

Intelligent 5-Axis Dry Dental Milling Machine

BSM-500D/BSM-500DS Compressor-Free Version

Key Features



Precise

- Digital servo system with high resolution
- Guaranteed milling accuracy: ±0.005mm



Efficient

- 60,000 RPM German spindle for high-speed milling
- 1/3 holder boosts output by 20% per block
- Milling speed:
 - Coping: 11 mins(Zirconia), 5 mins(Wax)
 - Crown: 16 mins(Zirconia), 6 mins(Wax)
 - Splint: 45 mins(PMMA/PEEK)

Above data were obtained based on the BSM-500D milling of Aconia HT+ 14mm



Reliable

- Industrial-grade aerometal gantry structure
- Advanced dust-proof system protects critical components
- Integrated ionizer neutralizes static for effortless cleaning



Intelligent

- Automatic tool changer
- Power-off protection & break-point resume
- Easy operation with intuitive LCD touch screen
- Automatic working-suspension function
- Intelligent working status indication light



BSM-500D, with a strong & reliable gantry structure design and 5-axis simultaneous linkage, features excellent reliability, intelligent processing, and efficient, precise milling at 5µm milling accuracy. With an automatic working-suspension function in case of accidental door opening during processing, it ensures operator safety to avoid physical injury. The built-in working status indicator provides intelligent monitoring of the milling operation. Equipped with a compact yet powerful spindle, it is an excellent choice for both dental labs and chairside practices.

Millable Materials



Zirconia



PMMA



Wax



Wood



PEEK

Millable Restorations



Full contour crown



Coping



Inlay/onlay



Veneer



Crown bridge



Zirconia abutment



Zirconia implant bridge



Non-metal frame

Technical Parameters

Width*depth*height	700mm*480mm*645mm	Weight	90kg	
Number of axis	5	Motor	AC servo	
Spindle power	800W	Spindle speed	60000RPM	
Built-in-burs	6	Rotation angle	A axis: 360°, B axis: -30°~ + 30°	
Tool Type	Zirconia End Mill	φ4mm*1mm		
	Zirconia Ball Mill	φ4mm*2mm	φ4mm*1mm	φ4mm*0.6mm
	Resin Mill	φ4mm*2mm	φ4mm*1mm	
Voltage/Power	220V/1KW	Fields of application	Dry milling	
Milling accuracy	±0.005mm	External Control Linkage	Vaccum	
Safety function	Automatic working-suspension function	CAM Software	Open system	
Remote control	✓	Monitor	8"LCD touch screen	

BSM-500DS

Compressor-Free Version

Built for Compact Spaces & Quiet Operation



Efficiency Upgrade

- **Lower maintenance:** No compressor upkeep required
- **Energy optimized:** Direct-drive cuts production energy use



Space & Noise Control

- **Compact design saves space:** Ideal for clinics/small workshops
- **Ultra-low noise:** Vibration-free operation reduces sound output



Easy Operation

- **Plug-and-play setup:** No complex air lines needed
- **Instant production:** Start producing instantly at power-on

Feature Comparison

BSM-500DS



Feature

Power System

No compressed air needed

Maintenance

0 compressor upkeep

Environment

Clinic-quiet & desktop-ready

BSM-500D

Compressed air needed

Annual maintenance cost

Standard noise output

CAD/CAM Digital Processing



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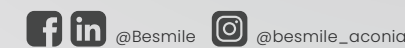
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BSM-500D BSM-500DS

