CAD/CAM FOR THE DENTAL PRACTICE

in Practice

SETTING NEW STANDARDS IN DIGITAL DENTISTRY

“With Axsys, I get a decrease in my costs and a growth in my practice, plus complete control over timeliness and quality.”

Dr. Brandon Kofford
Royal Oak Dental Group
WHY EARLY ADOPTERS FAILED AND WHY YOU WILL SUCCEED

Technology has changed. Early adopters of digital dental technology were plagued with many problems and as a result, did not realize the quality and profit benefits anticipated for their chair-side digital manufacturing investment.

Another contributing factor to this failure was these so-called "machines" lacked the rigidity of construction, fixtures, quality components, speed, versatility, and size to reliably, consistently, and effectively produce the various restoration types that are required to enable doctors to maintain or grow their practice.

inPractice.
FUTURE-PROOF SOLUTIONS

The field of digital dentistry continues to evolve. With inPractice, you need not worry about expanding technology or advances in materials. inPractice is based on an adaptable digital platform which includes our exclusive enhancements, providing you with technology that will serve your needs both now and in the future- enabling you to process new dental materials as they are developed. This OPEN platform provides you freedom to choose material, scanning, and software components that best fit your practice.

The feature-rich and easy-to-use cameo Dental CAD/CAM Suite provides software that supports the design and manufacture of a wide range of dental prosthetics and restorative components for single- and multiple-unit restorations. Our solution update program ensures you always have the latest technology at your disposal.

With inPractice solutions you can provide your patients with the full spectrum of dental restorations, from the thinnest ceramic veneers to a complete oral rehabilitation. From diagnostic wax-up prototypes and acrylic occlusal splints to custom titanium abutments and full-arch bars, inPractice is an affordable, in-office non-stop workhorse.
There are two main benefits I have received from Axsys Dental Solutions for my business:

One is predictability, I have complete control over the quality and timeliness of the products that I need.

Another benefit I get from Axsys Dental Solutions is an improvement in my cash-flow.

Patients get really excited about what I can do for them and they share that with others so it's growing my practice. I get a decrease in my cost as well as a growth in my practice.

Dr. Brandon Kofford
Royal Oak Dental Group

inPractice.

TAKE CONTROL

Take control over the success of your treatments with robust, innovative technology that allows you to create restoration designs to meet exact, patient-specific requirements.

STAND OUT

Separate your practice within your community and among your peers with superior technology that produces the best possible clinical results.

DELIGHT YOUR PATIENTS

With inPractice solutions' expertly-tuned CAD libraries, CAM machining templates, and machine accuracy of within 5 microns, your dental restorations will have consistent precision fits you never thought possible—the first time. If a restoration ever needs to be replaced, it can be re-milled quickly at the touch of a button and at a cost savings of up to 90% compared to traditional laboratory fabrication.

GROW YOUR PRACTICE

Elevate the quality, fit, finish and margin quality of your restorations. Increase profitability by eliminating remakes, decreasing installation time and eliminating unnecessary patient re-visits.

Patients appreciate technology and they expect quality care. They rely on you to deliver the promise of digital dentistry. Implementing an inPractice solution in your office will enable you to deliver on that promise with shortened fitting times, better fitting, more aesthetic prostheses with greater anatomic detail. These happier patients will enable you to grow your practice while realizing greater profits.
TAKE CONTROL

GROW YOUR PRACTICE

Take control over the success of your treatment with robust, innovative technology that allows you to create restoration designs to exact patient-specific requirements.

Elevate the quality, fit, finish and margin quality of your restorations. Increase profitability by eliminating remakes, deceasing installation time and eliminating unnecessary patient re-visits.

STAND OUT

Separate your practice within your community and among your peers with superior technology that produces the best possible clinical results.

There are two main benefits I have received from Axsys Dental Solutions for my business. One is predictability, I have complete control over the quality and timeliness of the products that I need. Another benefit I get from Axsys Dental Solutions is an improvement in my cash-flow. Patients get really excited about what I can do for them and they share that with other. So it is growing my practice. I get a decrease in my cost as well as a growth in my practice.

With inPractice solutions’ expertly tuned CAD libraries, CAM machining templates, and machine accuracy of within 5 microns, your dental restorations will have a consistent, precision fit you never thought possible—the first time. If a restoration ever needs to be replaced, it can be re-milled quickly at the touch of a button and at a cost savings of up to 90% compared to traditional laboratory fabrication.

Dr. Brandon Kofford
Royal Oak Dental Group

INDUSTRIAL QUALITY
IN A SMALL FOOTPRINT

Beyond the unsurpassed quality restorations provided by Versamill precision dental machining centers and other products associated with our Digital Dentistry Suite of products, there are many other characteristics that make Versamills perfect for any dental office. These include:

- Minimal post-machining handwork.
- Short machine cycle times for same day restorations if required.
- Small footprint.
- Open system (freedom to choose system components and consumables).
- Whisper-quiet 5-axis machining center.
- Fast, accurate and easy to operate.
- Wet milling provides clean operation free of equipment damaging, caustic and abrasive contaminates (typical of dry-machining operation).
- Trouble-free.
**INTEGRATED PRODUCTS IN THE DIGITAL WORKFLOW**

<table>
<thead>
<tr>
<th>SCANNING</th>
<th>CAD DESIGN</th>
<th>CAM</th>
<th>MACHINING</th>
<th>HAND-WORK</th>
<th>HARDENING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image of a dental scanner" /></td>
<td><img src="image2.png" alt="Image of a computer" /></td>
<td><img src="image3.png" alt="Image of a milling machine" /></td>
<td><img src="image4.png" alt="Image of a dental restoration" /></td>
<td><img src="image5.png" alt="Image of a hand-staining tool" /></td>
<td><img src="image6.png" alt="Image of a sintered zirconia block" /></td>
</tr>
</tbody>
</table>

**Digital models are required as the first step in fabricating restorations utilizing the digital workflow. The initial data can be captured digitally via an intraoral scanner or via a scan of a impression or model utilizing a 3D dental scanner.**

**Computer Aided Design (CAD) software utilizes the data captured from the scanning process allowing for the step-by-step design of the appropriate dental prosthesis.**

**Computer Aided Manufacturing (CAM) software is used to process the restoration design from the CAD software. This includes selection of restoration type, nesting into material disk, cutting bur selection, machine spindle speed and cutting feeds as well as simulation and verification of the machining process.**

**Axsys provide Dental CAM Software Solutions from a variety of industry leading software publishers whose solutions enable medical professionals to design and manufacture dental products.**

**Machine language code generated by the CAM system is transferred to a Computer Numerical Controlled (CNC) milling machine where the restoration is machined from raw stock. Machines are available in 3, 4 and 5 axis control for wet (utilizing coolant) or dry (requiring a filtration and vacuum system).**

**In addition to staining, post-machining hand-work is necessary to assure the quality of the finished restoration. The amount of which is largely determined by the quality of the design, the effectiveness of the “tool-path” generated in the CAM process, the quality of the machine tool and cutting burs. Includes removal of pins, machine marks and margin clean-up.**

**Sintering of zirconia and crystallization of glass-ceramic material is required to achieve maximum strength for green-stage blocks. Our Mil-M-Yogi speed sintering furnaces offer precise program control and save you valuable production time and shorten the sintering process substantially.**
inPractice.
WHAT OUR CLIENTS SAY

"AXYS’ EXTENSIVE MANUFACTURING AND CAD/CAM EXPERTISE IS UNLIKE ANY OTHER SUPPLIER OR DISTRIBUTOR OF THIS TECHNOLOGY. NOBODY ELSE CAN DO WHAT THEY DO."

Dr. Khajouian Attar, DDS
Sun Dental & Dentures

"MILLING TECHNOLOGIES ARE NEW IN DENTISTRY AND APPLICATIONS ARE STILL BEING INVENTED. THE TEAM HELPS CREATE ONE-OF-A-KIND SOLUTIONS FOR INDIVIDUAL PROBLEMS. I HAVE CALLED THE TEAM WITH QUESTIONS, AND IDEAS FOR SOLUTIONS ALMOST WEEKLY FOR THE LAST YEAR. THEY HAVE YET TO LET ME DOWN WITH DESIGN ISSUE, IMPLEMENTATION, OR ANY OTHER CHALLENGE. THE SUBSTANTIAL NATURE OF THIS MACHINE AND THE AXYS TEAM IS WELL WORTH THE TIME AND FINANCIAL INVESTMENT."

Robin D. Henderson, DMD, MS
Oklahoma Center for Implants & Periodontics

"THE RESTORATIONS ARE SO ACCURATE THEY REDUCE MY DELIVERY TIME BY ALMOST 50% WHICH HAS A HUGE IMPACT ON US FINANCIALLY. NOW THE RESTORATIONS DON’T NEED AS MANY ADJUSTMENTS OR REFINEMENTS IN ORDER TO COMPLETE THE APPOINTMENT."

Dr. Mark Friedman, DDS
Friedman Dentistry

"THE VERSAMILL, LIKE ITS NAME IMPLIES, IS EXTREMELY VERSATILE. THE MACHINES FROM AXYS INCLUDE MANY EXCLUSIVE ENHANCEMENTS TO INCREASE RELIABILITY. IT ALLEVIATES MANY CONCERNS AND THEIR CUSTOM TEMPLATES ENABLE ME TO HANDLE THE MOST COMPLEX OF CASES. THE QUALITY OF THE MILLED RESTORATIONS IS NOTICEABLE. WHEN I COMPARE OTHER COMPANIES’ MILLED RESTORATIONS WITH OURS FROM THE VERSAMILL, IT IS LIKE WATCHING A HI-DEFINITION 4K TELEVISION."

Dr. Jonathan Abenaim DMD
Jonathan Dental Spa
Based upon an OPEN, adaptable digital platform, all components of the inPractice portfolio can be combined to suit your current and expanding needs. Based upon our many years of digital manufacturing experience, we have developed pre-configured packages designed to make the decision-making process as easy as possible. Each package is configured to meet your needs and includes the training and support you need so you can implement the latest in digital dental technology as quickly and as easily as possible.

For restorative dental practices, our Restore solution provides the ability to process a wide range of indications and dental materials. It is the most cost effective of the inPractice digital dentistry solutions.

For the prosthodontic specialist, our Restore+ solution provides the ability to process a wide range of indications and dental materials. Adds the ability to process custom abutments.

For dental practices with a practice laboratory, Premier provides the ability to process the complete spectrum of indications and dental materials including cobalt-chrome bar overdentures.
Take control over the success of your treatment with robust, innovative technology that allows you to create restoration designs to exact patient-specific requirements. Elevate the quality, fit, finish and margin quality of your restorations. Increase profitability by eliminating remakes, decreasing installation time and eliminating unnecessary patient re-visits.

Elevate the quality, fit, finish and margin quality of your restorations. Increase profitability by eliminating remakes, decreasing installation time and eliminating unnecessary patient re-visits.

STAND OUT
Separate your practice within your community and among your peers with superior technology that produces the best possible clinical results.

There are two main benefits I have received from Axsys Dental Solutions for my business. One is predictability, I have complete control over the quality and timeliness of the products that I need. Another benefit I get from Axsys Dental Solutions is an improvement in my cash-flow. Patients get really excited about what I can do for them and they share that with other. So it is growing my practice. I get a decrease in my cost as well as a growth in my practice.

With inPractice solutions’ expertly tuned CAD libraries, CAM machining templates, and machine accuracy of within 5 microns, your dental restorations will have a consistent, precision fit you never thought possible—the first time. If a restoration ever needs to be replaced, it can be re-milled quickly at the touch of a button and at a cost savings of up to 90% compared to traditional laboratory fabrication.

Dr. Brandon Kofford
Royal Oak Dental Group

FOR THE PROSTHODONTIST
Custom Implant Abutments & Bar Overdentures

Coupling Axsys’ expertise with the quality and precision of Versamill technology provides the most comprehensive abutment & bar machining solution available. Produce superior quality and handle the widest variety of design characteristics - even those of extreme divergence.

- Best possible restorative margins.
- Most aesthetic emergence profiles.
- Super-fine surface finishes.
- Perfect fits.
- Easily handle complex case such as six implant secured restorations.
- Precise retention locations.

Making the transition to digital manufacturing can be a frightening proposition. After nearly 40 years of helping companies make the transition from old analog methods to digital methods, Axsys knows how to do it successfully. Even if you have little computer experience, our training programs enable you to successfully transition to the digital world in a short period of time.

Beyond training, Axsys supports you with highly skilled and experienced application engineers to address any questions, problems, or difficult cases that may appear during your day-to-day operations. They’re even available when it’s time for you to expand the offerings of your practice or explore new ideas to address your individual needs or plans for growth.
inPractice Restore is a full-featured system for the restorative practitioner and is focused on fixed restorations. It has the ability to fabricate models and restorations ranging from single-tooth crowns to full-arch rehabilitations from materials that include; zirconia, PMMA, lithium disilicate and more, there is nothing “entry-level” about inPractice Restore except the cost of the solution. Practices requiring removable prosthesis can add an optional module to facilitate the creation of implant bridges and more from soft dental materials such as zirconia and PMMA.

- Full-featured CAD & CAM software.
- High-performance CAD/CAM workstation.
- DOF UHD precision 3D scanner.
- Versamill 5X400 dental machining center.
- Full 5-axis machine  operation.
- Training & more...
SINGLE TOOTH RESTORATIONS
AND MUCH, MUCH MORE.

At the heart inPractice Restore stands our Versamill SX400 precision
dental machining center designed to perform reliably with high-precision for
the long term. It can process any dental material from zirconia and PMMA to
delicate glass ceramics.

With inPractice Restore you get a complete, industrial-quality
manufacturing solution used by dental laboratories and milling centers around
the world but specifically designed to meet the demanding support
requirements of dental practices.

INDICATION SPECTRUM:

- Inlays, onlays, copings, crowns,
  veneers, splints, guides.
- Removable & fixed bridges, models,
  bars (with optional modules).
- Full range of soft dental materials.
- Block sizes up to 40mm.

REvOLUTIONARY UHD

DOF Freedom UHD premium 3D
scanner with powerful Ultra
High-Definition (UHDI) resolution
and DOF’s patented Stable Scan
Stage (SSS) technology.

5.0MP cameras within the Freedom
UHD provides data with the
sharpest margin lines.

- Revolutionary UHD scanner.
- Optimized for scanning silicone
  and alginate impressions.
- Automatic matching of upper and
  lower impressions.
- Innovative HSS algorithm enables
capture of difficult to scan areas.
THE CAD/CAM SYSTEM FOR THE PROSTHODONTIC SPECIALIST

inPractice Restore+ is a full-featured system for the prosthodontic specialist that expands the capabilities of inPractice Restore by adding the capability to process custom implant abutments and other prostheses from hard materials such as titanium and cobalt-chrome.

Coupling Axsys' expertise with the quality and precision of Versamill technology provides the most comprehensive abutment machining solution available. Produce restorations of superior quality and handle the widest variety of design characteristics - even those of extreme divergence.
HIGHEST QUALITY CUSTOM ABUTMENTS IMAGINABLE.

At the heart of our inPractice Restore+ stands our Versamill SX200 precision dental machining center designed to perform reliably with high-precision for the long term. Its class-leading 3Kw spindle, cast aluminum-alloy frame and rigid fixturing enable the Versamill SX200 to process any dental material from zirconia and PMMA to delicate glass ceramics as well as hard metals such as titanium, cobalt-chrome and stainless steel quickly, with precision and quality that will astound both you and your patients.

With inPractice Restore+ you produce custom titanium abutments in as little as 18 minutes and install them within seconds of fabrication with unmatched off-the-machine quality and outstanding tissue response.

INDICATION SPECTRUM:

- Inlays, onlays, copings, crowns, veneers, splints, guides.
- Removable & fixed bridges, bars, models, implant abutments.
- Full range of soft & hard dental materials.
- Block sizes up to 40mm.

FLEXIBLE DESIGN

Thanks to the Versamill SX200’s full-contouring 5-axis capability, rigid construction, our custom CAD libraries and robust machining templates, you produce custom abutments with ideal anatomic contours and the most aesthetic emergence profiles - even those of extreme angulation.
IMPLANT BAR OVERDENTURES AND SCREW-RETAINED HYBRID DENTURES

The optional Premier module provides clinicians the ability to offer edentulous patients the safe, predictable placement of implants in order to retain a fixed or removable prosthesis from materials such as zirconia, titanium and cobalt-chrome.

Couple Axsys’ expertise with the quality and precision of VersaMill technology and the Imetric L1I high-accuracy scanner to produce multiple implant-supported overdentures. Whether it be a partial or full-arch rehabilitation overdentures, even those containing implants of severe divergence are easily produced with unmatched, off-the-machine quality and minimum hand-work.

inPractice Premier PROVIDES YOU:

- The ability to handle complex cases such as all-on-six prostheses.
- Highly divergent implants.
- High-quality appliance mating surfaces.
- Precise retention locations.
- Minimum post-machining hand-work.

The Imetric L1I provides high-accuracy determination of implant positions and orientation.
CAMO DENTAL SUITE POWERED BY EXOCAD: YOUR FUTURE IN DIGITAL DENTISTRY

inPractice Restore:
Covering a wide variety of indications.

**SIMPLE & ANATOMIC COPINGS**
Starting from the full anatomy, you can take advantage of autocomp options to create an optimal coping.

**INLAYS & ONLAYS**
Beautiful, natural-looking inlays and onlay restorations can be designed rapidly and easily.

**NIGHT GUARDS**
Combination of Bite-Registration Module and Virtual Articulator for optimal patient-specific results.

**VIRTUAL ARTICULATOR**
Simulate jaw movement and consider dynamic occlusion.

**TRUE SMILE**
Realistic rendering of dental restorations. Powerful marketing tool for dentists using chairside CAD/CAM systems.

**BRIDGE FRAMEWORK**
Full contour crowns, copings, pontics, or inlays can be combined with bridges and bridge frameworks.

**VENeERS**
Achieve highly aesthetic results with just a few mouse clicks. Several beautiful tooth libraries are included.

**ATTACHMENTS**
Attachment shapes, from a robust library, can be added to or removed from your design.

**MODEL CREATOR**
Create physical models from intraoral scan data or impression scans. A wide range of intraoral scanners is supported.

**TOOTH LIBRARY**
Extensive library of beautiful natural teeth. Includes the "Anteriors" collection of anterior teeth by Dr. Jan Hajic.

**ANATOMIC CROWNS**
Design beautiful and functional crowns with minimal effort. Multiple high-quality tooth libraries included.

**WORK WITH WAXUPS**
Waxups made by hand can be scanned, edited, and cooperated. It's also possible to create waxups digitally.

**TELESCOPIC CROWNS**
Cameo gives you maximum flexibility when designing telescopic crowns.

**TEMPORARIES**
Design individual temporary crowns and bridges using the eggshell technique.

**FASTER WORKFLOWS**

**FLEXIBILITY**

**FUTURE-PROOF**
Providing the entire suite of CAMEO Restore functionality plus additional modules for the prosthodontic specialist.

- Faster workflows, improved proficiency.
- Complex procedures become more simple and efficient.
- Flexibility as you require.
- Reliability you can trust.
- Independent & innovative.
- Truly future-proof.

The design of screw-retained bridges, crowns and copings also becomes an easy task while a huge selection of implant systems is supported – from top-tier implant manufacturers to smaller local sources.

Expand the functionality of Restore+ by the addition of modules to support the design of implant bars.

Advanced bar design for both standard and complex bars

The bar is designed to be supported within the context of full anatomical restorations. Attachments or retentions can be added to the design; cylindrical holes or even arbitrary geometries can be cut out in order to bolt or glue pre-fabricated attachments onto the bar.

* Optional add-on module: Restore

---

Full Denture
- Guided workflow for designing highly aesthetic full dentures.

Partial Framework
- The digital solution for designing high-quality removable partial denture frameworks.

Implant
- Design abutments and screw-retained bridges. Custom abutments and suprastructures can be designed together.

DICOM Viewer*
- Visualize voxel CT data during the design process.

Bar Module*
- Fast and easy realization of standard dental bars and advanced custom bar designs.

---

* Optional add-on module: Restore
Mihm-Vogt supplies sintering furnaces for a wide range of applications and requirements. Models in widely differing versions and sizes are suitable for both small laboratories and large milling centers. They are the ideal complement to any CAD/CAM system. As a user, you can be flexible when choosing your materials, without relying on one particular brand, as all our high-temperature furnaces can be programmed individually.

Mihm-Vogt speed sintering furnaces save you valuable production time and shorten the sintering process substantially, depending on the material. Speed programs use less energy and therefore help to protect the environment and reduce your consumption costs.

EnvisionTEC 3D Printers Deliver

Boasting the highest resolution available in the Vida Series, the C&B model is ideal for the production of extremely precise dental crowns, bridges, and copings in both a cast-able and press-able material or in an FDA-approved material for long-term temporaries.