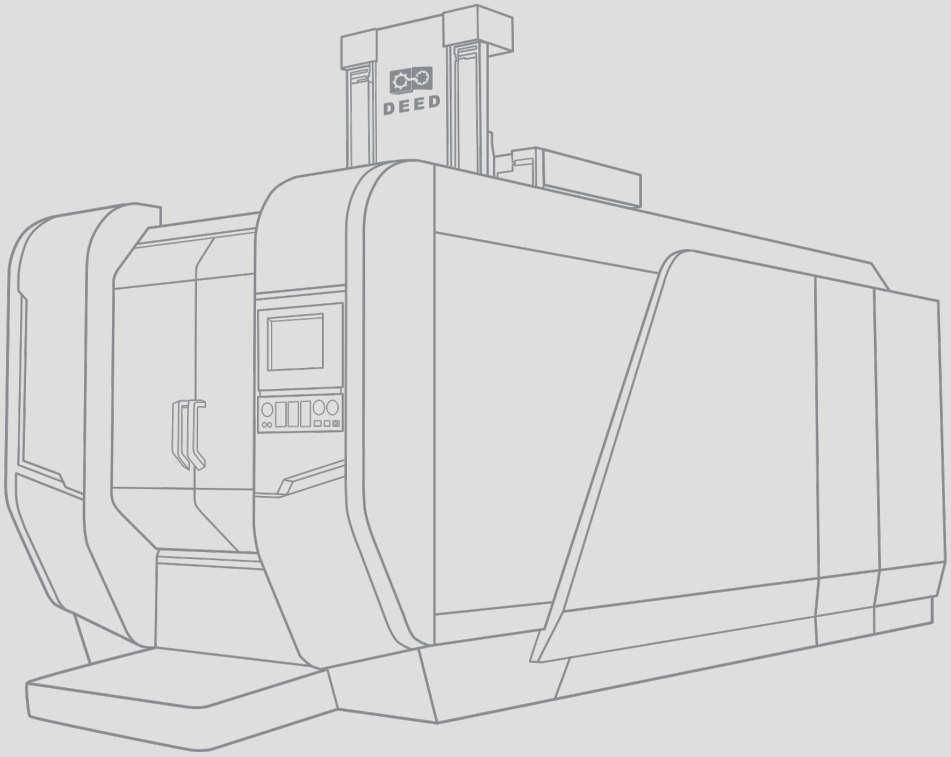
DEED BENELUX

VB SERIES

5-AXIS 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.

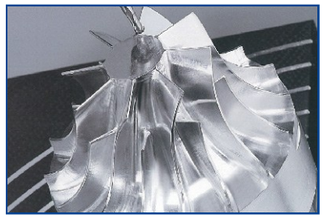
CATALOG

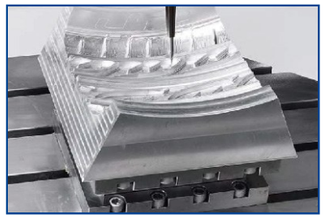
5 VB Series 5-axis machining center

6 Product advantages

7 Technical parameters

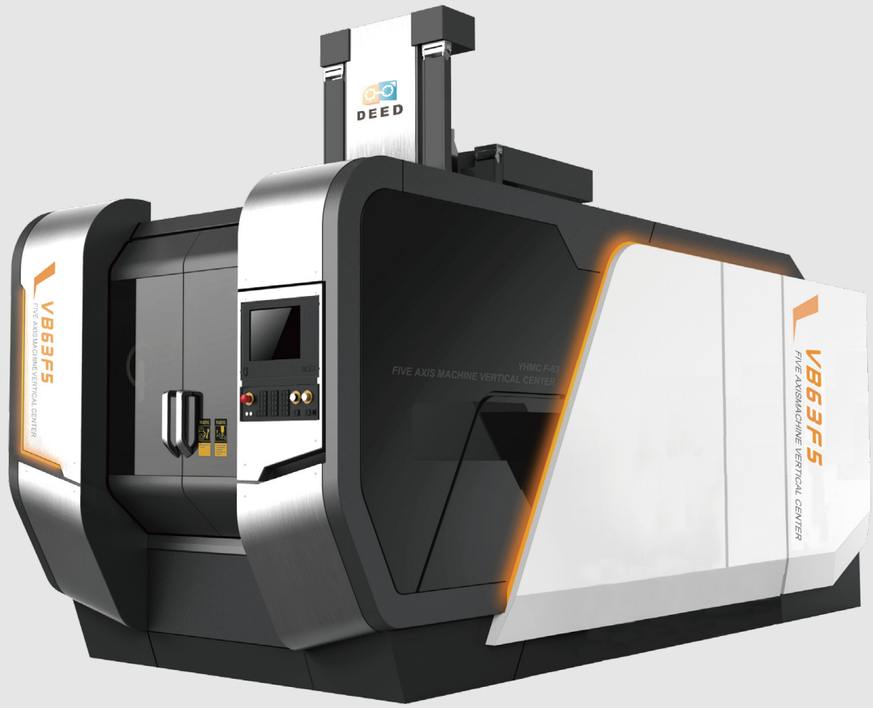






Typical workpieces: blades, impellers and molds.

DEED BENELUX



VB SERIES

5-AXIS MACHINING CENTER

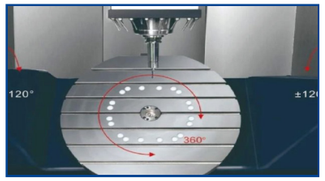
Easy operation

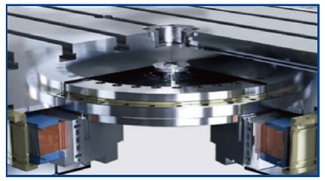
Excellent 5-axis machining performance

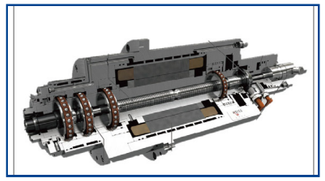
PRODUCT OVERVIEW

The VB series is a medium and small size vertical 5-axis machining center, designed in Europe and made in China. Based on long-term design and manufacturing experience and extensive research into customers' machining demands, it uses a gantry structure and is a new generation with higher speed and higher precision. It is ideal for complex curved parts such as blades, impellers and molds, as well as medium and small box-type parts and 3D surfaces, in aerospace, mold making and high-precision instrument industries.

PRODUCT ADVANTAGES





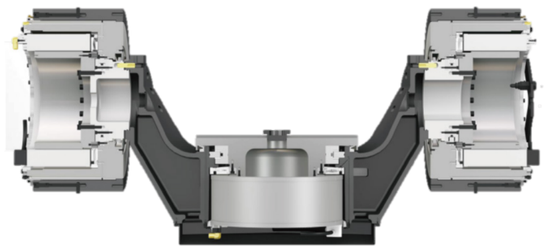


Direct drive rotary table

- Double swiveling rotary table structure for 5-axis simultaneous machining.
- Positioning at any angle for complex curved surface parts.
- Torque motor direct drive: higher precision and speed, no transmission gears.
- Hydraulic clamping for high-precision positioned machining.
- A axis swivels ±120°, C axis rotates continuously 360°.
- High-precision angle encoders for accuracy and long-term precision.

Electro spindle

High-power, high-speed motorized spindle: 35 kW, 95 Nm, max. 18000 rpm, for high-speed and high-precision machining of all kinds of workpieces.



Built-in motors

C axis

Rotation 360°

Positioning ±5″, repeatability 5″

A axis

Swivel angle ±120°

Positioning ±5″, repeatability 4″

Model	Table (mm)	Max. swing dia. (mm)	Load (kg)	Max. speed (rpm)		Rated torque (Nm)		Max. torque (Nm)	
				A	C	A	C	A	C
VB50F5	Ø500	Ø700	500	100	120	2×543	543	2×1030	1030
VB63F5	Ø630	Ø850	1000	80	120	2×1300	1370	2×2200	2420
VB80F5	Ø800	Ø1000	1500	60	80	2×2210	2120	2×3510	3460

Rotary table data (A/C axis)

TECHNICAL PARAMETERS

VB Series 5-axis machining center | standard configuration

Configuration / Model		Unit	VB50F5	VB63F5	VB80F5
Processing range	X axis travel	mm	550	800	900
	Y axis travel	mm	600	800	1000
	Z axis travel	mm	450	600	650
	Spindle nose to table	mm	120–570	150–750	150–800
	A axis	°	±120°		
	C axis	°	Continuous 360°		
Table	Table size	mm	Ø500	Ø630	Ø800
	Max. workpiece swing dia.	mm	Ø700	Ø850	Ø1000
	Table max. load	kg	500	1000	1500
Feed	X/Y/Z rapid traverse	m/min	50	50	36
	A/C axis rotation speed	rpm	100/120	80/120	60/80
Electro spindle	Spindle taper	/	HSK-A63		
	Max. speed	rpm	18000		
	Power (rated)	kW	30	35	35
	Torque (rated)	Nm	72	95	95
Precision	X/Y/Z axis positioning	mm	0.008	0.008	0.01
	X/Y/Z axis repeatability	mm	0.004	0.004	0.005
	A/C axis positioning	″	±5		
	A/C axis repeatability	″	4		

* Values shown apply to the standard configuration. Options are available on request. The parameters are subject to the technical agreement.

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

NOTES

CNC-SUPPLY
The World of Manufacturing

