



SKY MASTER
CNC Machinetool

Forming Men, Making Things, Producing Quality



SKY MASTER From the idea to the perfect machine



Sky Master CNC Machine Tool is an enterprise specialized in designing and manufacturing high quality CNC machines. We adopt modern management systems such as ERP to run each process of designing, machining, assembling and quality checking for an efficient performance.

The advanced inspection and machining equipment are imported from Germany and Japan to achieve accurate precision and stable performance for each machine.

Our foreign experts from R&D and application department offer their perfect technical service to our clients at any moment. Western engineering combined with Asian manufacturing leads us into an advanced synergy effect.

The professional service team keeps close contact with clients and supply technical supporting at any time. No matter engineer or worker we take high care about each detail.

VL700 *One for All*
Drilling, Tapping, Heavy Cutting



VL700
8000 rpm(Standard)

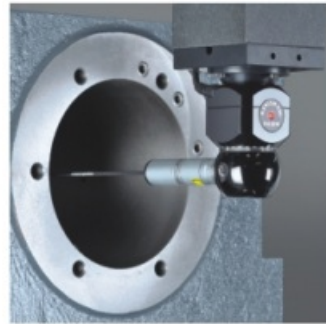


VL700
12000 rpm(Option)



QUALITY

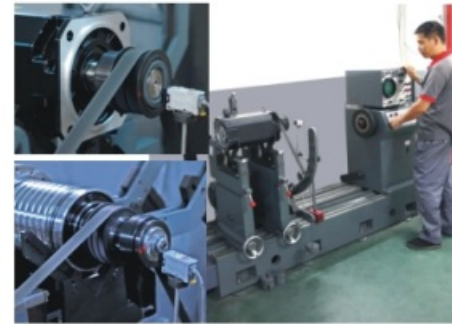
Details are important.



✔ Each main part is inspected and documented by CMM.



✔ High Performance SD measurement system for measuring distances of holes.



✔ Every spindle and motor has to pass a balance and vibration test.



✔ Each mechanical part is checked by standard inspection.



✔ Strict QC inspection for the assembling process.



✔ Every machine is inspected by laser and ball bar circle according VDI 3441 standards.



✔ Each machine must pass a practical test: heavy cutting, finishing, boring.



✔ Each machine must pass a final inspection before delivery.

VB1600 *Strong & Reliable*
Production- and Mold Machining



VB1600



State of The Art Equipment



➤ Japanese Okuma Machining Center



➤ Japanese Niigata Horizontal Machining Center



➤ Imported Grinding Machine



➤ Sky Master Portal-type Machining Center



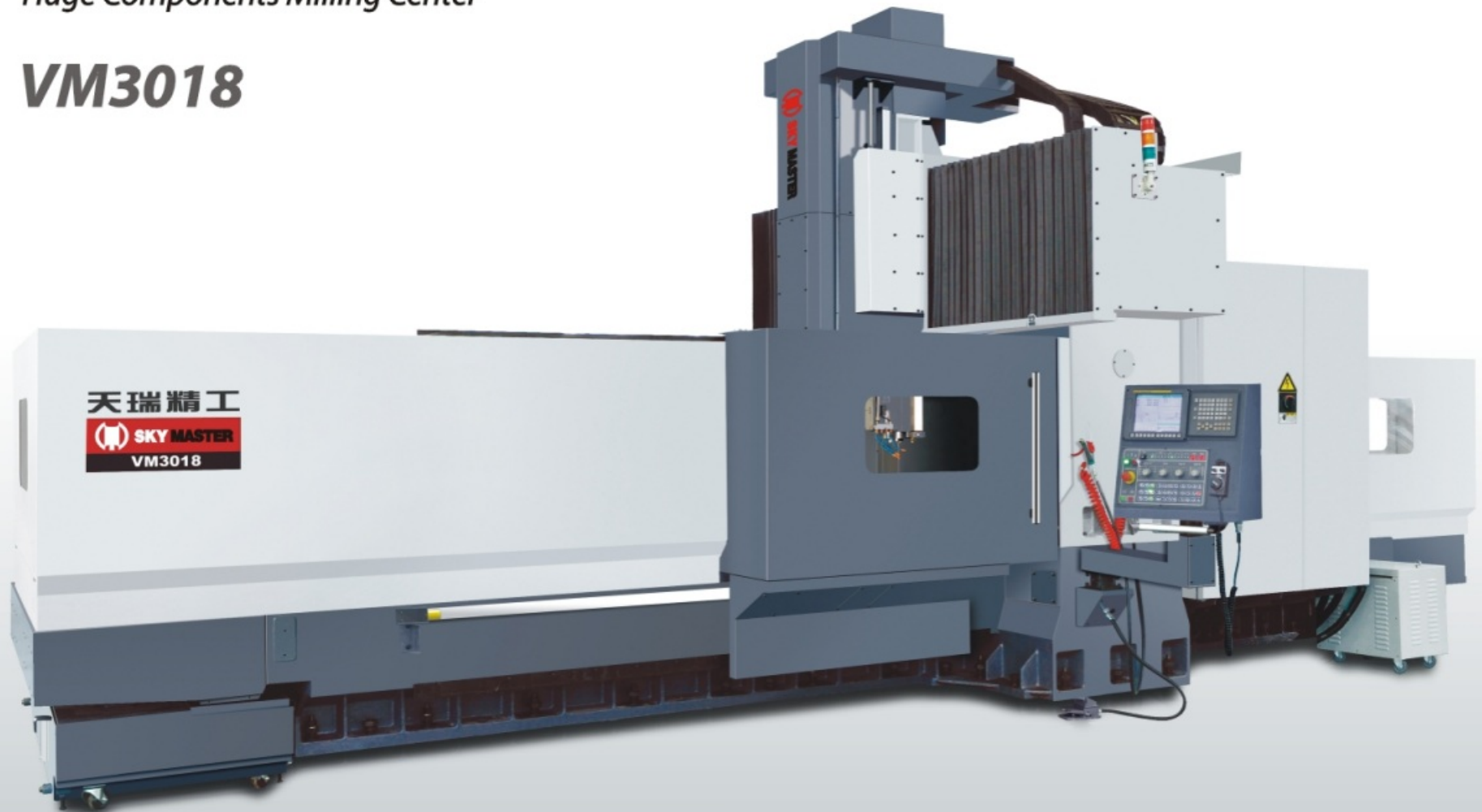
➤ Imported horizontal Boring Machining Center



➤ German Wenzel 3D coordinate Measuring Machine

VM3018 *Large & Powerful*
Huge Components Milling Center

VM3018



Engineering combined with precise manufacturing

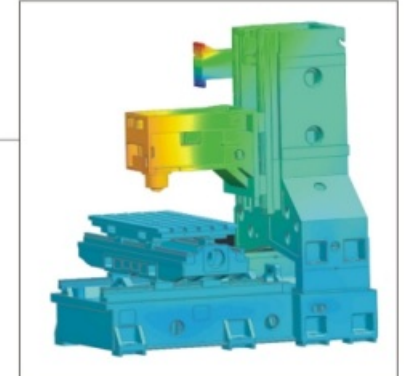


Sky Master is producing in generous new facilities under high standards and with a strong quality management CNC machining center. The products are under strict quality control and permanently revised in order to meet modern market demands and best performance. State of the art processing equipment and modern management methods guarantee stable and precise manufacturing results.

"Quality is our foundation, reliability our strength- to our customer's benefit."

VL SERIES

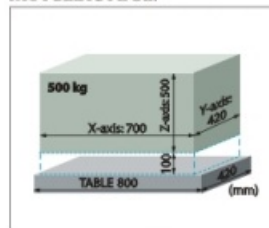
- The VL-series vertical CNC machine is designed for effective and productive machining. Widely used for high precision plastic moulds, forging dies, automotive, aerospace industry, electric and home appliance.
- The structure of this series is carefully developed and of high rigidity. Linear guide ways from REXROTH or THK guarantee excellent machining ability. The milling table is strong supported to guarantee optimized dynamic precision and long life lasting.
- The major machine parts are made of top-grade cast iron to achieve high rigidity and stable quality.
- The high quality spindle of the machine provides outstanding rotation precision at every speed. A separate chiller provides excellent cooling of the spindle.
- Pre-stressed precision double nut ball-screws C3 grade in all axis, directly driven by the servo motors in order to eliminate backlash and improve transmission efficiency as well as accurate position control.
- Inverted "Y" style column with extra wide contact surface result in excellent strengthness.
- VL700 is equipped with an extra strong Z-axis motor in order to improve the positioning and accuracy, without counter weight.



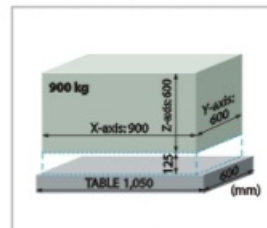
CAE Analysis Chart

VL Series: VL700 VL900 VL1100

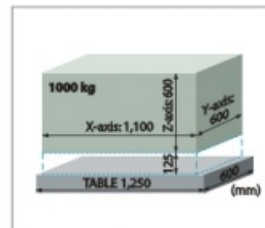
Moveable Area:



VL700



VL900



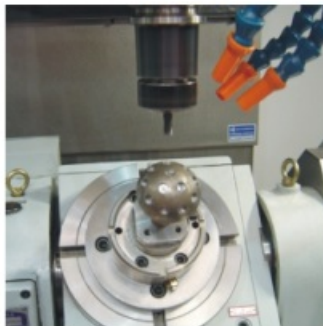
VL1100



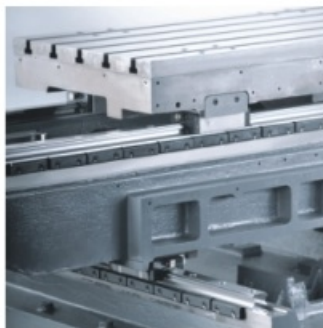
VL900



➤ Precise bearing assembly corner.



➤ 4th, 5th axis, customized.



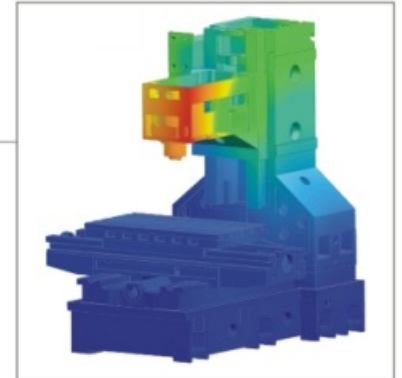
➤ Top grade casting parts.

MODEL	UNIT	VL700	VL900	VL1100
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Travel	mm	700	900	1100
Y Travel	mm	420	600	600
Z Travel	mm	500	600	600
Table Size	mm	800 × 420	1050 × 600	1250 × 600
T Slot Size	mm	5 × 14 × 80	5 × 18 × 100	5 × 18 × 100
Distance from Table to Floor	mm	850	930	930
Table Load	kg	500	900	1000
Spindle Taper	#	SK/BT40	SK/BT40	SK/BT40
Spindle Speed, Standard	rpm	8000	8000	8000
Distance from Spindle Nose to Table	mm	100–600	125–725	125–725
Distance from Spindle Center to Column Cover	mm	460	630	630
Spindle Motor Power (continual working 15 mins)	KW	11/15	11/15	11/15
Spindle Motor Torque	N.m	52.5/95.5	52.5/95.5	52.5/95.5
Rapid Speed X/Y	mm/min	36000	30000	30000
Rapid Speed Z	mm/min	30000	24000	24000
Max. Cutting Feedrate	mm/min	1~10000	1~10000	1~10000
Axis Motor Power X/Y/Z	KW	1.8/1.8/2.5	1.8/1.8/2.5	1.8/1.8/2.5
Ball Screw C3 Grade	mm	φ32 × 16	φ40 × 12	φ40 × 12
Tool Capacity	#	20	24	24
Max. Tool Weight	kg	8	8	8
Max. Tool Length	mm	350	350	350
Max. Tool Diameter	mm	φ80/φ130	φ80/φ130	φ80/φ130
Positioning Accuracy	mm	± 0.005	± 0.005	± 0.005
Repeatability Accuracy	mm	± 0.003	± 0.003	± 0.003
Air Pressure	kg/cm ²	6	6	6
Power Requirement	KVA	20	20	20
Supply Voltage & Frequency	V/Hz	3~380/50	3~380/50	3~380/50
Machine Weight	kg	4500	6500	6800
Machine Size Length	mm	2256	3000	3100
Width	mm	2250	2627	2637
Height	mm	2500	2750	2750

We reserve the right to change technical parameter for improvement to our products without giving notice to customers.

VB SERIES

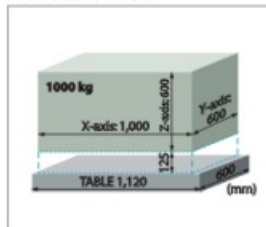
- The VB series has an outstanding ability for mould machining and powerful cutting.
- It is equipped with coil chip conveyor, achieving smooth chip transfer and save non-machining time for cleaning.
- A high efficient spindle cooling system dissipates heating in order to achieve high spindle accuracy and extends spindle life-time.
- The major machine parts are made of top-grade cast iron to achieve high rigidity and stable quality.
- The machine base has 4 hardened box ways, achieving great stability, combined with imported wear resisting slices, which is resulting in low friction and long life.
- A "V" style machine bed provides maximum rigidity, the foundation for powerful accurate cutting.
- An advanced counter weight is guided by a lead bar to achieve smooth Z axis movement.



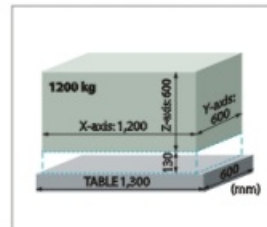
CAE Analysis Chart

VB Series: VB1000 VB1200 VB1600

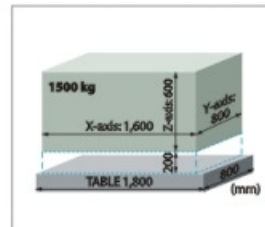
Moveable Area:



VB1000



VB1200

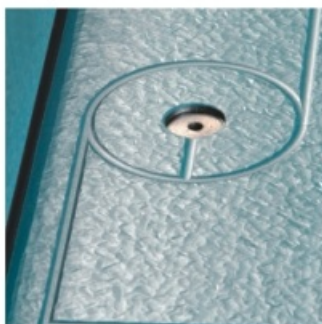


VB1600

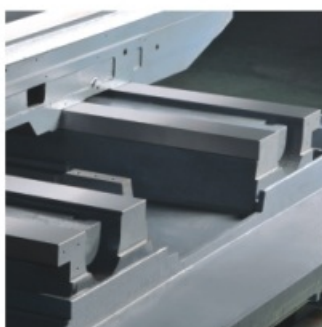




➤ Coolant through spindle center (Optional).



➤ Turcite B on counterpart.



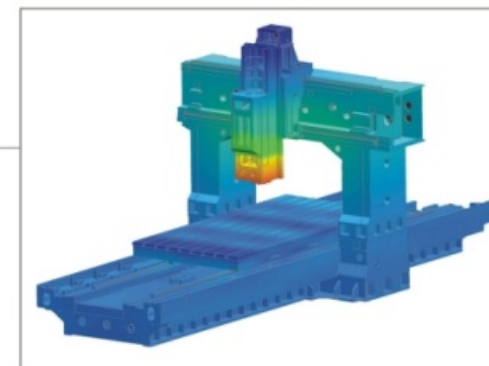
➤ Hardened box ways, min. 50 HRC in all axis. All VB models have 4 guideways in machine bed.

MODEL	UNIT	VB1000	VB1200	VB1600
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Travel	mm	1000	1200	1600
Y Travel	mm	600	600	800
Z Travel	mm	600	600	800
Table Size	mm	1120 × 600	1300 × 600	1800 × 800
T Slot Size	mm	5 × 18 × 125	5 × 18 × 125	7 × 18 × 115
Distance from Table to Floor	mm	930	930	1050
Table Load	kg	1000	1200	1500
Spindle Taper	#	SK/BT40	SK/BT50	SK/BT50
Spindle Speed Standard	rpm	8000	6000	6000
Distance from Spindle Nose to Table	mm	125–725	225–825	200–1000
Distance from Spindle Center to Column Cover	mm	630	630	840
Spindle Motor Power (continual working 30 mins)	KW	11/15	11/15	15/18.5
Spindle Motor Torque	N.m	52.5/95.5	70/95.5	95.5/118
Rapid Speed X/Y	mm/min	20000	18000	15000
Rapid Speed Z	mm/min	18000	15000	12000
Max. Cutting Feedrate	mm/min	1–10000	1–8000	1–8000
Axis Motor Power X/Y/Z	KW	2.5/2.5/2.5	4/4/4	4/7/4
Ball Screw C3 Grade	mm	φ40 × 12	φ40 × 12	φ50 × 10
Tool Capacity (Optional)	#	24	24	24
Max. Tool Weight	kg	8	15	15
Max. Tool Length	mm	350	350	350
Max. Tool Diameter	mm	φ80/φ130	φ127/φ215	φ127/φ215
Positioning Accuracy	mm	± 0.005	± 0.005	± 0.008
Repeatability Accuracy	mm	± 0.003	± 0.003	± 0.003
Air Pressure	kg/cm ²	6	6	6
Power Requirement	KVA	20	30	40
Supply Voltage & Frequency	V/Hz	3–380/50	3–380/50	3–380/50
Machine Weight	kg	6800	7200	16000
Machine Size Length	mm	3000	3280	4400
Width	mm	2627	2637	3910
Height	mm	2750	2850	3330

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VM SERIES

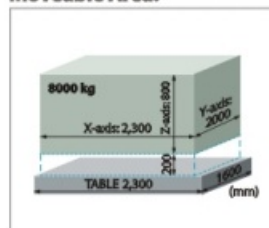
- One-piece cast iron machine bed and one piece cast iron bridge yield in highest rigidity for precise machining results. The frame, stress-relieving designed, provides a stable performance of the machine.
- The whole structure was analyzed by CAE to optimize rigidity and precision.
- Preload roller linear guide ways with P grade allow max. loading but with a lower friction coefficient (0.003-0.006). It supplies smooth running thanks to optimized roller recirculation and guidance, saving energy consumption.
- C3 grade double nut ball screws provide precise cutting, even for heavy loads.
- A two stage gear box with a 26 KM motor generate 544Nm torque for powerful cutting, thus reducing machining time.
- A coil chip conveyor on both sides of the work table remove the chips effectively. The conveyor screw mounting in embedded into the cast iron machine bed.



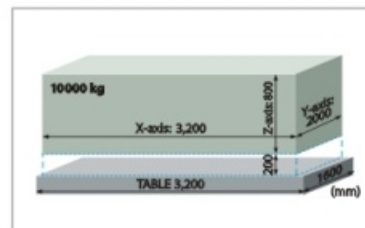
CAE Analysis Chart

VM Series: VM2018 VM3018 VM4018

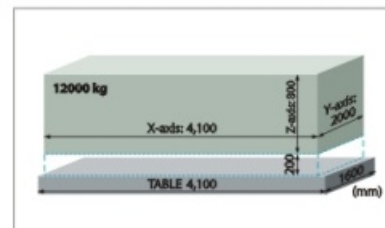
Moveable Area:



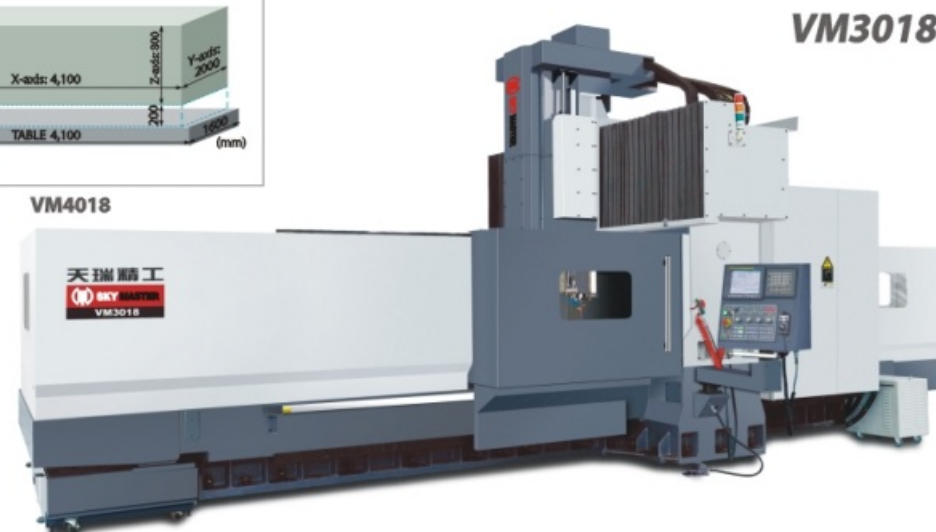
VM2018

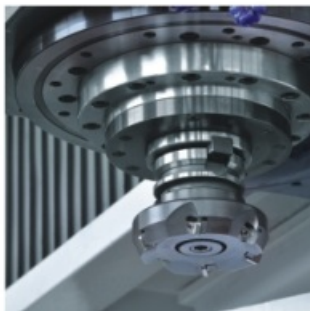


VM3018



VM4018





➤ Powerful Spindle with two stage gearbox. 26KW, 642 Nm.



➤ Orthogonal milling head. (optional)

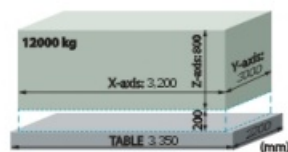


➤ One-piece casted column with bridge.

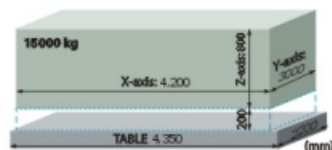
MODEL	UNIT	VM2018	VM3018	VM4018
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Travel	mm	2300	3200	4100
Y Travel	mm	2000	2000	2000
Z Travel	mm	800	800	800
Table Size	mm	2300 × 1600	3200 × 1600	4100 × 1600
T Slot Size	mm	8 × 22 × 180	8 × 22 × 180	8 × 22 × 180
Distance from Table to Floor	mm	950	950	950
Table Load	kg	8000	10000	12000
Spindle Taper	#	SK/BT50	SK/BT50	SK/BT50
Spindle Speed Standard	rpm	6000	6000	6000
Distance from Spindle Nose to Table	mm	200–1000	200–1000	200–1000
Distance between Columns	mm	1840	1840	1840
Spindle Motor Power (continual working 30 mins)	KW	22/26	22/26	22/26
Spindle Motor Torque	N.m	544/642	544/642	544/642
Rapid Speed X/Y	mm/min	20000	20000	18000/20000
Rapid Speed Z	mm/min	10000	10000	10000
Max. Cutting Feedrate	mm/min	1–10000	1–10000	1–10000
Tool Capacity (Optional)	#	32	32	32
Max. Tool Weight	kg	20	20	20
Max. Tool Length	mm	350	350	350
Max. Tool Diameter	mm	φ127/φ215	φ127/φ215	φ127/φ215
Positioning Accuracy	mm	±0.010	±0.010	±0.010
Repeatability Accuracy	mm	±0.003	±0.003	±0.003
Air Pressure	kg/cm ²	6	6	6
Power Requirement	KVA	60	60	60
Supply Voltage & Frequency	V/Hz	3–380/50	3–380/50	3–380/50
Machine Weight	kg	25000	28000	31000
Machine Size Length	mm	6830	8630	10240
Width	mm	4580	4580	4580
Height	mm	4060	4060	4060

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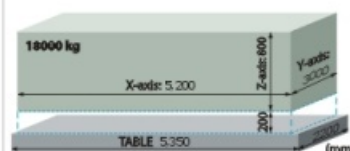
Moveable Area:



VM3225



VM4225



VM5225

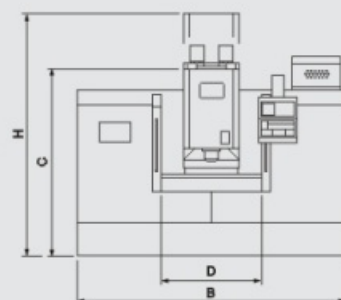
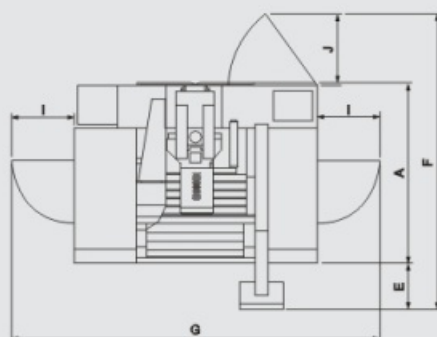
MODEL	單位	VM3225	VM4225	VM5225
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Travel	mm	3200	4200	5200
Y Travel	mm	3000	3000	3000
Z Travel	mm	800	800	800
Table Size	mm	3350 × 2200	4350 × 2200	5350 × 2200
T Slot Size	mm	13 × 28 × 250	17 × 28 × 250	21 × 28 × 250
Distance from Table to Floor	mm	990	990	990
Table Load	kg	12000	15000	18000
Spindle Taper	#	BT50	BT50	BT50
Spindle Speed Standard	rpm	5500	5500	5500
Distance from Spindle Nose to Table	mm	200–1000	200–1000	200–1000
Distance between Columns	mm	2550	2550	2550
Spindle Motor Power	KW	22/26	22/26	22/26
Spindle Motor Torque	N.m	750	750	750
Rapid Speed X/Y	mm/min	15000/18000	12000/18000	12000/18000
Rapid Speed Z	mm/min	10000	10000	10000
Max. Cutting Feedrate	mm/min	1–8000	1–8000	1–8000
Tool Capacity (Optional)	#	32	32	32
Max. Tool Weight	kg	20	20	20
Max. Tool Length	mm	400	400	400
Max. Tool Diameter	mm	φ127/φ215	φ127/φ215	φ127/φ215
Positioning Accuracy	mm	±0.015	±0.015	±0.015
Repeatability Accuracy	mm	±0.003	±0.003	±0.003
Air Pressure	kg/cm ²	6	6	6
Power Requirement	KVA	60	60	60
Supply Voltage & Frequency	V/Hz	3~380/50	3~380/50	3~380/50
Machine Weight	kg	40000	45000	50000
Machine Size Length	mm	9590	11760	13930
Width	mm	5600	5600	5600
Height	mm	4440	4440	4440

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Standard & Options

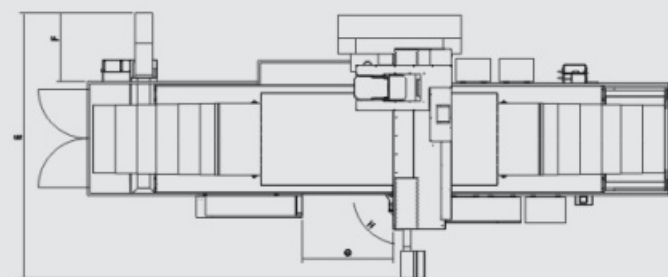
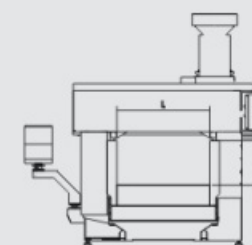
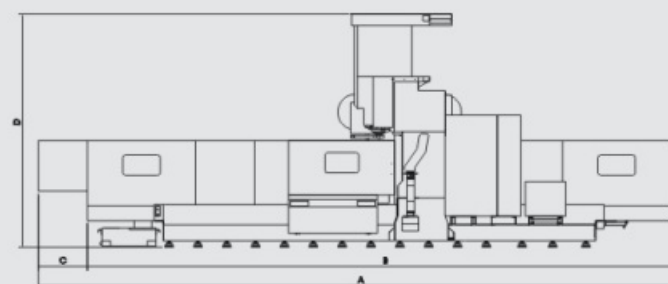
	VL700	VL900	VL1100	VB1000	VB1200	VB1600	VM2018	VM3018	VM4018	VM3225	VM4225	VM5225
FANUC 0i MD-PA	●	●	●	●	●	●	●	●	●	●	●	●
FANUC 18i-MB	○	○	○	○	○	○	○	○	○	×	×	×
FANUC 32i-MA	×	×	×	×	×	×	×	×	×	○	○	○
Mitsubishi M70	○	○	○	○	○	○	○	○	○	×	×	×
Mitsubishi M720	○	○	○	○	○	○	○	○	○	×	×	×
DATA SERVER & Ethernet	○	○	○	○	○	○	○	○	○	○	○	○
RS 232	●	●	●	●	●	●	●	●	●	●	●	●
Rigid Tapping	●	●	●	●	●	●	●	●	●	●	●	●
Full Enclosure Guard	●	●	●	●	●	●	●	●	●	●	●	●
Spindle 8000RPM	●	●	●	●	○	○	○	○	○	×	×	×
Spindle 6000RPM	×	×	×	×	●	●	●	●	●	×	×	×
Spindle Speed 10000-15000rpm	○	○	○	○	○	○	○	○	○	×	×	×
Electric Spindle 15000-32000rpm	○	○	○	○	○	○	○	○	○	×	×	×
Working Area Light	●	●	●	●	●	●	●	●	●	●	●	●
3 Colors Warning Light	●	●	●	●	●	●	●	●	●	●	●	●
Heat Exchanger in Electrical Cabinet	●	●	●	●	●	●	●	●	●	●	●	●
Tool Coolant System	●	●	●	●	●	●	●	●	●	●	●	●
Lubrication System	●	●	●	●	●	●	●	●	●	●	●	●
Adjustable Level Bolts and Foundation Blocks	●	●	●	●	●	●	●	●	●	●	●	●
Coil Chip Conveyor	○	○	○	○	○	●	●	●	●	×	×	×
Chain Chip Conveyor	○	○	○	○	○	●	●	●	●	●	●	●
Tool Set	●	●	●	●	●	●	●	●	●	●	●	●
Water Gun	●	●	●	●	●	●	●	●	●	●	●	●
Air Gun	●	●	●	●	●	●	●	●	●	●	●	●
Oil and Water Separator Box	●	●	●	●	●	●	●	●	●	●	●	●
Automatically Power Off	●	●	●	●	●	●	●	●	●	●	●	●
Transformer	●	●	●	●	●	●	●	●	●	●	●	●
Drum Type ATC (20pcs)	○ (16pcs)	○	○	○	○	○	×	×	×	×	×	×
Arm Type ATC (20pcs)	●	○	○	○	○	○	×	×	×	×	×	×
Arm Type ATC (20pcs)	○	●	●	○	○	○	×	×	×	×	×	×
Chain Type ATC (32pcs/40pcs)	×	×	×	×	×	○	○	○	○	○	○	○
Spindle Chiller	○	○	○	○	○	○	●	●	●	●	●	●
Spindle Cooling Through External Pipe	○	○	○	○	○	○	×	×	×	×	×	×
Gear Type Spindle	×	×	×	○	○	○	●	●	●	●	●	●
ZF Gear Box	○	○	○	○	○	○	○	○	○	○	○	○
Cooling Through Spindle Center	○	○	○	○	○	○	○	○	○	○	○	○
4" Axis	○	○	○	○	○	○	○	○	○	○	○	○
Linear Encoder	○	○	○	○	○	○	○	○	○	○	○	○
Tool Measuring System	○	○	○	○	○	○	○	○	○	○	○	○
Drawer Type Water Tank	●	●	●	●	●	×	×	×	×	×	×	×

● Standard ○ Optional × Not available



Dimensions

	A	B	C	D	E	F	G	H	I	J
VL700	1980	2258	2000	705	0	2840	2258	2500	0	880
VL900	2203	3000	2150	1020	180	3243	3000	2750	0	880
VL1100	2213	3100	2150	1100	180	3253	3100	2750	0	880
VB1000	2203	3000	2150	1020	180	3243	3000	2750	0	880
VB1200	2213	3280	2250	1100	180	3253	3280	2850	0	880
VB1600	2950	4400	2530	1745	615	4165	6200	3330	900	600



Dimensions

	A	B	C	D	E	F	G	H	L	M
VM2018	7880	8830	850	4080	4580	1190	1300	0-90°	1636	800
VM3018	9480	8630	850	4080	4580	1190	1300	0-90°	1636	800
VM4018	11090	10240	850	4080	4580	1190	1300	0-90°	1636	800
VM3225	10110	8860	1250	4440	5600	1200	3100	0-90°	2520	1000
VM4225	12110	10880	1250	4440	5600	1200	3100	0-90°	2520	1000
VM5225	14110	12860	1250	4440	5600	1200	3100	0-90°	2520	1000

We reserve the right to change technical parameter for improvement of our products without giving notice to customers.

Creating a favorable environment to improve corporate identity



➤ Garden Factory



➤ Garden Factory



➤ Dwelling



➤ Garden Factory

- The environment changes people, it forms people, it influences people.
 - Sky Master is well aware about the importance of the environment to the people.
- Working environment does not only reflect the corporate identity, but also responsibility and conduct towards workers, enterprise and life.



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