

THE DENTAL ADVISORTM

Improving Patient Care Through Research & Education

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MAIN TOPIC

Digitizing Dental Impressions 2

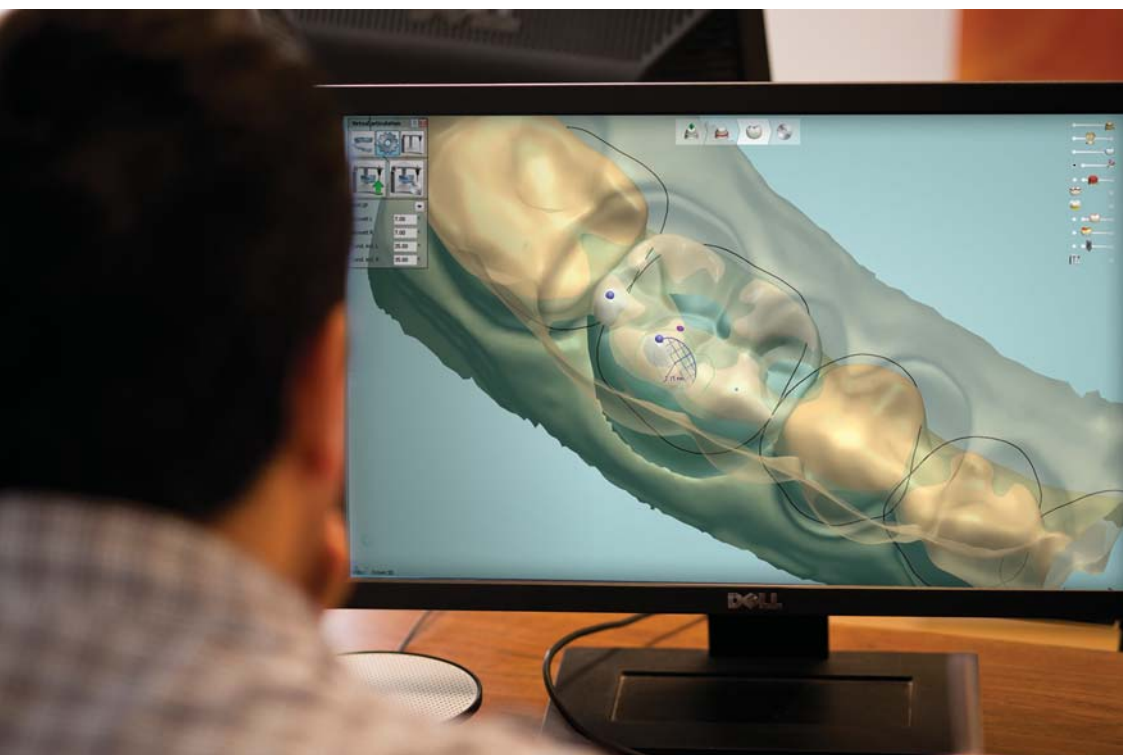
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Digitizing Dental Impressions

This issue of THE DENTAL ADVISOR discusses the current state of CAD/CAM and digital dentistry. Since 2007, we have been reporting on the changes to materials, equipment, and techniques. The concept of digital workflow is continually changing and is a source of confusion for dental practices and the laboratories they work with. An overview of available systems for both digital impressions and in-office milling is provided as well as materials available for same day or next day dentistry. Finally, a brief explanation of 3D printing and the popularity of orthodontics in digital dentistry is discussed.

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RATINGS:

Excellent + + + + +
Very Good + + + +
Good + + +

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From the Desk of Dr. Bunek, Editor-in-Chief



Whether adopting a totally new technology and integrating it into your practice or upgrading an existing piece of equipment or technology, the decision-making process is likely a daunting one. It is especially so when it comes to the growing number of choices available in CAD/CAM dentistry. There is no doubt that digital dentistry is the future (if not the present) of our field, and we want to provide our patients with the best our profession has to offer; but conflicting feelings often arise as we attempt to navigate the steadily growing stream of CAD/CAM systems with their distinctive capabilities and price points. We have taken on the task of wading through the data in hopes of offering you a clear, categorized view of the latest options in CAD/CAM dentistry. From chair-side restorative design and milling to enhanced laboratory relationships and orthodontic applications, our aim is to provide you with the information necessary to make a decision that makes sense for your practice and to keep you off of the sidelines. As always, I welcome your comments and suggestions; you can reach me at drbunek@dentaladvisor.com. Thank you for your continued support and reading!

How do digital impressions work?

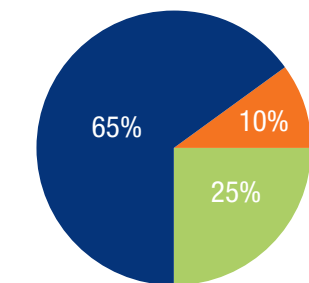
Digital impressions are a virtual replica of an image captured by an optical scanning device. Regardless of what system is used, the ability to control design parameters down to the smallest detail and to make modifications in-house are priceless. For offices electing a system complete with a milling station, restorations can be fabricated and even corrected while the patient waits. Offices opting for a scanner only optimize the effectiveness of their laboratory partners by minimizing communication errors and enhancing collaboration on case design with quantitative measurable data.

Digital Impressions: Here to stay!

The choice is no longer whether or not to participate in the world of digital impressions and CAD/CAM dentistry, but at what level will you choose to participate and which systems best support that level of engagement and the goals of your practice. As digital impression systems, CAD/CAM software, and milling units grow in their respective applications, continue to create interdisciplinary partnerships, and become more affordable as well as portable, options increase exponentially. The increase in options inevitably leads to more confusion for the potential consumer, and this likely contributes to the surprisingly stagnant number of purchasers.

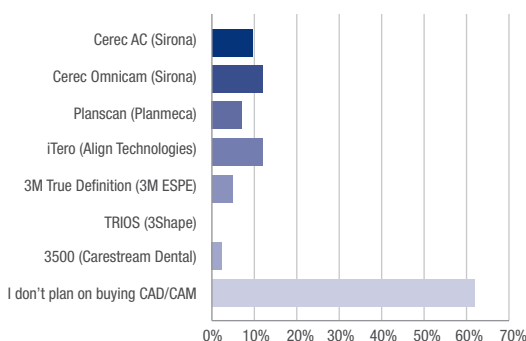
Feedback from our clinical consultants on CAD/CAM

Do you own a digital dental device?



■ Do not own a system
■ Own a Digital Impression System
■ Own a full system with in office mill

If you do not own, which brand do you plan to invest in?



Editor's Note: Somewhat indicative of the market; over 60% of our surveyed consultants do not plan on buying. The reason most often cited was price, closely followed by the sentiment that what they are doing is working.

Digital Impressions in Orthodontics

Digital impressions are becoming increasingly popular in orthodontics. In particular, going digital solves the dilemma of storing thousands of plaster models and reduces the hefty bill associated with producing and shipping traditional models. Although digital impressions are not new to orthodontics, new scanners and software enhancements have emerged in the past year. Listed below is a summary of some of the new technology.

Align Technology *iTero Intra Oral Digital Scanner*

Align Technology products include: **OrthoCAD**, **iTero**, and **Invisalign**. **OrthoCAD** digital services allow clinicians to analyze, treatment plan, and store 3D digital models. **iTero Intra Oral Digital Scanner** can be utilized in conjunction with Invisalign for the fabrication of a series of clear orthodontic retainers that may be used in appropriate cases to complete orthodontic treatment. Submitting digital impressions results in a quicker turnaround time and superior fit of the aligners. **iTero** also boasts new software features including the **Invisalign Outcome Simulator**, which helps patients visualize how their teeth may look at the end of treatment.

3M ESPE *3M True Definition Scanner*

The **3M True Definition Scanner** supports open STL files enabling an orthodontist to work with their choice of lab and any appliance brand. When used to customize **Incognito Appliances**, the system provides seamless communication and transfer of data to the **Unitek Treatment Management Portal (TMP)**, allowing for full case management and direct interaction with 3M Unitek. **Unitek TMP** provides a suite of treatment management resources for orthodontists utilizing **Incognito** braces and digital study models. Additionally, a partnership between 3M ESPE and Align Technologies was announced this year qualifying the **3M True Definition Scanner** for **Invisalign** case submission.

Ormco *Lythos*

The **Lythos** open system allows data to be easily shared with orthodontic labs and appliance manufacturers including **Insignia™**, **Clearguide™ Express** and **AOA Lab** to produce a variety of custom appliances and/or study models. Digital impressions for every patient can be stored on Ormco's cloud for up to 10 years through ormcodigital.com. There are no click fees or storage/management fees. **Lythos** also includes **DigiCast eModels**, an online portal for digital study models minimizing cost associated with physical model storage. Additionally, when **Lythos** scan data are used for **Ormco** and/or **AOA** products, practices earn rebates towards the cost of the impression system.

Carestream Dental *CS 3500 Intraoral Scanner*

Carestream Dental is also providing a digital solution for orthodontists. Combined with the **CS 3500** scan, orthodontists can utilize **CS Model** software to create, review, and store digital models. Orthodontists may elect to send the data in an STL file format to the lab via **CS Connect** portal. Digital scans captured by **CS 3500** are also being accepted by **Clear Correct** to create clear aligners.

Sirona *CEREC Ortho Software*

Sirona recently expanded its orthodontic product line with the new **CEREC Ortho** software. The software will allow **Omniscam** scans to be used for **ClearCorrect** clear aligners and classic orthodontic appliances. The software will be available to **CEREC Omniscam** users near the end of the year.

3Shape *TRIOS*

3Shape is providing a complete digital solution for orthodontists by combining **TRIOS 3D** images with the **3Shape Ortho Analyzer™**. The **Ortho Analyzer** software allows orthodontists to create digital study models and utilize advanced tools for analysis, virtual set-ups, and accurate treatment planning. After review, the digital STL files are sent to laboratories for appliance fabrication.

3D Printing in Dentistry



Objet Eden 260V
(Stratasys)



Objet30 OrthoDesk
(Stratasys)



Many dental professionals are excited about 3D printing in dentistry and the possibilities it offers. Currently, THE DENTAL ADVISOR is working with the Stratasys **Objet Eden 260V** and the **Objet30 OrthoDesk** printers.

Historically, laboratories utilize a manual process to pour models, trim dies, and create wax ups. These tasks are time consuming and can affect profitability. Technicians who are experts in designing and finishing can be utilized for those procedures instead of spending time on the minutiae of pouring models. The work of modeling and creating precision dies can be done by a 3D printer without the potential errors of a human hand.

Objet's new **OrthoDesk** system is also available for busy orthodontic practices who wish to fabricate their own models and appliances using a 3D printer. In addition, digital storage of files eliminates the need for physical model storage in a dental practice.

An exciting new and affordable SLA printer has been introduced by 3D Systems, also being sold by Whip Mix Corporation. The **ProJet1200** SLA printer is a small and affordable printer ideal for laboratories who wish to save time and reduce errors in waxing by hand. This printer is reported to print 12 units in under 2 hours. The true advantage of this printer is the price at \$4900.00. The size of the unit is also an advantage, as the footprint is just smaller than a coffee maker. The software is built right into the printer, and the unit simply connects to any computer via a USB port. The software intuitively nests jobs for maximum efficiency, but they can also be customized by the technician.

Why Buy?

Selecting the right system for your practice can be confusing. Below is an outline of systems, how they work in office and in conjunction with laboratories, and what the unique features each system showcase.

A System Overview: Digital Impression Systems

3M True Definition Scanner (3M ESPE)



3M ESPE's 3M True Definition Scanner can be used as a stand alone digital impression device or paired with the TS 150 mill or PlanMill 40 for in-office milling.

- Lab: 3M ESPE's 3M True Definition can send an open .stl file via 3M ESPE's digital hub to a participating laboratory. Laboratory can design and mill any type of restoration.
- Scan Fees: Unlimited scans (no per scan charges or click fees) and secure file transfers to the lab.
- Total System Cost: \$11,995
- Powder: Yes
- Ortho Integration: Yes, Invisalign and 3M Unitek.
- Implant Integration: Yes, Straumann and Biomet 3i.
- Special Features: Through the trusted integration program, 3M ESPE's 3M True Definition Scanner can be paired with Straumann and 3i implant systems, invisalign and 3M Unitek, and the TS 150 and PlanMill 40 for in-office milling.

TRIOS Color (3Shape)



TRIOS and TRIOS Color can be used as a stand alone cart or connected to a laptop using TRIOS Pod for portability. TRIOS can also connect to GALAXY BioMill for an in office solution.

- Lab: TRIOS can send a file directly to a participating 3Shape Lab. Laboratory can design and mill any type of restoration.
- Scan Fees: Not provided
- Total System Cost: Not provided
- Powder: No
- Ortho Integration: Yes
- Implant Integration: Yes
- Special Features: Measures shade during scan and transmits to laboratory; scanner can take HD photographs to send with case.

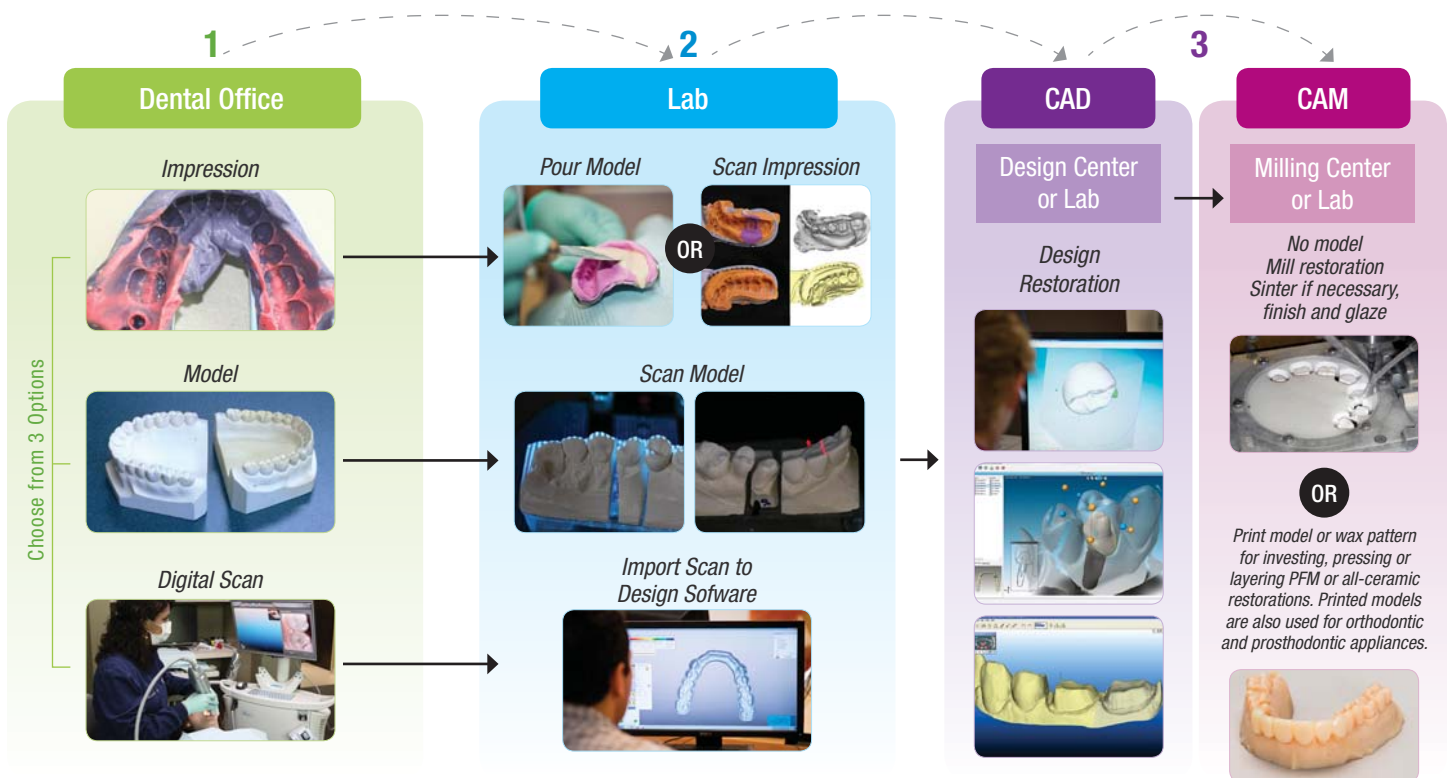
iTero Intra Oral Digital Scanner (Align Technologies)



iTero is a stand alone Digital Impression System on a PC based cart system.

- Lab: iTero can send an open .stl file to any laboratory that can accept scans via the internet. Laboratory can design and mill any type of restoration.
- Scan Fees: Monthly subscription and pay per scan options
- Total System Cost: \$24,999
- Powder: No
- Ortho Integration: Yes, Invisalign
- Implant Integration: Yes, Straumann, Biomet 3i, DENTSPLY Atlantis, Custom Abutments, Core 3D, Glidewell, and Zimmer.
- Special Features: iTero scans can be sent to any laboratory with the ability to accept digital files, no special software is necessary. Wand houses a fan for a fog free scan process. Simulator software allows dentists to show patient projected orthodontic results.

Digital Workflow with the Laboratory



A System Overview: Scanning and Milling Options

PlanScan Restorative System (Planmeca)



PlanScan is plug-and-play system providing the freedom to scan at multiple work stations and is laptop based for easy portability. **PlanMill 40** can be used to mill in-office. A firing furnace needs to be purchased if **IPS e.max CAD** is used.

- Lab: **PlanScan** can send an open .stl file via DDX portal, or using Romexis Software. Laboratory can design/mill any type of restoration.
- Scanner Only Cost: \$25,000
- Total System Cost: \$119,995
- Scan Fees: None
- Powder: None
- Ortho Integration: Romexis tools for 3D and Orthodontics.
- Implant Integration: Yes
- Special Features: Heated mirror which prevents intraoral fogging, Romexis image management, workflow with 2D & 3D treatment planning, allows import of CBCT data for orthodontics. Multiple tools for crown design and superimposing soft tissue. **PlanMill 40** features and automatic tool changer and multiple jobs can be sent to mill at once.

CEREC AC or CEREC Omnicam with MC, MCX or MCXL Mills (Sirona Dental Systems)



Both **CEREC AC** and **CEREC Omnicam** are on a cart based PC system.

CEREC MC, MCX, or MCXL can be used to mill in-office. A firing furnace needs to be purchased if **IPS e.max CAD** is used.

- Lab: Using **Sirona Connect**, participating laboratories will accept scans from any **CEREC Doctor** via the **Sirona Connect Portal** located on the machine. Participating laboratories can design and mill any type of restoration.
- Scanner Only Cost: Not provided
- Total System Cost: Not provided
- Scan Fees: Not provided
- Powder: None on **Omnicam**, Yes on **Cerac AC**
- Ortho Integration: Yes
- Implant Integration: Yes

CS 3500 Scanner and CS 3000 Mill (Carestream Dental)



CS 3500 can be connected to any computer which houses **CS Restore Software** via USB port. **CS 3000** can be used to mill in-office. Current available materials are **Lava Ultimate** and **VITABLOCS Mark II**.

- Lab: **CS 3500** can send an open .stl file to any Laboratory via **CS Connect**. Laboratory can design and mill any type of restoration.
- Scanner Only Cost: \$26,000
- Total System Cost: \$100,000
- Scan Fees: None
- Powder: None
- Ortho Integration: Yes
- Implant Integration: Yes
- Special Features: Portable, can be shared between operators; Autoclavable tips come in two sizes; No external heater; Light guidance system streamlines image acquisition; Files can be sent to more than 100 labs nationwide.

TS150 Mill (Glidewell Laboratories)



TS150 (Tooth Shaper 150,000 rpm) can be used to mill in-office, same day crowns utilizing data from **iTero Digital Impression Scanner** or **3M ESPE's 3M True Definition Scanner**.

- Lab: Labs can accept any open .stl file
- Current available materials: **Lava Ultimate** and **Obsidian 1**
- Special Features: Open-source milling unit that utilizes an air driven 150,000 RPM spindle and orbital precision milling strategy.



3M ESPE 3M True Definition Scanner/TS150 Mill

This system is currently being sold by **Benco Dental** as **One Visit**, **Burkhardt Dental** as **Flex System**, and by **Atlanta Dental**. All 3 dealers are selling the complete system for \$69,995. This includes **3M ESPE's 3M True Definition Scanner**, **Fast Design CAD Software** and the **TS150 mill**.

GALAXY BioMill (BIOLASE)

Utilizing **TRIOS 3Shape** or any open .stl file, **GALAXY BioMill** can be used to mill in office or a lab.

- Lab: **TRIOS Color** can send a file via **3Shape Communicate** to a participating laboratory. Laboratory can design and mill any type of restoration within **3Shape Software**.
- Total System Cost with **TRIOS Color Scanner**: \$94,990
- Special Features: Wet and dry mill can accommodate scans designed in **3Shape's Software**.

Materials Available for In-office Milling

	Type	CEREC (Sirona)	PlanMill (Planmeca)	TS-150 (Glidewell Laboratories)	CS 3000 (Carestream Dental)
CERASMART (GC America)	Resin ceramic	✓			
Enamic (Vident)	Resin ceramic	✓	✓	✓	
IPS e.max CAD (Ivoclar/Vivadent)	Lithium disilicate	✓	✓		
IPS Empress CAD (Ivoclar/Vivadent)	Leucite reinforced glass ceramic	✓	✓		
Lava Ultimate (3M ESPE)	Resin ceramic	✓	✓	✓	✓
Obsidian 1 (Glidewell Laboratories)	Lithium silicate			✓	
Suprinity (Vident)	Zirconia reinforced lithium silicate	Coming Soon			
TELIO CAD (Ivoclar Vivadent)	Acrylic polymer (PMMA)	✓	✓		
Trilux/Trilux Forte (Ivoclar Vivadent)	Feldspathic ceramic	✓			
VITABLOCS Mark II (Vident)	Feldspathic ceramic	✓			
VITA-CAD Temp (Vident)	Composite	✓			✓

Xantasil

Heraeus
(800) 854-4003
www.heraeusdentalusa.com

Description

Xantasil is a medium-viscosity, VPS impression material designed as a substitute for alginate that allows for multiple pours and storage of impressions for several weeks. Common uses for **Xantasil** include templates for provisional restorations, orthodontic models, retainers, splints, and opposing models. **Xantasil** is available in 50 mL automix cartridges and 380 mL cartridges compatible with motorized mixing machines. **Xantasil** has a working time of one minute and a setting time of 1:30 in the mouth. **Xantasil** was evaluated by 26 consultants in 365 uses. This alginate substitute received a 91% clinical rating.

Suggested Retail Cost

6, 50 mL cartridge/\$63.88 | 2, 380 mL cartridges/\$128.00

Product Features

The ability to delay pouring and to create multiple models from **Xantasil** impressions make it more useful than alginate for many purposes. The material is easy to extrude and seat in the mouth with a reasonably short setting time. **Xantasil** captures good detail; however, occasional voids at cervical areas beyond the height of contour were observed. The light orange color is easy to read. Stone models are easy to separate from the impressions and they have smooth surfaces. Appliances fabricated on models from **Xantasil** were reported to have an accurate fit.

Clinical Tips

- Seat the impression vertically to avoid distortion.
- Wait 30 minutes before pouring stone into the impression. ■

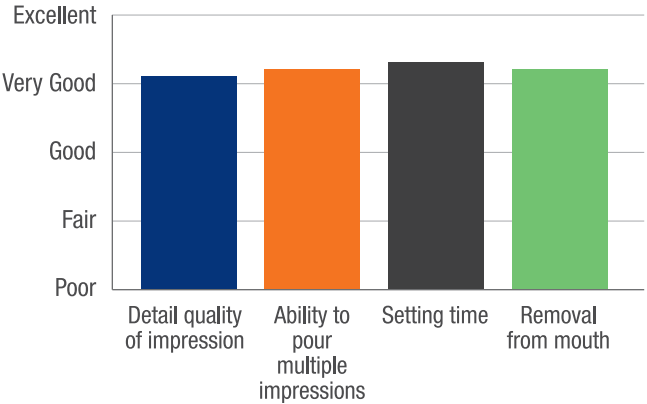
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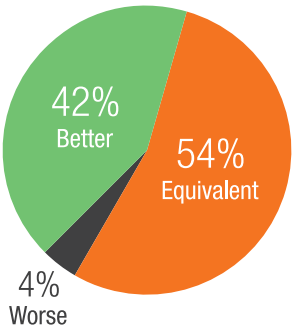
Consultants' Comments

- "Works great as a matrix for making a temporary crown."
- "Impressions turned out nicely each time!"
- "I won't go back to alginate."
- "Models from multiple pours are identical."
- "The dynamic mixer is more practical than the automix cartridges for full-arch impressions."
- "A fast setting version for quadrant impressions would be great."

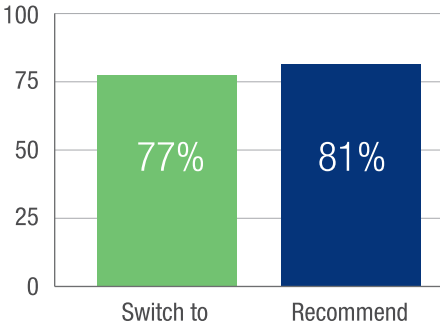
Key Features:



Compared to competitive products:



Percentage of consultants who would:



Reflectys

Itena Clinical

(877) 224-6608, (516) 247-2743

sales@itena-na.com | www.itena-clinical.com

Description

Reflectys is a light cured, radiopaque, nano-hybrid composite material indicated for restorations of anterior and posterior teeth, and all classes of cavities. **Reflectys** is available in 16 shades, including two opaque shades, enamel and incisal shades, and a pedo shade. Cure time for **Reflectys** is 20 seconds at a depth up to 3 mm. The composite is available in 4 g syringes or 0.25 g capsules. Intro kits contain four shades of **Reflectys**; the complete kit contains all shades. **Reflectys** was evaluated by 24 consultants in 740 uses. This universal composite received an 91% clinical rating.

Suggested Retail Cost

20, .25 g capsules/\$64.96 | 4 g syringe/\$43.29

Product Features

Reflectys performed well as a universal composite in anterior and posterior applications. The composite blends well with teeth and is easy to polish to a glossy surface, producing esthetic restorations. **Reflectys** has a soft consistency that levels out after placement. Creating anatomy was reported to be more effective during finishing than sculpting it during placement. Dispensing the material from the capsules required minimal pressure due to the low viscosity.

Clinical Tip

- Minimize ambient light to lengthen working time. ■

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Consultants' Comments

"Highly polishable."

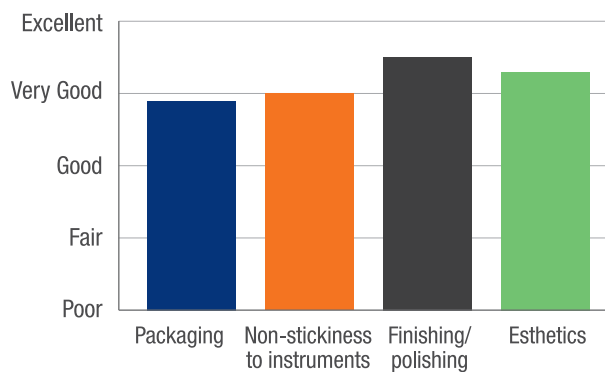
"Good shade selection."

"When placed, the composite settles almost like a flowable."

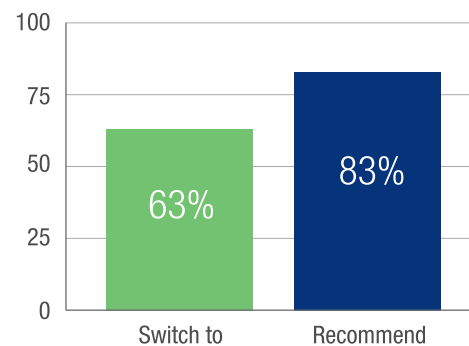
"Shades blend well with tooth structure."

"Represents a fantastic value for a high end material."

Key Features:



Percentage of consultants who would:



TIDIShield Assemble 'n Go™ Eye Shields

TIDI Products

(800) 521-1314

www.tidipproducts.com

Description

TIDIShield Assemble 'n Go™ Eye Shields provide eye protection from splatter during dental procedures. The lightweight frames are re-usable and autoclavable and come in 5 assorted colors. The eye shields offer front and side protection and resist glare and fogging. The eye shields are disposable and are intended for single patient use. **TIDIShield Assemble 'n Go™ Eye Shields** can be worn over prescription glasses. Each combo pack Includes 5 colored frames and 25 disposable eye shields. **TIDIShield Assemble 'n Go™ Eye Shields** were evaluated by 41 consultants in over 1030 uses. This eye shield received a 91% clinical rating.

Suggested Retail Cost

Combo Pack of 5 Frames/25 Eye Shields	\$35.95
100 ct. Replacement Eye Shields	\$99.95

Product Features

TIDIShield Assemble 'n Go™ Eye Shields are simple to assemble, and it took consultants just a few seconds to mount the eye shields onto the frames. Dental office staff liked the assorted colors and lightweight

++++ 1/2



Consultants' Comments

"Provides appropriate protection with a professional appearance."

"Lightweight - I don't even know I have them on."

"Easy assembly."

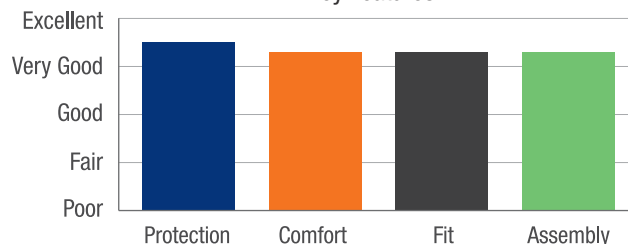
"They fit over my prescription glasses."

"We used them for patient protection also."

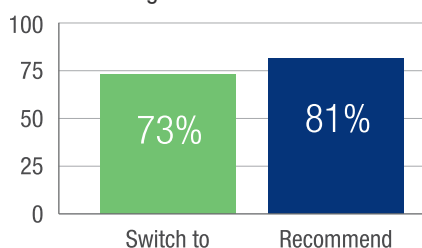
"Temples can be trimmed shorter if needed."

frames. Users enjoyed having crystal clear lenses that wrapped around, providing full protection to the eyes. Frames held up well after repeated sterilization, and the disposable eye shields eliminated the chances of cross contamination. ■

Key Features:



Percentage of consultants who would:



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Senior Clinical Consultants (15-19 years):

S. Anderson, MI · A. Anthony, OH · K. Baker, TX · F. Berman, PA · L. Brimhall, MT · M. Briskin, NY · L. Brown, MI · R. Ciccone, MI · C. Colbert, MI · M. Conrad, PA · J. Dingman, WI · J. Doueck, NY · M. Dwoskin, MI · M. Eannaccone, NY · R. Engle, IL · K. Fairbanks, MI · K. Fischer, IN · G. Franco, NY · N. Garlisi, OH · K. Goodman, MI · S. Graber, IL · P. Grandsire, NY · B. Gursky, MI · E. Gutman, NY · K. Hamlett, TX · G. Hart, OH · R. Herwig, KS · J. Kaminski, MI · R. Kaprielian, NJ · M. Kastner, OH · C. Kehr, MI · M. LaMarche, WA · J. Leitner, MI · R. Lezell, MI · M. Livernois, NC · B. Manne, FL · N. Mansour, MI · N. Markarian, CA · J.W. Mikesell, IL · G. Mosso, PA · E. Mosso, PA · E. Odenweller, OH · J. Paris, TX · D. Parris, GA · D. Peterson, MD · T. Pieper, WY · D. Pitak, MI · V. Plaisted, NY · D. Qualliotine, NC · C. Reed, MI · P. Sandvick, WI · K. Schwartz, FL · J. Shea, MO · B. Shumaker, NJ · B. Sims, NY · H. Tetalman, OH · C. Trubschenck, CA · P. Tu, CA · S. Ura, NH · W. Walcott, MI · L. Wee, MI · D. Wojtowicz, MI · R. Wilkie, MI · M. Zahn, MI

Clinical Consultants (14 years or less):

C. Adamson, MI · A. Albright, NY · N. Alexa, MI · B. Argersinger, NC · A. Bagchi, MI · B. Barricklow, OH · L. Bartoszewicz, MI · J. Bechtel, MI · C. Bhatti, MI · L. Bishop, MI · T. Bizga, OH · G. Bloomfield, MI · J. Bostic, OH · N. Brezden, MI · C. Brown, LA · W. Brownscombe, MI · S. Bunek, MI · J. Bunek, MI · J. Bush, PA · H. Cadorette, MI · P. Campo, NY · P. Cracchiolo, MI · D. Chacko, TN · P. Chaiken, IL · R. Cherry, FL · J. Chips, PA · T. Chips, PA · W. Co, MI · M. Connelly, MI · S. Dillingham, NY · R. Dost, VA · A. Dutko, MI · J. Dwahan, MA · M. Elford, MI · O. Erdt, MI · F. Facchini, MI · F. Falcao, FL · M. Feinberg, NY · L. Feldman, NJ · S. Finlay, MD · M. Fluent, MI · M. Frankman, SD · L. Gee, OK · C. Goldin, MI · B. Greenwood, UT · J. Griffin Jr., MO · P. Gronet, KY · H. Gulati, MA · D. Haas, Ontario · J. Haddad, MI · S. Harden, GA · J. Hastings, CA · D. Hauck, CA · J. Hengehold, MI · B. Herrmann, CA · D. Hock, MI · D. Hassoun, MI · C. Huang, CA · J. Hur, MI · P. Indianer, MI · J. Ireland, MI · C. Jaghab, MI · J. Jaghab, MI · M. Kachi-George, MI · D. Kapp, NY · J. Karam, MI · S. Kazan, MI · E. Kelly, GA · J. Kelly, GA · L. Kemmet, MN · D. Keren, NY · D. Kinra, MI · M. Koczarski, WA · B. Kolb, MI · C. Latham, OH · R. Le, NC · T. Leonard, FL · S. Lever, MD · I. Levine, NY · E. Lowe, BC, CAN · J. Lusby, MI · M. Man, NY · C. Manduzzi, MI · K. Mantzikos, NY · F. Margolis, IL · M. Mason, NY · T. McDonald, GA · C. McLaren, MI · J. McLaren, MI · M. McMullin, MI · H. Menchel, FL · L. Metsger, PA · M. Migdal, MI · J. Minsky, CA · R. Mizrahi, NY · M. Moeller, MI · G. Molinari, MI · L. Montes, NY · M. Murphy, MI · J. Nash, MI · A. Nazarian, MI · N. Nealis, IL · M. Nemeth, MI · V. Nerikar, FL · C. Noe, MD · J. Oltitsky, FL · J. Olsen, MI · F. Orlando, NY · R. Oshrain, NY · A. Overall, MI · S. Owens, MI · M. Paquette, MI · J. Park, IL · J. Parrott, MI · M. Patel, MI · C. Pike, MI · T. Poirier, MI · D. Radtke, MI · H. Rahim, VA · G. Raichelson, Ontario · G. Ramos, NY · C. Ramsey, FL · T. Reeves, TN · N. Rego, CA · G. Reskakakis, NY · J. Riggs, MI · J. Rowe, AR · F. Ruder, FL · A. Saddy, MI · L. Seluk, MI · R. Selvan, NJ · M. Shapiro, MI · S. Shoukfeh, MI · P. Shumaker, MI · J. Smith, MI · C. Stevens, OK · B. Stevenson, MI · P. Symeonides, NY · S. Tamber, MI · S. Tamber, MI · G. Tarantola, FL · T. Teel, IN · T. Trullard, MI · Lyn. Vandelaar, MI · M. Vanderbeek, MI · H. Vann, MS · M. Waranowicz, MI · J. Wehr, MI · H. Whitt, MI · E. Whittier, FL · L. Williams, MI · K. Wilson, MI · D. Wolf, MA · W. Wright, CA · H. Yeung, CA · D. Young, MI · P. Zanetti, MI · J. Zanetti, MI · S. Zimmer, 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