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BSM-520W

Robust 5-axis Dental Milling Machine





BSM-520W Robust 5-axis Dental Milling Machine

BSM-520W, a 5-axis wet milling machine featuring excellent reliability, high precision, high efficiency, and intelligent processing, is well suited for the demanding processing of metal blanks. The solid gantry structure with core parts made of high-strength cast iron and the thermal symmetry structure design guarantee its excellent reliability, equipped with 16 tools, the premium spindle, the smart CAM nesting system, and the intelligent touch screen, it achieves high efficiency easily. The installation accuracy of each axis is well controlled within $\pm 0.01\text{mm}$, ensuring excellent milling precision within $\pm 0.005\text{mm}$.



Key Features



■ Precise Milling

- Digital servo system with high resolution
- Installation accuracy $\pm 0.01\text{mm}$
- Repetition accuracy $\pm 0.005\text{mm}$



■ Efficient Processing

Milling speed:

- Full contour posterior crown (TC4 14mm) $\approx 20\text{min}$
- Coping (TC4 14mm) $\approx 15\text{min}$
- 3-unit full contour crown bridge (TC4 14mm) $\approx 40\text{min}$
- 3-unit coping bridge (TC4 14mm) $\approx 30\text{min}$
- Frame (TC4) $\approx 2\text{h}$
- Customized abutment (TC4) $\approx 30\text{min}$
- Implant Bar $\approx 3.5\text{h}$

*Above data were obtained based on the BSM-520W milling of TC4 material.



■ Excellent Reliability

- The gantry structure and thermal expansion symmetric design ensure excellent stability
- B axis ($-30^\circ \sim +30^\circ$) wide rotation range meets customized needs



■ Intelligent Processing

- Intelligent power-off protection
- Easy operation with intuitive LCD touch screen



■ Tool Magazine Management

- Magazine can equippe with 16 tools, supports automatic tool change
- Tool life monitoring to reasonably plan the usage cycle of cutting tools

Millable Materials



Titanium disk



Titanium alloy disk



Co-cr alloy disk



Titanium Premill



Epoxy Tooling Board



PEEK



PMMA



Wax



Glass Ceramic

Millable Restoration

Customized Abutment	Screw-retained Bridge	Implant Bar	Frame	Metal Crown Bridge
Veneer	Inlay & Onlay	Full Contour Crown (Anterior)	Full Contour Crown (Posterior)	Full Contour Anterior Bridge(3 unit)

Technical Parameters

Width*depth*height	800mm*880mm*1780mm	Weight	500kg
Fields of application	Wet milling	Spindle Power	2.5 KW
Number of axes	5	Tool Magazine Capacity	16
Milling accuracy	$\pm 0.005\text{mm}$	Repetition accuracy	$\pm 0.005\text{mm}$
Spindle speed	Up to 60,000 RPM	Touch screen control	13.3" LCD touch screen
Cooling system	Automatic water-cooling	Automatic tool changer	Positive
Voltage/Power	220V/4KW	Air pressure	> 0.65Mpa