



 **versamill**
5X500
5X500L

Extreme Rigidity, Precision with Automated Operation

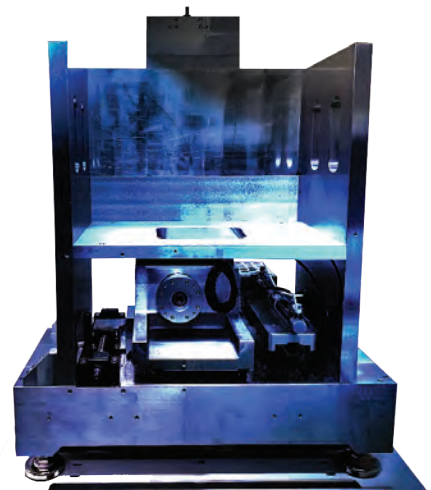
Constructed utilizing the technology found in “full-frame” CNC industrial machines, the Versamill 5X-500 is designed to perform reliably with high precision for the long term.

This purpose-built, open source 5-axis mill is designed to provide owners with maximum flexibility and versatility in a dental manufacturing system. The Versamill 5X-500 can accept input from popular dental design programs and process virtually any dental milling materials including wax, zirconia, acrylic, composites, PMMA, PEEK, Pektan, stainless steel, titanium, cobalt chrome, high-strength ceramics (Celtra® Duo, Shofu HC), glass-ceramics, and others.

The strength and rigidity of the Versamill 5X-500 coupled with the undercut machining capability of full 5-axis control provides superior surface finishes, faster cycle times and greater tool life while allowing you to machine virtually any material with the minimum amount of bench time.

Constructed for Vibration-free Operation

Cast aluminum-alloy frame, heavy-duty rotary reduction gears, zero stack-tolerance drive systems, linear guideways, and 3-way hybrid ceramic spindle bearings provide for long-term, trouble-free service. This coupled with Axsys Dental Solutions' expert machining templates crafted from over 40 years manufacturing experience, provides the highest quality restorations possible.



Key Construction Elements

The Versamill 5X-500 provides the best features and benefits of full-frame industrial high-speed CNC machine tools – which makes the 5X-500 reliable, and easy-to-operate while requiring minimal maintenance.



Linear Guideways

Linear guideways with pre-loaded blocks assure reduced vibration and consistent precision at high machining feed rates.



Zero-Point Clamp

Provides for accuracy and reduced vibration of the included disc, block, C-clamp, and multiple pre-milled abutment fixtures.



Ball Screws

Ball screws with ball nuts, driven by closed-loop servo drives, eliminate backlash providing maximum precision and repeatability.



Machine Base

The standard machine table features a sturdy design with maximum functionality, while rollers ensure optimum stability and easy movement of the machine.

Next Digital Dentistry Automation for any Dental Laboratory or Milling Center

More Award-Winning Technology from
Axsys Dental Solutions



Powerful Spindle

The Versamill 5X-500 features the German-made 60,000 rpm Sycotec 5060 AC spindle whose continuous duty (S1) rating for power is 3.0kW with a powerful 55Ncm of torque.

Three-times ceramic hybrid bearings, 6.0mm clamping diameter, and cooling system that does not require additional liquid cooling, provide for smooth operation with minimal run-out, deflection and thermal expansion concerns.



Indications

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



For continuous operation and high accuracy, The Versamill 5X500L features a 20-station automatic cartridge changer with zero-point fixturing.

Custom Abutments



Razor-thin margins, sub 1.0 micron Ra subgingiva surface smoothness, smooth transition to interface, & more.

Dental Bars



Produce all-on dental bars with no restriction to number of units and angulation with perfect fits.

Crown & Bridge



Crown & bridge work provides for fine anatomic detail, perfect fits and thin, clean restorative margins.

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.



Versamill 5X-500/5X-500L Specifications

Number of axes:		5 simultaneous
Travel (x, y, z axis):	(mm)	228 x 128 x 130
A Rotational axis:	(degrees)	360 °
B Rotational axis:	(degrees)	+40°, -30°
Drive Mechanism:		Ballscrew
Way System:		Linear Guide
Repeatability:	(µm)	±1.0
Spindle Power:	(watts)	AC 3.0kW max / 2.2kW S1
Spindle Speed:	(rpm)	6,000 - 60,000
ATC number of tools:	6.0mm	20
Axis Drive System	Closed-Loop	Servo Motor w/Encoder
Blank disc diameter:	(mm)	98 Ø
Machine size (W x H x L):	(mm)	1100 x 910 x 1715
Auto Cartridge Changer:		20
Weight:	(Kg)	470
Input Power	(VAC/50-60Hz)	240 Single Phase



"...I have found NO-ONE who isn't eager to help and assist until the customer is satisfied. I should know, I've been with them for three years. One of the best business decisions in my 40 years of dentistry."

Dr. Jacob Dobbins DDS
Mountain View, AR



"It's a pleasure working with such an organized, knowledgeable, and action oriented team like Axsys Dental Solutions. I wish all my projects and suppliers were like Axsys Dental. We look forward to continuing our relationship for years to come".

Ernest A. Dion Manager, Process Development
DentsplySirona



**Dental
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