THE DENTAL ADVISOR™
Improving Patient Care Through Research & Education

Sept/Oct 2017
Vol. 34, No. 5



Simplifying Infection control

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RATINGS: Excellent: + + + + + Very Good: + + + + Good: + + +

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PUBLISHER
DENTAL CONSULTANTS, INC.
John W. Farah, D.D.S., Ph.D.
John M. Powers, Ph.D.
Sabiha S. Bunek, D.D.S.

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Mark Zahn, D.D.S. M.S.

CONTRIBUTING AUTHORS
Fiona M. Collins, B.D.S, M.B.A., M.A.
John A. Molinari, Ph.D.
Peri D. Nelson, B.S.
Devi Janani Vijaya Raghavan, BDS, CDA

EXECUTIVE TEAM
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Peri D. Nelson, B.S.
Devi Janani Vijaya Raghavan, BDS, CDA
Christopher Voigtman
Nelson Williams, M.S.
Mary E. Yakas, B.A., CMC

Please send inquiries and address changes to:
THE DENTAL ADVISOR,
3110 West Liberty, Ann Arbor, MI 48103
Call: 800.347.1330 - 734.665.2020
Fax: 734.665.1648
Email: info@dentaladvisor.com
Website: www.dentaladvisor.com

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Guest Editorial





As members of the editorial board and contributors to THE DENTAL ADVISOR, we are fortunate to see and evaluate a broad range of dental products that reach the market. In this issue, we are providing information on infection control, highlighting key touch points in instrument reprocessing.

We know that there are many procedures required on a repeated basis throughout the day for effective infection control and many products to choose from. These procedures also take time and must be performed in a safe and effective manner. It gives us genuine pleasure to be able to combine our experiences to offer you this list of go-to products that truly solve clinical problems.

While we all have our own opinions regarding individual products, this issue more directly offers you our advice on how these products can be utilized safely and equipment maintained.

We hope you find these suggestions useful, and please keep your own recommendations coming!

— John A. Molinari, Ph.D. and Fiona M. Collins, B.D.S, M.B.A., M.A.

Questions from the field . . .

As we are out lecturing, we receive questions from practicing dental professionals. Many are confused about CDC recommendations, OSHA guidelines, and infection control protocols.

We offer a service to the dental community to receive ***unbiased, confidential answers to questions based on research*** we perform here at THE DENTAL ADVISOR. Contact us at connect@dentaladvisor.com

Here are a couple of the questions we have recently received at our lectures, and our answers:

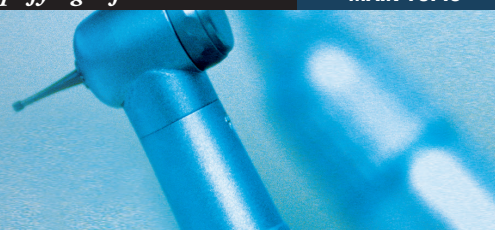
Q. How often should we do dental unit waterline monitoring?

A. There is no specific guideline from the CDC on the frequency of dental unit waterline monitoring. Check the directions on the product you use for waterline maintenance or ask the manufacturer of that product. If the manufacturer has no specific recommendation, quarterly monitoring has been recommended.

Q. In my office we wipe down the barrier with cleaner or disinfectant in between patients. Is this okay?

A. This is an infection control breach. Barriers are disposable and must be discarded after a single-use. In addition, cleaner/disinfectant is not intended for use on barriers and may also be damaging. Only FDA-cleared barriers should be used. We often hear of offices using clear garbage bags or saran wrap as alternatives. These choices do not meed CDC guidelines.

Simplifying
Infection Control
HANDPIECES: MAINTENANCE & REPROCESSING



High- and low-speed handpieces and motor attachments are semi-critical heat-sensitive instruments. They are also sophisticated, complex devices – the manufacturer's instructions for use and reprocessing must be followed. Dental handpieces must be cleaned, lubricated and heat sterilized - the standard method is for them to be autoclaved. The general recommendations with Dos and Don'ts below provides pointers for successful reprocessing of handpieces.

General Dos and Don'ts*

Do	Don't
☑ **Flush water through the handpiece** for 30 seconds prior to removing it from the unit.	✖ **Do not** operate the handpiece without a bur in it.
☑ **Remove the bur before cleaning** the exterior of the handpiece.	✖ **Do not** reuse a single-use, disposable bur.
☑ **Clean the exterior gently -** options recommended by manufacturers include using warm water and detergent together OR a soft toothbrush and isopropyl alcohol OR a cleaner/disinfectant wipe. ONLY follow the method recommended by the handpiece manufacturer.	✖ **Do not** place a handpiece or motor in an ultrasonic cleaner. ✖ **Do not** immerse a handpiece or motor in chemical disinfectants/ sterilants or other liquids.
☑ **Loosen and remove debris** from the water spray channel using a recommended cleaning wire.	✖ **Do not** force or jam a wire into the water spray channels. Use only the recommended diameter wire or tool provided with your handpiece.
☑ **Lubricate the handpiece** as recommended using an automated handpiece maintenance system or manually placing lubricant in the air drive until it comes out the other end (head of the handpiece). Lubricate motor if recommended.	✖ **Do not** lubricate 'lube-free' handpieces. For handpieces requiring lubrication, be sure to lubricate in the air drive only. Clean and lubricate chucks as well.
☑ **Manual method:** Purge excess lubricant by hooking the handpiece (with a bur reinserted) up to an air source, and running it for 20 or 30 seconds. Wipe off any lubricant on the exterior surface. Remove bur.	✖ **Manual method: Do not** run water through the handpiece when purging excess lubricant.
☑ **Sterilization.** Place the handpiece in sterilization pacakaging and sterilize it in the autoclave (or chemiclave) using the cycle recommended by the handpiece manufacturer. Remove after the drying cycle when the packaging is dry. Also sterilize motors. ***Caution:*** *Some electric motors require use of an autoclave plug over the end during autoclaving.*	✖ **Do not** sterilize handpieces with the bur inserted, unless recommended by the manufacturer. ✖ **Do not** use dry heat sterilization – the high temperatures can damage handpieces. Remove packages from the autoclave when they are completely dry. Incomplete drying leads to turbine failure.

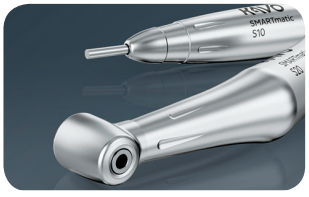
These are general recommendations. Always follow the specific instructions for use and reprocessing instructions provided by the manufacturer of your handpieces and motors. Do not run a turbine while still warm after autoclaving - this will damage the turbine and it will fail.

Q. **I heard that it was OK to wipe down our low-speed handpieces in between patients and to sterilize them at the end of the day — is that true?**

A. No. Studies have confirmed the potential for cross-contamination, and retraction of oral fluids into handpieces. The CDC recommendations are to clean and sterilize handpieces and components after use on a single patient.

WHAT'S NEW:

SMARTmatic™ low-speed handpiece



The *KaVo* ***SMARTmatic***™ is a one-piece low-speed handpiece, making proper cleaning easier prior to sterilization between patients.

The *KaVo* ***SMARTmatic*** can be autoclaved at up to 135°C. Special features include a durable stainless steel construction that will not rust and ball bearings designed for smooth operation.

The ***SMARTmatic*** contra-angle, low-speed handpiece optimizes performance with a small head size for better sight lines and ceramic sliders within the chuck system for securing the bur. It can be used for a broad range of treatment options including endodontic, restorative and prophylaxis procedures.

Simplifying

Infection Control

HANDPIECES: MAINTENANCE & REPROCESSING



Tips to Consider

A number of factors can make handpiece maintenance easier and user-friendly, including the following:

- **Have the same types of high-speed and low-speed handpieces** in inventory to reduce the risk of reprocessing errors by standardizing reprocessing as much as possible.
- **Handpieces with fewer ridges and uneven areas** may accumulate less debris and be easier to clean.
- **Using disposable prophy angles simplifies reprocessing;** the straight attachment must be sterilized between patients.
- **Wipe debris off external surfaces** as soon as it starts to accumulate (it's easier to remove before it dries).
- **Use a handpiece maintenance system** to automate cleaning and lubrication all in one step.

430 Torque

Dental EZ



The ***430 Torque*** *(StarDental®)* is the newest member of the 430 high-speed handpiece family - delivering power and choice. It includes ceramic bearing turbines which are 25% harder than stainless steel and high quality fiber optic glass designed to withstand the rigors of steam sterilization.
An independent test by THE DENTAL ADVISOR shows ***430 Torque*** has the highest Watts of power of the handpieces tested, at 27 watts and maximum power output. Visit DentalEZ.com/430Torque to learn more!

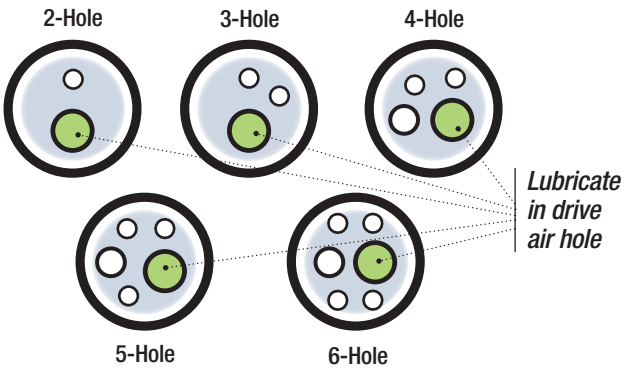
Automated Cleaning and Lubrication

Cleaning and lubrication are simplified by using a handpiece maintenance system that automates cleaning and lubrication. It reduces the risk of errors and the time required by individuals reprocessing handpieces and motors. Automated units also deliver a measured amount of lubricant. After using the unit, excess lubricant should be wiped from the external surface of the handpiece/motor before further reprocessing. Always follow the handpiece manufacturer's recommendations.

Product	Company	Number of handpieces	Adaptors/couplers for multiple brands	Chuck cleaning function	Proprietary cleaner/lubricant	Rating
QUATTROCare Plus	KaVo Kerr	Up to four	Yes	Yes	Yes — spray	99%
STATMATIC	SciCan	Up to three	Yes	Yes	Yes — spray	96%
Assistina 301 Plus	Adec/W&H	One	Yes	Yes	Yes — liquid solutions	N/A
Midwest Automate	DENTSPLY Sirona	Up to four	Yes	Yes	Yes — spray	N/A
iCare	NSK	Up to four	Yes	Yes	Yes — liquid solution	N/A
Lubricare	Bien Air	Up to four	Yes	Yes	Yes — separate sprays	N/A
Lubrina	J Morita	Up to four	Yes	Yes — Morita devices only	Accepts multiple brands	N/A

Confused About Where to Lubricate Your Handpiece?

The diagrams below illustrate the location of the drive air hole **(marked in green)**. Lubricating improperly can cause malfunction of the handpiece.



QUATTROcare Plus

KaVo Kerr



The user friendly ***QUATTROcare Plus*** handpiece maintenance system is designed to automatically clean, lubricate and purge your instruments with the push of a button. Easy loading and operation saves time and money while increasing the service-life of handpieces.

The ***QUATTROcare Plus*** can be used for virtually all manufacturer's high-speeds, low-speed contra-angles, straight handpieces, air driven scalers, and air motors. Protecting your handpiece investment with ***QUATTROcare Plus*** is easy and increases the warranty of KaVo Master and Expert Series handpieces from 2 years to 2-½ years.

Simplifying Infection Control

HANDPIECES: MAINTENANCE & REPROCESSING



DID YOU KNOW? ***The single greatest reason for handpiece failure is inadequate maintenance, not autoclaving.***

TIPS FOR SUCCESS AND HANDPIECE LONGEVITY

- **If the manufacturer recommends lubrication after sterilization for manual lubrication,** use separate cans of lubricant before and after sterilization to prevent cross-contamination.
- **Always clean the fiberoptic light following the reprocessing instructions.** Using harsh chemicals can degrade the surface, reducing the light emitted.
- **Maintain compressors** to avoid contaminating handpieces and motors with compressor oil or dirty air. This is a cross-contamination risk for patients. Excess oil can also cause restorative materials to fail.
- **Make sure burs are fully inserted** in the autochuck during use.
- **Avoid using dull burs** and applying greater lateral pressure - this contributes to bearing wear.
- **When manually lubricating handpieces,** be sure to purge excess lubricant so that it does not coagulate during autoclaving or interfere with sterilization.
- **Make sure handpieces have time to cool** after autoclaving them. Using them while still warm causes turbine failure in air-driven handpieces.
- **Clean and lubricate chucks** at least weekly, or as recommended by the manufacturer. Chucks readily accumulate debris.
- **Clean water spray channels** with an appropriate tool or wire to prevent debris from accumulating.



Safety First!



Recommendations include:

- **Always wear PPE when reprocessing instruments** – heavy-duty utility gloves, mask, protective eyewear and protective clothing.
- **Use a mechanical cleaning device** – an ultrasonic or instrument washer/disinfector.
- **Avoid/minimize manual cleaning.**
- **Place sharps in a sharps container** before transporting contaminated instruments.
- **Instrument cassettes improve safety** during transportation and reprocessing of instruments, protect instruments and save time.

Infinity Series™ Cassettes

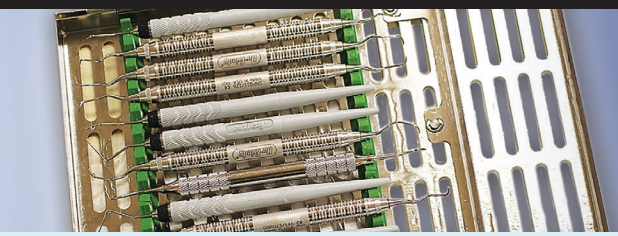
Hu-Friedy



Infinity Series™ Cassettes feature a modern design with an innovative, open hole pattern and silicone rail system that increases exposure to hard to reach areas of instruments during reprocessing, creating an optimal environment for cleaning and sterilization. An ergonomic latch allows for user-intuitive, single-handed opening. Implementing a cassette-based instrument management system, like Hu-Friedy's IMS, provides a safer, efficient, and cost-effective environment by reducing the handling of instrumentation, removing time consuming steps, and protecting instruments during handling and reprocessing. Learn more about Hu-Friedy's IMS solution at www.hu-friedy.com/IMS.

Instrument Cassette Advantages: from THE DENTAL ADVISOR, Translating the Science #22 "Instrument Cassettes: Effective and Safe"

Time Savings	One cassette holds all instruments for a specific procedure together from chairside procedure through reprocessing while eliminating certain manual steps from the process.
Improved Safety	Minimized handling of contaminated instruments during processing for re-use, which decreases chances of sharps injuries.
Better Organization	Standardized procedures that are color coded for easy identification and organization.
Decreased Contamination Potential	Proper spacing of instruments during reprocessing provides optimal environment for cleaning and sterilization.
Streamlined Workflow	Promotes proper flow of dirty to clean during instrument reprocessing. Easy break down after patient appointment and simple patient prep.
Increased Instrument Longevity	Protects instruments from damage during reprocessing while keeping them in place from chairside to storage to reduce the possibility of misplaced instruments.



Simplifying
Infection Control

The Need for "Clean"

Cleaning – the removal of soil and debris – is an essential component of infection control. It's necessary as a part of effective hand hygiene, instrument reprocessing and management of environmental surfaces. The recent FDA Guidelines for Reprocessing Medical Devices in Health Care Settings is for industry, not dental professionals. It does, however, highlight the need for cleaning, validation for devices, and requirements for instructions for reprocessing. Here we'll look at aspects of cleaning during instrument reprocessing and management of clinical contact surfaces in the dental office.

Cleaning During Instrument Reprocessing

Thorough cleaning of instruments prior to packaging and sterilization is essential. Steam, chemicals and dry heat (the sterilant) cannot penetrate debris and soil, making proper sterilization impossible.

In addition to offering effective and safe instrument cleaning, instrument washers and washer/disinfectors, as well as ultrasonic cleaners, offer cleaning solutions for these devices. Solutions that are enzymatic, have a neutral pH, and offer anti-corrosive properties are the best choices to keep instruments from degradation. An instrument washer/disinfector may make sense for a larger or specialty practice using cassettes.



Best Practices for Ultrasonic Cleaning

- **Always use instrument cassettes,** racks or dedicated ultrasonic containers.
- **Avoid contact of instruments with the chamber.** This impedes cleaning and can damage the motor.
- **Always use an ultrasonic cleaning solution.** These are formulated for optimal ultrasonic cleaner performance; regular detergents are not as effective in cleaning.
- **Replace ultrasonic cleaning solution daily** or when it appears to be cloudy or contaminated.
- **If using cassettes, choose an ultrasonic cleaner** that can accommodate smaller and larger size cassettes at a higher quantity.
- **Test efficacy of ultrasonic cleaner regularly.**

Instrument Washer or Ultrasonic?

How to decide which is best for your office:

Features	Instrument washers and washer/disinfectors	Ultrasonic cleaners
Automated	Yes	Yes
More effective than manual cleaning	Yes	Yes
Safer than manual cleaning	Yes	Yes
Accommodates instrument cassettes	Yes	Yes
Can be used with an enzymatic solution*	Yes	Yes
May be used with a regular detergent	No	No
Disinfects instruments	No/Yes**	No
Dries instruments after cleaning	Yes	No
Removes need for sterilization	No	No
Integrated data logger	Available	No
Easy to use	Yes	Yes
Cost	High	Moderate

**Provided indicated by the cleaning device manufacturer*
*** Washer alone doesn't disinfect, must be used in conjunction with disinfector*

Resurge® Ultrasonic Cleaner

DENTSPLY Sirona



The ***Resurge® Ultrasonic Cleaner*** provides dental practices with optimum capacity and flexibility in cleaning dental instruments. Available in two sizes, 0.8 gallon and 2.0 gallon, these units meet the needs of offices seeking either high or low capacity cleaning requirements. Both size units feature a low-profile design making it easy to insert and remove instruments, while a touch screen makes set up and operation simple. Combined with the ***Resurge® Instrument Cleaning Solution,*** the ***Resurge Ultrasonic Cleaner*** offers superior cleaning and ease of use.

Managing Clinical Contact Areas



Surface Disinfectants:

- **Disinfection** requires that a surface already be clean.
- **If the product you use is only a disinfectant,** you must also stock and use a cleaning product.
- **An intermediate-level cleaner/disinfectant** (or disinfectant) with a TB claim will kill TB and all less-resistant microorganisms when exposed for the stated kill time. If you use a low-level cleaner/disinfectant (or disinfectant) when indicated, you must also stock and use an intermediate-level product for use when visible blood is present.
- **A one-step product can be used as a one-step only** if there is no visible debris on the surface.
- **Always wear the recommended PPE** when working in contaminated clinical contact areas.
- **Make sure to use enough product** – if you are using a wipe, it is meant to cover a certain surface area. If you use it for a larger area, insufficient product will be on the surface for it to remain wet and disinfect the area.
- **Check the TB kill time** and the number of other microorganisms the product will kill.
- **For dental chairs** (upholstery), always use a cleaner/disinfectant recommended by the chair manufacturer to help avoid damage to the surface.
- **Using barrier protection on upholstery** when possible reduces cumulative long-term exposure of the upholstery to cleaner/disinfectant.
- **Never make your own wipes.** Using 4x4 gauze, for instance, can affect the disinfectant as the gauze can contain bleach.

OPTIM 1™

SciCan



With ***OPTIM 1™*** there is no need to compromise between efficacy and being protected. With a one-minute broad-spectrum contact time, it is one of the fastest and most effective cleaner and intermediate level disinfectants. It is in the lowest EPA toxicity category (Category IV) and does not require any GHS hazard pictograms, signal words or statements. ***OPTIM 1*** gives you confidence that you are compliant and protecting your patients, staff, your equipment and the environment; the perfect balance.

CaviWipes™

Kerr TotalCare



CaviWipes™ are a popular surface disinfectant in the dental industry and trusted by leading infection control experts. With clinically relevant efficacy claims, it kills microorganisms that pose a threat in today's environment like TB, bacteria, viruses and fungi in just 3 minutes. ***CaviWipes*** are conveniently packaged and ready-to-use with no dilution or mixing required and are compatible with common hard, non-porous surfaces. Take advantage of industry-leading contact times that safely, efficiently disinfect surfaces throughout the operatory.

Barriers

Single-use, disposable FDA-cleared barriers are recommended for each patient. Cleaning and disinfecting of the underlying surface is still necessary if the barrier is torn or damaged during use or removal.

Advantages of single-use, disposable barriers:



- **Reduces personnel exposure** to chemicals.
- **Reduces the need for cleaning** and disinfection.
- **Protects areas that are hard to access** for cleaning and disinfection.
- **Protects areas that are sensitive** to chemicals.
- **Reduces long-term exposure** of upholstery to chemicals.

Pinnacle™ Barriers

Kerr TotalCare



Pinnacle™ Barriers meet specific standards to the dental industry and are blood and viral penetration tested to greater protect against bacteria. It is the best way to minimize both operatory turnaround time and environmental surface contamination, which can harbor different microorganisms for weeks. ***Pinnacle Barriers*** can help preserve the quality of the equipment in your practice and keep it in new condition. These barrier products are designed for simple placement and removal and come in a variety of sizes.

THE DENTAL ADVISOR

Improving Patient Care Through Research & Education

Biomaterials Research Report

Cutting Performance Comparison of Various 1558 Metal Cutting/Transmetal Carbide Burs

Matt Cowen, B.S.
THE DENTAL ADVISOR Biomaterials Research Center
3110 West Liberty, Ann Arbor, MI 48103
(734) 665-2020, ext. 111
matt@dentaladvisor.com

Introduction:

This study compared the cutting rates of similar carbide burs from different manufacturers by measuring the volume removed per second. The burs were all tested utilizing the same computer controlled test program to deliver a consistent, clinically-relevant fixed load of 1.5 N utilizing an electric handpiece operating at 150k RPM. Five burs of each product were used to cut a 20 mm long sample of Macor® ceramic 3 times for each bur for a total of 15 cuts, or 30 cm of linear cutting distance. This was done to compare the cutting rate for a new bur to the cutting rate after use.

Experimental Design:

Repetitions: 5 identical burs of each product compared, with 3 passes for each bur adding up to 60 mm of cutting for each bur or 300 mm of cutting per bur product.

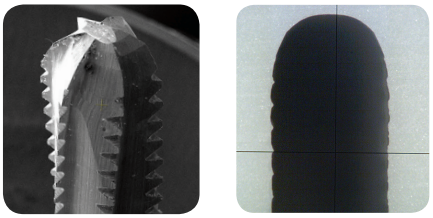
Methods:

The bur test machine is composed of an electric handpiece driving the test burs while positioned over a carriage holding the Macor® test specimens. The carriage holding the specimen is moved into the rotating bur by a cable connected between it and the cross-head of a universal test machine (Instron 5866) which allows a constant force to be applied while cutting. A dry run without cutting was performed before every bur test to measure the friction inherent in the system and the load zeroed to 0 +/- 0.05 N over the total length of travel. The electric handpiece was operated at 150k RPM with a deionized water spray.

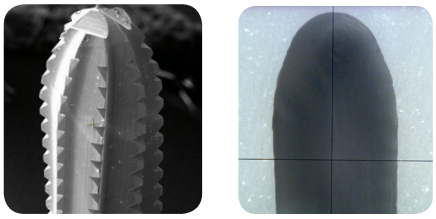
Depth of cut was set at 2.5 +/- 0.2 mm. The depth of cut of each pass was measured with a micrometer attached to a binocular microscope at 10X magnification on each end of the cut Macor® slabs and averaged. Microscopic images were captured on the ends of cut specimens and the cross-sectional area measured using the depth of cut and ImageJ software (NIH). Cutting volume was calculated using the cross-sectional area and linear cutting distance. The volumetric cutting rate was calculated by dividing the cutting volume by the measured time to cut from 2 to 20 mm for each repetition.

1558 Carbide Burs

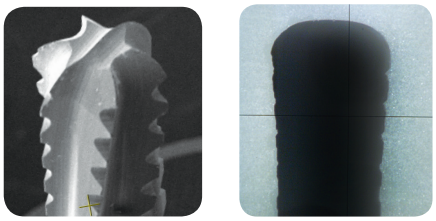
Alpen Speedster 1558G (Coltene/Whaledent)



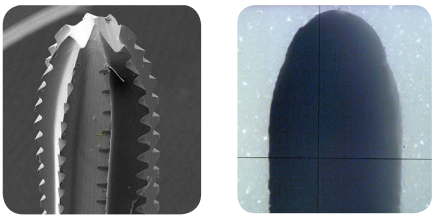
SabreCut Fissure Carbide #1558SC (Brasseler USA)



Great White Gold Series GW-2 1558 (S.S. White Burs, Inc.)



Razor Operative H1558RZ-FG (AXIS Dental Corp.)



SEM images of new burs used in this study. (Left) Edge view of the cutting patterns left in Macor by new burs. (Right)



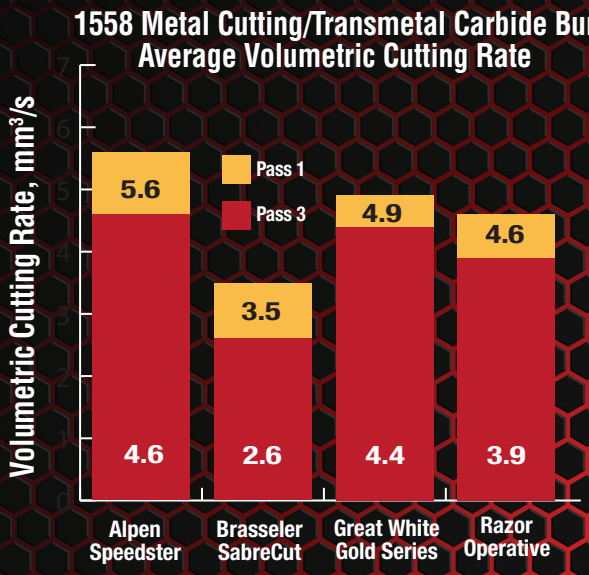
Sanao 200 L
Electric Handpiece
(SciCan)



Macor®
Ceramic Substrate



Customized cutting platform



Overall, averaged over 15 cuts

Alpen Speedster is:

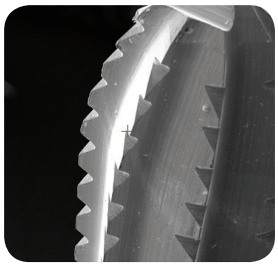
- **60% faster** than Brasseler SabreCut
- **14% faster** than Great White Gold Series
- **22% faster** than Razor Operative

Alpen Speedster


New 100x magnification

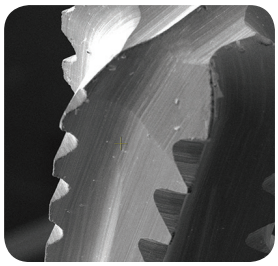

Used 100x magnification

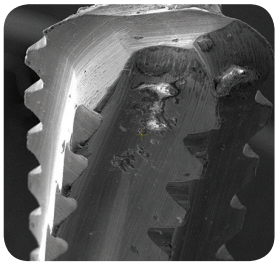
Brasseler SabreCut


New 100x magnification

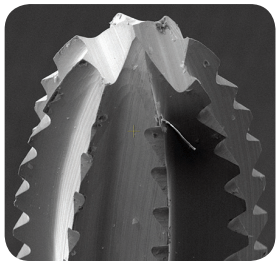

Used 100x magnification

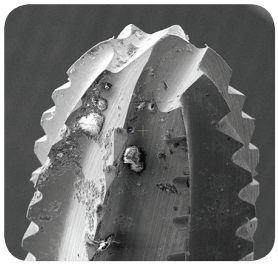
Great White Gold Series


New 100x magnification


Used 100x magnification

Razor Operative


New 100x magnification


Used 100x magnification

COLTENE

Tetric EvoCeram®

(10-YEAR CLINICAL PERFORMANCE)

+ + + + +

Ivoclar Vivadent, Inc.
www.ivoclarvivadent.com

97% rating at recall

Description:

Tetric EvoCeram® is a universal, nano-hybrid composite indicated for anterior and posterior esthetic restorations. The composite is radiopaque and formulated to meet any esthetic need. The ***Tetric EvoCeram*** shade range includes 22 shades offering 4 dentin, 4 bleach, 13 enamel and a highly translucent incisal shade for optimal customization. This light-cured composite incorporates well-balanced filler technology combining the advantages of all filler sizes ranging from 40 to 3,000 nm with an average particle size of 550 nm. The composite is available in 0.2g, color coded, unit dose capsules and 3g color-coded syringes.

Clinical Evaluation Protocol:

At the 10-year recall, there were 801 restorations available for monitoring, of which 592 were recalled. The restorations included both anterior restorations (5%) and posterior restorations (95%) (Figure 1). Figure 2 depicts the various classes of restorations in which ***Tetric EvoCeram*** was used. A timeline of restorations in clinical service is shown in Figure 3.

Fig. 1: Distribution of recalled ***Tetric EvoCeram*** restorations.

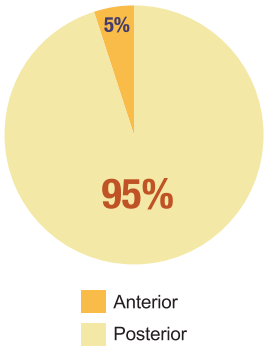


Fig. 2: Classes of recalled ***Tetric EvoCeram*** restorations.

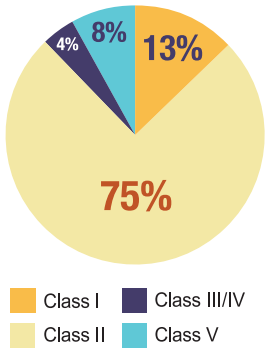
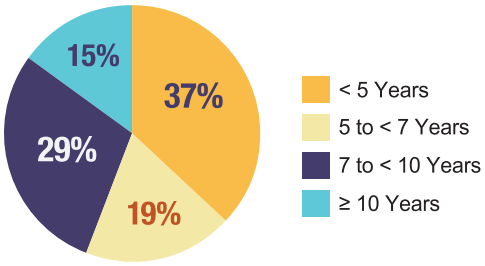


Fig. 3: Timeline of recalled ***Tetric EvoCeram*** restorations in service.



Consultants' Comments

- *"After more than 10 years, the restorations still look beautiful."*
- *"Retains esthetics and polish over time."*
- *"Amazing resistance to wear."*
- *"I love the handling of* ***Tetric EvoCeram*** *– it is definitely my go-to composite."*

Clinical Observations:

At recall the following categories, esthetics, resistance to fracture/chipping, resistance to marginal discoloration, and wear resistance were rated on a scale of 1 to 5 with 1= poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent. Any restoration receiving a rating of 1 or a 2 in a category was replaced. Restorations receiving a rating of 3 or 4 in a category were considered clinically acceptable.

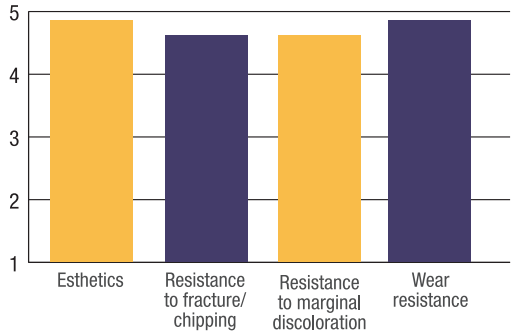


Tetric Evo #29 MOD @ 12 yrs

Esthetics

The esthetics of ***Tetric EvoCeram*** were excellent (Figure 4). Of 592 recalled restorations, 92% received an excellent rating and close to 8% received a good to very good rating. Only two restorations required replacement because of poor esthetics. ***Tetric EvoCeram*** layered with a translucent shade often resulted in improved esthetics.

Fig. 4: Results of ***Tetric EvoCeram*** at 10 years.



Resistance to Fracture/Chipping

More than 94% of the 592 recalled ***Tetric EvoCeram*** restorations received an excellent rating based on resistance to fracture and chipping (Figure 4). Fifteen restorations (2.5%) had minor chips and received ratings of 3 or 4. These restorations were either smoothed or repaired with flowable composite. Twenty restorations (3.4%) were replaced as a result of tooth fracture and/or recurrent decay – not due to composite failure.

Resistance to Marginal Discoloration

86% of the recalled restorations had no visible marginal discoloration and were rated excellent (Figure 4). Of the remaining restorations, 12% had slight to moderate marginal discoloration requiring no intervention, while 2% had excessive marginal discoloration that necessitated their replacement. Both the composite and the bonding agent can affect marginal discoloration. A variety of bonding agents were used, with approximately 89% being self-etch and the remainder total-etch bonding agents. Excessive microleakage can lead to caries.

Wear Resistance

97% of the restorations received a rating of excellent and showed no evidence of wear (Figure 4). Only 12 (2%) restorations had slight to moderate wear, requiring no intervention. Four restorations had excessive wear that resulted in their replacement.

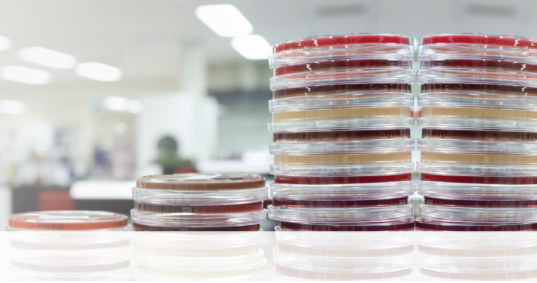
Conclusion

This 10-year evaluation of 592 restorations demonstrated that ***Tetric EvoCeram*** had superior performance in esthetics, resistance to fracture/chipping, resistance to marginal discoloration, and wear resistance. ***Tetric EvoCeram*** has excellent handling characteristics. It is non-slumping, not sticky, contours well, and is easy to finish and polish. ***Tetric EvoCeram*** received a 97% clinical performance rating.

THE DENTAL ADVISOR
Improving Patient Care Through Research & Education

Research Report

John A. Molinari, Ph.D., Peri Nelson, B.S.
THE DENTAL ADVISOR Microbiology Research Center
Dental Consultants, Inc., Ann Arbor, Michigan



Number 72 – July 2015

Cleaning and Antimicrobial Efficacy of Evacuation Line Solutions

Purpose: To investigate the cleaning capabilities of several enzymatic evacuation system cleaners in a clinical practice.

Methods and Materials:

Used evacuation lines were collected from 4 dental operatories in a busy practice and replaced with 4 new evacuation lines. The lumens of the used evacuation lines were exposed, photographed, and then tested for bacterial contamination. Each of the 4 new lines installed were assigned an experimental evacuation line preparation: a) Line 1 - ***SANI Vac™*** *(Crosstex)*; b) Line 2 - ***Leading Comptetitor A*** and c) Line 3 - ***Leading Comptetitor B***. Active agents for each product are shown in Table 1. Clinical personnel were instructed to clean each line every workday for a 2-month period as per manufacturer's instructions. Visual and bacterial analysis of attached debris was performed at 1 and 2 months of the study.

Table 1. Active Cleaning Agents in Experimental Evacuation Line Products.

Product Name	Active Cleaning Agent(s)
SANI Vac™	Multiple proteolytic enzymes
Leading Competitor A	Dual quaternary ammonium, ethanol, EDTA, sodium metasilicate
Leading Competitor B	Phosphoric acid, glycolic acid, isopropanol, surfactant

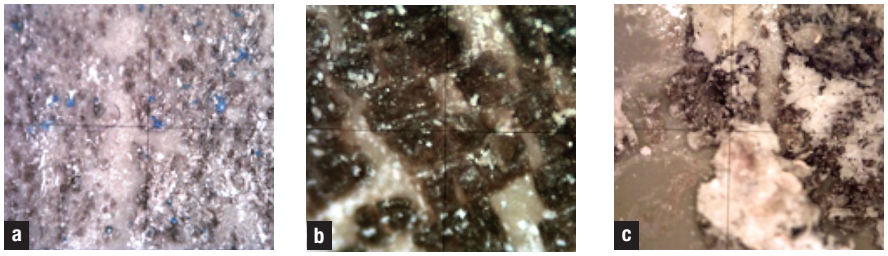


Figure 1a-c. Evacuation lines prior to the start of treatment: a) Line 1; b) Line 2; c) and Line 3

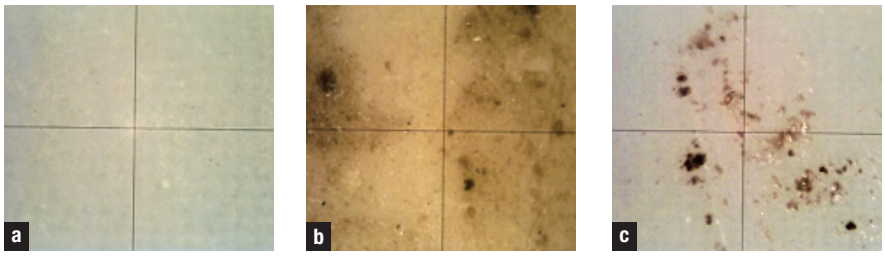


Figure 2a-c. New evacuation lines after 1 month of treatment: a) ***Sani Vac™*** (1); b) ***Leading competitor A*** (2); c) ***Leading competitor B*** (3)

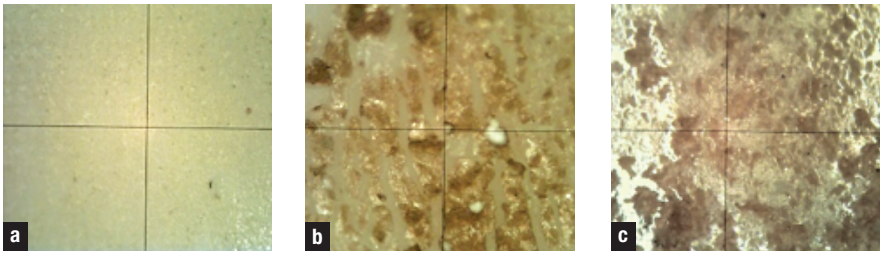


Figure 3a-c. New evacuation lines after 2 months of treatment: a) ***Sani Vac™*** (1); b) ***Leading competitor A*** (2); c) ***Leading competitor B*** (3)

Results

Used evacuation lines that were replaced at the beginning of the study were found to contain large amounts of attached debris within the lumens of each sample (Figure 1). After 1 month of treatment with test cleaners, all line specimens showed small amounts of debris, with only minor differences noted. The most notable finding was observed with the evacuation line treated with ***SANI Vac™*** (Line 1) (Figure 2). This line also continued to show lower debris levels after 2 months of treatment compared to observations of the other 3 test lines (Figure 3). All evacuation lines contained moderate presence of viable bacteria, however microbial colonization could not be quantified due to clumping of organic and inorganic debris on surfaces.

Summary

In this study new evacuation lines were installed and then treated using multiple cleaners for a period of 2 months. At the end of the investigation, each of the 3 cleaning products were shown to maintain clean and unobstructed lines. However, observation of the evacuation line treated with ***SANI Vac™*** stood out, as little to no accumulated debris was detected on inner tubing walls when samples were processed.

Acknowledgment: This study was funded in part by Crosstex.

THE DENTAL ADVISOR
Improving Patient Care Through Research & Education

Research Report

John A. Molinari, Ph.D., Peri Nelson, B.S.
THE DENTAL ADVISOR Microbiology Research Center
Dental Consultants, Inc., Ann Arbor, Michigan



Number 102b– December 2016

Handpiece Maintenance Study: Oil and Lubrication

Objective:

To evaluate the ability of ***Statmatic 31*** *(SciCan)* and ***Statcare*** *(SciCan)* handpiece maintenance systems to inhibit the accumulation of debris within the internal components of the handpiece compared to competitor maintenance systems when used on substrates common to dentistry.

Experimental Design:

Four new electric dental handpieces *(Sanao by SciCan)* were designated to an experimental handpiece maintenance system or an untreated control; ***Statmatic 31*** *(SciCan)*, ***Statcare*** *(SciCan)*, ***Assistina 301 Plus*** *(W&H)*, and untreated. Handpieces were fitted with *Great White Gold Series GW-2 Carbide Burs (SSWHITE)* and used on five substrates common to dentistry [*Admix Amalgam., Benco Dental*; human teeth; *Mocar Porcelain Block; CeraSmart Ceramic Block, GC America;* and, multiple composites (*TPH3 Plus, Dentsply; Camouflage Universal NanoHybrid, Glidewell;* and *E·ON Universal, Benco Dental)*] (Figure 1). For each use/reprocessing cycle, a selected substrate was drilled on-and-off for 1-minute with low water flow, lubricated and cleaned by a designated handpiece maintenance system or left untreated, and then sterilized in the Statim 2000 (SciCan) sterilizer using the pre-programmed unwrapped cycle (Table 1). For this study dental handpieces were used and then reprocessed 150 times at which point the handpieces were disassembled, and internal components were examined and photographed using *Micro Enterprise microscope* with a *PixeLink camera*.

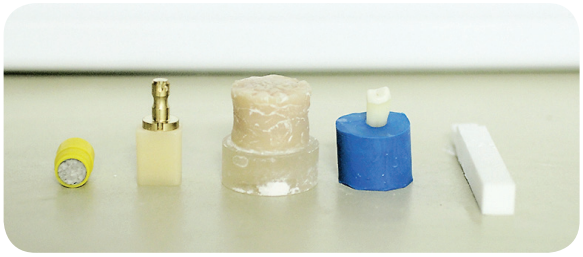


Figure 1. Test substrates, left to right; amalgam, *CeraSmart* ceramic block, various composites, human tooth, and *Morcar* porcelain block.

Table 1. Handpiece maintenance system pre-programmed cycle parameters

HP Maintenance System	Solutions Used	Length of Cycle (Secs)	Chuck Care
Statmatic 31	Oil	20	Yes
Statcare	Oil	21	Yes
Assistina 301 Plus	Oil, Cleaner	35	No

Results:

Four internal structures were examined in order to qualify the effects of each handpiece maintenance system on the test *Sanao* handpieces; head casing, cartridge, oblique shaft assembly, and push button (Table 2). After 150 cycles of use/maintenance/sterilization, the untreated (control) handpiece demonstrated considerable surface discoloration that suggests possible debris accumulation and/or corrosion on all four internal parts examined (Figure 2a-d). Similar findings seen with the control were observed with the handpiece maintained with the ***Assistina 301 Plus*** (Figure 3a-d). Conversely, the handpieces maintained with ***Statmatic 31*** and ***Statcare*** (Figures 4a-d and 5a-d), closely resembled the internal components of an unused handpiece with the exception of one small area on the oblique shaft assembly. This surface irregularity was limited to a small grooved area, whereas multiple locations on the oblique shaft showed surface discoloration with the untreated and ***Assistina 301 plus*** handpieces.

Table 2. Irregularities observed

Maintenance System	Head Casing	Cartridge	Oblique Shaft Assembly	Push Button
Statmatic 31	No	No	Yes	No
Statcare	No	No	Yes	No
Assistina 301 Plus	Yes	Yes	Yes	Yes
Untreated	Yes	Yes	Yes	Yes

Figure 2a-d. Internal components from untreated handpiece; a) head casing, b) cartridge, c) oblique shaft assembly, and d) push button

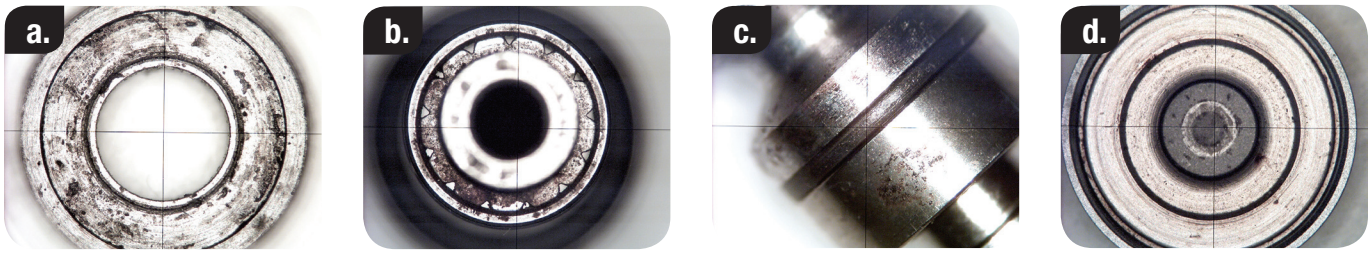


Figure 3a-d. Internal components from ***Assistina 301 plus*** handpiece; a) head casing, b) cartridge, c) oblique shaft assembly, and d) push button

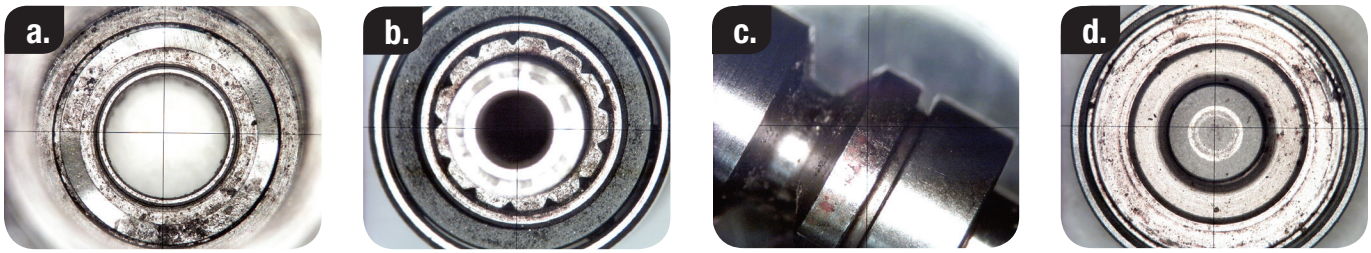


Figure 4a-d. Internal components from ***Statmatic 31*** handpiece; a) head casing, b) cartridge, c) oblique shaft assembly, and d) push button

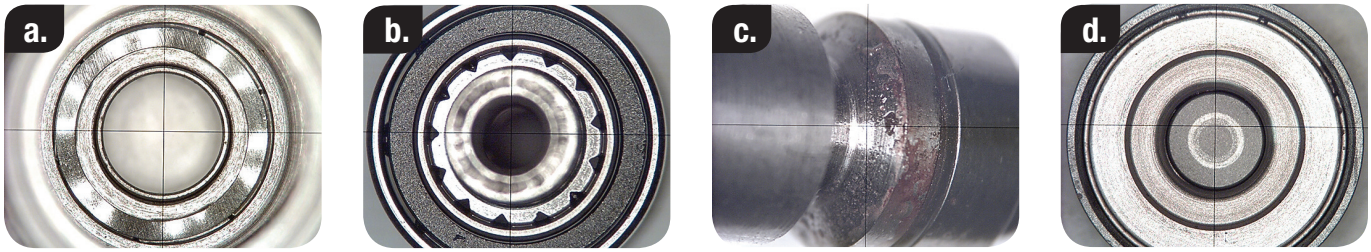
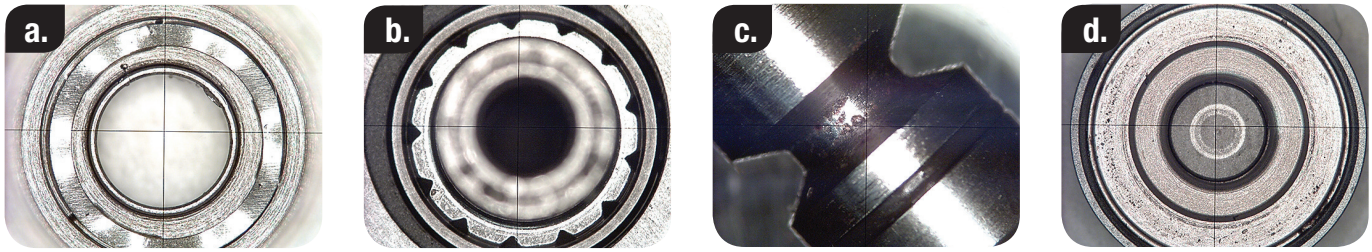


Figure 5a-d. Internal components from ***Statcare*** handpiece; a) head casing, b) cartridge, c) oblique shaft assembly, and d) push button



Discussion and Summary:

A number of automated systems are currently available, and these are able to reduce the potentially harmful effects human error can have on performance and device life expectancy. This investigation studied cleaning and internal maintenance of new ***Sanao*** *(SciCan)* electric handpieces by comparing findings using competitor automated systems and untreated controls. Experiments were designed to examine accumulated internal debris after simulated use.

After 150 cycles of simulated use on 5 hard substrates and treatment with the ***Statmatic 31*** and ***Statcare*** procedures, visual inspection of internal handpiece components revealed very little, if any, discoloration. In comparison, considerable discoloration, signifying possible debris accumulation, was noted following 150 cycles of prescribed ***Assistina 301 Plus*** cycles and untreated controls. Manufacturer's directions were followed for each system tested.

These findings from this *in vitro* experiments showed definitive differences between the previous generation of handpiece cleaning/lubrication stations and more recently available systems.

Clip Flow™

++++½

92% overall rating



VOCO
www.vocoamerica.com

Description

Clip Flow™ is a flowable, light-cured temporary resin composite. It is applied using an intraoral tip, adapts well, cures using a halogen or LED curing light, and provides a saliva-proof seal once cured. This material is elastic after setting and non-adhesive, making it possible to remove it in one piece even when undercuts are present. ***Clip Flow*** is available in packs of two syringes (1.8 g each) with 20 tips; intraoral tips are available separately in packs containing 100.

Indications

- Temporary fillings, inlays and onlays
- Sealing of openings for implant screws
- Temporary coronal obturation of root canal orifices
- Relining the intaglio (inner) surface of temporary crowns and bridges
- Block out material for retentive areas in the dental arch, e.g., before taking impressions
- Protective gingival margin coverage
- Securing resin matrices during restoration placement
- Temporary filling of abutment apertures.

Unique Features

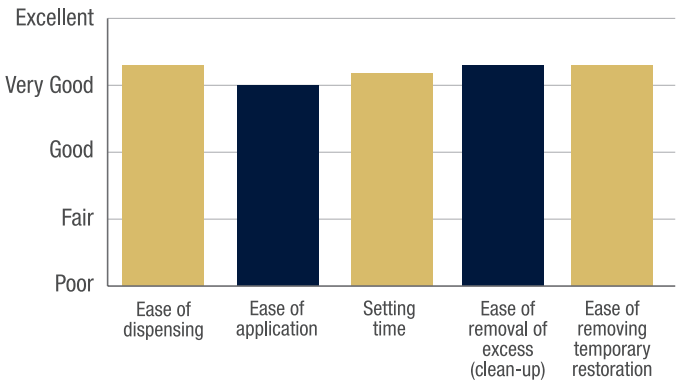
- Elastic, allowing for removal in one piece.
- Removal will not affect preparation margins and does not require drilling.

Evaluation Highlights

Clip Flow was evaluated by 27 consultants for a total of 366 times.

- Easy to dispense and place.
- Good flowability and adaptability.
- Elastic when set.
- Versatile.

Key Features:

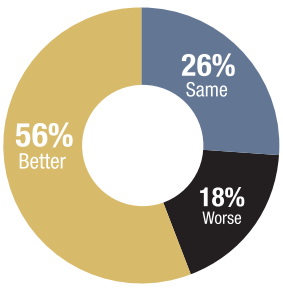


Consultants' Comments

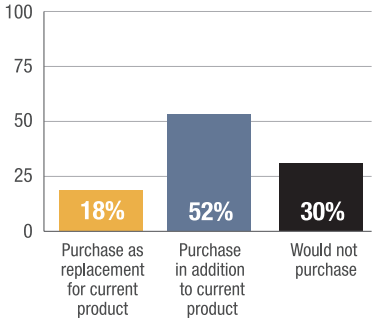
"GREAT VISCOSITY. STAYS WHERE PLACED. IT IS ALSO PERFECT FOR BUILDING THE MATERIAL UP."

- *"Easy to dispense, flows well and easy to apply."*
- *"Easy to use as a block-out material. I used it to fill in black triangles between a patient's teeth before taking an alginate impression."*
- *"Best product for covering screw heads in implant abutments."*
- *"The fact that it is injectable with an intraoral tip is a definite plus."*
- *"I loved this product. The material is easy to apply and remove, including from implant screw heads when needed."*
- *"It was still a little challenging to remove - it came out in pieces."*

Compared to Competitive Products:



Percentage of Consultants Who Would:



Clinical Tips

- Use a little then cure quickly and add to it, if necessary, to eliminate sagging.
- Build up slowly to fill in black triangles prior to taking impressions.
- Great for implant abutment scanning blackout material.
- I used it to cover the gingiva when applying silver diamine fluoride to root caries.

Harmonize™

+ + + + +

96% overall rating



Kerr Restoratives
www.kerrdental.com

Description

Harmonize™ Nanohybrid Universal Composite is a light-cured, esthetic nanohybrid resin composite. The filler load is 81% and the filler particles result in refraction and diffusion of light such that this composite offers a chameleon effect to blend with tooth structure.

This composite can be placed, packed and sculpted immediately. It is non-sticky and soft during sculpting - the viscosity then increases to prevent slumping. Light curing should be performed with a minimum light output (LED or halogen) of at least 600 mW/cm2 in the 400-520 nm range. ***Harmonize Nanohybrid Universal Composite*** is available in a wide range of enamel, dentin and translucent shades. Each shade can be used individually or blended with other shades for a natural-looking restoration. The composite is delivered in single 4-gram syringes and uni-dose capsules in packs of 10 (2.5 grams) and 20 (5 grams).

Consultants' Comments

"WONDERFUL ESTHETICS. IT BLENDS BEAUTIFULLY TO TOOTH STRUCTURE WITH A GOOD CHAMELEON EFFECT."

- *"Easy to dispense, and highly packable, yet sculptable and not too sticky. I can achieve a great contour and have less trimming to do."*
- *"I found it good for anterior composites but was too translucent for the posterior region."*
- *"With an adequate bevel, the interface between the tooth and composite was invisible."*
- *"Beautiful polish, it polished to a mirror finish and seems like glass. It looks so natural."*
- *"This composite looks so lovely, there must be some special light refraction ingredient in it."*
- *"I'll be using this for every esthetic case; it beats every other product I've tried so far."*

Clinical Tips

- Use a dentin/opaque shade in areas of class III and IV restorations to prevent shine through.
- Use a layering technique to optimize opacity and translucency.
- For the last increment, use a microbrush with a little bonding agent on it and gently move the microbrush from the composite to the cavosurface margin for a seamless restoration.
- Use long bevel margins for finishing at cavosurface margins.
- Wax-like consistency when handling it - once you get used to the way it handles, it is great.

Indications

- All classes of anterior and posterior direct restorations
- Repair of enamel defects
- Repairs to provisionals and porcelain restorations
- Minor occlusal build-ups
- Core build-ups
- Incisal defects

Unique Features

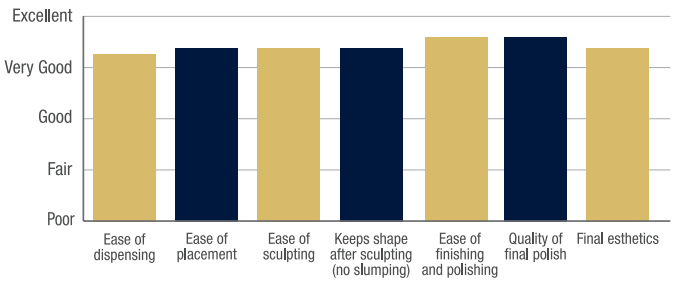
- Adaptive Response Technology (ART) enables dynamic viscosity for superior handling and optical characteristics that mimic human enamel.
- Excels in all three categories: strength, handling, and esthetics.
- Fast polishing time, great natural luster.

Evaluation Highlights

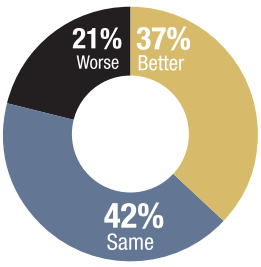
Harmonize Nanohybrid Universal Composite was evaluated by 33 consultants for a total of 829 times.

- Easy to use and dispense.
- Packable and easy to sculpt with no slumping afterwards.
- Esthetic.
- Versatile.
- Available in dentin, enamel, bleach, translucent, and transparent shades.

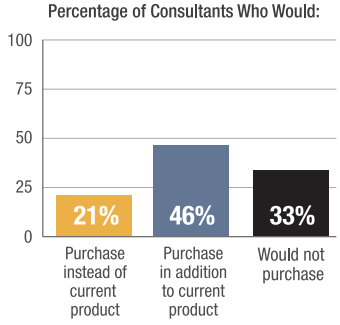
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



BeeSure® Vibe Earloop Face Masks

+ + + + +



96% overall rating

EcoBee, Inc.
www.ecobeeworld.com



Description

BeeSure® Vibe Earloop Face Masks are ASTM F2100 Level 3 masks, providing the highest level of protection in a face mask. They incorporate a Quad-Fold design that offers extra comfort and expanded breathability without any moisture buildup. The VA DuoSeal allows the mask to adapt to the face and nose. The anti-fog flap reduces fogging of protective eyewear. ***BeeSure Vibe Earloop Face Masks*** are latex- and fiberglass-free. They are available in Dazzling (lime green), Glamorous (pink) and Luminous (blue), in boxes of 50 masks.

Indication

- All patient care and infection control procedures requiring use of a protective face mask. Level 3 masks are highly recommended with procedures that involves fluid spatter and splash.

Unique Features

- Quad-fold design offers more breathing volume.
- Anti-fogging design with innovative nose flap.
- Latex- and fiberglass-free.
- ASTM Level 3.
- Comfortable and breathable.
- Vibrant colors.

> "SO COMFORTABLE I ALMOST FORGOT I WAS WEARING ONE. IT'S THE MOST COMFORTABLE MASK I'VE WORN."

Consultants' Comments

- *"The best mask I've used in 22 years of clinical practice and I've tried a LOT of them."*
- *"Breathable and soft material. It felt soft on my face and nose."*
- *"Great colors."*
- *"The duo-seal anti-fogging properties and the anti-fog flap are an added bonus."*
- *"Great adaptability to face and nose. The anti-fog nose piece also provides extra comfort."*
- *"I found the vibrant colors a little distracting."*

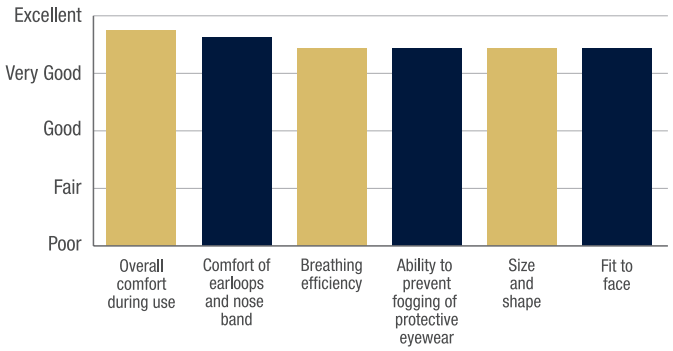
Clinical Tips

- Remember to flip up the anti-fog flap to aid in anti-fogging performance.
- Unfold anti fog flap, then place mask.
- Make sure to lift the nose piece from the inside to fit around the bridge of nose.

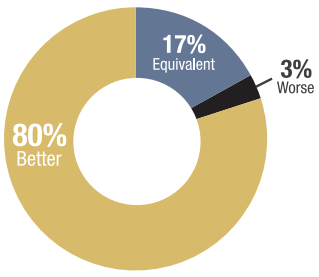
Evaluation Highlights

BeeSure Vibe Earloop Face Masks were evaluated by 36 consultants, for a total of 970 times.

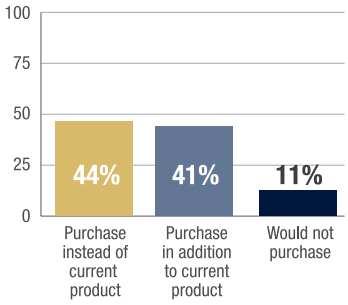
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Minnow Nano Composite Polishers

+ + + + +

Microcopy
www.microcopydental.com

96% overall rating



Description

Minnow Nano Composite Polishers are single-use composite polishers that are used without polishing paste and sized to fit into pits and fissures without crumbling and breaking off during use. A maximum speed of 5,000 rpm should be used. The ***Minnow Satin*** (white polisher) is designed for everyday posterior restorations, fabricated with aluminum oxide and removes surface striations and anatomical defects leaving a smooth satin gloss surface. To polish, use the white Satin polishers for initial refining of the composite. Use dry and light pressure. Use water to keep the area cool if necessary. The ***Minnow Hi-Gloss*** (blue polisher) is designed to polish esthetic restorations, fabricated with diamond particles, and leaves a liquid luster gloss. The Hi-Gloss blue polisher should be used with feather-light pressure and water can be used for cooling if necessary. ***Minnow Nano Composite Polishers*** are available as polishing cups and points.

Indication

- Polishing direct composite restorations.

Unique Features

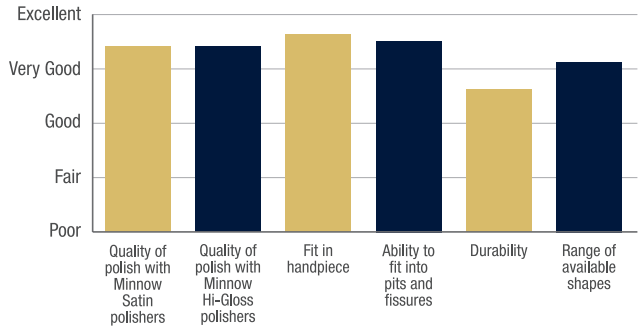
- No polishing paste is required.
- Delivered in individually sterilized packs.
- The Silitec process used for the diamond and aluminum oxide particles makes the polishers durable and able to retain their profiles.

Evaluation Highlights

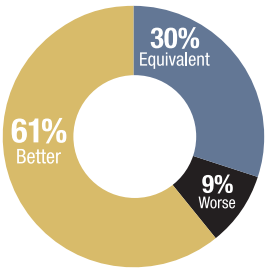
Minnow Nano Composite Polishers were evaluated by 33 consultants, and were used 695 times in total.

- Easy to use.
- Soft and pliable.
- Adapt to teeth, and fit well into pits, fissures and occlusal grooves.
- Single-use.
- Excellent polish.

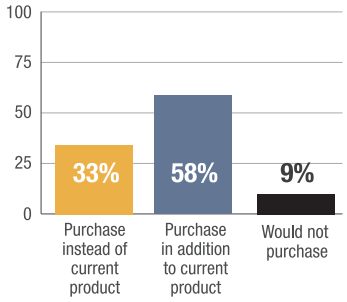
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Consultants' Comments

- *"Great that they are single-use. Easy to use, efficient and don't need any polishing paste."*
- *"A simple system that gives an excellent finish and high luster for composite restorations."*
- *"Soft and pliable, yet don't break down or shred."*
- *"The points tend to break easily if you apply too much pressure. Apply only light pressure."*
- *"These polishers adapted really well to the tooth. The cup hugs the tooth and wraps line angles beautifully, and the points fit really well into occlusal grooves."*
- *"The cup was a little more flared and larger than I would like."*
- *"They wore out quickly when I used them on multiple restorations."*
- *"Excellent size selection. Best ever used for pits and fissures and occlusal anatomy."*
- *"They worked really well to remove heavy stain."*

> "THEY FIT EASILY INTO PITS AND FISSURES. I ABSOLUTELY LOVED THE SMALL SIZE."

Clinical Tips

- Make sure to use them at the correct rpm range, they don't function like a larger polisher with more surface area.
- The cup is perfect for polishing Class Vs.
- Make sure to use water to keep the area cool.
- I found that they work best for me in addition to my regular polishers.
- I used them with water in an electric slow speed. They gave a really nice sheen.

PerioRinse

+ + + +



86% overall rating

Centura Pharmaceuticals
www.centurapharma.com
www.perio-rinse.com

Description

PerioRinse is a therapeutic oral rinse that contains 0.10% dyclonine hydrochloride, a local analgesic/anesthetic that results in surface anesthesia of oral mucous membranes. ***PerioRinse*** mouth rinse is indicated for the temporary relief of minor oral irritations, oral pain/discomfort and sore throat. The time to onset varies by patient and usually occurs from 2 to 5 minutes after swishing, after which local analgesia/anesthesia persists for 30-40 minutes. ***PerioRinse*** should be swished in the mouth vigorously for at least 2 minutes and expectorated. It can be used up to three or four times daily with a dose of 10 to 20 mL for adults and children over 12 years of age. For children between 3-12 years, the dose is 5 to 10 mL.

Indications

- Oral pain/discomfort, minor oral irritations and sort throat requiring relief.

Consultants' Comments

- *"Patients were surprised that they were more comfortable during scalings/cleanings."*
- *"Effective for mild soft tissue anesthesia, and works quickly enough to be useful."*
- *"Patients liked that there was no injection, and patient acceptance was high."*
- *"Great for patients during subgingival preps and scaling procedures."*
- *"Great response to flavor and effectiveness."*

"EASY TO USE AND PATIENTS LIKED THE TASTE. IT'S EASIER AND MORE EFFECTIVE THAN TOPICAL GEL."

Clinical Tips

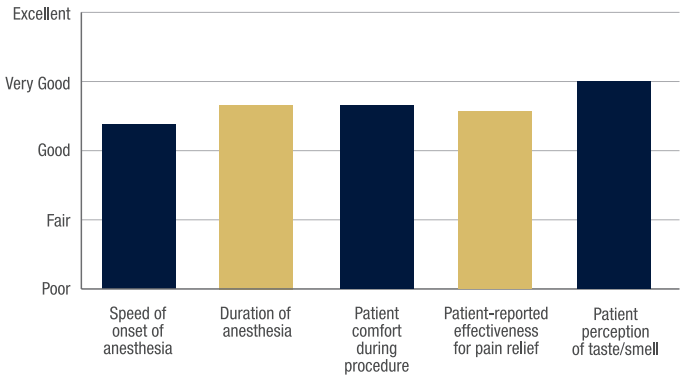
- Great for gaggers.
- Greatly relieves discomfort during placement of retraction cord and was used once for placing cord without any other anesthetic with good results.
- 10 mL was well tolerated, but a dose of 20 mL is more effective with longer lasting anesthetic effect.
- Increase pre-procedural rinse time to obtain longer duration topical anesthesia (minimum 2 minutes).
- Have patients rinse before and after the procedure.

Evaluation Highlights

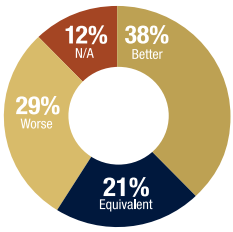
PerioRinse was evaluated by 24 consultants for a total of 260 times.

- Easy to use.
- Good taste.
- Well-tolerated and excellent patient acceptance.
- Useful for many procedures.

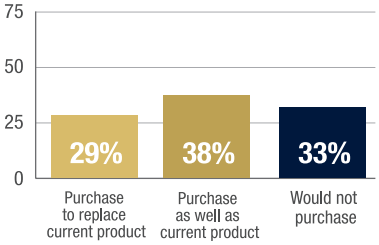
Key Features:



Compared to competitive products



Percentage of consultants who would:



THE DENTAL ADVISOR

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Order Samples
www.dentaladvisor.com

StellaLife® VEGA® Oral Care Gel

+ + + + +

96% overall rating

StellaLife,® Inc.
www.stellalifehealing.com



Description

StellaLife® VEGA® Oral Care Gel consists of a homeopathic gel for in-office and home use. It is formulated to speed up healing and post-operative recovery and to provide pain relief. ***StellaLife VEGA Oral Care Gel*** is also indicated for the treatment of oral ulcerations and irritations. Individuals should refrain from eating or drinking for 20 minutes after gel application. The gel can be applied in-office immediately after treatment or at post-operative visits. ***StellaLife VEGA Oral Care Gel*** is available in a 1 oz bottle. The gel, along with an antimicrobial rinse and sublingual spray, is also part of a *Recovery Kit*.

Unique Features

- Homeopathic/natural.
- Long-term daily use.
- Adjunct therapy for accelerated healing after dental surgical and non-surgical procedures.
- Natural pain relief for dry mouth, oral ulcers, dry sockets, cold/denture sores and mucositis.

Consultants' Comments

- *"Patients loved that it is homeopathic."*
- *"We heard frequently that it worked better than any other product for persistent oral ulcers."*
- *"Very quick relief of discomfort."*
- *"We successfully used it to treat erosive lichen planus for multiple patients."*
- *"My patients loved it."*

"IT WAS THE FIRST TIME I HAVE EVER HAD PATIENTS ASK FOR MORE OF A PRODUCT JUST TO HAVE AROUND THE HOUSE IN CASE THEY NEEDED IT."

Indications

- Relief of pain and discomfort and to speed up recovery of oral wounds following surgical and nonsurgical procedures.
- Relief of pain/discomfort and to accelerate healing of aphthous oral ulcers, mucositis, cold sores, dry mouth, sores from dentures, and dry sockets.
- Reduce local swelling and bruising.

Evaluation Highlights

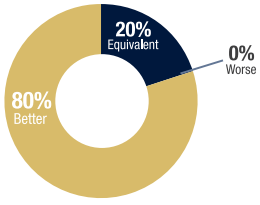
StellaLife VEGA Oral Gel was evaluated by 5 consultants.

- Homeopathic.
- Easy to use.
- Relieves pain/discomfort.
- Speeds up recovery and reduces swelling/bruising.

Clinical Tips

- Great for persistent erosive lichen planus and post bleaching gingival sensitivity.
- Great for a patient with swelling after surgical and nonsurgical procedures.
- Use if a patient has a bruised/uncomfortable area after a rubber dam clamp was used.
- As an alternative to a cotton swab, apply with a small plastic stirrer.
- One patient used his temporary partial denture for better gel placement.

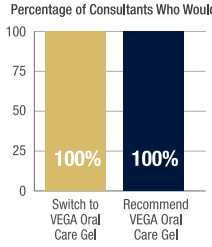
Compared to Competitive Products For Care of Oral Ulcers:



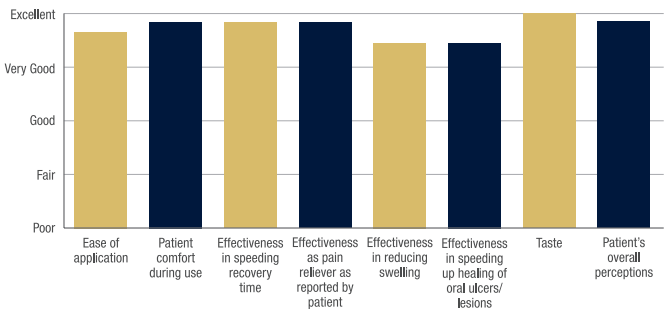
Compared to Competitive Products For Care of Other Oral Lesions:



Percentage of Consultants Who Would:



Key Features:



StellaLife® VEGA® Oral Care Recovery Kit

+ + + + ½

91% overall rating



StellaLife
www.stellalifehealing.com

Description

StellaLife® VEGA® Oral Care Recovery Kit consists of a homeopathic antibacterial rinse, gel and spray that together provide pain relief, reduce inflammation and edema, and accelerate healing and post-operative recovery. ***StellaLife VEGA Oral Care Recovery Kit*** contains an 8 oz bottle of rinse and a 1 oz bottle each of the gel and spray. The rinse can also be used as part of routine daily oral hygiene. It kills oral bacteria that cause dental caries and periodontal disease, hydrates the oral cavity and freshens breath. The gel can be applied with a Q-tip or cotton swab and can also be used under dentures. Ideally, the Recovery Kit should be used for 3 days before the surgery to increase therapeutic levels and use should continue for a further 7 days. ***StellaLife VEGA Oral Care Recovery Kit*** should be used 3-4 times per day, after meals. Patients should refrain from eating or drinking for 20 minutes after using the products. The gel and rinse can also be purchased separately.

Unique Features

- Homeopathic.
- Hydrates and moisturizes the oral cavity.

Consultants' Comments

"I LIKE THAT IT IS HOMEOPATHIC. THE PACKAGING OF ALL THREE PRODUCTS TOGETHER IS GOOD."

- *"This product is very useful. I gave it out to my implant patients and they recovered well."*
- *"Wound healing was fast, especially around provisional bridgework."*
- *"Patient-friendly - we like the pre- and post-op use."*
- *"Healing looked more mature/less inflamed after 24 and 48 hours and at 1 week post-op."*
- *"My patients have had less discomfort than after previous extractions."*
- *"A patient perceived a benefit and said how much the liked it."*
- *"It sped up wound healing, particularly around provisional bridgework."*
- *"I liked the whole package – the rinse, spray and gel."*
- *"Helped patients maintain the area after implant and surgical treatment."*
- *"The kit with rinse, gel and spray was great for a chemo patient who was having difficulty finding a soothing product without parabens."*
- *"We successfully used it to treat erosive lichen planus for multiple patients."*
- *"Good for patients after bone grafting and implant procedures."*

Clinical Tips

- Let your patient know that this is an all-natural rinse to aid in healing.
- The gel can be used under dentures.
- Use all three Recovery Kit products in the order outlined in the Patients' Application Guide. Start with rinse, then spray and followed by the gel.

Indications

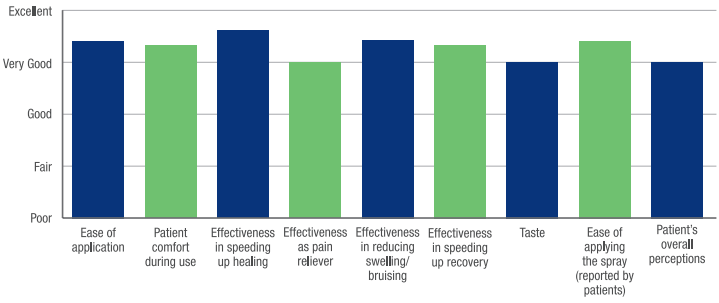
- To hydrate the oral cavity.
- To promote healthy gums.
- Breath freshening (rinse).
- Relief of pain, swelling and bruising.
- To accelerate post-surgical recovery and healing after wisdom teeth removal, placement of dental implants, bone grafting, osseous surgery, connective tissue grafting and other oral procedures.
- Relief of pain and discomfort associated with oral ulcers, dry sockets, dry mouth, cold sores and mucositis.

Evaluation Highlights

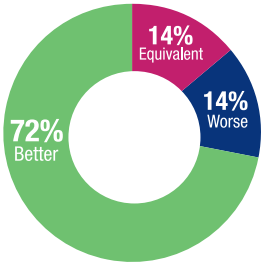
StellaLife VEGA Oral Care Recovery Kit was evaluated by 7 consultants.

- Homeopathic.
- Pleasant taste.
- Easy to use.
- Speeds wound healing.
- Relieves discomfort.

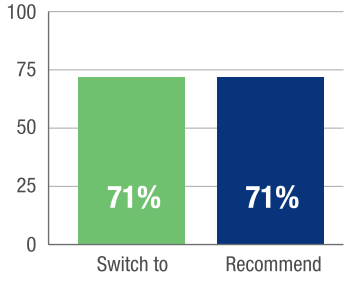
Key Features:



Compared to Competitive Products For Post-Surgical Use:



Percentage of Consultants Who Would:



Composi-Tight 3D Fusion Ultra Adaptive Wedges

+ + + + ½

Garrison Dental
www.garrisondental.com

91% overall rating

Description

Composi-Tight 3D Fusion Ultra Adaptive Wedges are adaptive interproximal wedges that are easily inserted and allow for tooth separation. The wedges include fins that help retain the wedges following insertion, and they have an outer soft over-lay that molds itself to the root surface to provide a seal. ***Composi-Tight 3D Fusion Ultra Adaptive Wedges*** are designed for use with any matrix system. They are available in four color-coded sizes: x-small (yellow), small (blue), medium (orange), and large (green). The wedges can be purchased in kits of 200 or 400 that contain all four sizes and are also available in single size refill boxes of 50 or 100.



Evaluation Highlights

Composi-Tight 3D Fusion Ultra Adaptive Wedges were evaluated by 29 consultants, with an average of 26 uses per consultant.

- Easy placement and removal.
- Glides easily into the interproximal area.
- Excellent adaptability to matrix bands and to teeth, including to non-uniform interproximal surfaces.
- Excellent retention.
- Little to no soft tissue trauma.
- Simplifies Class II procedures.

Indication

- Clinical procedures requiring the use of interproximal wedges, including restorative and splinting procedures.

Unique Feature

- ***Composi-Tight 3D Fusion Ultra Adaptive Wedges*** have a firm inner core for easy insertion and tooth separation. The fins also fold down during insertion and then spring back for retention after placement of the wedge.

Consultants' Comments

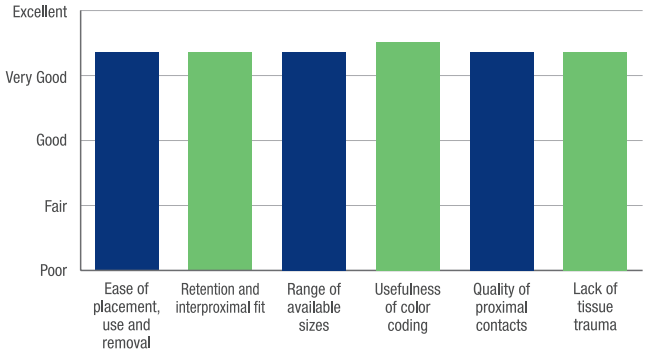
"THESE WEDGES ARE EXCELLENT, AND THEIR STIFFNESS AND FINS HELP HOLD THE MATRIX BAND IN PLACE."

- *"Completely seals the gingival floor."*
- *"Very handy for teeth with a proximal concavity."*
- *"Great if you use a flowable composite in the interproximal box."*
- *"The overall softness reduces gingival trauma."*
- *"The fins increase gingival contact, making it possible to push the matrix band against the gingival margin without ending up with an overhang."*
- *"Unlike a wooden wedge, this wedge doesn't break."*
- *"The wedges worked well in all situations I used them in."*
- *"It would be helpful to have a key hole in the wedge to grab it for removal."*
- *"I would like to see more sizes, and a slightly stiffer wedge and one with a shorter tip."*

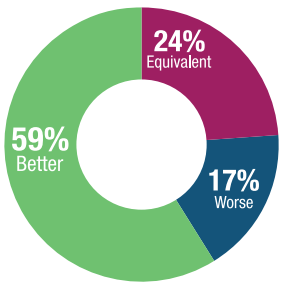
Clinical Tips

- Retract the wedge slightly after initial placement to further engage it.
- Use it when doing a fiber splint, especially along the lower anteriors.
- When removing the wedge, do so slowly to make sure the fins do not cause tissue trauma.
- Take care when using *ComposiTight* gold/silver rings as they can bend the wedges. If you do bend a wedge while trying to place it, don't try to straighten it - get a new one.
- Use the larger sizes if you want some compression.
- Compress the wedge more than once in molar areas to help it stay in position.

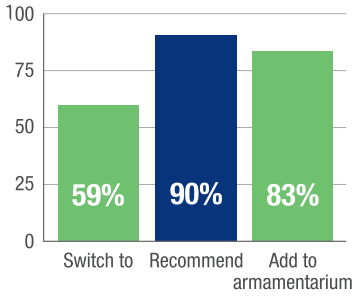
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



iStar™ Cordless Prophy Handpiece

+ + + + ½

91% overall rating

DentalEZ®
www.dentalez.com

Description

iStar™ Cordless Prophy Handpiece from StarDental® is a cordless, rechargeable prophylaxis handpiece that can be used with any disposable prophy angle. The handpiece weighs 90 g, has five speed settings, and a maximum cup speed of 2,500 rpm. Its cordless design is ergonomic, and it does not involve use of a foot control. The motor is designed to be lube-free. The handpiece requires an initial charge for at least 90 minutes and should be replaced in the cradle to re-charge between treating patients. The degree of charge is indicated visually by lights on the handpiece. The ***iStar Cordless Prophy Handpiece*** is non-autoclavable, comes with 100 disposable barrier sleeves, and should be wiped with isopropyl alcohol after each use. It comes with a one-year warranty on the handpiece and a three-year warranty on the battery.

Unique Features

- Can be used with any brand of prophy angle.
- Great versatility.

Indication

- All clinical procedures requiring use of a prophy handpiece.

Consultants' Comments

"THE ABILITY TO USE ANY PROPHY ANGLE WITH IT IS A VERY GOOD FEATURE."

- *"I love that it is lightweight, cordless and mobile."*
- *"Great product."*
- *"Easy to use and I like that you don't have to lube it."*
- *"Very good for prophies in wheelchairs and for children on laps."*
- *"Very quiet during use."*
- *"I experienced less hand fatigue using this handpiece."*
- *"Ergonomic and very easy to maneuver."*



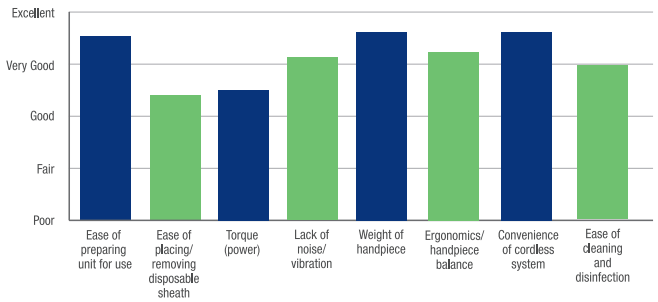
The ***iStar™ Cordless Prophy Handpiece*** shown in patient is noteworthy because it can be used with any disposable angle.

Evaluation Highlights

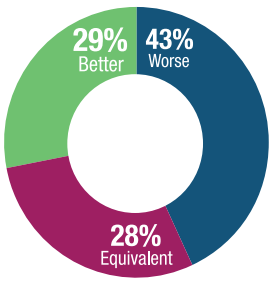
iStar Cordless Prophy Handpieces were evaluated by 14 consultants, in total 1339 times.

- Cordless.
- Lightweight.
- Ergonomic design.
- Quiet during use.

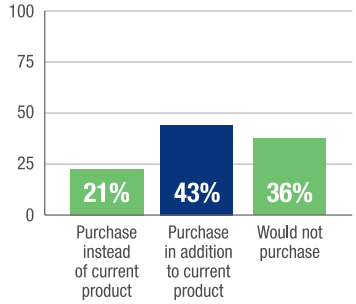
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



430SWL Torque Handpiece

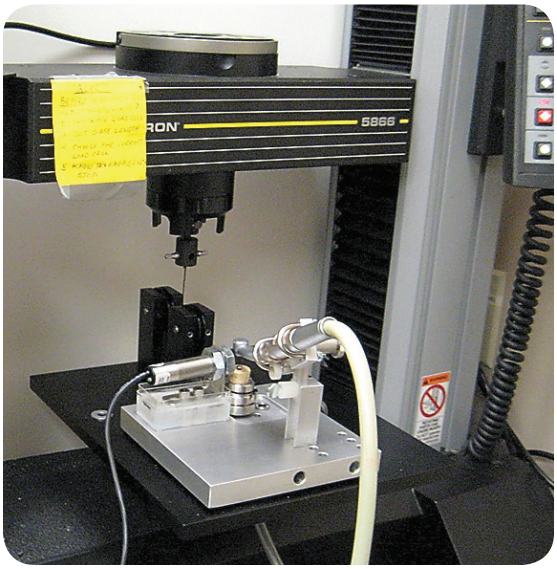
++++½

91% overall rating

DentalEZ®
www.dentalez.com

Description

The ***430SWL Torque Handpiece*** from StarDental® is a light-weight, air-driven handpiece with solid glass rod fiber optics. It contains ceramic bearings that are lube-free, and the autochuck provides for quick bur changing. The small head size (11 mm) offers improved accessibility and visibility. In addition, the high torque is designed to improve speed while lowering the decibel level. The ***430SWL Torque Handpiece*** is designed to fit a 360° quick connect swivel and is constructed of electropolished stainless steel for strength and durability. The handpiece can be autoclaved at a minimum of 121°C and up to 135°C. The ***430SWL Torque Handpiece*** is backed by a 1-year warranty, with a 5-year warranty on all fiber optics.



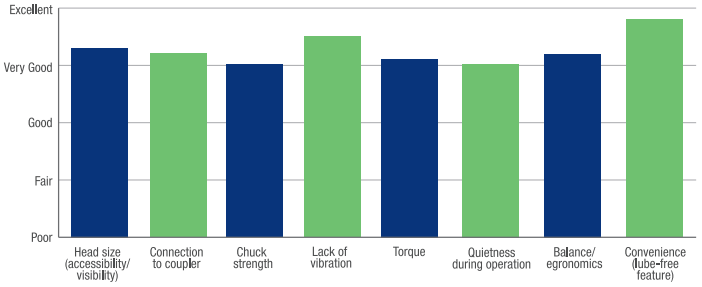
The ***430SWL Torque Handpiece*** was one of several handpieces being tested in the biomaterials lab at THE DENTAL ADVISOR for a report on "Handpiece Torque vs. Speed Performance" to determine how well various handpieces perform under different loading conditions.

Evaluation Highlights

The ***430SWL Torque Handpiece*** was evaluated by 10 consultants for a total of 478 times.

- Lightweight handpiece with a small head.
- Ergonomic.
- Unique coupler.
- Lube-free.

Key Features:

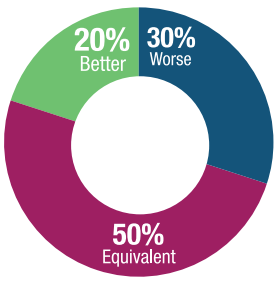


Consultants' Comments

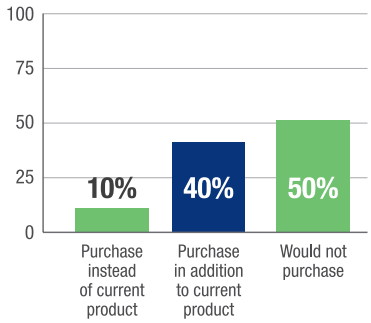
> "GREAT TORQUE FOR A SMALL HEAD, AND TREMENDOUS POWER. NOT AS HIGH-PITCHED AS OTHER HANDPIECES."

- *This is a very nice handpiece with a small head size and good torque. It is light, handles well and allows for good visibility and accessibility."*
- *"The cleansability of the air water port and light is good."*
- *"Good, small handpiece for crown preps."*
- *"I really like the convenience of lube-free."*
- *"Very nice handpiece provided the existing coupling tube is in proper sync."*
- *"I started to look forward to this handpiece being in my set up."*

Compared to Competitive Products:



Percentage of Consultants Who Would:



Axess™ Low Profile Nasal Mask System

++++

Crosstex/Accutron
www.Crosstex.com

86% overall rating

Description

Axess™ Low Profile Nasal Mask System is used to deliver nitrous oxide/oxygen and to remove excess and exhausted gases. It consists of single-use, disposable nasal masks and reusable scavenging circuit tubing. The masks are small, low profile, latex-free and pliable for stability, complete access to oral cavity and to minimize ambient nitrous oxide and gas leakage from the mask. Masks are available in packs of 24 in either small, medium or large and for each size either as unscented (clear), bubble-gum scented (pink) or mint-scented (green) masks. ***Axess Scavenging Circuits*** are also latex-free and suitable for Crosstex/Accutron's ***RFS Remote Flow System*** and ***In-Line/Accu-Vac*** vacuum controllers. The slender tubing wraps behind the patient's ears and is secured by a slider under the chin. They are available in single packs with 6-foot long tubing, a complimentary selection of masks, a small gas connector, and various scavenging system adapters.

Indication

- Use when nitrous oxide/oxygen sedation is required.

Unique Features

- Slim, low profile mask allows good visibility and access to the clinical site.
- Slender, lightweight scavenging circuit tubing to maximize accessibility to the oral cavity.
- Translucent and clear masks show the patient breathing - the masks fog up on exhalation.
- Comfortable for patients.

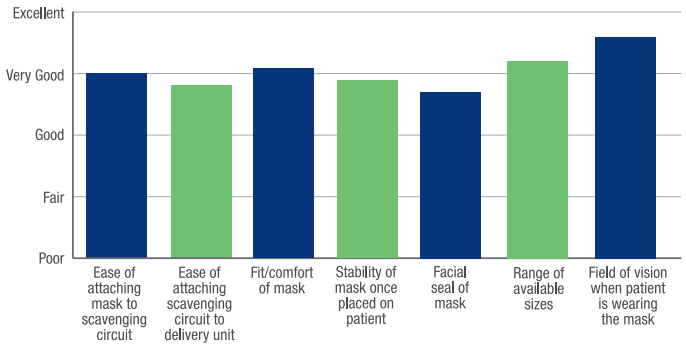


Evaluation Highlights

Axess Low Profile Nasal Mask System was evaluated by 33 consultants, and was used 405 times in total.

- Soft, pliable and low profile translucent and clear single-use masks.
- Masks available in unscented, bubble-gum and mint scents.
- Lightweight, autoclavable tubing.
- Provides for good access to the clinical site.

Key Features:



Consultants' Comments

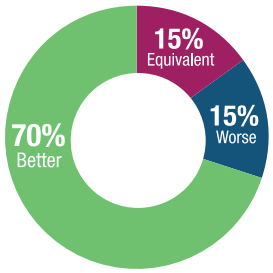
> **"THE MASK WAS VERY COMFORTABLE FOR OUR PATIENTS. THEY LOVED IT. IT FIT WELL AND DIDN'T PINCH OR LEAVE ANY MARKS ON THE PATIENT'S FACE."**

- *"Easy to assemble and use."*
- *"The mask is lightweight, low profile and small - the tubing is also lightweight."*
- *"I'm able to do dentistry unimpeded using this system."*
- *"I liked the ability to see through the mask."*
- *"We found that the system was effective in delivering nitrous oxide and oxygen."*
- *"I liked the scented masks. Patients didn't complain about a plastic/rubber smell."*

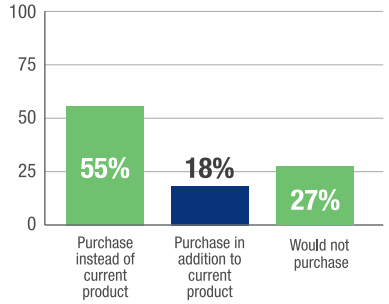
Clinical Tips

- Size selection is very important - go down in size.
- Stretch the mask laterally when placing it and make sure the hose goes behind the ears.
- Let tubing dry for 5 hours after sterilization before use or it will be tacky and sticky.
- Turn the vacuum hose to the lowest power - the tight fit allows the evacuation of too much nitrous if you do not adjust the scavenging unit down.
- When using CSR-wrapping the tubing for sterilization, make sure there are no kinks in it.

Compared to Competitive Products:



Percentage of Consultants Who Would:



Richmond's Reflective Shields Plus®

+ + + +

Richmond Dental and Medical

www.richmonddental.net

88% overall rating

Description

Richmond's Reflective Shields Plus® are heart-shaped, flexible, absorbent pads with rounded edges and a reflective film. They are manufactured with durable, non-woven material to provide for rapid moisture absorption and retention, as well as cheek retraction and protection. The heart-shape accommodates buccal curvatures and is designed to keep the shield adjacent to the parotid gland orifice when necessary. In addition, the reflective film offers illumination of the oral cavity. ***Richmond's Reflective Shields Plus*** retain moisture without compromising the dentist's workspace. They are available in large and small sizes, in packs of 50 single sizes or a dual pack containing both sizes.

Indications

- Procedures requiring local moisture control and a dry field
- Ideal for procedures such as sealants, composite fillings, restorations, and crown preps

Unique Features

- Heart shape accommodates buccal curvatures and the parotid duct orifice.
- Reflective film that illuminates the oral cavity.

Consultants' Comments

"EASY INSERTION - DIDN'T STICK TO THE CHEEK AND EASY TO REMOVE."

- *"Very comfortable for patients."*
- *"Flexible, with a soft backing and rounded edges for comfort."*
- *"Effective absorbency and it didn't swell."*
- *"Held their shape and didn't slip during use."*
- *"Light reflection was very good. The reflective side is brighter and mirror-like."*

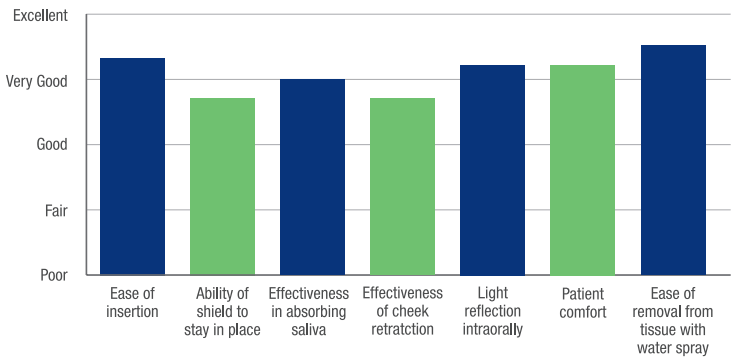
Evaluation Highlights

Richmond's Reflective Shields Plus were evaluated by 35 consultants, with 904 uses in total.

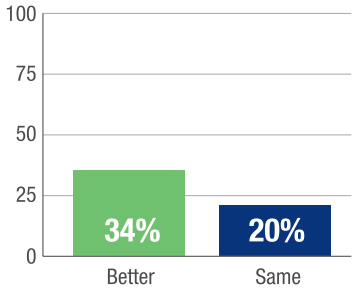
- Flexible.
- Patient comfort.
- Light reflection.
- Easy insertion and removal.



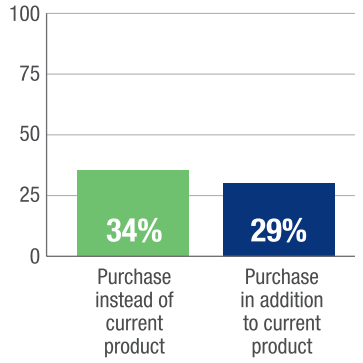
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Filtek™ One Bulk Fill Restorative

++++½

3M
www.3M.com/FiltekOne

92% overall rating



Description

Filtek™ One Bulk Fill Restorative is a light-cured, bulk fill nanocomposite restorative material, with increased opacity for improved esthetics. With a 5mm depth of cure, it allows for fast and easy one-step placement and can be sculpted. ***Filtek One Bulk Fill Restorative*** is designed specifically for the posterior, providing excellent marginal adaptation, superior wear resistance and excellent polish retention. The opacity is increased on curing, resulting in esthetic results without compromising the depth of cure. In addition, the aromatic urethane dimethacrylate helps to reduce polymerization shrinkage and stress. The addition-fragmentation monomer also reduces the polymerization stress. ***Filtek One Bulk Fill Restorative*** is available in shades A1, A2, A3, B1, and C2, in 0.2 g capsules and 4 g syringes.

Indications

- All classes of anterior and posterior direct restorations.
- Base/liner under direct restorations.
- Core build-ups.
- Splinting.
- Indirect restorations including inlays, onlays and veneers.
- Restorations in deciduous teeth.
- Extended fissure sealing in molars and premolars.
- Repair of defects in porcelain restorations, enamel, and temporaries.

Consultants' Comments

- *"Great blending ability, polishability and a nice final shade. It is more opaque than most bulk fill materials."*
- *"It adapts seamlessly to the tooth."*
- *"Placed well in bulk."*
- *"Use for pediatric cases – a single increment, bulk fill.*
  Great material for build-ups."

"EASY HANDLING AND PACKABLE WITH THE CONVENIENCE AND SPEED OF A BULK FILL."

Clinical Tips

- The increased opacity is important in posteriors with amalgam staining.
- Make sure to follow the recommended curing time – it varies by light source and depth.

Unique Features

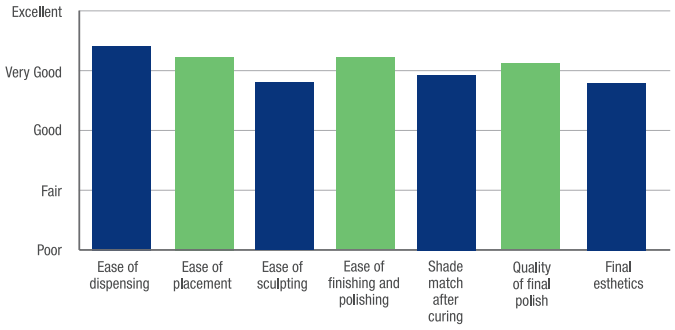
- Increased opacity for improved esthetics.
- One-step placement with a 5mm depth of cure.
- Excellent adaptation.
- Highly radiopaque.

Evaluation Highlights

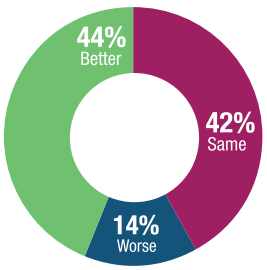
Filtek One Bulk Fill Restorative was evaluated by 41 consultants for a total of 1075 restorations.

- Fast bulk fill.
- Packable.
- Increased opacity.
- Versatile.

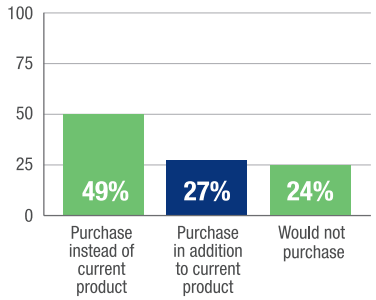
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Avid Fit® Hygiene System

++++

Avid Dental Products®
www.avid.dental

87% overall rating



Description

The ***Avid Fit® Hygiene System*** consists of the ***Avid Fit® Hygiene Handpiece*** and the ***Avid Fit® Disposable Prophy Angles.*** The ***Avid Fit® Hygiene Handpiece*** is a prophylaxis handpiece that weighs just 2.61 ounces. It is designed to be ergonomically advanced, it has nine divots on the handpiece for a natural grip, and adapts to any hand. In addition, the Handpiece has a full 360 degree swivel and the nose cone can be tilted up to 20 degrees in any direction to improve access to hard-to-reach areas while encouraging neutral hand position. The torqueing feature allows adjustment to the tension of the nose cone movement; set it once and go. The handpiece motor is autoclavable, except for the locking seal, which must be wiped down with an EPA-registered disinfectant wipe or cold sterilized in a high-level disinfectant. The ***Avid Fit Hygiene Handpiece*** is also lube-free, although it is stated that the drive mechanisms can be oiled after each sterilization cycle, once a week or after every 20 uses. ***Avid Fit Disposable Prophy Angles*** rotate smoothly to help improve ergonomics by reducing vibration. They feature modified webbing on the paste cup that allows for optimal flare, reduced splatter and adaptability/accessibility below the gum line. ***Avid Fit Disposable Prophy Angles*** can be used with any low-speed hygiene handpiece with a straight standard nose cone. They are available in a soft cup for adults or mini soft cup for pediatric patients. Each package of prophy angles contains angles with pink, purple and teal cups.

Indication

- Prophylaxis procedures in pediatric and adult patients.

Evaluation Highlights

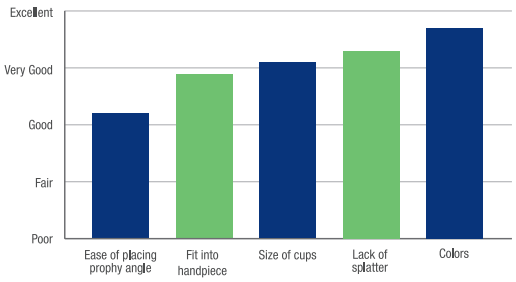
The ***Avid Fit Hygiene System*** was evaluated by 12 consultants, and was used 512 times in total.

- Lightweight, autoclavable handpiece.
- Adjustable nose cone.
- Smooth rotating prophy angles.
- Adult and pediatric-sized prophy cups.

Unique Features

- Ergonomically designed, lightweight handpiece.
- The only adjustable / tilting nosecone handpiece on the market.
- Handpiece is adaptable to any hand.
- Prophy angle webbing improves flare - reduces splatter and vibrations.
- Prophy angle streamlined body style improves patient comfort.
- Prophy angle does not contain natural rubber latex.

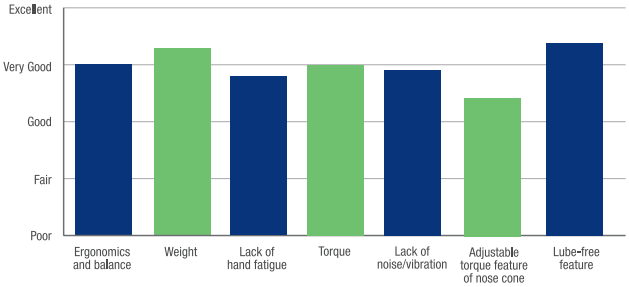
Key Product Features: Prophy Angle



50%
Would purchase instead of current product or in addition to current product.

42%
Rate it better compared to competitive products.

Key Product Features: Handpiece



Consultants' Comments

- *"The adjustable nose cone was good for easier access to difficult-to-reach areas."*
- *"Lack of splatter and lack of vibration."*
- *"I like that the handpiece is lightweight."*
- *"I like that I can keep my hand in a neutral position - the handpiece moves to different angles."*
- *"High power/torque, relatively quiet."*
- *"The two sizes for the prophy angles were very helpful."*

"THE MINI CUP PROPHY ANGLES ARE GREAT FOR KIDS."

High Q Bond SE™

+ + + + ½

B.J.M. Laboratories
www.bjmlabs.com

91% overall rating

Description

High Q Bond SE™ is a fluoride-releasing, radiopaque, self-etch, dual-cured self-adhesive resin cement. The cement is dispensed using an automix tip, has a working time of 1.5 to 3.5 minutes in ambient light (temperature-dependent), and an intraoral setting time of 2.5 to 4.5 minutes in self-cure mode. The cement can be tack-cured before removal of excess cement and light-cured at the margins using a halogen, plasma arc or LED light. Refrigeration is required for maximum shelf life of two years. ***High Q Bond SE*** is available in shades A2, White and Translucent. It is delivered in kits containing one automix syringe of resin cement (5 mL) in the selected shade, 10 automix syringe tips, 10 intra-oral angular tips (size fine), 10 intra-oral angular tips (size long XX-fine), and a mixing pad.

Indications

- Cementation of crowns and bridges, inlays, and onlays.
- Cementation of ceramic crowns.
- Cementation of posts and cores.

Unique Features

- Fluoride-releasing.
- Virtually no taste or odor.

"VERY EFFICIENT - EASY TO DISPENSE AND EASY CLEAN-UP."

Consultants' Comments

- *"A good product for short crown preps and post cementation."*
- *"Good viscosity - it stays where placed."*
- *"While the material set up quickly with ambient light, I found that useful when cementing translucent posts."*
- *"Good radiopacity."*
- *"The mixing tips supplied are very good."*
- *"Translucent appearance is great for veneers and good for ceramic inlays and onlays."*
- *"I would prefer not to have to wait before tack curing."*
- *"The self-cure working and setting times were a little too fast."*

Clinical Tips

- For better handling, let it return to room temperature after removing it from the refrigerator.
- Be careful to allow more setting time for metallic restorations.
- Tack-cure the cement for 5 seconds before removing excess cement.
- Work without the operatory light shining on the syringe - be careful if you have a light on your loupes.

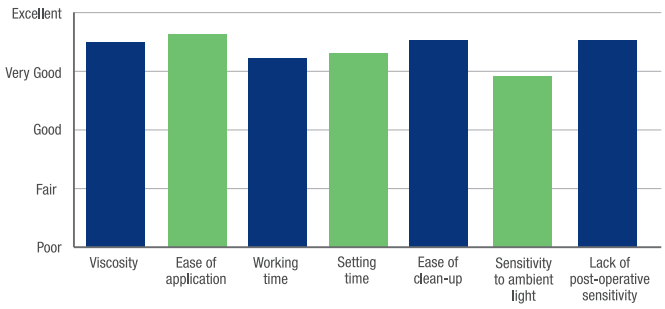


Evaluation Highlights

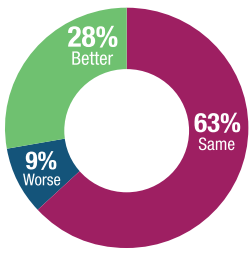
High Q Bond SE was evaluated by 33 consultants and used 426 times in total.

- Compatible with halogen, LED and plasma arc lights.
- Easy to dispense and place.
- Good viscosity.
- Radiopaque.
- Efficient.
- Easy clean-up.
- Dual cured

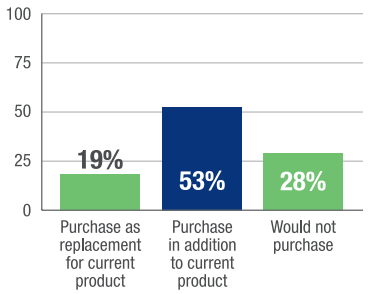
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Perfect™ Desensitizer

++++

86% overall rating

B.J.M. Laboratories
www.bjmlabs.com

Description

Perfect™ Desensitizer is an in-office topical desensitizing liquid that occludes the dentinal tubules. It is applied to a clean surface after first placing a rubber dam. After application, the liquid should be left on the surface undisturbed for 30 to 60 seconds, before gently drying it using compressed air from the air/water syringe tip. After drying, the area should be rinsed. Contact with skin, mucosa, pulpal tissue and eyes must be avoided. ***Perfect Desensitizer*** is available in 10 mL bottles, has a 24-month shelf life from the date of manufacture and requires refrigeration for storage.

Indications

- In-office desensitizer for exposed cervical areas.
- In-office desensitizer for preparations prior to placement of direct and indirect restorations.

Unique Features

- Can be used as a desensitizer under direct and indirect restorations, and on exposed cervical areas.
- Contains HEMA and glutaraldehyde.

"WORKED VERY WELL IMMEDIATELY ON EVEN MY MOST SENSITIVE PATIENTS."

Consultants' Comments

- *"Desensitizes under composite and amalgam."*
- *"Easy to apply, not messy, and I like that it's a single bottle."*
- *"It works most of the time."*
- *"Initial relief was good but seemed to wear off after about a week."*
- *"Effectiveness wears off especially with patients that brush rather vigorously."*
- *"The necessity to use a rubber dam is very inconvenient."*
- *"I had difficulty dealing with sensitive root structure while needing to use a rubber dam and avoid gingival contact. The instructions stress no contact with skin or mucosa."*

Clinical Tips

- For better handling, let it return to room temperature after removing it from the refrigerator.
- Be careful to allow more setting time for metallic restorations.
- Tack-cure the cement for 5 seconds before removing excess cement.
- Work without the operatory light shining on the syringe - be careful if you have a light on your loupes.

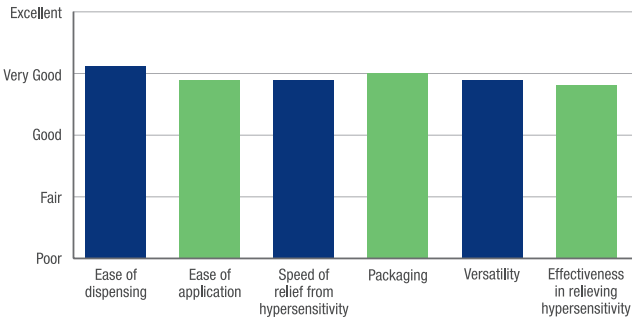
Evaluation Highlights

Perfect Desensitizer was evaluated by 29 consultants, with a total of 457 uses.

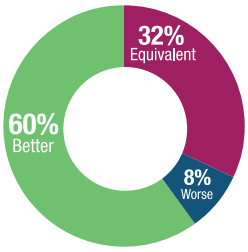
- In-office use.
- Easy dispensing and application.
- Occludes dentinal tubules.
- Immediate relief.
- Requires use of a rubber dam.
- Versatile – desensitizes cervical areas and teeth after preparation.



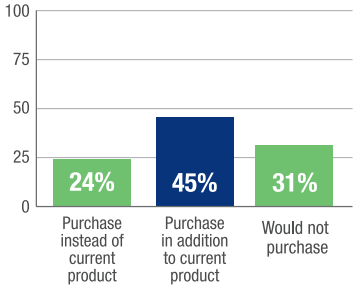
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



EverSmile® WhiteFoam™

+ + + + +





EverSmile, Inc.
www.eversmile.com

Description

EverSmile® WhiteFoam™ contains *EverClean™*, an anionic cleaning technology with 3.8% hydrogen peroxide. ***EverSmile WhiteFoam*** is designed to clean retainers/aligners and to whiten teeth while the retainer/aligner is being worn. The foam can be used up to 4 times daily while the appliance is being worn or as an overnight soak for the retainer/aligner. The foam will whiten teeth even underneath attachments. The bottle should be stored away from direct sunlight and heat. ***EverSmile WhiteFoam*** is mint-flavored and supplied in 50 mL bottles, which is sufficient for 60 applications.

Unique Features

- Does not alter the fit of the appliance.
- No sensitivity during or after use.
- Utilizes *EverClean*™, an anionic cleaning technology with 3.8% hydrogen peroxide.

"GREAT PRODUCT - EASY TO DISPENSE, EASY TO USE, GREAT MINT TASTE - CLEANS ALIGNERS WELL."

Consultants' Comments

- *"Freshens aligners while they are being worn."*
- *"Can also be used to clean bruxism splints and night guards."*
- *"A great idea, since patients complain about retainers being dirty and difficult to clean."*
- *"Minimal whitening of teeth. Some sloughing."*
- *"The product is too thin."*

Clinical Tips

- Less is more - it takes only about a quarter of a pump to adequately fill each tray.
- You can spread it around with a finger prior to placement over teeth.
- Still have the patient use a denture cleaner if there is tartar on the appliance.
- I would recommend doing this daily for stains and avid coffee wand tea/wine drinkers.
- Good for patients in Essix retainers.

Evaluation Highlights

EverSmile WhiteFoam was evaluated by 22 consultants, with a total of 392 uses.

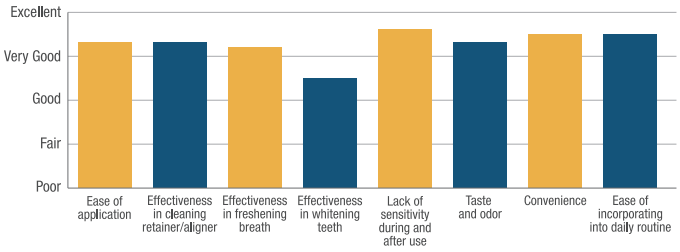
- Easy to use.
- Effective at cleaning retainers and aligners.
- Freshens breath.
- Convenient and portable.
- Mint flavor.

Indications

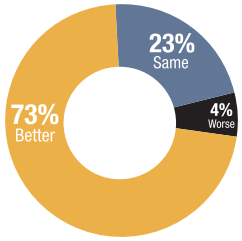
- Cleaning of retainers/aligners.
- Whitening teeth.
- Freshens breath.



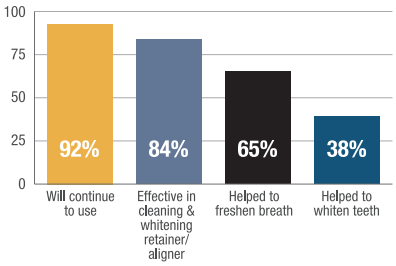
Key Features - Patient Evaluation



Compared to Competitive Products, Dental Professionals Thought:



Percentage of Patients Who:



Ionolux

+ + + + +

96% overall rating



VOCO
www.vocoamerica.com

Description

Ionolux is a light-cured, radiopaque, biocompatible and esthetic resin-modified glass ionomer restorative material. It has a mixing time of 10 seconds, a working time of 2.5 minutes and light-curing takes 20 seconds. This material can be packed and contoured immediately after placement and offers fluoride release. No conditioner or bonding agent is required. ***Ionolux*** is contained in a direct activation capsule that is activated by pressing it down on a hard surface before trituration, after which the tip is turned upwards for application of the material into the preparation. ***Ionolux*** is available in shades A1, A2, A3, A3.5, and B1 in boxes containing 20 capsules of one shade. Boxes of 50 capsules with 10 capsules each of shades A1 and A3 together with 30 capsules of shade A2 are also available, as well as boxes of 150 capsules in shades A2 or A3.

Indications

- Class III and V restorations.
- Restorations in the primary dentition.
- Small Class I restorations.
- Suitable for temporary restorations.
- Core build-ups.
- Liner.

Consultants' Comments

"EASY TO USE AND DISPENSE, GOOD HANDLING AND PACKABILITY - DID NOT STICK TO INSTRUMENTS."

- *"I like that it is one-step, does not require a conditioner or bonding agent or varnish after placement, and it releases fluoride."*
- *"This RMGI is a huge improvement over traditional glass ionomers."*
- *"Great dispensing syringe, I love this RMGI."*
- *"Esthetics are close to composite and it's quicker to use."*

Clinical Tips

- Great for restorations associated with root caries and for children.
- There is plenty of time to add where you want the material to go.
- The restorations improved by applying a clear coat of resin on the surface.

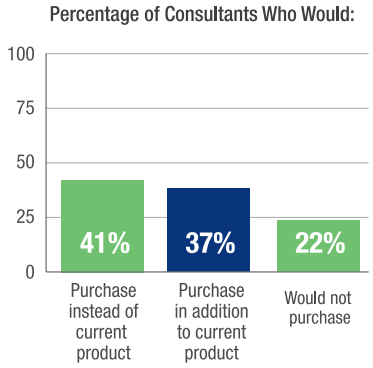
Unique Features

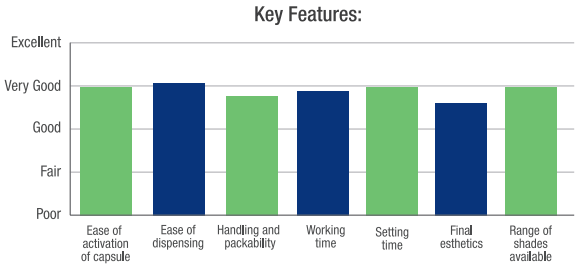
- Low to no stickiness to instruments.
- Requires no conditioner or varnish.
- High compressive strength and low solubility.
- Fluoride release.
- Very good bond to tooth structure.

Evaluation Highlights

Ionolux was evaluated by 27 consultants for a total of 566 times.

- Easy to use.
- Radiopaque.
- Small tipped capsule for dispensing.
- Packable.
- Requires no conditioner or varnish.
- Versatile.





Sellador Root Canal Sealer

+ + + +

87% overall rating

Medicaline
www.medica-line.com

Description

Sellador Root Canal Sealer is a biocompatible, non-staining, radiopaque, epoxy resin root canal sealer for use in combination with gutta-percha points in the single-point method, thermoplastic and all condensation techniques. The paste is dispensed onto a mixing pad and should be spatulated for 20-30 seconds or until it has a creamy homogeneous consistency. It has a working time of 35 minutes and a setting time of 45 minutes. ***Sellador Root Canal Sealer*** is available in a 13.5 g dual syringe, as 9 g base and 4.5 g catalyst, together with a mixing pad and spatula. It has a two-year shelf life and should be stored away from UV light and between 64°F and 75°F.

Indication

- Permanent root canal filling in combination with gutta-percha points.

Unique Feature

- Hermetic sealing and insoluble in tissue fluids.

"EASY TO MIX AND USE, WITH GOOD VISCOSITY."

Consultants' Comments

- *"I like the working and setting times."*
- *"Very radiopaque."*
- *"Great apical and auxiliary canal sealer."*
- *"I would like to be able to adjust the viscosity - sometimes it was too thin."*
- *"Dispensing was quick, easy and consistent. Much better than the usual two tubes. The dispensing system leaves little waste and prevents potential mixing errors."*
- *"I found it somewhat difficult to dispense equal amounts of base and catalyst - sometimes the smaller tube didn't seem to express paste properly."*

Evaluation Highlights

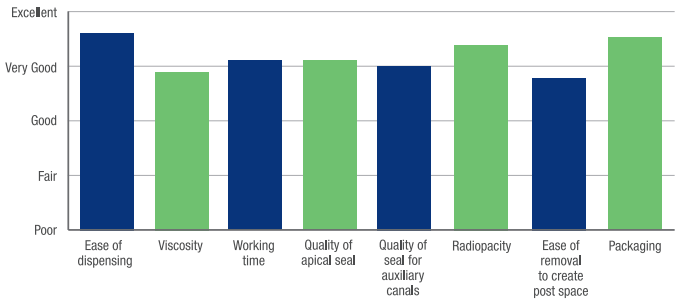
Sellador Root Canal Sealer was evaluated by 16 consultants for a total of 208 times.

- Easy to dispense from a dual-barrel syringe, and mixes to a smooth paste.
- Easy to use.
- Good working and setting times.
- Very radiopaque.

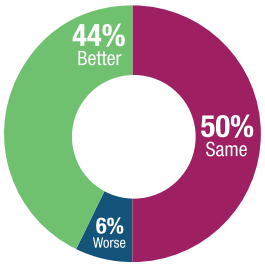
Clinical Tips

- Works great with a lentulo spiral.
- May be beneficial in highly curved canals.

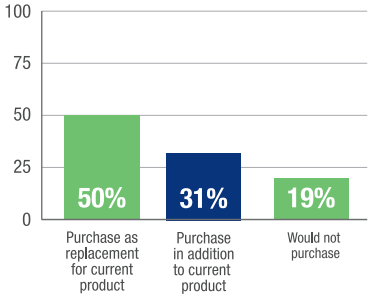
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



SPECIAL THANKS TO:

Select Senior Clinical Consultants (Over 20 years):
J. Amara, CT · R. Fisher, OH · W. Gregory, MI · E. Katkow, MD · J. Lockwood, MI · J. Mayer, OH · W. Nagy, TX · G. Poy, MI · J. Shamraj, MI · R. Trushkowsky, NY · P. Yaman, MI

Senior Clinical Consultants (15-19 years):
K. Baker, TX · F. Berman, PA · J. Bostic, OH · L. Brimhall, MT · M. Briskin, NY · L. Brown, MI · W. Brownscombe, MI · R. Ciccone, MI · C. Colbert, MI · M. Conrad, PA · J. Dingman, WI · R. Dost, VA · J. Doueck, NY · M. Dwoskin, MI M. Eannaccone, NY · R. Engle, IL · K. Fairbanks, MI · M. Feinberg, NY · K. Fischer, IN · G. Franco, NY · N. Garlisi, OH · K. Goodman, MI · S. Graber, IL · P. Grandsire, NY · E. Gutman, NY · D. Haas, Ontario · K. Hamlett, TX · S. Harlock, MI G. Hart, OH · R. Herwig, KS · J. Kaminski, MI · R. Kaprielian, NJ · M. Kastner, OH · D. Keren, NY · M. LaMarche, WA · J. Leitner, MI · S. Lever, MD · R. Lezell, MI · M. Livernois, NC · M. Man, NY · B. Manne, FL · N. Mansour, MI N. Markarian, CA · C. McLaren, MI · J.W. Mikesell, IL · R. Mizrahi, NY · G. Mosso, PA · E. Mosso, PA · J. Nash, MI · A. Nazarian, MI · E. Odenweller, OH · R. Oshrain, NY · J. Paris, TX · D. Parris, GA · M. Patel, MI · D. Peterson, MD T. Pieper, WY · D. Pitak, MI · V. Plaisted, NY · D. Qualliotine, NC · G. Raichelson, Ontario · C. Reed, MI · G. Reskakis, NY · K. Schwartz, FL · J. Shea, MO · B. Shumaker, NJ · B. Sims, NY · P. Symeonides, NY · H. Tetalman, OH C. Trubschenck, CA · S. Ura, NH · W. Walcott, MI · M. Waranowicz, MI · L. Wee, MI · D. Wojtowicz, MI · H. Yeung, CA · M. Zahn, MI · P. Zanetti, MI · S. Zimmer, MI

Clinical Consultants (14 years or less):
A. Albright, NY · N. Alexa, MI · G. Alfe, IL · B. Argersinger, NC · P. Arsenault, MA · G. Ash, MI · A. Bagchi, MI · B. Barricklow, OH · L. Bartoszewicz, MI · J. Bechtel, MI · C. Bhatti, MI · L. Bishop, MI · T. Bizga, OH · G. Bloomfield, MI C. Brown, LA · E. Brust, MI · S. Bunek, MI · J. Bunek, MI · T. Burns, MI · J. Bush, PA · H. Cadorette, MI · S. Campbell, MI · P. Campo, NY · P. Cracchiolo, MI · D. Chacko, TN · P. Chaiken, IL · D. Chenevert, MI · R. Cherry, FL · M. Connelly, MI W. K. Dancy, GA · C. Dietz, OH · S. Dillingham, NY · K. Dobracki, MI · J&E Duski, MI · A. Dutko, MI · M. Elford, MI · O. Erdt, MI · M. Evers, OH · F. Facchini, MI · F. Falcao, FL · L. Feldman, NJ · M. Frankman, SD · M. Glovis, MI · C. Goldin, MI M. Grant, MI · A. Green, MI · R. Green, MI · B. Greenwood, UT · J. Griffin Jr., MO · K. Grindling, MI · P. Gronet, KY · R. Grossman, PA · H. Gulati, MA · G. Haddad, CA · J. Haddad, MI · J. Hastings, CA · D. Hauck, CA · J. Hengehold, MI B. Herrmann, CA ·D. Hock, MI · A. Hodges, NC · C. Huang, CA M. Huberty, WI · P. Indianer, MI · J. Ireland, MI · C. Jaghab, MI · J. Jaghab, MI · R. Juluri, IL · M. Kachi-George, MI · D. Kapp, NY · J. Karam, MI · E. Kelly, GA · J. Kelly, GA L. Kemmet, MN · C. Knapp, MI · M. Koczarski, WA B. Kolb, MI · D. Kuras, MI · C. Laird, OR · C. Latham, OH · R. Le, NC · I. Levine, NY · E. Lowe, BC, CAN · J. Lusby, MI · C. Manduzzi, MIK. Mantzikos, NY · F. Margolis, IL · A. Marlow, MI T. McDonald, GA · J. McLaren, MI · M. McMullin, MI M. Migdal, MI · J. Minsky, CA · M. Moeller, MI · G. Molinari, MI · L. Montes, NY · M. Murphy, MI · L. Musgrave, MI · M. Nasif, MI · N. Nealis, IL · J. Neuman, MI · J. Olitsky, FL J. Olsen, MI · F. Orlando, NY · S. Owens, MI · P. Panchal, NC · M. Paquette, MI · J. Parrott, MI · D. Perkins, MI · S. Picazio, NJ · C. Pike, MI · C. Piontkowski, MI · B. Pittsley, MI · T. Poirier, MI · D. Radtke, MI · G. Ramos, NY · C. Ramsey, FL S. Reddy, MI · T. Reeves, TN · N. Rego, CA · J. Riggs, MI · J. Rowe, AR · J. Rubin, DC · D. Ruhlig, MI · A. Saddy, MI · S. Salhadar, MI · P. Scalia, MI · C.Scanlon, MI · J. Schau, MI · L. Seluk, MI · R. Selvan, NJ · Y. Shaheen, MI M. Shapiro, MI · A. Shemesh, IN · S. Simos, IL · B. Silver, MI · S. Simpson, MI · J. Smith, MI · C. Stevens, OK · B. Stevenson, MI · B. Stieper, MI · S. Tamber, MI · G. Tarantola, FL · T. Teel, IN · C. & L. Thorpe, MI · A. Valentine, MI Lyn. Vandelaar, MI · H. Vann, MS · H. Whitt, MI · L. Williams, MI · K. Wilson, MI · D. Wolf, MA · W. Wright, CA N. Yaeger, MI · S. Yun, MI · D. Young, MI · J. Zanetti, MI

Laboratory Consultants:
Apex Dental Milling, MI · Bullinger Dental Lab, MI · Centric Dental Laboratory, TX · Cornerstone Dental Studio, Inc., MI · David's Dental Laboratory, NY · Expertec Dental Lab, MI · Heritage Dental Laboratory, IL Technique Crown and Bridge, Inc., NC