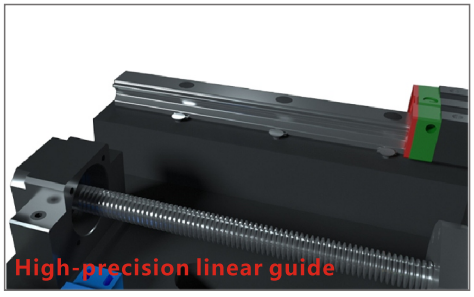
Small 5 Axis CNC Machine Center (Product No: VMC300)

A compact 5-axis CNC machining center with excellent stability.It is equipped with a high-performance 5-axis milling CNC controller that supports Rotated Tool Center Point (RTCP) and multi-language interface display. The standard specification includes an MPG handwheel.

Constructed from high-quality cast material, the machine adopts high-precision linear guides and ball screws. The XYZAC axes are driven by AC servo motors. The 4th and 5th axes use harmonic reducers. It comes with an interlocking safety guard, a 10-station automatic tool changer, flood coolant system, automatic tool setter, automatic lubrication system and an ISO20 spindle.

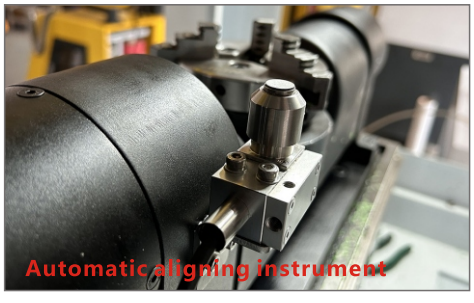
The standard version is a 5-axis CNC milling machine; 3-axis or 4-axis versions are optional.Model VMC300 features a stronger, higher-speed spindle rated at 24000 rpm. With programmable spindle speeds and feed rates, the VMC300 is suitable for machining a variety of difficult-to-cut materials including plastics, free-cutting alloys, aluminum and steel.

Recommended software: MasterCAM, UG, Fusion360 and SolidWorks. ArtCAM is also required.It is an ideal choice for DIY enthusiasts, hobbyists, as well as CNC education and training.

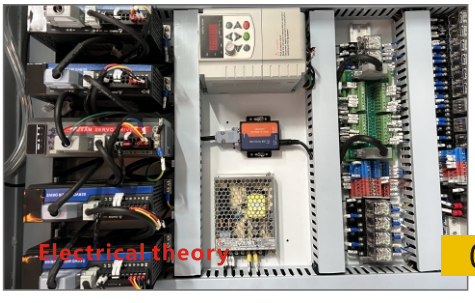

High-precision linear guide

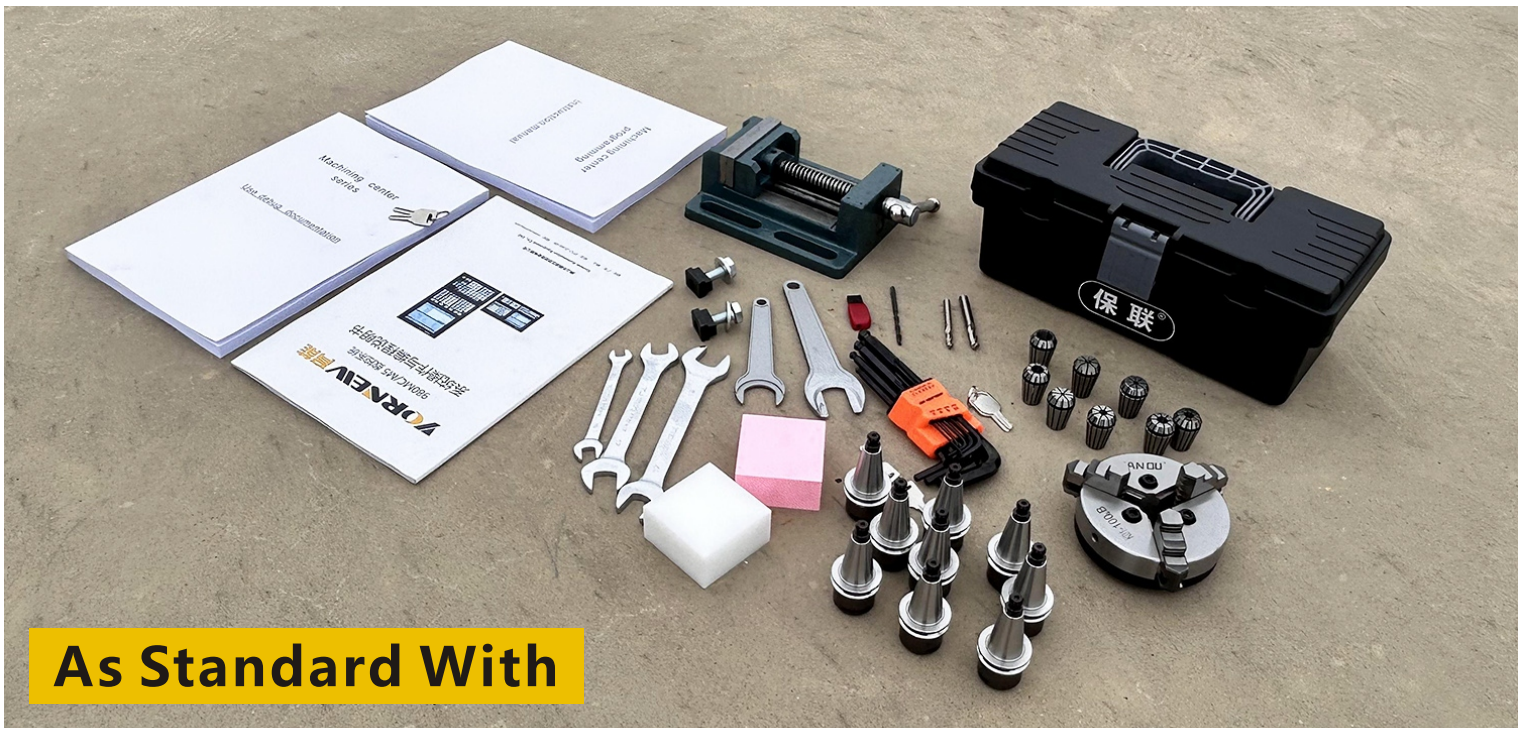
5th axis
using maintenance free harmonic reducers

Automatic tool changer


Automatic aligning instrument

Lubrication system


Electrical theory



As Standard With

Technical Parameters

1	Positioning accuracy	0.015mm	
2	Repeatability accuracy	0.01mm	
3	X axis travel	320mm	
4	Y axis travel	200mm	
5	Z axis travel	320mm	
6	5th axis	Backlash	Zero Backlash
		Max Speed 4th axis	30/R.P.M
		Max Speed 5th axis	30/R.P.M
		Accuracy 4th axis	40 arc-sec
		Accuracy 5th axis	40 arc-sec
		Repeatability 4th axis	20 arc-sec
		Repeatability 5th axis	20 arc-sec
		Homing	A axis
		Limits	+C, -C
		4th axis Travel	A axis:+30° to -120°
		5th axis Travel	C axis:±infinity
		C axis Output Flange Diameter	120mm
7	Spindle taper	ISO 20	
8	Automatic tool change system(ATC)	10 Tools	
9	Pneumatic supply	0.6 MPa	
10	Tool DIA.range	1-13mm	
11	Standard Size Collet	1-13mm	
12	Control system	5 axis CNC center machine controller	
13	MPG hand wheel	5 axis	
14	Spindle Power	2.2kw	
15	Spindle speed	100-24000rpm	
16	Motor Type	XYZAC axis AC Servor	
17	Rapid movement in X /Y/Z Axis	1-8000mm/min	
18	Feed rate in X/Y/Z Axis	1-4000mm/min	
19	Power of X/Y/Z Axis	AC Servo 750W	
20	Power of A/C Axis	AC Servo 200W	
21	Transmission	ball screw	
22	guide rail	High-precision linear guide	
23	Table size	550*180mm	
24	Number of T-slots	3	
25	Width of T-slot	12mm	
26	Table structure	Full cast iron	
27	Power	230VAC/110VAC	
28	Weight(NW/GW)	650/700kg	
29	Overall dimension	1360*990*1800mm	
30	Packing size	1400*1050*2000mm	