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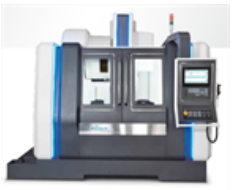
SAM 021969 **FINETECH Tipo SMV 1370 H3L**

Gruppo	Centro di lavoro a 3 assi
Produttori	FINETECH
Tipo	SMV 1370 H3L
Controller	FANUC 0i-MF Plus
Anno	2022



Numero di assi totale	3
Lunghezza della tavola	1450 mm
Larghezza della tavola	700 mm
Numero scanalatura a T:	5
Distanze tra le scanalature a T	100 mm
Larghezza della scanalatura a T	18 mm
Peso mass. su tavola	1500 kg
Corsa longitudinale (X-asse)	1300 mm
Corsa trasversale (Y-assi)	700 mm
Corsa verticale (Z-Asse)	700 mm
Magazzino utensili numero di posti utensile	30
Attaco cono mandrino: BT	40
Distanza attacco mandrino e tavolo	130 - 830 mm
Velocità mandrino:	
con variatore continuo	
da	0 t/min
fino	12000 t/min
Avanzamenti rapidi:	25 m/min
Motore mandrino	18.5 kW
Potenza installata totale	45 kVA
Peso della macchina circa	9000 kg
Dimensioni macchina:	
Lunghezza	4188 mm
Larghezza	2414 mm
Altezza	2560 mm

Accessori diversi:

Assi lineari azionamenti diretti	
Refrigerazione	
Refrigerazione	510 l
Refrigerante centro mandrino	20 bar
Soffiatura per cono del mandrino	
Convogliatore di trucioli	
Volantino elettronico	
Lampada	
Refrigerzione del mandrino	
Refrigeratore dell'olio del mandrino	
Pistola di risciacquo	
Pistola a pressione	
Spegnimento automatico	

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Lubrificazione centralizzata
Armadio elettrico Condizionatore d'aria
Luce di stato

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Internationally Recognized Machine Tools From Finetech

From its beginnings in 1979, Finetech has been one of the top machine tool manufacturers in the world. Finetech manufactures a wide range of CNC vertical machining centers. Finetech's machines are built to deliver high speed with more accuracy, efficiency and durability with more standard features, high-tech innovations and solid engineering.

Every Finetech machine is designed to provide more flexibility and productivity, making for a very sound investment.

Finetech

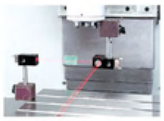
Extensive Quality Control

Before shipping, each machining center from Finetech is subject to rigorous quality inspections during assembly. If it does not measure up to our standards, it does not leave our factory. Our objective is to ensure that each machine will provide optimum performance and fully satisfy customers.

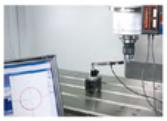
SPINDLE DYNAMIC BALANCE TESTING
After machine assembly, the spindle is re-balanced to ensure smooth operation.

SPINDLE THERMAL GROWTH TESTING
Each spindle is tested through the complete speed range and thermal growth is measured to ensure the spindle is within normal values.

FINAL TEST CUT
Dynamic cutting process test ensures precision and performance of machine.

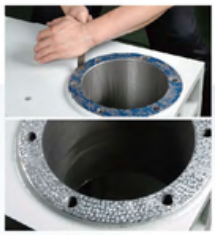


CALIBRATION
Every Finetech machine is laser calibrated for pitch error compensation and backlash.



BALL BAR TESTING
Every machine is put through a Dynamic Ballbar test to test circularity and reversal spike errors.

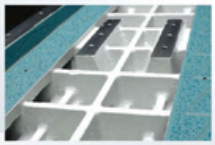
Extensive Quality Control During Assembly



SPINDLE TRAM
Every spindle mount is hand scraped to ensure accurate alignment of the spindle to worktable.

BALLSCREW ALIGNMENT
The ballscrew bearing mounts are aligned using a precision test mandrel.

The mounting surface is hand scraped to ensure a highly precise alignment.



GUIDEWAYS ARE FITTED WITH "TURCITE B"
Box way type machines are hand scraped and set matched to ensure high geometric accuracy.

STRAIGHTNESS
Every linear guideway has a precision ground mounting surface and is checked using a high precision Granite straight edge.

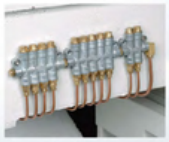
Finetech

LEVEL
The machine level is continuously checked through each stage of the assembly process using precision levels.

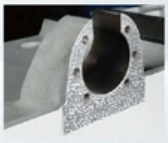
SCREW AND LINEAR RAIL PARALLEL TEST
The straightness of the ballscrew is measured against the straightness of the linear guideway to ensure both components are parallel to each other.

THRUST BEARING ASSEMBLY
The thrust bearing housings are inspected and ground for proper clearances to allow the ballscrew to be properly supported.

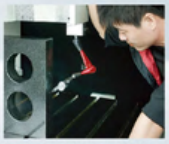
SERVO MOTOR MOUNT
Each servo motor mounting surface is ground to ensure the motor is correctly aligned to the ballscrew.



EFFICIENT AXES LUBRICATION
Each axis uses volumetric oil or grease distribution to ensure even and efficient lubrication.



BALLSCREW MOUNT
The ball nut is hand scraped and aligned using a precision test mandrel.



Z AXIS ALIGNMENT TEST
The Z axis is tested for accuracy using a high precision granite square in X, Z and Y, Z directions.

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Excellent Mechanical Features

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LINEAR WAY

CNC Vertical **Machining Center**

High Speed and Precision

- The casting assembly of the SMV machining centers has been designed using a Finite-Element-Analysis process to ensure the machine will handle cutting forces and weight loads associated with the demands of the machine specifications.
- All axes use an extra wide 45mm roller type linear guideway to allow the machining center to accommodate heavy loads with fast accelerations and low friction while maintaining accurate positioning.
- The machine base and saddle base utilize a wide design to prevent sagging and overhanging concerns with heavy work piece loads.
- The Z axis casting uses a reinforced rib design to achieve structural strength through the entire casting length.
- Each axis motor is directly coupled to the ball screw.
- Each axis will use a grade C3 precision ground ball screw and will use a pre-tensioned design to improve machine performance.

▲ SMV-1270-H3L

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BOX WAY

Heavy Cutting Vertical **Machining Center**

- The casting assembly of the SMV machining centers has been designed using a Finite-Element-Analysis process to ensure the machine will handle cutting forces and weight loads associated with the demands of the machine specifications.
- All axes use box way design to allow the machining center to accommodate extremely heavy loads with smooth motion while increasing dampening of vibrations and cutting force characteristics.
- The machine base and saddle base utilize a wide design to prevent sagging and overhanging concerns with heavy work piece loads.
- The Z axis casting uses a reinforced rib design to achieve structural strength through the entire casting length.
- Each axis motor is directly coupled to the ball screw.
- Each axis will use a grade C3 precision ground ball screw and will use a pre-tensioned design to improve machine performance.

▲ SMV-2590-3B

BOX WAY SERIES

▲ 650-3B
- Travel : X650 Y500 Z500 mm
- Table : L800 × W470 mm

▲ 1060-3B
- Travel : X1000 Y600 Z650 mm
- Table : L1100 × W500 mm

▲ 1270-3B
- Travel : X1200 Y700 Z650 mm
- Table : L1300 × W700 mm

▲ 1570-3B
- Travel : X1500 Y700 Z650 mm
- Table : L1650 × W700 mm

▲ 1670-3B
- Travel : X1600 Y700 Z650 mm
- Table : L1750 × W700 mm

▲ 1890-3B
- Travel : X1800 Y1000 Z900 mm
- Table : L1950 × W900 mm

▲ 2090-3B
- Travel : X2000 Y1000 Z900 mm
- Table : L2150 × W900 mm

▲ 2290-3B
- Travel : X2200 Y1000 Z900 mm
- Table : L2350 × W1000 mm

▲ 2590-3B
- Travel : X2500 Y1000 Z900 mm
- Table : L2600 × W1000 mm

COMBINATION WAY

Combination Type Vertical **Machining Center**

- The casting assembly of the SMV machining centers has been designed using a Finite-Element-Analysis process to ensure the machine will handle cutting forces and weight loads associated with the demands of the machine specifications.
- The X and Y axes utilize roller type linear guideways to allow the machining center to accommodate heavy work piece loads with fast accelerations and low friction while maintaining accurate positioning.
- The Z axis uses box way design to allow the machining center to dampen heavier cutting forces.
- The machine base and saddle base utilize a wide design to prevent sagging and overhanging concerns with heavy work piece loads.
- The Z axis casting uses a reinforced rib design to achieve structural strength through the entire casting length.
- Each axis motor is directly coupled to the ball screw.
- Each axis will use a grade C3 precision ground ball screw and will use a pre-tensioned design to improve machine performance.

▲ SMV-2090-2LB

COMBINATION WAY SERIES

▲ 1060-2LB
- Travel : X1000 Y600 Z650 mm
- Table : L1100 × W600 mm

▲ 1270-2LB
- Travel : X1200 Y700 Z650 mm
- Table : L1350 × W700 mm

▲ 1570-2LB
- Travel : X1500 Y700 Z650 mm
- Table : L1650 × W700 mm

▲ 1670-2LB
- Travel : X1600 Y700 Z650 mm
- Table : L1750 × W700 mm

▲ 1890-2LB
- Travel : X1800 Y900 Z900 mm
- Table : L1950 × W900 mm

▲ 2070-2LB
- Travel : X2000 Y700 Z700 mm
- Table : L2150 × W700 mm

▲ 2090-2LB
- Travel : X2000 Y1000 Z1000 mm
- Table : L2150 × W1000 mm

▲ 2290-2LB
- Travel : X2200 Y1000 Z1000 mm
- Table : L2350 × W1000 mm

▲ 2590-2LB
- Travel : X2500 Y1000 Z1000 mm
- Table : L2600 × W1000 mm

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Optional Equipment

Work Piece Measuring System	Tool Measuring System	CTS-Coolant Through Spindle
RENISHAW (OMP 40/60)	RENISHAW (TS27R)	20 BAR
BLUM (TC 50)	BLUM (Z3D)	50 BAR
HEIDENHAIN (TS 640)	HEIDENHAIN (TT 160)	60 BAR
	RENISHAW (NC-4)	70 BAR
	BLUM (NT)	120 BAR

All Of Matching Checklist		
HEIDENHAIN Linear Scale	4/5th Axis Rotary Table	Screw Type Chip Auger
Built-in Coolant Nozzles	HEIDENHAIN Rotary Encoder	
Oil Skimmer	Gear Box	
Spindle Oil Cooler	Transformer	
4th Axis Rotary Table	Chain Type Chip Conveyor	