zublerUSA

Z-Apex

Five-axis dry milling machine
with 8-disc changer



Dry

5 Axis

1.8kW Spindle

10 Tools

8 Disc

90° Milling

- 5-axis machining
- Auto calibration
- 8 disc with zero point quick change
- 19.5 inch screen Win 10 system
- Ionizer
- Modular integrated



The Ultimate Dry Milling Production System

FULLY AUTOMATED. INTELLIGENT. BUILT FOR RELIABLE ALL-ON-X OUTPUT.

Z-Apex is engineered for laboratories focused on high-volume, repeatable production. Designed around intelligent automation, it reduces operator intervention while increasing consistency across every job.

Its automated disc-changing system and integrated machine control architecture support extended, unattended operation allowing continuous production beyond standard working hours.

By minimizing manual setup, calibration variability, and operator dependent adjustments, Z-Apex helps reduce material waste, lower rework rates, and improve overall production efficiency.
The result is higher throughput, greater consistency, and more predictable delivery timelines for full-arch workflows.

With automation-driven process control, laboratories can increase daily output, stabilize quality standards, and scale operations without proportionally increasing labor.

Processing mode	Dry
Millable material	Zirconia, PMMA, PEEK, Wax
Basic construction	Aluminum
Number of axes	5
Tool	10 (Removable tool magazine)
Spindle power	1.8kW
Spindle collet	6mm
Spindle cooling method	Water cooling
CAM Software Adaptation	Millbox / Hyperdent



The Perfect Balance, Automated Dry Production

Ultra-HD Touchscreen Control

The high-resolution touchscreen, paired with a Windows-based interface, delivers a clear and responsive operating experience. The expansive display allows full job visibility without constant zooming, while precise touch response minimizes input errors during daily operation.

Dedicated Dry Milling Architecture

Engineered exclusively for dry applications, Z-Apex optimizes airflow, debris management, and internal component protection for zirconia and PMMA production. Its purpose-built dry design enhances reliability, simplifies maintenance, and supports consistent performance in high-volume environments.

Intelligent 8-Disc Automatic Changer

The integrated 8-disc automatic changer enables extended, unattended operation while maintaining a compact production footprint. Each disc position features integrated RFID recognition, allowing the system to automatically identify material type and indication — reducing setup errors, preventing material mismatch, and supporting seamless production transitions. Designed for real laboratory workflows, the 8-disc configuration balances capacity and efficiency without unnecessary bulk.

Integrated Status Indicator

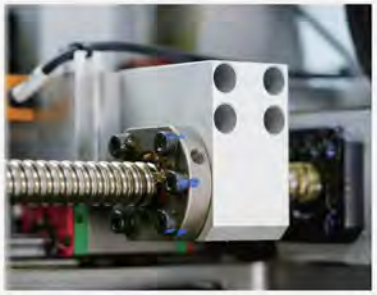
The color-coded status light, positioned at the top left of the machine, provides immediate visual feedback on machine activity and job progress — allowing operators to monitor production from across the lab floor.

1.8 kW Precision Spindle

The 1.8 kW spindle is optimized specifically for dry milling applications, delivering stable torque and consistent performance across zirconia and PMMA indications while maintaining long-term durability.



Features at a glances

Precise effect presentation

- ✓ C5 grade high precision ball screw
- ✓ P grade guide rail
- ✓ High resolution servo control system
- ✓ 5 μm repetition accuracy
- ✓ Ball bearing made of hybrid ceramic for the highest concentricity <3μm



Flexible handling of indications

- ✓ Calibrated fixture scale.
- ✓ Automatic calibration, reducing material waste by 15%.




Stable output of results

- ✓ 1.8kW /Φ62mm powerful spindle
- ✓ Professional water-cooled, longer life
- ✓ Cast aluminum body for low vibration in operation
- ✓ An ionizer neutralizes the charge of plastic chips



Smart Tool Management System

- ✓ Automatic Tool Change
- ✓ Removable tool magazine

Various materials and indications

Zirconia	PMMA	PEEK	Wax	Composite



Half-open blank holder(C-CLAMP)
- Suitable for processing φ98mm discs
- Maximum material thickness 35mm



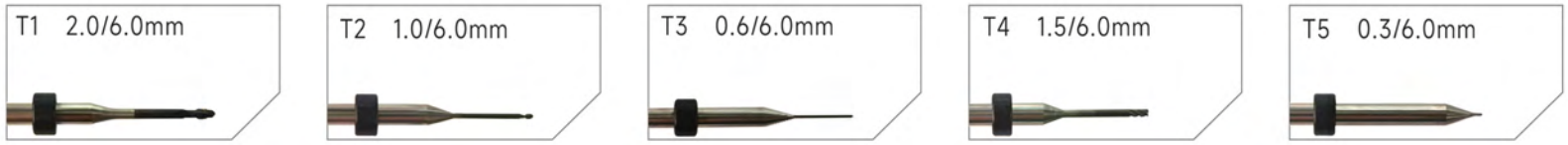
Block holder
- 6 processing positions
- Applicable to block materials: zirconia, resins, PMMA

Crown/Bridge	Veneer	Inlays/Onlays	Abutments	Denture
				

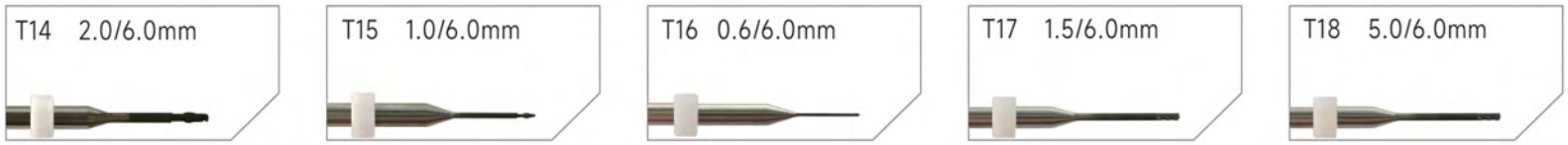
Model cast	Occlusal splint	Screw-retained bridge	Surgical guide
			



Zirconia milling burs



Resin milling burs



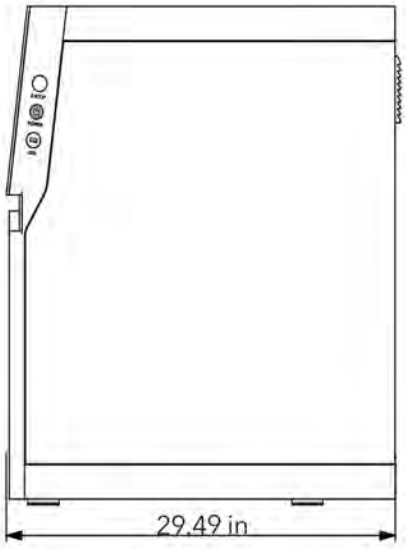


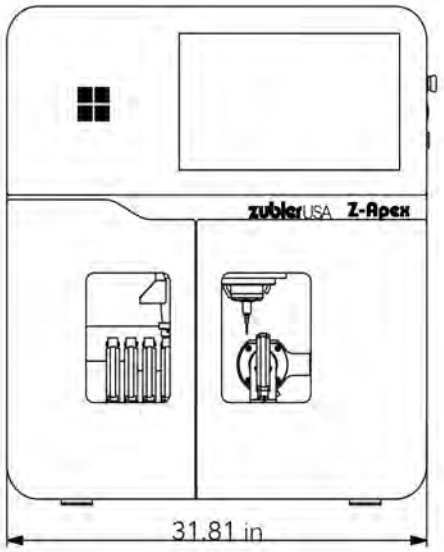
Technical Parameters

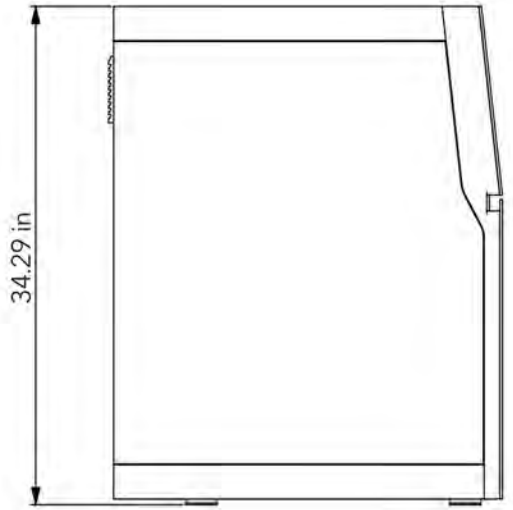
General	
Processing mode	Dry
Millable material	Zirconia, PMMA, Wax, PEEK, Composite
Applications	Crown	Bridge, Veneer, Inlay	Onlay, Abutment, Denture, Screw-retained bridge, Model cast, Surgical guide
Power	220V/2.5kW
Dimension	31.81 x 29.49 x 34.29 in
Weight	396.8 lbs
Air supply pressure	>0.5 MPa
Air flow	>200 L/min

Structure parameters	
Basic construction	Aluminum
Number of axes	5
Rotary axis A-axis	+30°~-30°
Rotary axis B-axis	360°
Tool	10

Spindle	
Speed	60,000 rpm
Power	1.8kW
Positioning/Repositioning accuracy	0.01/ 0.005 mm
Collet	Φ6 mm
Cooling method	Water cooling









ABOUT US

Established in 2012, Zubler USA embarked on a mission to revolutionize the dental industry by providing solutions and unparalleled support. Over the years, we have grown into a reliable resource for dental laboratories and in-house dental laboratories, offering a comprehensive range of products that empower companies to achieve exceptional results.

We are committed to excellence in every aspect of our business. From sourcing top-tier dental lab equipment to delivering outstanding customer service, we prioritize quality, precision, and innovation. We aim to provide a comprehensive range of dental laboratory supplies and solutions that not only meet but exceed the needs of our customers.

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