

4230 E Airport Dr. Ste 105. Ontario, CA 91761 Tel: (909) 923-5520 Fax: (909) 923-5509

URL:www.manford-usa.com. e-mail:sales@manford-usa.com

P.O.Box 7002 West Orange, NJ 07052 Tel: (201) 729-1100 Fax: (201) 729-1155

# Machining Center MODEL: VH-1100

## **MACHINE FEATURES**

- Mitsubishi M70-2A (8" LCD)
- SJ-V-11-01ZT 8000rpm 7.5/11Kw(15HP) Spindle Motor
- CAT40 Spindle Taper
- Belt drive 8,000 rpm spindle speed
- Armless Genoa type 20 tools ATC
- Super grade Tucite-B On X/Y/Z Slide-ways
- Hardened & Ground X&Y&Z Slide-ways
- 40mm,C3 Double nut precision ballscrews
- Meehanite Casting with annealed & stress relieved
- 100% Laser tested for positioning accuracy & repeatability
- Ball Bar tested for circular interpolation accuracy
- High pressure water scour for chip removal
- Telescopic steel way cover on three axes
- Tool box & Tools
- Coolant System and air blast system
- Central lubrication system, auto power off
- Built-in Quartz work light and Alarm lamp
- 4 Solid box ways construction provides rigidity & accuracy
- Y travel 700mm provides superior rigidity and stability
- Rigid tapping
- Full enclosure
- Remote Hand Wheel

## **Specification:**

Table: Longitudinal travel (X axis ): Cross travel: Vertical travel: Spindle nose to table top (D): Load capacity: Spindle taper: Spindle Speed (r. p.m.): Transmission of spindle & motor: Spindle center to column front surface:

#### Feed Rate:

Rapid feed rate: Cutting feed rate: **Motor:** Spindle motor: Feed motors on XYZ: Coolant pump: Lubrication pump: Power requirement:

## Automatic Tool Changer

No. of tools: Max. tool diameter:



25.6" x 51.2" (650 x 1300mm) 43.3" (1100mm) 27.5" (700mm) 24" (610mm) 5.1"-29.1" (130-740mm) 2205 lb (1000 Kg) CAT40 (60Hz ) 8,000 rpm Belts 28.7" (730 mm)

X/Y: 945 ipm Z: 591 ipm 1-394 ipm

15HP ,SJ-V-11-01ZT 8000rpm 7.5/11Kw HF354 0.75Kw 80W 20 KVA

20 Full:3.9" (100 mm) Next empty:5.9"(150mm)



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Max. tool length: Max. tool weight: Length X Width X Height (LXWXH):

Net Weight:

11.8" ( 300 mm) 15.4 lb (7 Kg) 118" x 112.2" x 122" (3000mm x 2825mm x 3100mm ) 15,400 lbs. ( 7000 Kgs)

## CNC VERTICAL MACHINEING CENTER (BOX WAY)

( DUA WA	1)							
MODEL	SPINDLE	Trave	X/Y/Z	ATC	CNC	SPINDLE	AXES MOTOR	FOB
		43.3"/27.5"/24"		Arm Type	SYSTEM	MOTOR		Ontario,CA
VH-1100	CAT40	8000 RPM	BELT	Genoa 20	M70-2A	SJ-V-11-01ZT 8000rpm 7.5/11Kw	HF354	\$71,000
VH-1100	CAT50	6000 RPM	BELT	Genoa 20	M70-2A	SJ-V-11-01ZT 8000rpm 7.5/11Kw	HF354	\$78,000
VHG-1104	CAT40	8000 RPM	GEAR HEAD	Genoa 20	M70-2A	SJ-V-11-01ZT 8000rpm 7.5/11Kw	HF354	\$78,000
VHG-1105	CAT50	6000 RPM	GEAR HEAD	Arm 24	M70-2A	SJ-V-15-01ZT 8000rpm 11/15Kw	HF354	\$97,000

## **CNC SYSTEM OPTION:**

ITEM	SCREEN	SPINDLE MOTOR	AXIS MOTORS	SUIT FOR MODEL	Extra US\$
Fanuc 0i-MD Package A	10.4" LCD	A8i/8000 (7.5/11Kw) 15HP	A12/3000ix3 (3Kw)	VH-1100 VHG-1104 VHG-1105	\$9,400

## STANDARD ACCESSORIES:

Tools & box	Full guarding	Heat Exchange for electrical cabinet
Leveling bolts & plate	Rigid tapping	Auto Lubrication (Box way type)
RS-232 Interface	Auto Power off	Halogen work light
Operation manual	End of program light	Remote Hand wheel

## **OPTIONAL FOR CNC FUNCTION:**

BRAND	MODEL	SPECIFICATION	Extra US\$
	0iMD(A/B)	DATA SERVER	\$1,500
	0iMD(A/B)	ETHERNET	\$1,500
		AICC (look ahead 40 blocks)+ Bell-shaped	
		acceleration./deceleration before cutting feed interpolation	
		+Bell-shaped acceleration./deceleration after cutting feed	
	0iMD(A)	interpolation	\$1,500
		AICC I (look ahead 200 blocks)+ Bell-shaped	
		acceleration./deceleration before cutting feed interpolation	
		+Bell-shaped acceleration./deceleration after cutting feed	
	0iMD(A)	interpolation	\$3,200
Fanuc	0iMD(A)	FANUC spindle motor A12i/7000(20HP) I.O. A8i/8000(15HP)	\$2,100



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	0iMD(A)	FANUC spindle motor A15i/7000(25HP) I.O. A12i/7000(20HP)	\$1,400
	0iMD(A)	FANUC spindle motor A18i/7000(30HP) I.O. A12i/7000(20HP)	\$3,400
	0iMD(B)	4th axis servo motor B8/3000is with driver (for CNC-170R~250R)	\$2,500
	0iMD(B)	4th axis servo motor B12/3000is with driver (for CNC-170R~250R)	\$3,800
	0iMD(B)	4th axis servo motor A4/3000is with driver (for CNC-170R~250R)	\$5,500
	0iMD(B)	4th axis servo motor A8/3000is with driver (for CNC-170R~250R)	\$6,000
	0iMD(B)	4th axis servo motor A12/3000is with driver (for CNC-320R)	\$6,500
	0iMD(B)	4th axis servo motor A22/3000is with driver (for CNC- 400R~500R)	\$7,600
	ALL	2GMB CF card with PCMCIA interface	\$170
	M70	Spindle motor 7.5/11KW(15HP) I.O. 5.5/7.5Kw(10HP)	\$1,200
	M70	Spindle motor 11/15KW(20HP) I.O. 7.5/11Kw(15HP)	\$1,400
Mitsubishi	M70	4th axis servo motor HF-54T with driver (for CNC-170R/CNC-200R)	\$1,400
WIIISUDISIII	M70	4th axis servo motor HF-104T with driver (for CNC-250R)	\$1,600
	M70	4th axis servo motor HF-204S with driver (for CNC-320R)	\$2,000
	ALL	2GMB CF card with PCMCIA interface	\$170

## STANDARD ACCESSORIES:

Tools & box	Full guarding	Heat Exchange for electrical cabinet
Leveling bolts & plate	Rigid tapping	Auto Lubrication (Box way type)
RS-232 Interface	Auto Power off	Halogen work light
Operation manual	End of program light	Remote Hand wheel

## **OPTIONAL ACCESSORIES (EXTRA CHARGE THAN STANDARD)**

SPECIFICATION		SUITABLE FOR MODEL	PRICE	
BT40/10000rpm belt type spindle with spindle oil cooler		VH-1100/1300	\$3,500	
BT40/12000rpm belt type spindle with spindle o	il cooler	VH-1100/1300	\$4,600	
BT50/8000rpm belt type spindle		VH-1100/1300(BT50)	\$700	
BT40/12000rpm Direct type spindle (no CTS) w oil cooler (M70)	ith spindle	VH-1100/1300(15HP)	\$6,200	
BT40/15000rpm Direct type spindle (no CTS) w oil cooler (M70)	VH-1100/1300 (15HP)	\$12,100		
BT40/12000rpm Direct type spindle (no CTS) with spindle oil cooler (0iMD A)		VH-1100/1300(A8/12000rpm)	\$10,300	
BT40/15000rpm Direct type spindle (no CTS) w oil cooler (0iMD A)	VH-1100/1300(AT8/15000rpm)	\$15,500		
Spindle oil cooler (4000BTU)				
Spindle oil cooler (6000BTU)			\$2,100	
BT40 Arm type 24 tool ATC extra	VL/VH-61	0~VH-1300	\$4,600	



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BT40 Arm type 30 tools ATC extra	VL/VH-850~VH-1300	\$5,600			
BT40 Chain type 32 tools ATC extra	VL/VH-850~VH-1300	\$9,000			
BT50 Arm type 24 tools ATC I.O. BT 50 Genoa 20 tools	VH-1100/1300 (BT50)	\$7,400			
BT50 Chain type 32 tools ATC I.O. BT 50 Genoa 20 tools	VH-1100/1300 (BT50)	\$9,800			
Screw type chip conveyor with chip bucket	VH-1100/1300	\$1,000			
Steel-belt type chip conveyor with chip bucket	VH-1100/1300	\$2,900			
Scraper type chip conveyor with chip bucket	VH-1100/1300	\$3,800			
Rear guarding	VH-1100/1300	\$1,000			
Top cover	VH-1100/1300	\$600			
Coolant through spindle center close loop 30	0BAR (simple, without tank, 2 filters)	\$4,700			
Coolant through spindle center close loop 70BAR (Tank 300L, 1 filter)					
Rear side coolant wash for chip removal		\$700			
Left & Right side coolant wash for chip removal					
Oil skimmer					
Oil through tool holder					
Air conditioner for electrical box (2000BTU	J)	\$1,400			
CE/CSA electricity extra with interlock read	ly for front door	\$2,000			
Heidenhain Linear Scale (3-axis) VH1100	(LC183/193F)	\$11,600			
Tool length measurement TS-30 (Marposs)		\$1,500			
Tool length measurement ML-75 (Marposs	laser tool setter)	\$6,700			
Tool length measurement ML-85 (Marposs laser tool setter)					
Tool length measurement TS-27R (Renishaw)					
Workpiece measurement RMP60 (Renishaw	v Radio system)	\$11,500			
Workpiece measurement OMP40 (Renishav	v infrared ray system)	\$9,200			
Workpiece measurement OMP60 (Renishav	v infrared ray system)	\$11,000			
Workpiece measurement E-83WA(Marposs	infrared ray system)	\$6,700			
Workpiece measurement E-86N (Marposs Radio system)					
Air gun					
Coolant gun					
Transformer 20 KVA					
Transformer 25 KVA					
Transformer 30 KVA					
4th Axis wire ready only (No motor/drive/rotary)					



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AR125R rotary table, manual scroll 6", manual tailstock TJ-125, and cable (w/o servo motor & driver)	\$5,900
AR170R rotary table, manual scroll 8", manual tailstock TJ-170, and cable (w/o servo motor & driver)	\$6,800
AR210R rotary table, manual scroll 8", manual tailstock TJ-210, and cable (w/o servo motor & driver)	\$7,700
AR250R rotary table, manual scroll 8", manual tailstock TJ-255, and cable (w/o servo motor & driver)	\$8,000
CNC-120R rotary table, manual scroll 4", manual tailstock, and cable (w/o servo motor & driver)	\$7,000
CNC-170R rotary table, manual scroll 6", manual tailstock, and cable (w/o servo motor & driver)	\$7,400
CNC-200R rotary table, manual scroll SC-7", manual tailstock TS-A160, and cable (w/o servo motor & driver)	\$8,100
CNC-250R rotary table, manual scroll SC-8", manual tailstock TS-A160, and cable (w/o servo motor & driver)	\$9,100
CNC-320R rotary table, manual scroll SC-10", manual tailstock TS-B210, and cable (w/o servo motor & driver)	\$10,900
CNC-400R rotary table, manual scroll SC-12", manual tailstock TS-B250, and cable (w/o servo motor & driver)	\$14,000
CNC-500R rotary table, manual scroll SC-16", manual tailstock TS-C310, and cable (w/o servo motor & driver)	\$24,000

### **F.O.B.:** Ontario, CA

**DELIVERY:** 3 months after receiving your confirmed P/O with down payment

## STANDARD TERMS OF PAYMENT:

A minimum down-payment of 30% of the purchase price at receipt of order. Balance before date of shipment.

**TAXES:** Federal, State, Local Taxes are the responsibility of Purchaser.

**VALIDITY:** This proposal is valid for 60 days.

#### **INSTALLATION:**

After the machine has been positioned, cleaned, leveled and the customer has provided electric power service, hydraulic, lubrication oil, cutting oil, cutting tools, etc. a service technician will be dispatched to the installation site. The technician will place the machine in service, verify proper operation and provide instructions to operating and maintenance personnel.

## WARRANTY:

Two-year warranty for all Fanuc components. One-year warranty for any defects in material or workmanship of machine tool and factory installed components.