Technical Parameters



Width*depth*height	800mm*570mm*1650mm	Weight	300kg
Number of axis	4	Motor	AC servo
Spindle power	1800W	Spindle speed	60000RPM
Cooling system	Automatic water-cooling spindle	Voltage/Power	220V/3.7Kw
Holding quantity (round)	3 units premill, φ98mm Titanium disc		
Holding quantity (square)	10 units premill, 3 units glass ceramic		
Built-in-burs	6	Automatic tool length detection	\checkmark
Tool Type	Tool for metal	φ6mm*3mm, φ6mm*2mm, φ6mm*1mm	
	Tool for glass ceramic	φ6mm*2.5mm, φ6mm*1mm, φ6mm*0.6mm	
Environmental temperature	5°C~40°C	Air pressure	>0.65Mpa
Fields of application	Wet milling	Remote control	√

About Besmile

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.



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Contact Us







4-Axis Dental Milling Machine

BSM-420W



4-Axis Dental Milling Machine

BSM-420W

CAD/CAM Digital Processing



BSM-420W is a 4-axis simultaneous dental milling machine that features an open processing system, equipped with a premium spindle and high-quality core components.

delivers high-precision milling and exceptional eliability, making it ideal for processing sophisticated metal materials such as titanium, cobalt-chrome, and composites—perfectly suited for producing high-quality crowns, bridges, abutments, and more.

Holder Type





Square holder



Square holder (10 units premill)

Round holder (3 units premill)



Key Features

(🜣) Precise Milling

- · High-resolution digital servo system with ±0.005 mm repetition accuracy
- ±0.01 mm installation accuracy per axis

High Efficiency

- Premium spindle with speeds up to 60,000 RPM
- · Mlilling speed:

Titanium full-contour single crown ≈ 32 mins Titanium full-contour 3-unit bridge ≈ 110 mins Customized abutment ≈ 22 mins (3 burs) / 19 mins (2 burs)

Glass ceramic full-contour anterior crown ≈ 20

Glass ceramic inlay & onlay ≈ 23 mins Glass ceramic veneer ≈ 23 mins

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

Stable Operation

- Heavy industrial quality featuring a durable aerometal structure
- Gantry structure and thermally symmetric design ensure outstanding stability



- · Smart CAM nesting strategy for optimized material usage
- Integrated PC with 9.7-inch intelligent touch
- Automatic tool changer with haptic detection and breakage monitoring
- · Automatically generates efficient tool paths, prevents sticking, and facilitates easy debris removal

Millable Materials







Titanium alloy disk







Titanium premill

Glass ceramic

Millable Restorations







titanuum abutment





Inlay/Onlay







crown (anterior) crown (posterior)



Full contour anterior bridge