



## Precision Dental Machining Centers

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# 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 software and hardware 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 Axsys to enable them to meet their objectives.

In the year 2015, Axsys Dental Solution's Versamill 5X200 earned recognition as the top technology product by AEGIS publication Inside Dental Technology.



In the year 2018, Axsys is selected by Xplore 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.?

## Sample of Services Provided

- 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.

## 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.





# 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.*

## 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 customers.
- Effectively troubleshoot machine, tooling and software problems.
- Quickly analyze and solve machining and restoration design problems.
- Expertly assist in the modification of machining template to address issue such as: severe restoration design features, changing production or quality requirements and new materials or processes.

...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.

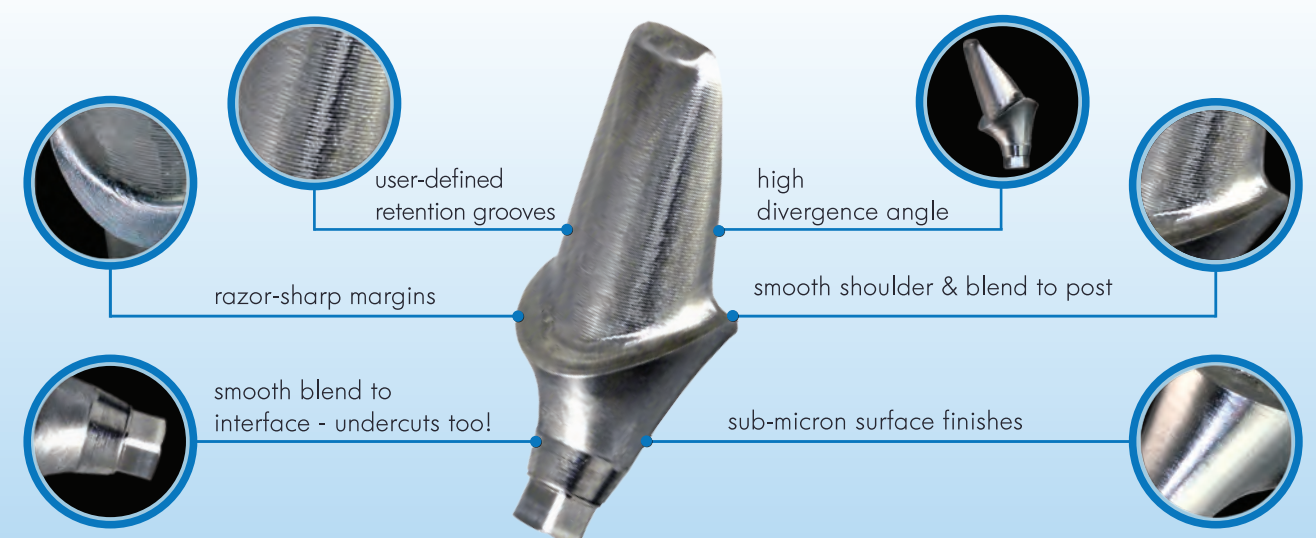
In addition to greatly enhanced libraries, the machining templates developed by our team of manufacturing experts are designed to effectively and efficiently handle even the most challenging of custom abutment designs.

## 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



# 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 the EnvisionTEC 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.

EnvisionTEC 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.



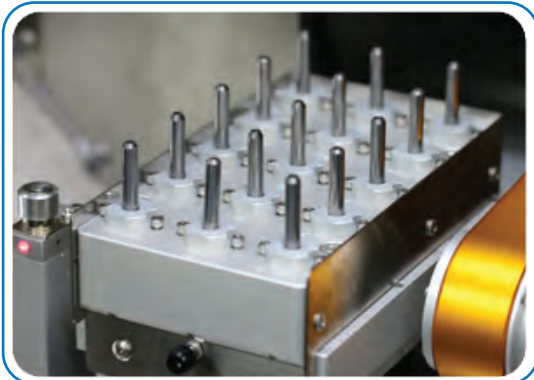


# Versamill 5X200

## 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..."*

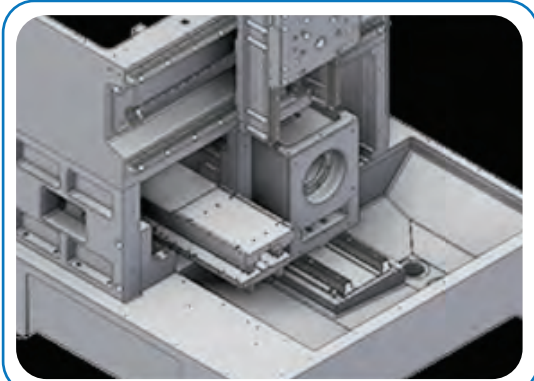
- John Noel, Noel Laboratories



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.



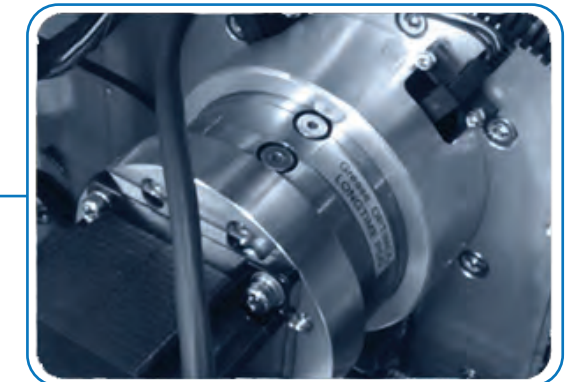
*The 5X200's heavy-duty base provides the necessary stability to produce restoration with unsurpassed surface finishes & the best possible restorative margins.*



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.

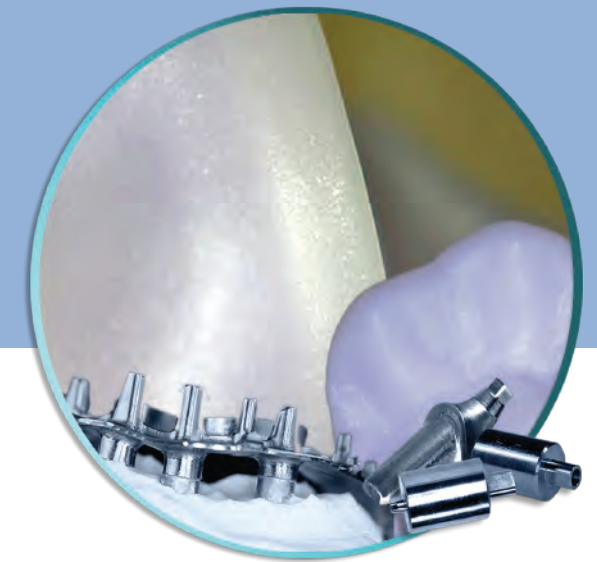
Separate coolant tanks makes for easy change over from zirconia to other materials without compromising the integrity of the fluids.





# Versamill 4X100

## Industrial quality with a small footprint



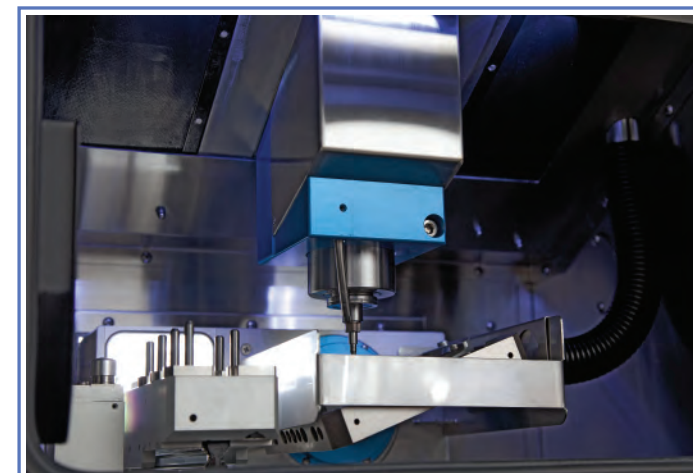
The Versamill 4X100 is an open source, compact dental machining center designed to provide owners with maximum flexibility and versatility.

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 4X100 provides superior surface finishes, faster cycle times and greater tool life with minimum profit-robbing and time consuming post-machining bench processing.

### Indications

- Inlays and Onlays
- Veneers
- Copings
- Crowns
- Bridges
- Custom Metal and Hybrid Abutments



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

### Features

- Open architecture
- Space saving design
- 4-Axis simultaneous operation
- Rigid, vibration dampening construction
- Precision guides, linear ways and ball screws
- Low maintenance and high reliability
- High performance 1.4Kw max 60,000 rpm spindle
- 170,000 point AC closed-loop servo drives
- 6mm shaft tooling
- 8 position automatic tool changer
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with  $\pm 5\mu\text{m}$  Accuracy

### Materials

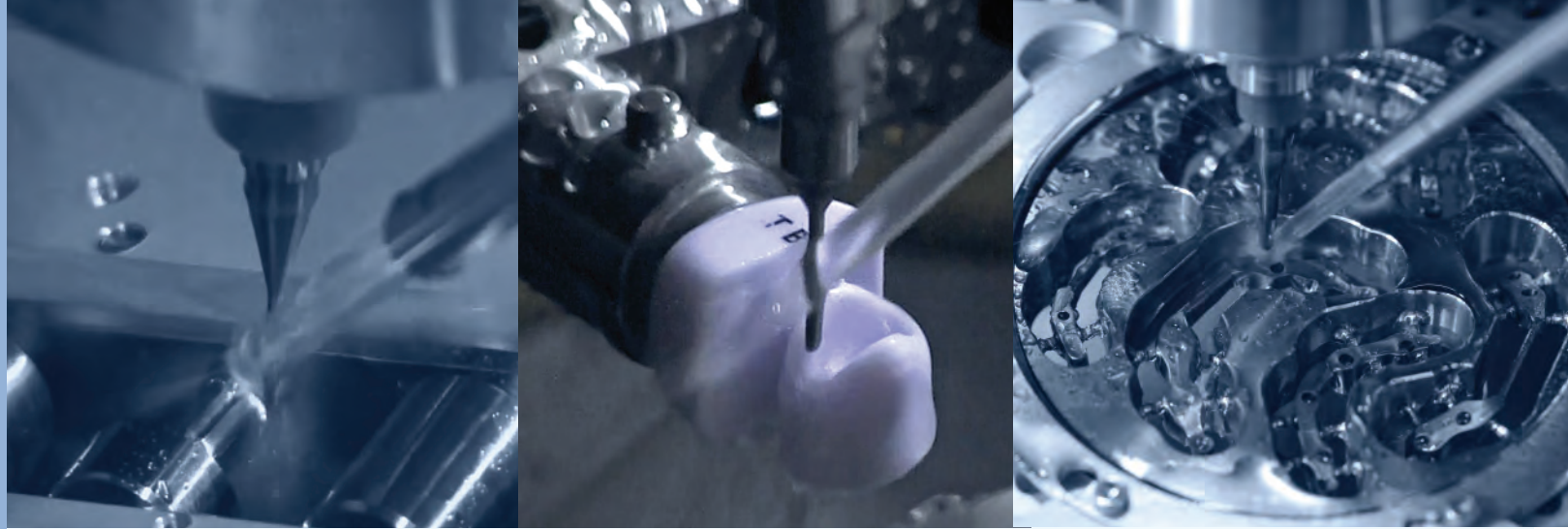
- Titanium
- Glass Ceramics/Lithium Disilicate
- Composite (Lava™ Ultimate, Vita Enamic®, etc.)
- Zirconium Oxide
- PMMA
- Resin, Wax and more...





# Versamill Dental Machining Centers

## Producing restorations of the highest quality



### High Quality Machine Components

Both the Versamill 4X100 and the Versamill 5X200 provide a single, cost-effective, compact and easy-to-use open platform. This high precision dental milling machine is constructed from heavy duty, reliable components like those utilized in heavy industrial applications and can be implemented into any lab 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.



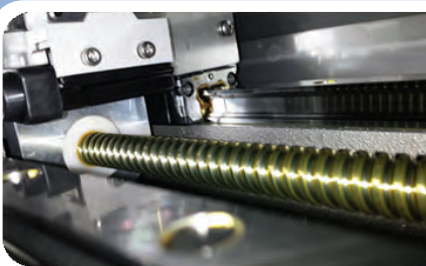
Heavy Duty Spindle Assembly

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.

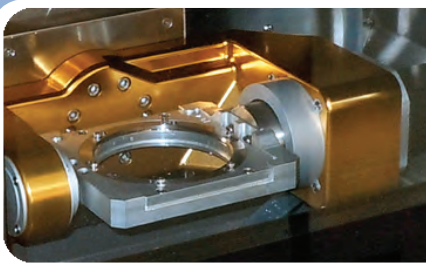
The precision universal fixture is fully supported on each end to assure accuracy and the rigidity necessary to produce high quality surface finishes with the longest possible tool life.



Vibration Dampening Construction



Precision Guides and Ball Screws



Rigid Rotary Axis and Fixture

### Versamill 4X100 Specifications

Number of axes:		4 simultaneous
Travel (x, y, z axis):	(mm)	250 x 116 x 110
Rotational axis:	(degrees)	360 °
Feedrate (x, y, z axis):	(mm/minute)	6,000
Feedrate B-axis:	(mm/minute)	3,000 (30 rpm)
Resolution:	(µm)	±1.0
Accuracy:	(µm)	±5.0
Repeatability:	(µm)	±3.0
Spindle Power:	(watts)	1,400
Spindle Speed:	(rpm)	5,000 - 60,000
ATC number of tools:		8
Coolant capacity:	(liters)	20 l
Blank disc diameter:	(mm)	98.3Ø
Machine size (W x H x L):	(mm)	623 x 780 x 1735
Machine Installation Space (WxHxL):	(mm)	1100 x 800 x 2005
Weight:	(Kg)	300
Input Power	(VAC/50-60Hz)	220-240 VAC single Ø



### 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

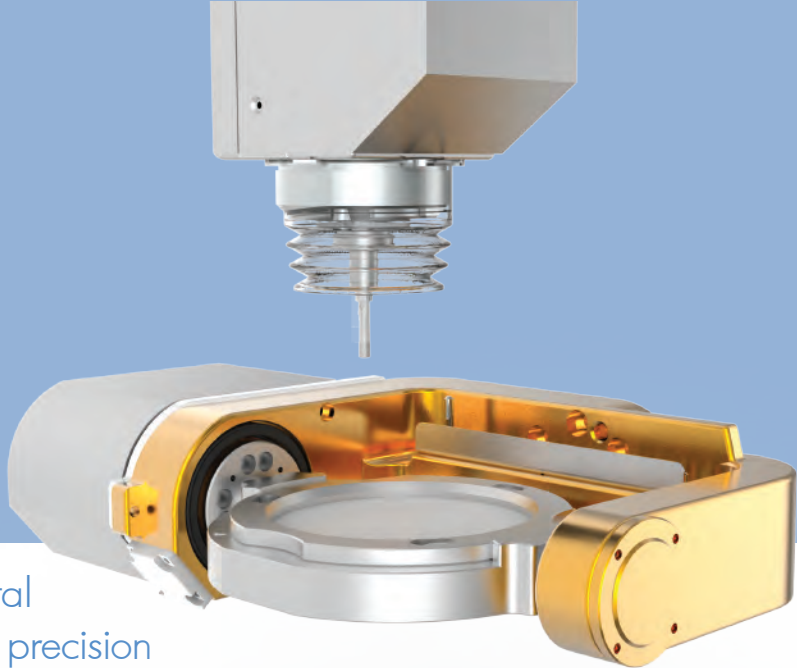






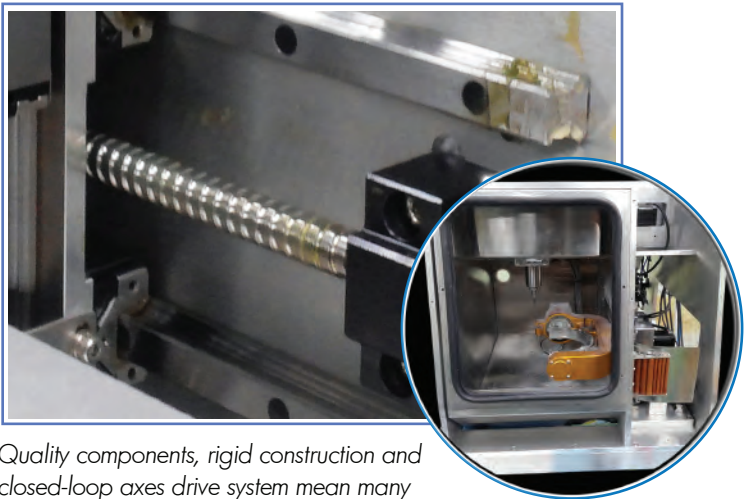
# Versamill 5X400

## Industrial quality with a small footprint



The Versamill 5X400 is 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.

The 5X400 can accept input from any dental design program and can machine a wide variety of dental milling materials, including; wax, zirconia, PMMA, glass-ceramics, lithium disilicate, PEEK, Pekkton, Lava Ultimate, resins composites and even titanium pre-form abutment blanks.



Quality components, rigid construction and closed-loop axes drive system mean many hours of 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
- 4mm shaft tooling
- Tool measurement probe with breakage detection
- Wet or dry milling
- High Precision with  $\pm 1\mu\text{m}$  Resolution

### 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)	$\pm 35$ °
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Repeatability:	( $\mu\text{m}$ )	$\pm 5.0$
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

### Quality, Durability and Dependability

With precision ball screws, linear guides, closed-loop drives and rigid frame, the Versamill 5X400 shares many of the same high-quality, durable characteristics of the larger members of the Versamill family—at an extremely attractive price point.



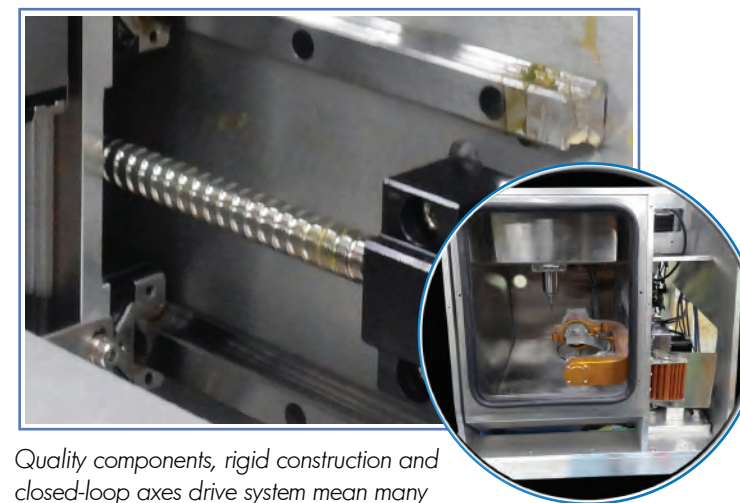


# Versamill 5X300D

## Industrial quality with a small footprint

The Versamill 5X300D is a compact 5-axis dental machining center designed for the dry precision machining of copings, crowns, bridges, dentures, models and more.

The 5X300D can accept input from any dental design program and can machine a wide variety of dental milling materials, including; wax, zirconia, PMMA, PEEK, Pekkton, resins and more.



Quality components, rigid construction and closed-loop axes drive system mean many hours of trouble-free operation.

### Versamill 5X300D 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 ±1µm Resolution

### Quality, Durability and Dependability

With precision ball screws, linear guides, closed-loop drives and rigid frame, the Versamill 5X300D shares many of the same high-quality, durable characteristics of the larger members of the Versamill family—at an extremely attractive price point.



# 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 and 4X100 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.



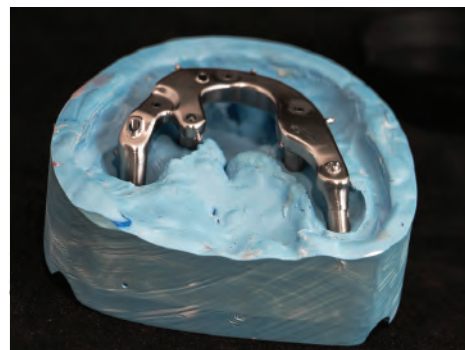
## ZIRCONIA CROWN

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 & 4X100.



## 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.



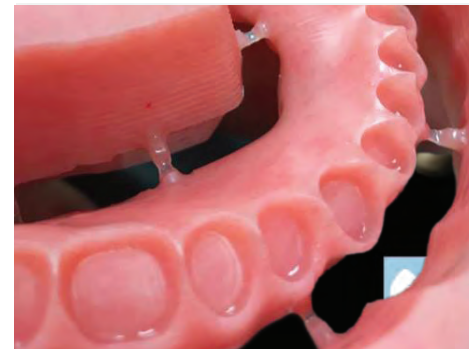
## SUPERIOR ABUTMENTS

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.





## CAMEO DENTAL SUITE POWERED BY EXOCAD:

## YOUR FUTURE IN DIGITAL DENTISTRY



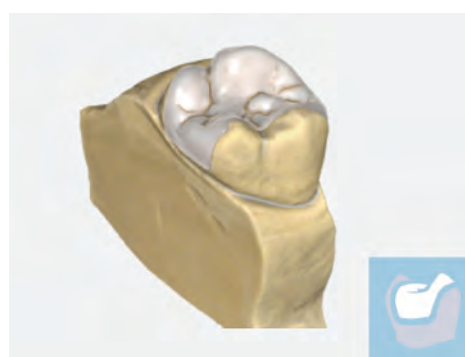
### IMPLANT\*

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



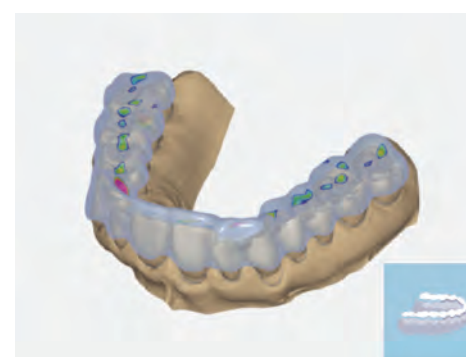
### SIMPLE & ANATOMIC COPINGS

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.



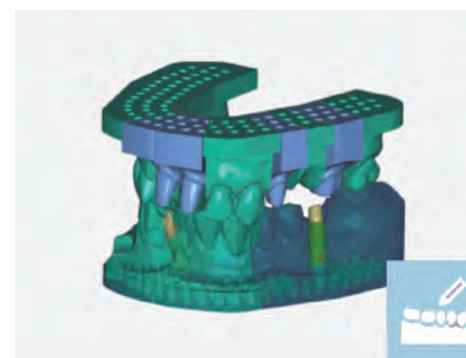
### VENEERS

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.



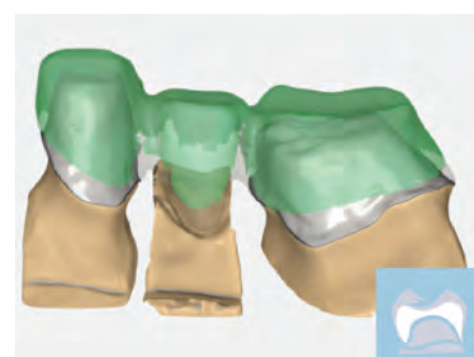
### TOOTH LIBRARY

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

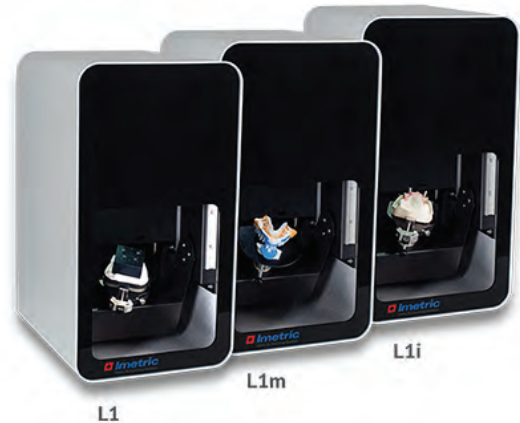




# Integrated, Open-System 3D Scanning Solutions

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

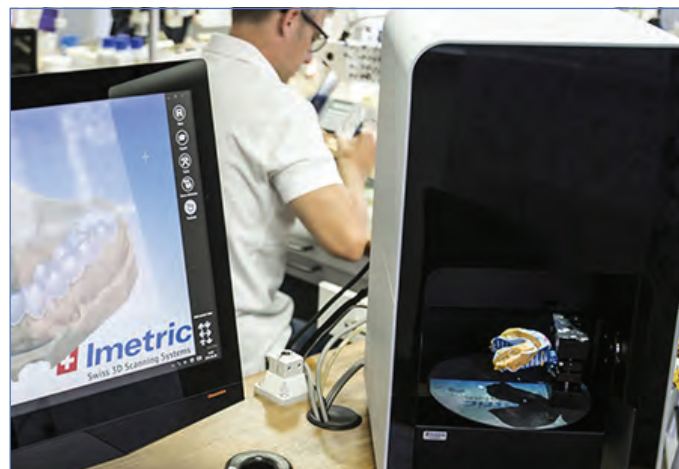
## **Imetric** IMETRIC 3D SA



### iScan L1

3 Models to Choose From

With < 15µm accuracy over full arch, your best choice for scanning dental models and impressions.



### Fast Scan Times

Optimized Scanning Function for Impressions

Eliminates the need to create plaster models. Simply mount the impression on the impression holder & scan.



### Implant Scanning

Precision of less than 5µm using implant position functionality and iMetric approved adapter.



### Speed & Data Quality

Impressions, dental models and check-bites. Standard indications, such as crowns and bridges, partials, dentures, inlays/onlays, implant positions and more.

## **MEDIT** T & I-SERIES DENTAL SCANNERS



### i500 IOS

With its impressive speed and powderless system, the i500 intraoral scanner allows for a smoother scanning experience.



### MEDIT T-500

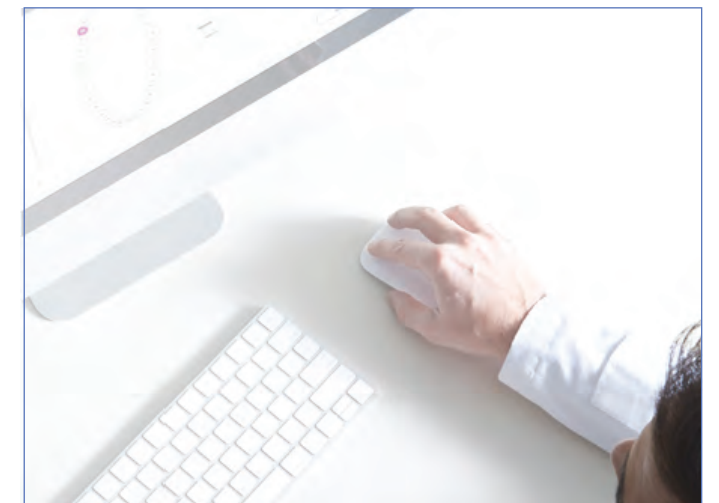
Model Free Workflow with automatic 3-axis, double-sided auto impression scanning.

Speed and accuracy with 2MP cameras.



### MEDIT T-300

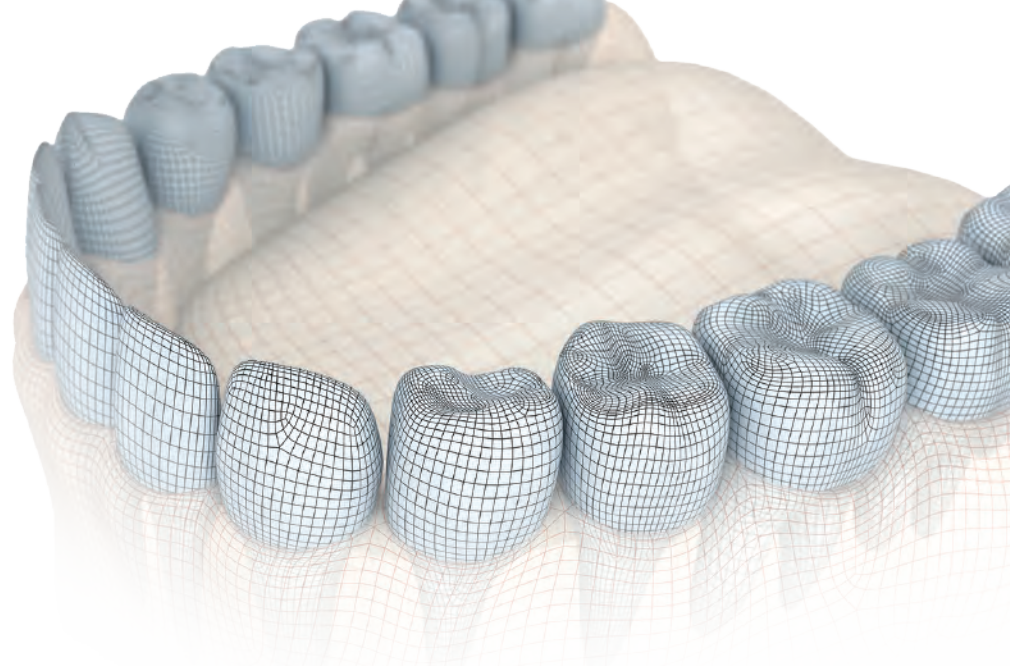
Advanced Data Processing and High Resolution with high-resolution cameras, blue light scanning technology and manual 2-axis impression scanning.



### MEDIT LINK

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





# 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 the cutting-edge EnvisionTEC 3D-printing platform, provide highly-accurate, predictable and reproducible results.

## 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 EnvisionTEC 3D printers both of which are known for delivering excellent precision, surface finish, functionality and speed. Denture materials include E-DENT, FDA-approved base material, E-DENT-200 for long term crown & bridge provisionals and E-DENT-400 FDA-approved solution for the accurate 3D printing of crowns and bridges for long-term or temporary use.





## DENTAL FURNACES

Axsys Dental Solutions offer a choice of sintering and porcelain furnaces for a wide range of applications and requirements. Models from Whipmix and Nacera, available 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.



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.

## 3D PRINTERS

### EnvisionTEC 3D Printers Deliver

EnvisionTEC offers a full range of desktop, full-production and high-speed continuous 3D printers. EnvisionTEC 3D printers deliver tight-fitting crowns and orthodontic models with a best-in-class smooth surface that results in crystal-clear thermoformed aligners.

Paired with an industry-leading materials library, featuring a variety of FDA and CE-approved materials, EnvisionTEC machines offer unmatched flexibility and a complete solution that delivers reliable, proven results..



### High-quality, Right-priced Dental Materials

Axsys offers an assortment of dental materials in a range of sizes and configurations for manufacturing of dental restorations. Whether it be PMMA, zirconia, stainless steel or titanium, we can provide high-quality, blank CAD/CAM discs in a size and configuration to meet the needs of dental practices, labs and milling centers; regardless of their CAD/CAM software system or CNC dental milling machine manufacturer.

### AxZir™ Full-contour Dental Zirconia

Utilizing our pre-shaded discs, dental professionals can simply and consistently produce all 16 Vita A-D shades as well as bleach shades. No dipping or use of coloring liquids is required at any point in the process, helping to ensure a consistent aesthetic result.

Multi-layered and pre-colored discs are also available. Colored zirconia blocks are available in LL1, LL2, LL3, LL4, LL5. Or A1-D4 vita 16 classical shades.

### AxZir<sup>xt</sup> Multilayer Zirconia - Gradients in Three Dimensions

AxZir<sup>xt</sup> multilayer zirconia provides natural gradients of color, translucency and strength producing restorations of unmatched aesthetics and strength.

Featuring 6-layer natural color transition, Translucency from 57% incisal to 43% cervical, Strength gradient from 600 Mpa to greater than 900 Mpa. Available in VITA classical A1-D4® shades for anterior & posterior crowns and bridges.

