5 Steps to Navigating the Challenge of Change
Lava™ Precision Solutions

You and 3M ESPE share a common goal. We’re both committed to improving dental care. More specifically, we’re both committed to finding healthier, safer and more effective solutions for dental patients.

That said, it isn’t always easy to know whether the decisions you make today for your practice, your lab or your organization will help you achieve your goals. The science and technology of dentistry is undergoing major changes, and not all of them are right for everyone.
Without an experienced guide, you can find yourself off the prudent path. Fortunately, we can help guide you.

As part of 3M ESPE, we have a strong track record of bringing practical and ingenious solutions to the dental industry, designed with collaboration and feedback from dentists and dental labs. And today, through acquisition and innovation, we are continuing to introduce new solutions that can move your business forward.

Find a partner who sees beyond the next bend.

“Our industry is rapidly transforming and 3M ESPE is committed to helping dentists and dental labs through this change. Since 1947, we’ve been developing practical and ingenious solutions to help improve clinical outcomes. This background and our collaborative approach with dental professionals enables us to develop and integrate digital technology with material science to transform the practice of dentistry.”

Jeff Lavers, 3M ESPE Division Vice President and General Manager

You can count on us to have a firm grasp on the future and sound advice for helping you get there.
The Lava™ name began as the 3M ESPE brand of zirconia, a promising alternative to porcelain-fused-to-metal (PFM) copings.

Since that introduction, Lava™ Zirconia has become the zirconia brand most requested by dentists for crowns and bridges in the U.S.¹ The reason: it’s not a commodity. It provides differentiating benefits, in natural esthetics, strength and fit, along with eight years of clinical history. 3M ESPE continues to merge the best of this material science with the best of digital technology to help labs and dentists transform the way dentistry is done.

¹ Only Lava zirconia restorations come with their own authentication program. It’s everyone’s assurance of the quality that comes with the Lava brand.
² The Lava™ CNC 500 Milling Machine, the Lava™ Wax Block and the Lava™ Digital Veneering System are scheduled for release in 2009.
Case in point: Now we are able to bring the productivity and precision you can achieve with Lava™ Copings to the entire restoration. The new Lava™ Digital Veneering System uses the Lava™ CAD/CAM system to design and produce an anatomical designed-veneer for the coping. This leads to a process that is more productive than hand layering and pressing. Plus, with glass ceramic blocks in enamel colors and fusion porcelains in dentin colors, the final full contour restoration is also more esthetic than the single-layer made with pressable ceramics. Which increases the likelihood that everyone ends up in a beautiful place.

Follow a proven path to beauty.

"Lava restorations disappear in my patients’ mouths. They are simply beautiful! Plus, they offer marginal integrity comparable to gold restorations and superior intraoral fit. Lava zirconia is the material of choice for my all-ceramic restorations."

Michael D. Clerk BSc, MSc, DDS, MASc, Dip Prosth, FRCD(C)
Certified Prosthodontist, Canada

Using the new Lava™ CNC 500 Milling Machine and the Lava™ Digital Veneering System, technicians can digitally design full contour restoration including the coping and veneering. Copings are created by uniformly reducing the full contour design. This ensures the coping optimally supports the porcelain.

The beauty we deliver is not just esthetics. It is also the beauty of productivity, convenience and consistency.
When different aspects of your process work seamlessly together, the outcome is greater than the sum of its parts.

Such is the case with the Lava™ System.

Based on input from dentists and lab people around the world, 3M ESPE has made the Lava system more accessible to other systems and materials. This is why you can use the Lava™ Chairside Oral Scanner for PFM restorations. This is why we’ve selectively opened the Lava™ Scan ST Design System to wax/resin printers and metal laser sintering devices. And this is why the Lava™ CNC 500 Milling Machine³ works with two different materials to create porcelain veneering in two different ways: either directly with the Lava™ Digital Veneering System² or indirectly with pressable patterns milled from the Lava™ Wax Block². The wax materials can also be invested to produce metal copings.
After a dental lab digitally marks the margin of the digital impression, a SLA model is made from the Lava™ C.O.S. file. This model can be used to support traditional PFM restorations or Lava™ Restorations.

We know how important integration is in your evolving workflow. That’s why we’re committed to connecting our solutions with the rest of your world. It’s a direction that can lead you to greater efficiency, consistent quality and improved outcomes.

Lava™ Scan ST design system is open for output to selective wax/resin pattern printers and metal laser-sintering machines so labs have more material options.

Lava™ Scan ST design system owners can have the ability to scan models and seamlessly order a gold-shaded titanium or zirconia Atlantis™ patient-specific abutment provided by Astra Tech through the Atlantis™ WebOrder system.

A smart guide knows that the path you take is as important as the final destination.

“When we use our Lava Scan ST Design System, it just works, whether we are designing a Lava restoration or a PFM for our wax/resin machine. 3M ESPE pulled the hardware, software and materials together for us.”

Dick Pilsner, CDT, President D&S Laboratories Inc.

The Lava™ CNC 500 Milling Machine, the Lava™ Wax Block and the Lava™ Digital Veneering System are scheduled for release in 2009.
A proficient guide knows there’s more to the job than finding the right destination. There’s also the responsibility of providing support on and after arrival.

The people behind the Lava™ Brand take this responsibility seriously. We have worked diligently to establish a world-class training and service organization to support our customers. We’ve developed training programs on all aspects of indirect restorations. Our lunch and learn seminars with dentists address everything from traditional and digital impression taking to temporization and cementation. This training helps dentists reduce case delays and improve the patient experience. We also provide on-site dedicated training for all Lava™ Milling and Design Centers, as well as e-learning for upgrades and refreshers.
Choose a Guide who is with you for the long-term.

“When I purchase a Lava product from 3M ESPE, I feel like I’ve purchased a partnership. They not only help me with the initial understanding of the product, they put an action plan into place that helps me avoid downtime. Their support is unlike any we’ve experienced anywhere else.”

Brad Slominski, Owner Dental Crafters
Marshfield, Wisconsin

Many of 3M ESPE’s trainers and technical service specialists are dental technicians and former lab owners. They can relate, technician to technician, Todd Rutkus, CDT and 3M ESPE technical service and Ole Mathieson of Valley Dental Laboratory.

In addition, we provide all Lava system customers with a choice of service plan options supported by highly trained field-based technicians. Finally, know that before 3M ESPE brings a new system or solution to market, we make sure we have the right training and service infrastructure in place to support it.

We’re with you for the whole journey.
The Big-Picture Approach To Answering Real-World Questions.

Although some in the business will adopt them more slowly than others, it’s inevitable that digital solutions will someday soon be the backbone of dentistry. Those who venture into the digital realm today will find bold claims, brash promises and befuddling complexity.

Those who venture smartly will find a partner that can simplify the issues. A partner that can put things in perspective.

At 3M ESPE, we’ve already spent more than a decade developing digital solutions for dentists, labs and milling centers. We’ve spent even longer asking customers what makes sense and what doesn’t. We know how one decision relates to another, in your workflow.

In short, we can help guide you through the complexities of change because we are firmly positioned on its leading edge.

Digital Impression
A breakthrough in digital imaging that offers precise-fitting restorations, greater patient comfort and fewer time-consuming steps for both labs and dentists.

Full Contour CAD/CAM Restoration
Soon, dentists will be able to prescribe a Lava™ Zirconia DV Crown. Using this system, labs can design and produce an anatomically designed veneer with all the precision of the Lava CAD/CAM system. Plus, with glass ceramic blocks in enamel colors and fusion porcelains in dentin colors, the final full contour restoration is more esthetic than the single-layer made with pressable ceramics.

Esthetics
Lava™ Zirconia Restoration, porcelain work created with the Lava™ Digital Veneering System²
CAD Design

Allows labs to digitize traditional models so they can confidently move from conventional wax up design to virtual design. The system is an integral part of the Lava™ CAD/CAM system for Lava™ Zirconia. It can also be used to design wax/resin patterns and laser-sintered metal restorations for selective third-party devices.

CAM Manufacturing

Productivity is redefined in this machine, which can run up to 76 hours straight. Offers both 3- and 5-axis milling. Works with multiple materials including Lava zirconia, wax and glass ceramic blocks that are part of the Lava™ Digital Veneering System.²

Sintering Process

The high-temperature, high-speed furnace for Lava zirconia copings and frameworks has different sintering programs for Lava zirconia. This gives labs the flexibility to sinter overnight or throughout the work day.

Flexibility

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