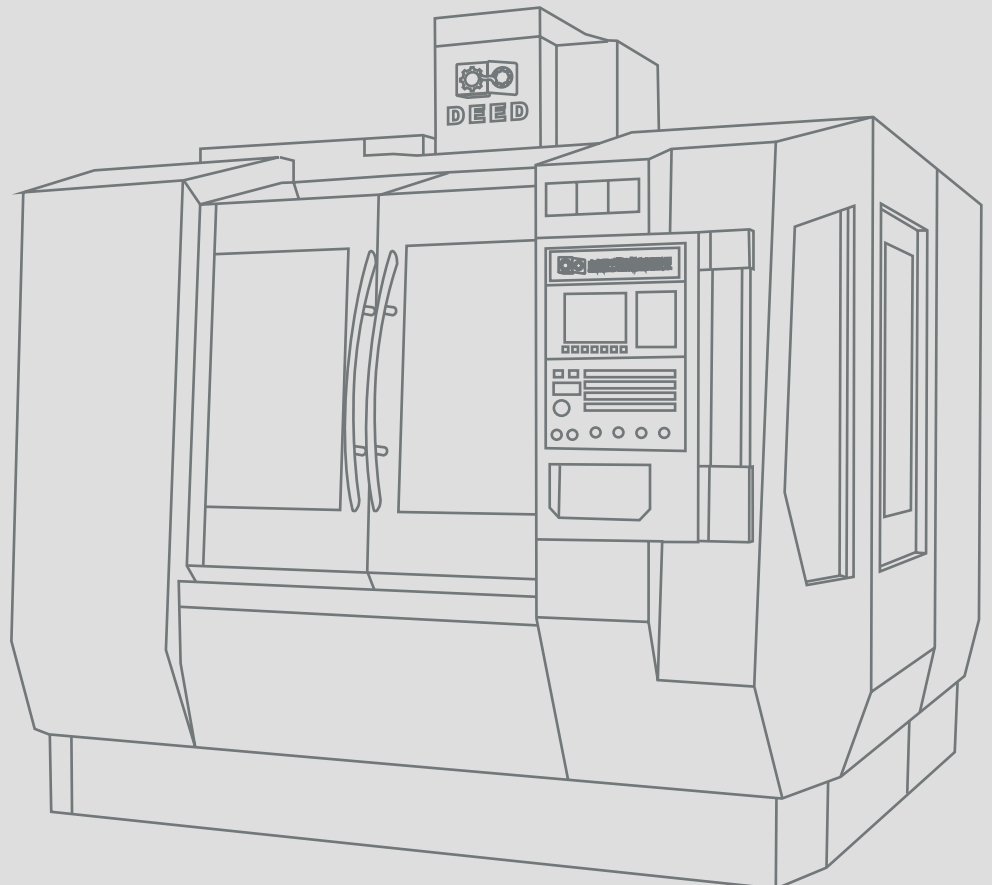




VMC SERIES

VERTICAL MACHINING CENTER

ADVANCED GERMAN TECHNOLOGY WITH THE STRENGTH
OF CHINESE MANUFACTURING



COMPANY PROFILE



Shandong Deed Precision Machine Tool Co., Ltd. is a high-end equipment enterprise integrating R&D, production and sales of high-end CNC machine tools, located in Yanzhou District, Jining City. The company takes high-speed vertical machining center, large scale gantry machining center, high-efficiency drilling & tapping machining center, high-precision turning center, high-precision five-axis linkage machining center, horizontal milling & boring machining center and horizontal machining center as the leading products, and serves a wide range of key industries such as aviation, aerospace, military, shipbuilding, automobile, construction machinery, rail transit, 5G, precision mold and others, both in the domestic and overseas markets. The company vigorously implements the development strategy of “going out and bringing in”, and has reached a comprehensive strategic cooperation with the well-known German CNC machine tool manufacturing enterprise ROTTler to jointly develop high-grade precision machine tools of the world’s leading level and jointly explore the global high-end market. Establishing a high-end machine tool R & D center and manufacturing base in Germany - “Hipreed Technology GmbH”, fully implementing international operations and achieving the perfect combination of German technology and Chinese manufacturing. The company has five domestic and foreign R & D centers, with six provincial and municipal innovation platforms, with comprehensive R & D, experiment, testing, manufacturing advantages of high-grade machine tool research and development, new material development, advanced technology testing and reliability improvement. Through continuous innovation and breakthrough, it has undertaken 25 key government science and technology projects, obtained more than 200 intellectual property rights of various types, 15 scientific and technological achievement awards, and is in a leading position of the overall development and innovation ability in the industry. With strong technology and innovation advantages, the company has passed the ISO9001 quality management system certification, ISO14001 environmental management system certification and ISO45001 occupational health and safety management system certification. It has won more than 80 key awards such as the “National High-Tech Enterprise”, “National Specialized New Little Giant Enterprise”, the highest award of China’s machine tool industry the “Spring Swallow Award”, “Top 10 Product Quality of China’s Machine Tool Industry”, and “Chinese Machinery Industry Science & Technology Progress 2nd Award “ etc.

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VMC SERIES

VERTICAL MACHINING CENTER

High Performance Milling

Provide professional solutions for different demands

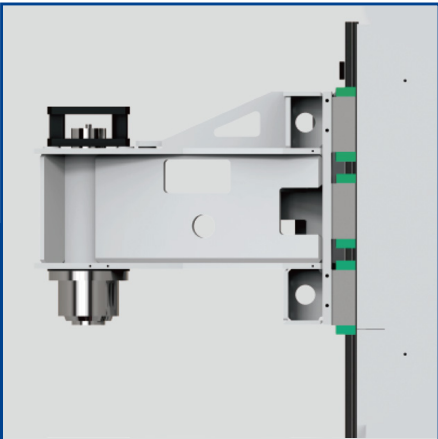
PRODUCT OVERVIEW

This machine is a small and medium-size vertical machining center designed in Germany and manufactured in China. Adopting mainstream European design structure, based on many years of design and manufacturing experience, combined with extensive research into customer application requirements, this new generation of high-speed, high-precision machines has been developed. Once the workpiece is clamped, it can automatically and continuously complete multiple processes such as milling, drilling, boring, expanding, reaming and tapping. It is suitable for complex parts and multi-variety processing ranges such as medium and small box-type parts, plates, disk parts and housing parts. This series can be widely used in automobile parts, valves, engineering machinery, IT equipment, optical equipment, medical equipment, conventional molds, aerospace and other industries.

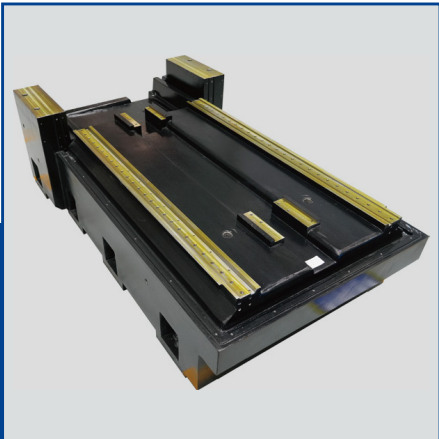
PRODUCT ADVANTAGES



Vertical installation of the tool magazine can reduce lateral deformation of the column and improves tool change stability the stability of tool changing.



Z-axis single guideway with 3 slide blocks to maintain high rigidity of the spindle box and get more stable processing.



Solid Structure
Better vibration absorption

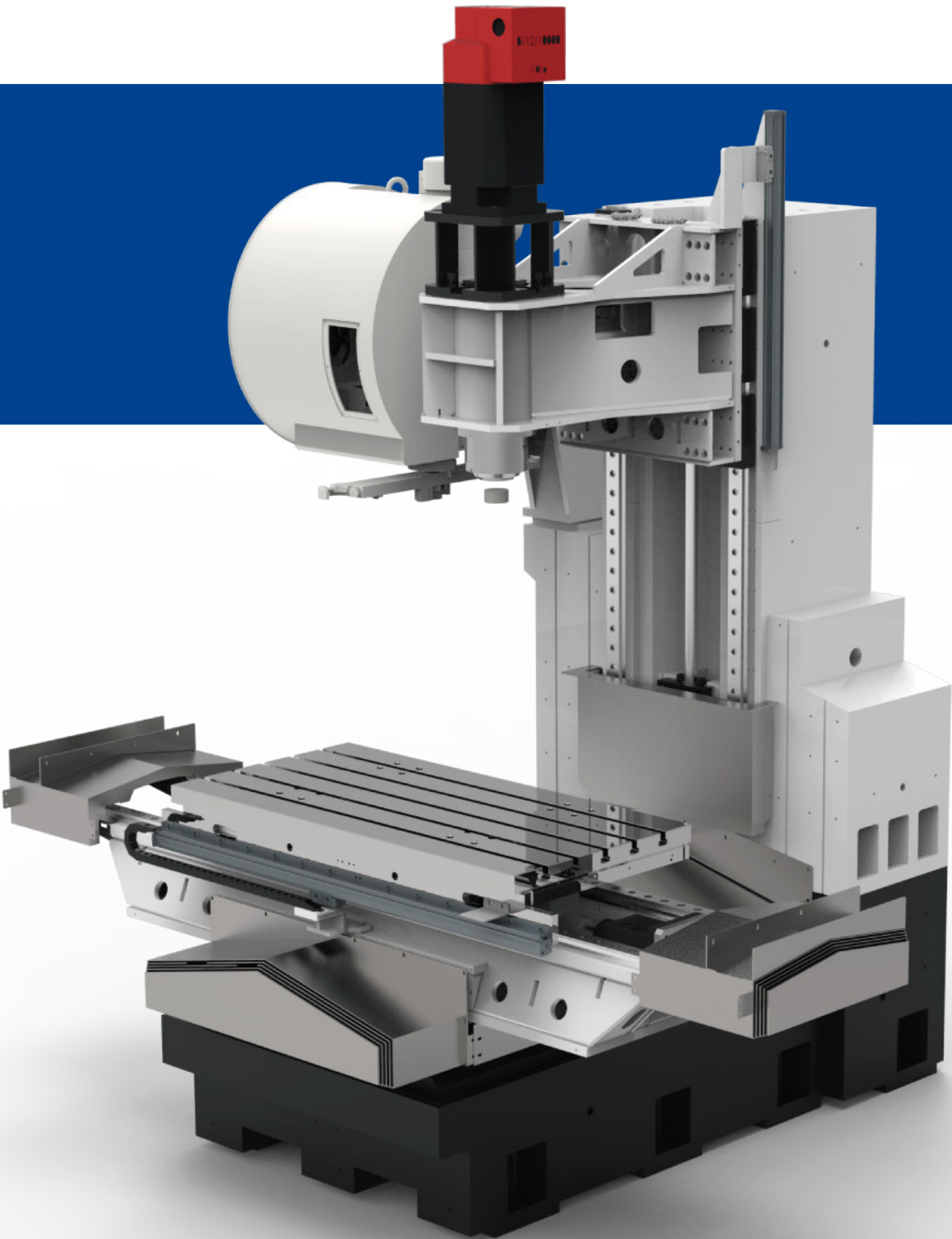
Large-span 3-axis guideways

Higher load capacity

Greater rigidity

Smoother operation

- The inner protection adopts a loop structure to prevent chips or liquid from entering the shield, thus extending the service life of functional components.
- With its anti-chip accumulation and anti-derailment roller structure, the front door can be used frequently without problems.
- Machine bed and column are made of new mineral casting materials to ensure the stability of physical and mechanical properties.
- Three-coordinate moving parts are all supported by roller linear rails with high precision, which effectively improves the overall rigidity of the machine tool.
- The water groove design on machine bed allows the cutting fluid to automatically flow back to avoid overflow.
- Mineral casting precision casted sealing grooves. Installing sealing strips, and ensuring the sheet meal zero-leakage.



TECHNICAL PARAMETERS

Configuration \ Model		Unit	VMC50B		VMC60B		VMC70B	
Working range	X axis	mm	850		1100		1400	
	Y axis	mm	500		600		700	
	Z axis	mm	600		600		700	
	Spindle nose to table (direct type)	mm	150-750		150-750		150-850	
Table	Size	mm	950×500		1200×600		1500x700	
	Max. load	kg	600		1000		1200	
Spindle	Spindle type	-	Direct		Direct		Direct	
	Spindle taper	-	BT40	BT40	BT40	BT40	BT40	BT40
	Max. speed	rpm	12000	12000	12000	12000	12000	12000
	Power(rated/max)	kW	11/18.5	11/18.5	11/18.5	11/18.5	11/18.5	11/18.5
	Torque(rated/max)	Nm	52.5/118	70/117	52.5/118	70/117	52.5/118	70/117
Feed	Fast feed	m/min	40/40/32	40/40/40	40/40/32	40/40/40	32/32/24	40/40/32
	3-axis linear guideway width	mm	45		45		45	
	Positioning	mm	0.006		0.006		0.008	
Accuracy	Repeatability	mm	0.004		0.004		0.005	
Tool magazine	Tool magazine type	-	Disc		Disc		Disc	
	Tool magazine capacity	T	24		24		24	
Weight		kg	7500		8500		12500	

※ The parameters are subject to the technical agreement

CONFIGURATIONS

No.	Standard Configuration	No.	Standard Configuration
1	Fanuc Oi MF(3) controller system	13	Workpiece flood cooling
2	3-axis roller linear guideway	14	Workpiece air cooling
3	3-axis ball screw	15	24T tool magazine
4	Spindle taper air blowing	16	Heat exchanger
5	Spindle ring spray	17	Ball screw pre-stretch
6	Guideway protection	18	Sizing block and adjust bolts
7	3-color alarm lights	19	Handheld pulse generator
8	Automatic lubrication system	20	Double-pump flushing device
9	Air gun	21	2G CF card
10	Water gun	22	Belt type spindle 10000RPM
11	Electric cabinet lighting	23	Spindle taper BT40
12	Chain type chip conveyer	24	Both side screw type chip conveyor

No.	Options	No.	Options
1	Siemens controller system	11	Oil-mist collector
2	Spindle taper BBT40	12	30T magazine
3	Spindle taper SK40	13	40T magazine
4	Spindle taper HSK A-63	14	4th-axis preparation
5	Direct drive spindle 12000RPM	15	CTS 20bar
6	Direct drive spindle 15000RPM	16	Column heightened
7	Spindle oil chiller	17	BLUM or Renishaw taster
8	Profinet IO device	18	BLUM or Renishaw tool setter
9	Air conditioner for electrical cabinet		
10	Auto open/close side window for automation		

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

