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2015.4



China-Germany
Investment



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12-15 High Speed Series



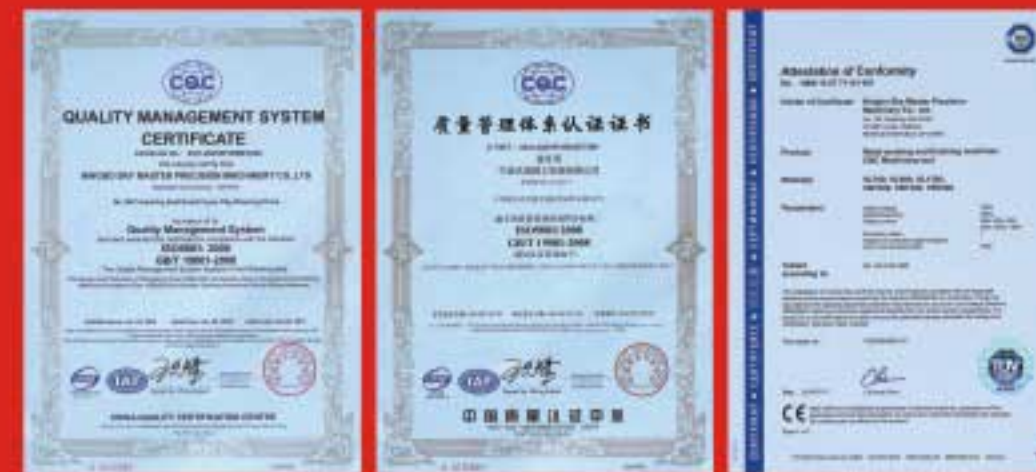
16-17 5-axis Series



20-27 Vertical Series



28-37 Double Column Series



Pursue Excellent Machining Solution

SKY MASTER is a China-Germany investment company specialized in designing and manufacturing high quality CNC machine tools under the supervision of Germany partner KRAFT. Our first-rate environment and well development foreground attracts a lot of experts and senior engineers to join in our technical team, both Taiwan R&D team and Germany R&D team supply the technical supporting, western engineering combined with Asian manufacturing leads us into an advanced synergy effect. We adopt modern management systems to run each process of designing, machining ,assembling and quality checking for an efficient performance .The company get the ISO9001 quality certificate and all machine get the CE certificate from TUV SUD company.

Our professional service team in all over the world keeps close contact with clients and supply technical support at any time. Take "Making quality Reliable "as our management concept to produce each machine with our full heart, we are looking forward in achieving progress with you in the field of CNC machine tool.



Double Column-Workshop





● VMC Workshop



● Decades experience

Decades experience and German technology keep SKY MASTER always supplying reliable products.





● High speed- workshop

● Advanced manufacturing and design

Since 2012, SKY MASTER has been dedicated to developing the high speed series, because of the advanced design concept and excellent technical supporting, Sky Master high speed bridge type machine achieve the reliable performance and get 1.2g of acceleration and 0.005mm for repeatability accuracy



✔ Spindle temperature measuring device



✔ Air dry device



✔ Oil mist recycle device



✔ Oil water separate device



✔ Tool measuring probe device



✔ Spindle lube system



✔ Swiss IBAG spindle(built in)



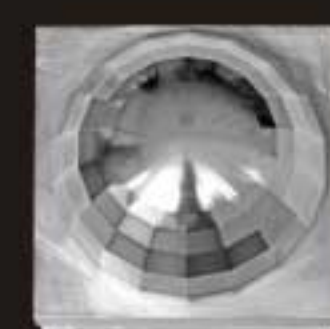
✔ All three axis use roller linear guide way and linear encoder



✔ X axis use many roller slide blocks



✔ Benz testing sample



✔ Round testing sample



✔ Auto interior decoration mould



✔ Auto interior decoration mould



✔ Auto lamp mould



✔ Auto lamp mould





● Japanese Okuma 5-axis Machining Center

● State of the art equipment



ㄣ Imported Grinding Machine



ㄣ Japanese Niigata Horizontal Machining Center



ㄣ Sky Master Double Column Machining Center



ㄣ Imported Horizontal Boring Machine



● Details are important

From the idea to the perfect machine

- Sky Master is producing in generous new facilities under high standards and with a strong quality management for 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.



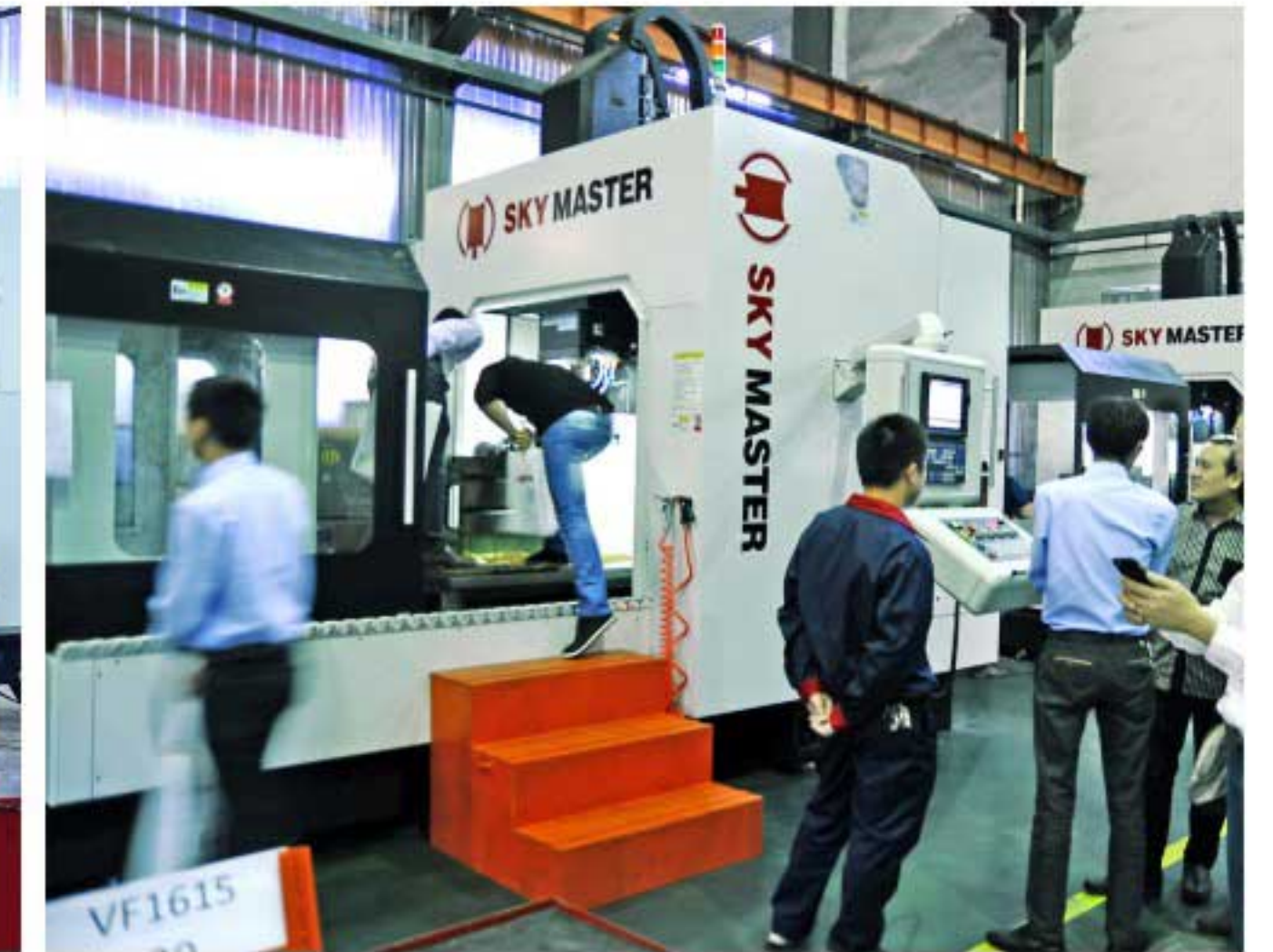
One user's workshop

• Your flexible solutions partner

Turnkey project for customers



Customers get the latest information



Operating training

• The constantly developing performance get the customers trust and recognition

Outstanding support and service



One user's workshop

VF High Speed

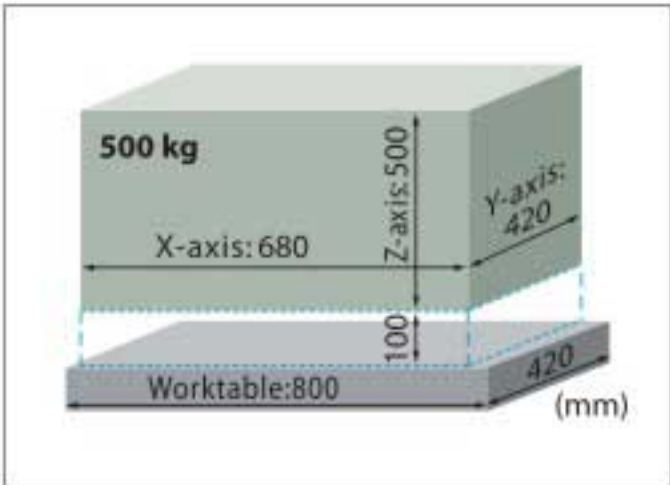
- VF high speed vertical machine center is the new design for high precision mould cutting and nonferrous metal workpiece which need high speed machining.
- 15000RPM direct driven spindle with chiller and HSK A63 tool shank(BBT40 is option)which make the machine has excellent rotation precision ,low vibration and high speed response.
- All three axis are driven by large motors to achieve synergy ability.
- The surrounding coolant and workpiece side flushing can put down the temperature of tool,workpiece and machine.
- The standard machine is equipped with Fanuc absolute controller with AICC II and Ethernet DNC machining function.



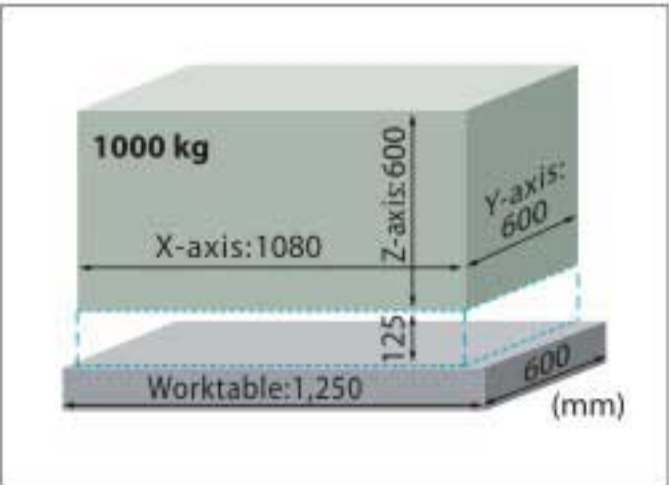
MODEL	UNIT	VF68	VF108
Standard Controller		FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	680	1080
Y Axis Travel	mm	420	600
Z Axis Travel	mm	500	600
Table Size	mm	800 × 420	1250 × 600
T Slot Size	mm	5 × 14 × 80	5 × 18 × 100
Distance from Table to Floor	mm	850	930
Table Load	kg	500	1000
Spindle Taper	#	HSK–A63(Optional BBT40)	HSK–A63(Optional BBT40)
Max. Spindle Speed	rpm	15000 (Direct driven)	15000 (Direct driven)
Distance from Spindle Nose to Table	mm	100 ~ 600	125~725
Distance from Spindle Center to Column Cover	mm	460	630
Spindle Motor Power (30mins Continue)	kW	7.5/11	7.5/11
Spindle Motor Torque	N.m	47.7/70	47.7/70
Three Axis Rapid Speed	mm/min	40000/40000/32000	36000/36000/30000
Three Axis Max. Cutting Feedrate(X Y Z)	mm/min	1 ~ 10000	1 ~ 10000
Three Axis Motor(X Y Z)	kW	3/3/3	3/3/3
Tool Capacity (Optional)	pcs	20	24
Max. Tool Diameter	mm	φ80/φ130	φ80/φ130
Max. Tool Length	mm	350	350
Max. Tool Weight	kg	8	8
Full Travel Positioning Accuracy(VDI/DGQ 3441)	mm	P0.010	P0.010
Repeatability Accuracy(VDI/DGQ 3441)	mm	Ps0.008	Ps0.008
Air Pressure	MPa	0.6 ~ 0.8	0.6 ~ 0.8
Supply Voltage&Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Power Requirement	kVA	20	20
Machine Weight	kg	4500	6800
Machine Size : Length/Width/Height	mm	3135x2955x2490	4500x3253x2750

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Moveable Area:



VF68



VF108

VF High Speed Bridge Machining Center

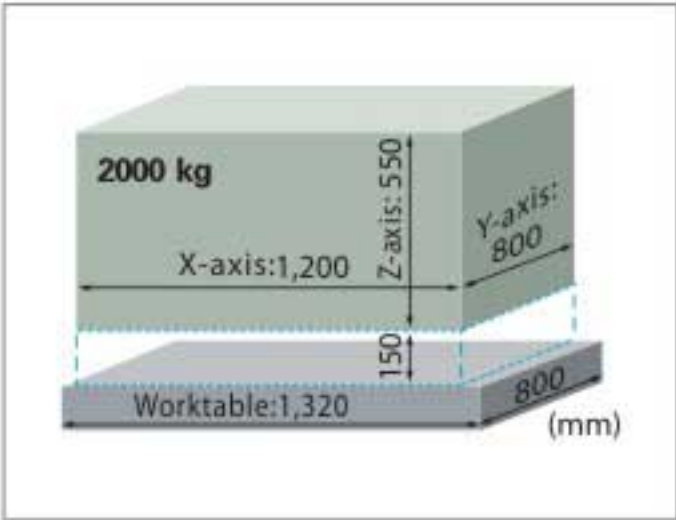
- The VF high speed bridge machine center is designed for high precision mold& die and parts production.
- All structural parts are manufactured from Meehanite grade cast iron and released the stress by heat treatment , ensuring the best structural stability and positioning accuracy.
- The standard controller is MITSUBISHI M730VW with absolute nanometer type which has function of high speed high accuracy II,SSS control (super smooth surface),Windows operation interface with 10G hard disk, OMR-FF control, OMR-II control, and machining condition selecting function.
- One piece cast iron machine bed & one piece cast iron bridge yield in highest rigidity, the whole machine is analyzed by FEM, assure machine accuracy and reliability.
- All three axis use European high quality linear guide way and Heidenhain absolute type linear encoder, providing precise accuracy and stable performance.
- The working area is completely enclosed with a protective housing provides operator with easy operation.
- The coolant tank is equipped with oil/water separator which can protect the working environment and prolong the life time of coolant.



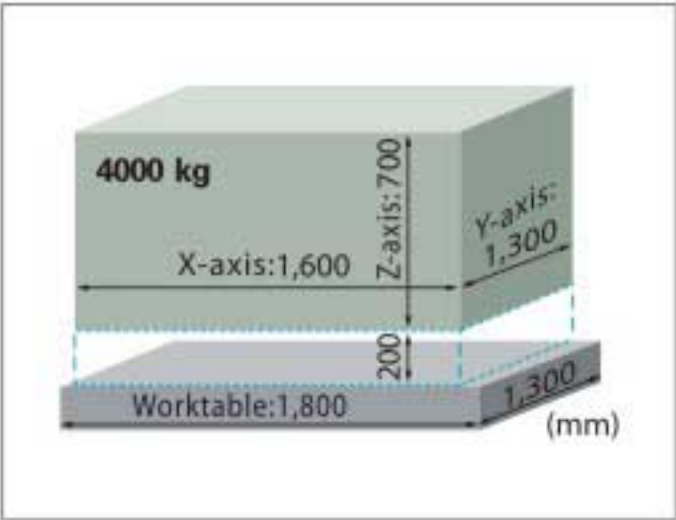
MODEL	UNIT	VF1290A	VF1290B	VF1615	VF1615A	VF1615B
Standard Controller		Mitsubishi M730VW	Mitsubishi M730VW	Mitsubishi M730VW	Mitsubishi M730VW	Mitsubishi M730VW
X Axis Travel	mm	1200	1200	1600	1600	1600
Y Axis Travel	mm	800	800	1300	1300	1300
Z Axis Travel	mm	550	550	700	700	700
Table Size	mm	1320 × 800	1320 × 800	1800 × 1300	1800 × 1300	1800 × 1300
T Slot Size	mm	7 × 14 × 120	7 × 14 × 120	22 × 160 × 8	22 × 160 × 8	22 × 160 × 8
Distance from Table to Floor	mm	840	840	980	980	980
Table Load	kg	2000	2000	4000	4000	4000
Spindle Taper	#	HSK-A63	HSK-E50	HSK-A63	HSK-A63	HSK-E50
Max. Spindle Speed	rpm	24000(Build-in)	36000(Build-in)	15000(Direct Driven)	24000(Build-in)	36000(Build-in)
Distance from Spindle Nose to Table	mm	150~700	150~700	200~900	225~925	250~950
Distance between Columns	mm	920	920	1500	1500	1500
Spindle Motor Power (30mins Continue)	kW	30/39	20/26	15/18.5	25/33	20/26
Spindle Motor Torque	N.m	29.1/37.8	10.4/13.5	95.5/118	72.6/95.8	10.4/13.5
Three Axis Rapid Speed	mm/min	40000	40000	30000	30000	30000
Max. Cutting Feedrate(X Y Z)	mm/min	1 ~ 20000	1 ~ 20000	1~20000	1~20000	1~20000
Three Axis Motor(X Y Z)	kW	7/4.5/4.5	7/4.5/4.5	7/4.5/7	7/4.5/7	7/4.5/7
Tool Capacity (Optional)	Pcs	20	24	20	20	24
Max. Tool Diameter	mm	φ100/φ130	φ80/φ130	φ100/φ130	φ100/φ130	φ80/φ130
Max. Tool Length	mm	300	220	300	300	220
Max. Tool Weight	kg	8	4	8	8	4
Full Travel Positioning Accuracy(VDI/DGQ 3441)	mm	P0.014	P0.014	P0.014	P0.014	P0.014
Repeatability Accuracy(VDI/DGQ 3441)	mm	Ps0.008	Ps0.008	Ps0.008	Ps0.008	Ps0.008
Air Pressure	MPa	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8
Supply Voltage&Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Power Requirement	kVA	80	80	60	80	80
Machine Weight	kg	12000	12000	22000	22000	22000
Machine Size : Length/Width/Height	mm	5270 × 4525 × 3210	5270 × 4525 × 3210	5660 × 5295 × 3930	5660 × 5295 × 3930	5660 × 5295 × 3930

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Moveable Area :



VF1290A/1290B



VF1615/1615A/1615B

VU 5 Axis Machining Center

- VU 5 axis machining center is widely used in automobile industry, aerospace, precise die/mold machining and so on.
- VU series is composed of outstanding construction with high rigidity. Equipped with high precision linear ways of REXROTH or THK.
- The major parts are manufactured from high grade cast iron and released the stress by heat treatment , ensuring the best structural stability and positioning accuracy.
- Compact structure of A and C axis with high rigidity and load ability, fits for 5 axis machining products with precise position accuracy.
- The angle of inclination for A axis is -42°~+120° with Y axis traveling 580mm to achieve large machining span .
- The standard machine is equipped with chain chip conveyor which could move chips effectively.
- The machine can equip with 5 axis in synchronization

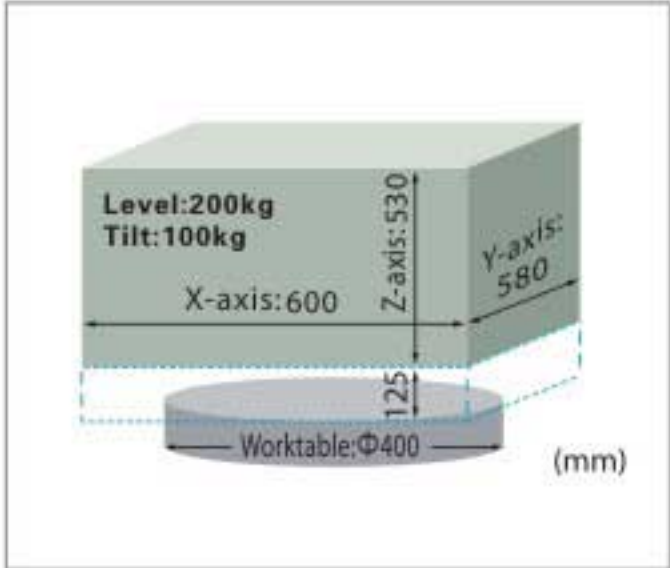


oil drill machining

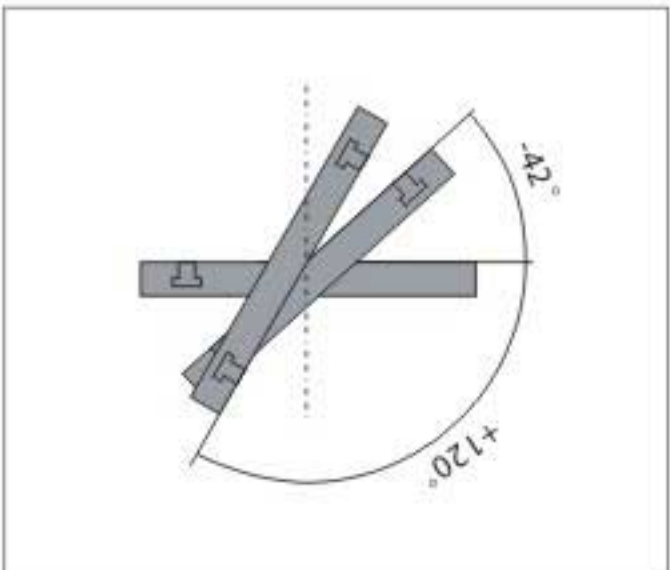


VU400

Moveable Area :



XYZ axis move area



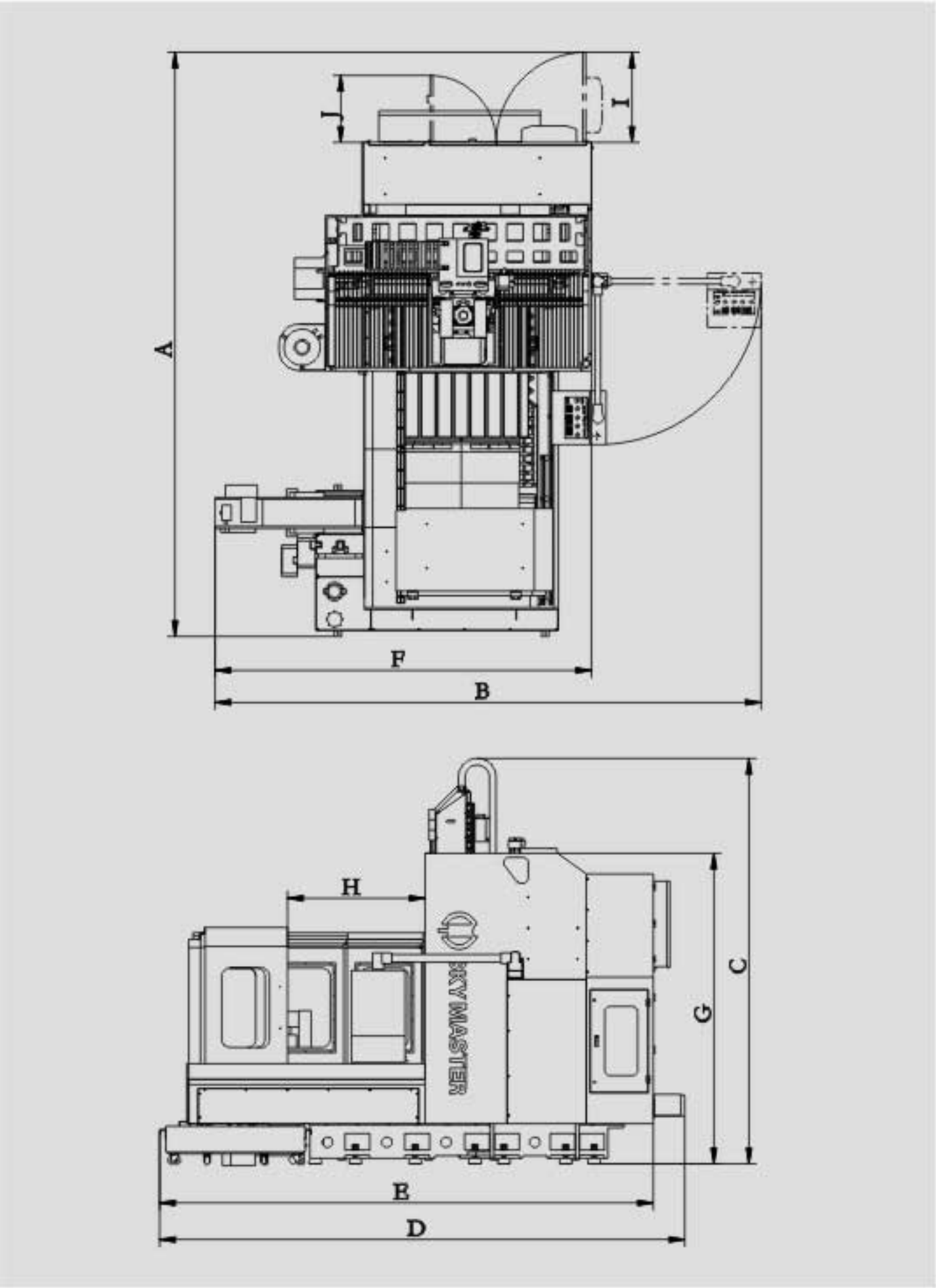
A axis tilt angle

MODEL		UNIT	VU400	VU400A
Standard Controller		mm	FANUC 0i MD (any 4 axis in synchronization)	FANUC 31i B5 (5 axis in synchronization)
X Axis Travel		mm	600	600
Y Axis Travel		mm	580	580
Z Axis Travel		mm	530	530
Table Diameter		mm	Φ400	Φ400
Max. Workpiece Diameter		mm	Φ600	Φ600
Max. Workpiece Height		mm	400	400
A Axis Rotation Angle			+120° ~ -42°	+120° ~ -42°
C Axis Rotation Angle			360°	360°
A Axis Max.Speed		rpm	13.3	13.3
C Axis Max.Speed		rpm	22.2	22.2
T Slot Size		mm	8X12	8X12
Basic Hole Diameter		mm	Φ160H7	Φ160H7
Distance from Table to Floor		mm	1114	1114
Table Load	Level	kg	200	200
	Tilt	kg	100	100
Distance from A Axis Rotation Center to Table		mm	0	0
Distance from Spindle Nose to Table		mm	125~655	125~655
Distance from Spindle Center to Column Cover		mm	630	630
Spindle Taper		#	BT40	HSK-A63
Spindle Speed		rpm	8000	15000
Spindle Motor (continual working 30 mins)		kW	7.5/11	7.5/11
Spindle Torque		N.m	47.7/70	47.7/70
Rapid Speed X/Y/Z		mm/min	30000/30000/24000	30000/30000/24000
Max. Cutting Feedrate		mm/min	1~10000	1~10000
Axis Motor (X/Y/Z/A/C)		kW	3/3/4/4/1.6	3/3/4/4/1.6
C3 Grade Ball Screw		mm	Φ40x12	Φ40x12
ATC Capacity		#	24	24
Max. Tool Weight		kg	8	8
Max. Tool Length		mm	350	350
Max Tool Diameter		mm	Φ80/Φ130	Φ80/Φ130
Full Travel Positioning Accuracy (VDI/DGQ 3441)		mm	P 0.010	P 0.010
Repeatability Accuracy (VDI/DGQ 3441)		mm	Ps 0.008	Ps 0.008
Air Pressure		MPa	0.6~0.8	0.6~0.8
Power Requirement		kVA	30	30
Supply Voltage&Frequency			3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Machine Weight		kg	7400	7400
Machine Size / Length		mm	4500	4500
Width		mm	3253	3253
Height		mm	2950	2950

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Standard&Options	VF68	VF108	VF1290A	VF1290B	VF1615	VF1615A	VF1615B	VU400	VU400A
FANUC 0i MD-PA	●	●	x	x	x	x	x	●	FANUC 31i B5
HEIDENHAIN TNC620	x	x	○	○	○	○	○	x	x
MITSUBISHI.M730VW	○ (M70) 1200rpm	○ (M70) 1200rpm	●	●	●	●	●	x	x
Rigid Tapping	●	●	●	●	●	●	●	●	●
Full Enclosure Guard	●	●	●	●	●	●	●	●	●
Direct driven spindle 15000rpm HSK A63	●	●	x	x	●	x	x	○	●
Electric spindle 24000rpm HSK A63	x	x	●	x	x	●	x	x	x
Electric spindle 36000rpm HSK E50	x	x	x	●	x	x	●	x	x
Spindle Air Sealing	●	●	●	●	●	●	●	●	●
Air Blowing Device	●	●	●	●	●	●	●	●	●
Working Area Light	●	●	●	●	●	●	●	●	●
3 Colors Warning Light	●	●	●	●	●	●	●	●	●
AC for Electric Cabinet	●	●	●	●	●	●	●	●	●
Portable MPG	●	●	●	●	●	●	●	●	●
Tool Coolant System	●	●	●	●	●	●	●	●	●
Lubrication System/Pneumatic System	●	●	●	●	●	●	●	●	●
Adjustable Level Bolts and Foundation Blocks	●	●	●	●	●	●	●	●	●
Chain Chip Conveyor	●	●	●	●	●	●	●	●	●
Tool Box	●	●	●	●	●	●	●	●	●
Air Gun/Water Gun with Flushing Function	●	●	●	●	●	●	●	●	●
Oil and Water Separator Machine	●	●	●	●	●	●	●	●	●
Automatically Power Off	●	●	●	●	●	●	●	●	●
Transformer	●	●	x	x	●	x	x	●	x
Arm Type ATC (24pcs)	○ (20PCS)	○	x	x	x	x	x	●	●
Drum Type ATC (20pcs)	x	x	○	○	○	○	○	x	x
Spindle Chiller	●	●	●	●	●	●	●	●	●
Spindle Cooling by External Pipe	●	●	●	●	●	●	●	●	●
Cooling Through Spindle Center	○	○	○	○	○	○	○	○	○
4th Axis	○	○	○	○	○	○	○	x	x
Heidenhain Absolute Linear Encoder	○	○	●	●	●	●	●	○	●
Measuring System(Tool,Workpiece)	○	○	○	○	○	○	○	○	○
3 Axis Hollow Ballscrew Coolant System	x	x	○	○	○	○	○	x	x
Air Dry Machine	x	x	○	○	x	○	○	x	x
Oil Mist Recycle Machine	○	○	○	○	○	○	○	○	○
Spindle Temperature Compensation(Simple)	x	x	○	○	x	○	○	x	x
Spindle Displacement Sensor of Temperature Compensation	x	x	○	○	x	○	○	x	x

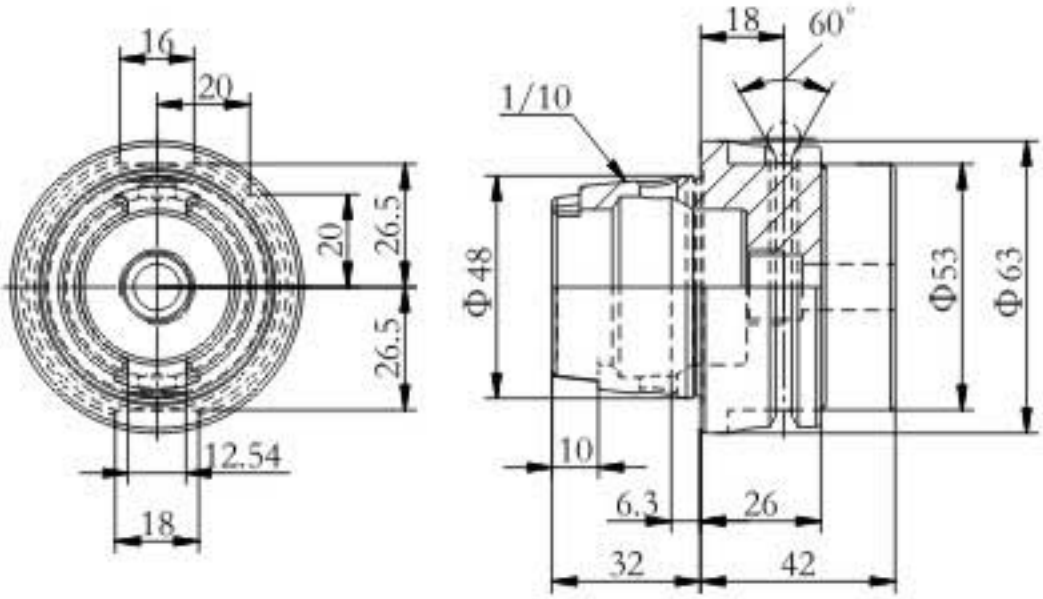
● Standard ○ Optional × Not available



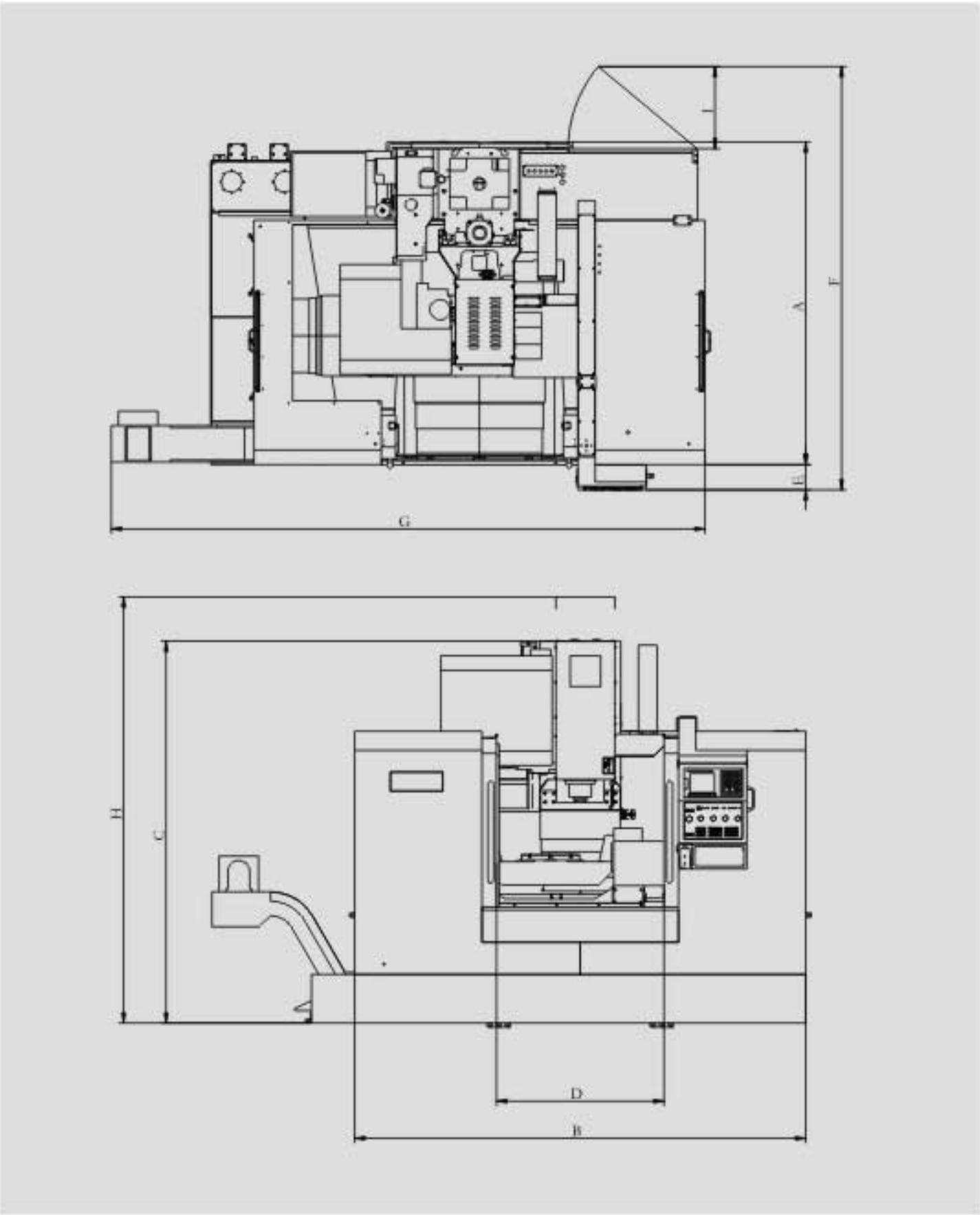
Dimensions

	A	B	C	D	E	F	G	H	I	J
VF1290A/1290B	5270	4525	3210	4400	4155	3285	2270	1330	870	740
VF1615/1615A/1615B	5660	5295	3930	5090	4785	3650	3010	1430	875	650

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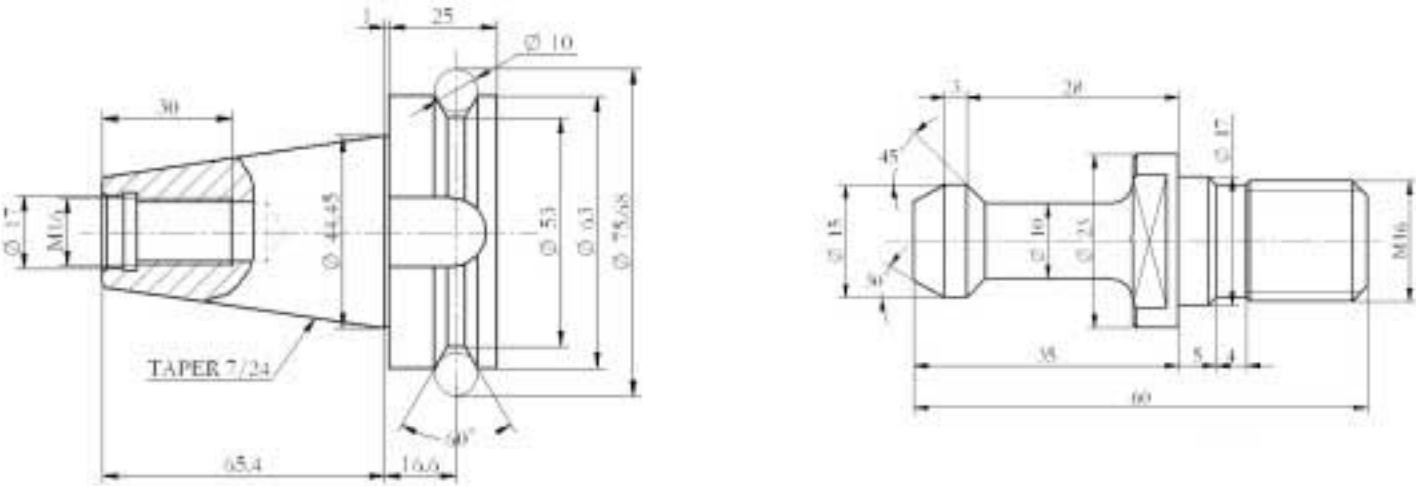
■ HSK-A63 Tool Shank



Dimensions

	A	B	C	D	E	F	G	H	I
VF68	1915	2180	1990	650	180	2955	3135	2490	860
VF108	2213	3100	2150	1100	180	3253	4500	2750	880
VU400	2213	3100	2350	1100	180	3253	4500	2950	880

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■ BBT40 tool Shank

■ BBT40 Pull Stud

VL Linear Guide Way Series

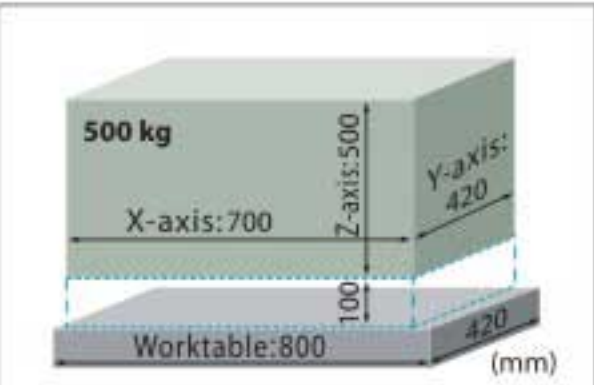
- The VL-series vertical CNC machine is designed for effective and productive machining. Widely used for high precision plastic moulds, forging dies, automotive, aerospace industry, electric and home appliance.
- The structure of this series is carefully developed and with high rigidity. Linear guide ways from REXROTH or THK guarantee excellent machining ability. The work 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 and equip with coolant by external pipe.
- 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.
- Z axis is equipped with an extra strong Z-axis motor in order to improve the positioning and accuracy without counter weight.



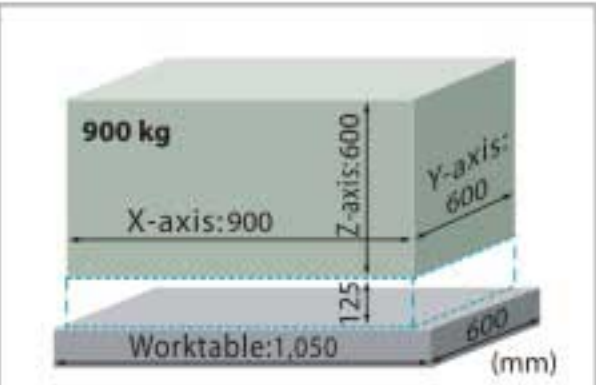
MODEL	UNIT	VL700	VL900	VL1100	VL1100D
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	700	900	1100	1100
Y Axis Travel	mm	420	600	600	600
Z Axis Travel	mm	500	600	600	600
Table Size	mm	800 × 420	1050 × 600	1250 × 600	1250 × 600
T Slot Size	mm	5 × 14 × 80	5 × 18 × 100	5 × 18 × 100	5 × 18 × 100
Distance from Table to Floor	mm	850	930	930	930
Table Load	kg	500	900	1000	1000
Spindle Taper	#	BT40	BT40	BT40	BT50
Max. Spindle Speed	rpm	8000	8000	8000	6000
Distance from Spindle Nose to Table	mm	100–600	125–725	125–725	125–725
Distance from Spindle Center to Column Cover	mm	460	630	630	630
Spindle Motor Power (Continual Working 15 Mins)	kW	11/15	11/15	11/15	11/15
Spindle Motor Torque	N.m	52.5/95.5	52.5/95.5	52.5/95.5	52.5/95.5
Rapid Speed X/Y	mm/min	36000	30000	30000	30000
Rapid Speed Z	mm/min	30000	24000	24000	24000
Max. Cutting Feedrate	mm/min	1~10000	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	1.8/1.8/2.5
Ball Screw C3 Grade	mm	φ32 × 16	φ40 × 12	φ40X12	φ40X12
Tool Capacity	#	20	24	24	16
Max. Tool Weight	kg	8	8	8	15
Max. Tool Length	mm	350	350	350	350
Max. Tool Diameter	mm	φ95/φ125	φ80/φ130	φ80/φ130	φ125/φ250
Full Travel Positioning Accuracy(VDI/DGQ3441)	mm	P 0.010	P 0.010	P 0.010	P 0.010
Repeatability Accuracy(VDI/DGQ3441)	mm	Ps 0.008	Ps 0.008	Ps 0.008	Ps 0.008
Air Pressure	MPa	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8
Power Requirement	kVA	20	20	20	20
Supply Voltage & Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Machine Weight	kg	4500	6500	6800	6800
Machine Size / Length	mm	3135	4500	4500	4500
Width	mm	2955	3253	3253	3253
Height	mm	2490	2750	2750	2750

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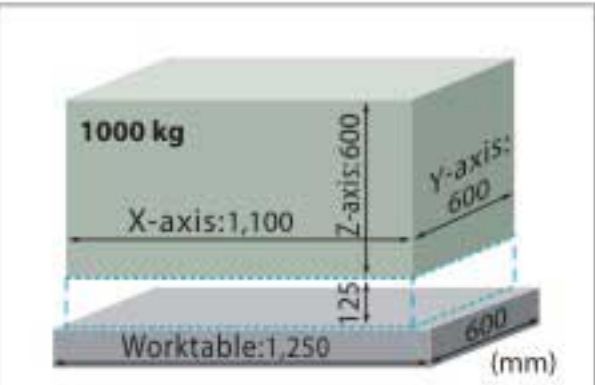
Moveable Area:



VL700



VL900



VL1100/1100D

VL Linear Guide Way

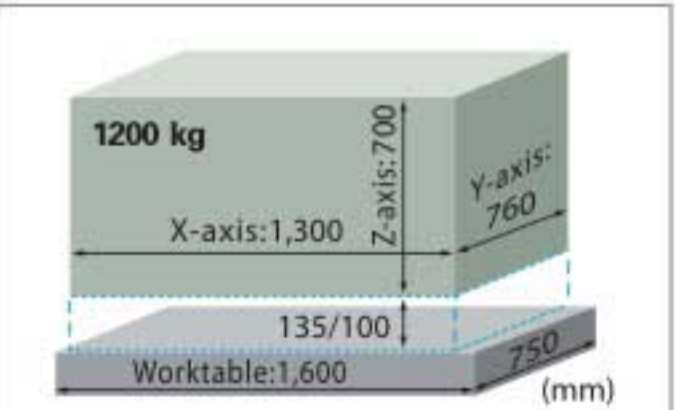
- VL1300/1500 with 10000rpm BT40 standard spindle is designed for auto, textile machine and other industry parts which need high efficiency machining.
- VL1300D/1500D with 6000RPM ,BT50,two stage gear box spindle is designed for mould-base, mould and all kinds of steel and die-cast workpiece.
- All three axis use roller linear guide way, machine bed with 4 guide ways give the best supporting to the worktable while move in full travels.
- Large span column frame ensure the good vibration absorption while continue machining.
- 24pcs Arm type ATC with one-time clamping and rapid tool exchange to execute the component machining.
- The one piece design of enclosure splash guard equip with 2 coil chip conveyor supply large machining space



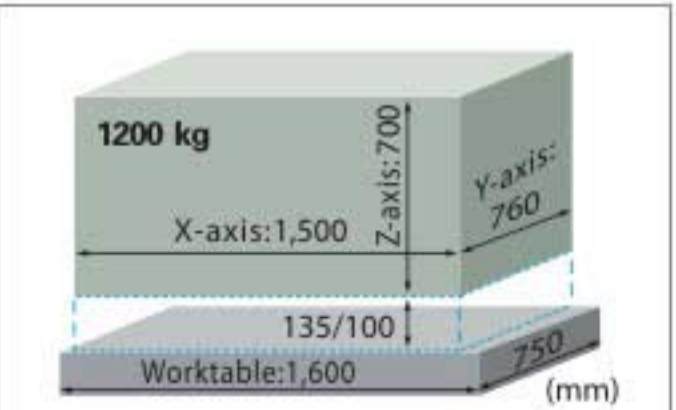
MODEL	UNIT	VL1300	VL1300D	VL1500	VL1500D
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	1300	1300	1500	1500
Y Axis Travel	mm	760	760	760	760
Z Axis Travel	mm	700	700	700	700
Table Size	mm	1600 × 750	1600 × 750	1600 × 750	1600 × 750
T Slot Size	mm	5 × 18 × 125	5 × 18 × 125	5 × 18 × 125	5 × 18 × 125
Distance from Table to Floor	mm	1009	1009	1009	1009
Table Load	kg	1200	1200	1200	1200
Spindle Taper	#	BT40	BT50	BT40	BT50
Max. Spindle Speed	rpm	10000	6000	10000	6000
Distance from Spindle Nose to Table	mm	135–835	100–800	135–835	100–800
Distance from Spindle Center to Column Cover	mm	790	790	790	790
Spindle Motor Power (Continual Working 15 Mins)	kW	15/18.5	15/18.5	15/18.5	15/18.5
Spindle Motor Torque	N.m	95.5/118	382/460	95.5/118	382/460
Rapid Speed X/Y	mm/min	24000	24000	24000	24000
Rapid Speed Z	mm/min	24000	24000	24000	24000
Max. Cutting Feedrate	mm/min	1~10000	1~10000	1~10000	1~10000
Axis Motor Power X/Y/Z	kW	4/4/4	4/4/4	4/4/4	4/4/4
Ball Screw C3 Grade	mm	φ50 × 12	φ50 × 12	φ50 × 12	φ50 × 12
Tool Capacity	#	24	24	24	24
Max. Tool Weight	kg	8	15	8	15
Max. Tool Length	mm	350	350	350	350
Max. Tool Diameter	mm	φ81/φ162	φ110/φ200	φ81/φ162	φ110/φ200
Full Travel Positioning Accuracy(VDI/DGQ 3441)	mm	P 0.012	P 0.012	P 0.012	P 0.012
Repeatability Accuracy(VDI/DGQ 3441)	mm	Ps 0.010	Ps 0.010	Ps 0.010	Ps 0.010
Air Pressure	MPa	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8
Power Requirement	kVA	25	25	25	25
Supply Voltage & Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Machine Weight	kg	12000	12000	12300	12300
Machine Size / Length	mm	4015	4015	4015	4015
Width	mm	3605	3605	3605	3605
Height	mm	3410	3410	3410	3410

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

Moveable Area:



VL1300/1300D



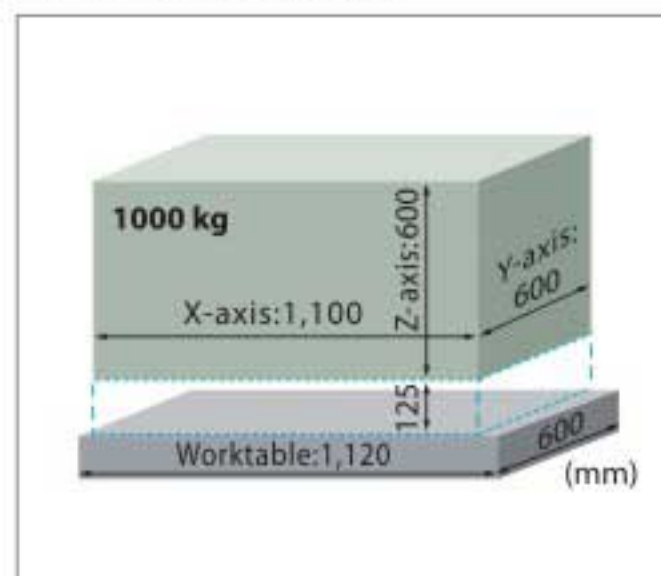
VL1500/1500D

VB Box Way Series

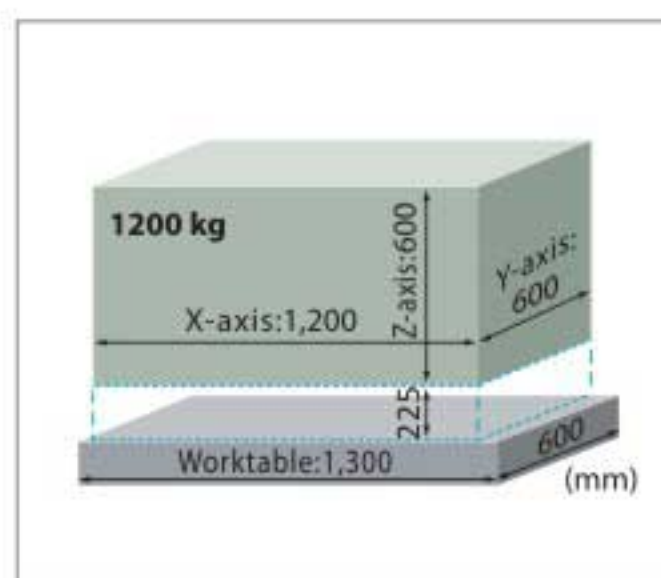
- The VB series has an outstanding ability for mould machining and powerful cutting.
- It is equipped with chain chip conveyor, achieving smooth chip transfer and save non-machining time for cleaning.
- A high efficient spindle cooling system dissipates heating in order to achieve high spindle accuracy 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 "convex" 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(VB1000,VB1200 use nitrogen cylinder).



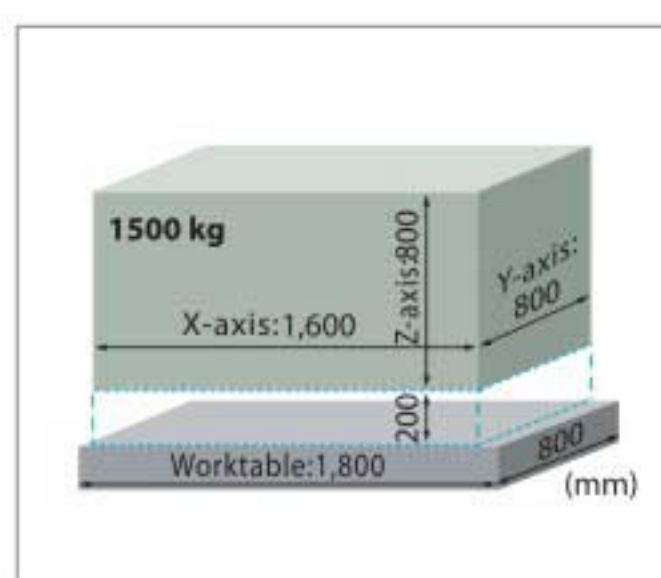
Moveable Area:



VB1000



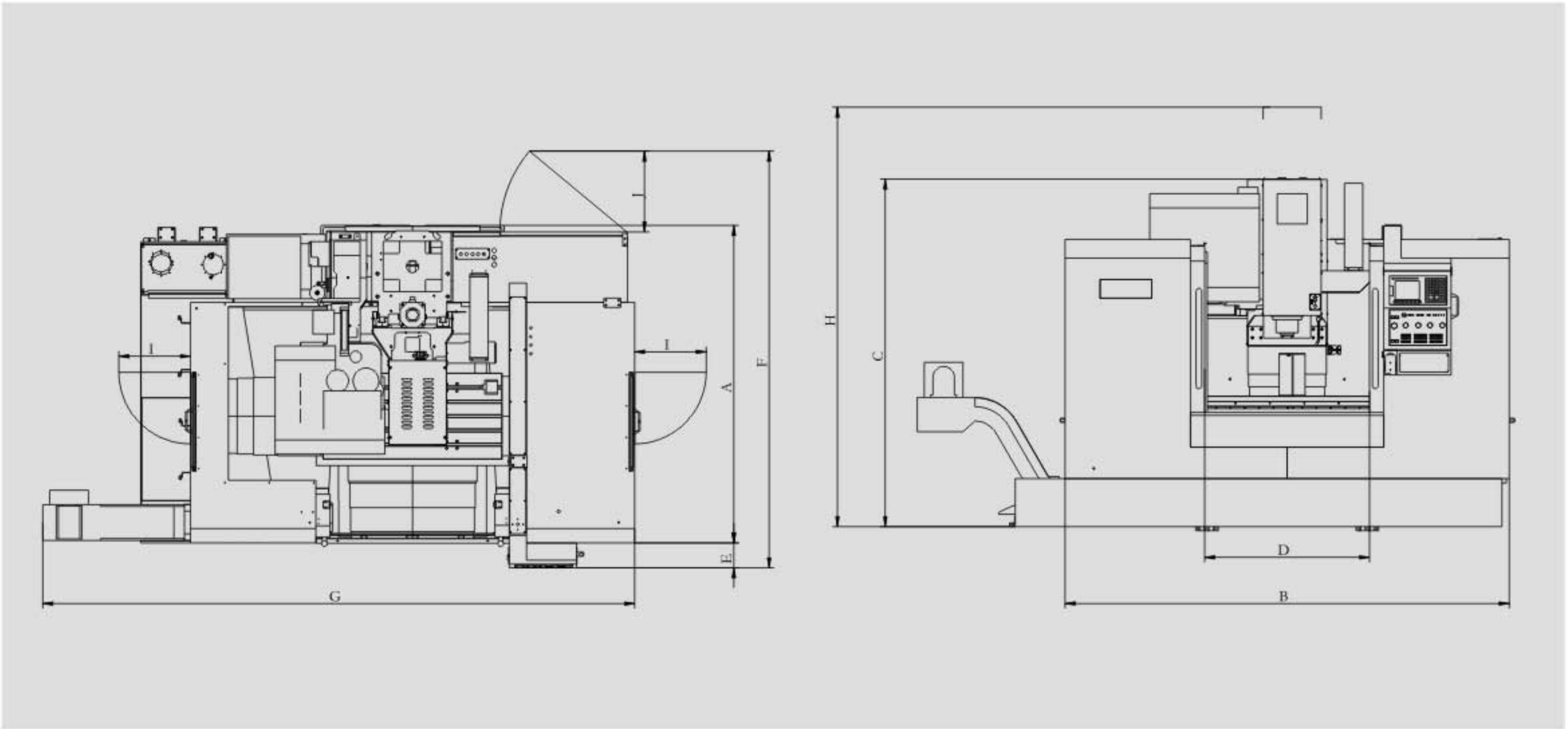
VB1200



VB1600

MODEL	UNIT	VB1000	VB1200	VB1600
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	1000	1200	1600
Y Axis Travel	mm	600	600	800
Z Axis 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	#	BT40	BT50	BT50
Max. Spindle Speed	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 30Mins)	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	φ50X10
Tool Capacity (Option)	#	24	16	24
Max. Tool Weight	kg	8	15	15
Max. Tool Length	mm	350	350	350
Max. Tool Diameter	mm	φ80/φ130	φ125/φ250	φ127/φ215
Full Travel Positioning Accuracy(VDI/DGQ3441)	mm	P0.015	P0.015	P 0.015
Repeatability Accuracy(VDI/DGQ3441)	mm	Ps 0.010	Ps 0.010	Ps 0.010
Air Pressure	MPa	0.6-0.8	0.6-0.8	0.6-0.8
Power Requirement	kVA	20	40	40
Supply Voltage & Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Machine Weight	kg	6800	7200	16000
Machine Size / Length	mm	4500	4500	6600
Width	mm	3253	3253	3300
Height	mm	2750	2850	3300

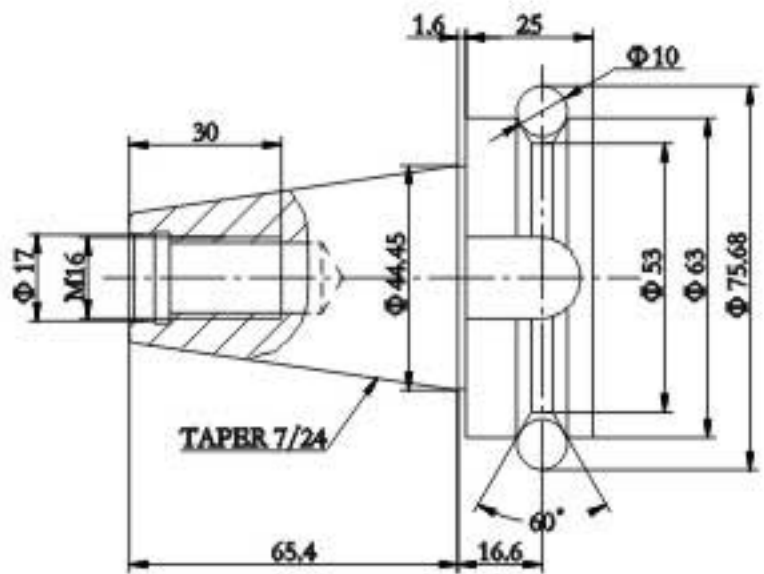
We reserve the right to change technical parameter for improvement of our products without giving notice to customers.



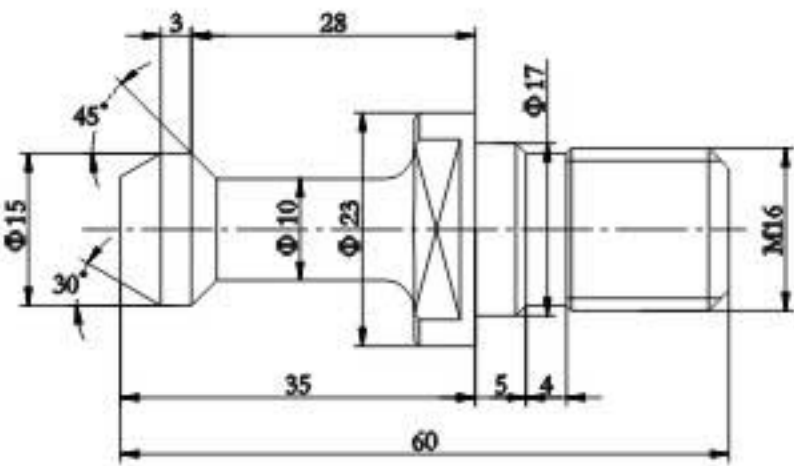
Dimensions

	A	B	C	D	E	F	G	H	I	J
VL700	1915	2180	1990	650	180	2955	3135	2490	0	860
VL900	2213	3000	2150	1100	180	3253	4500	2750	0	880
VL1100/1100D	2213	3100	2150	1100	180	3253	4500	2750	0	880
VL1300/1300D	2402	3600	2882	1635	300	3529	4015	3407	0	800
VL1500/1500D	2402	3600	2882	1635	300	3529	4015	3407	0	800

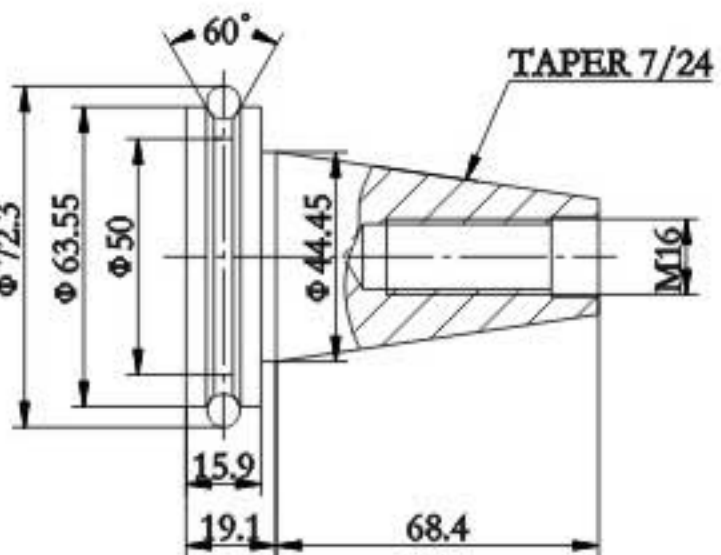
We reserve the right to change technical parameter for improvement of our products without giving notice to customers.



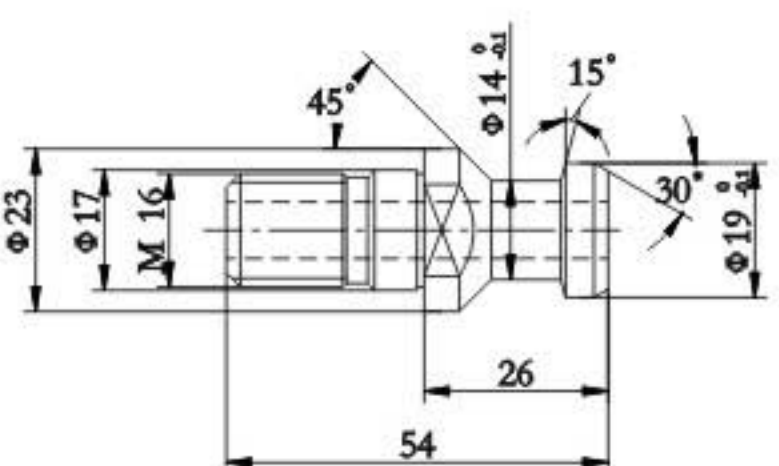
■ Bt40 Tool Shank



■ Bt40 Pull Stud



■ Sk40 Tool Shank



■ Sk40 Pull Stud

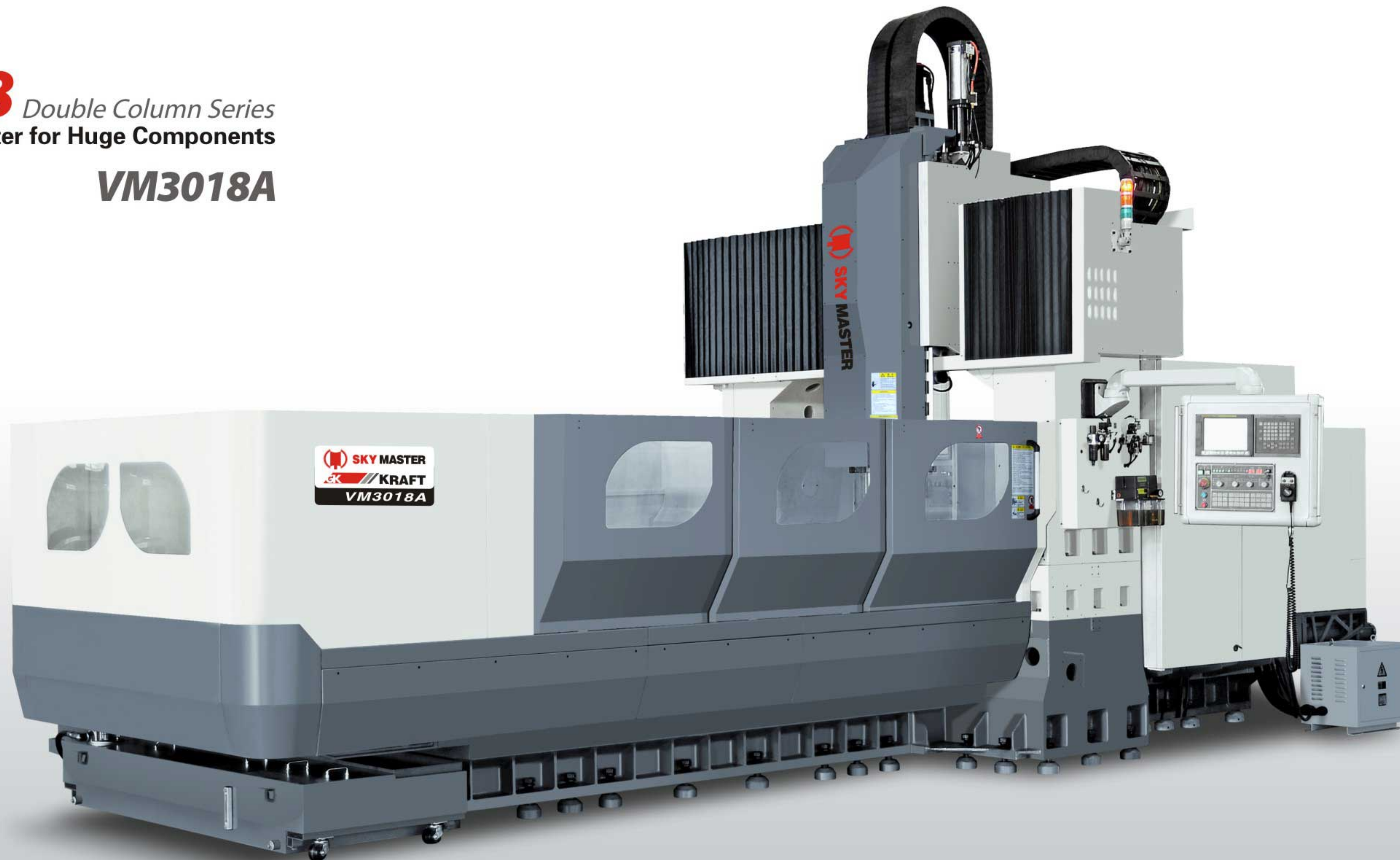
● Standard ○ Optional × Not available

Dimensions

	A	B	C	D	E	F	G	H	I	J
VB1000	2213	3000	2150	1100	180	3253	4500	2750	0	880
VB1200	2213	3280	2250	1100	180	3253	4500	2850	0	880
VB1600	2950	4400	2530	1745	615	4165	6600	3330	900	600

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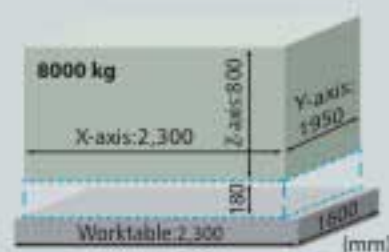
VM18 *Double Column Series*
Machine Center for Huge Components
VM3018A



MODEL	UNIT	VM2018A	VM2018B	VM3018A	VM3018B	VM4018A	VM4018B
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	2300	2300	3200	3200	4100	4100
Y Axis Travel	mm	1950	1950	1950	1950	1950	1950
Z Axis Travel	mm	800	800	800	800	800	800
Table Size	mm	2300 × 1600	2300 × 1600	3200 × 1600	3200 × 1600	4100 × 1600	4100 × 1600
T Slot Size	mm	8 × 22 × 180	8 × 22 × 180	8 × 22 × 180	8 × 22 × 180	8 × 22 × 180	8 × 22 × 180
Distance from Table to Floor	mm	950	950	950	950	950	950
Table Load	kg	8000	8000	10000	10000	12000	12000
Spindle Taper	#	BT50	BBT50	BT50	BBT50	BT50	BBT50
Max. Spindle Speed	rpm	6000	10000	6000	10000	6000	10000
Distance from Spindle Nose to Table	mm	180~980	180~980	180~980	180~980	180~980	180~980
Distance between Columns	mm	1840	1840	1840	1840	1840	1840
Spindle Motor Power (30mins Continue)	kW	22/26	22/26	22/26	22/26	22/26	22/26
Spindle Motor Torque	N.m	662	140	662	140	662	140
Three Axis Rapid Speed:X	mm/min	20000	20000	20000	20000	15000	15000
Y	mm/min	20000	20000	20000	20000	20000	20000
Z	mm/min	15000	15000	15000	15000	15000	15000
Max. Cutting Feedrate	mm/min	1~10000	1~10000	1~10000	1~10000	1~10000	1~10000
X,Y,Z motor	kW	7/4/4	7/4/4	7/4/4	7/4/4	7/4/4	7/4/4
Tool Capacity (Optional)	pcs	32	32	32	32	32	32
Max. Tool Weight	mm	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225
Max. Tool Length	mm	350	350	350	350	350	350
Max. Tool Diameter	kg	20	20	20	20	20	20
Full Travel Positioning Accuracy(VDI/DGQ 3441)	mm	P 0.020	P 0.020	P 0.025	P 0.025	P 0.030	P 0.030
Repeatability Accuracy(VDI/DGQ 3441)	mm	Ps 0.015	Ps 0.015	Ps 0.020	Ps 0.020	Ps 0.025	Ps 0.025
Air Pressure	MPa	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8
Supply Voltage&Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Power Requirement	kVA	60	60	60	60	60	60
Machine Weight	kg	25000	25000	29000	29000	33000	33000
Machine Size / Length	mm	7027	7027	8927	8927	10327	10327
Width	mm	5217	5217	5217	5217	5217	5217
Height	mm	4339	4339	4339	4339	4339	4339

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

Moveable Area:



VM2018A/2018B

Moveable Area:



VM3018A/3018B

Moveable Area:



VM4018A/4018B

VM25 Series Machine Frame



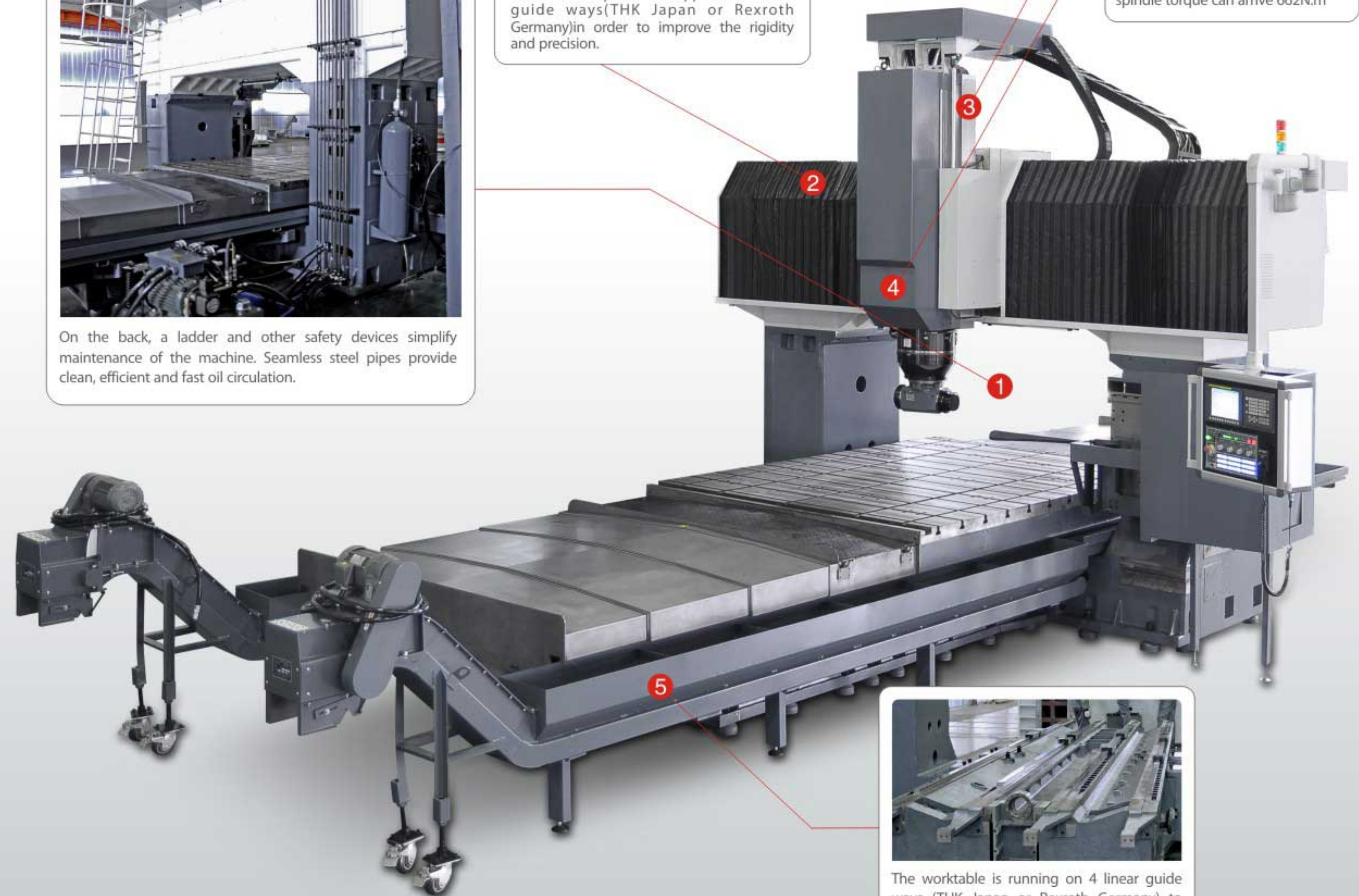
On the back, a ladder and other safety devices simplify maintenance of the machine. Seamless steel pipes provide clean, efficient and fast oil circulation.



The Y axis adopts three stepped roller linear guide ways(THK Japan or Rexroth Germany)in order to improve the rigidity and precision.

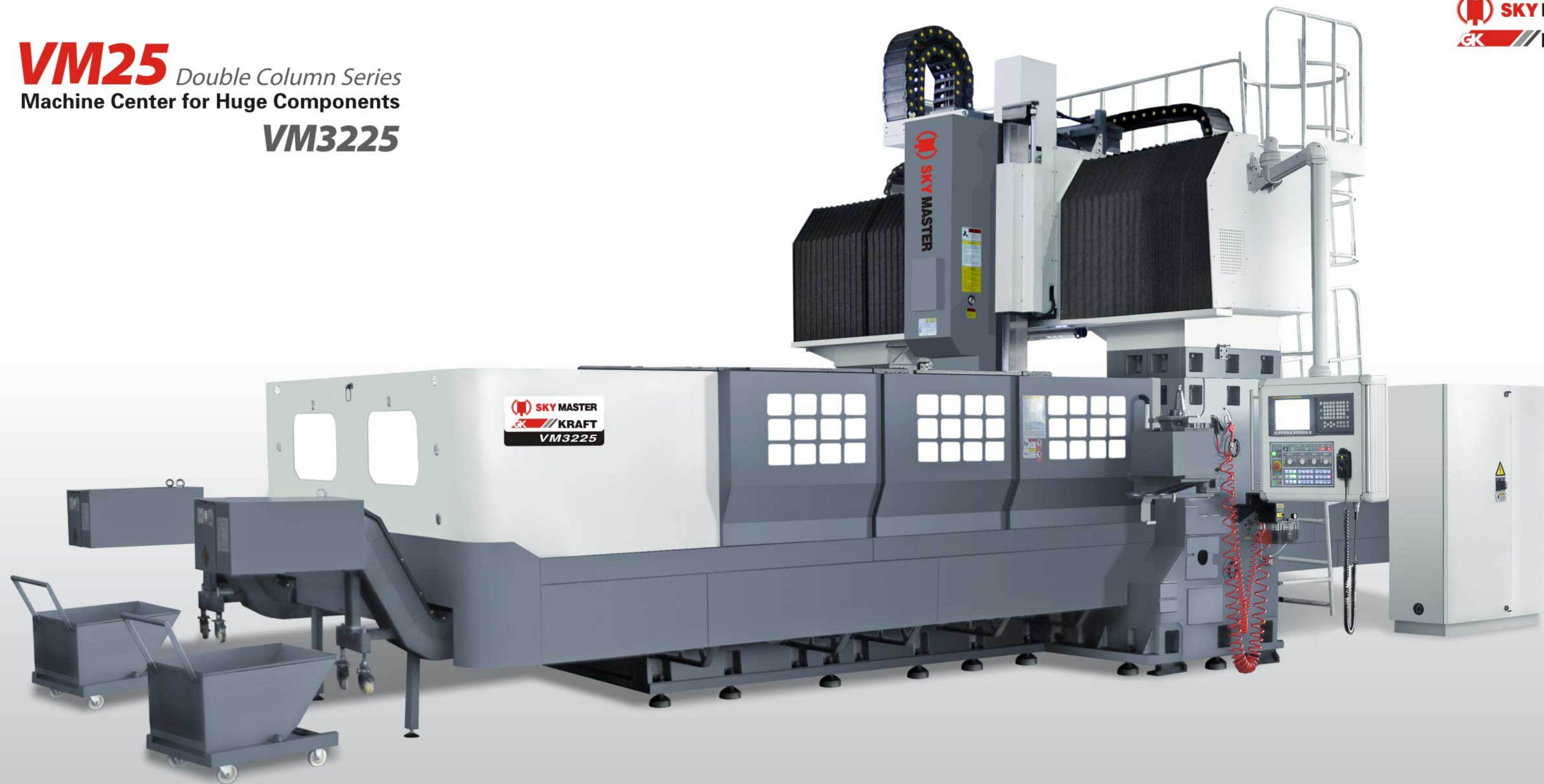
The Z axis has rectangular-shaped guide ways with (linear guide way is option) oversized contact surface to improve the rigidity for heavy duty cutting, reduce vibration and prolong tool life.

ZF/BF gear box is standard,the spindle torque can arrive 662N.m



The worktable is running on 4 linear guide ways (THK Japan or Rexroth Germany) to support the stability and to improve the loading ability and reduce the cutting vibration.

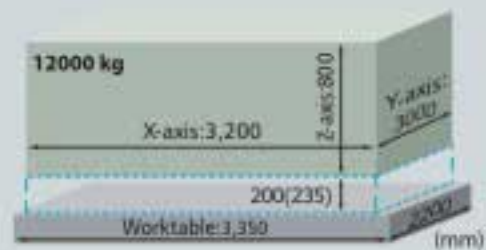
VM25 *Double Column Series*
Machine Center for Huge Components
VM3225



MODEL	UNIT	VM3225	VM3225A	VM3225B	VM4225	VM4225A	VM4225B	VM5225	VM5225A	VM5225B
Standard Controller		FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD	FANUC 0i MD
X Axis Travel	mm	3200	3200	3200	4200	4200	4200	5200	5200	5200
Y Axis Travel	mm	2900	2900	2900	2900	2900	2900	2900	2900	2900
Z Axis Travel	mm	800	800(Option 1000)	800(Option 1000)	800	800(Option 1000)	800(Option 1000)	800	800(Option 1000)	800(Option 1000)
Table Size	mm	3350×2200	3350×2200	3350×2200	4350×2200	4350×2200	4350×2200	5350×2200	5350×2200	5350×2200
T Slot Size	mm	13×28×250	13×28×250	13×28×250	17×28×250	17×28×250	17×28×250	21×28×250	21×28×250	21×28×250
Distance from Table to Floor	mm	990	990	990	990	990	990	990	990	990
Table Load	kg	15000	15000	15000	18000	18000	18000	21000	21000	21000
Spindle Taper	#	BT50	BT50	BBT50	BT50	BT50	BBT50	BT50	BT50	BBT50
Max. Spindle Speed	rpm	6000	6000	10000	6000	6000	10000	6000	6000	10000
Distance from Spindle Nose to Table	mm	200~1000	235~1035	235~1035	200~1000	235~1035	235~1035	200~1000	235~1035	235~1035
Distance between Columns	mm	2550	2550	2550	2550	2550	2550	2550	2550	2550
Spindle Motor Power (30mins Continue)	kW	22/26	22/26	22/26	22/26	22/26	22/26	22/26	22/26	22/26
Spindle Motor Torque	N.m	662	662	165	662	662	165	662	662	165
Three Axis Rapid Speed:X	mm/min	15000	15000	15000	12000	12000	12000	12000	12000	12000
Y	mm/min	18000	18000	18000	18000	18000	18000	18000	18000	18000
Z	mm/min	10000	15000	15000	10000	15000	15000	10000	15000	15000
Max. Cutting Feedrate	mm/min	1~8000	1~8000	1~8000	1~8000	1~8000	1~8000	1~8000	1~8000	1~8000
X,Y,Z motor	kW	7/6/7	7/6/7	7/6/7	7/6/7	7/6/7	7/6/7	7/6/7	7/6/7	7/6/7
Tool Capacity (Optional)	pcs	32	32	32	32	32	32	32	32	32
Max. Tool Weight	mm	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225	φ110/φ225
Max. Tool Length	mm	350	350	350	350	350	350	350	350	350
Max. Tool Diameter	kg	20	20	20	20	20	20	20	20	20
Full Travel Positioning Accuracy(VDI/DGQ 3441)	mm	P 0.025	P 0.025	P 0.025	P 0.030	P 0.030	P 0.030	P 0.040	P 0.040	P 0.040
Repeatability Accuracy(VDI/DGQ 3441)	mm	Ps 0.020	Ps 0.020	Ps 0.020	Ps 0.025	Ps 0.025	Ps 0.025	Ps 0.030	Ps 0.030	Ps 0.030
Air Pressure	MPa	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8	0.6~0.8
Supply Voltage&Frequency		3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz	3/PE,AC380V,50Hz
Power Requirement	kVA	60	60	60	60	60	60	60	60	60
Machine Weight	kg	40000	40000	40000	45000	45000	45000	50000	50000	50000
Machine Size / Length	mm	10125	10125	10125	12035	12035	12035	14035	14035	14035
Width	mm	6840	6840	6840	6840	6840	6840	6840	6840	6840
Height	mm	4515	4515	4515	4515	4515	4515	4515	4515	4515

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Moveable Area:



VM3225/3225A/3225B

Moveable Area:



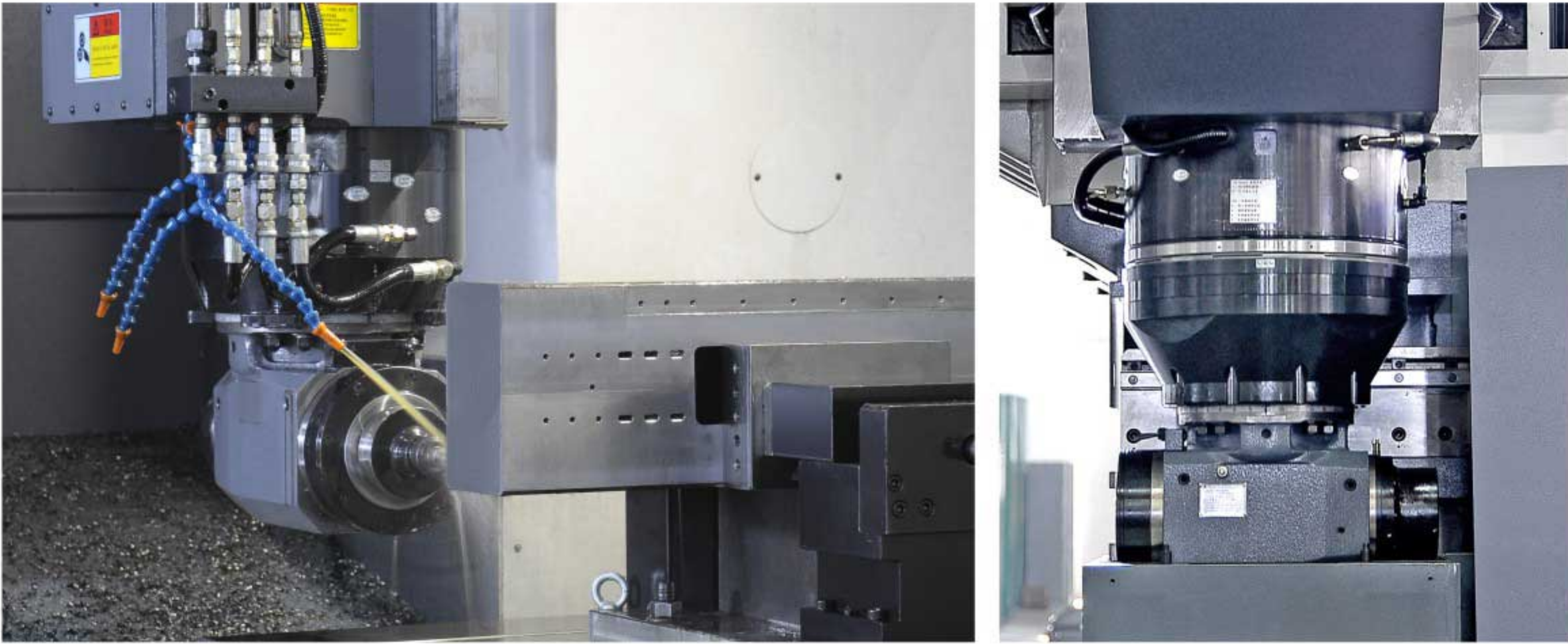
VM4225/4225A/4225B

Moveable Area:



VM5225/5225A/5225B

VM Series Application of Extra Milling Head



- The extra milling head with high effective performance to improve the comprehensive cutting ability.
- The extra milling head can be designed with automatic change, rapid location by manual or automatic way which can enlarge the machining scope and ability.
- Special solution and service is available according to customer's special machining demand.
- Rapid and effective milling head exchange with semi-automatic and automatic exchange head storage.
- Designed with compact structure and will not occupy any machining space, covered by corrosion prevention and splash proof metal sheet with sealed protection.
- The structure with strong, concise, safe and reliable design.
- Improve machining effective.



Manual orthogonal milling head



Prolong milling head



Orthogonal prolong milling head

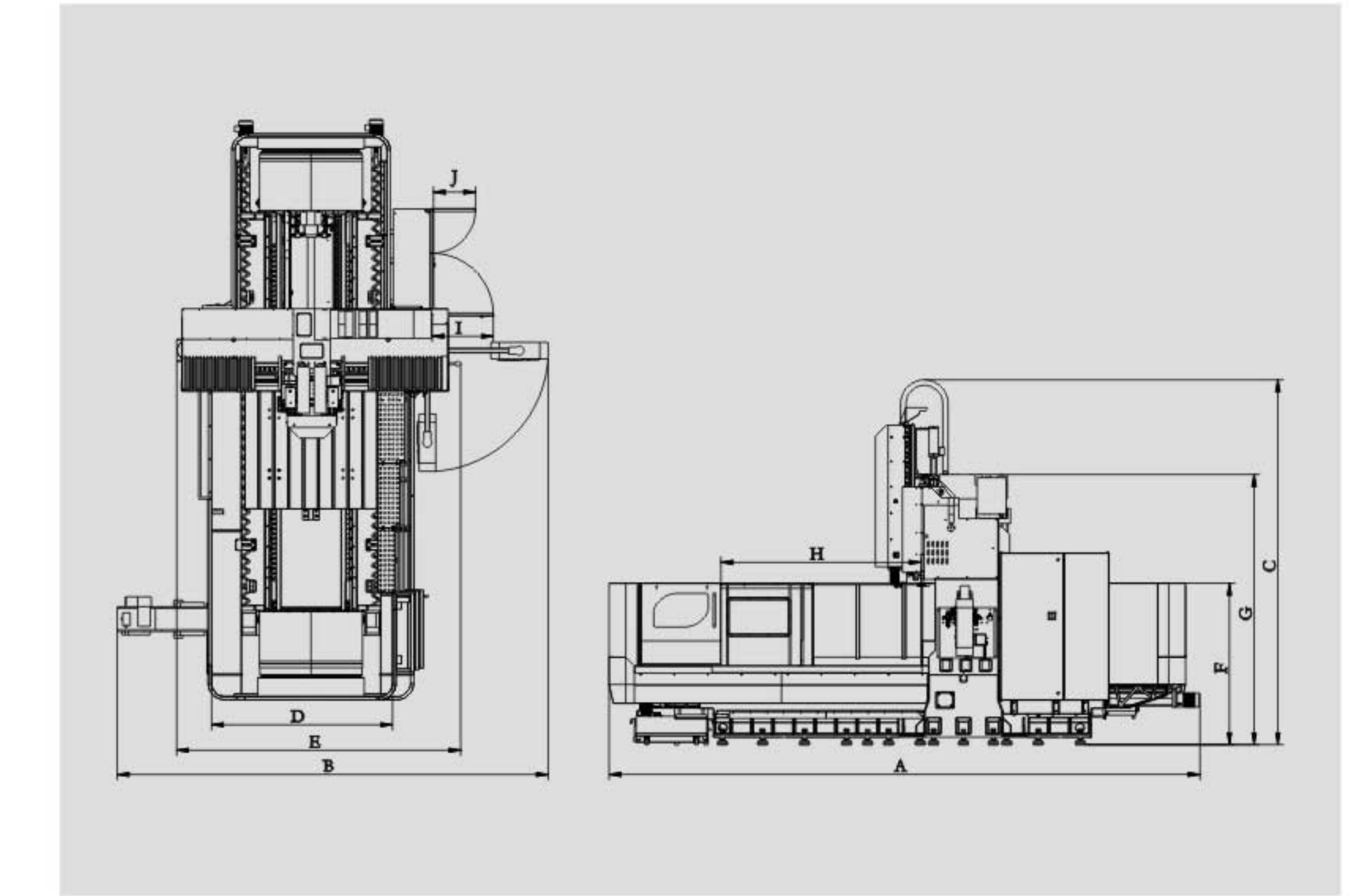


Swing head



Automatic orthogonal milling head

■ BT-50 Tool Shank ■ DIN69871-A(DIN50) Tool Shank ■ BT-50 Pull Stud ■ DIN69872 Pull Stud



	A	B	C	D	E	F	G	H	L	M
VM2018A/2018B	7027	5217	4339	2191	3438	1920	3213	2400	740	508
VM3018A/3018B	8927	5217	4339	2191	3438	1920	3213	3000	740	508
VM4018A/4018B	10327	5217	4339	2191	3438	1920	3213	3000	740	508
VM3225/3225A/3225B	10125	6840	4515	2984	4614	1940	3642	3000	740	508
VM4225/4225A/4225B	12035	6840	4515	2984	4614	1940	3642	4000	740	508
VM5225/5225A/5225B	14035	6840	4515	2984	4614	1940	3642	4000	740	508

■ BT-50 Tool Shank ■ DIN69871-A(DIN50) Tool Shank ■ BT-50 Pull Stud ■ DIN69872 Pull Stud