge new relationships. Hours have been expanded to 8 a.m.-5 p.m., and session times will be staggered to enable more time in the exhibits area. There will be a beer and wine reception with exhibitors from 4-5 p.m. with complimentary wine, beer and snacks. A “Stage Show” in the PDC Lab Expo will feature 30-minute demonstrations at peak times for exhibitors to showcase their latest products and technologies.

Wide range of top speakers

Of course, the heart of the meeting is the educational sessions, and speakers this year are among the industry’s best. Examples on today’s agenda include:

- Alan Atlas, DMD, in private practice in Philadelphia and serves as clinical professor of restorative dentistry at the University of Pennsylvania School of Dental Medicine. He is founder and director of the Endodontic-Restorative Microscopy and Technology Clinic, teaching the art of precision restorative dentistry using the dental microscope and digital technologies. At 8:30 a.m., he presents “Good to GREAT! Mastering Adhesion Dentistry and Posterior Composites,” and at 1:30 p.m., he follows up with a limited-attendance hands-on session of the same title.

- Jeff Glaizel, DDS, is in private practice in Toronto and serves as senior business lead, venture development, at the Ontario Telemedicine Network. He consults and lectures on electronic record-keeping, privacy, security and interoperability. One of his goals is to enable secure digital knowledge transfer in a person-centric health care system. At 8:30 a.m. and again at 1:30 p.m., he presents “Digital Dentistry 101.”

- Warren Karp, DMD, PhD, is professor emeritus of the Dental College of Georgia at Augusta University. He earned his PhD in biochemistry at Ohio State University and his DDS at the Dental College of Georgia. He is an elected member of the American Society of Clinical Nutrition and a past president of the Georgia Nutrition Council. He has directed the dental nutrition consultation service for more than 20 years. Today and repeating on Saturday at 9 a.m., he will present “The Diet to Promote Health and Prevent Disease in Your Patients.” At 1:30 p.m. on Friday, he will present “Facilitating Nutrition Learning: Helping Patients Translate Nutrients Into Foods.”

This is just a hint at the scope of dental education here in Vancouver during the next three days, with more than 165 speakers and 210 sessions scheduled.

(Way from page 1)
By Lares Research Staff

Lares Research, a global leader in handpiece manufacturing, launched the Fluoresce HD handpiece line in 2017 — the first handpiece that deploys caries- and restorative-detection technology — available in both high-speed (turbine) and electric micro-motor systems.

Honored as ‘Most Innovative Product’
The Fluoresce HD was awarded “The Most Innovative Product” at the ADF 2017 in Paris.

At the Pacific Dental Conference, Lares Research’s exclusive Canadian distributor Dental Fix Rx (booth No. 149) will be marketing the Fluoresce HD, described as dentistry’s first dual-wavelength handpiece system. It has a push button to switch from normal white LED light to Fluoresce HD 405 nm LED light.

Fluoresce HD utilizes 405 nm light emitted from the handpiece to cause caries to fluoresce red, restorative material to glow yellow and healthy tooth to show as light green.

According to the company, Fluoresce HD is minimally invasive, reduces the risk of reinfec tion and saves chair time — benefitting both patient and dentist.

Simple and cost effective to use, Fluoresce HD can be deployed with the Lares Fluoresce HD Electric system or any KaVo MULTIflex* compatible turbines, according to the company.

For more information, you can telephone Dental Fix at (800) 575-2806 or visit online at www.dentalfixrx.com.
A LITTLE GIVE

GOES

A LONG WAY

A New Standard in Patient Comfort

Introducing the Dexis FS Ergo by KaVo—the latest innovation to redefine comfort. By pairing the newly developed flexible sensor technology with a soft housing, FS Ergo can “give” as X-rays are being captured. Imagine a digital sensor that gently cushions your patient’s sensitive anatomy—a new standard in patient comfort.

Feel the difference yourself: dexis.kavo.com/404675
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AWARDED THE 2017 MOST INNOVATIVE PRODUCT AT THE ADF IN PARIS, FRANCE
One of the greatest limitations in the use of resin composites is the material’s shrinkage during polymerization. This process, typically associated with dynamic development of elastic modulus, creates a network of stress cells within the resin composite and its interface with the tooth structure.

The unrelieved stress can weaken the bond between the tooth structure and the restoration. Consequently, marginal leakage, tooth fracture and a restoration’s displacement may occur and further initiate the formation of secondary caries and postsurgical sensitivity.

On average, the majority of resin composites in the market shrink about 2 to 5 percent. As polymerization shrinkage cannot be completely eliminated, a plethora of techniques and protocols has been developed to conduct the manipulation of restorative procedures to minimize the effects of shrinkage and associated shrinkage stress.

Introduction of various new composite systems with low-shrink chemistry may also help overcome the problem.

A next generation of a bioactive composite indicated for all cavity classes, I–V, Beautifil II LS (Low Shrink) provides general practitioners with the means to reduce polymerization shrinkage and shrinkage stress while creating predictable and functional esthetics.

Like all restorative materials from Shofu, this novel composite incorporates the proprietary bioactive Giomer chemistry, clinically proven in eight- and 13-year recall studies to release and recharge fluoride and other beneficial ions and inhibit plaque formation to help establish a stable pH in the oral environment.

Highly filled, 83 wt percent, Beautifil II LS demonstrates excellent compressive and flexural strength (ca. 370 MPa and 120 MPa, respectively), maintains ideal color stability and polishes in an instant, producing a long-lasting sheen, according to the company.

A distinguishing feature of Beautifil II LS is its low-shrink rate. In rigorous international bench tests, this ground-breaking material demonstrated volumetric shrinkage of 0.85 percent and polymerization shrinkage stress of 2.72 MPa, the lowest characteristics among all universal composites in the market today. Shofu attributes these outstanding results to a new proprietary monomer and high-density pre-polymerized fillers, which also exhibit tooth-like optical properties and natural esthetics.

Available in syringes, tips and value kits, in 14 dentin and enamel shades, Beautifil II LS offers the clinicians predictable and functional esthetics with greater strength, higher wear resistance and naturally beautiful esthetics, according to the company.

Features of Beautifil II LS (Low Shrink)

- Lowest volumetric shrinkage (0.85 percent) and shrinkage stress (2.72 MPa).
- Greater strength and higher wear resistance.
- Tooth-like esthetics with natural fluorescence and chameleon effect.
- Polishes in an instant.
- Sustained fluoride release/recharge with bioactive Giomer chemistry.

Here at the PDC

You can visit Shofu in booth No. 1203 to learn more about how Beautifil II LS (Low Shrink) reduces polymerization shrinkage and shrinkage stress while creating predictable and functional esthetics.
BIG on small DETAILS

Discover the outstanding MICROTOUCH® DENTA-GLOVE® examination gloves. Your customers are focused on the small details that deliver amazing patient experiences. At Ansell, we’re big on delivering gloves that help with improved dexterity, ergonomics and the health of your hands. Certified for use in oral procedures for patient safety and peace of mind. Your customers won’t want to let go of these gloves!

Visit us at the 2018 Pacific Dental Conference Booth #1725 to get FREE SAMPLES of all of our Ergonomic products.
The purpose of obturating a root canal is to fill the space three-dimensionally to eliminate any gateways through which bacteria might enter. Thanks to DiaDent, doctors now have a bulletproof way to seal root canals that will help ensure treatment success.

Studies indicate that using the warm compaction technique increases the chances that no voids will be left behind in the obturation process. DiaDent is showing this new piece of technology — EvoFill™ Duo Obturation System — here at the Pacific Dental Conference.

While countless methods and techniques are available for root canals, perhaps none is as easy, intuitive and time-saving as DiaDent’s complete obturation system, the company asserts. With an innovative electric motor that prevents hand fatigue, EvoFill Duo offers fast heating and controlled gutta-percha extrusion with precise 3-D fills and reliable results. Both units can be fully charged within 90 minutes.

EvoPack™ is a cordless warm vertical compaction device. It effectively and tightly compacts and seals all canals including lateral canals. After a canal has been shaped and cleaned, a master cone is selected for a snug fit and tug back.

EvoPack is then used to cut, soften, downpack and compact the root canal filling material. With a new innovative LED light-guided condenser, it enables users to have a clear view inside the oral cavity. Color-coded pen tips are available in five sizes, including XF, F, FM, M and ML. Its quick heating tip reaches the highest level of temperature, 250 degrees C, within one second to save treatment time. Three levels of temperature and two heating time settings let users have full control of any procedure.

EvoFill is next. EvoFill is a motorized cordless obturation system that extrudes warm gutta-percha to backfill the yet unfilled portion of the canal. The motorized mechanism prevents users from experiencing hand fatigue, according to DiaDent. EvoFill uses a hygienic one-time-use gutta-percha cartridge to deliver a fast, precise and direct injection of softened gutta-percha into the root canal. The tips can be bent to the desired shape and angle using the multi-purpose wrench provided. The clear GP window displays the amount of gutta-percha available in the cartridge.

With the new disposable fast-loading gutta-percha cartridge, there is no more messy, tedious clean-up, the company says. EvoFill has three variable temperature settings to allow precise control of obturation flow. The preheating function quickly softens the gutta-percha when device temperature is low.

Detailed instructional and introductory videos can be viewed at www.diadent.com. A brochure and demo unit can also be requested. DiaDent is exhibiting here at the Pacific Dental Conference in booth No. 1522; at the Hinman Dental Meeting in booth No. 1645 (March 22-24); and at the AAE meeting in booth No. 724 (April 26-28).

For more product and company information, call (877) 342-3368.
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Booth # 1719
A revolutionary paradigm shift in dynamic surgical navigation

‘It has streamlined and simplified the workflow in both the diagnostic and surgical phases’

By George Mandelaris, DDS

A revolution in surgical guidance is afoot. A new dynamic navigation technology called “Trace and Place” (TaP for short) was developed by ClaroNav and will soon become available with its Navident system. I have had the opportunity to try the technology in a range of cases, and I am very impressed. Here’s a brief description of my experience.

Registration is accomplished using any recent CT scan of the jaw by selecting on-screen and then tracing three of the patient’s teeth or other structures (such as braces or abutments).

The process is done in the chair, immediately before surgery. No stent or guide needs to be prepared, and the entire registration process is typically accomplished in about three minutes.

If needed, the registration can be immediately repeated

In the rare case something goes wrong during registration and an accuracy check fails to demonstrate the accuracy expected, the registration can be immediately repeated by tracing the same or other structures.

Once the jaw is registered with its CT scan, on-screen guidance of the drill position and orientation is provided. The jaw surface is fully exposed, just like with free-hand drilling.

Because the jaw often moves during the operation, the system continuously tracks the position of the jaw and adjusts the registration to keep the jaw and its on-screen image in accurate alignment.

Tracking the upper jaw is accomplished using a special head-tracking frame, which is not affected by movements of the lower jaw or changes in facial expressions.

Tracking the lower jaw is accomplished by connecting a lightweight plastic “jaw tracker” part, marked with optical targets, to a single tooth using a light-cured composite.

The motions of the drill are tracked using another plastic part marked with optical targets.

After only a short experience with Trace and Place technology in my practice, I have come to believe that it is a real tipping point for dynamic navigation guidance.

It has streamlined and simplified the workflow in both the diagnostic and surgical phases to allow state-of-the-art technology to be an everyday component of my surgical implant practice.

I can’t imagine going back!

Here at the PDC
Learn more about Navident 2.0 “Trace and Place” dynamic navigation technology in the ClaroNav booth (No. 105).

Attend today’s session

Today at 11:15 a.m. on the Exhibit Hall’s Live Dentistry Stage, watch Mark Kwon, DMD, and Mark Lin, DDS, FRCD(C), perform “3D Digital Navigation Live Implant Surgery.”

(Photos/Provided by Dr. George A. Mandelaris)
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*Does not include drying.

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Headlights: Now in high-definition

By Designs for Vision Staff

Designs for Vision is introducing an advanced photonic design that provides uniform light distribution with maximum intensity. The patent-pending headlights optically focus the light from the LED to provide 45 percent more light with uniform distribution.

The new LED DayLite® Micro HD™ combines the new high-definition imaging with a very lightweight headlight in combination with the new Micro power pack, according to the company, which says the Micro power pack is the lightest and smallest available. The complete unit includes two power packs, and each power pack can run up to 10 hours.

Designs for Vision has also added the high-definition imaging to LED DayLite WireLess Mini HD, providing a lightweight, cordless solution with light intensity comparable to many cabled headlights. You can choose high-definition imaging with either a wired or wireless design to meet your preference, and all HDi headlights will illuminate the entire oral cavity.

Designs for Vision’s WireLess headlights free you from being tethered to a battery pack. The simple modular designs uncouple the headlights from a specific frame or single pair of loupes.

Prior technology married a cordless light to one pair of loupes via a cumbersome integration of batteries and electronics into the frame.

The compact design of the LED DayLite WireLess headlights are independent of any frame/loupes.

In addition, Designs for Vision is also featuring the REALITY 5-star rated The Micro 3.5EF Scopes, which utilize a revolutionary optical design that reduces the size of the prismatic telescope by 50 percent and reduces the weight by 40 percent while providing an expanded-field, full oral cavity view at 3.5x magnification.

Building on the award-winning design, the newest addition to the Micro Series line is the Micro 4.5EF Scopes. These scopes reduce both the size and weight of the telescopes by 44 percent.

Designs for Vision has expanded into a new 67,500-square-foot location at 4000 Veterans Memorial Highway in Bohemia, N.Y.

You can visit www.DesignsForVision.com/move.htm to check out some photos of the new facility.
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Laser has next-generation ‘ASP Pulse Control’

By Harvey S. Shiffman, DDS

- The LightWalker’s “gold standard” laser wavelengths Nd:YAG and Er:YAG feature micro-processor current control, with next-generation photon amplification chambers that dramatically enhance performance and results. The new LightWalker procedure presets deliver the peak power, pulse shapes and pulse durations that can take your dentistry to a new level, for both you and your patients. Adaptive Structured Pulse (ASP) is a fundamental change at the core of laser technology, and Fotona’s 50 years of laser innovation makes this possible. By changing the engine that drives the laser, not only are new procedures possible, but traditional restorative procedures can truly be done more efficiently and with little need for anesthetic.

- Having two lasers in one machine means there’s no compromise with procedure that use both lasers – and complex treatments become simple and easy to perform.

**TwinLight periodontal treatment**

With the LightWalker, Er:YAG and Nd:YAG wavelengths join forces for TwinLight™ periodontal treatment, which leverages the dramatic differences in selective absorption, specific target chromophores and tissue interaction of two very different lasers, all in one advanced system. TwinLight represents a breakthrough in laser assisted periodontal therapy, providing the ability to comprehensively treat the different facets of periodontal disease.

**PIPS endodontics**

PIPS is an advanced endodontic treatment with the LightWalker Er:YAG laser, which enables 3D debridement of the entire canal system. PIPS harnesses the power of the Fotona ASP powered Er:YAG laser to create photoacoustic shock waves within the cleaning and debriding solutions introduced in the canal. The containment of the shockwaves thoroughly stream these solutions through the entire canal system, enhancing their effectiveness. The canals and sub-canals are left clean, and the dentinal tubules are free of smear layer. PIPS is equally effective for final water rinsing prior to obturation.

**Nightlase snoring therapy**

Nightlase uses the photothermal capabilities of the LightWalker laser to convert and initiate the formation of new and more elastic collagen. The target mucosal tissues are the oropharynx, soft palate and uvula. The LightWalker’s proprietary “Smooth Mode” pulse characteristics create a non-ablative heat generation or “Heat Shock” that initiates the conversion of existing collagen to more elastic and organized forms and also initiates “neocollagenesis,” the creation of new collagen. Nightlase tightens these tissues and has been shown in studies using cone-beam imaging to increase the airways by as much as 30 percent in the most restricted part. The NIGHTLASE treatment is non-surgical and does not require any anaesthetic and can also be used as an adjunctive therapy for OSA patients.

**Faster and efficient for more procedures per appointment**

LightWalker procedures are typically faster, easier to perform and more effective than traditional methods. Laser treatments are by nature minimally invasive, and LightWalker takes this concept to a new level. This allows you the opportunity to raise your production and ROI by doing more procedures in the same amount of time or offering new procedures that may have been too complex or time consuming using traditional methods. It is a win-win for dentists, patients and staff members.

The LightWalker’s Er:YAG wavelength is 300 percent more highly absorbed in water than other Erbium wavelengths, increasing cutting speed. In addition, the ASP technology enables the Physics of QSP™. Studies and clinical experience have documented that the LightWalker ATS’s exclusive QSP mode improves ablation efficacy and precision. QSP’s fast, precise cutting and ability to cut oral tissues comfortably is a result of the “quantized” characteristic of the QSP mode pulse, which reduces the undesirable effects experienced with other hard-tissue lasers.

**FIg. 1: PIPS endodontics in four steps: Gain access to the canal; instrument the canal to ISO #20; perform PIPS with the Fotona handpiece for seven cycles of 30 seconds each; obturate the canal. (Images/Provided by NDI and Dr. Harvey Shiffman)**

- Fig. 2: Complex cases are simplified because filing is minimal and the laser tip does not need to enter the canal.
- Fig. 3: Cleared tooth shows a complicated canal system, five portals of exit, thoroughly cleaned using PIPS.
- Figs. 4a, b: NIGHTLASE snoring and sleep apnea reduction therapy elevates the soft palate and uvula and tightens oropharyngeal tissues to improve upper airway volume.
- Figs. 5a – c: Before, during, after: Fast, less-invasive preps create surfaces for optimal bonding with no smear layer.
- Fig. 6: SEM image (x5000) shows clean, flat dentin surface with wide-open dentinal tubules after treatment with OBP Er:YAG laser irradiation (200 mJ per pulse).

**Faster and efficient preps provide superior surfaces for optimal bonding with no smear layer**

Laser dentists are excited to present these modern, minimally invasive and more natural treatment modalities to the dental community. Using the LightWalker laser, we can now have another tool in our dental toolbox and offer our patients health improvements that reach beyond restorative and rehabilitative dentistry.

Financial disclosure: The author has no financial interest in the products mentioned in this article.

**Financial disclosure**

The author has no financial interest in the products mentioned in this article.

**Here at the PDC**

Learn more about the LightWalker Er:YAG and Nd:YAG dental laser in the National Dental Inc. booth, No.1329.

**About the author**

Harvey Shiffman, DDS, is in general practice at the Laser Dental Center in Boynton Beach, Fla. He is a graduate of Georgetown University School of Dentistry and completed a general practice residency at Georgetown University Medical Center, with an emphasis on treating medically compromised patients. Shiffman completed certification with the Academy of Laser Dentistry (ALD) in three laser systems and recently earned ALD fellowship. He uses and helps develop cutting-edge technology and has performed thousands of laser dental procedures.

Shiffman is an instructor for the Academy of Clinical Technology and recently lectured on advances in laser dentistry at the Yankee Dental Congress and the Greater New York Dental Meeting. He is an adjunct professor in the prosthodontics department of Nova Southeastern College of Dental Medicine and is responsible for the development of a dental laser educational program for undergraduates and dental graduate students.
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COMPATIBILITY CHART

Dia-X DX: Access File (19mm)
- Dia-X D1: ProTaper® S1
- Dia-X D2: ProTaper® S2
- Dia-X D3: ProTaper® F1: Dia-ProT™ F1
- Dia-X D4: ProTaper® F2: Dia-ProT™ F2
- Dia-X D5: ProTaper® F3: Dia-ProT™ F3

*ProTaper is a registered trademark of Dentsply Sirona USA.*
By DEXIS Staff

KaVo Kerr, an organization comprising two global leaders in dentistry, has released the DEXIS FS Ergo by KaVo. Built upon the award-winning DEXIS PerfectSize™ sensor and TrueComfort™ design, the FS Ergo stands as the latest innovation to redefine patient comfort and create a new class of digital sensors, the company asserts.

The FS Ergo combines innovative design and skillfully engineered components to add ease and flexibility to the patient experience.

More pleasant sensor placement

The sensor provides significant improvements in comfort for patients with low tolerance for standard intraoral modalities, allowing for a more pleasant sensor placement that patients will remember.

A robust, durable device that maintains optimal image integrity, FS Ergo features:

- **Sensor housing** — Resistant to bite marks, the submersible sensor housing can also withstand a wide variety of disinfection chemicals.
- **Cable-to-sensor Connection** — The connectivity has proved to be successful under rigorous testing to forces such as pulling, twisting, straining and bending.
- **USB connector** — Built to withstand high-frequency insertion and pulling cycles, the USB connection adds to the overall durability of the sensor.
- **Contoured positioning system** — Made from advanced materials, the positioning system enables the sensor to easily exit and protects the longevity of the cable from wear and tear.

According to the company, the FS Ergo helps to reduce retakes due to patient movement caused by discomfort, thereby enhancing practice efficiency and creating a streamlined digital workflow.

By pairing the newly developed flexible sensor technology with a soft housing, FS Ergo can “give” as X-rays are being captured. Even the proprietary holder system is uniquely designed to accommodate the flex of the sensor so that it can adapt to your patient and thus offer the best radiographic experience possible.

Joins innovative imaging line

“DEXIS products have always instilled confidence in patients and practitioners, and FS Ergo by KaVo will reinforce their beliefs,” said Insiyah Ahmedi, senior marketing manager, KaVo Kerr intraoral imaging. “The complete line of DEXIS imaging products has continually displayed the ability to innovate and excite with digital solutions that consistently provide highly diagnostic information crucial for patient care.”

Dental professionals are encouraged to experience how the FS Ergo can work for them by visiting Dexis in the KaVo booth, No. 911. You also can visit www.dexis.com/fs-ergo.
Introducing Navident 2.0 for Dynamic Navigation with Trace and Place (TaP)

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“Trace and Place is one of the most astounding pieces of technology I have ever seen. It is a revolution in guided surgery. Much faster to use than static guides and you have the ability to easily make changes during surgery if needed.

The workflow for static guided surgery involves dental scans, intraoral scans and STL files, merging them, designing the case, printing, curing, washing and sterilizing the guide. With trace and place the workflow is much simpler: take a scan, plan the case, trace the teeth to align the scan with the patient’s anatomy and place the implant. It gives the best of both worlds. The minimal time of an unguided case and the accuracy of a guided case. It’s a game changer.”
David R. Scharf, DMD

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New from Dentsply Sirona: TPH Spectra ST universal composite with SphereTEC filler technology

By Dentsply Sirona Staff

When it comes to successful restorations, clinicians know what truly matters. Isn’t it time for a composite that does, too? The newest breakthrough in composite technology began with exactly this question: What matters to today’s clinicians?

New from Dentsply Sirona, TPH Spectra® ST universal composite restorative was made possible by SphereTEC™ filler technology, a proprietary method of manufacturing microscaled, well-defined spherical superstructures, composed of submicron glass.

Although the basic components of resin-based composites (including particular fillers, polymerizable resin, initiators, stabilizers and pigments) have remained mostly the same, improvements in design and placement of components is evident over the years.

The synthesis of these SphereTEC microstructures of a defined size distribution and microstructure is achieved in three steps. First, a suspension of submicron barium glass in a mixture of solvent and resin is forced through a nozzle and into a hot air stream (atomization). When entering the gaseous phase, the emerging droplets immediately act to minimize their surface energy and form spherical shapes of a distinct size distribution.

Due to the increased temperature, the solvent is subsequently evaporated and the initial droplets solidify into preformed particles. Finally, the resin on the particles’ interfaces is thermally cured and the PPF can be collected. Because of the well-controlled processing, fillers from this process can be used as obtained: Additional milling is not required.

The resulting SphereTEC fillers’ morphology, particle size distribution and surface microstructure deliver the benefits that really matter to dentists.

Efficiency matters: Versatile handling, made even easier to work with.

Thanks to new SphereTEC filler technology, TPH Spectra ST composite offers optimized handling characteristics in both a high and low viscosity to accommodate the clinician’s preference and technique for placement efficiency. According to the company, clinicians experience drastically reduced “sticking” of material to hand instruments, easy adaptation to cavity surfaces, easy sculptability and excellent slump resistance.

Esthetics matter: Exceptional esthetics, made even easier to create. SphereTEC filler brings an enhanced chameleon blending ability to TPH Spectra ST composite for simplified shade matching. It also enables faster finishing, and it polishes to an excellent luster, according to the company. Just five CLOUD shades cover the full VITA® range, saving money and shelf space by reducing inventory. Clinicians can polish to a high gloss faster with Enhance® finishing and Enhance PoGo® finishing and polishing systems.

Longevity matters: Esthetic results made even more durable. With 24 years and more than 174 million restorations placed, the TPH® DNA has a proven record of long-term clinical success. New SphereTEC filler takes that performance to the next level with excellent stain resistance and 60 percent improved wear resistance, according to the company.

TPH Spectra ST with SphereTEC filler technology is now available in Canada from your local authorized Dentsply Sirona Distributor.

Experience the TPH Spectra ST – SphereTEC difference today at the Dentsply Sirona booth (No. 429), and check out the PDC DIAC coupon book for an exclusive “buy-two-get-one” show offer.

About Dentsply Sirona

Dentsply Sirona describes itself as being the world’s largest manufacturer of professional dental products and technologies, with more than a century of innovation and service to the dental industry and patients worldwide.

Dentsply Sirona develops, manufactures and markets comprehensive solutions, which include dental and oral health products as well as other consumable medical devices — all under a strong portfolio of world-class brands.

As “The Dental Solutions Company™,” Dentsply Sirona has a portfolio of products that provide innovative, high-quality and effective solutions that improve patient care and deliver better, safer and faster dentistry.

Dentsply Sirona’s global headquarters is in York, Penn., and the international headquarters is in Salzburg, Austria. The company’s shares are listed in the United States on NASDAQ under the symbol XRAY.

Visit www.dentsplysirona.com for more information about Dentsply Sirona and its products.

References
2. VITA is not a registered trademark of Dentsply Sirona.
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