

THE DENTAL ADVISOR

Improving Patient Care Through Research & Education

November 2016

Vol. 33, No. 09

Impression methods:

Past, present and future

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www.dentaladvisor.com

RATINGS:

Excellent + + + + +

Very Good + + + +

Good + + +



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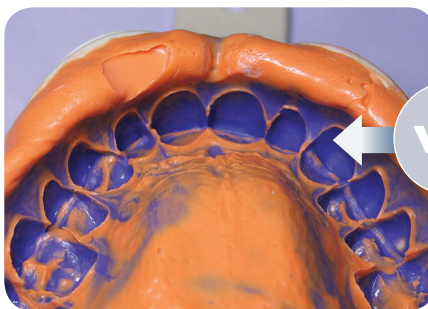
We have been discussing and debating digital impressions versus traditional impressions for as long as I can remember at THE DENTAL ADVISOR. As new technology is introduced and methodology changes, I continue to get the same question in my lectures, "Is it worth the investment?" I personally use both traditional VPS and digital impression devices in my private practice; there is a place for both. One of the most significant benefits I've realized in implementing this technology has been the ability to see my preparation enlarged and in 3D immediately. It has made me a better dentist and allowed me to communicate with my laboratory partners more effectively. Still, we see dentist reluctant to enter this digital marketplace. As we uncover contributing factors such as cost, training/ education, time management and work-flow changes, we are met with the introduction of the desktop impression/model scanner. This addition to digital impression technology could address some of these issues and allow more dentists to participate in the digital economy at levels they are comfortable with.

In this issue we will compare the different methods of acquiring impressions, discuss criteria and tips for predictable outcomes, review technology on the market, and discuss infection control related to digital scanner tips.

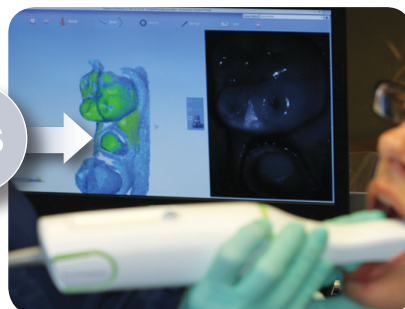
As always, thanks for reading! I welcome your comments and suggestions; you can reach me at drbunek@dentaladvisor.com.

— Sabiha S. Bunek

Impressions of the past, present and future



VS



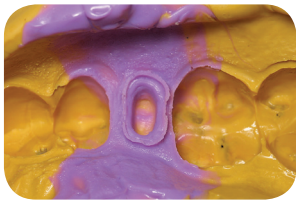
Despite the introduction of new technologies to the marketplace, dentists are still very slow to purchase any sort of digital impression technology for their practice, leaning on traditional impression taking as the method of choice.

Over the past several years, there has been a dichotomy of complete digital (scanner and mill) practices who adopt scanning and milling in-office, and those "analog" offices who have chosen traditional impressions with either VPS or Polyether. The introduction of digital intra-oral impressions was created to increase accuracy of impressions, assuming that digital technology would always be more accurate. However, learning curves for intra-oral scanners as well as price points along with a change in workflow and demands on team members have left dentists shying away from a transition to all digital impressions in their practices. New to the market is a solution that labs have long since discovered - the desktop impression scanner.

In the past 5 years, THE DENTAL ADVISOR has seen a complete change in intra-oral scanner device design, and a complete overhaul in software design. This instability in the marketplace gives dentists pause when deciding to transition to a digital impression environment.

New to the market is a solution that labs have long since discovered - the desktop impression scanner.

Choices in impression-taking



Traditional Impression Materials

- + High accuracy
- + Long-term dimensional stability
- + Familiar method
- + Quick procedure
- Need to reimpres if unacceptable result
- Potential for distortion (bubbles/voids/tears/pulls/disinfection)
- Patient acceptance
- Model fees



Intraoral Scanners

- + High accuracy
- + Opportunity for same day results
- + Increased patient comfort; assist with gag reflex
- + Enlarged 3D view of preparation
- + Ability to retake impression with little effort
- Initial investment and learning curve
- Workflow changes required for team
- Continual education of team members
- Not ideal for every clinical case
- Additional space requirements
- Use of powder (some scanners)
- Higher speed internet/network required

Future trends:

- Smaller more portable intraoral scanners
- Chairside digital impression scanners
- Open file format for easier integration with any laboratory
- Real time scan and design software for enhanced communication with your lab during the procedure
- Newer, more accurate traditional materials



What's new?

Digital Impression scanners have been used by digital dental laboratories for several years. These devices allow clinicians to simply send a scan of the traditional impression to their laboratory of choice.

cara Scan 4.0i
Heraeus Kulzer
www.heraeus-kulzer-us.com
 1-800-431-1785

COMING SOON!



Description:

The **cara Scan 4.0i** scanning solution was designed to be the easiest way for clinicians to transition to digital dentistry and create an automated workflow. With its compact design, and touchscreen and semi-automatic operation, the **cara Scan 4.0i** allows anyone on the dental team to digitize traditional impressions. Once the impression scanning is completed, the information is automatically transmitted to your laboratory. Your office now can have an affordable scanner to digitize your traditional impressions. Please contact Heraeus Kulzer for more details.

Digital Impression Scanners

- + Permanent stability and immediate
- + No change in doctor technique
- + No model storage
- + No shipping time/cost
- + Participation in digital workflow at a lower cost
- + No transfer fee
- Initial investment
- Higher speed internet and network required
- Additional space requirements
- Some do not scan models

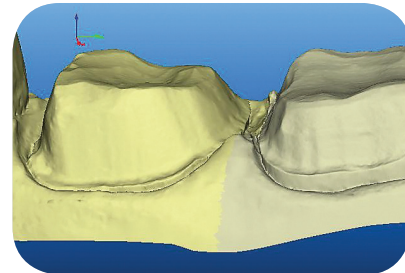


Soft tissue management

Regardless of the impression method, preparation is critical and tissue needs to be managed properly. Ideal impressions are a result of a crisp, clean, and clear margin.



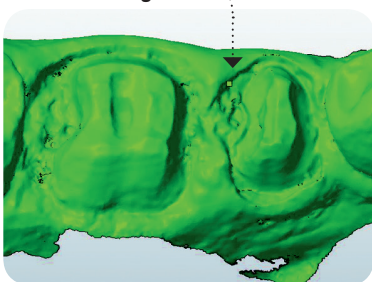
CRISP MARGINS: Traditional impression



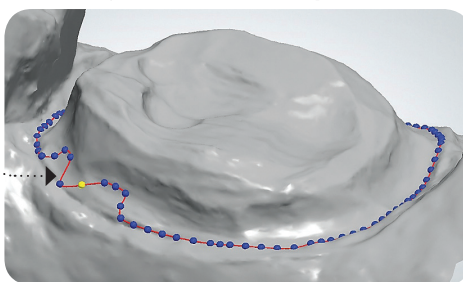
CRISP MARGINS: Digital impression

"Margin of error"

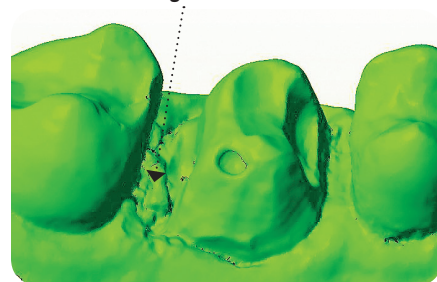
Unclear margins



Margin with an unclear path



Debris on margin



Photos courtesy of Apex Dental Milling

Clinical tips:

Cheek and tongue retraction is an integral but sometimes difficult step when utilizing an intraoral scanner. **Optragate** (Ivoclar Vivadent) retractors and **Neodry** dental absorbants (Microcopy) are the perfect combination to deliver soft tissue retraction necessary for intraoral scanning.

Use of acidic hemostatic agents and pastes such as aluminum or ferric sulfates can prevent setting of PVS impression materials causing a margin that is not crisp in appearance. When utilizing these hemostatic agents, it is imperative that you thoroughly rinse and dry the area before the final impression is taken.

Q Sometimes our intraoral scanner cannot capture a distal margin on a tooth?

A Scannable impression materials such as **Flexitime Fast & Scan** have been developed for this purpose. Not all preparations are suitable for digital impressions. Simply take the traditional impression using a triple tray, and scan using your intraoral wand to fill in missing scan data to mill in office.

Q Is there an alternative to using impression guns when applying light body to the preparation?

A **BFC** and **3M Intraoral Syringes** are great if you find impression guns cumbersome. These smaller syringes allow for precise application of light body without the weight of a larger gun, minimizing the potential for voids.

Flexitime Fast & Scan®

Heraeus Kulzer
www.heraeus.com



Description:

Direct scanning of **Flexitime Fast & Scan** impression material provides higher precision and detail in comparison to a model scan. **Flexitime Fast & Scan** provides a way to digitize traditional impression material. It provides the user with higher precision as impressions are scanned directly without the need for powder, resulting in greater accuracy, improved efficiency, and access to modern CAD/CAM restorations. THE DENTAL ADVISOR published an independently verified study at <https://www.dentaladvisor.com/evaluations/flexitime-fast-scan>

Currently available intraoral scanners

PRODUCT	COMPANY	IN-OFFICE MILL OPTION	CONTRAST/MEDIUM POWDER REQUIRED	CART/USB
iTero Element	Align Technology, Inc.	TS-150	No	Trolley w/PC
Dental Wings Intraoral Scanner /Straumann CARES	Dental Wings /Straumann CARES	DWLM	Yes	Trolley w/PC
3M™ True Definition Scanner	3M	TS-150, PlanMill	Yes	Trolley w/PC
3M™ Mobile True Definition	3M	TS-150, PlanMill	Yes	Tablet
TRIOS 3	3Shape Galaxy BioMill,	PlanMill 40, Roland DWX 4W	No	Trolley, Integrated on Delivery System, USB connect via laptop
TRIOS 3 Mono	3Shape	PlanMill 40, Galaxy BioMill, Roland DWX 4W	No	Trolley, Integrated on Delivery System, USB connect via laptop
CS 3600 Scanner	Carestream	CS 3000 mill	No	Integrated on Delivery System, USB connect via laptop
CS 3500 Scanner	Carestream	CS 3000 mill	No	Integrated on Delivery System, USB connect via laptop
PlanScan	Planmeca	PlanMill 40	No	USB
CEREC BlueCam	DENTSPLY Sirona	MCX, MCXL mill	Yes	Trolley w/PC
CEREC Omnicam	DENTSPLY Sirona	MCX, MCXL mill	No	Trolley w/PC

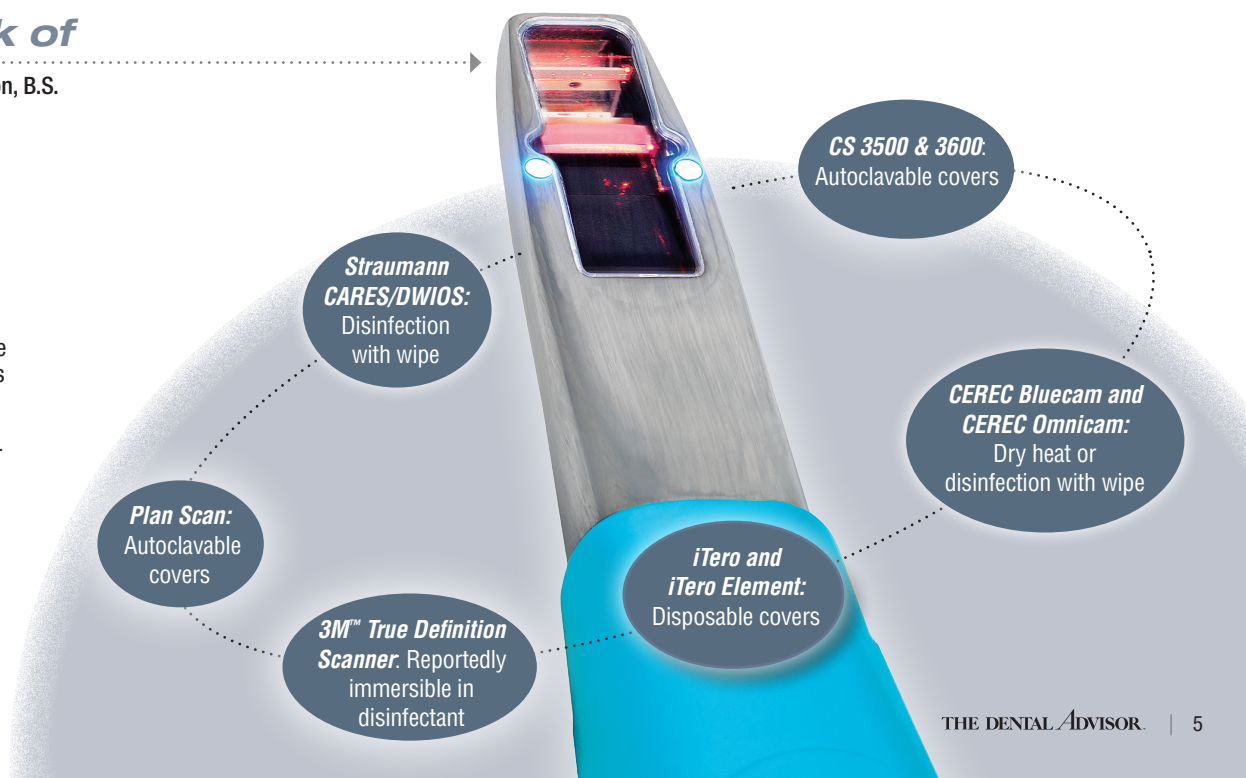
From the desk of

John A. Molinari, Ph.D., Peri Nelson, B.S.

Infection Control: Intra-Oral Scanners

As intra-oral scanners become more popular, we have received questions on how to effectively disinfect the wands being used intraorally. Due to the digital function of the scanner heads, using a traditional barrier is not an option as it will interfere with capture. We will be investigating in future projects the effectiveness of the currently available methods.

Note: Only use disinfectant approved by equipment manufacturer.



Path-O-Guard™ Earloop Face Masks

++++ 1/2

Richmond Dental and Medical
www.richmonddental.net

91%
overall
rating

Description

Path-O-Guard™ Earloop Face Masks are ASTM Level 3-rated and offer ≥98% bacterial filtration efficacy. They are latex-free, non-irritating, 3-ply, comfortably secured by earloops, and feature a nose clip that is designed to improve adaptation and fit across the bridge of the nose. **Path-O-Guard™ Earloop Face Masks** are available in boxes of 50 masks. The anti-fluid and anti-fog, anti-fog **Path-O-Guard™** face masks are available in pink, lavender and blue.

Indications

- Use as a part of personal protective equipment (PPE) for clinical procedures requiring an ASTM Level 3 face mask.

Unique Features

Path-O-Guard™ Earloop Face Masks are available in an anti-fog/anti-fluid version and as regular ASTM Level 3 face masks.

Consultants' Comments

- "The best face masks I have tried in a long time."
- "I especially liked the anti-fog feature and the confidence of protection with a Level 3 mask."
- "There was no fogging and they felt extremely soft on the inside."
- "Thicker than lower level face masks, but they didn't feel confining and I could breathe well."
- "A very comfortable mask."
- "Minimal 'fuzz' after use. There was no residue from the mask material adhering to my lip."
- "My assistant noticed a big difference with fog control compared to our usual face masks."
- "For an earloop face mask, the breathability was very good."
- "I would like to see some padding around the nose."
- "I would like to see an adjustable chin band included in the face mask."

Clinical Tips

- Take the time to adapt the anti-fog strip so that it can function 'seamlessly.'
- Cut the whole top off the box of masks to make it easier to get the masks out.

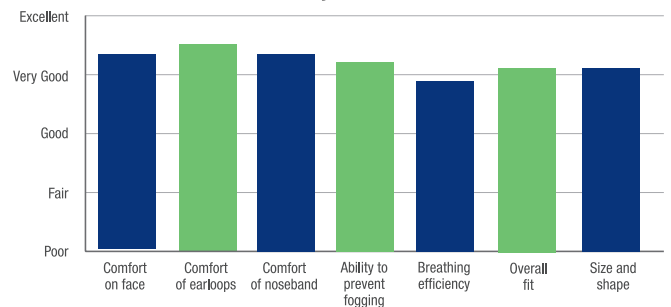


Evaluation Highlights

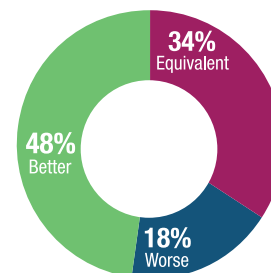
Path-O-Guard™ was evaluated by 38 consultants, with an average of 34 uses per consultant.

- Great fit.
- Very comfortable to wear.
- Non-irritating.
- Great color.
- Non-fogging.
- Noseband adapts well.
- The seal to the bridge of the nose is excellent.
- Nice packaging.

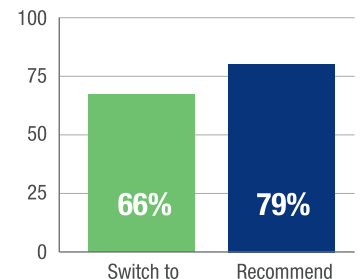
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Zirconite

++++ 1/2

BJM Laboratories, Ltd.
www.bjmlabs.com

93%
overall
rating

Description

Zirconite is a dual-cured, radiopaque self-adhesive resin cement formulated for the cementation of zirconia restorations. It offers a working time of up to 2 minutes, and a setting time of 3 minutes at intraoral temperature. A gel state can be achieved with a 2-second light cure or 1.5 to 2 minutes self-cure, at which time excess cement is easy to remove with a scaler or explorer before light-curing all surfaces for 20 seconds. **Zirconite** includes a 5 mL syringe of the adhesive resin cement, 10 auto-mix tips, 10 large and 10 small intra-oral tips and a mixing pad. For maximum shelf life, **Zirconite** should be refrigerated.

Indications

- Adhesion of zirconia restorations

Unique Features

Zirconite is specially formulated for zirconia restorations to offer superior retention and marginal integrity. No pre-treatment of the intaglio surface of the restoration is necessary when using this self-adhesive resin cement.

Consultants' Comments

- "A perfect cement."
- "Does not affect the shade of translucent crowns."
- "BJM lab has developed some very specific products that are perfect for their individual uses."
- "The gel state clean-up prior to light curing was easier than a total self-cure, but the overall time spent due to the extra light-cure step was longer."
- "A quicker setting/self-curing time would be helpful, and an initiator so that light-curing is not needed."
- "I prefer letting it set undisturbed for 1.5 minutes rather a quick cure prior to excess removal."

Clinical Tips

- Clean-up is much easier if you don't let it get too hard.
- Floss through contact points before the gel phase.
- Floss interproximally and leave the floss in place until the cement is fully cured.
- Use the intraoral tip for accurate placement of the material into the intaglio of the crowns.
- If you are using it for the first time, check the setting every 15 seconds as the material becomes very hard if left beyond the ideal time for clean-up.
- The mixing tip is small. We extruded the product onto a mixing pad and then mixed, reducing the amount of wasted product.

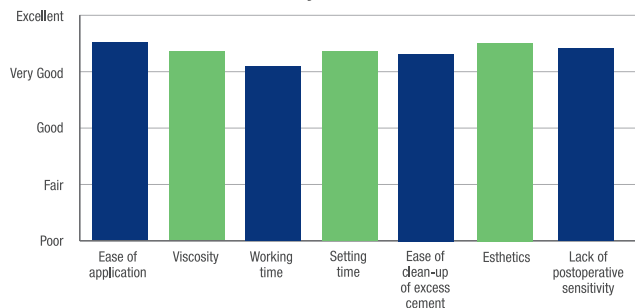


Evaluation Highlights

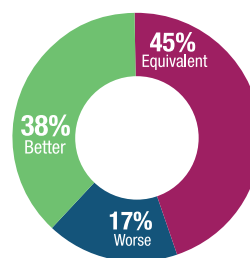
Zirconite was evaluated by 29 consultants.

- Easy to use and fast, easy clean-up.
- Good viscosity and handling properties.
- No need to pre-treat the inner surface of the restoration or the tooth preparation before bonding.
- Very straightforward to use - no learning curve.
- Mixing and application tips are high quality.
- Patients had no post-operative sensitivity.

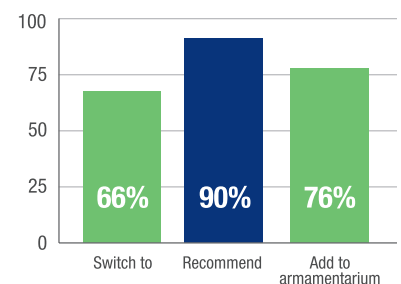
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Bioclear
www.biocleardental.com



94%
overall
rating



Description

Heat Sync Composite Warmer is designed to warm composite thoroughly and evenly to allow it to flow and conform to the preparations easily. This device holds two heat-safe composite dispensing guns, two flowable syringes, and six extra composite compules. **Heat Sync Composite Warmer** is ergonomically designed with slots to aid handling, placement and removal of the guns and syringes in the warmer. The large anodized aluminum heat-transfer top quickly heats composite to an optimum working temperature of 155° F (68° C).

Indications

- For the warming of composite before being placed as a direct restorative material.

Unique Features

Heat Sync Composite Warmer has a large capacity and is designed to hold two dispensing guns, syringes and compules that can be warmed evenly and simultaneously. The heat transfer top is removable and autoclavable. The remainder of the device can be cleaned and disinfected.

Evaluation Highlights

Heat Sync Composite Warmer was evaluated by 12 consultants, with an average of 32 uses per consultant.

- A very easy way to warm composite.
- Reliable, portable and functional.
- The large capacity makes it possible to warm more compules and to keep two dispensing guns warm at the same time.
- Warms composite evenly and to a good consistency.
- Works well with Bioclear matrices for the anterior region.
- I would like to see a safety cut-off switch.
- Decrease the time it takes the composite to warm up.

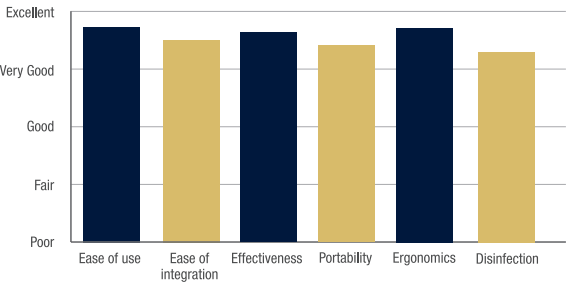
Consultants' Comments

- "Easy to use and it does what it says."
- "Makes the composite more flowable, and it can then be extruded effortlessly from the gun."
- "When using the compule dispensing gun, I preferred to wait 10-15 seconds to allow the syringe barrel to cool down a bit first."
- "Heat Sync offers more options for composite storage than other devices. My assistants loved it!"
- "Warming a bulk fill posterior composite makes placement quick and easy. The composite adapts very well to preparation walls."
- "I believe that every restorative dentist doing adhesive dentistry should be using a composite warmer."

Clinical Tips

- Warming the composite first is useful for good adaptation to the preparation walls.
- Turn it on ahead of time if you know what composite shade(s) you will need, and let it warm up your compules well before you need them.
- Place and sculpt the composite quickly while it is cooling down.
- Don't squeeze out the composite with the same pressure that you would use for an unwarmed composite.
- Have the extra composite gun loaded and ready for use with additional compules warming.
- Standard precautions should be taken when using a heated syringe around soft tissue.

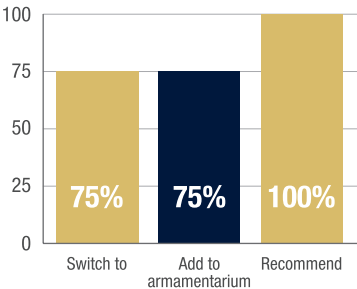
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Tapered Occlusal Reduction Diamond Burs

+++++



ISO#	828TG	828TO	828TY	828TB	828TR	828TW
Diameter	017	017	017	017	017	017
Length mm	1.5	1.8	2.0	2.2	2.4	1.0

Meisinger

www.meisinger.com

Description

Tapered Occlusal Reduction Diamond Burs offer precise reductions for preparations. The burs are color-coded, available in 6 depths, and have 8° tapers. This includes 1mm (color-coded white, for axial reduction of monolithic restorative material or maxillary anterior lingual reduction), 1.5mm (color-coded green, for occlusal reduction for full-coverage gold and zirconia restorations, and for axial reduction for layered porcelain or incisal reduction for monolithic porcelain), 1.8mm (color-coded orange, for incisal reduction for layer porcelain restorations), 2mm (color-coded yellow, for reductions for e.max, Lava and porcelain-fused-to-metal restorations, and for incisal reductions for layered porcelain or an inlay), 2.2mm (color-coded blue, for inlays) and 2.4mm (color-coded red, indicated for a supra-erupted tooth). Each Tapered Occlusal Reduction Diamond Burs are available in packages of 5 or packaged in a set containing one of each bur depth.

Indication

- Clinical procedures requiring occlusal, incisal and axial reductions for preparations.

Evaluation Highlights

Tapered Occlusal Reduction Diamond Burs were evaluated by 29 consultants, with an average of 19 uses per consultant.

- Excellent burs in a container that is very easy to use, store, and sterilize.
- Provide accurate and precise measurements and cutting depth.
- Predictable.
- Excellent cutting efficiency.
- Many sizes to choose from.
- A short shank version would be helpful.
- Very easy to use.
- Excellent self-limiting shoulder (stop).
- Versatile - can be used for crowns, inlays, onlays and porcelain veneers.



96%
overall
rating

Consultants' Comments

- "These are an excellent, if not mandatory, addition to every crown and bridge set-up, for both new and experienced dentists."
- "I would switch because each prep will be very consistent."
- "I was very impressed with how well they cut tooth structure."
- "Ensures perfect reduction every time. These burs remove any guesswork."
- "These are the best occlusal reduction burs out there."

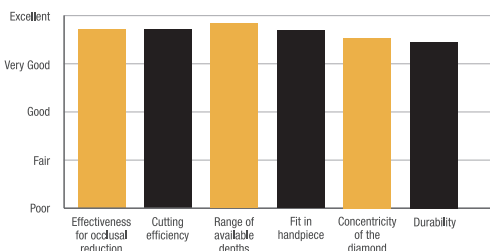
Clinical Tips

- Trust the preset depth indicator - it is correct.
- Reduce the central fossa first and then the cusps, so that you do not lose your point of reference and over-reduce the central fossa area.
- Use plenty of water to prevent overheating the tooth.
- Great for occlusal rests for partials.
- Use the top end of the diamond perpendicular to the occlusal surface to the depth of the diamond. The non-cutting flange will stop you from cutting too deep.
- Make a few initial depth cuts and then use the sides of the diamond to complete the entire occlusal reduction. It is a quick and efficient without ever really having to dramatically change the angle of the handpiece.
- Measure the bur depth on your X-ray to make sure the pulp horns will not be impacted.

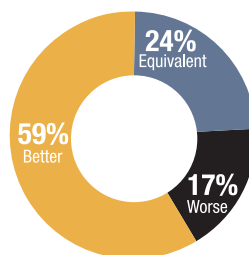
Unique Features

Tapered Occlusal Reduction Diamond Burs offer precise occlusal reduction, with an angled non-cutting stop that limits the bur to the designated depth. Suitable for preparations for a variety of indirect restorative materials.

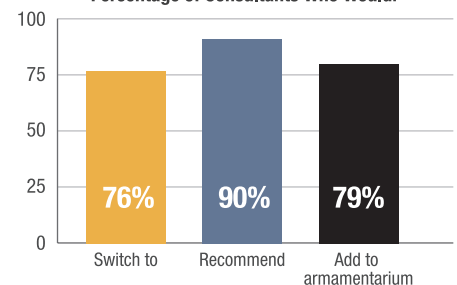
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



CRAVE Nitrile Powder Free Examination Gloves

++++ 1/2



Cranberry USA
www.cranberryusa.com

91%
overall
rating

Description

CRAVE Nitrile Powder Free Examination Gloves are single-use, powder-free and latex-free. They are light-blue in color, textured, and available in 5 sizes (extra small, small, medium, large, extra large) to meet the needs of everyone in the office. **CRAVE Nitrile Powder Free Examination Gloves** are sold in boxes of 200.

Indication

- Single-use gloves for examination and non-surgical patient procedures.

Unique Features

CRAVE Nitrile Powder Free Examination Gloves are coated with lanolin and boosted levels of vitamin E. This proprietary formulation is designed to soothe dehydration and irritation by boosting and helping skin retain moisture. The material and full hand texturing are designed to offer exceptional tactile sensitivity.

Evaluation Highlights

CRAVE Nitrile Powder Free Examination Gloves were evaluated by 28 consultants, with an average of 56 uses per consultant.

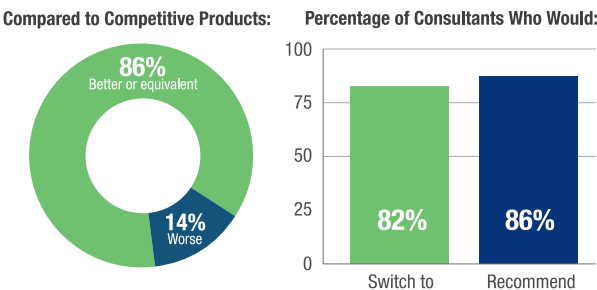
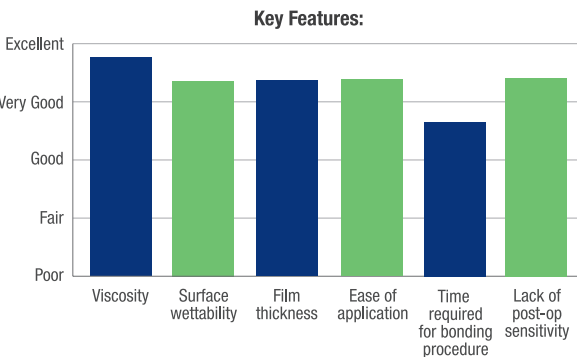
- The texture of these gloves is excellent.
- They are flexible and very thin, yet strong.
- Tactile sensation is great while wearing these gloves.
- The lanolin and vitamins really help keep hands from drying out.

Consultants' Comments

- "They were easy to don and glided on very easily, unlike most nitrile gloves."
- "Very comfortable, and the gloves easily flex while at the same time conforming to my hands."
- "They fit my finger tips and the texture meant there was no instrument slippage."
- "I did not realize how dried out my hand had been until I used these gloves. My skin feels fantastic, even after wearing gloves throughout the day."
- "I had no skin irritation with the CRAVE gloves."
- "It would be helpful if the box were slightly larger or there were fewer gloves in the box, making removal from the box easier."

Clinical Tips

- The sizes run a little larger than other brands. You may find a size smaller than you would normally choose will fit well. The small size can actually be comfortably used for both small and medium hands.
- The gloves have some stretch; you can pull them up your wrist.
- The gloves may feel a little tight at first, but they loosen up quickly and are comfortable.



Dia-PT Files



DiaDent

www.diadent.com

Description

Dia-PT Files are flexible nickel-titanium rotary files available in 19, 21 and 25 mm lengths. The 19 mm DX file is designed for coronal shaping, providing access in restrictive and hard-to-reach areas. D1 and D2 are for coronal and canal shaping with purple and white identification ring on the handles. D3, D4 and D5 are finishing files and have yellow, red, and blue identification rings on the handles corresponding to ISO color coding of size #20, #25, and #30.

Dia-PT Files offer universal compatibility with other techniques and systems, and are designed with an anti-corrosion coating. The files have a variable taper for increased cutting efficiency. The manufacturer recommends that the files are used with a torque of 2 to 3 Ncm and at a rotary speed of 250 to 350 rpm and that use of an individual file be confined to less than 60 minutes. **Dia-PT Files** are available in packs of four, with 21 mm or 25 mm files in sizes D1 through D5, and in a 4-pack with 19 mm DX files. Packs of Dia-ProT gutta percha and paper points are available to precisely fit the shapes created by **Dia-PT Rotary Files**.

Indications

- Endodontic treatment

Unique Features

Dia-PT Files are progressively tapered and are designed for instrumentation of curved and calcified canals. They have a triangular cross section that is designed to reduce the file's contact with the canal wall, thus improve safety by decreasing the torsional load.

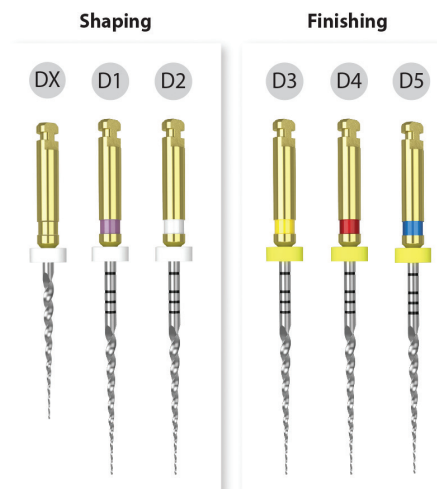
Consultants' Comments

- "The flexibility of the files made shaping of curved canals easy."
- "This is an excellent, easy-to-use systematic approach."
- "You only need 5 files to get the job done."
- "Cutting with these files was efficient but not too aggressive."
- "The calibration rings did not line up well."
- "Package all necessary files into a single patient use kit or individually package files, rather than providing them in bulk packs."
- "I feel that other file systems are more flexible and better able to negotiate the canals that, as an endodontist, I am faced with."
- "I would like to see fewer files being required for a procedure."

Clinical Tips

- Use lots of irrigation and RC Prep for tight canals.
- Be sure to have a glide path with a 15 file.
- Keep the canals lubricated.
- Do not rush through filing. Use a pumping action until this action is smooth and without resistance.
- Use the matching Dia-ProT gutta percha points.

86%
overall
rating

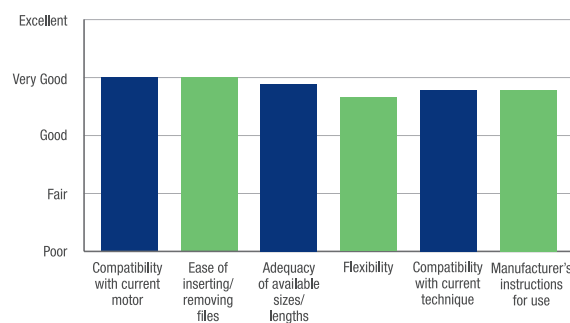


Evaluation Highlights

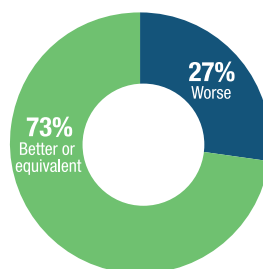
Dia-PT Files were evaluated by 22 consultants, with an average of 16 uses per consultant.

- Easy system to use – shapes and cleans canals beautifully.
- The gutta percha matches up well with the finishing files.
- The instruments are secure in place and do not slide upon opening the box.
- The files are flexible, cut well and save time.
- Compared to current shape memory files, these files are stiff.
- Enlarge the apical end of the files to ensure adequate removal of debris and shaping.
- Cyclical fatigue testing a plus.
- Color-coding the boxes differently would make it easier to find the length of file we are seeking, and a plastic-coated chart showing the file color and use of file would be helpful.

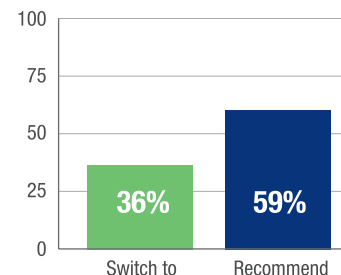
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Panavia V5

++++ 1/2

Kuraray America, Inc.
www.kuraraydental.com

92%
overall
rating



Description

PANAVIA V5 is a dual-cured, fluoride-releasing adhesive resin cement. This versatile universal cement can be used for all restorative applications requiring the use of adhesive resin cement. The **PANAVIA V5 Standard Kit** comes in an all-in-one kit with one color-stable esthetic shade of cement in a 4.6 mL automix syringe, together with 20 automix tips. The dual-cured shades available in a kit include A2 (Universal), or Clear. Shades Brown (A4), White, and Opaque (self-cure) are available as separate refills. The intraoral working and self-curing setting times once the cement comes into contact with the Tooth Primer are 60 seconds and 3 minutes, respectively, at 99° F (37° C). The cement can also be light-cured in 10 seconds, while tack-curing can be achieved in 3 to 5 seconds using a Blue LED light. At a room temperature of 73° F (23° C), the total working time after dispensing is 2 minutes. The **PANAVIA V5 Standard Kit** also includes a 3 mL syringe of 35% phosphoric acid etchant that also contains silica, a 4 mL bottle of self-etching Tooth Primer that bonds to all tooth structures, and a 4 mL bottle of **CLEARFIL CERAMIC PRIMER PLUS** that bonds to all silica-based ceramics (including lithium disilicate), zirconia, composites and metals. The remaining contents of the kit are 5 endo tips, a 1.8 mL syringe of try-in paste, 20 needle tips, 1 mixing dish, 50 applicator brushes, a laminated flow chart, the manufacturer's instructions for use, and a storage case.

Indications

- Crowns, bridges, posts, adhesive bridges, inlays, onlays and veneers
- Implant restorations
- Splints
- Amalgam bonding

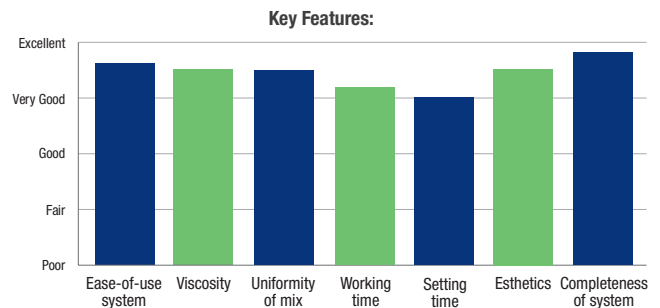
Unique Features

PANAVIA V5 is an all-in-one kit. The self-etching Tooth Primer contains new catalysts that accelerate cement curing and provide for high bond strengths to all tooth structures in the self-cured mode. **CLEARFIL CERAMIC PRIMER PLUS** contains the original MDP adhesive monomer and a γ-MPS silane monomer that enhances bond strength to restorative materials. **PANAVIA V5** is amine-free for color-stability.

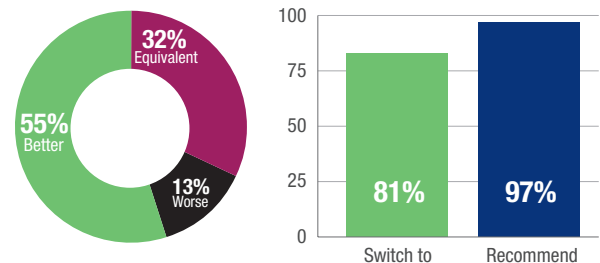
Evaluation Highlights

PANAVIA V5 was evaluated by 31 consultants.

- Complete, convenient and well-organized system.
- Easy to use and easy cleanup.
- Excellent bond strength.
- Good viscosity.
- Patients had no post-operative sensitivity.



Compared to Competitive Products: **Percentage of Consultants Who Would:**



SPECIAL THANKS TO:

Select Senior Clinical Consultants (Over 20 years):

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