

OVDental

**THE INNOVATOR OF INTEGRATED
DIGITAL DENTAL SOLUTIONS**

ABOUT US

OV Dental, as an innovator in integrated digital dental solutions, OV Dental originated from the technology of Tsinghua DME (the Department of Mechanical Engineering of Tsinghua University) and SIAT (the Precision Engineering Center of Shenzhen Institute of Advanced Technology of Chinese Academy of Sciences), focusing on the research, development, production, and application of digital dental processing equipment, digital accessories, and dental materials.

With over 15 years of experience in the development and manufacturing of high-end machine tools across multiple industries, OV Dental deeply integrates advanced manufacturing technologies from aerospace, automotive, electronics, and healthcare into the field of dentistry. By doing so, the company drives the automation and intelligent transformation of the dental manufacturing industry, delivering comprehensive digital solutions to dental institutions worldwide.



X700 Seven-axis Five-linkage Wet Processing Machine



Performance Characteristics

- Powerful CNC system
- 30-tool manipulator tool magazine
- Hydraulic lock spindle, hydraulic fixtures
- High-torque water-cooled electric spindle head
- High-standard,precise CNC machine manufacturing process
- Logically rigorous algorithm operation and complex surface controlcapabilities
- Industrial refrigeration air conditioning, temperature-controlled electrical cabinet

Specifications data

Technical equipment parameters

Axis:	7-axis 5-linkage	Milling Type:	Wet Milling
Power:	25KW	Weight:	4800KG
Tool Magazine:	30T	Spindle Speed :	30000rpm
Dimention (W/D/H):	245*305*258cm	Milling Range (X/Y/Z):	450/200/650/190mm
Rotation Angle:	A:-360/360°B:-15/+100°W:-360/+360°		
Tool Spec:	HSKE40 toolholder (can be Turning or Milling use		
Processing Material Size:	8-10mm bar material,Interchangeable chuck,round and square disc (customizable)		

Materials and applications

Processing Material:	High-strength alloys (titanium alloys, cobalt-chromium alloys, etc.)
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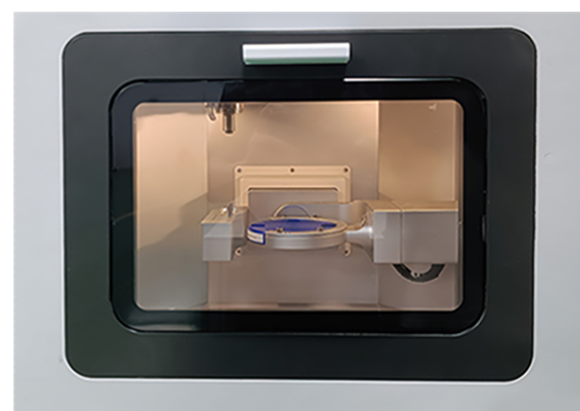
G5 5-Axis Dry Milling Machine



Performance Characteristics

- The C-type open fixture saves materials, improving efficiency and ease of operation.
- Achieves high-precision 5-axis linkage milling, making implant crowns, bridges, and malar bridges more precise.
- Excellent dust collection system and sealing performance.
- Protection against incorrect tool change operations.
- Simple and convenient secondary development interface
- Mechanical structure analyzed by finite element methods, ensuring enhanced stability during rapid operation.

Detail Showcase



Specifications data

Technical equipment parameters

Axis:	5 Axis Linkage	Milling Type:	Dry Milling
Power:	0.8-1.0KW	Weight:	110KG
Tool Magazine:	6T	Spindle Speed:	6000rpm
Tool Spec:	D3×L40	Dimention (W/D/H):	55*55*77cm
Rotation Angle:	A:±360°B:-35°/+100°	Milling Range(X/Y/Z):	130/108/105mm
Processing Material Size:	p98mm(thickness 10-30mm)		

Materials and applications

Processing Material:	Zirconia, Wax, PMMA, peek, Epoxy
Processing Type:	Crown, Bridge, Veneer, Inlay, Framework

Product Showcase



S4 Pro Multi-functional Wet Milling Machine



Fixtures



Product Features



80mm Spindle
High Torque & Stability



Multi-Fixtures
Multi-Materials



Gantry Structure



Monolithic Cast Iron
Stable Operation



Precision Assembly
High-Prec Guideway



24H Continuous



Auto-Tool Calib
Auto-Tool Change



Voltage Prot
Air Pressure Prot

Specifications data

Technical Equipment Parameters

Control Axes:	4-axis	Precision:	5μm	Spindle Speed:	60000rpm
Spindle Power:	1.8kw	Tool Capacity:	18 tools	Cooling:	Watering
Spindle Travel(XYZ):	225×140×110mm	Mechining Angle:	±360°		

Materials & Applications

Materials :	Wax, PMMA, peek, Glass Ceramic, Titanium Disc/Rod, Disc, Plate
Applications:	Abutment, Crown, Inlay, Veneer, Bridge

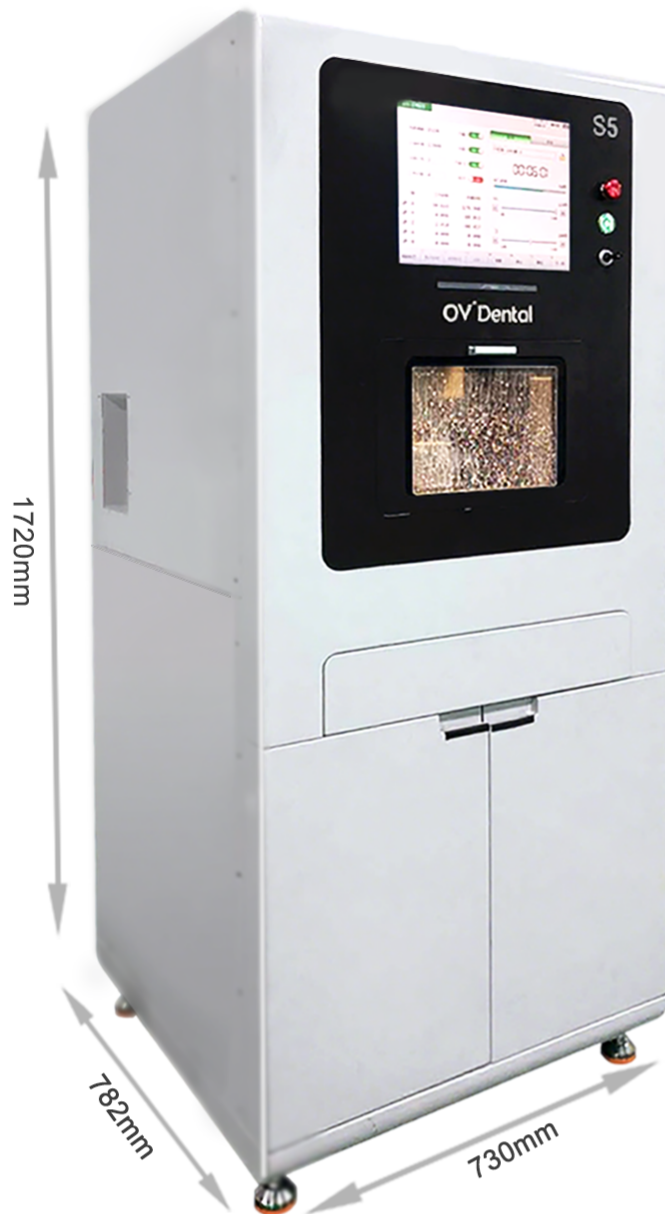
Other Parameters

Dimension(wxD×H):	660×810×1800mm	Voltage:	AC 220V 50/60HZ
Weight:	~700kg	Total Power:	3.6kw

Product Showcase



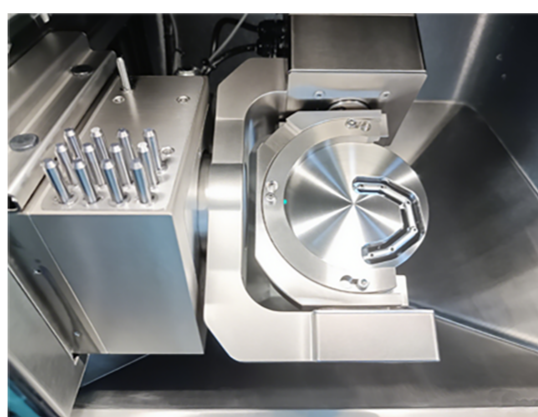
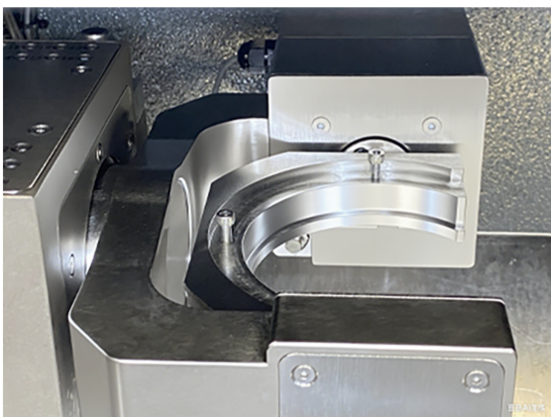
S5 Multi-functional Wet Milling Machine



Performance Characteristics

- The C-type open fixture saves materials, improving efficiency and ease of operation.
- High-precision milling of 5-axis linkage for ensuring more precise processing.
- Excellent sealing performance and water-cooling recycling system.
- Protection against incorrect tool change operations.
- Simple and convenient secondary development interface.
- Mechanical structure analyzed by finite element methods.

Detail Display



Specifications data

Technical equipment parameters

Axis:	5 Axis Linkage	Milling Type:	Wet Milling
Power:	4.5KW	Weight:	500KG
Tool Magazine:	20T	Spindle Speed:	6000rpm
Tool Spec:	D6×L50	Dimention (W/D/H):	730*782*1720mm
Rotation Angle:	A: ±40° B: ±360°	Milling Range(X/Y/Z):	210/140/110mm
Processing Material Size:	p98mm(thickness 10-30mm)		

Materials and applications

Processing Material: Titanium Disc、Cobalt-Chromium Alloy、Titanium Rod、Resin、Glass Ceramic

Processing Type: Abutment、Crown、Inlay、Veneer、Occlusal Splint、Metal Framework、Bar Attachment

Product Showcase



X5 5-Axis Wet Milling Machine



Performance Characteristics

- Rigid spindle and stable structure ensure accurate, repeatable results for dental applications.
- 5-Axis machining enables complex, high-efficiency processing of materials like zirconia, wax, and PMMA.
- Auto tool changer which Increases productivity by minimizing manual intervention during batch operations.
- Advanced CNC system with an intuitive interface for easy operation.
- Built with robust materials for long-term reliability and low maintenance.
- Space-efficient layout ideal for dental labs and clinics.

Specifications data

Technical equipment parameters			
Axis:	5-Axis Linkage	Milling Type:	Wet Milling
Power:	4KW	Weight:	1000KG
Tool Magazine:	20T/40T Optional	Spindle Speed :	40000rpm
Dimention (W/D/H):	1206*890*1940mm	Milling Range (X/Y/Z):	340/150/120mm
Rotation Angle:	A:±360°B:±35°		
Tool Spec:	D6*L55		
Materials and applications			
Processing Material:	Titanium, Metal		
Processing Type:	Malong Bridge, Implant Abutment, Metal RPD, PEEK RPD		



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