Sunmill
your best partner

JHV series

JIENXI

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AGENT:

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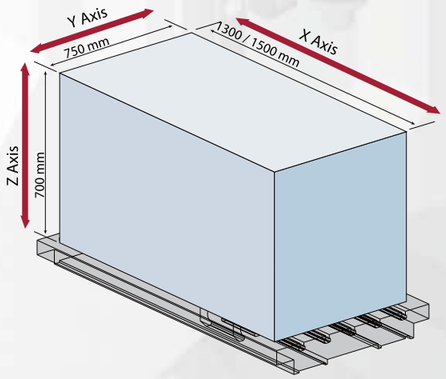
CNC VERTICAL MACHINE CENTER

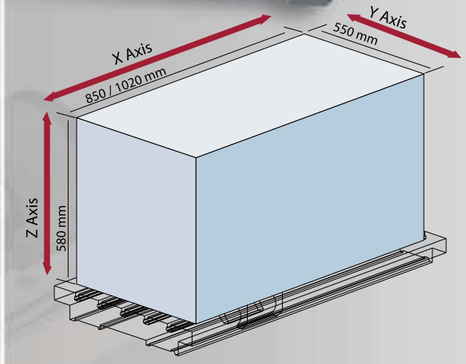
A Competitive Performer for Precision Parts, Mold and 3C Parts Machining!

In today's competitive environment, the only way for competitve 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.

優良設計產品
GOOD DESIGN PRODUCT



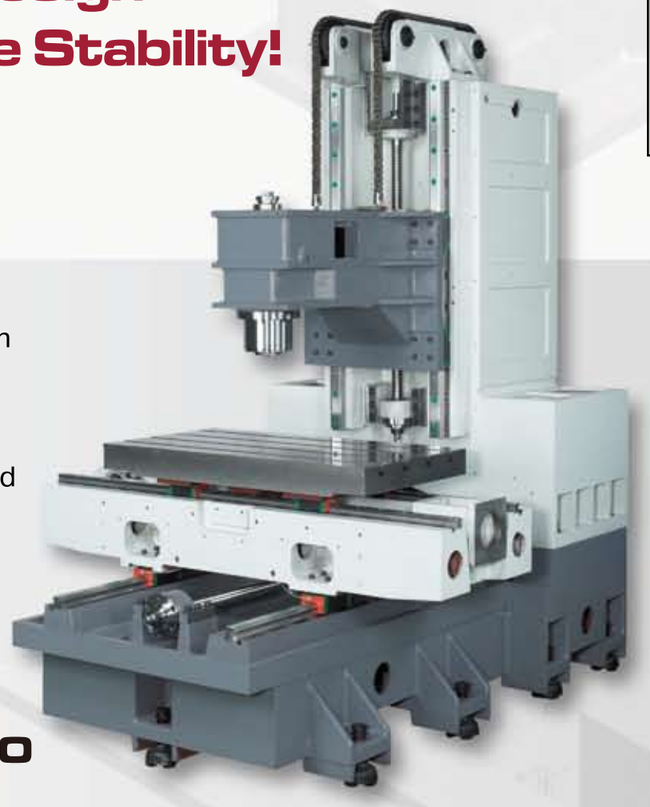
JHV-1300, 1500



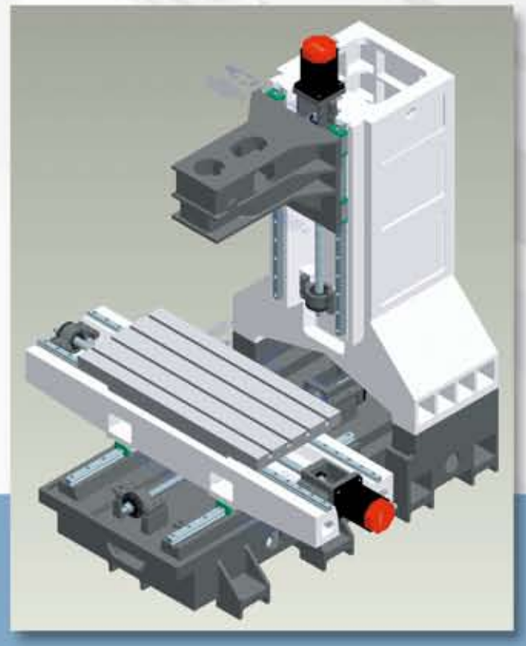
JHV-850, 1020

Optimal Structure Design
High Rigidity! Lifetime Stability!

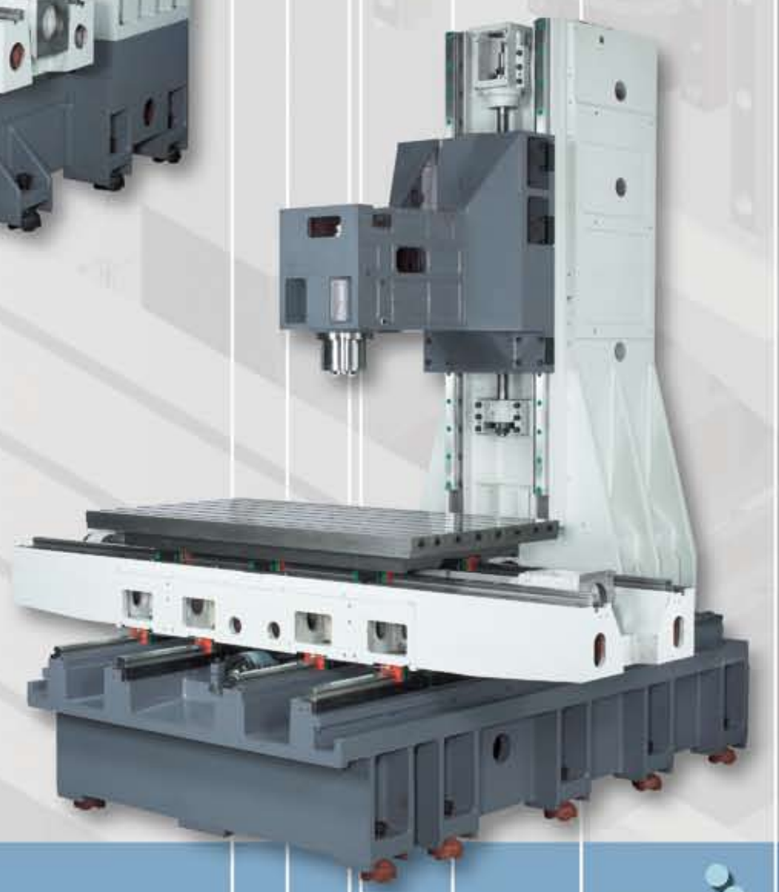
- The major structures are manufactured from Meehanite cast iron, stress relieved and combined with scientific rib reinforcement to ensure deformation-free operations.
- Increased width on the column bottom with box-type structure provides maximum stability especially when performing high speed cutting.
- Linear ways on three axes assure high feed rates and extremely smooth motion.
- Extra wide span between linear ways greatly increases machine stability.



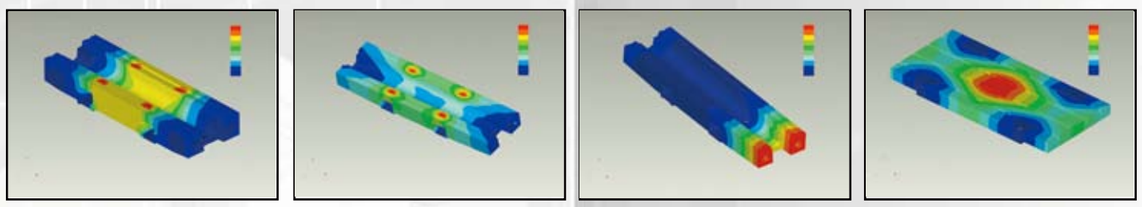
JHV-850, 1020



- Choice of 8,000, 10,000, 12,000 or 15,000 rpm high speed spindles are designed for high speed machining requirement.
- High precision class C3 ball screws feature outstanding vibration dampening capability for high precision machining.
- Extra wide column bottom and base ensure superior stability during high speed machining.
- Compacted and simplified machine structure for space saving.
- Increased Y-axis travel for increasing working capacity (models JHV-1300/1500)

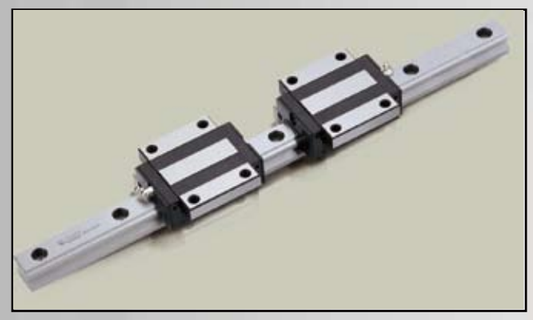


JHV-1300, 1500



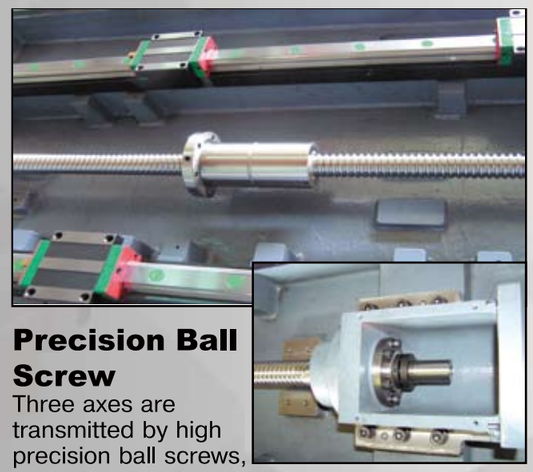
Finite Element Analysis

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.



Linear Guide Way

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



Precision Ball Screw

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

Choice of Various High Speed Spindles!

Belt Drive Spindle

- Choice of spindle speeds 8,000, 10,000 or 12,000 rpm.
- Spindle taper BT-40.

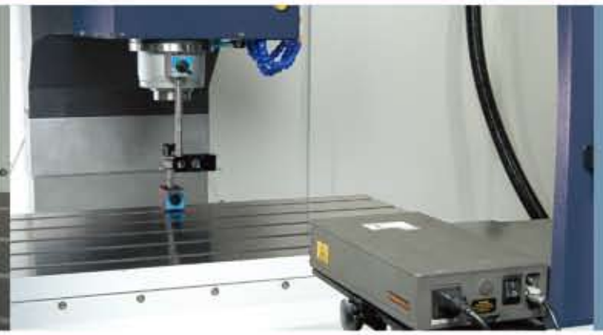
Direct Drive Spindle

- Choice of spindle speeds 10,000, 12,000 or 15,000 rpm.
- Spindle taper BT-40.

HEAT EXCHANGER FOR CONTROL CABINET
To maintain a constant temperature inside the control cabinet, the machine is equipped with a heat exchanger. It provides effective protection for the controller and electronic components. The high performance heat exchanger features high efficiency heat exchange and power saving.

SPINDLE OIL COOLER
It prevents spindle thermal deformation due to oil temperature variation while ensuring high machining accuracy, especially at high spindle speeds.

CONVENIENT WORKPIECE LOADING
The shortened distance between the table and the front of the machine provides easy accessilbility for workpiece loading and unloading.

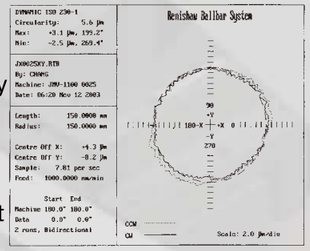


CAROUSEL TYPE MAGAZINE
The carousel type magazine is standard equipment. It carries 16 tools for various types of machining applications. Fixed type tool selection for quick tool changing that reduces non-cutting time.

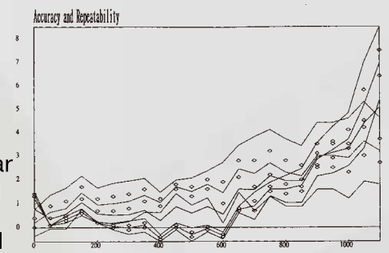
ARM TYPE MAGAZINE (OPTIONAL)
The magazine is driven by a precision cam for rapid and stable tool change motion. Tool loading capacity provides 20 or 24 tools to choose from. Bi-directional random tool selection provides quick tool changing that reduces non-cutting time.

DIRECTLY COUPLED SERVOMOTORS
The three axes ball screws are directly coupled to servomotors through backlash-free couplings. This ensures dependable positioning accuracy. High precision class C3 ball screws are preloaded to eliminate thermal strain.

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

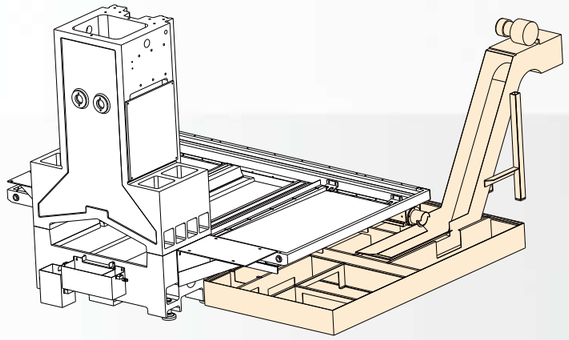


LASER INSPECTION
An advanced laser instrument is employed for inspecting and compensating linear accuracy and pitch error. This assures optimum axis travel accuracy.

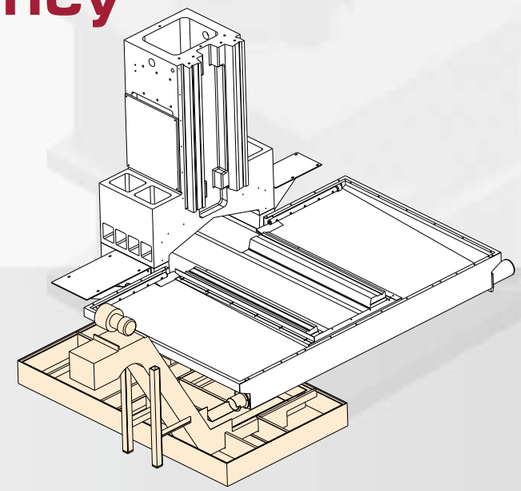


Unit: m

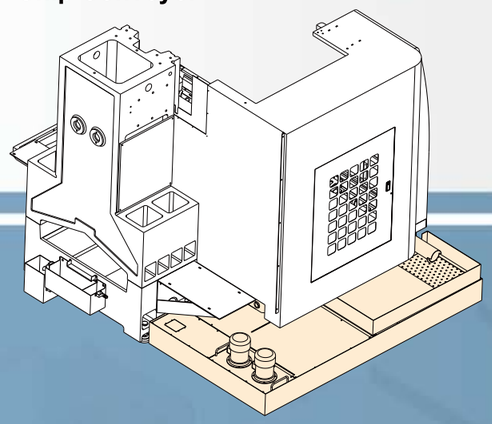
Look to JEENXI High Speed JHV for Better Efficiency



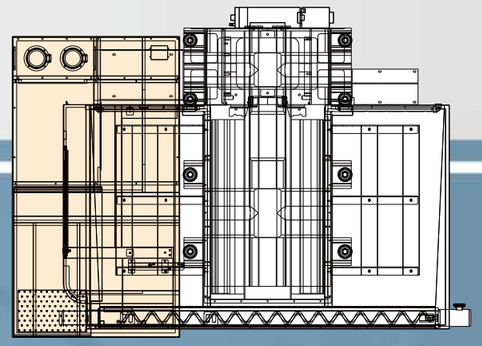
Front Mounted Link-Chain-Type Chip Conveyor



Side Mounted Link-Chain-Type Chip Conveyor

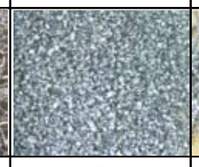
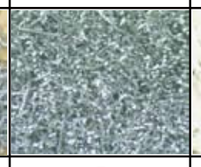


Standard Coolant Tank

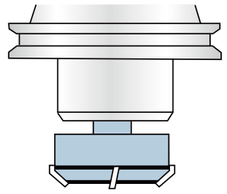
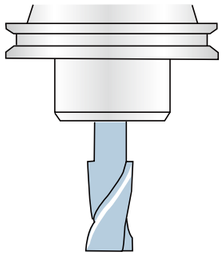
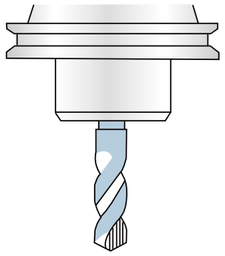
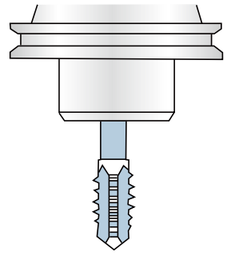


Front Mounted Screw-Type Chip Conveyor

CHIP CONVEYOR SELECTION TABLE

Chip Types	Metal Chips	Cast Iron Chips	Curled Aluminum Chips	Aluminum Chips	Non-ferrous Chips
Workpiece Material					
Link-Chain-Type Chip Conveyor	O	O	O	O	O
Screw-Type Chip Conveyor	O		O	O	

Superior Cutting Capabilities

			
Face Milling	**End Milling**	**Drilling**	**Tapping**
Ø80 S:1000 RPM D:3 mm 320 cc/min	Ø50 S:1800 RPM D:10 mm	Ø21 S:300 RPM D:50 mm	M20 S:100 RPM D:30 mm

COOLANT FLUSHING DEVICE (OPTIONAL)
Three coolant nozzles are provided on both sides of the table featuring high pressure flushing to remove chips from the table.

4th/5th CNC ROTARY TABLE (OPTIONAL)
The 4th/5th CNC rotary table features high positioning accuracy and maximum stability during cutting. It is ideal for various types of workpiece machining.

SPINDLE SPLASH RING(OPTIONAL)
The spindle splash ring is available only for models with arm-type magazine. The device not only effectively removes chips on workpiece but also increases workpiece cooling efficiency.

Machine Specifications

Model	Unit	JHV-850		JHV-1020		JHV-1300		JHV-1500	
TRAVEL		Linear		Linear		Linear		Linear	
X axis travel	mm	850		1020		1300		1500	
Y axis travel	mm	550		550		750		750	
Z axis travel	mm	580		580		700		700 (750)	
Distence from table surface to spindle nose	mm	120-700		120-700		120-820		120-820	
TABLE									
Table area	mm	1020 x 550		1200 x 550		1420 x 750		1650 x 750	
Max. load of table	kg	600		800		1000		1000	
T-slot	mm	4 x 18 x 125		4 x 18 x 125		5 x 18 x 125		5 x 18 x 125	
SPINDLE		8000 RPM (Standard)				8000 RPM (Standard)			
Spindle taper		BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40	BT-40
Spindle speed	rpm	8000,10000	10000,12000,15000	8000, 10000	10000, 12000, 15000	8000, 10000	10000, 12000, 15000	8000, 10000	10000, 12000, 150000
Spindle drive		Belt type	Direct type	Belt type	Direct type	Belt type	Direct type	Belt type	Direct type
Spindle motor	kw	5.5 / 7.5	5.5 / 7.5	7.5 / 11	7.5 / 11	7.5 / 11	7.5 / 11	7.5 / 11	7.5 / 11
Spindle cooling		Oil cooler		Oil cooler		Oil cooler		Oil cooler	
FEED RATE									
Rapid traverse (X,Y)	m/min	30		30		30		30	
Rapid traverse (Z)	m/min	20		20		24		24	
Cutting feed rate	mm/min	1-15000		1-15000		1-15000		1-15000	
3 Axes motor output (X,Y,Z)	kw	1.8 / 1.8 / 2.5		1.8 / 1.8 / 2.5		4.0 / 4.0 / 7.0		4.0 / 4.0 / 7.0	
A.T.C.									
Magazine type		Carousel	Arm	Carousel	Arm	Carousel	Arm	Carousel	Arm
Tool magazine capacity	pcs	16	24	16	24	16	24	16	24
Max. tool diameter	mm	100 / 150	80 / 150	100 / 150	80 / 150	100 / 150	80 / 150	100 / 150	80 / 150
Max. tool lenght	mm	250	250	250	250	300	300	300	300
Max. tool weight	kg	7	7	7	7	7	7	7	7
Tool selection		Fixed type	Random	Fixed type	Random	Fixed type	Random	Fixed type	Random
OTHER									
Power consumption	KVA	20		20		30		40	
Floor space (LxWxH)	mm	2940 x 2180 x 2350		2940 x 2180 x 2350		3720 x 2640 x 3100		4100 x 2640 x 3100	
Machine weight	kg	6200		6800		10000		11000	

■ Design and specifications are subject to change without prior notice.

Standard Accessories:

- Spindle oil cooler unit
- Full splash guard
- Cutting coolant unit
- Heat exchanger in control box
- Auto power off
- Auto lubrication system
- Air blast through spindle
- Work lamp
- Tool box
- Carousel type ATC (16 tools)
- Rigid tapping
- Mechanical, electrical operation manuals
- RS-232 interface
- Screw type chip conveyor

Optional Accessories:

- Direct drive spindle 10,000, 12,000 or 15,000 RPM.
- Belt drive spindle 10,000 or 12,000 RPM.
- Rotary table 320 or 250 (4th axis; including manual tailstock, oil tank, motor and driver)
- 4th axis oil tank
- 4th axis motor with driver
- Arm-type ATC (24 tools)
- Oil skimmer
- Coolant gun (motor), rear coolant flushing device.
- Link-chain-type chip conveyor.
- Coolant through tool holder.
- Spindle splash ring (arm-type).
- Linear scales for 3 axes.
- Coolant through spindle center with filter
- Deep hole drilling stop
- Tool probe system