

# Bring the **wow**

Journal of Dental Technology's

# WOW!

# 2024

**T**he JDT asked industry professionals to nominate products or services that save time, money, and improve the quality of dental laboratory work. A judging panel then researched and ranked the nominations. JDT thanks all who nominated the products and services that really bring the WOW to their day. The following items are the 2024 top-ranked WOW! winners in alphabetical order.

This highly qualified panel reviewed, researched and ranked all the nominations. JDT thanks the following individuals who voluntarily gave their time and expertise to create the 2024 WOW list.



### **Justin Gray, CDT**

*Ceramics Department Manager, Image Gallery CDL, Dublin, Ohio*

Justin Gray came to Image Gallery, CDL 17 years ago via Columbus College of Art and Design, where he earned his Bachelor of Fine Arts in Ceramics and Sculpture. He has put his critical eye and creative touch to good use in all areas of the lab. Justin has been an anterior ceramics specialist for many years and enjoys the unique opportunity to work closely with dentists and patients to follow through with the best possible results. When he isn't at the bench, he enjoys volunteering, attending art and music events, and most of all, traveling, cycling, and anything else outdoors with his wife.



### **Carrie Ling**

*Owner, Lifelike Dental Studio Inc., Temple, Texas*

Carrie Ling has owned and operated Lifelike Dental Studio Inc. alongside her husband, Chris, in their hometown of Temple, Texas. Carrie is a wife, mother of four, and a lab owner. She and Chris started Lifelike Dental Studio in 2005. Over the past 19 years, she has learned how to juggle the many different roles she has played, both in the lab and at home. She says the hardest part of her journey was, "learning to have a work/life balance...it is hard to do when you are married to each other, and you spend 24/7 together." Ling is excited about the growth of digital dentistry and looks forward to the opportunities it brings!



### **Tony Prestipino, CDT**

*President, Artifex Dental Lab Inc., Alexandria, Va.*

Tony Prestipino, CDT, completed the dental technology program at Northern Virginia College and received additional training at the Pankey Institute in Key Biscayne, Fla. He has been at Artifex Dental Lab since 1995 and president since 2008. He provides student and staff support at the University of Maryland School of Dentistry and is a past board member of both the NBC, NADL, and current board member of the Foundation for Dental Laboratory Technology. He lectures nationally on implant dentistry and is a published author and inventor.



### **Buddy Wester, CDT, TE**

*Ceramist, Veristic Dental Studio, Alpharetta, Ga.*

Thomas "Buddy" Wester, CDT, TE, is a ceramist with Veristic Dental Studio in Alpharetta, Ga. He graduated from Atlanta Area Technical School in 1981 and has been a Certified Dental Technician, TE, for 43 years. In 2007, he became a certified LVI Master Technician. Wester previously served on the board of the Florida Dental Laboratory Association, serving on several committees as well as president. In 2009, he began serving on the NBC, holding several roles as well as board chairman. He is happily married to his wife Tami; they are the proud parents of three children and eight grandchildren. In his free time, Buddy enjoys playing music, hunting, fishing, kayaking, hiking and spending time with family and friends.

# AO Polishing Cassette

*The entire surface area of the printed part is uniformly polished during printing, preserving the intricate details of the design.*

## Describe the product/service and what it does.

The AO Polishing Cassette is an innovative resin cassette designed to enhance the quality and efficiency of dental appliances produced on the Carbon platform. Utilizing advanced light scattering technology, this cassette smooths the entire surface of printed parts, including difficult-to-reach areas such as the intaglio surface of splints. This automatic polishing process not only improves the optical transparency of nightguards but also significantly reduces the amount of manual polishing. The AO Polishing Cassette is currently validated for use with Keystone KeySplint Soft®, Keystone KeySplint Hard®, and Desktop Health™ SmileGuard™ resins on the Carbon M2 printer.

## In what ways does it create efficiency and save money?

The AO Polishing Cassette is engineered to streamline the production process of dental appliances and reduce the cost of parts produced. By incorporating the AO Polishing Cassette in the printing process, it is possible for labs to reduce the amount of manual labor required to achieve a high-quality finish on nightguards. This can help labs achieve a more efficient production workflow and can help labs lower the production costs associated with manual finishing and polishing.

## How does quality improve?

The quality of printed products is improved with the AO Polishing Cassette due to its ability to produce clearer and



smoother parts directly off the printer. The advanced light scattering technology employed by the cassette ensures that the entire surface area of the printed part is uniformly polished during printing, preserving the intricate details of the design. This leads to nightguards with improved optical clarity and a higher-quality finish, reducing the amount of manual polishing that can potentially alter the accuracy of fit.

## How does this product/service bring the WOW to your customer's day?

Carbon is committed to partnering with our customers to help streamline their production processes and help them solve challenges. One of the most common challenges labs face today is the lack of experienced technicians and the high cost of analog labor. The AO Polishing Cassette brings the WOW factor to Carbon customers by providing an innovative printing method that produces nightguards that are clearer and have a better surface texture. Because this happens during the printing process, it reduces the amount of post-printing manual finishing time and associated labor cost and improves workflow efficiency.

B.J. Kowalski, CEO of ROE Dental Laboratory, says, "The new polishing cassette from Carbon allows nightguards to come off the printer cleaner, clearer, and significantly reduces post process polishing time. That's why we've switched all 3D-printed splints over to the new polish cassette."

**Carbon®**  
**(650) 285-6307**

[www.carbon3d.com/products/ao-suite-hardware](http://www.carbon3d.com/products/ao-suite-hardware)

# Argen Milling Services/ Support/Outsourcing

## Describe the product/service and what it does.

Argen's Digital Manufacturing Facility houses more than 150 printing and milling machines that run 24 hours per day, five days per week and are serviced by more than 100 trained personnel. With its state-of-the-art facility, Argen can produce the widest range of quality digital products in a fast turnaround. Milled zirconia units and bridges, custom abutments compatible with 16 leading platforms, milled gold and cobalt chrome (available in screw-retained bridges, crowns, and bridges), Selective Laser Melting (SLM), CAD/Cast Digital Precious Metals (DPM), milled and 3D printed bite splints, 3D printed dentures, 3D printed models, PMMA, wax, and clear aligners are available. Argen offers high-quality design services for labs requiring extra assistance. Argen continually innovates and will offer additional fixed and removable solutions.

## In what ways does it create efficiency and save money?

Equipping a lab to support a fully in-house digital workflow is costly and time intensive. Building and/or expanding a lab also requires additional facilities/space, rent, insurance, utilities, and staff needed to run additional infrastructure. The steep financial investment and resource burden is a common barrier when entering the digital market. Argen helps labs avoid these issues by serving as an extension of the dental lab with its digital production services. Argen has prioritized the expansion and optimization of its digital center, investing heavily in talent, technology, and equipment. Argen's manufacturing capabilities enable a high volume of quality products to be produced quickly and affordably. In turn, dental labs benefit from an end-to-end digital workflow while bypassing cost and time barriers typical to labs interested in going digital.

## How does quality improve?

Argen's broad product selection means dental labs can conveniently source all their product and service needs through Argen Digital. Argen is the single source for digital dentistry solutions and helps labs remain competitive in the industry, regardless of the lab's technical capabilities or experience. With Argen's efficient manufacturing processes, labs receive units in just two business days without the labor, management, inventory, or rework headaches that go along with running your own lab.



## How does this product/service bring the WOW to your customer's day?

Labs choose Argen for the convenience, accuracy, quality, and efficiency provided by Argen's San Diego-based state-of-the-art manufacturing facility. Labs trust Argen to provide them with the best products at competitive prices and endorse Argen's dedicated support, dependable service, and fast turnaround times. Additionally, customers appreciate Argen's commitment to dental labs worldwide and its efforts to be a true digital partner to all labs.

"Choosing the right outsourcing partner is crucial. At my lab, we have mills, printers, and ovens to help us complete our work. However, acquiring new equipment can be costly, and our workload fluctuates each month. Some months are busier than others, while some are slower, yet we still have to make payments on the equipment. This is why I partner with Argen. When we experience an overflow of work, I can send it to Argen and get the cases back in two days. By outsourcing to Argen, you can save money and spend it on a trip with your family." — Jose Luis Banos, Technician Director, Prosthetic by Jose

**Argen**  
**(800) 255-5524**  
**Argen.com**



*Argen offers high-quality design services for labs requiring extra assistance.*

# Axsys Technical Educational Services

## Describe the product/service and what it does.

Finally, dental labs and practices can upgrade their CAM skills and milling strategies. Axsys Technical Educational Services has launched two virtual education programs to provide true machining training to the dental community. Axsys has over 800 man-years of experience in digital manufacturing and has developed milling strategies to solve some of the industry's biggest problems, including game-changing solutions such as milling full-arches in under 60 minutes! This training is unique to the industry and provides the necessary skills development to compete in today's market. Training can be customized to your business challenges and can be delivered in two ways:

- Internet-based one-on-one distance learning workshops concentrating on four key areas:
  - ◆ Principles of machining
  - ◆ Cutting tool technology
  - ◆ Machining strategies
  - ◆ Jigs and fixtures
- Instructor-led "Power-Assist" internet-based training to front-end our traditional classroom-based training curriculum

With the Power Assist program, we've combined self-paced internet-based training, training collaterals, and Mastercam software that is power-assisted by one of our expert application engineers to get students up to speed and productive in the shortest possible timeframe.

*This training is truly unique in the dental business and provides incremental skills development.*



Students enrolled in the Mastercam Mill 2D Power Assist program receive access to online Mastercam University training to learn Mastercam at their own pace, with four specific break points defined during the 12-lesson curriculum to have one-on-one web sessions with a senior Axsys instructor.

## In what ways does it create efficiency and save money?

Training is applicable to ANY milling machine and ANY CAM software and provides insights into how software and machine characteristics affect operation costs, machine cycle time, tool life, quality of restorations, remakes, and more.

## How does quality improve?

Students are able to create restorations faster, with more anatomic detail, thinner margins, and less post-machining handwork.

## How does this product/service bring the WOW to your customer's day?

Students learn milling and toolpath strategies that not only provide great personal satisfaction, but increase profitability, quality and speed while providing the ability to effectively machine new dental materials as they are introduced to the market.

"As dental technicians we tend to focus more on CAD and great design, but the Axsys training program has shown us an entirely new frontier to dental technology with the world of CAM that most know very little about. Axsys taught us milling and toolpaths/strategies that not only increase profitability but also quality and speed, especially when a new material puck is being introduced to the market. Therefore, we are encompassing the whole realm of dental technology which in the end means higher satisfaction for both the dentists and their patients. Simply put, until you take this kind of training, 'you don't know what you don't know.'" — Rob Teachout, CDT, BSc. Patriot Dental Lab

**Axsys Dental Solutions**

**(855) 687-7941**

**Axsysdental.com**

**[www.axsysdental.com/VirtualDentalAcademy.html](http://www.axsysdental.com/VirtualDentalAcademy.html)**

# Cajun Cutters

## Describe the product/service and what it does.

Cajun Cutters, a line of non-premium milling tools exclusively branded for Nowak Dental Supplies, are designed to enhance the precision and efficiency of dental milling procedures. These tools feature an extended reach, making them ideal for removing material from deeper cavities that are typically challenging to access. Specially engineered in collaboration with Hyperdent and Millbox, Cajun Cutters are tailored to fit seamlessly into modern dental CAD/CAM workflows. They stand out for their robustness and adaptability, making them a staple in dental labs aiming for top-notch production quality without the premium price tag.

## In what ways does it create efficiency and save money?

Cajun Cutters streamline the milling process by reducing the need for multiple tool changes and manual adjustments. Their extended reach allows technicians to work on complex cases with fewer interruptions, significantly cutting down the production time. This efficiency translates to cost savings by maximizing throughput and minimizing labor hours. Furthermore, the durability of Cajun Cutters reduces the frequency of tool replacements, lowering the overall operational costs. By integrating these tools into their workflow, dental labs can achieve more with less, optimizing both time and resources.

## How does quality improve?

Quality is at the heart of Cajun Cutters' design. The precision engineering behind these tools ensures that each cut is smooth and accurate, reducing the risk of errors and rework. The extended reach capability allows for meticulous attention



to detail in deep cavity preparations, leading to superior fitting restorations. Additionally, the collaboration with Hyperdent and Millbox ensures that the cutters are perfectly compatible with advanced milling strategies, enhancing the overall quality of the final dental products. Consistent performance and reliable outcomes mean that dental professionals can trust Cajun Cutters to deliver exceptional results every time.

## How does this product/service bring the WOW to your customer's day?

Cajun Cutters consistently exceed expectations, bringing a WOW factor to dental professionals' daily operations. Customers appreciate the seamless integration into their existing workflows and the noticeable improvement in efficiency and quality. Quotes from satisfied users highlight the transformative impact these tools have on their practice.

"Since switching to Cajun Cutters, we've seen a significant reduction in our milling times without compromising quality," says Dr. Jane Smith, a leading prosthodontist.

Generally speaking, the reliability and performance of Cajun Cutters provide a competitive edge, allowing dental labs to meet tight deadlines and deliver outstanding restorations that impress both dentists and patients alike.

In summary, Cajun Cutters are not just tools but a game-changer in dental milling, offering efficiency, cost savings, enhanced quality, and a WOW experience that sets them apart in the industry.

**Nowak Dental Supplies**  
(800) 654-7623  
[www.nowakdental.com](http://www.nowakdental.com)



*The precision engineering behind these tools ensures that each cut is smooth and accurate, reducing the risk of errors and rework.*



# DGSHAPE DWX-53DC

## 5-Axis Dry Dental Mill with Automatic Disc Changer

### Describe the product/service and what it does.

Roland DGA's DGSHAPE DWX-53DC delivers the latest innovation for the ultimate dry dental milling experience with 24-hour capabilities. This immersive technology is designed to maximize productivity with seamless predictability. We are changing the world of dental labs with our affordable, open-architecture digital milling solutions.

### In what ways does it create efficiency and save money?

The Roland DGA DGSHAPE DWX-53DC is equipped with a redesigned spindle for 3x gripping power, and more efficient milling of PMMA applications. The user-replaceable spindle can be replaced effortlessly in a matter of minutes without the need to call or schedule a service technician. No special tools, testing or training are required. That's efficiency!

The single-flute 4mm tool brings you faster roughing of PMMA, which is exclusive to the DWX-53DC and a built-in webcam that allows for real-time monitoring. The integrated webcam allows for monitoring from anywhere, anytime, on any device. These enhancements reduce downtime and save money for your dental business.

Supercharge milling productivity with the 24-hour automatic disc changer, which provides 50 percent faster exchange compared to other models. 24-hour milling extends your workday, extends your work week, and expands your capacity.

### How does quality improve?

The DGSHAPE DWX-53DC covers all the details. With 5-axis milling, a smooth and steady ball screw-driven system provides superior milling re-



sults—simultaneously rotating and tilting discs for deep undercuts and milling large restorations and other full-mouth prosthetics. This mill's ability to work with multiple materials allows for improved control of your inventory. Materials such as PMMA, zirconia, wax, composite resin, PEEK, gypsum, glass-fiber-reinforced resin, and pre-sintered chromium cobalt are all compatible with the DWX-53DC. Load up to six material disc adapters to include a combination to suit the needs of your business.

The NEW automatic eco-system minimizes mill maintenance with included extraction unit and connection cable. Combine this with our newly redesigned robust spindle for 3X gripping power and you now have speed and performance all within a cleaner footprint.

Peace-of-mind, reliability and support. Roland DGA's DGSHAPE DWX-53DC dry milling solution delivers digital solutions that make it incredibly easy for labs to produce high-quality, cost-effective dental prosthetics and restorations while improving workflow efficiencies and maximizing ROI.

### How does this product/service bring the WOW to your customer's day?

Faster... Stronger... Cleaner, all in ONE! At DGSHAPE, we take a purpose-driven approach to the process of innovation. Our focus on customer needs, opportunities and product design enables us to consistently deliver value to dental labs like yours.

"One of the nice things that has been developed with this mill is the torque that it takes to mill the plastics and that allows for accurate and faster milling." — *Kris Schermerhorn, CDT, owner, Northern Virginia Dental Lab*

"This machine is open source, so we are not locked into one set of materials from an individual company, we've got a lot of options as to what we want to do...its just been an amazing, amazing tool." — *Cristian Lagos, Wellington Street Dentures*

The DWX-53DC is dental milling workflow reimagined: unattended, intelligent, 24-hour productivity that requires no special tools, testing or training, and provides more efficient, predictable restorations for your lab. That's the WOW that DGSHAPE brings to your business!

**Roland DGA Corporation**  
(855) 431-0311  
[www.rolanddga.com/dwx-53dc](http://www.rolanddga.com/dwx-53dc)



*We are changing the world of dental labs with our affordable, open-architecture digital milling solutions.*



# exocad's DentalCAD 3.2 Elefsina

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## Describe the product/service and what it does.

DentalCAD 3.2 Elefsina is exocad's globally renowned CAD software for labs and full-service clinics. DentalCAD is exocad's powerful tool for experts and beginners alike. The software is designed for dental technicians who want to create outstanding dental restorations. From quick volume production to the most complex, customized solutions—DentalCAD meets the evolving needs of dental professionals.

## In what ways does it create efficiency and save money?

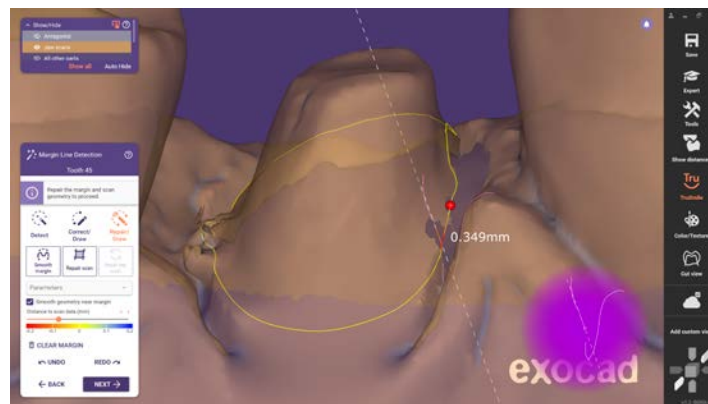
With more than 60 new features created to optimally fulfill customers' requirements, DentalCAD 3.2 Elefsina offers new and improved workflows—from treatment planning to design and manufacturing. DentalCAD is known for its speedy operation and ease of use, helping to minimize training costs and maximize productivity. The software is reliable and robust when solving complex restoration design cases.

## How does quality improve?

DentalCAD 3.2 Elefsina includes many time-saving features. The new preparation margin repair tool enables users to make the most out of imperfect intraoral scans—users can fix margins to get an acceptable result despite artifacts or holes in the scan. A new auto-articulator offers fully automatic consideration of dynamic occlusion. Also included is a new integration of compact milling machines. Users can select their preferred block and start production seamlessly from within their CAD software, and switch tooth libraries while keeping their previous setup.

New tools in the Smile Creator module bring users more predictability and better planning options. Users can now design virtual gingiva for more realistic outcomes and create smiles based on patients' natural teeth. The ability to adjust the 3D rendering to the camera's focal length enables a more precise photo-driven smile design.

With the Bite Splint Module in DentalCAD 3.2 Elefsina, users can now enjoy more automation in their bite splint design and save design time. The Full Denture Module includes a new



Above: The new preparation margin repair tool enables users to fix margins to get an acceptable result despite artifacts or holes in the scan.



Left: With the Smile Creator module, users can now design virtual gingiva for more realistic outcomes and create smiles based on patients' natural teeth.

feature to rapidly copy an existing denture in a highly automated workflow. This provides a faster and more cost-effective alternative to relining, leveraging recent advances in 3D printing. In addition, dentures on ball attachments are now supported. An add-on module for the Ivoclar Ivotion™ Denture System is now available as well, in conjunction with a dedicated tooth library, available from Ivoclar.

To improve collaboration between labs and doctors, clinicians can now share external case-related files like images, videos and X-rays with exocad DentalCAD users via the MyiTero™ portal. The new bi-directional case communication allows DentalCAD users to share their 3D designs with the doctor for an efficient preview-and-approval process. Within the CAD software, lab users can also validate margins with iTero intraoral camera images and visualize internal tooth structure with iTero NIRI (Near Infra-Red Imagery) technology.

## How does this product/service bring the WOW to your customer's day?

"DentalCAD 3.2 Elefsina delivers the exciting functionalities dental experts have been waiting for," said Tillmann Steinbrecher, CEO of exocad. "The new release offers more automation, speed, and intuitive workflows from CAD to CAM."

**exocad America**  
**(855) EXO-4CAD (396-4223)**  
**exocad.com/dentalcad-elefsina**

Right: The Full Denture Module includes a new feature to rapidly copy an existing denture in a highly automated workflow.





# Harvest Nano<sup>®</sup> Zirconia

## Describe the product/service and what it does.

For a dental lab manager, every day feels like a race against the clock. The pressure mounts as deadlines loom, cases stack up, and hands are short. Adding to the stress, the fixed constraints of zirconia workflows –sintering time, glaze firing and manufacturing yield – become painfully evident.

It is for this truth that Harvest Nano<sup>®</sup> Zirconia exists – a visionary material that intently positions itself with differentiated value in the following workflow territories:

### Speed Sintering response

Sinter up to 50 single units in as little as 60 minutes.

### Polish optimization

Polish surfaces to a high shine in seconds.

### Minimized shrinkage

Yield up to 10% more crowns per disc.

Harvest Nano<sup>®</sup> Zirconia exhibits these benefits and goes even further. But what's the secret? Nanometer particles. No organic binders.

Boasting 50% translucency and 1,200 MPA, Harvest Nano<sup>®</sup> is indicated for All-on-X, single crowns and bridges, large and small.

And...proud to say, it's made right here in the US of A.

## In what ways does it create efficiency and save money?

### Faster Production

Faster sintering means more units in a day with less labor.

### Quicker Polishing

Pre-polished out of the mill means a quicker high shine with less effort.

### Greater Profit

No binders mean 20% less shrinkage resulting in 1-3 more units per disc.



*Harvest Nano<sup>®</sup> Zirconia contains no binders, but instead, densely fuses nano particles together.*

In addition, enhanced blended gradation, crack inhibition, and precision fit all characterize the advanced benefits of Harvest's binder-less, nano-particulate construction.

## How does quality improve?

Imagine smooth sand in comparison to rough gravel.

Isostatic pressed materials use organic binders to hold large, irregularly shaped micron sized particles together. Once binders burn out, voids and pores are formed which lengthen sintering times, polishing effort and expand shrinkage rate.

By contrast, Harvest Nano<sup>®</sup> Zirconia contains no binders, but instead, densely fuses nano particles together that are akin to the size of smoke. Quality is improved in significant ways, promoting super-fast sintering, high polish ability and lower shrinkage rate.

Each meticulous step, from particle size control to sintering, contributes to creating a material that not only sinters faster, polishes easier, and shrinks substantially less, but exhibits natural gradation without lines and enhanced translucency without overloading on yttria.

And finally, what does Harvest Nano<sup>®</sup> mean for the patient, who is the north star for all of us?

Natural esthetics and extreme friendliness to opposing dentition.

## How does this product/service bring the WOW to your customer's day?

"As the owner of a production dental lab, every material choice is highly scrutinized. For us to change the material we use in our production lines, it must exceed expectations. We never thought it was possible to experience this level of quality and speed. Needless to say, our expectations are being exceeded every day."

—Jay Collins, The Dental Lab | Cornerstone

**Harvest Dental**  
**(714) 674-7400**  
[www.harvestdental.com](http://www.harvestdental.com)



# Ivotion Denture System

## Describe the product/service and what it does.

The Ivotion Denture System offers a seamless and fast digital manufacturing process for fabricating top-quality removable dentures. Ivotion combines a highly proven cross-linked PMMA tooth material with a premium denture base material. This is accomplished by a state-of-the-art manufacturing process that produces a tight chemical bond between the two materials to produce a smooth transition and a stress-free monolithic disc.

Due to the disc's unique Shell Geometry, complete dentures are milled from one disc in one uninterrupted milling process without any time-consuming manual working steps. The Shell Geometry is a data-based, three-dimensional tooth and dental arch structure which is designed for fabricating upper and lower dentures. This innovative technology is located within the disc and defines the transition between the tooth and the denture base parts of the disc. This digital technique allows you to fabricate dentures for a wide range of jaw shapes and sizes.

Ivotion also offers flexibility and esthetics offered by our two disc process via the Ivotion Dent and Ivotion Base discs. This manufacturing process involving two discs is characterized by exceptional individuality and flexibility. It enables you to tackle even the most challenging cases.

## In what ways does it create efficiency and save money?

Ivotion combines proven high-quality tooth and denture base materials in a single, bi-color disc and provides digital laboratories with an efficient, predictable monolithic



milling solution. Efficient design strategies offer the freedom to customize and morph the shape of individual teeth for patient-specific dentures. Since Ivotion is a truly monolithic disc, dentures can be milled in one uninterrupted milling process, eliminating the denture tooth bonding process and only requiring polishing prior to delivery.

## How does quality improve?

There are many ways quality is improved with Ivotion. For the technician, it reduces working and production time, gives predictable results, and there is no polymerization shrinkage or porosity formation. For the dentist, Ivotion offers easy and fast reproduction, good suction effect, and fewer patient visits. Finally, for the patient, Ivotion offers natural-looking esthetics, comfort, and a denture that is easy to clean and hygienic.

## How does this product/service bring the WOW to your customer's day?

Built on years of research and development, Ivotion uses time-tested materials to produce a high-quality denture for patients. What makes technicians say WOW is the esthetic result with reduced manual working time. For doctors and patients, they can't believe the precise fit and function of the denture.

**Ivoclar**  
 (800) 533-6825  
[www.ivoclar.com/en\\_us](http://www.ivoclar.com/en_us)



*This digital technique allows you to fabricate dentures for a wide range of jaw shapes and sizes.*

# M3 Max

*The space-saving M3 Max is engineered to propel parts to the next step in dental labs' workflows.*

## Describe the product/service and what it does.

The Carbon M3 Max printer is designed to meet the needs of dental labs requiring high daily print outputs. It offers the largest printing platform in the M-Series lineup, while performing with the same reliability as the other models. The M3 Max prints twice as fast as the M2 and boasts a build area 2.2 times larger than the M2 and M3, making it ideal for growing dental labs that need to maximize throughput.

## In what ways does it create efficiency and save money?

The M3 Max's build volume and print speed are designed to optimize part throughput. By combining around double the print speed of the M2 and a 2.2 times larger build area, it handles the workload of multiple smaller printers, maximizing output per shift. The space-saving M3 Max is engineered to propel parts to the next step in dental labs' workflows quickly making it more efficient for dental labs in both speed and footprint.



## How does quality improve?

The M3 Max ensures high print accuracy and repeatability thanks to its true 4K light engine, which maintains consistent pixel density even with the increased build area. Utilizing next-generation Carbon Digital Light Synthesis™ (DLS™) technology, the M3 Max printer produces precise and accurate parts consistently. Resins validated for printing on M-Series printers can be printed on the M3 Max, giving labs options to print many dental applications including dentures, nightguards, mouthguards, castables, and all-on-x long-term provisionals.

## How does this product/service bring the WOW to your customer's day?

The M3 Max brings the WOW factor to Carbon customers by providing the largest build platform in the M-Series printer lineup combined with highly accurate parts from cutting-edge Carbon DLS print technology. Customers also benefit from Carbon's proven reliability, including: regular software updates that often improve printer performance, remote monitoring of critical components, and fast, comprehensive support.

Sam Wainwright, Head of R&D at Dandy, says, "With the speed gained and build platform size, there seems to be no loss of accuracy or repeatability. It's quite impressive how fast and how big this platform is... as a lab, that's what you want."

**Carbon®**  
**(650) 285-6307**  
[www.carbon3d.com/products/m3-3d-printer](http://www.carbon3d.com/products/m3-3d-printer)

# Panthera Fusion Bar

## Describe the product/service and what it does.

The Panthera Fusion Bar™ (PFB) is an advanced dental restoration solution by Panthera Dental. Engineered shape, form and function based on dental science, the PFB solution offers integrated strength and durability of the titanium and implant compatibilities of Panthera's implant bar to support your overlay. The PFB allows for in-lab milling of the overlay while Panthera manufactures the implant bar, ensuring a seamless and synchronized workflow. You can let Panthera mill both the implant bar and overlay; the choice is yours.

Choose your own adventure with the Panthera Fusion Bar™!

## In what ways does it create efficiency and save money?

We know that time is money for our laboratory partners, which is why we developed the PFB solution by putting ourselves in the place of dental technicians and understanding the challenges they face every day.

That's why we came up with a streamlined solution offering less for more:

- Less zirconia fracture with 30 percent higher resistance thanks to the implant bar;
- No downtime thanks to the simultaneous production of the implant bar and the zirconia overlay;
- No bone reduction needed, saving surgical time, cost and complexity, thanks to the low-profile;
- No physical material shipment thanks to the digital workflow (You Scan, We Design);
- No need for multi-unit abutments or Ti bases thanks to the implant bar;
- No more worries for long-term issues thanks to the 25-year warranty and titanium's renowned durability.

## How does quality improve?

The Panthera Fusion Bar™ significantly enhances the quality of dental restorations through its precise design and engineering. A couple of similar solutions are available on the market, but the PFB is the only one that was developed and engineered based on dental science to enhance quality features such as the rounded top profile to avoid pressure points, vertical lingual seating and 10-degree buccal chamfer for perfect seating position, 100-micron constant cement gap, and low transition line. The durability of the titanium implant bar and the high fracture resistance guarantee long-lasting,



*PFB was developed and engineered based on dental science.*



reliable restorations. The proprietary software of Panthera ensures the ideal split from a denture try-in to a separate implant bar and overlay, making two parts that fit perfectly together.

These are all features that guarantee a quality product, developed for dental technician needs.

## How does this product/service bring the WOW to your customer's day?

Not only does it bring a WOW, it brings multiple WOWs for labs and dentists!

Dental technicians love the synchronized digital workflow with no downtime and no material to ship, maximizing the overall production efficiency and significantly reducing turnaround time. Not to mention, the unmatched implant compatibilities, up to 130 implants for digital workflows and more than 700 for analog workflow, makes Panthera the partner of choice for any brand of implant.

Dentists love the durability of the PFB solution that offers a 25-year warranty for the implant bar and a 30 percent higher fracture resistance of the zirconia. No surgery is needed for bone reduction thanks to the low profile of the bar, as low as 8mm, precisely designed to replicate the patient planned intaglio contours.

The final WOW: A little extra to try it and love it – Discover the Panthera Fusion Bar origin in the video "BACK TO THE FUSION" and redeem your discount to try the PFB solution at [www.pantheradental.com/fusion-bar](http://www.pantheradental.com/fusion-bar).

**Panthera Dental**  
(418) 527-0388 | (855) 233-0388 (toll free)  
[www.pantheradental.com](http://www.pantheradental.com)