BSM-520D

5-Axis Dental Milling Machine



Revolutionary technologies

Top-quality results





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BSM-520D is a 5-Axis dry-milling machine for dental CAD/CAM system with wide range of materials, featuring high accuracy, durable stability and excellent compatibility. It is an ideal choice for high-precision restorations including bridges, frames, abutments, base and complicated operations like zirconia perforation. Equipped with premium spindle, smart CAM nesting system and intelligent touch screen, BSM-520D offers better disc handling, wider material capabilities, automatic tool change to deliver a higher efficiency.

CAD/CAM Digital Processing



Key Features



■ High Compatibility

B Axis (-30°~+40°) wide rotation range **Indications:** crown, bridge, inlay, onlay, abutment, veneer



■ Higher ROI

- 1/3 holder, simplified operation; Increased 20% production per block
- 2-second block insertion
- Special dust-proof design ensures long lifespan



■ Intelligent processing

Smart CAM nesting strategy

- Integrated PC with 9.7 inch intelligent touch screen
- Automatic changer for 6 tools with haptic tool detection and tool breakage monitoring



■ Excellent Reliability

- Premium spindle with 60,000RPM
- Heavy industrial quality and aerometal structure
- The gantry structure and thermal expansion symmetric design ensure accuracy stability



■ High Accuracy & High Efficiency

- Digital servo system with high resolution, ±0.005mm repetition accuracy
- ±0.01mm installation accuracy for per axis
- 90° vertical processing

Milling speed: zirconia posterior anatomic crown ≈ 17' (Aconia HT+ 14mm); zirconia 3-unit crown bridge ≈ 24' (Aconia HT+ 14mm)



Wide Accessibility



Millable Materials











PEEK

Zirconia

PMMA

Wax

Wood

Millable Restorations

















Full Contour Crown

Coping

Inlay/Onlay

Veneer

Crown Bridge Abutment Im

Implant Bridge

Frame

Technical Parameters

| Dimension (W*D*H) | 570mm*680mm*780mm | | Weight | | 130kg |
|-------------------|-----------------------------------|--|----------------------|------------------------|----------------|
| Cooling system | Automatic air- cooling spindle | | Motor type | | AC Servo-motor |
| Number of axes | 5 | | Voltage/power | | 220V//2.6KW |
| Tool type | φ4mm*2mm(Ball-mill) | | φ4mm*1mm (Ball-mill) | φ4mm*0.6mm (Ball-mill) | |
| | φ4mm*1mm (End-mill) | | φ4mm*2mm(Resin-mill) | φ4mm*1mm (Resin-mill) | |
| Built-in tools. | 6 | | Dry milling | | Support |
| Spindle Power | 500W | | Air pressure | | >0.65MPa |