



Since 1997 we always insist on this sincere service



VMC-116 Series

Vertical Machining Center X.Y.Z Box Way

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AGENT

20 19/02

Various Spindle Selections

Direct transmission BBT40 10000/12000/15000rpm Spindle arbor 70mm

BBT50 10000/12000rpm Spindle arbor 90mm

Belt transmission BBT40 10000rpm

Spindle arbor 70mm

BBT50 6000/8000rpm Spindle arbor 100mm

Gear transmission BBT50 6000rpm

Spindle arbor 100mm



Belt Spindle

Gear Spindle with High / **Low Torque Design**

Gear designed by two stage transmission, lower speed gear is suitable for heavy cutting and provides the maximum torque of 520Nm. (Option torque of 620Nm/730Nm)

Gear materials are produced by chrome molybdenum alloy steel with heat treatment and precision grind. (Made by HAMADA)



Exquisitely Carved

Traditional hand scraping skill to ensure high accuracy of machine.



Dual Screw Chip Conveyors

One piece casting for chip flute and bottom base could solve the problem of leaking.

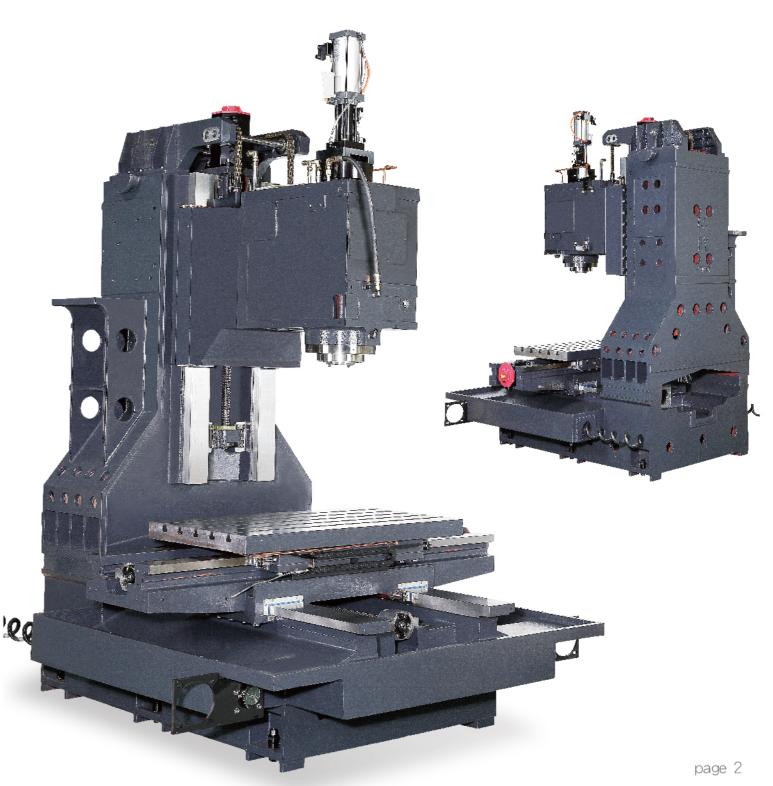
Solid and High Rigidity Structure of Body

Base, saddle, table, spindle head and column are enhanced by the ribs structure to improve machine rigidity and accuracy and to avoid machine deformation.

Five major MEEHANITE castings are molded processed, heat-treated and ground in Taiwan.



Gear Spindle



Strict Quality Inspection Regulation

- ① Each machine has 100% full inspection.
- ② Entire machine has Geometric Accuracy Test.
- 3 Ball-Bar inspection: Use circular tester to adjust accuracy of roundness and machine.
- Laser inspection: According to VDI3341 (ISO230-2) standard, machine will do multiple back and forth operation with compensation to meet the suitable machine accuracy.

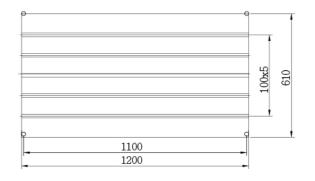
 Each machine has individual inspection report.
- ⑤ Spindle dynamic balancing correction. This can ensure the spindle stability during high rotation speed.



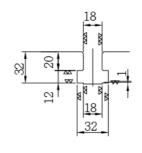




Table Dimension (mm)

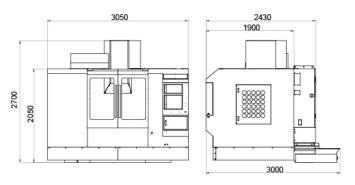


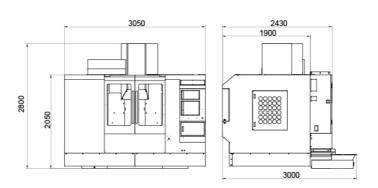
VMC-116 Series



Machine Dimension (mm)

VMC-116B



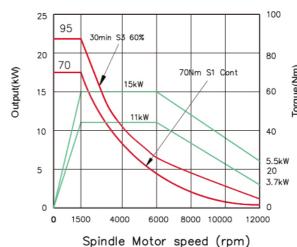


VMC-116G

LEADYANG reserves the right to change the appearance design and specification. And the above specifications are subject to change without notice.

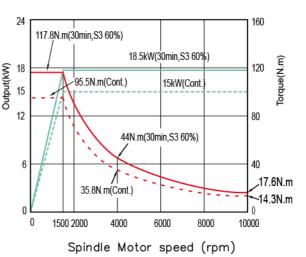
Spindle Power and Torque Curve

Spindle motor ail 12 / 12000i



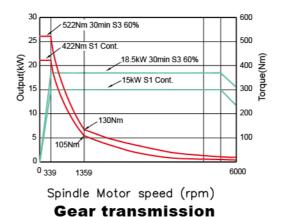
Direct Transmission

Spindle motor ail 15/12000i

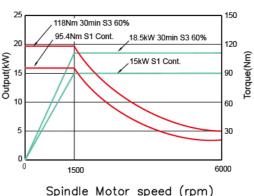


Direct transmission

Spindle motor ail 15/8000i



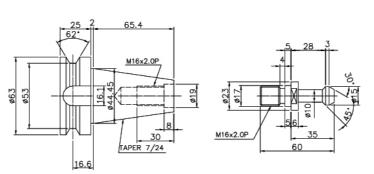
Spindle motor ail 15/8000i



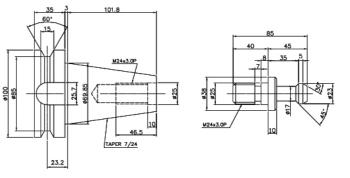
Belt transmission

Tool Taper Dimension (mm)

BT40 / BBT40



BT50 / BBT50



Model	Unit	VMC-116B		VMC-116D		VMC-116G
TRAVEL						
X/Y/Z Axes Travel	mm	1100 / 610 / 610		1100 / 610 / 610		1100 / 610 / 610
Spindle Nose to Table	mm	125-735	100-710	125-735	100-710	100-710
Spindle Center to Column	mm	670		670		670
Types of Guideway (X/Y/Z)		Box Way / Box Way / Box Way		Box Way / Box Way / Box Way		Box Way / Box Way / Box Way
TABLE						
Table Size	mm	1200x610		1200x610		1200x610
T-Slot Size	mm	18x5x100		18x5x100		18x5x100
Max.Table Load	kgs	1100		1100		1100
SPINDLE						
Spindle Transmission		Belt Type		Direct Type		Gear Type
Spindle Taper		BBT-40	BBT-50	BBT-40	BBT-50	BBT-50
Spindle Speed	rpm	10000	6000/8000	10000/12000	10000/12000	6000
Spindle Motor(cont./30mins)	kw	11/15(15/18.5)	15/18.5	11/15(15/18.5)	15/18.5	15/18.5
CUTTING FEED RATE						
X/Y/Z Rapid Travel Rate	m/min	m/min 18 / 18 / 15		18 / 18 / 15		18 / 18 / 15
X/Y/Z Cutting Feed Rate	m/min	1-10m/min		1-10m/min		1-10m/min
A.T.C (Optional)						
Tool Change Method		Cam arm type		Cam arm type		Cam arm type
Magazine Capacity	set	24/30/36	24/32	24/30/36	24/32	24/32
Tool Change Time (Tool to Tool)	sec	2	3.5	2	3.5	3.5
Max. Tool Diameter	mm	75/150	125/200	75/150	125/200	125/200
Max. Tool Length	mm	250	300	250	300	300
Max. Tool Weight	kgs	7	15	7	15	15
ACCURACY STANDARD \	VDI3441 ISC	O 230-2				
Positioning Accuracy	mm	0.008	0.008	0.008	0.008	0.008
Repetitive Positioning Accuracy	mm	0.007	0.007	0.007	0.007	0.007
Ball-bar Accuracy	mm	0.012/300	0.012/300	0.012/300	0.012/300	0.012/300
ACCESSORY EQUIPMENT						
Spindle Coolant Ability	kcal	1000	1500	1000	3000	3000
Cutting Coolant Pump	W	1270X2		1270X2		1270X2
Grease System Pump	W	100		100		100
OTHERS						
Air Pressure Requirement	kgs/cm²	6		6		6
Electric Power Requirement	kva	35		35		35
Machine Weight (Approx.)	kgs	7200		7200		7800

NOTE:

Accessories

Dual screw chip conveyor for Y axis

10.4 Inch LCD screen Fully enclosed splash guard

Three axes telescopic covers

Heat exchanger for electric cabinet

Spindle oil coolant system

Spindle air blast syetem

(Automatic controlled by M07 program)

Cutting coolant system

Chips flushing system on both sides

Spindle water ring with 4 water blast

3-axes auto lubrication system

Removable MPG

Oil purifier(proportion type)

Leveling pads and bolts

Tri-color indicating light

Air/ water gun for chip remove

Work lights on both sides

Auto power off (M30)

RS232C interface

Fine molding machine function

Tool box and adjustment tools

Accuracy inspection report

Machine operating and maintenance manual

E- book of FANUC program operating and maintenance manual

Independent water pump for water gun Oil coolant device of deep drilling

Air conditioner for electric cabinet

CNC rotary table

Auto tool length measurement

Auto workpiece measurement

Data serve & 2G memory

Three axes linear scales

Oil mist blast system

Oil mist collector

Disc type oil skimmer

20/30/70 bar C.T.S and external filtration tank

Transformer (380V)

Japan NSK ballscrews of three axes 24/30/36 Tools magazine capacity

(BT40/BBT40)

24/32 Tools magazine capacity (BT50/BBT50)

^{1.} Standard controller. Fanuc OIMF. Depend on customer's demand can choose Siemens series or Mitsubishi series.

^{2.} LEADYANG reserves the right to change the design and planning. And the above specifications are subject to change without notice.

^{3.} Above accuracy value is in accordance with the new machine and standard inspection status of the test data.

^{4.}Depends on customer's request, the columns can be heightened by one 200mm riser blocks as option.