

orangedental

premium innovations



Very stable 5 axis dental milling machine



coolant tank
& spindle cooler



Blank holder option with
auto clamping system

Features:

- * Easy to use
- * Operation can be learned quickly
- * Easy and flexible to program
- * Wet or dry working
- * Price-performance ratio balanced and optimized

EVO labMill5

Dental milling machine



Complex Conturmachining with the 5 Axis simultaneous milling machine EVO labMill.

With the new 5-axis milling machine from MB they produce very effectively and with high precision.

All materials and all products for the dental industry can be produced.

Due to the very stable cast structure, rectangle heavy-duty guides, pre-tensioned Ball screw, AC servo drives in all axes, highly accurate and stable gearboxes for A&B axis and the double control system, the machine is a comfortable and complete unit for the dental laboratory.

Specifications:

Travel X axis	300 mm	Flushing medium tank	80 liter
Travel Y axis	230 mm	flushing pump	4 l/min
Travel Z axis	150 mm	Dry/wet switching	M Code
Travel A axis	+/- 28 Grad	Spindle cooler with compressor	19 liter 295 Kcal/h
Travel B axis	360 Grad	Cold air blowing unit for cooling the tools	HF 6-1
Heavy-duty guides (long-term lubricated)	20 mm	Capacitive touchscreen with safety circuit	15 Zoll
Ball screw (long-term lubricated)	Ø 25x5 mm	LED work light with status display	24 VDC 12Watt
Blank size	Ø 100 mm	PC for operation and display	WIN 10
Max. workpiece weight	2 kg	Job manager	MB
Clamping force zero clamping system (Option)	10000 N	CNC controller	OPEN Key
Max. feed rate	6.000 mm/min	Current connection value complete	5,0 kVA
Max. rapid traverse speed	8.000 mm/min	Electric current fuse size	Fuse carrier 3x16 A
Repeatability	< 0,008 mm	Electrical connection 1Phase/MP/NP	400V/ 50/60Hz
Automatic tool length measurement	+/- 0,003 mm	Max. Power grid fluctuation	+/- 5%
Minimum input value	0,001 mm	Noise level (depending on the material to be milled)	55-65 dB (A)
AC servo system X;Y;U;V;W	1,3 Nm	Compressed air connection min. 200 l/min. bei 6,5 bar	
AC servo system A;B (gear 100:1)	1,3 Nm	Connection suction	3-pin connector 1x switched
AC servo system Z	2,7 Nm	Other connections	1x Network; 2x USB
HF spindle Jäger 62 mm	60000min ⁻¹ /Pmax. 2,5 kW	Floor space	1250 x 1200 x 2050 mm
HFS max. Tool diameter	Ø 6,0 mm	Weight of the machine (Depending on the equipment)	750 kg
HF spindle HSK mounting (Optional)	5 kW	Dimensions of the machine	1700x 1600 mm
Number of tools in the tool changer	16 pieces	Compressed air check via pressure switch	
Measuring probe optional		Tool breakage inspection implicated in WW macro	

Features:

- * Highest precision practically without reworking of the milled work.
- * Unmanned work thanks to the tool changer, double blank holder and job manager.
- * B axis with optional MB quick-change system allows the holder to be changed quickly.
- * Various standard holders and several special holders available. (e.g abutment holder).
- * Fully encapsulated workcell. * Suction device on the head, optionally on the workpiece holder.
- * Automatic tool length correction. (Even with 5 axes simultaneously).
- * Hybrid machining without additional touch probe.
- * Special tools for different materials, standard tools can also be used.
- * Remote maintenance via network. * The machine can be adapted to your needs

A solid cast iron substructure, heavy LM recirculating ball guides, very accurate and large ball screw, A&B axes with Harmonic Drive gearbox and maximum LMF distance guarantee long service life. Powerful drive systems from Yaskawa and a highly dynamic CNC control guarantee homogeneous and fast movements of all axes.



Cast structure with ribs

EVO labMill5 Pro

Dental milling machine