



Dental  
SOLUTIONS



Dental  
SOLUTIONS

Axsys Incorporated  
29627 West Tech Dr.  
Wixom, MI 48393

Office: 248.926.8810  
Fax: 248.926.9085  
Toll-free: 855.687.7941

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AXSYSDENTAL.COM

# The Trusted Authority in Digital Dental Manufacturing

Setting new standards in the world of digital dentistry



## Who we Are

Axsys Dental Solutions is an independent professional services company focused on providing the best possible hardware and software technology along with industry-leading training and support services for the design and manufacture of dental prostheses.

Axsys is unique in the business as we are one of the few, if not the only distributor of digital dental technology whose business is solely focused in this area. We have no other manufacturing, laboratory or milling center business. Our focus is providing the right technology, training and support to our clients in the dental industry.



## What we Do

We focus on providing open, digital dental solutions to dental professionals throughout North and South America.

Our products include a full-line of CAD/CAM/Scanning software, 3D scanners, milling machines, 3D printers, tooling, furnaces, hard & soft materials and FDA-cleared implant components.

Our services combine a proven, focused approach with real-world expertise to deliver total solutions that enable our customers to realize their business and profitability objectives.

We provide exclusive machine and software enhancements over and above that which is provided by base products to increase reliability & optimize productivity.



## Our History

Since the days of Numerical Control (NC) in the mid-1970's, long before anyone heard of CAD/CAM, we have been involved in virtually all aspects of computer aided manufacturing (CAM).

We have extensive experience with virtually every type of CNC machine tool from a wide range of machine tool builders and distribution partners.

We have been serving a multitude of industries designing, programming and machining products, large and small including: molds, dies, patterns, fixtures, production parts and castings made from an endless list of hard, soft and exotic materials.



## Awards

Year after year we have earned premier reseller status with many of our solution partners. This status means that our organization's ability to service the products we represent is among the best in the world and that many have placed their trust in us.

In the year 2019, Axsys is selected by Healthcare Tech OUTLOOK as one of The Top 10 Dental Solution Providers of 2019.



In the year 2019, Axsys is selected by MirrorReview as one of The Top 10 Manufacturing Innovators of 2019.

In the year 2018, Axsys is selected by Xplorex IT Magazine as one of The 10 Best Manufacturing Solution Providers in 2018.



# Customer Service

Raising the Standards in Digital Dentistry

One of the key components in a successful implementation of digital dental technology is the partner you choose to supply you with the technology and just as importantly, implement and support you in the ongoing use of the technology in your organization.

The knowledge of our people and our commitment to Customer Service is second to none in the industry. Our extensive in-house technical resources have hundreds of man years of experience putting CAD, CAM and CNC solutions to work for literally thousands of customers. This allows us to draw on a wide range of industry and systems experience while supporting you in the use of our products.

## THE DNA OF SUCCESS

Only Axsys Dental Solutions has all the DNA elements required to assure your success. We are your trusted advisors, just as we are to literally thousands of others, providing complete solutions, building relationships, accelerating your business development and your path to productivity

We've been involved in digital manufacturing since 1978, long before anyone ever heard of CAD/CAM. It's in our blood—a large part of our DNA.



### CAD/CAM Software Development & Support

Imagine if your support partner actually had over 30 years of extensive experience developing, supporting and training CAD/CAM software and using it in production.



### CNC Machine Service, Instruction & Production

Imagine having a supplier that could actually service the machines they provided.



### Machining and Manufacturing

Imagine having a supplier that has over 40 years of extensive machining and manufacturing experience across many industries.



### Information Technology & Systems Integration

What if your solution partner was versed in all levels of systems - from the physical hardware to the operating systems, applications, databases, storage, & servers, etc.?

research  
& development

## The Axsys Advantage

Axsys Dental Solutions is committed to advancing the quality, productivity, reliability and interoperability of the products we represent.

Our team is comprised of experienced professionals such as; Certified Dental Technicians (CDTs), manufacturing engineers and technicians—all with extensive experience in software development, machining, machine tool technology, manufacturing processes, systems and more. Our experience is based upon over four decades in a wide variety of industries— even beyond digital dental manufacturing.

It is this experience and commitment that enables us to continue to offer solutions with enhanced capabilities beyond that which is available with standard product offerings. This commitment allows us to assure our clients maintain a competitive advantage in the performance of the products we deliver & the quality of the products they deliver to their customers.



- Onsite, help desk and web-based support.
- Customer portal facilitating secure data exchange and providing access to updates, software modules and additional website features.
- Modern facility with world-class, real-world training.
- Development of new machining templates or optimizing machine performance.
- Remote and on-site machine troubleshooting & repair.



# The Axsys Advantage

Leveraging 40 years of CNC Machine,  
Manufacturing & CAD/CAM Experience

*"Axsys' extensive manufacturing and CAD/CAM experience is unlike any other supplier or distributor of this technology; nobody else can do what they do."*

*- Dr. Khaldoun Attar, DDS*

We combine the knowledge gained from nearly four decades of CAD/CAM/CNC manufacturing experience with the precision, reliability and durability of our Versamill Dental Machining Centers to enable you to profitably and consistently produce restoration of unsurpassed quality - regardless of type and material.

## Breadth of Experience

Our experience includes machine repair, manual NC/CNC programming as well as machine operation instruction and application support.

We have helped thousands of companies, big and small, in essentially all industries; machining the simple to the complex, the small to the very large in a virtually endless list of hard and soft materials.

Our experience extends further to CAD/CAM software development, sales, marketing, training, support and distribution. This knowledge along with the same experiences with CNC machine tool technology makes us truly unique and unlike other distributors of CAD/CAM and CNC dental technology, we are not a laboratory or a milling center - we are solely a CAD/CAM and CNC technology solutions provider.

Coupling all this experience and knowledge with our manufacturing expertise enables us to provide a distinct advantage to our customers - The Axsys Advantage.



*Since the days of NC, long before anyone ever heard of CAD/CAM, we have been involved in virtually all aspects of computerized manufacturing.*

...because it's more than JUST about the machine

## Putting the Axsys Advantage to work

40 years of CAD/CAM and CNC manufacturing experience allows us to apply our extensive machining knowledge to the development and on-going support of the most comprehensive digital manufacturing solution imaginable - including complex titanium implant abutments.

Our enhanced abutment libraries eliminates the undercuts and excess raw stock defined at the interface typical of standard libraries.

In addition to greatly enhanced libraries, the machining templates developed by our team of manufacturing experts are designed to effectively and efficiently handle even the most challenging of custom abutment designs.

## Crown & Bridge, Dental Bars, Custom Abutments and More

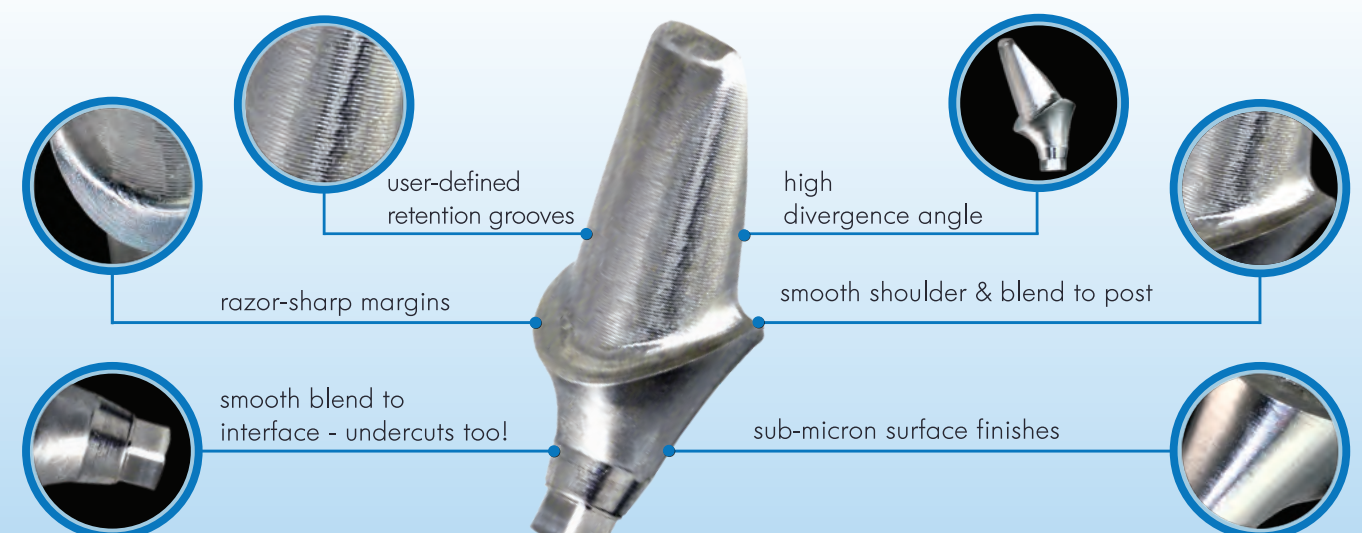
Our digital dentistry solutions goes well beyond basic zirconia, glass ceramic, metal or acrylic crown and bridge applications. Whether it be screw-retained crowns, implant bridges, severe abutment designs or difficult to machine cobalt chrome bar overdentures, the robust and highly efficient machining templates developed by our team of manufacturing experts enable you to produce restorations of amazing quality. Prosthesis will be produced quickly, with sharp, clean margins and perfect fits - without the need for error-prone, profit-robbing hand-finishing operations.

## Key Benefits

- Greatly reduces hand-finishing
- Extended cutting tool life
- Eliminates re-work
- Decreased machine cycle time
- Perfect fits
- Razor-sharp margins
- Greater design flexibility
- Shorter lead-times
- Higher profits

## What we do for you

- Evaluate machine and cutting tool technology to provide only the most reliable and highest performing machines and tooling to our clients.
- Effectively troubleshoot machine, tooling, and software problems.
- Quickly analyze and solve machining and restoration design problems.
- Expertly assist in the modification of machining templates to address issues such as: severe restoration design features, changing production or quality requirements, and new materials or processes.



# Our Products in the Digital

Setting new standards in the world of digital dentistry

# Workflow



## Scanning

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

We offer a choice of high-resolution desktop and interoral scanning products utilizing the latest technology to quickly, easily and accurately capture patient anatomy to facilitate the restoration design process.



## Restoration Design

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

Software is typically purchased as a base crown & bridge application with optional modules for abutments, models, provisionals, etc.

Cameo, our exocad-based CAD software is known for its speedy operation and ease of use, helping you minimize training costs and maximize productivity.



## Machine Motion

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 disc, cutting bur selection, machine spindle speed and cutting feeds, simulation of the machining process and post processing (conversion of graphic motion to machine language).

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



## Milling & Grinding

Machine language code (G-code) generated by the CAM system is transferred by network 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 filtration and vacuum systems).

Constructed utilizing the technology found in "full-frame" CNC industrial machines, our Versamill precision dental machining centers are designed to perform reliably with high precision for the long term.

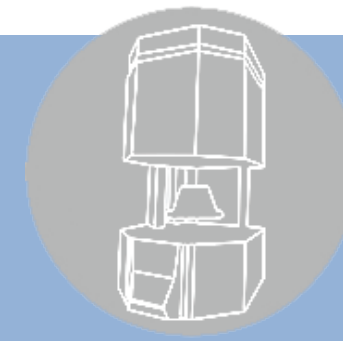


## 3-D Printing

Because Axsys Dental Solutions believes the future of dentistry is digital, we represent a variety of Dental 3D printers.

3D Printers are being integrated into the digital workflow throughout the global dental industry as CAD/CAM and 3D printing are changing the dental industry at a very fast rate.

These 3D printers deliver labor and material cost reduction as well as higher clinical quality and consistency throughout the manufacturing process.



## Hardening

Sintering is required to achieve maximum strength for green-stage and pre-sintered blocks. A crystallization process is required for glass-ceramic restorations. Our dental furnaces save you valuable production time and shorten the firing process substantially.

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.

# Versamill 5X200

## Producing restorations of the highest quality



The Versamill 5X200 is an open source, compact 5-axis dental machining center designed to provide owners with maximum flexibility and versatility.

The Versamill 5X200 conforms to the philosophy of Open Solutions for the dental laboratory. It can be driven by any open CAM system and can utilize material readily available on the open market.

The combination of rigid machine structure and 60,000 rpm, 3 KW spindle enables the Versamill to machine hard and soft materials, while maintaining fine tolerances. With a feedrate over 2,500mm per minute productivity is high, cycle times are low and bench time is kept to the absolute minimum.

### Indications

- Inlays and Onlays
- Veneers
- Copings, Crowns
- Bridges, Superstructures
- Dental Bars, Models
- Custom Metal and Hybrid Abutments

### Features

- Open architecture
- Space saving design
- 5-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- High performance 3Kw max 60,000 rpm spindle
- 170,000 point AC closed-loop servo drives
- 6.0 mm shaft tooling
- 15 position automatic tool changer
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with  $\pm 5\mu\text{m}$  Accuracy

### Materials

- Titanium, Cobalt Chrome, Nickel-chromium
- Glass Ceramics/Lithium Disilicate
- Composite (Lava™ Ultimate, Vita Enamic®, etc.)
- Zirconium Oxide
- PMMA, PEEK, PEKTON
- Resin, Wax and more...



The Versamill 5X200 has many time & money making features that makes operation and maintenance a breeze.

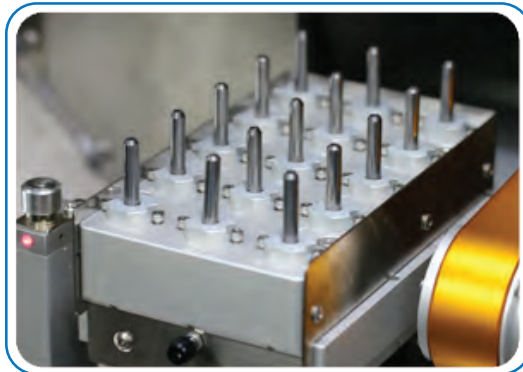


# Versamill 5X200

## Open Source, Quality Construction, High Reliability

*"This machine is allowing us to diversify the products that we offer, and to do that digitally - it is producing very, very nice work. It is a robust piece of equipment with a very nice envelope..."*

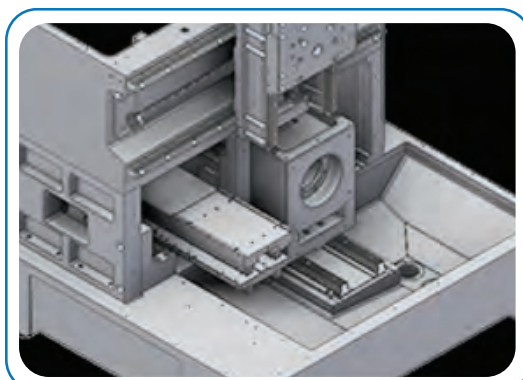
*- John Noel, Noel Laboratories*



15-position tool magazine includes touch probe that provides for automatic tool length compensation and breakage detection.

### Heavy-Duty Frame

The Versamill 5X200's cast aluminum-alloy frame provides the mass, material and stability to dissipate heat and reduce vibration. It's internal structure, together with high-quality steel components and heavy-duty base provide the stability, while still maintaining an overall size and weight easily manageable by labs, milling centers and dental practices.



*The 5X200's heavy-duty base provides the necessary stability to produce restoration with unsurpassed surface finishes & the best possible restorative margins.*



Built-in machine control, specifically designed for high-speed machining provides optimum machine dynamics, speed and accuracy.



Rotary axis driven by heavy-duty, high-torque reduction gears providing reliability, accuracy, repeatability, and high-quality restorations.



Separate coolant tanks makes for easy change over from zirconia to other materials without compromising the integrity of the fluids.





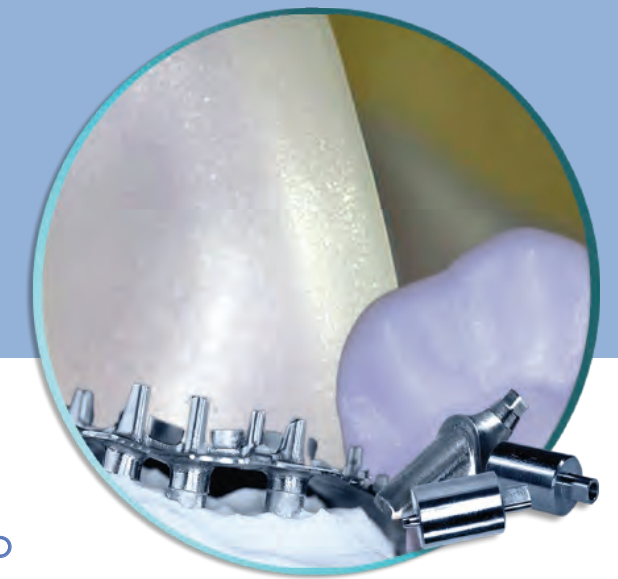
versamill  
5X450



5X450

# Versamill 5X450

## Industrial quality with a small footprint

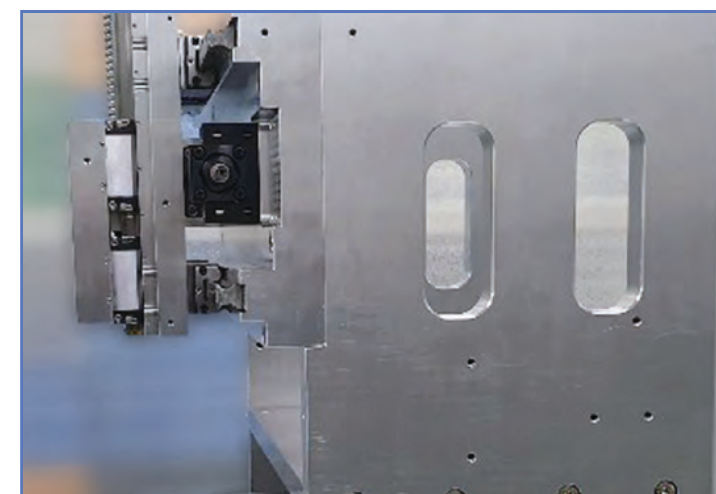


The Versamill 5X450, specially suited for the production of custom abutments and dentures, is an open source, compact dental machining center designed to provide owners with maximum flexibility and versatility.

The mill can accept input from any dental design program and work with virtually all existing dental milling materials including; wax, zirconia, acrylic, composites, stainless steel, titanium, ceramics and others.

The strength and rigidity of the 5X450 provides superior surface finishes, faster cycle times and greater tool life with minimum profit-robbing and time consuming post-machining bench processing.

### Indications



Quality components and rigid construction means many hours of quiet trouble-free operation.

### Features

- Open architecture
- Space saving design
- 5-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- High-performance 1.28Kw max 60,000 rpm
- Closed-loop stepper motors with micro-stepping
- 6mm shaft tooling
- 12-position automatic tool changer
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with  $\pm 5\mu\text{m}$  Accuracy

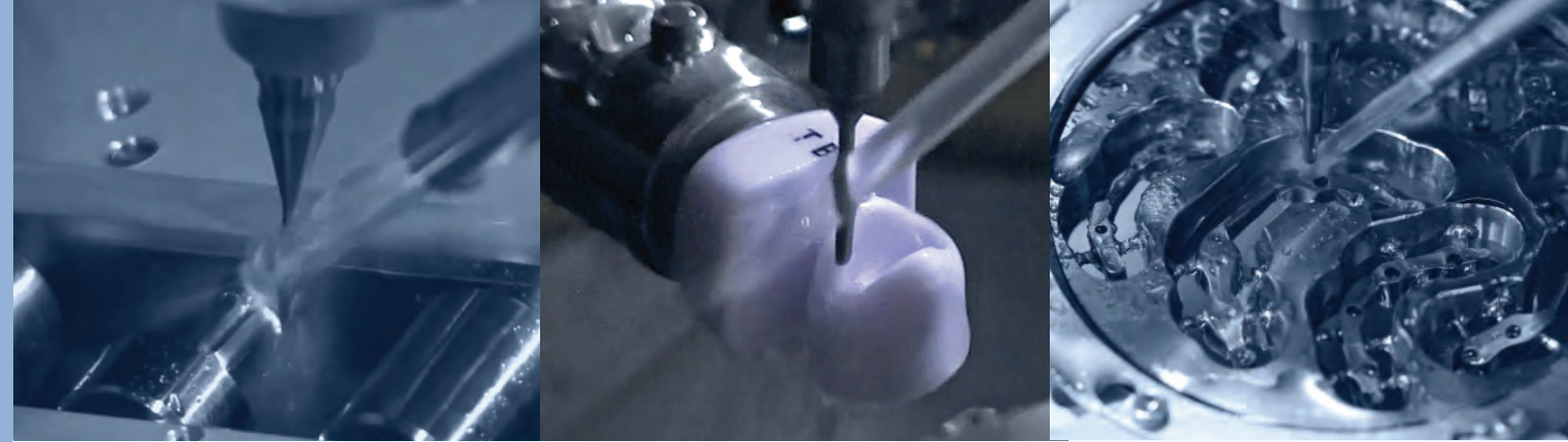
### Materials

- Titanium
- Glass Ceramics/Lithium Disilicate
- Composite (Lava™ Ultimate, Vita Enamic®, etc.)
- Zirconium Oxide
- PMMA, PEEK, Pekkton, and Other Thermoplastics
- Resin, Wax and more...



# Versamill Dental Machining Centers

## Producing restorations of the highest quality



### High Quality Machine Components

All Versamills offer a cost-effective, compact, and easy-to-use open platform. These high-precision milling machines are constructed from the same reliable components in heavy industrial applications and can be implemented into any lab or clinical environment.



Cast aluminum alloy castings and high strength steel for chassis and structure components provide outstanding machine dynamics and long term dependability.

Closed-loop servo drive's coupled with linear guides and ball screws provide stability while allowing for smooth, accurate motion at extremely high feedrates.



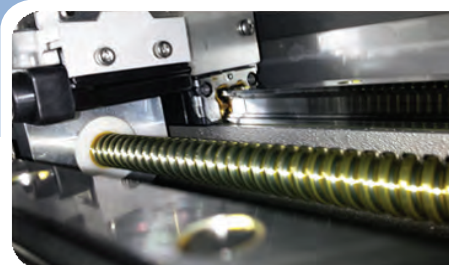
**Heavy Duty Spindle Assembly**

Heavy-duty Z-axis assembly dissipates heat and dampens vibration while the high speed precision spindle, housed within a large diameter quill, provides accuracy, stability, ultra-fine finishes and extended tool life.

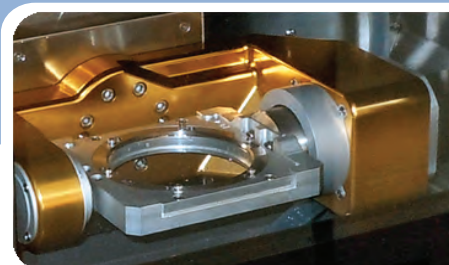
The precision universal fixture is fully supported on each end to assure accuracy and the rigidity necessary to produce high quality surface finishes with the longest possible tool life.



**Vibration Dampening Construction**



**Precision Guides and Ball Screws**



**Rigid Rotary Axis and Fixture**

### Versamill 5X450 Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	235 x 116x 130
A Rotational axis:	(degrees)	360 °
B Rotational axis:	(degrees)	±30 °
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Accuracy:	(µm)	±5.0
Spindle Power:	(watts)	AC 1,280W max
Spindle Speed:	(rpm)	5,000 - 60,000
ATC number of tools:	4.0mm Ø	12
Axis Drive System	Closed-Loop	Microstepper w/Encoder
Blank disc diameter:	(mm)	98 Ø
Machine size (W x H x L):	(mm)	603x 790x 674
Table size (W x H x L):	(mm)	603x 790x 1734
Weight:	(Kg)	263Kg
Input Power	(VAC/50-60Hz)	220- 240 Single Phase



### Versamill 5X200 Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	330 x 146 x 145
Rotational A-axis:	(degrees)	360 °
Rotational B-axis:	(degrees)	±30 °
Feedrate (x, y, and z axis):	(mm/minute)	6,000
Feedrate rotational axes:	(mm/minute)	3,000 (30 rpm)
Resolution:	(µm)	±1.0
Accuracy:	(µm)	±5.0
Repeatability:	(µm)	±3.0
Spindle Power / Torque:	(watts / Ncm)	3,000 / 65
Spindle Speed:	(rpm)	5,000 - 60,000
ATC number of tools:		15
Blank disc diameter:	(mm)	98.3Ø
Machine size (W x H x L):	(mm)	745 x 1765 x 830
Machine Installation Space (W x H x L):	(mm)	1220 x 2025 x 900
Weight:	(Kg)	405
Input Power	(VAC/50-60Hz)	220-240 VAC single Ø






**5X500L**  
**500**

# Versamill 5X500

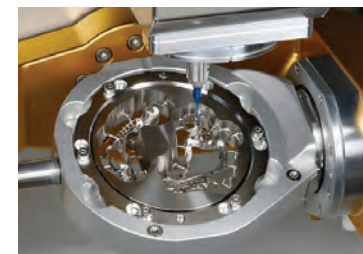
## Producing restorations of the highest quality



### THE AUTOMATED ALL-IN-ONE SOLUTION

Harness the latest in high-speed machining technology. Designed to meet the demanding requirements of modern CAD/CAM processing.

Rely on the 5X500 family for the reliable, precision processing of virtually all present and future dental materials. The standard zero-point clamping system of the Versamill 5X500 and 5X500L allows a simple, fast and precise change of the complete blank holder.



### Indications



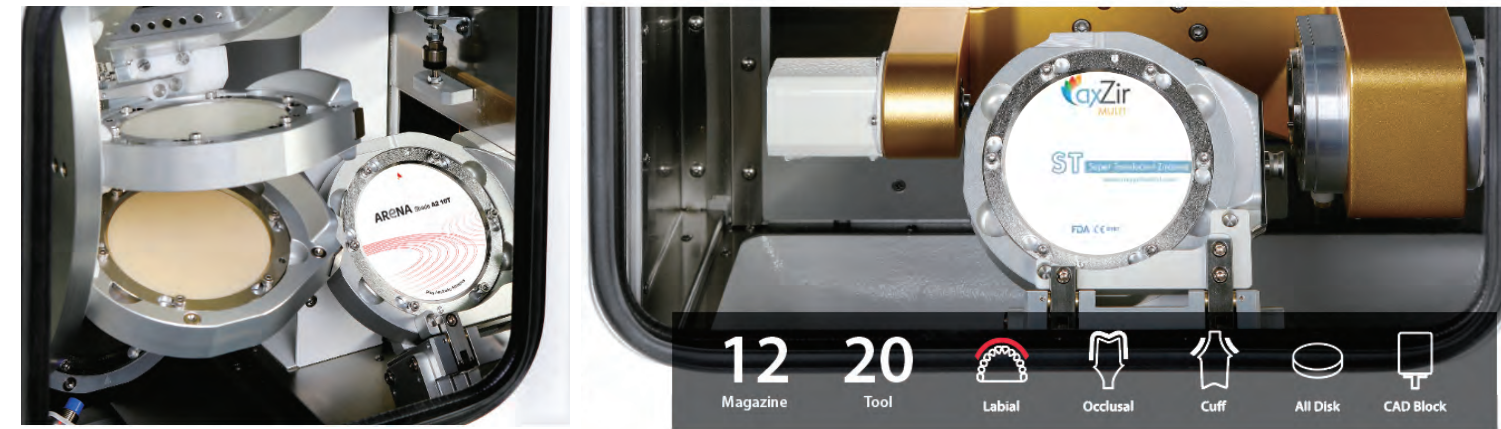
Wireless Auto Calibration improves the usability and accuracy, maintaining the best machining condition.

### Features

- Open architecture
- Space saving design
- 5-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- High-performance 2.2kW max 60,000 rpm spindle
- 170,000 point AC closed-loop servo drives
- 6.0 mm shaft tooling
- 20-position automatic tool changer
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with  $\pm 5\mu\text{m}$  Accuracy

### Materials

- Titanium, Cobalt Chrome, Nickel-chromium
- Glass Ceramics/Lithium Disilicate
- Composite (Lava™ Ultimate, Vita Enamic®, etc.)
- Zirconium Oxide
- PMMA, PEEK, PEKTON
- Resin, Wax and more...



Materials			Applications		
Model	5X-500L	5X-500	Model	5X-500L	5X-500
Pre-milled Blank (Titanium)	⊙ (10ea)	⊙ (10ea)	Implant Bar	⊙	⊙
Co-Cr & Ni-Cr Disk	○	○	Screw-Retained Bridge (Crown & Coping)	⊙	⊙
Titanium Disk	⊙	⊙	Customized Abutment	⊙	⊙
Lithium Disilicate	○	○	Hybrid Abutment	⊙	⊙
Nanocomposite	⊙	⊙	Inlay & Onlay	⊙	⊙
Zirconia	⊙	⊙	Crown & Coping	⊙	⊙
PMMA	⊙	⊙	Crown & Coping Bridge	⊙	⊙
PEEK	⊙	⊙	Model	⊙	⊙
Wax	⊙	⊙	Bite Splint	⊙	⊙
			Denture	⊙	⊙

⊙ High Compatibility / ○ Compatibility / X Non-Compatibility



#### LABIAL SIDE MACHINING

With the Versamill 5X-500 Open C-Type Jig, you can minimize time spent in the machining and post-machining of labial, buccal side texture, and undercut areas.



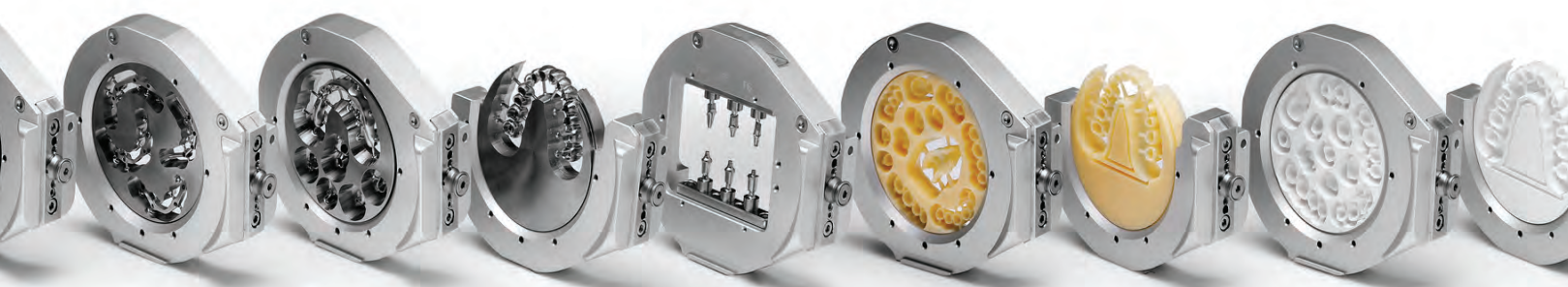
#### WIRELESS AUTO CALIBRATION

Wireless Auto Calibration improves usability and accuracy by maintaining the best operating condition. Auto Calibration assures the location and position of pre-milled blanks for precision custom abutments.



#### BEST-IN-CLASS SPINDLE

With the powerful spindle from Sycotec in Germany, the Versamill 5X-500 and 5X-500L boasts excellent performance in the machining of all dental CAD/CAM materials including metals such as: Co-Cr, titanium, and Ni-Cr.



With the ZERO-Point System, you can achieve optimum origin-point precision despite repeated jig replacement allowing for the precision machining of complex restoration designs. Servo motors with built-in Absolute Encoder and auxiliary support compensates for even the finest of vibrations.

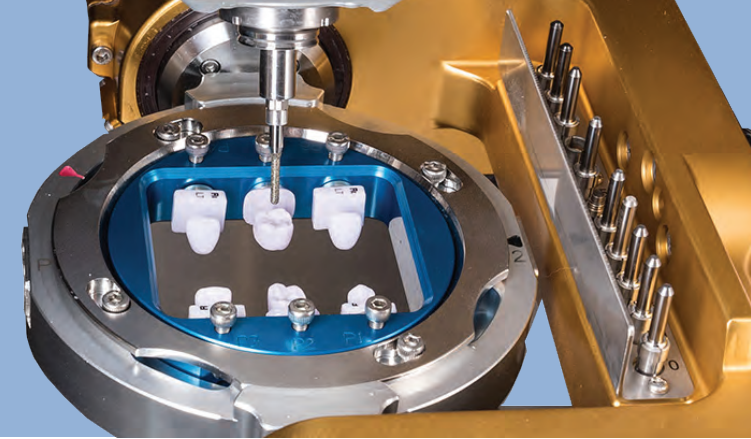
### Specifications

Model	5X-500L	5X-500
Axis	5-Axis	5-Axis
Processing	Wet and Dry	Wet and Dry
Spindle Power	AC 2.2kw	AC 2.2kw
Max. RPM	60,000	60,000
A.T.C	20	20
Tool Shank (mm)	Ø6	Ø6
Motor	Servo	Servo
Drive Mechanism	Ball Screw	Ball Screw
Way System	Linear Guide	Linear Guide
Machine Size (W*D*H)	1100*910*840mm	710*910*840mm
Total Size (W*D*H)	1100*910*1735mm	710*910*1735mm
Weight (Machine / Table)	330kg / 87kg	230kg / 65kg
Travel	X,Y,Z axis	228*128*130mm
	A / B axis	360° / ±30°
Number of Jig	12	-
Jig exchange	Auto	-



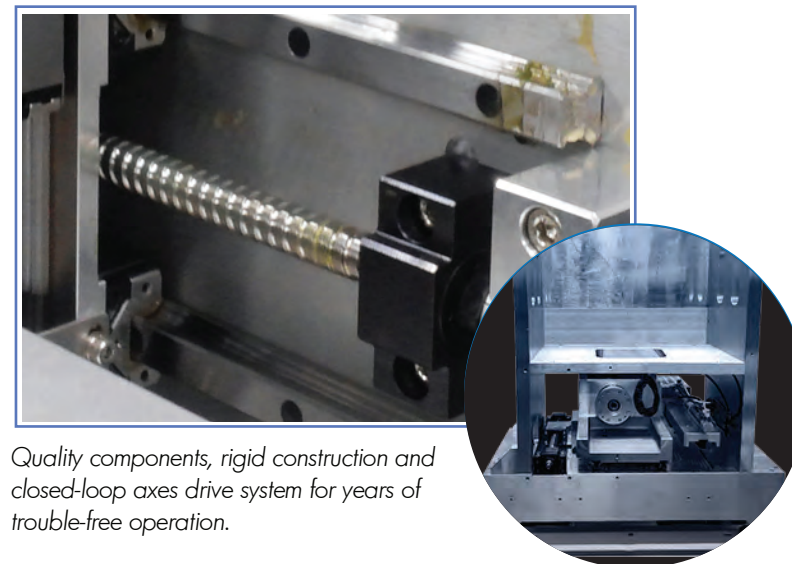
# Versamill 5X400

## Industrial quality with a small footprint



A compact 5-axis dental machining center designed for the wet or dry precision machining of copings, crowns, bridges, dentures, titanium custom abutments, models and more.

Versamill features like heavy-duty aluminum-alloy frame, large-diameter ballscrews, closed-loop drive system, linear guideways, heavy-duty gear reducers, and more enable you to quickly manufacture restorations with perfect fits and virtually no post-processing.



Quality components, rigid construction and closed-loop axes drive system for years of trouble-free operation.

### Versamill 5X400 Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	145 x 110 x 85
A Rotational axis:	(degrees)	360 °
B Rotational axis:	(degrees)	±35 °
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Repeatability:	(µm)	±5.0
Spindle Power:	(watts)	AC 0.5kW max
Spindle Speed:	(rpm)	6,000 - 80,000
ATC number of tools:	4.0mm Ø	10
Axis Drive System	Closed-Loop	Microstepper w/Encoder
Blank disc diameter:	(mm)	98 Ø
Machine size (W x H x L):	(mm)	545 x 590 x 680
Table size (W x H x L):	(mm)	545 x 590 x 950
Weight:	(Kg)	100Kg
Input Power	(VAC/50-60Hz)	100 - 240 Single Phase

### Materials

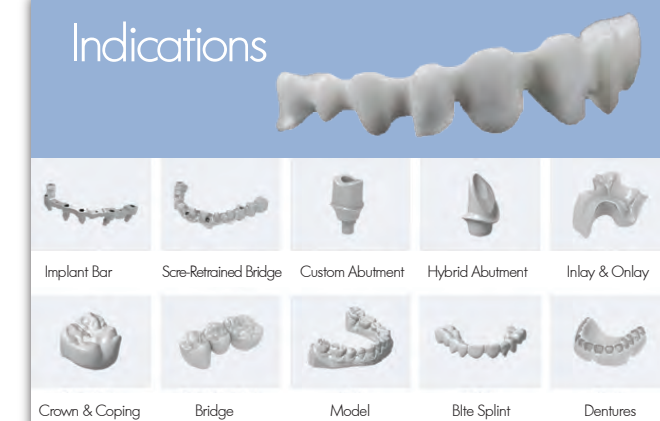
Pre-milled Ti Blank	○ (2-each)
CoCrr & NiCr Disc	X
Ti Disc	X
Lithium Disilicate	○
Nanocomposite	○
Zirconia	○
PMMA	○
PEEK	○
Pekkton	○
Wax	○

○ High Compatibility / X Not Compatible /  
○ Compatible (not intended for continuous production)

### Features

- 5-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- 4mm shaft tooling
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with ±1 µm Resolution

### Indications





 5X300PRO

## Versamill 5X300PRO

### Industrial quality with a small footprint



The Versamill 5X300PRO is a compact 5-axis machining center for the wet or dry precision milling of copings, crowns, bridges, dentures, models and more.

The 5X300PRO can accept input from any dental design program and can machine a wide variety of milling materials, including; wax, zirconia, PMMA, PEEK, Pekkton, glass-ceramics, resins and more.



An external compressor is not required, and all additional devices (dust collector, coolant system) are built inside the table to overcome installation space constraints & minimize noise.

\*\* Renfert SILENT compact CAM model is used (optional)

#### Versamill 5X300PRO Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	145 x 110 x 85
A Rotational axis:	(degrees)	360 °
B Rotational axis:	(degrees)	±30°
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Repeatability:	(µm)	±5.0
Spindle Power:	(watts)	AC 0.5kW max
Spindle Speed:	(rpm)	6,000 - 80,000
ATC number of tools:	4.0mm Ø	12
Axis Drive System	Closed-Loop	Microstepper w/Encoder
Blank disc diameter:	(mm)	98 Ø
Machine size (W x H x L):	(mm)	540 x 580 x 630
Table size (W x H x L):	(mm)	540 x 580 x 950
Weight:	(Kg)	90Kg
Input Power	(VAC/50-60Hz)	100 - 240 Single Phase

#### Features

- Open architecture
- Space saving design
- 5-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- 4mm shaft tooling
- Tool measurement probe with breakage detection
- Dry milling solution
- High Precision with  $\pm 1 \mu\text{m}$  Resolution

#### Quality, Durability and Dependability

With precision ball screws, linear guides, closed-loop drives and a rigid frame, the Versamill 5X300PRO shares many of the same high-quality, durable characteristics of the larger members of the Versamill family—at a fraction of the price.



x1000rpm

# ***SPEED SERIES***

Precision Dental Machining Centers

# Versamill AX726DW-PRO

## Next-gen CNC technology in a space-savings design



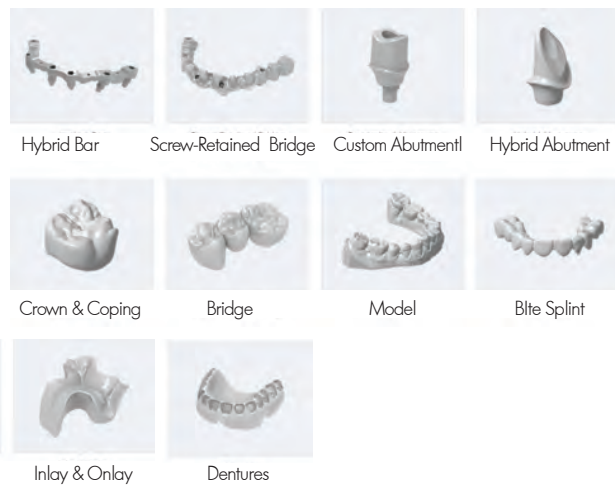
### Supercharge your lab or practice with the new 7-Series Versamill—the ultimate in reliable 24-Hour productivity.

Assembled and rigorously tested in the state of Michigan, the AX726DW-PRO is an innovative machine that meets all the requirements of the modern, automated digital dental manufacturing process. The industrial construction enables the processing of all dental materials in wet and dry machining. With a fully-automatic robotic 18-position blank changer, the system enables versatile machining in 24-hour operation without the problems associated with traditional disc changer systems. 7-Series' precision reduces the need for production-robbing machine calibration, while the auto-calibration feature simplifies the process and reduces the time required.

#### FLEXIBILITY TO MEET THE DEMANDS OF TODAY AND TOMORROW

Process virtually all current and future dental materials, including: PMMA, Zirconia, PEEK, Pekkton, Composites Glass-Ceramic, Hybrid-Ceramic, Sintered Metal, Ti & CoCr PreMill Abutments, Resins, Titanium, Cobalt-Chrome, and More. Block thickness up to 40mm.

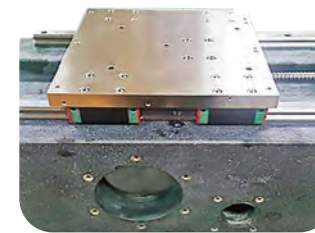
#### INDICATIONS



#### AVAILABLE COLORS



High-torque, 2.7kW max liquid-cooled spindle with 3 ceramic hybrid bearings. Reduce margin thickness, and extend spindle life by reducing deflection and protecting against contamination by cutting chips and coolant.



Heavy, stable, granite frame with the lowest coefficient of linear expansion. Provides rigidity and precision to enable the highest possible precision and quality.



Class-leading 18-position robotic auto loader to maximize productivity with overnight and weekend operation.

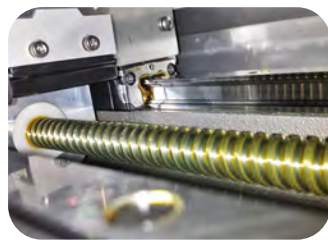


16-station ATC houses sturdy, flex-resisting 6mm diameter cutting tools with automatic tool management and breakage sensor.

#### aX 726DW|PRO



Superior dynamic motion and positional accuracy thanks to large-diameter precision ball screws, anti-backlash ball nuts, and linear guides with closed loop servo drives.



Designed for higher production dental labs and milling centers. Machine hard metals such as titanium, cobalt chrome, zirconia, and virtually any other dental material, including models.



Couple class-leading rotary operating range of  $\pm 35^\circ$  and 94mm Z-axis stroke, with granite frame, and Axsys expert machining templates to produce restorations with undercuts, and clean, thin margins.



Precise assembly and testing of perpendicularity of A-axis and B-axis—vital for accurate multi-axis manufacturing.

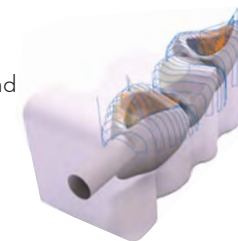


All Versamill machines come with Axsys' award-winning support and unique software and machine enhancements—not available from any other supplier. We leverage over 40 years of digital design and manufacturing experience—spanning a variety of industries—to provide additional functionality, unrivaled reliability, and increased productivity.

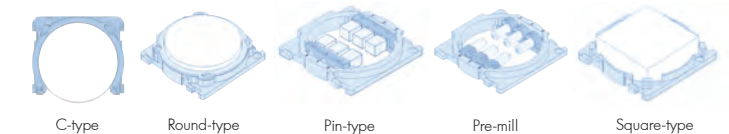
#### CAM SOFTWARE: PROVEN & FULL-FEATURED

The Versamill AX726DW-PRO is powered by your choice of GO2cam or hyperDENT CAM software from FOLLOW-ME! Technology Group.

These software products incorporate efficient, proven milling cycles to provide maximum process stability and indication quality. Includes patent-protected milling strategies used for complex materials that, coupled with our expert machining templates, ensure perfect surface quality while minimizing cycle time and maximizing tool life.



#### FIXTURES



#### Versamill AX726DW-PRO Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	330 x 146 x 145
B Rotational axis:	(degrees)	$\pm 35^\circ$
Processing:		Wet/Dry
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Air Requirement:	(bar)	6.5 bar
Spindle Power:	(watts)	AC 2.7kW max
Spindle Speed:	(rpm)	6,000 - 60,000
ATC number of tools:	6.0mm $\varnothing$	16
Axis Drive System		Servo Motor w/Encoder
Blank disc diameter:	(mm)	98 $\varnothing$
Machine size (W x H x D):	(mm)	870 x 1520 x 800
Weight:	(Kg)	260Kg
Input Power	(VAC/50-60Hz)	220 /6A Single Phase



#### OPTIONAL MODULES

Full Denture, Hybrid, Implant, Template Generator Multi-Import & Nesting, Implant Bar/Bridge, Expert, Expanded Import



# Versamill AX726DW

## All the precision features of the PRO in a manual load machine



Supercharge your lab or practice with the versatility of the new 7-Series Versamill. Mill virtually any dental material while providing the thinnest of margins—without chipping.

Assembled and rigorously tested in the state of Michigan. With domestic and foreign components, the AX726DW is an innovative machine concept that meets all the requirements of the modern, automated digital dental manufacturing process. Heavily-stabilized construction enables the processing of all dental materials in wet and dry machining. Ideal for extended operations with a fully-automatic 16-position tool changer, tool breakage sensor, and tool management system.



### FLEXIBILITY TO MEET THE DEMANDS OF TODAY AND TOMORROW

Process virtually all current and future dental materials, including: PMMA, Zirconia, PEEK, Pekkton, Composites Glass-Ceramic, Hybrid-Ceramic, Sintered Metal, Ti & CoCr PreMill Abutments, Resins, Titanium, Cobalt-Chrome, and More.

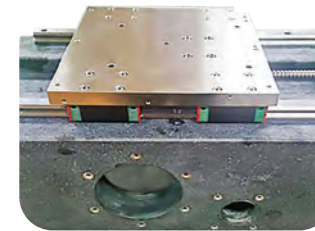
### INDICATIONS



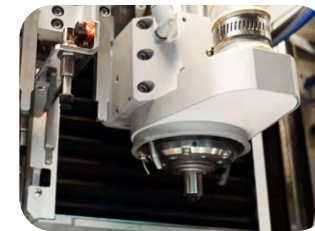
### AVAILABLE COLORS



High-torque, 2.7kW max liquid-cooled spindle with 3 ceramic hybrid bearings that help to reduce margin thickness, and extend spindle life by reducing deflection and protecting against contamination by cutting chips and coolant.



Heavy, stable, granite frame with the lowest coefficient of linear expansion. Provides the rigidity and precision to enable the production of highest possible restoration precision.



Powerful, high-torque, 2.7 kW 60,000 rpm spindle provides the ability to tackle the toughest machining challenges.

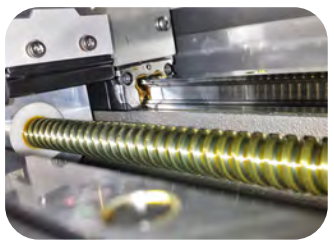


16-station ATC houses sturdy, flex-resisting 6mm diameter cutting tools with automatic tool management and breakage sensor.

ax 314DW



Superior dynamic motion and positional accuracy thanks to large-diameter precision ball screws, anti-backlash ball nuts and linear guides with closed loop servo drives.



Designed for higher production dental labs and milling centers, Series 7 machines are capable of machining hard metals such as, titanium and cobalt chrome as well as zirconia, and virtually any other dental material, including models.



Couple class-leading rotary operating range of  $\pm 35^\circ$  and 94mm Z-axis stroke, with granite frame, and Axsys expert machining templates to produce restorations with undercuts, and clean, thin margins.



Precise assembly and testing of perpendicularity of A-axis and B-axis-vital for accurate multi-axis manufacturing.

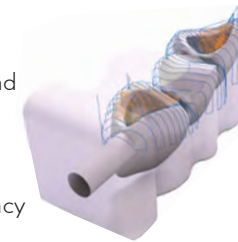


All Versamill machines come with Axsys' award-winning support and unique software and machine enhancements not available from any other supplier. We leverage over 40 years of digital design and manufacturing experience—spanning a variety of industries—to provide additional functionality, unrivaled reliability and increased productivity.

### CAM SOFTWARE: PROVEN & FULL-FEATURED

The Versamill AX726DW is powered by your choice of GO2cam or hyperDENT CAM software from FOLLOW-ME! Technology Group.

These software products incorporate efficient, proven milling cycles to provide maximum process stability and indication quality, including patent-protected milling strategies used for complex materials that, coupled with our expert, high efficiency machining templates, ensure perfect surface quality while minimizing cycle time and maximizing tool life.



### FIXTURES



### Versamill AX726DW Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	330 x 146 x 145
B Rotational axis:	(degrees)	$\pm 35^\circ$
Processing:		Wet/Dry
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Air Requirement:	(bar)	6.5 bar
Spindle Power:	(watts)	AC 2.7kW max
Spindle Speed:	(rpm)	6,000 - 60,000
ATC number of tools:	6.0mm $\varnothing$	16
Axis Drive System		Servo Motor w/Encoder
Blank disc diameter:	(mm)	98 $\varnothing$
Machine size (W x H x D):	(mm)	870 x 1520 x 800
Weight:	(Kg)	260Kg
Input Power	(VAC/50-60Hz)	220 /6A Single Phase

hyperDENT GO2cam

### OPTIONAL MODULES

Full Denture, Hybrid, Implant, Template Generator Multi Import & Nesting, Implant Bar/Bridge, Expert, Expanded Import



# Versamill AX314DW

## Optimized for the precision milling of hard & soft materials



The NEW Versamill® AX314DW dental milling machine provides super versatility with its ability to mill virtually any dental material while providing the thinnest of margins without chipping.

The AX314DW is a desktop milling machine specialized for soft materials. Small and compact, but fast and accurate. The extremely stable construction of the AX314DW enables the efficient dry-machining of dental restorations. Optimized to delicately mill with thin, clean margins, the prostheses that require sophisticated techniques such as facial, undercut, inlay, and veneer can be milled precisely—without chipping.



### FLEXIBILITY TO MEET THE DEMANDS OF TODAY AND TOMORROW

Process a wide variety of dental material, including: PMMA, Zirconia, PEEK, Pekkton, Composites, Hybrid-Ceramic, Titanium Premill Abutments, Glass-Ceramic, and More.

98mm disc with up to 30mm thickness.

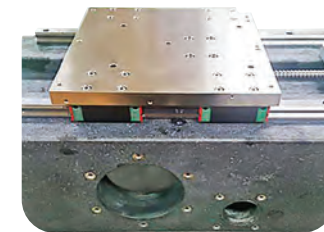
### INDICATIONS



### AVAILABLE COLORS



High-torque, .5kW max spindle with ceramic hybrid bearings that help to reduce margin thickness, and extend spindle life by reducing deflection and protecting against contamination by cutting chips and coolant.



Heavy, stable, granite frame with the lowest coefficient of linear expansion. Provides the rigidity and precision to enable the production of highest possible restoration precision.



The ultimate in productivity, the AX314DW fixtures can facilitate the machining of 10 titanium premill abutments and 6 ceramic blocks.

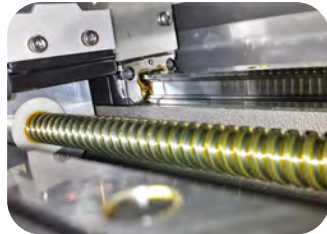


16-station ATC houses 6.0 mm diameter cutting tools with automatic tool management and breakage sensor.

ax314DW



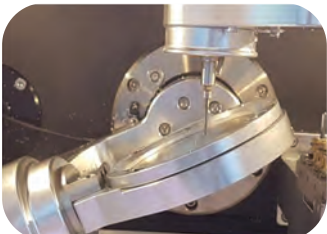
Superior dynamic motion and positional accuracy thanks to large-diameter precision ball screws, anti-backlash ball nuts and linear guides with closed loop servo drives.



C-Clamp fixture provides unlimited access to critical facial features which produces the highest levels of aesthetics—without the concern of undercuts or typical manufacturing limitations.



Couple class-leading rotary operating range of ± 30° with granite frame, and Axsys expert machining templates to produce restorations with undercuts, and clean, thin margins.



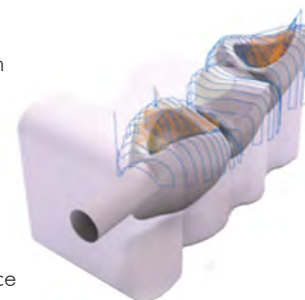
The strength and rigidity of the Versamill AX314DW enables the efficient processing of restorations while yielding the thinnest and cleanest of restorative margins.



### CAM SOFTWARE: PROVEN & FULL-FEATURED

The Versamill AX314DW is powered by your choice of GO2cam or hyperDENT CAM software from FOLLOW-ME! Technology Group.

These products are selected as they incorporate efficient proven milling cycles from the industrial segment to provide maximum process stability and indication quality, including patent-protected milling strategies used for complex materials ensuring perfect surface quality while maximizing tool life.



**hyperDENT**

**GO2cam**

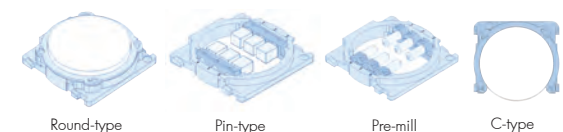
### OPTIONAL MODULES

Full Denture, Hybrid, Implant, Template Generator

Multi Import & Nesting, Implant Bar/Bridge, Expert, Expanded Import

All Versamill machines come with Axsys' award-winning support and unique software and machine enhancements not available from any other supplier. We leverage over 40 years of digital design and manufacturing experience—spanning a variety of industries—to provide additional functionality, unrivaled reliability and increased productivity.

### FIXTURES



### Versamill AX314DW Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	200 x 102 x 108
B Rotational axis:	(degrees)	±30°
Processing:		Wet/Dry
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Air Requirement:		6.5 bar
Spindle Power:	(watts)	AC 1.4KW max
Spindle Speed:	(rpm)	80,000
ATC number of tools:	6.0mm Ø	16
Axis Drive System:		Servo Motor w/Encoder
Blank disc diameter:	(mm)	98 Ø
Machine size (W x H x D):	(mm)	500 x 720 x 690
Weight:	(mm)	130Kg
Input Power	(VAC/50-60Hz)	120-240 /6A Single Phase

# Versamill AX305D

## Optimized for the precision dry milling of soft materials



The NEW Versamill® AX305D dental milling machine provides super versatility with its ability to mill virtually any dental material while providing the thinnest of margins without chipping.

The AX305D is a desktop milling machine specialized for soft materials. Small and compact, but fast and accurate. The extremely stable construction of the AX305D enables the efficient dry-machining of dental restorations. Optimized to delicately mill with thin, clean margins, the prostheses that require sophisticated techniques such as facial, undercut, inlay, and veneer can be milled precisely—without chipping.

### FLEXIBILITY TO MEET THE DEMANDS OF TODAY AND TOMORROW

- Process a wide variety of dental material, including: PMMA, Zirconia, PEEK, Pekkton, Composites, Hybrid-Ceramic, and More.
- 98mm disc with up to 30mm thickness.

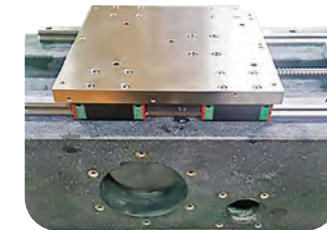
### INDICATIONS



### AVAILABLE COLORS



High-torque, .5kW max spindle with ceramic hybrid bearings that help to reduce margin thickness, and extend spindle life by reducing deflection and protecting against contamination by cutting chips and coolant.



Heavy, stable, granite frame with the lowest coefficient of linear expansion. Provides the rigidity and precision to enable the production of highest possible restoration precision.



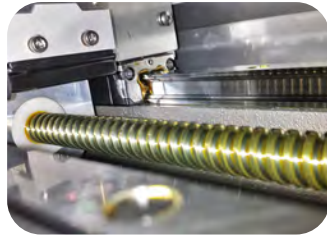
Precise assembly and testing of perpendicularity of A-axis and B-axis—vital for accurate multi-axis manufacturing.



12-station ATC houses 3mm diameter cutting tools with automatic tool management and breakage sensor.



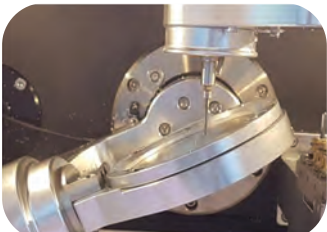
Superior dynamic motion and positional accuracy thanks to large-diameter precision ball screws, anti-backlash ball nuts and linear guides with closed loop servo drives.



C-Clamp fixture provides unlimited access to critical facial features which produces the highest levels of aesthetics—without the concern of undercuts or typical manufacturing limitations.



Couple class-leading rotary operating range of  $\pm 35^\circ$  with granite frame, and Axsys expert machining templates to produce restorations with undercuts, and clean, thin margins.



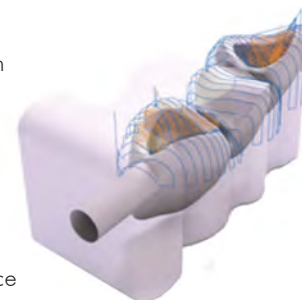
The strength and rigidity of the Versamill AX305D enables the efficient processing of restorations while yielding the thinnest and cleanest of restorative margins.



### CAM SOFTWARE: PROVEN & FULL-FEATURED

The Versamill AX305D is powered by your choice of GO2cam or hyperDENT CAM software from FOLLOW-ME! Technology Group.

These products are selected as they incorporate efficient proven milling cycles from the industrial segment to provide maximum process stability and indication quality, including patent-protected milling strategies used for complex materials ensuring perfect surface quality while maximizing tool life.



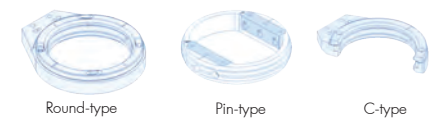
**OPTIONAL MODULES**  
Full Denture, Hybrid, Implant, Template Generator



Multi Import & Nesting, Implant Bar/Bridge, Expert, Expanded Import

All Versamill machines come with Axsys' award-winning support and unique software and machine enhancements not available from any other supplier. We leverage over 40 years of digital design and manufacturing experience—spanning a variety of industries—to provide additional functionality, unrivaled reliability and increased productivity.

### FIXTURES



### Versamill AX305D Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	682 x 500 x 712
B Rotational axis:	(degrees)	$\pm 34$
Processing:		Dry
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Air Requirement:		6.5 bar
Spindle Power:	(watts)	AC .5kW max
Spindle Speed:	(rpm)	60,000
ATC number of tools:	3.0mm $\varnothing$	12
Axis Drive System		Servo Motor w/Encoder
Blank disc diameter:	(mm)	98 $\varnothing$
Machine size (W x H x D):	(mm)	620 x 1620 x 800
Weight:	(mm)	100Kg
Input Power	(VAC/50-60Hz)	220 /6A Single Phase



Now, you can easily produce the best-fitting restorations in as little as 8 minutes with zero-to-minimal hand finishing.

Ideal for glass-ceramic, hybrid-ceramic and other materials like zirconia, and PMMA, the chairmaxx's powerful dual 0.5kW, 100,000 rpm spindles, enable the production of crowns, inlay/onlays, and veneers in as little as 8-15 minutes.



Introducing the Versamill® chairmaxx chairside milling machine—the ultimate practice partner for single-visit dentistry.

*The Chairmaxx was developed for single-visit dentistry applications with a mind toward safety and the clean, quiet, simple, and reliable operations clinicians require.*

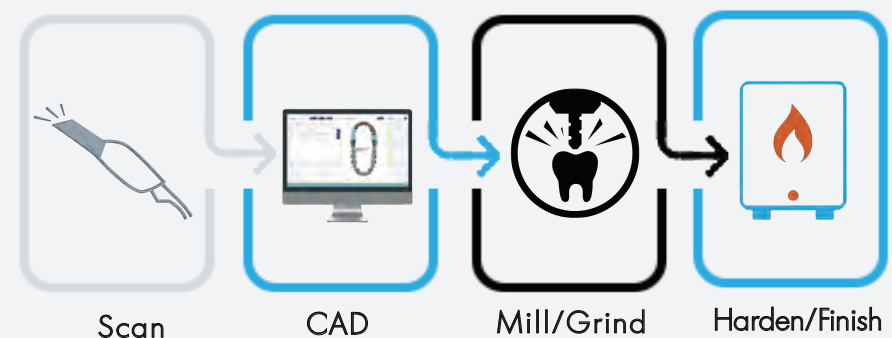
*Whether you're new to digital dentistry or have experimented with other CAD/CAM milling machines, you'll appreciate just how easy it is to use our Chairmaxx in addition to quality and flexibility you could never have imagined.*





With innovation at our core, we are mindful of the importance of timely, quality service. That's why we leverage our industrial experience from other industries to upgrade our products and services to meet the ever-changing needs of dental professionals.

We support the freedom to choose and ability to grow, which is why the chairmaxx is a fully open system, giving you the flexibility to work with your preferred workflow while offering a wide variety of upgrade paths.









## Simple Workflow



 <p><b>DESIGN</b></p> <p>Compact and whisper-quiet, the Versamill chairmaxx was designed specifically for the needs of dental clinics.</p>	 <p><b>ACCURACY</b></p> <p>Complete accuracy up to less than 20 micrometers and thin connector lines to reduce the post processing time.</p>	 <p><b>FLEXIBILITY</b></p> <p>The Chairman uses open CAD/CAM system architecture, allowing you to import .stl files from any CAD software.</p>	 <p><b>SIMPLE &amp; FAST</b></p> <p>Single-visit dental restorations in 8 to 15 minutes using user-friendly touch screen LCD to manage the process</p>
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-   
**Wet milling**
-   
**Built-in compressed air**  
 air compressor
-   
**Free voltage**  
 AC100-220  
 100-220VAC
-   
**Noise shielding**  
 for silent office  
 for silent office
-   
**Auto calibration**
-   
**Auto tool breakage detection**  
 breakage detection

## DENTAL FURNACES

The ideal complement to any CAD/CAM system. Axsys Dental Solutions offers a variety of sintering and porcelain furnaces for a wide range of applications for both small labs and large milling centers. A wide selection of models are available from Arum, Mihm Vogt and DEKEMA. All of our high-temperature furnaces can be programmed individually to achieve the ultimate in flexibility when choosing materials



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.

## Your Trusted Authority



There is a reason we have earned awards for our ability to provide robust state-of-the-art solutions in the ever-changing world of digital dentistry. Axsys is unique in its ability to leverage over 800 man-years of experience in CAD, CAM, and manufacturing across a wide variety of industries. Our key relationships with software, material, and machine suppliers allow us to provide dental professionals with the open products and services necessary to compete and be profitable in today's digital dentistry world.



# Dental CAM Solutions

## World-class solutions customized for you.



## hyperDENT®

### AT THE FOREFRONT OF DENTAL ENGINEERING

hyperDENT® is the world's leading software system in the dental CAM market and is valued among experts for its modular product structure. We customize CAM solutions to your specific application needs. Regardless of company size and whether for dental or practice labs, FOLLOW-ME! offers suitable hyperDENT® product bundles for a perfect interaction between CAM and machine.s



### Features

- Recognition of imported elements geometry
- Holes recognition, clasps and grids
- Automatic connectors selection
- Meta-connectors for sintering process
- Discs management, re-use of partially used discs
- Spatially optimized nesting of machined parts
- Collision avoidance toolpaths
- Machine kinematics consideration
- Machining reports edition into various formats

### Features

- Open, highly automated and flexible system
- Complete production process coverage
- Simple, intuitive operation
- Maximum precision and time efficiency
- Material-independent
- Flexible addition of software modules
- Maximum freedom in creating templates
- Additive manufacturing and milling all-in-one
- Automatic part identification
- Consistent software enhancement
- Optimum surface finish quality

### DENTAL CAM FOR LABS AND CLINICIANS

GO2cam Dental is a fully customizable CAM software. Amazingly easy to use, it allows you to program high quality machining of all dental restorations in any raw material while increasing tool life.

### IRIS CHAIRSIDE CAD/CAM


Iris is a chairside CAD/CAM solution dedicated to dentists. It allows them to produce crowns directly at the dental clinic.

Based on the latest CAD/CAM innovations, Iris reduces the time between dental impression and crown milling to only a few minutes.



# CAMEO DENTAL SUITE POWERED BY EXOCAD:

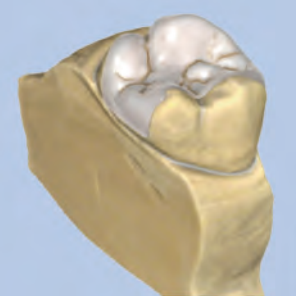
# YOUR FUTURE IN DIGITAL DENTISTRY



**IMPLANT\***  
Design abutments and screw-retained bridges. Custom abutments and superstructures can be designed together.




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



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



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



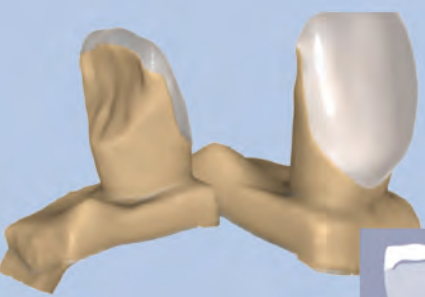
**VIRTUAL ARTICULATOR**  
Simulate jaw movement and consider dynamic occlusion.



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



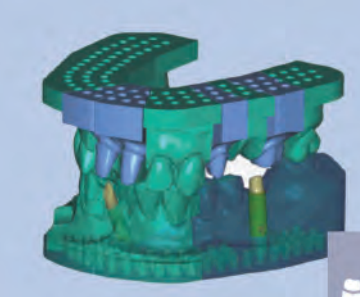
**BRIDGE FRAMEWORK**  
Full contour crowns, copings, pontics, or inlays can be combined with bridges and bridge frameworks.




**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.



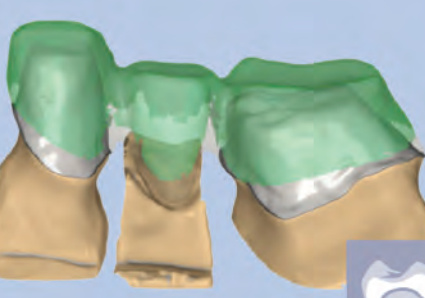
**MODEL CREATOR**  
Create physical models from intraoral scan data or impression scans. A wide range of intraoral scanners is supported.



**TOOTH LIBRARY**  
Extensive library of beautiful natural teeth. Includes the "Anteriors" collection of anterior teeth by Dr. Jan Hajt6.



**FULL DENTURE**  
Guided workflow for designing highly aesthetic full dentures.



**WORK WITH WAXUPS**  
Waxups made by hand can be scanned, edited, and copy-milled. 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



# Artificial Intelligence

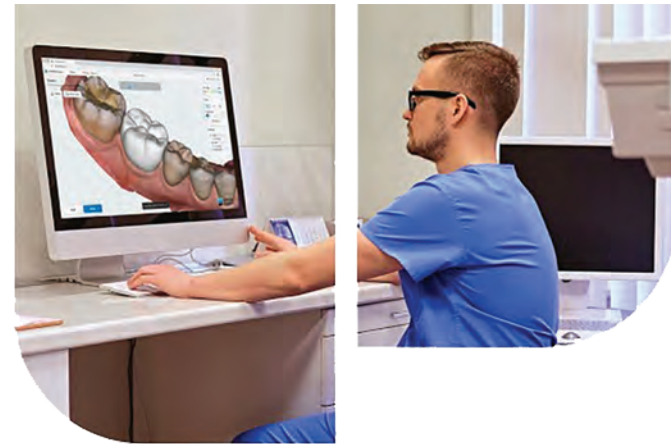
Providing the latest cloud-based CAD/CAM software technology



## Making the future of Digital Medical for Everyone

Imagoworks Inc. offers a web-based Dental CAD solution using AI, streamlining the digital workflow for dental professionals. Together with world-class technology, they are setting new standards for digital dentistry in the global market. Their mission is to "Make the future of digital medicine for everyone". They have accumulated technological expertise in the medical field for over 10 years, specializing in AI-based automation, 3D geometric modeling and mesh processing, and SaaS, they now turn their focus to commercializing their innovative technologies and transforming the field of dentistry.

By cooperating with leading dental companies, they are seeing great success as they find themselves in the industry spotlight. Imagoworks currently offers Dentbird Crown which automatically generates optimal crown design with a single click and without any software installation. As they continue to expand their services, Imagoworks aims to be recognized as a chairside design solution for dentists worldwide.



### ARTIFICIAL INTELLIGENCE

Imagoworks have developed AI technologies for various modalities in medicine from structured data (X-ray image, 3D CT volume) to unstructured data (3D point-cloud, mesh data). The classification, segmentation, detection, and 3D-model generation can be automated using their state-of-the-art deep learning technology.



### CAD

Computer Aided Design became an essential technology for prosthetics and orthodontics. They have developed robust and efficient 3D geometrical modeling and mesh operation algorithms such as Boolean operation, registration, smoothing, cutting, and deformation.



### CLOUD

Imagoworks develops cloud-based medical solutions: SaaS (Software as a Service) and IaaS (AI as a Service) that run on the HTML5 web browser (Chrome recommended). They also provide 3DMe Studio, where you can carry out AI alignment, inspection, Boolean operations, and much more WITHOUT ANY INSTALLATION or licensing fees!



Reduce prosthesis design time to less than 1 minute

## OQTON

### AI-DRIVEN DENTAL PRODUCTION SOFTWARE

Oqton provides automated dental workflows to help you meet growing production goals while significantly reducing manpower requirements. An end-to-end, integrated dental production system, Oqton ensures full traceability to future-proof your business.

The Oqton platform is agnostic, replacing multiple disconnected software applications across all of your machines.



### AVOID REPETITIVE TASKS

AI-driven automation of CAM workflows including automatic stock selection, nesting, and toolpath generation.

Machine learning capabilities for orientation and pin placement.

Optimized machining efficiency and consistent results based on feature detection and automated assignment of milling templates.

Up to **98%** faster data preparation from intelligent automation

**2x** machine productivity with denser nesting, faster printing or easier support removal

**100%** ready for any scale, from small lab to large production center

- AUTOMATED DENTAL WORKFLOWS**  
Meet high volume production goals and significantly reduce manpower requirements by automating your dental manufacturing processes.
- FUTURE-PROOF YOUR BUSINESS**  
Schedule, track, and trace all actions in your dental lab environment. With full traceability and QA, Oqton prepares your business for regulatory requirements.
- COMPLETE PEACE OF MIND**  
Artificial intelligence and IoT improves overall dental lab and service center productivity. Increase your throughput, reduce recruitment and training needs, and save costs.
- TECHNOLOGY AGNOSTIC**  
An end-to-end, fully integrated dental production system replaces multiple disconnected software applications in your dental lab, across all of your machines.
- INSTANT TECHNICAL SUPPORT**  
Your team can quickly interact with our dental production experts for support questions through live chat, email, or phone.

# Latest Works

Expert machining coupled with the power technology produce unmatched off-machine

& precision of Versamill quality.



## DENTAL BAR OVERDENTURE

All-On-Six titanium bar overdenture with significant off-axis angulation.



## DENTAL BAR OVERDENTURE

Precision fits—no problem for the Versamill 5X200 precision dental machining center.



## GLASS-CERAMICS

Crisp margins and fast processing with high anatomic detail are all possible with 5X200, 5X400, 5X450, and 5X450 Versamill's.



## PMMA BRIDGE

Quickly produce zirconia and PMMA bridges on your choice of Versamill.



## PMMA BRIDGE

Regardless of material, you can expect perfect fits on fixed restorations with any Versamill.



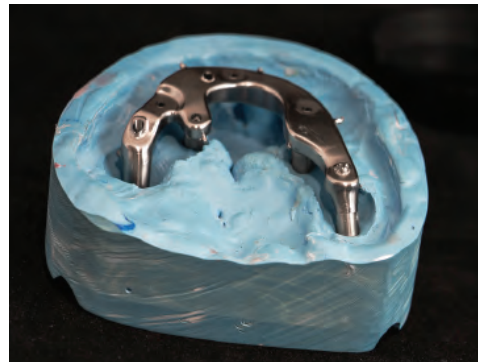
## ZIRCONIA CROWN

Expect high anatomic detail & thin margin with Versamill technology & our expert templates.



## SPECIALIZED OVERDENTURE

With the help of our support specialist, even the most complex CoCr bars are possible.



## SPECIALIZED OVERDENTURE

Perfect fit on this specialized overdenture produced on the Versamill 5X200.



## CUSTOM ABUTMENT

High-quality custom abutment produced from titanium blank disc on the 5X200.



## 3-UNIT BRIDGE

High-quality cobalt-chrome restorations are possible with the Versamill 5X200 & 5X450.



## SCREW-RETAINED CROWN

Zirconia screw-retained crown with great anatomic detail possible with all Versamill's.



## PMMA CROWN

Crisp, thin margins with superior finishes—the hallmark of our digital dental solutions.



## SUPERIOR ABUTMENTS

Note the fine sub-gingival surface finish and smooth, tangential blend to interface.



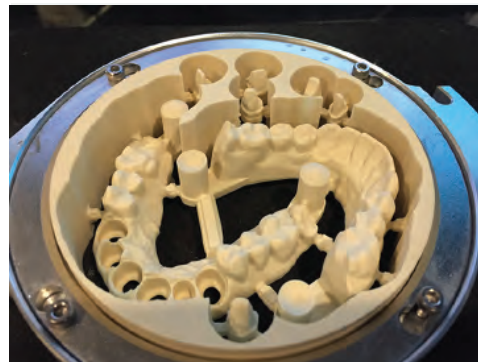
## SUPERIOR ABUTMENTS

Produce superior quality abutments from pre-mill blanks in record time.



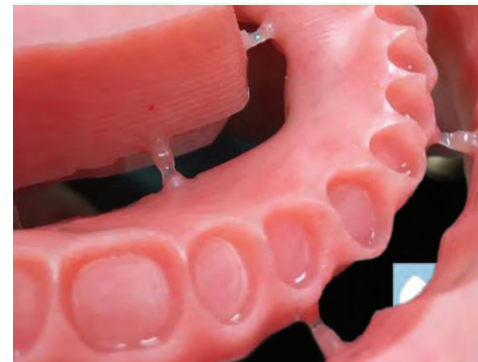
## SUPERIOR ABUTMENTS

Note the sharp margins and smooth blends on the highly-divergent custom abutment.



## MODELS & DIES

Complete models with removable dies can be produced on Versamill machining centers.



## DIGITAL DENTURES

Denture bases and complete dentures can be machined each Versamill & Polident discs.



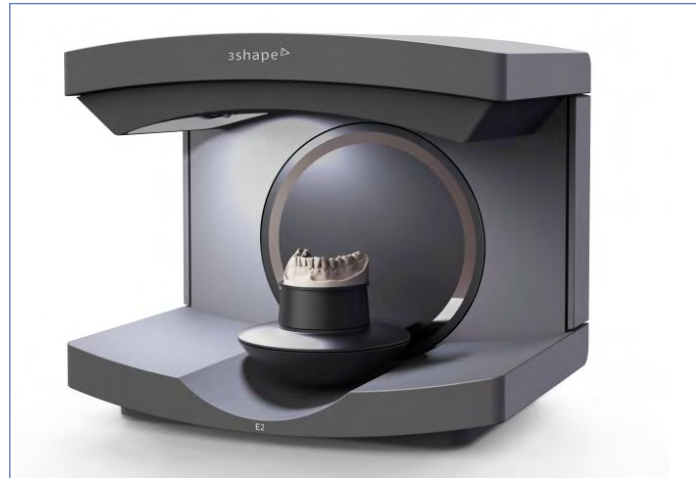
## BITE SPLINTS

High-quality bite splints are easily produced with outstanding accuracy and fit.

# Integrated, Open-System 3D Scanning Solutions

Meeting any of your technical, operational, or budgetary requirements.

## 3shape INTRAORAL & DESKTOP SCANNERS



### E-Series Lab Scanners

Three options to choose from.  
Quick, accurate impression scanning optimized for productivity.



### F8 Lab Scanner

Engineered for efficient dual model scanning workflows requiring minimal scanner interaction, F8 enables you to do more, in less time, and with fewer steps.



### TRIOS Intraoral Scanners

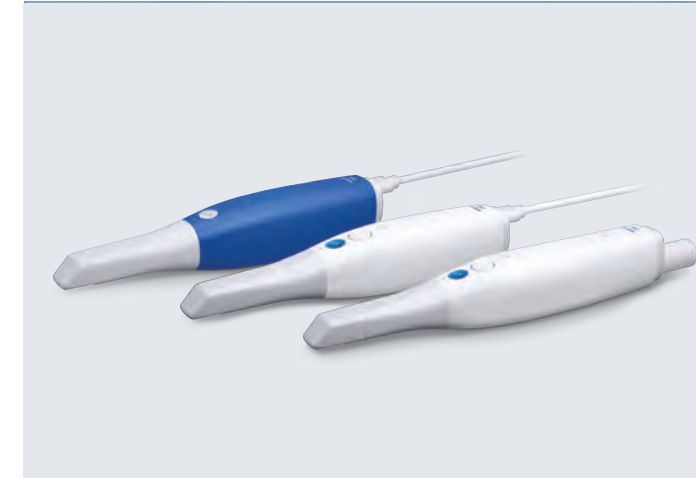
The world's most recognized intraoral scanner brand.  
Three models of wired and wireless scanners to choose from.



### TRIOS Move +

The intraoral scanner set-up that makes it easier to engage with patients.

## MEDIT T & I-SERIES DENTAL SCANNERS



### Medit Intraoral Scanners

Three scanners to choose from. A solution for every application from implant work to orthodontics and even denture replication.



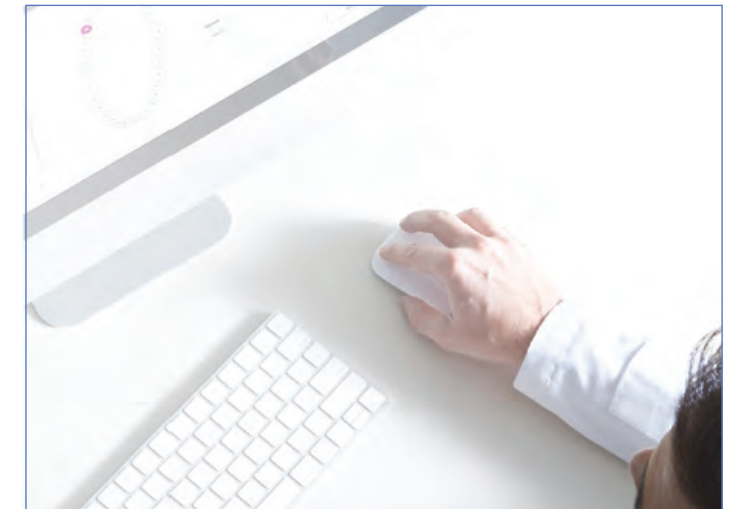
### Medit T-Series Scanners

The lab scanners of the Medit T-Series deliver power, speed, and versatility. The three open-system scanners are suitable for every use case.



### Medit Apps

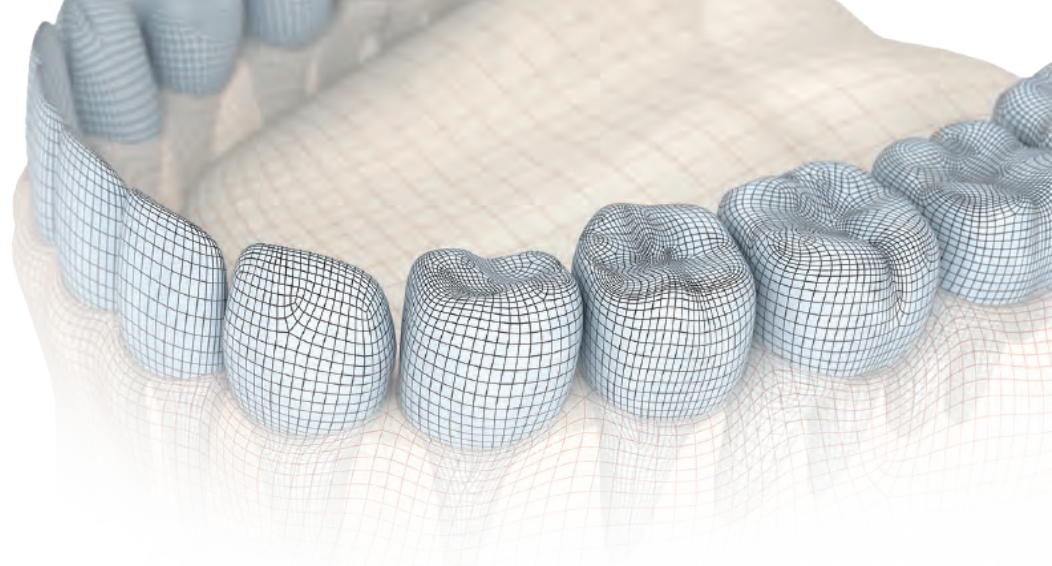
A portfolio of software that puts you in the driver's seat of your digital dentistry workflow and adds new value to scans and images.



### MEDIT LINK

Collaborative tool that facilitates communication between dentists and labs to support patient-centered workflows.





## MATERIALS

Rated amongst the top strongest PMMA in an independent Ohio State University research study published in the Journal of Prosthetic Dentistry. Use Polident digital denture discs to produce aesthetic and functional full or partial dentures. Discs can be used for immediate load implant denture as a long term provisional in combination with denture teeth and titanium connectors. CAD/CAM denture discs include:

- Pink Denture Base Discs (custom colors available).
- Full Denture Discs: Shades include pink base with choice of A1, A2, or A3 dentin layer.
- Shaded and 3- or 5-layer multilayer PMMA discs. Shades include: A1-A3, B1-B3, bleach and enamel E1, E2.

Axsys offers PMMA artificial teeth from Polident for the production highly aesthetic multilayered high-end anatomical teeth to produce the most life-like dentures possible. Polident teeth are available in complete sets of 28 teeth for total dentures or in separate sets of 6 or 8 teeth. Three product lines are available with comprehensive mold charts representing a wide variety of sizes, shades and shapes in each product segment. These highly aesthetic artificial teeth can be attached on a denture base with PMMA resin or light curing composite material with proper primer

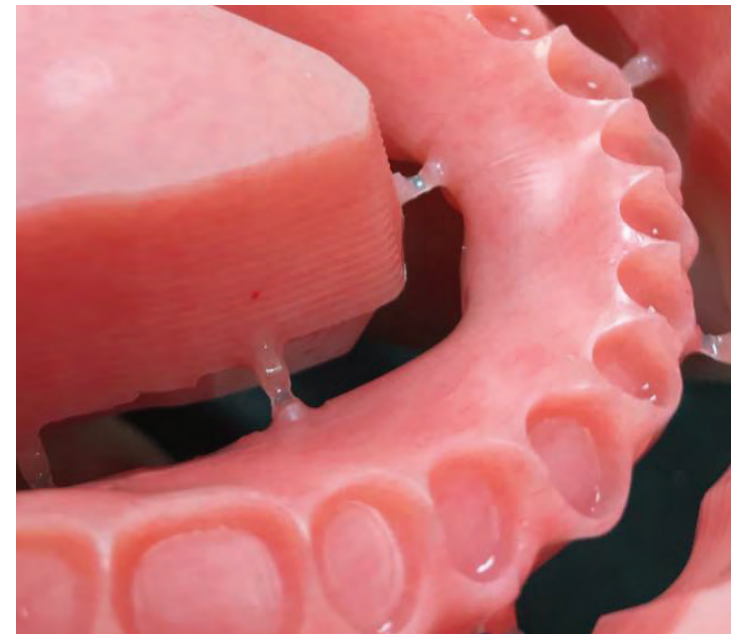
## FABRICATION

Our solution includes fabrication utilizing our award winning Versamill dental machining centers or one of our 3d printing solutions all of which are known for delivering excellent precision, surface finish, functionality and speed. Denture materials are available as well as materials for long term crown & bridge provisionals. FDA-approved materials are also available providing a solution for the accurate 3D printing of crowns and bridges for long-term or temporary use.

# DIGITAL DENTURE SOLUTIONS

CAD/CAM Dentures are produced utilizing advanced scanning, dental CAD, milling, and 3-D printing. The digital process of designing and manufacturing the try-in and final denture is another step in the evolution of CAD/CAM dental solutions. Once finished, the digital design file is a complete representation of the patient's dentition that can be leveraged to fabricate replacement restorations, including implant-retained prostheses.

The components of our denture manufacturing solution include 3D scanners, dental CAD design software and ideally coordinated materials. Combining these elements with specialized CAM software with expertly-designed manufacturing strategies for select award winning Versamill 5-axis milling machines, or one of our cutting-edge 3D-printing solutions, provide highly-accurate, predictable and reproducible results.





# Precision Dental Tooling

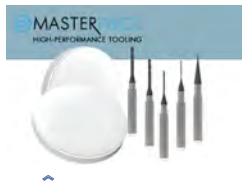


Axsys provides a wide range of tooling for virtually any dental manufacturing application. Whether it be a drill, ball, bull or flat end mill, solid carbide, coated carbide or even diamond coated carbide we supply some of the best available on the market.

Take advantage of the machining knowledge obtained by our Application Engineers from hundreds of man years of experience machining hard, abrasive and even flammable materials with large and extremely small cutting tools. We strive to provide the strongest possible tooling with the greatest resistance to wear and a fair price point.

Axsys has not only proven and extensively tested the tooling but we can also help fine tune your machining templates to provide optimal machining times, longest wear and the best blend between surface finish and short cycle times.

Masterpiece utilizes a new composite Chromium Nitride coating treatment for our burs used in milling PMMA/PEEK materials. It is an excellent coating that provides lubricity and superior wear and corrosion resistance. This technology has a very low residual stress, which provides for the best adhesion and ductility. High hardness, low coefficient of friction and the low residual stress combine to resist abrasive and excessive wearing when machining PMMA/PEEK materials.



Masterpiece Milling Burs are specifically engineered to meet the demands of today's digital milling processes for Zirconia. Chemical Vapor Deposition (CVD) Diamond Coating ensures increased bur life. In addition, the cutting efficiency, cutting speeds, and the workpiece quality are significantly improved. The specific CVD Diamond Coating process used to produce Masterpiece yields the purest diamond coating of milling tools available on the market.



## LASTS MORE THAN 2X LONGER

Masterpiece grinding burs utilize an advanced abrasive diamond grit in different grain sizes applied by a unique electroplating process. The adhesion of the diamond grit size plays a crucial role in avoiding micro-cracks and reducing the sensitivity to thermal problems. The plating process, which bonds the diamonds to the bur's shank, is critical for performance. The uniformity of the diamond surface ensures the proper characterization to enhance the abrasion and failure resistance for long endurance run times. The result is: Masterpiece diamond plated grinding tools provide the maximum tool life while producing accurate grinding results and at the best possible price-performance ratio.



Masterpiece Milling tools have been developed with a new hybrid AlCrN based-coating that is ideal for milling Titanium and Cobalt-Chrome dental materials.

These millings tools are specially designed and processed to provide extended wear and high strength in high-speed machining applications of Titanium and Cobalt-Chrome materials.

ADVANCED ZIRCONIA SYSTEMS FROM



## DD Bio ZX<sup>2</sup> color – High Translucent (3Y-TZP-LA) Natural chroma: high translucent zirconia according to VITA® shades

The DD Bio ZX2 system combines the known positive properties of classic zirconia with a significant increase in translucency. This material is perfect for highly aesthetic restorations such as:

- Monolithic crowns and bridges of any span range
- Especially for monolithic bridges
- Cut back (one layer)
- High aesthetic veneering of any span range



## DD cube ONE® ML – High Translucent Plus (4Y-TZP) Multilayer: high strength cubic zirconia

Based on the "DD cube ONE® – high strength cubic zirconia system," the blanks offer a flowing color gradation from cervical to incisal. The manufacture of aesthetic monoliths has never been this efficient.

Perfect for:

- High aesthetic monolithic crowns and bridges
- Monolithic anterior restorations
- Cut back (one layer)
- High aesthetic veneering



## Nacera® Pearl Natural Zirconia Super High Translucent (6Y-PSZ), High Translucent (3Y-TZP)

Nacera® Pearl Natural 3D Zirconia gives all constructions—from single crowns to large, fully anatomical implant retained constructions. Life-like character with fine gradations of color and the translucency of natural teeth are revealed in smooth transitions after sintering.

16 shades, two bleach shades according to the VITA\* shade scheme, and a specially developed bleach shade cover all common tooth shades and meet the highest esthetic demands.





# suprême® Ceramics & Dental Alloys



## Implant Components Tools & Accessories



Suprême® utilizes Heatran® hot flow die casting technology, an advanced manufacturing technology where the glass solution is pressurized and cooled at a high temperature of 1700 ° C., so that the glass is instantaneously formed under high pressure. Compared with the traditional dental glass ceramic manufacturing process, the interior of the ceramic block is more uniform, dense, and without cracks and defects.



Suprême utilizes a 99% high-purity platinum system for the high-temperature melting of glass ceramics to eliminate the challenges of traditional systems. Traditionally, the impurities of alumina ceramic materials will penetrate into the glass ceramics and reduce biological safety. Uneven and various defects can also appear randomly, and the service life in the mouth is shortened.



Bring the experience of "immediate repair" to clinical patients with sintering-free technology. By precisely controlling the crystal structure, the dental glass ceramic can be used after cutting and polishing. The user can glaze according to actual needs without high temperature crystallization. This technology reduces processing time by 35% without reducing the machinability of the porcelain block.



The addition of biological-grade rare-earth elements enhances the fluorescence and opalescence of dental glass ceramics. This avoids the traditional glass ceramics and zirconia problems of dark, gray appearances at night.

Suprême® CAD/CAM HT-BL Series (18-15-3/40-15-15):  
Amber color, & purple HT-BL1, HT-BL2, HT-BL3, HT-BL4.

Suprême® Standard CAD/CAM LT & MT & HT Series (18-15-3/40-15-15):  
Vita 16 shades plus 4 bleached shades.

Suprême® U-ZEE Sinter-free Series (18-15-3):  
HT/LT A1-A3, B1-B2, BL1-BL4.

### Suprême® Dental Alloy CAD/CAM Discs

Ti-5 Ti 6Al4V ELI with shoulder, Ø 98.5 mm: H10, H12, H14, H16\*  
CoCr with shoulder Ø 98.5 mm: H10, H12, H14, H16\*.

\*Additional heights available upon request.

- Raw material purification
- Flexural strength 420MPa
- Edge integrity optimization



### Partner with Axsys Dental Solutions to skyrocket your profits and simplify your life.

We help clinicians and laboratories of every size with competitively priced, trusted dental supplies. We offer:

- A wide selection of supplies and equipment from leading brands
- Competitive pricing for laborator and practices of every size
- Fast delivery
- Commitment to supporting educational institutions and initiatives
- Authorized sources for every product



Created by lab technicians for lab technicians. Open Implants simplifies operations and inventory management, reduces costs and increases reliability.

Featuring customizable titanium bases, 510(k) compliance and compatibility for the following implant systems:

- Astra Tech® OsseoSpeed
- Biomet® 3i Certain
- Nobel Biocare® Nobel Active
- Nobel Biocare® Replace Select
- Straumann® Bone Level
- Zimmer® Tapered Screw Vent



Medentika®, a Straumann company, supplies dental technicians and dentists with precision engineered implants, multi platform abutments and components that are durable and fully compatible with all major implant systems at an affordable price.

### FDA Regulatory Compliance Peace of Mind

Axsys Dental Solutions partners with the leading FDA consultancy agency, EVO820 to help our clients with the development of a Quality Management System (QMS) that is compliant with the FDA's Title 21 CFR 820 that guides companies on the FDA current Good Manufacturing Practices and provides the training on how to install a QMS and manage the documentation.

EVI820 audits your QMS to assure that you are prepared for the FDA inspection and have all documentation in order. When the FDA announces that an FDA inspector is coming, we work with our clients to prepare for the FDA audit.



With more than 50 years of experience in manufacturing high precision parts for the medical and dental industry, DESS shares your passion for quality and the desire to achieve the best restorative outcomes.

DESS products provide FDA clearance and offers Ti bases, scanbodies, analogs, screws, pre-mills, impression transfers, multi-unit, and tools for over 25 implant systems.



IPD's team of specialists collaborates with well-known dental professionals and very prestigious dental technicians to produce dental abutments with a cutting-edge and innovative design, ensuring they are of the highest quality and functionality.

From their facilities in Barcelona, Spain, dedicated exclusively to the production, manufacturing and distribution of their wide range of products and using state-of-the-art technology: IPD offers prosthetic abutments that are compatible with over 30 leading brands and carry FDA clearance.