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2024

Striving for excellence,
perfecting and craftsmanship!

山东欧瑞特数控机床制造有限公司
Shandong Orient CNC Machine Tool Manufacturing Co.,Ltd.

A PARTNER FOR SUCCESS

Company Profiles

Shandong Orient CNC Machine Tool Manufacturing Co.,Ltd. is a high-tech enterprise specializing in the development and production of CNC machining centers. The company is located in the "advanced manufacturing province" - Shandong Province, covers an area of 18,000 square meters, more than 160 employees, the annual production of machining centers more than a thousand, with dozens of sets of CNC machining equipment and key testing and debugging instruments.

In recent years, the company has cooperated with Shandong University to set up a CNC machine tool manufacturing technology research and development base, focusing on the research and development and manufacturing of high-end CNC machining centers.

Our main products are CNC vertical machining centers, horizontal machining centers, double-column machining centers and 5-axis machining centers. They are widely used in industrial mother machine manufacturing, auto parts, new energy, semiconductor, medical and aerospace fields. With stable performance and reliable quality, our products are sold well in 70 countries and regions such as Europe, the United States, the Middle East, Southeast Asia and South America.

Most of our products are focused on exporting overseas, and in recent years, we have also provided OEM and body/frame to other international high-end enterprises overseas.

We warmly welcome guests to visit our factory, negotiate and cooperate with us for common development and win-win future!

Welcome to visit our factory!

The worldwide technology leader in the manufacturing of CNC machining centers!

Why choose us?

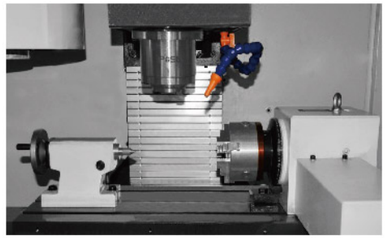
1.We specialize in the design and manufacture of CNC machining centers.
2.Our business philosophy: Always quality first, quality No.1.
3.Under the premise of ensuring quality, improve production efficiency, reduce production costs, and provide customers with lower prices.
4.We provide technical support and after-sales service 7/24. We also can arrange for installation and training at the buyer's company.

Mass prodution – superior reliability & high performance!

CNC Vertical Machining Centers

VMC-440

VMC-440 Features:
1.3-axis linear guideways.
2.The machine has compact design, complete functions, and small footprint.
3.Base, column and table, high strength castings, precision machining.
4.Drilling dia.14mm, tapping M12, milling 63mm.
5.Metalworking and teaching machine.



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CNC Vertical Machining Centers

VMC-450

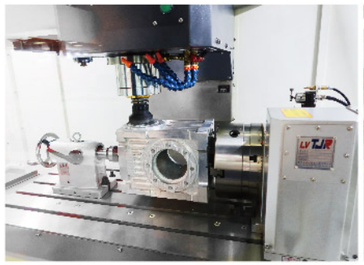
VMC-450 Features:
1.3-axis linear guideways.
2.Adopt high speed, high precision spindle unit, pneumatic clamping tool device.
3.Bed, column, slide seat, table and spindle box with widening reinforcement and angle support plate, to ensure the rigidity of the overall structure and maintain the accuracy.
4.Drum type 12T ATC, the tool change is accurate and reliable.
5.Centralized automatic lubrication.

MODEL	UNIT	VMC-440	VMC-450
Table travel (X,Y,Z)	mm	420x300x460	450x320x420
Table size	mm	870x260	800x260
T-slots (No./width/distance)	mm	3-16-80	3-14-80
Max. load of table	kg	200	200
Rapid feed speed (X,Y,Z)	m/min	30/30/15	12/12/10
Spindle taper		BT30	BT40
Spindle speed	rpm	8000	8000 or 10000
Spindle motor power	kW	2.2/3.7	3.7
Tool magazine	T	8	12
Positioning accuracy	mm	±0.016	±0.015
Re-positioning accuracy	mm	±0.008	±0.0075
Overall dimensions	mm	1860x1520x2060	2250x1950x2200
Weight	kg	1100	2400

CNC Vertical Machining Centers

VMC-1160

1.3-axis linear guideways.
2.The machine has compact structure design, good rigidity, strong bearing capacity, long life and good positioning accuracy.
3.Taiwan spindle unit, NSK/KOYO bearing. Z-axis with enlarged lock motor.
4.Spindle speeds 10000 & 12000rpm, rapid speed of X,Y,Z-axes 36/36/30m/min are available.



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CNC Vertical Machining Centers

VMC-850

MODEL	UNIT	VMC-650	VMC-750	VMC-850	VMC-1160
Table travel (X,Y,Z)	mm	600x400x450	700x450x500	800x500x500	1100x600x600
Table size	mm	800x320	900x400	1000x500	1200x600
T-slots (No./width/distance)	mm	3-16-100	5-16-75	5-18-90	5-18-100
Max. load of table	kg	300	400	500	800
Rapid feed speed (X,Y,Z)	m/min	18/18/16	20/20/18	24/24/20	24/24/20
Spindle taper		BT40	BT40	BT40	BT40
Spindle speed	rpm	8000	8000	8000	8000
Spindle motor power	kW	5.5	5.5	7.5	11
Tool magazine	T	16	16	24	24
Positioning accuracy	mm	±0.02	±0.01	±0.01	±0.01
Re-positioning accuracy	mm	±0.01	±0.005	±0.003	±0.003
Overall dimensions	mm	2200x1950x2400	2500x2200x2400	2750x2300x2300	3350x2300x2550
Weight	kg	2800	3800	5200	6600

CNC Vertical Machining Centers

VMC-1580

VMC-1890

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CNC Vertical Machining Centers

VMC-1370

1.3-axis linear guideways.
2.The main parts are all made of Meehanite castings, stable structure and permanent quality.
3.The base is wide, the column is a triangular box-shaped structure, the heavy load is fully supported, and the structure is solid, which can ensure the heavy load capacity during processing.
4.The spindle box is reinforced by ribs, and the contact length ratio between headstock and column is appropriate to provide a stable support for the spindle.
5.X,Y,Z-axes servo motors are directly connected with the ball screw by a precision coupling, which can eliminate the connection gap and improve the transmission efficiency.

MODEL	UNIT	VMC-1370	VMC-1580	VMC-1890
Table travel (X,Y,Z)	mm	1320x720x650	1520x800x700	1800x900x800
Table size	mm	1400x700	1650x800	2000x900
T-slots (No./width/distance)	mm	5-18-125	5-18-150	5-22-160
Max. load of table	kg	1000	1400	2500
Rapid feed speed (X,Y,Z)	m/min	24/24/24	20/20/20	20/20/20
Spindle taper		BT40/BT50	BT50	BT50
Spindle speed	rpm	10000/8000	8000	8000
Spindle motor power	kW	BT40:11/15 BT50:15/18.5	15/18.5	15/18.5
Tool magazine	T	24	24	24
Positioning accuracy	mm	±0.005	±0.01	±0.01
Re-positioning accuracy	mm	±0.003	±0.005	±0.005
Overall dimensions	mm	4800x3020x3030	5350x4800x3350	6000x5150x3460
Weight	kg	9000	11000	16000

CNC Drilling Tapping Centers

DTC-750A

1.HT300 advanced resin sand casting is used to eliminate the internal stress after annealing treatment and vibration aging treatment.
2.One-body forming ultra-wide base to provide more stable load support ability.
3.Widen the herringbone column with the span of the joint surface to improve the rigidity of the machine
4.Control systems: Mitsubishi, Siemens, Fanuc, Syntec.
5.Adopt imported 3-axis linear guideway, ball screw, coupling and bearing, high precision and high efficiency.
6.Spindle speeds 12000rpm,15000rpm and 24000rpm are available.
7.Optional: the 4th axis or the 5th axis rotary table. And 5-axis linkage models are available.

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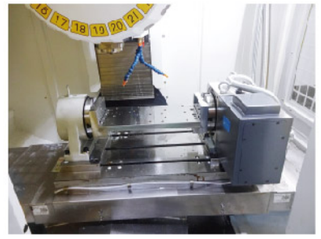
CNC Drilling Tapping Centers



The 4th axis rotary table

The 5th axis rotary table

5-axis linkage model

MODEL	UNIT	DTC-540A	DTC-640A	DTC-750A	DTC-850A	DTC-1050A
Table travel (X,Y,Z)	mm	500x400x300	600x400x300	700x450x300	800x500x330	1000x500x330
Table size	mm	650x400	700x420	800x420	1000x500	1100x500
Table load	kg	250			350	
Distance from spindle to table	mm	150-450			150-480	
Distance from spindle to column	mm	464			546	
Rapid feed	m/min	36			48	
Spindle taper		BT30/BT40			BT30/BT40	
Spindle speed	rpm	20000			20000	
Spindle motor power	kW	5.5			5.5	
Tool magazine	T	21 (opt.26)			21 (opt.26)	
Overall dimensions	mm	2300x1750x2500		2400x1880x2500	2480x2290x2295	2680x2290x2295
Weight	kg	2800	3000	3350	4000	4300

Horizontal Machining Centers (Inverted T)

HMC-630

HMC-800

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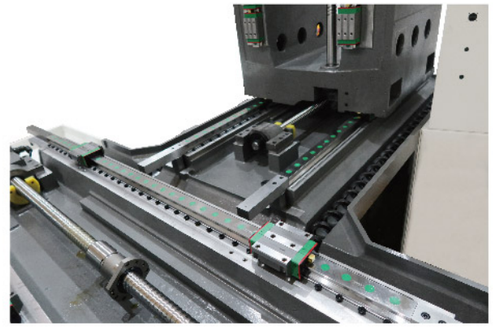
Horizontal Machining Centers (Inverted T)

1.The bed adopts the whole inverted "T" box structure, table left-right movement, column back-forth movement. The rib layout is appropriate, has high static and dynamic stiffness and accuracy retention.
2.Standard 1-pc table, optional 2-pc table.
3.Table indexing 1°. B-axis positioning accuracy 10 arcsec, re-positioning accuracy 2 arcsec.
4.The main transmission adopts spindle reducer (two speeds) directly connected structure, large torque, high efficiency.
5.Standard 4 spiral chip conveyors (X and Z direction each 2) and 1 chain chip conveyor. High efficient iron chip collection.
6.Spindle speed 6000rpm on request.
7.Optionals: ZF gear box, chip flushing, linear scales, CTS, oil cooling, water gun, tool pre-setter, probe system, oil mist collector, etc.



MODEL	UNIT	HMC-630	HMC-800	HMC-1000	HMC-1200
Spindle taper		BT50	BT50	BT50	BT50
Spindle speed	rpm	3000	3000	3000	3000
Spindle motor power	kW	15/18.5	15/18.5	22/30	22/30
Table size	mm	630x630	800x800	1000x1000	1200x1200
Table travel (X,Y,Z)	mm	1000x800x800	1250x1000x1000	1600x1200x1300	2000x1500x1300
T-slot (No./width/distance)	mm	5-18-125	5-22-160	7-22-125	7-22-160
Table load	kg	1200	2000	3000	5000
Distance from spindle center to table surface	mm	100-900	80-1080	20-1250	0-1500
Distance from spindle end face to table center	mm	150-950	150-1150	350-1650	350-1650
Rapid feed speed (X,Y,Z)	m/min	24	24	18	18
ATC system	T	24	30	32	32
Positioning accuracy	mm	0.010	0.010	0.02	0.02
Re-positioning accuracy	mm	0.005	0.006	0.008	0.008
Overall dimensions	mm	5800x3700x3170	6000x4000x3600	7160x4760x4100	7300x5050x4600
Weight	T	15	17	24	26

Horizontal Machining Centers (Positive T)

HMCT-1000

HMCT-500

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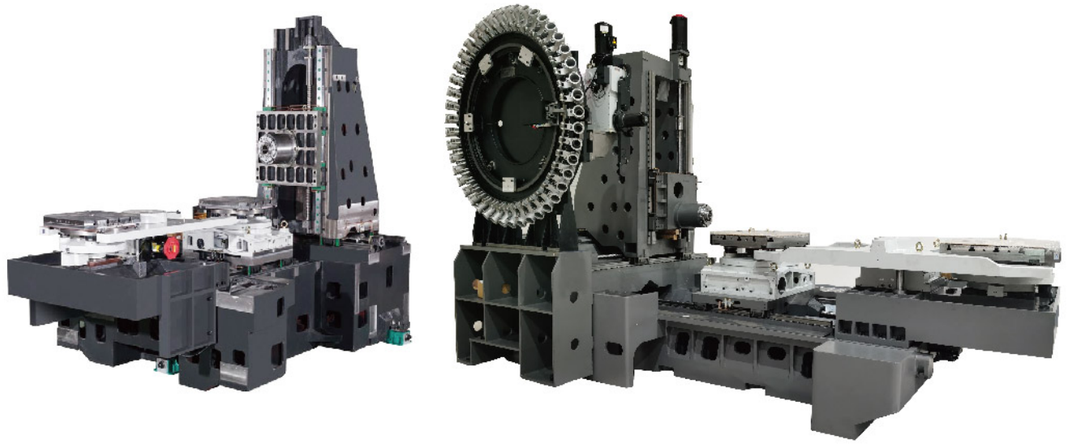
Horizontal Machining Centers (Positive T)

1.The bed adopts the whole positive "T" box structure, table back-forth movement, column left-right movement.
The rib layout is appropriate, has high static and dynamic stiffness and accuracy retention.
2.Double pallet (2-pc) exchange table. Table indexing 1°. HMCT-500/1000, B-axis positioning accuracy 10 arcsec,
re-positioning accuracy 2 arcsec. HMCT-630/800, B-axis positioning accuracy 8 arcsec, re-positioning accuracy 2 arcsec.
3.Direct-drive spindle to achieve large torque output and improve the workpiece processing efficiency.
4.HMCT-500/630/800: 2 spiral chip conveyors and 2 chain chip conveyors. HMCT-1000: 2 spiral chip conveyors and
1 chain chip conveyor. High efficient iron chip collection.
5.Optionals: ZF gear box, chip flushing, linear scales, CTS, oil cooling, water gun, tool pre-setter, probe system,
oil mist collector, etc.



MODEL	UNIT	HMCT-500	HMCT-630	HMCT-800	HMCT-1000
Spindle taper		BT50	BT50	BT50	BT50
Spindle speed	rpm	5000	6000	6000	5000
Spindle motor power	kW	15/18.5	22/26	22/26	22/26
Table size	mm	500x500	630x630	800x800	1000x1000
Table travel (X,Y,Z)	mm	800x650x800	1000x900x1000	1300x1100x1200	1700x1350x1400
T-slot (No./width/distance)	mm	5-14-100	5-18-125	5-22-160	7-22-125
Table load	kg	500	1200	2000	3000
Distance from spindle center to table surface	mm	50-700	50-950	50-1150	50-1400
Distance from spindle end face to table center	mm	150-950	200-1200	200-1400	300-1700
Rapid feed speed (X,Y,Z)	m/min	48	60	48	24
ATC system	T	24	45	45	40
Positioning accuracy	mm	0.010	0.006	0.006	0.010
Re-positioning accuracy	mm	0.005	0.003	0.003	0.005
Overall dimensions	mm	6200x4100x3200	6300x4300x3500	8300x4500x3800	8500x4700x3800
Weight	T	10	20	23	25

CNC Double-column Machining Centers

GMC-2518

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CNC Double-column Machining Centers

1.GMC-2518,GMC-3018: X,Y-axes linear guideways. Z-axis box way. The X-axis is designed with 2 guideways.
GMC-4032,GMC-5032: X,Y,Z-axes linear guideways. The X-axis is designed with 4 guideways.
The table and workpiece are fully supported with high load capacity, stable precision and high rigidity.
2. Adopt center-symmetric spindle head (Z-axis) design and T-type ram structure.
(1).The specially designed internal shower temperature control system of the spindle head ensures the accuracy of the spindle and the stability of long time high-speed operation.
(2).Adopt left-right symmetrical double hydraulic cylinder counterweight to balance the top and bottom to ensure the best long term accuracy.
(3).Adopt high power digital servo spindle motor, matched with full gear type two-speed gearbox, high cutting torque, which can adapt to all kinds of heavy cutting and high precision machining.
(4).Optional: square ram, spindle speed 3200rpm or 4500rpm, especially suitable for heavy cutting and rough machining of large workpieces.
3.Rich optionals: Milling heads, CTS, RENISHAW measurement tools, etc.

GMC-4032

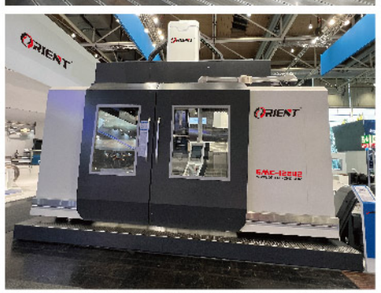
MODEL	UNIT	GMC-2518	GMC-3018	GMC-4032	GMC-5032
Spindle taper		BT50	BT50	BT50	BT50
Spindle speed	rpm	6000	6000	6000	6000
Spindle motor	kW	15/18.5	15/18.5	22/26	22/26
Table travel (X,Y,Z)	mm	2500x1800x800	3000x1800x800	4000x3200x1000	5000x3200x1000
Table size	mm	2500x1600	3000x1600	4000x2400	5000x2400
Table load	T	8	10	15	18
Rapid feed (X,Y,Z)	m/min	15/15/12	15/15/12	12/15/12	10/15/12
Distance of two columns	mm	1900	1900	2700	2700
Distance from spindle to table	mm	200-1000	200-1000	200-1200	200-1200
Tool magazine (ATC)	T	24/32	24/32	24/32/60	24/32/60
Overall dimensions	mm	7350x5015x4323	8320x5015x4323	10804x6202x5077	12895x6865x6085
Weight	T	23	25	43	48

CNC Crossbeam-moving Gantry-type Machining Centers

GMC-5242





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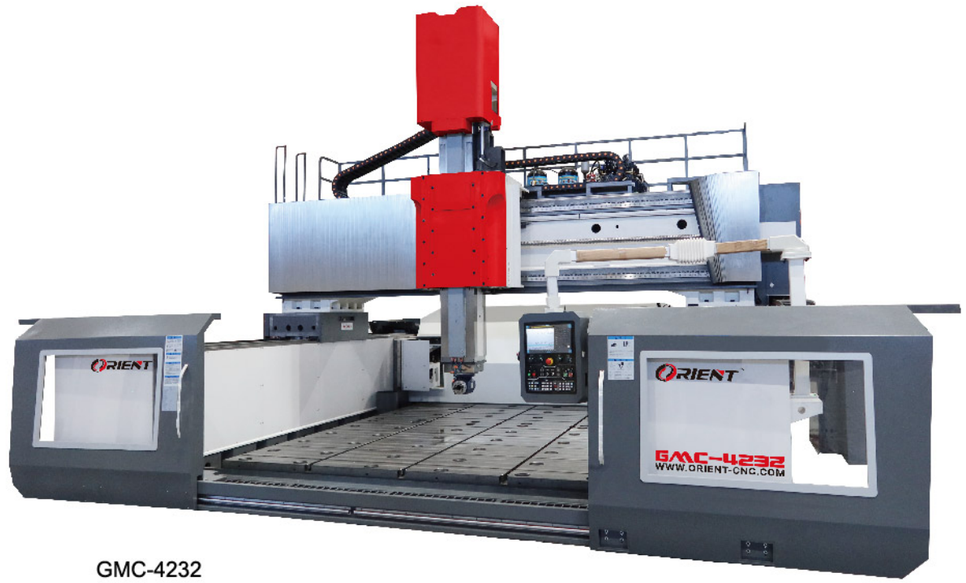
CNC Crossbeam-moving Gantry-type Machining Centers



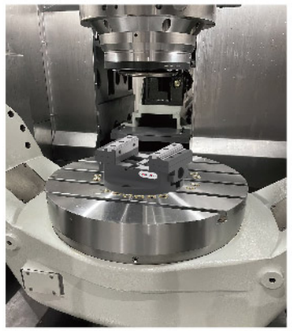
GMC-4232

1.Main parts are 3D FEM design, high strength Meehanite cast iron.
2.Bridge type moving beam machine structure, good rigidity, strong shock absorption, good dynamic characteristics.
3.The spindle is equipped with two-gear transmission and oil cooler for high torque output and heavy-duty cutting.
4.The column is designed with "honeycomb" bionic structure to improve the structural rigidity.
5.The bed table and the column form a U-shaped frame structure with strong rigidity and high stability.
6.High torque spindle:1274/1572Nm, especially suitable for rough machining, heavy cutting. Optional: High speed spindle 6000rpm,12500rpm or 20000rpm,especially suitable for finishing, such as mold machining.
7.Space-saving design: the floor area is 56% of the traditional mobile table.
8.Optional: Z-axis travel 1500mm; The column is increased 300-500mm; 5-axis spindle head (Box-in-box thermal symmetry structure).
9.Applicable to automotive, aerospace, printing, packaging, textile, military, mold, and other mechanical processing fields.

MODEL	UNIT	GMC-3223	GMC-3228	GMC-4232	GMC-5242	GMC-12242
Spindle taper		BT50	BT50	BT50	BT50	BT50
Spindle speed	rpm	3000	3000	3000	3000	3000
Spindle motor	kW	22/26	30/37	30/37	30/37	30/37
Table size	mm	3000x2000	3000x2500	4000x3000	5000x4000	12000x4000
Table travel (X,Y,Z)	mm	3200x2200x1000	3200x2700x1250	4200x3200x1250	5200x4200x1250	12200x4200x1250
Distance of two columns	mm	2800	3300	3800	4800	4800
Distance from spindle to table	mm	300-1300	300-1550	300-1550	400-1650	400-1650
Table load	T	30	38	60	100	240
Rapid feed (X,Y,Z)	m/min	15,15,10	12,12,8	10,10,8	10,10,8	10,10,8
Tool magazine (ATC)	T	16/24/32	16/24/32	16/24/32	16/24/32	16/24/32
Overall dimensions	mm	6350x5350x6120	6350x5850x6120	7550x6450x6120	8500x7800x6120	18800x7800x6120
Weight	T	48	52	62	80	142

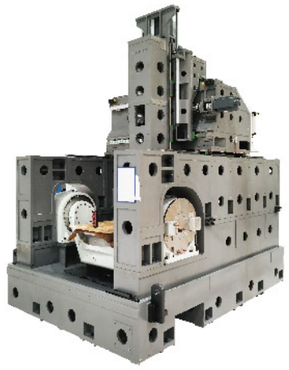
5-Axis CNC Machining Centers

5-VMC-260



5-VMC-320

5-Axis CNC Machining Centers



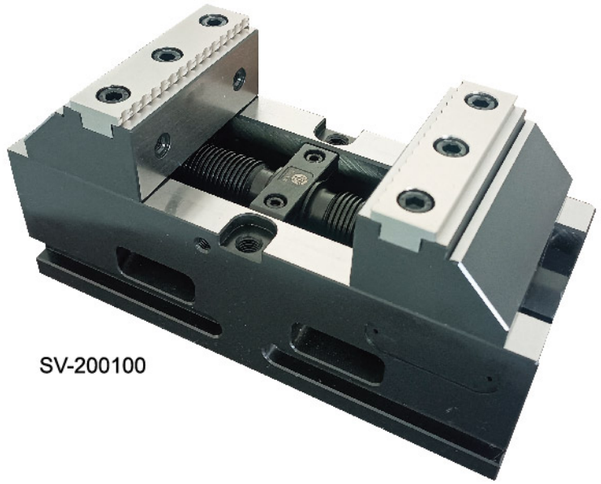
5-VMC-600

1.High rigidity bridge type structure, the high rigidity bed and the column constitute the U-shaped frame structure.
2.The large bevel of the inner cavity of the bed is matched with a central chip removal structure.
3.X/Y/Z axis adopts linear motor driving, no backlash transmission, fast response and higher accuracy.
4.Large torque motor drives A axis and C axis, no transmission chain, with good rigidity.
5.Absolut encoder, full closed-loop control.
6.Control systems: Heidenhain, Siemens, Syntec, Hnc, Lynuc, etc.
7.It is used for machining impeller, valve body, thin-wall, shell and frame parts with flexible and efficient processing.

MODEL		UNIT	5-VMC-260	5-VMC-320	5-VMC-500	5-VMC-600	5-VMC-800	5-VMC-1000
Spindle	Spindle taper		BBT40	A63	A63	A63	A63	A63
	Spindle speed	rpm	15000	18000	18000	15000	15000	15000
	Motor power	kW	7.5	15	22/33	25/37.5	25/37.5	30/46
Working range	Table travel (X,Y,Z)	mm	500x500x450	400x560x350	500x600x450	600x650x600	850x850x700	850x1000x700
	A axis tilting range		±110°	-90°~ 110°	±120°	±120°	±120°	±120°
	C axis rotating range		360°	360°	360°	360°	360°	360°
Rapid speed	X/Y/Z axis	m/min	24	36	36	36	32	32
	A/C axis	r/min	80/100	60/120	60/120	60/100	60/90	60/100
ATC	Tool magazine	T	24	16	32	40	40	60
A/C axis	Table size	mm	Φ260	Φ320	Φ500	Φ650	Φ800	Φ1000
	Max. table load	kg	60	150	350	850	1200	1200
Accuracy	Positioning/Re-positioning (X,Y,Z)	mm	0.005/0.005	0.006/0.004	0.005/0.003	0.008/0.005	0.008/0.005	0.005/0.003
	Positioning/Re-positioning (A,C)	arc sec	±10/±5	±10/±4	±5/±4	±5/±4	±5/±4	±8/±4
Others	Overall dimensions	mm	2000x2400x2300	1200x1850x1900	5500x2350x3100	4600x3840x3300	5500x4000x3500	5750x5000x4500
	Weight	kg	3800	6500	11000	15000	18000	19000

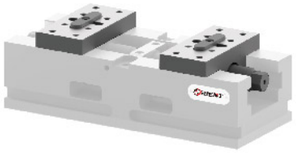
Self-centering Vices

Maximum torque:125Nm
Repeatablility:0.01mm.
Combined jaws & Soft jaws are available.

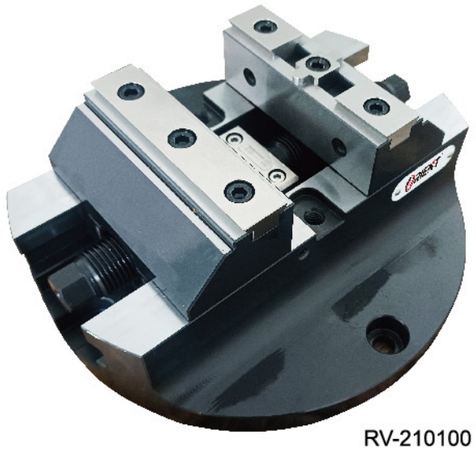


SV-200100

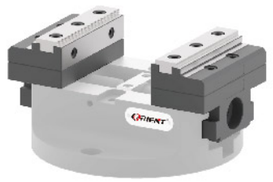
Combined jaws



Soft jaws



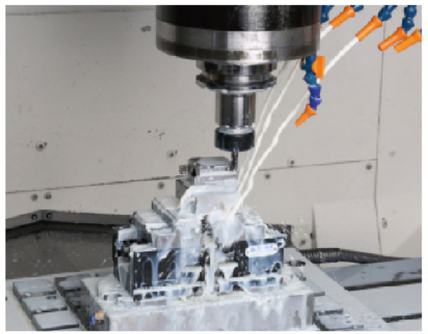
RV-210100



Combined jaws

Soft jaws

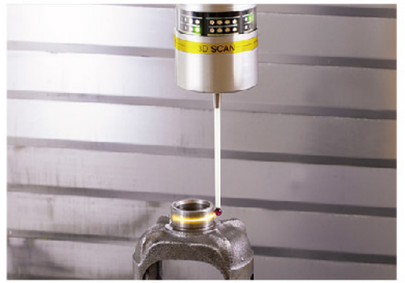
MODEL	Width(mm)	Body length(mm)	Clamping range(mm)	Weight(kg)
SV-20080	80	200	0-152	8
SV-200100	100	200	0-152	10
SV-200125	125	200	0-152	12.5
SV-250100	100	250	0-202	12
SV-250125	125	250	0-202	15
RV-21080	80	Φ210	0-152	10
RV-210100	100	Φ210	0-152	11
RV-255125	125	Φ255	0-202	15.5



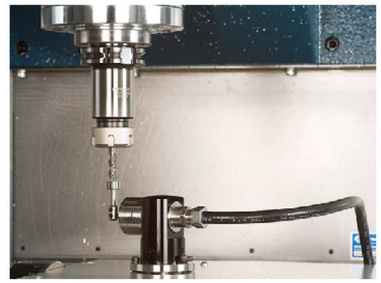
Striving for excellence, perfecting and craftsmanship!

Various Configuration Options

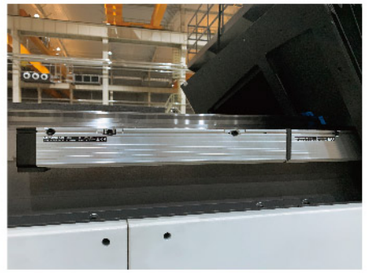
Coolant through spindle system



Workpiece measurement system



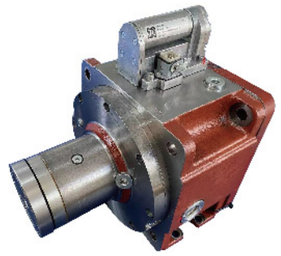
Automatic tool length measurement system



HEIDENHAIN linear scale

Tool Magazines

Oil mist filters



ZF/BF/GTP gear box

Automatic right angle milling head

Extension head (only manual)

Manual universal milling head

Manual right angle millimg head

Semi-automatic right angle milling head