

Technical Parameters



Width*depth*height	700*480*1400mm	Weight	150kg
Number of axis	5	Motor	AC servo
Spindle power	800W	Spindle speed	80000RPM
Cooling system	Automatic air-cooling spindle	Voltage/Power	220V/1KW
Built-in-burs	13	Rotation angle	A axis: 360°, B axis: ±30°
Tool Type	Zirconia Milling Bur: φ4mm*(2mm/1mm/0.6mm) Ball-mill, φ4mm*1mm End-mill		
	Resin Milling Bur: φ4mm*(2mm/1mm)		
	Glass Ceramic Milling Bur: φ4mm*(2.5mm/1mm/0.6mm)		
	Metal Milling Bur: φ4mm*(3.0mm/1.5mm/1.0mm) Ball-mill, φ4mm*3mm Bull-mill		
Environmental temperature	5°C~40°C	Air pressure	>0.65Mpa
Milling accuracy	±0.005mm	Automatic tool length detection	✓
Remote control	✓	Automatic tool life monitoring	✓
Safety function	Automatic working-suspension function	External Control Linkage	Vaccum & water pump
Dry milling	✓	Wet milling	✓
Processing status light reminder	✓	Monitor	13.3"LCD touch screen

Besmile is a global digital solutions provider for restorative and implant dentistry.

We offer integrated systems—premium CAD/CAM materials, advanced equipment, and precision implant systems—designed to streamline workflows and ensure reliable results.

All core products are developed and manufactured in-house, ensuring consistent quality and continuous innovation.

Trusted by over 1,000 partners in more than 100 countries, we empower dental professionals to create confident, lasting smiles.

Technology creates the best smile.



Chengdu Besmile Biotechnology Co.,Ltd.
www.bsmdental.com
T: +86-28-85317108
E: info@cdbesmile.com

Besmile Dental America Inc.
20311 Valley Blvd, Suite#1, Walnut, CA91789
T: (626)921-5798
E: sales@bsmdentalus.com

Contact Us



@Besmile @besmile_aconia

5-Axis Dental Milling Machine for
Both Dry and Wet Applications

BSM-500DW

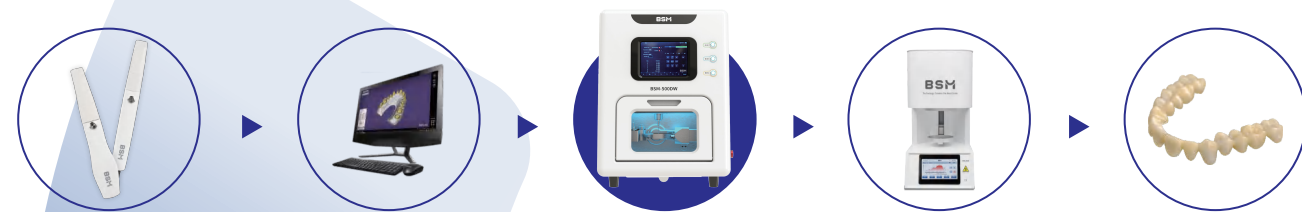


An All-New Experience with
Comprehensive Upgrades

Chairside 5-Axis Wet & Dry Dental Milling Machine

BSM-500DW

CAD/CAM Digital Processing



The BSM-500DW is Besmile's latest innovation: a chairside dry and wet dual-purpose 5-axis milling machine with powerful performance and an impressive milling accuracy of $\pm 0.005\text{mm}$.

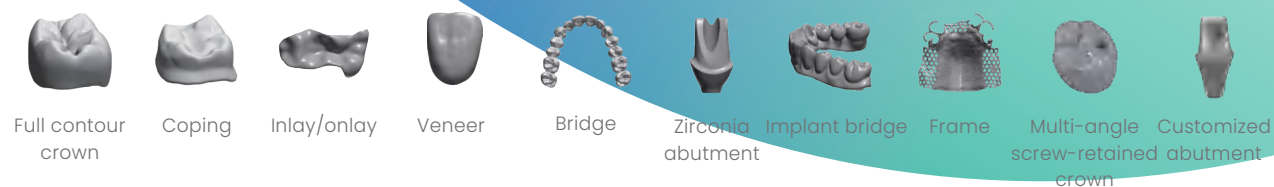
The 1/3 holder optimizes material usage, saving up to 20% while boosting production efficiency. It offers dental clinics an efficient, versatile, and cost-effective solution for comprehensive milling needs.



Millable Materials



Millable Restorations



Key Features

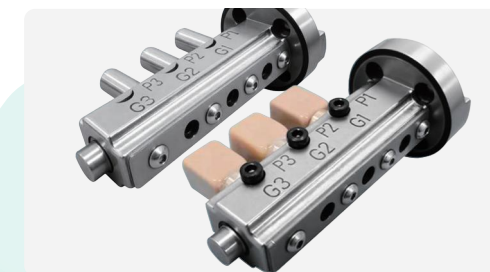
IoT Cloud Platform

- Supports remote monitoring and operation via computer and mobile devices, enabling online and remote management.
- Unattended operation enhances efficiency.

High Precision

- Equipped with an AC servo motor and a high-resolution full servo system, the machine delivers exceptional precision with an accuracy of $\pm 0.005\mu\text{m}$.
- The B-axis tilt angle of $\pm 30^\circ$ enables precise milling of undercuts.

High Return on Investment



- Equipped with 1/3 holder and secondary holder, it allows you to nest 20% more units. The secondary holder enables quick disc changing and supports the processing of block materials such as titanium and glass ceramics.
- It supports 90° vertical milling for buccal texture of anterior teeth surfaces, allowing precise incisal texture processing. Additionally, it supports vertical milling of titanium premill, enabling seamless abutment and crown integration.

Exceptional Stability



- The 800W German spindle with a speed of 80,000 RPM ensures robust and consistent performance, effortlessly handling metal materials.
- Crafted with an integrated aviation-grade aluminum casting and gantry structure, it guarantees 24-hour processing stability.
- Equipped with customized imported core components, high-precision ball screw guide rails, and high-precision harmonic reducers, the machine delivers unmatched accuracy and stability.

Smart and Simple

- The door-open auto-pause feature safeguards operators, preventing potential injuries.
- Equipped with 13 tools and automatic tool-changing capabilities, it also features tool life management for seamless operations.
- Additional automation features include break-point resume milling, power failure protection, low air pressure alerts, processing status lights, a user-friendly interface, and remote control capabilities.