

Sunmill
your best partner

JHV series Linear guideways

VERTICAL MACHINING CENTER

Sunmill
your best partner

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JEENXI TECHNOLOGY CO., LTD.

JHV-550 APC

Innovation Technology

- The above procedures save suspending time of waiting to increase production efficiency. It also can prevent accident and quality abnormal happened because workers operate hastily.
- Operation Panel is built-in type and a fine view of observation widows, the operators can easily proceed the inspection and operation.



Coolant Flush Device for APC Shield

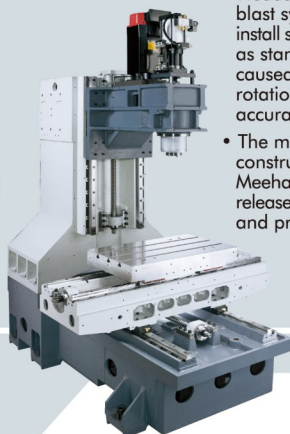
Coolant flush will be activated automatically before APC exchange to clean chips and enable APC for orientation and clamping.



Auto Pallet Changers

A, B Table driving by oil tank to rotate in CW / CCW directions, complete the table exchange swiftly.

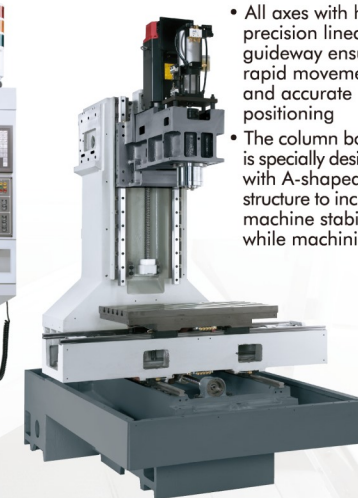
JHV-550



- Headstock with spindle air blast system, also machine install spindle oil cooling device as standard to eliminate heat caused by spindle high speed rotation, ensure spindle accuracy and life lasting.
- The machine structure is constructed from high quality Meehanite cast iron and stress released to ensure great rigidity and prolonged precision.
- Compacted and simplified machine structure for space saving.

JHV-710 / JHV-800

Linear Guideway Series



- All axes with high precision linear guideway ensure rapid movement and accurate positioning
- The column bottom is specially designed with A-shaped structure to increase machine stability while machining.



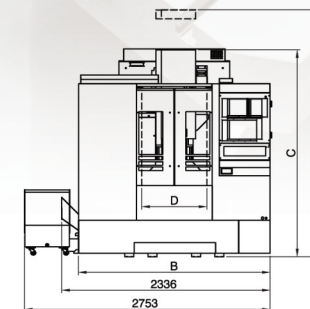
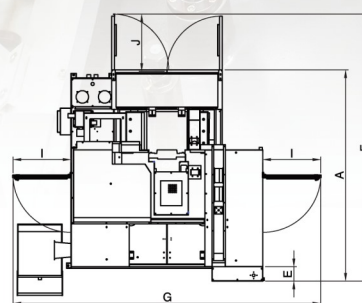
Belt type headstock with standard speed 8000rpm. Direct Drive spindle is optional accessories for less vibration and noise, available speed 10,000rpm / 12,000rpm / 15,000rpm.



Precision BallScrew

Pre-tensioned ballcrews on X, Y, Z axes ensure accuracy and eliminate positioning error.

Machine Dimensions



	JHV-710	JHV-800
A	2412	2532
B	2150	2150
C	2322	2322
D	730	730
E	160	160
F	3007	3157
G	3450	3450
H	2770	2780
I	644	644
J	633	633

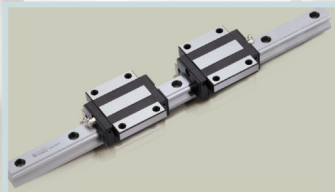
Linear Guideway Series

JHV-850 / JHV-1020

A Competitive Performer for Precision Parts, Mold and 3C Parts Machining!



In today's competitive environment, the only way for competitive edge is to pursue efficiency and quality, JEENXI high speed JHV is just designed and engineered with high efficiency and high accuracy in mind. The series of JHV employs high speed spindle, linear ways on three axes and rigid machine structure. When it comes to precision parts, mold and 3C parts machining, the JEENXI high speed JHV is your only choice.



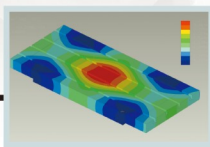
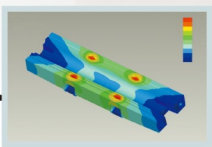
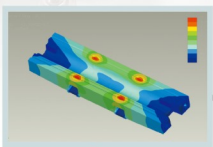
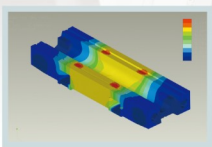
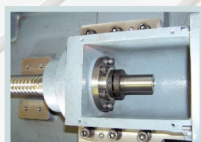
Linear Guide Way

The machine employs 45 mm. wide ball-type linear guide ways.



Precision Ball Screw With Double Nuts

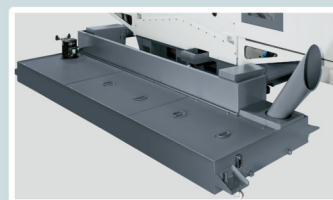
Three axes are transmitted by high precision ball screws, preloaded, hardened and ground-assuring dependable feed accuracy.



Finite Element Analysis

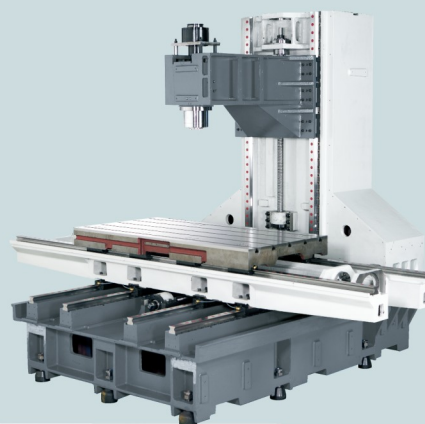
The structural parts on Jeenxi machine are analyzed and designed by the advanced Finite Element Analysis. It provides a detailed analysis for structural stress/strain conditions, and ensures excellent machine rigidity and lifetime stability.

JHV-1300 / JHV-1500 / JHV-1600



JHV-1300 / 1500

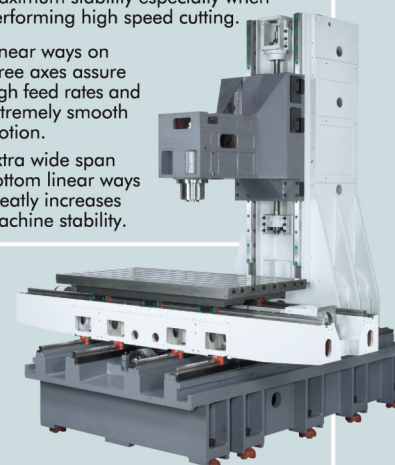
(Rear Chip Conveyor)



- Increased width on the column bottom with box-type structure provides maximum stability especially when performing high speed cutting.

- Linear ways on three axes assure high feed rates and extremely smooth motion.

- Extra wide span bottom linear ways greatly increases machine stability.

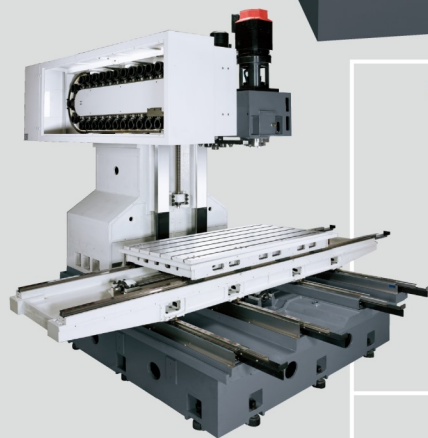


JHV-1600 Frame Machine

Competitive Advantage

In the conditions of not change working travel, JHV-1300 / JHV-1500 can be loaded by HQ container. The succinct design reduces machine space and substantially economizes the packing, transportation cost.

JHV-1800 JHV-2000



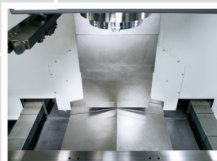
Optimal Structure Design

- Linear guideways on X, Y axes, less friction, rapid traverse movement. Boxway on Z axis, strengthen cutting ability. Regular big type machine rapid are 12/12/10M/min. JHV1800 / 2000 rapid set on 24/24/15M/min.
- Pre-consideration of environmental concept, machine body design can separate oil and water, decrease the injury of nature and easily clean up. Oil Mist Collector or Dust Vacuum Cleaner is available as options
- The column bottom with U-shaped design, extended span guarantee heavy load and superior stability.
- The product is analyzed and designed by the advanced Finite Element Analysis; box-cage-type structures to ensure the high quality.

Labyrinth Telescopic Cover
Labyrinth design to protect guideway not damaged by chips and coolant oil. It also has the function to separate oil and water.



3-Guarding on Y Axis Back Side
The design can reduce noise when rapid traverse and easy clean up.



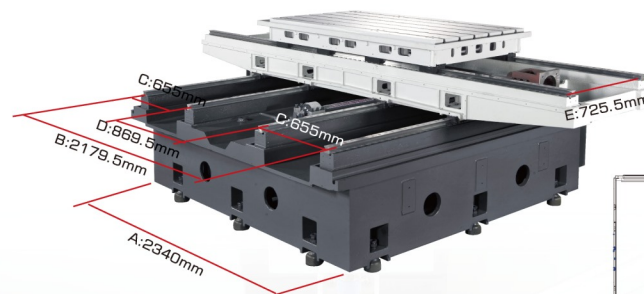
Direct Drive Spindle
#50, 10000 // 12000 rpm
(Optional)



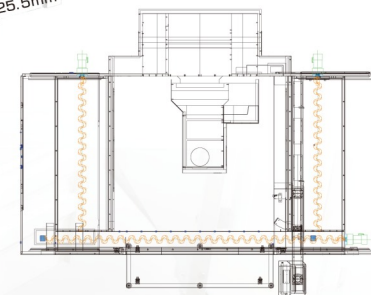
ZF Gear Box
Two-Speed gear box
(Optional)

JHV-1800 / JHV-2000

Linear Guideway Series



Machine constructions apply Triangle Mechanics to reach the best movement and positioning accuracy. Y axis with 4 linear guideways, each one have 8 sliding blocks to support. Work table still can be carried by 6 blocks even move to the end. Roller type Linear guideways on X, Y axes - Standard.



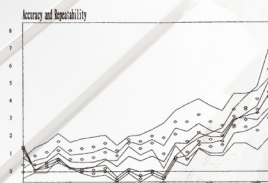
Triple Chip Remover - Scres Type

Strict Quality Control

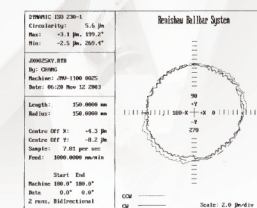
Geometric Accuracy Inspection, Spindle Balancing Adjustment, Ball Bar Test, Laser Inspection, Cutting Test.



LASER INSPECTION
An advanced laser instrument is employed for inspecting and compensating linear accuracy and pitch error. This assures optimum axis travel accuracy.



BALL BAR TEST
Through ball bar testing the circularity, geometry error and backlash can be accurately obtained allowing the machine to be adjusted to the best possible accuracy.



單位/Unit: μm

STANDARD & OPTIONAL ACCESSORIES

Belt Drive Spindle



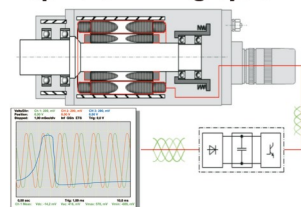
- Standard spindle speed: 8000RPM, Options 10000, 12000RPM available.
- Spindle taper: BT40

Direct Drive Spindle (optional)

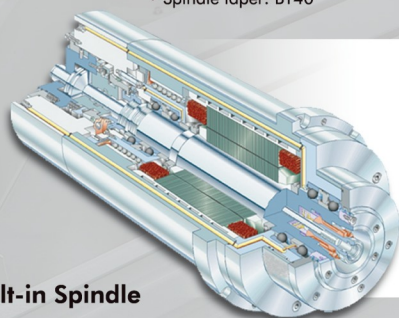


- Choice of spindle speeds / 10000, 12000, 15000,RPM
- Spindle taper: BT40

Spindle Driving System



Built-in Spindle



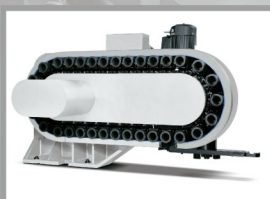
CAROUSEL TYPE ATC

Capacity:
16-tools, 20-tools



ARM TYPE ATC (Optional)

Capacity:
24-tools, 30-tools



CAM TYPE ATC (Optional)

Capacity:
40-tools (#40), 32-tools (#50)



SPINDLE SPLASH RING (Optional)

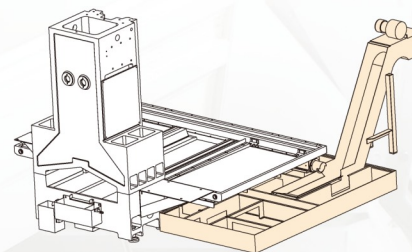


COOLANT FLUSHING DEVICE (Optional)

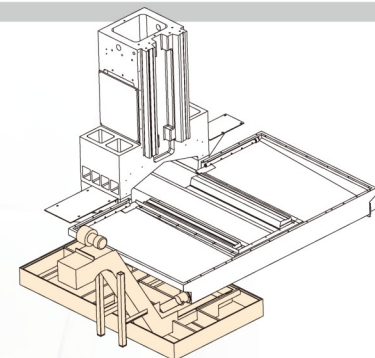


COOLANT THROUGH SPINDLE (Optional)

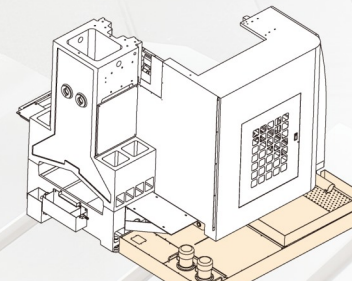
Linear Guideway Series



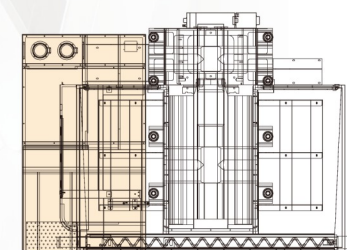
Front Mounted Chain type Chip Conveyor



Side Mounted Chain type Chip Conveyor

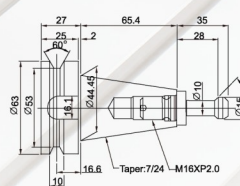


Standard Coolant Tank

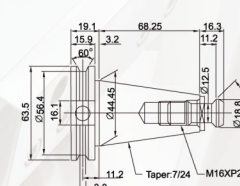


Front Mounted Screw-Type Chip Conveyor

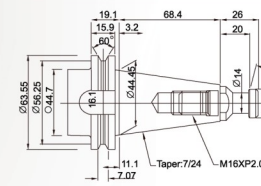
Tool Shank & Pull Stud



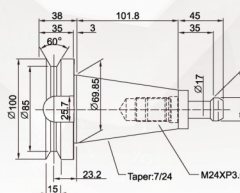
BT40



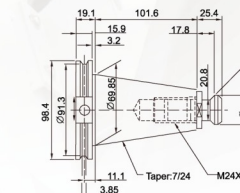
DIN40(69871)



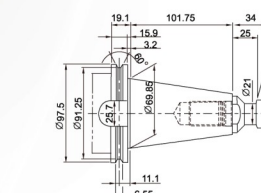
CAT40



BT50



DIN50



CAT50

Specifications

MODEL	UNIT	JHV-550APC	JHV-550	JHV-710	JHV-800	JHV-850	JHV-1020	JHV-1300	JHV-1500	JHV-1600	JHV-1800	JHV-2000
3 axes travel		Linear guideways									Linear guideways(X,Y)+Box way(Z)	
X axis travel	mm	550	550	710	800	850	1020	1300	1500	1600	1800	2000
Y axis travel	mm	400	400	460	500	550	550	750	750	750	900	900
Z axis travel	mm	460	460	560	580	580	580	700	700	700	750	750
Spindle nose - table surface	mm	120-580	120-580	120-680	120-700	120-700	120-700	150-850	150-850	120-820	150-900	150-900
TABLE												
Table area	mm	600 x 400	650 x 410	760 x 420	900 x 500	1020 x 550	1190 x 550	1300 x 750	1500 x 750	1650 x 750	1850 x 900	2050 x 900
Max. table load	kgs	200 x 2	250	450	500	600	800	1000	1000	1200	2500	3000
T-slot	mm	3 x 14 x 100	3 x 14 x 100	3 x 14 x 126	5 x 16 x 100	4 x 18 x 125	4 x 18 x 125	5 x 18 x 150	5 x 18 x 150	5 x 18 x 125	6 x 18 x 145	6 x 18 x 145
Pallet changing time	sec.	7	—	—	—	—	—	—	—	—	—	—
Pallet exchange method		180° changing (rotary)	—	—	—	—	—	—	—	—	—	—
SPINDLE												
Spindle taper	type	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-50	BT-50
Spindle speed	rpm	8000	8000	8000	8000	8000	8000	8000	8000	8000	6000	6000
Spindle drive	type	Belt	Belt	Belt	Belt	Belt	Belt	Belt	Belt	Belt	Belt	Belt
Spindle motor	kw	5.5 / 7.5	5.5 / 7.5	5.5 / 7.5	5.5 / 7.5	7.5 / 11	7.5 / 11	7.5 / 11	7.5 / 11	11 / 15	11 / 15	15 / 18.5
Spindle cooling	type	oil cooler	oil cooler	oil cooler	oil cooler	oil cooler	oil cooler	Oil cooler	Oil cooler	Oil cooler	Oil cooler	Oil cooler
FEED RATE												
Rapid traverse (X/Y/Z)	m/min	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	30 / 30 / 24	24 / 24 / 15	24 / 24 / 15
Cutting feed rate	mm/min	1-15000	1-15000	1-15000	1-15000	1-15000	1-15000	1-15000	1-15000	1-15000	1-7000	1-7000
X/Y/Z axis servo motor (Fanuc)	kw	1.2 / 1.2 / 1.8	1.2 / 1.2 / 1.8	1.2 / 1.2 / 1.8	1.2 / 1.2 / 1.8	1.8 / 1.8 / 2.5	1.8 / 1.8 / 2.5	4 / 4 / 7	4 / 4 / 7	4 / 4 / 7	7 / 7 / 7	7 / 7 / 7
X/Y/Z axis servo motor (Mitsubishi)	kw	1.5 / 1.5 / 2	1.5 / 1.5 / 2	1.5 / 1.5 / 2	1.5 / 1.5 / 2	3.5 / 3.5 / 3.5	3.5 / 3.5 / 3.5	4.5 / 4.5 / 7	4.5 / 4.5 / 7	4.5 / 4.5 / 7	7 / 7 / 7	7 / 7 / 7
ATC												
Magazine type	type	Arm	Carousel	Carousel	Carousel	Carousel	Carousel	Carousel	Carousel	Carousel	Arm	Arm
Tool magazine capacity	pcs	24	16	16	16	16	16	16	16	16	24	32 (OPT)
Max. tool diameter	mm	80 / 150	100 / 150	100 / 150	100 / 150	100 / 180	100 / 180	100 / 180	100 / 180	100 / 180	110 / 220	125 / 220
Max. tool length	mm	250	250	250	250	250	250	300	300	300	300	300
Max. tool weight	kgs	7	7	7	7	7	7	7	7	7	15	15
Tool selection	type	Random	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Random	Random
BALLSCREW												
Diameter of X,Y,Z axis	mm	32	32	32	32	40 / 40 / 38	40 / 40 / 38	45	45	45 / 45 / 50	50	50
Pitch of X,Y,Z axis	mm	12	12	12	12	10	10	10	10	10	10	10
OTHER												
Power consumption	KVA	20	20	20	20	20	20	30	30	40	40	40
Floor space (L/W/H)	cm	200 x 296 x 236	190 x 245 x 260	230 x 245 x 277	230 x 255 x 278	331 x 275 x 295	331 x 275 x 295	430 x 350 x 300	430 x 350 x 300	440 x 305 x 320	580 x 400 x 365	580 x 400 x 365
Machine weight	kgs	3750	3400	4200	4500	6200	6800	9000	10000	11000	17500	18500
CONTROLLER												
Fanuc Oi-MD								Fanuc Oi-MD				

Design and specifications are subject to change without prior notice.