

# eX5.3D-C

**5-Axis Dental Milling Machine**  
Uninterrupted milling.



24/7  
Production



12-Disc  
Automatic  
Changer



Mobile App



The top half of the page features a dark grey background. In the center, the 'nexum' logo is displayed in a bold, lowercase sans-serif font, with the 'e' highlighted in a vibrant blue. Below it, the word 'DENTAL' is written in a clean, uppercase, spaced-out sans-serif font. To the right, a lush green palm plant is partially visible. In the foreground, the silhouettes of two office chairs and computer monitors are faintly visible against the dark background.

# nexum DENTAL

## ABOUT THE BRAND

At Nexum Dental, **we redefine the standard in dental equipment and supplies**, transforming the ordinary into the extraordinary.

Our headquarters combines **technological innovation with an unwavering commitment** to excellence, positioning us as a leader in the premium dental market.

**We are a comprehensive provider of CAD/CAM solutions**, integrating research and development (R&D), production, and sales, backed by a well-established R&D team. We have obtained numerous international certifications, such as CE, FDA, and ISO, **which guarantee the quality and reliability of our products.**

**We specialize in importing and distributing products** designed for dental laboratories and clinics that seek exceptional quality, ease of use, and an innovative approach. Inspired by the need to offer accessible solutions without compromising exclusivity, we provide advanced equipment and after-sales services that make a difference.

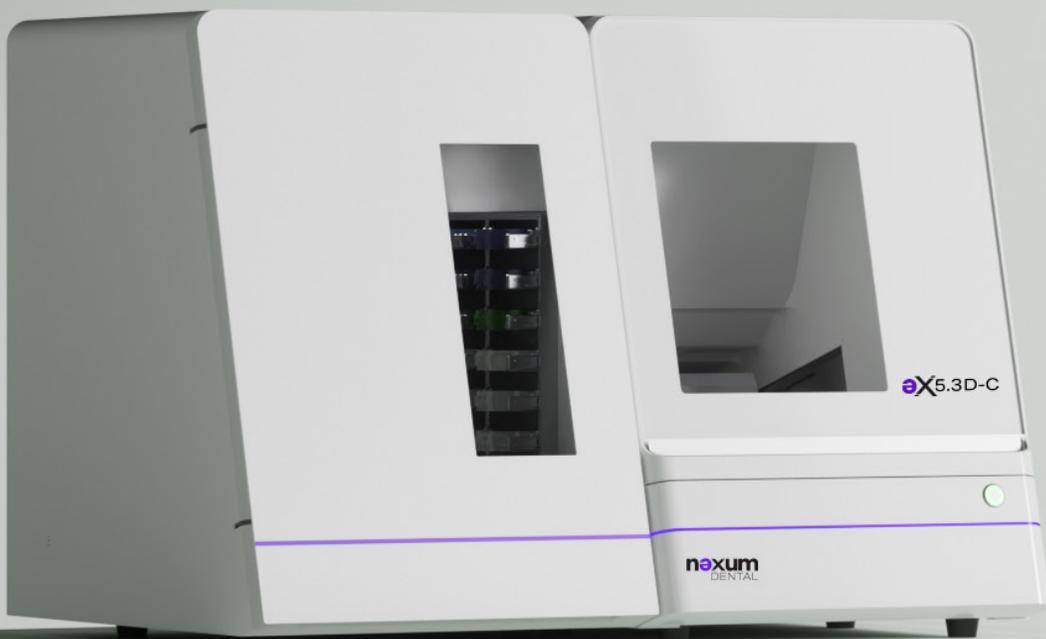
Our mission is clear: **to simplify processes, exceed expectations, and elevate the customer experience.** At Nexum Dental, we are driving a new era of technology in the service of dental health.

# eX5.3D-C

## Unattended, Smart, and Reliable Automated Milling Experience

**Imagine a process managed entirely by an intelligent system**—just set the task and focus on other priorities. You can boost your productivity even outside of regular hours or when you're away.

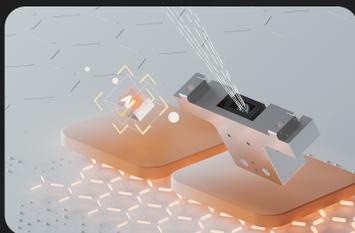
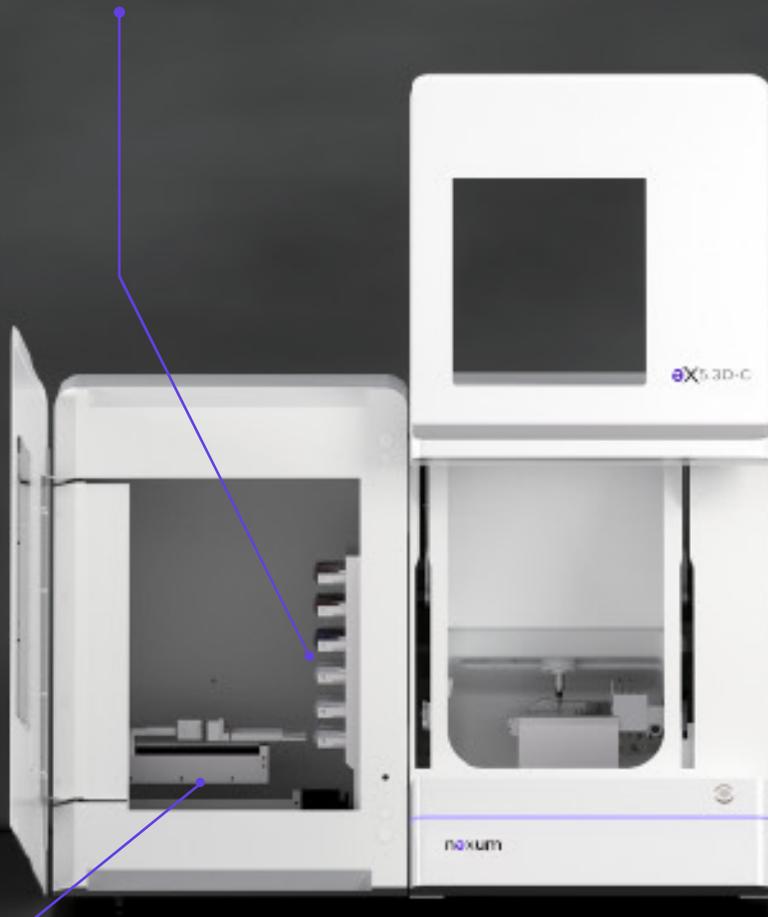
The eX5.3D-C makes unattended milling a reality, maximizing productivity and reducing errors.





 **Automatic  
Disc Changer**

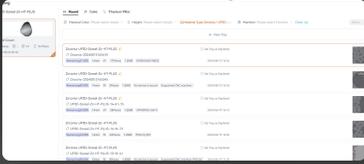
- **Supports Multiple Materials:** Zirconia, Wax, PMMA, PEEK, CoCr sinter metal, Composite Resin
- **Holds 12 Discs:** Enables non-stop multi-task milling
- **Compatible Discs:** 98mm discs and 6 blocks of different sizes
- **BK-1 Clamp & C-Clamp:** Quick switch between discs and blocks, ensuring efficient production



 **Smart Disc  
Identification  
Technology**

With smart disc identification technology, materials can be placed in any slot. The system automatically identifies and processes disc information, speeding up production automation.

### Smart Order Management (Smartassign):



- **Quick Import:** Batch import design orders without click
- **Intelligent Recognition:** Automatically identifies design type, color, and thickness for easy categorization
- **Automatic Material Matching:** Recommends optimal materials based on design specifics

### Smart Material Management System

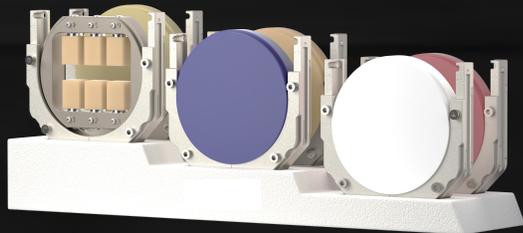


### Smart Nesting:

- Import dental design data, intelligently position teeth within the disc, and automatically generate pin placements.



- MillMind software allows you to remotely manage and control your milling device via your smartphone.
- Monitor production status anytime, anywhere, without the need for on-site supervision.

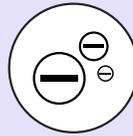


### Pre-Loadable Material Adapters

Six pre-loadable material adapters with unlimited expansion, allowing efficient management of various material types.

# The Perfect Choice for Resin Milling

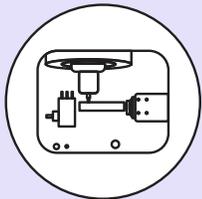
The **eX5.3D-C** makes resin processing simpler and more efficient, becoming your trusted partner for achieving outstanding restorations.



## Enhanced Ionizer

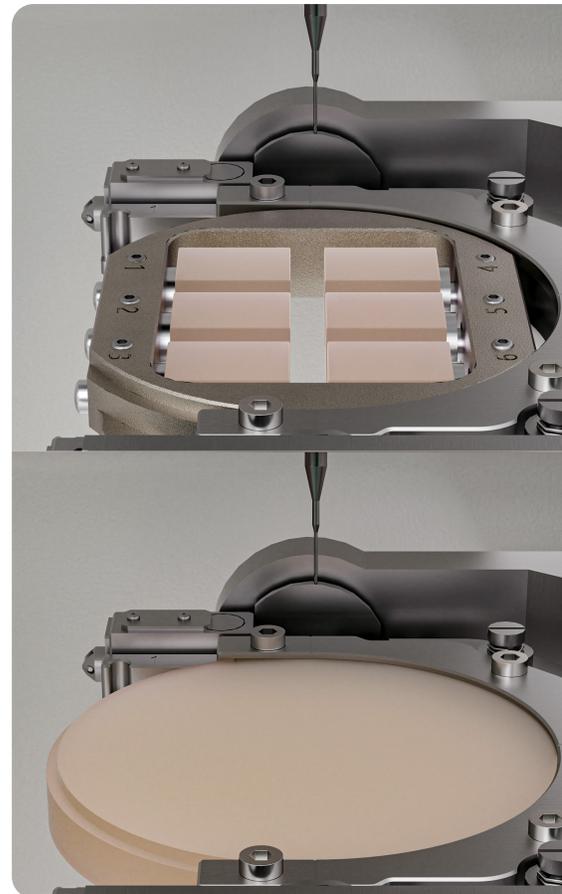
The ionizer effectively neutralizes static electricity, preventing debris from adhering to the working chamber and tools, which could compromise milling accuracy.

This ensures long-term, stable milling of PMMA and resin materials, delivering a clean and smooth milling process that enhances overall quality.



## Compatible with Various Material Forms

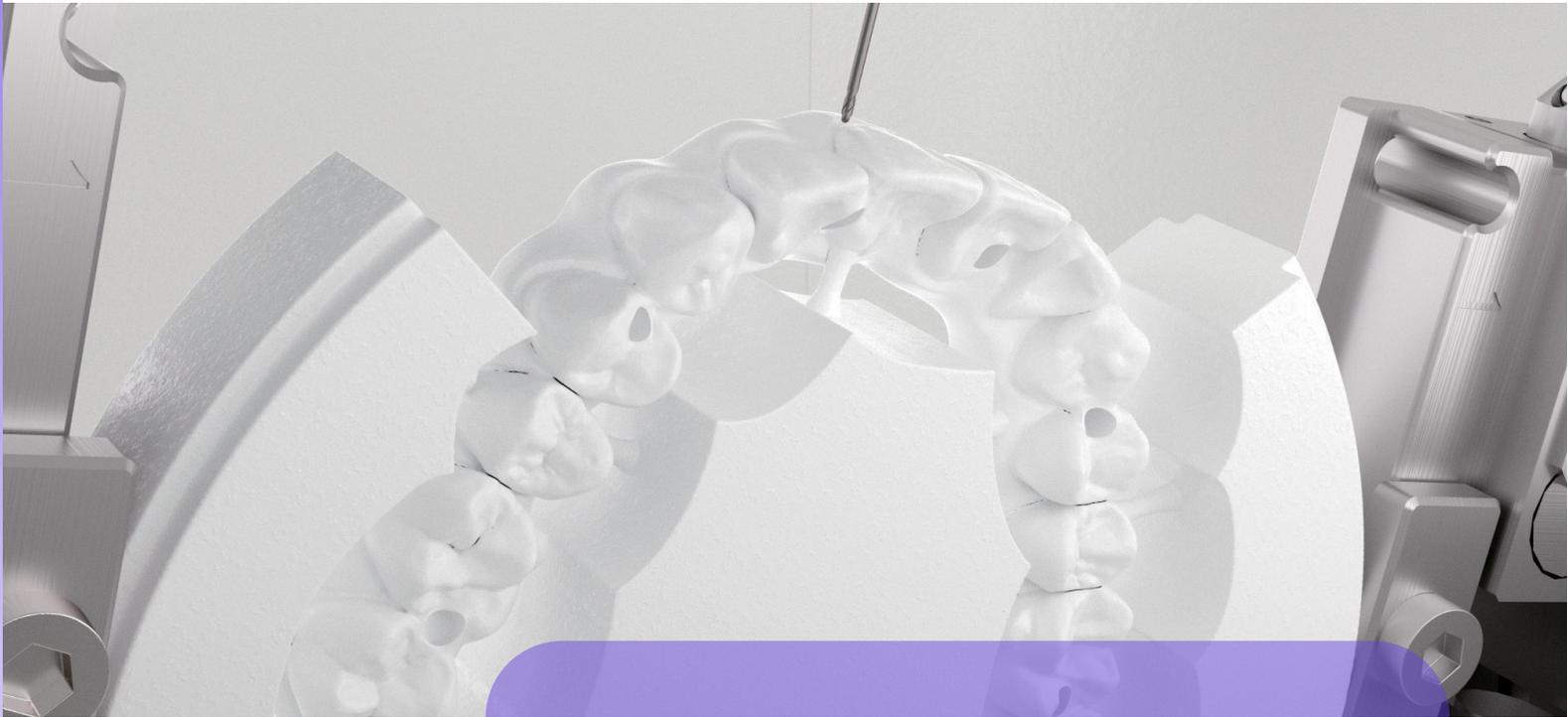
Whether it's composite resin disc or block, the **eX5.3D-C** handles it with ease, providing greater flexibility for your dental lab.



# Bionic Aesthetic Milling Precision Milling Solution

The **eX5.3D-C** redefines the precision and efficiency of dental restorations with bionic aesthetic milling. It delivers outstanding aesthetic results while maximizing material utilization and significantly

reducing the need for manual finishing. This allows your dental lab to deliver high-quality restorations **faster and more efficiently**, meeting your clients' strict demands for detail and aesthetics.



**90°**  
**VERTICAL**  
**MILLING**

Designed for areas requiring high precision and aesthetics, 90-degree vertical milling precisely textures the labial (or buccal) surfaces, enabling more diverse anterior tooth aesthetics.

This approach significantly reduces complex post-processing time and lowers labor costs.



# Ensure Precision and Efficiency

*Stable Milling,  
Greater Returns*



## Dustproof System Tailored for Dental Material Milling

### Sliding Dust Cover Design

Effectively prevents dust from entering the chamber, ensuring precise and efficient lead screw operation.

### Simplified Maintenance

The efficient dustproof system requires only basic cleaning and vacuuming, saving time and effort.

## Comprehensive Hardware Optimization for Long-Term Precision Stability

### Spindle Temperature Monitoring

Built-in CNC overload warning system prevents overheating and spindle damage.

### Advanced Spindle Protection

Precise pressure regulator ensures stable spindle cooling and air pressure, greatly extending spindle life and ensuring smooth operation at peak performance.

### Integrated Cast Aluminum Structure

Thickened baseplate with reinforced support provides shock and impact resistance, significantly enhancing machine stability and durability.

# Features



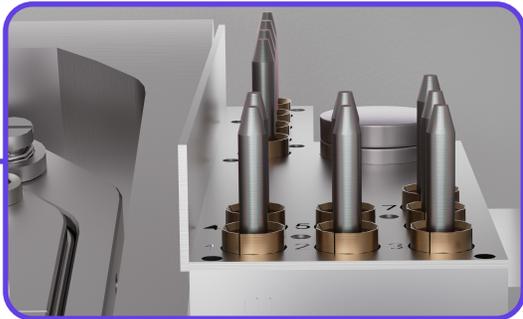
## 01- CLOSED-LOOP STEPPER MOTOR

The precise feedback system ensures stable material changing, while the motor disable function simplifies material adapter positioning, boosting production efficiency.



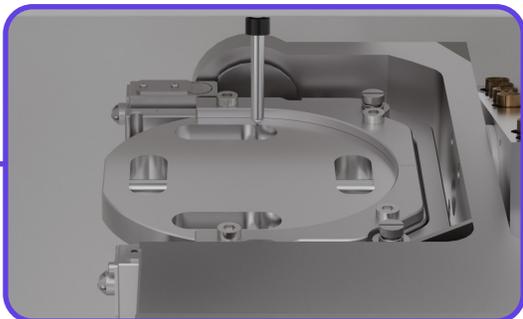
## 02- AUTOMATIC TOOL CHANGER

With an 11-tool capacity, the automatic tool changer supports continuous milling across different materials, minimizing downtime, boosting efficiency, and ensuring precision and stability while reducing maintenance costs.



## 03- ONE-CLICK AUTO CALIBRATION

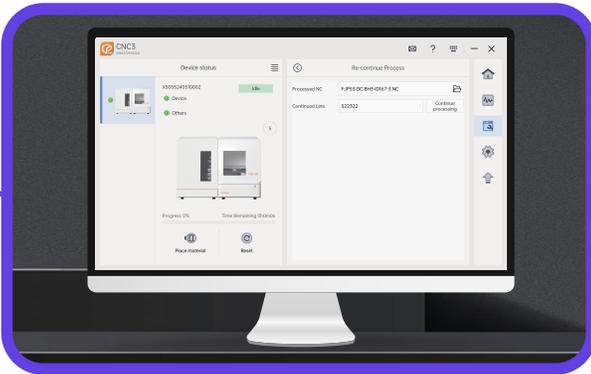
One-click intelligent calibration simplifies the process, ensuring continuous accuracy with minimal effort.





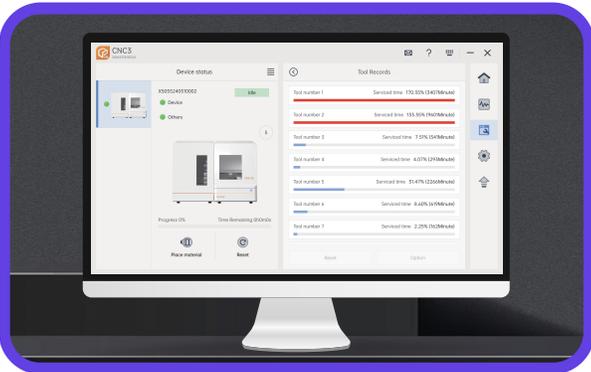
## 04- INDICATING LIGHT BAR

The external light bar provides real-time updates on milling progress and device status, reducing the need for manual checks and enhancing efficiency.



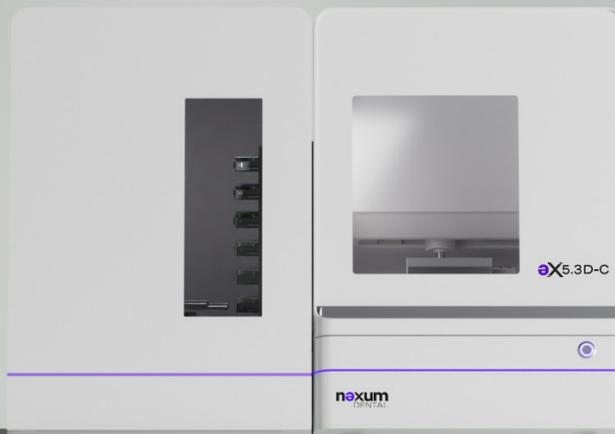
## 05- RESUME FROM BREAKPOINT

No worries about unexpected stops—if milling is interrupted, the software automatically resumes from where it left off, avoiding redundant work.



## 06- TOOL LIFE MONITORING

CNC-3 automatically calculates tool wear and, with smart alerts, plans the tool usage cycle judiciously to minimize the risk of chipping and processing failures.



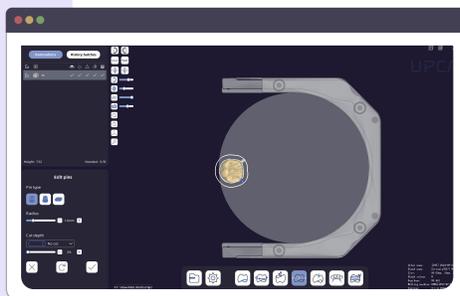
# UPCAM

Advanced Dental Nesting Software  
Seamless Integration | Easy to Use



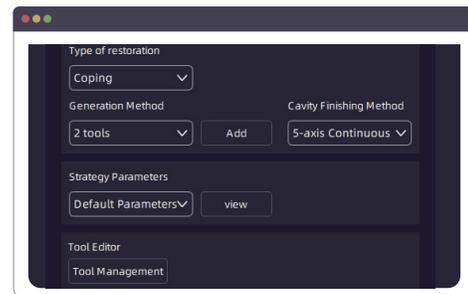
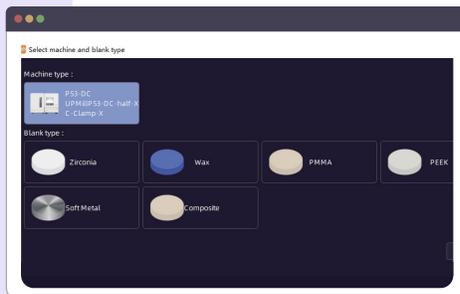
## 01. FAST NESTING

Generate NC files for a single tooth in just 30 seconds; full disc in 6 minutes



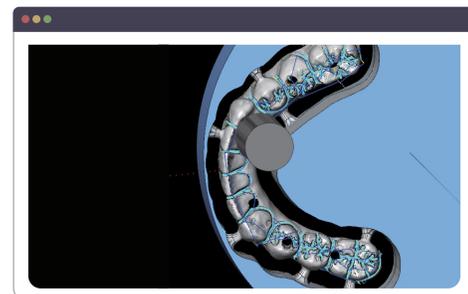
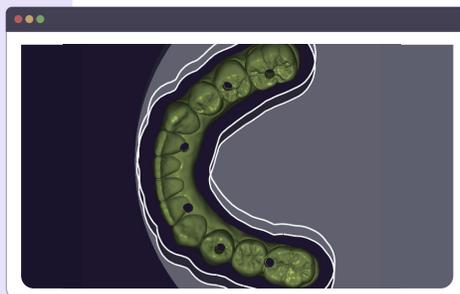
## 02. COMPREHENSIVE SOLUTION

Supports all popular materials with customizable milling strategies



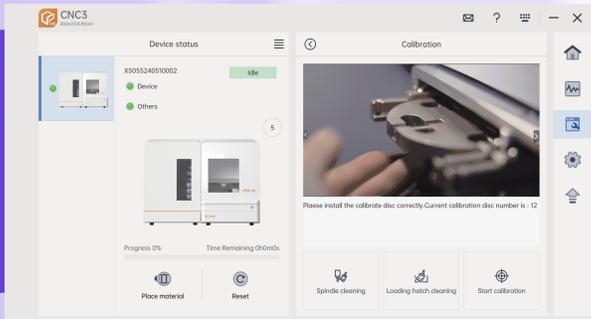
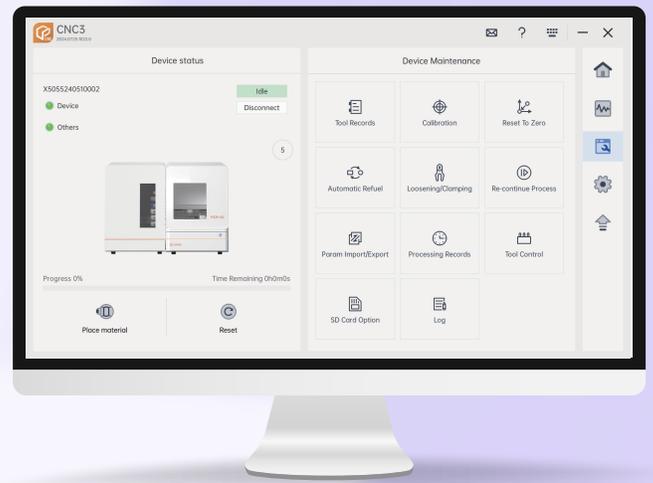
## 03. TOOLPATH SIMULATION

Preview milling with precision to identify potential risks in advance

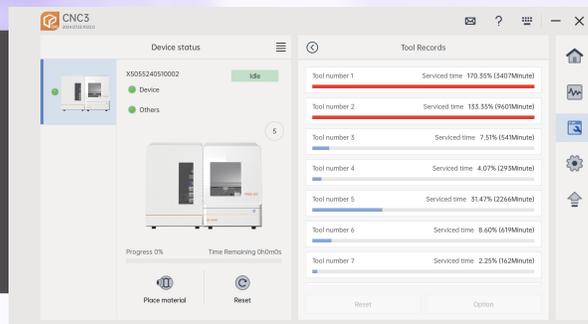


# CNC-3

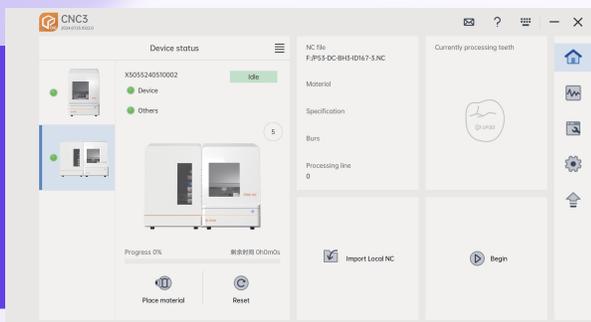
New Control Software  
Simpler | More Efficient



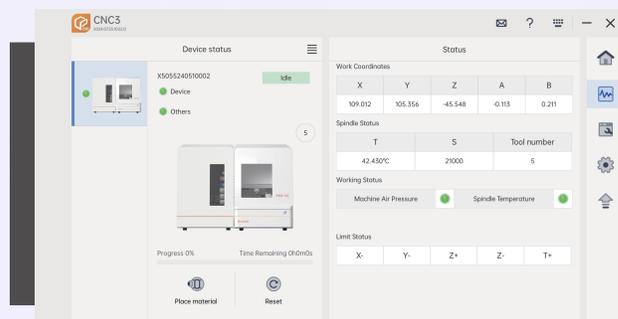
**01. ONE-CLICK  
AUTO CALIBRATION**



**02. TOOL LIFE  
MONITORING**



**03. CONTROL  
MULTIPLE  
DEVICES**



**04. REAL-TIME  
OPERATION  
TRACKING**

# MATERIALS



**ZirPrime**



**TempPrime**  
(PMMA)



**PeekPrime**



**Composite Resin**

	Coping/ Full Crown	✓	✓	✓	✓
	Three-Unit Bridge	✓	✓	✓	✓
	Inlay/Onlay	✓			✓
	Veneers	✓			✓
	Screw-Retained Crown	✓	✓		✓
	Custom Abutment	✓		✓	
	Thimble Bar	✓		✓	
	Partial Denture Frameworks	✓	✓	✓	
	Superstructures Over Bars	✓	✓		
	Full Dentures		✓		
	Full Dentures without Teeth		✓		
	Bite Splint		✓		

# Especificaciones técnicas

## GENERALS

<b>Dimensions</b>	720x875x630 mm
<b>Weight</b>	138 kg
<b>Input Voltage</b>	AC 100V-130V, AC 200V-240V, 50~60Hz (selectable)
<b>Maximum Power</b>	High Pressure:1.3KW Low Pressure: 0.55KW
<b>Spindle Power</b>	0.35 KW (max)
<b>Number of Axes</b>	Five-axis simultaneous
<b>Milling Range</b>	X/Y/Z: 167 / 206 / 104 mm A: ±30° B: ±360°
<b>Milling Type</b>	Dry milling
<b>Max Spindle Speed</b>	60,000 rpm
<b>Max Feed Rate</b>	3000 mm/min
<b>Tools Quantity</b>	11
<b>Disc Library Quantity</b>	12
<b>Tool Change Method</b>	Automatic (air pressure > 0.35MPa)
<b>Spindle Cooling</b>	Air Cooling, Compressed Air (pressure: 0.15~0.20MPa)
<b>Materials</b>	Zirconia, Wax, PMMA, PEEK, chrome cobalt sinter metal, Composite Resin
<b>Milling Time</b>	Coping: Zirconia 10 minutes, Wax 4.5 minutes Full crown: Zirconia 13 minutes, Wax 5.5 minutes
<b>Disc Size</b>	Maximum Φ98*30 disc
<b>Spindle Clamping Diameter</b>	Φ4.0mm
<b>CAM Support</b>	UPCAM
<b>Data Transmission</b>	Network interface



Designed  
in USA

**nexum**  
DENTAL



+1 (650) 248-0653



info@nxmdental.com



@nexum\_dental



@nxmdental

www.nxmdental.com