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China-Germany  
Investment

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# 01 Company Brief



KY MASTER is a China-Germany investment company specialized in designing and manufacturing high quality CNC machine tools under the supervision of Germany partner KRAFT. The company's technical team is strong, with an internal R&D technical team, and a professional R & D team in Germany for Synchronous online design and research. Western engineering combined with Asian manufacturing leads us into an advanced synergy effect. Sky master own management platform covers sales, R&D, product control, QC, after-service, which can make full-process information traceability. Operate strictly in accordance with modern management mode. The company has advanced testing equipment and processing equipment imported from Germany, UK, Japan and other countries, ensuring the precise accuracy and stable quality of each machine tool. The company gets the ISO9001 quality certificate and all machine get the CE certificate from TUV SUD company. Sky Master continuously hires domestic and foreign experts to guide the factory, and also establishes high-end CNC machine tool joint bases with Shanghai Jiaotong University and Zhejiang University. and our innovation never stops.

Our professional service team in all over the world keeps close contact with clients and supply technical support at any time. Take "Upright integrity, Excellent operation and High quality" as our management concept to produce each machine with our full heart,

The first professional high-speed machine production factory in China,  
provincial high-speed machine industry standard-setting company



# 01.1 Our Partner-KRAFT

GK Werkzeugmaschinen GmbH in Stockstadt am Rhein - Everything you need in one place, Everyone finds what they are looking for at KRAFT

In 1990 Gerhard Kraft founded GK Werkzeugmaschinen GmbH in Stockstadt am Rhein. Company founder Gerhard Kraft brought 25 years of knowledge and experience to the company. Since then, the company has grown into a flourishing enterprise with 10 professional designer who are focusing on CNC machine tool in different area, with 10 additional sales representatives in Germany, Austria, Italy, Netherlands and Switzerland for selling and serving KRAFT machine. GK headquarters has the international standard factory with 8000sqm which is near to Rhein river ,it is very close to the

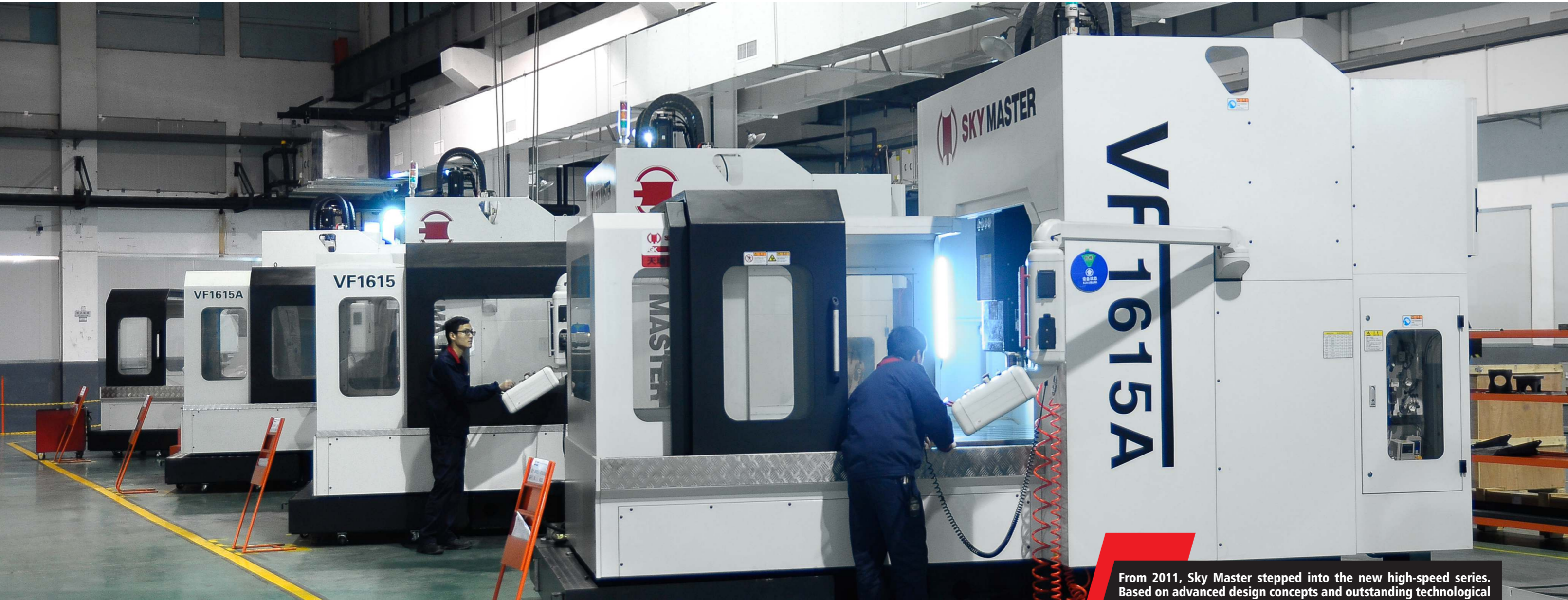


# 02 Products



# High Speed Series

Use our know-how to work out the solutions for your most difficult issues



Temperature & humidity constant workshop

From 2011, Sky Master stepped into the new high-speed series. Based on advanced design concepts and outstanding technological support, Sky Master high-speed machines fill up various gaps in the field of domestic high-speed machines, and can reach up to 1.0

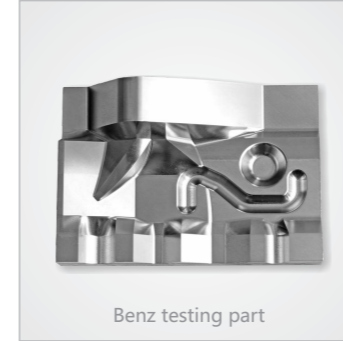


# High Speed Series

- 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 FANUC absolute type model 1 system with 15 inch display and high speed high quality machining package (including AICC II Jerk control Smooth tolerance Machining quality level adjustment function).
- The grease lubrication system comes as standard, low maintenance budget, environmental friendly.
- Separated strong and weak electric cabinet, eliminate the electromagnetic field interference generated by working electrical components.

## VF108

Optional draw type water tank

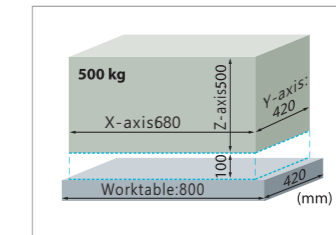


## Technical Parameter

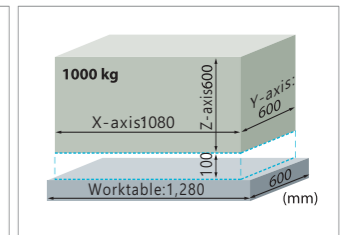
Item	Unit	VF68	VF108		
Standard controller		FANUC 0i MF			
Travel	X axis travel(work-table)	mm	680	1080	
	Y axis travel(saddle)	mm	420	600	
	Z axis travel(spindle head)	mm	500	600	
	Distance from spindle nose to table	mm	100~600	100~700	
	Distance from spindle center to column cover	mm	480	630	
Work table	Table size(length×width)	mm	800×420	1280×600	
	Max. table load	kg	500	1000	
	T slot size(width×distance×quantity)	mm	14×80×5	18×100×5	
Spindle	Spindle taper		HSK-A63		
	Max. spindle speed	rpm	15000(Direct driven)		
	Spindle motor power (continual working/Max.)	kW	9/15		
	Spindle torque	N.m	57.3/120		
X/Y/Z	Rapid traverse X/Y	mm/min	40000	36000	
	Rapid traverse Z	mm/min	32000	24000	
	Cutting feed rate on X/Y/Z	mm/min	1~10000		
ATC (Option)	ATC type		Arm type		
	Tool capacity	pcs	24		
	Max. tool diameter	mm	80/ 130		
	Max. tool length	mm	300		
Accuracy	Max. tool weight	kg	8		
	VDI/DGQ3441	Full travel positioning accuracy	mm	P0.010	
		Repeatability accuracy	mm	Ps0.008	
Air pressure	MPa	0.6~0.8			
Supply Voltage & Frequency		3/PE, AC380V, 50Hz			
Power requirement	kVA	30			
Machine size (L/W/H)	mm	3900×3200×2700	4920×3510×2970		
Machine weight	kg	4500	7250		

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

### Moveable Area:



VF68



VF108



# High Speed Series

- VF double column high speed high accuracy series is designed for precise mold base and nonferrous metal machining. Standard machine equips with high speed spindle.
- One piece cast iron machine bed and one piece cast iron bridge, the whole structure is analyzed by FEM which optimize the rigidity and accuracy.
- All three axis use world famous linear guide way and ball screw to provide precise accuracy and stable performance.
- Full enclosed splash guard with European operation box in safe and elegant outlook ,every design is for convenience operation.
- The grease lubrication system comes as standard, low maintenance budget, environmental friendly.

## VF1615A



## Technical Parameter

Item	Unit	VF1290	VF1290A	VF1290B	VF1615	VF1615A	VF1615B
Standard controller		FANUC Oi MF	MITSUBISHI. M800W		FANUC Oi MF	MITSUBISHI. M800W	
Travel	X axis travel(work-table)	mm	1200			1600	
	Y axis travel(saddle)	mm	800			1300	
	Z axis travel(spindle head)	mm	550			700	
	Distance from spindle nose to table	mm	150~700		200~750	200~900	225~925 250~950
	Distance between columns/work piece access height	mm	920/715			1500/715	
Work table	Table size(length×width)	mm	1320×800			1800×1300	
	Max. table load	kg	2000			4000	
	T slot size(width×distance×quantity)	mm	14×120×7			22×160×8	
Spindle	Spindle taper		HSK-A63		HSK-E50	HSK-A63 HSK-E50	
	Max. spindle speed	rpm	15000 (Direct driven)	24000 (Build-in)	36000 (Build-in)	15000 (Direct driven)	24000 (Build-in) 36000 (Build-in)
	Spindle motor power (continual working/Max.)	kW	9/15	30/39	20/26	15/38	25/33 20/26
	Spindle torque(continual working/Max)	N.m	57.3/120	29.1/37.8	10.4/13.5	70/150	68/89.5 10.4/13.5
X/Y/Z	Rapid traverse (X/Y/Z)	mm/min	30000	40000		30000	
	Cutting feed rate (X/Y/Z)	mm/min	1~10000				
ATC (Option)	Tool capacity	pcs	20		24	20 24	
	Max. tool diameter	mm	100/ 130		80/ 120	100/ 130 80/ 120	
	Max. tool length	mm	300		200	300 200	
	Max. tool weight	kg	8		4	8 4	
Accuracy	VDI/DGQ3441 Full travel positioning accuracy	mm	P0.014				
	Repeatability accuracy	mm	Ps0.008				
Air pressure	MPa	0.6~0.8					
Supply voltage & frequency		3 /PE, AC380V, 50Hz					
Power requirement	kVA	30				80	
Machine size (L/W/H)	mm	4808×4773×3215			5657×5403×3954		
Machine weight	kg	12000			22000		

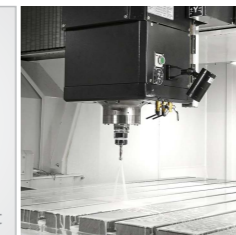
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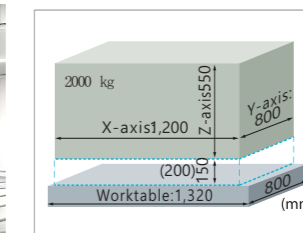
Car light part



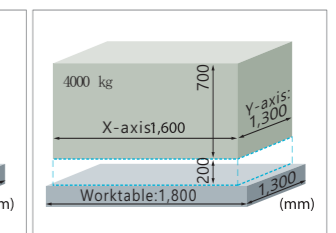
Car light part



### Moveable Area:



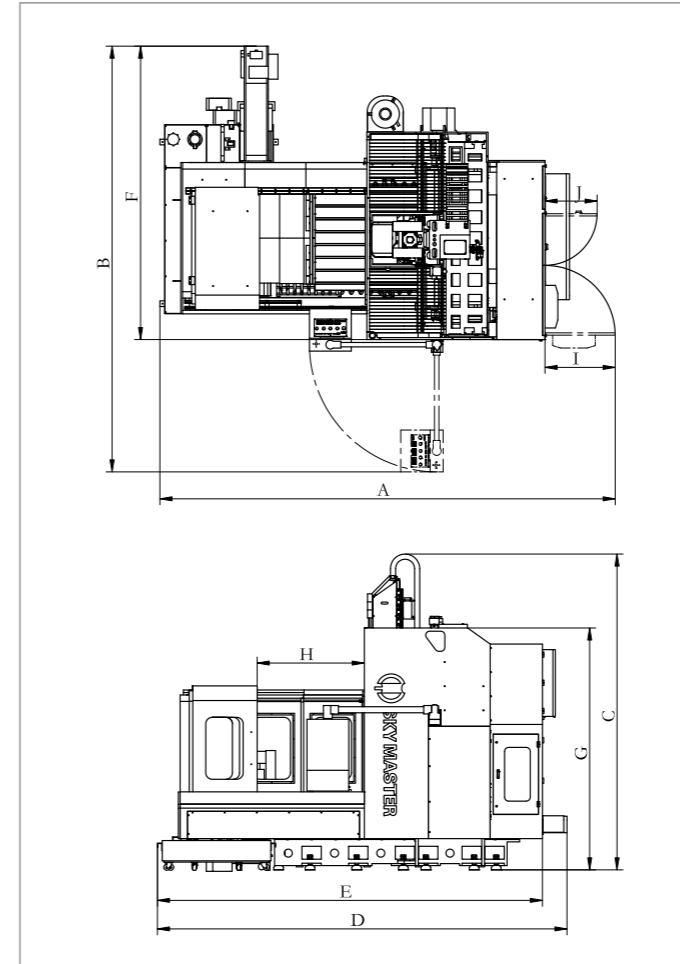
VF1290/1290A/1290B



VF1615/1615A/1615B

Standard&Option	VF68	VF108	VF1290	VF1290A	VF1290B	VF1615	VF1615A	VF1615B
FANUC Oi-MF absolute type 1, 15"LCD	●	●	●	×	×	●	×	×
HEIDENHAIN TNC620 , 15"LCD	×	×	×	○	○	○	○	○
MITSUBISHI M80A, 15"LCD	○	○	○	×	×	×	×	×
MITSUBISHI M800W, 15"LCD	○	○	×	●	●	×	×	×
MITSUBISHI M800W, 19"LCD	×	×	×	×	×	○	●	●
Direct driven spindle 15000rpm HSKA63	●	●	●	×	×	●	×	×
Direct driven spindle 15000rpm BBT40	○	○	○	×	×	○	×	×
Electric spindle 24000rpm HSK A63 IBAG (MITSUBISHI M800W)	○	○	×	●	×	×	●	×
Electric spindle 36000rpm HSK A63 IBAG (MITSUBISHI M800W)	×	×	×	×	●	×	×	●
Arm type ATC HSKA63 24T (pneumatic)	○	○	×	×	×	×	×	×
Chain type ATC HSKA63 32T (pneumatic)	×	○	×	×	×	○	○	×
Chain type ATC HSKA63 40T (pneumatic)	×	×	×	×	×	○	○	×
Drum type ATC HSKA63 20T (pneumatic)	×	×	○	○	×	○	○	×
Drum type ATC HSKA63 24T (pneumatic)	×	×	×	×	○	×	×	○
Column raise 200	×	○	×	×	×	○	○	○
Column raise 300	×	○	×	×	×	×	×	×
Rigid tapping	●	●	●	●	●	●	●	●
Full-enclosed splash guard	●	●	●	●	●	●	●	●
Spindle chiller/ Coolant surrounding spindle	●	●	●	●	●	●	●	●
Spindle air sealing / Air blowing device	●	●	●	●	●	●	●	●
Working area light / 3 colors warning light	●	●	●	●	●	●	●	●
A/C for electric cabinet	●	●	●	●	●	●	●	●
Portable MPG	●	●	●	●	●	●	●	●
Grease lubrication device	●	●	●	●	●	●	●	●
Coolant system/pneumatic system	●	●	●	●	●	●	●	●
Chain chip conveyor	●	●	●	●	●	●	●	●
Coil chip conveyor	×	×	●	●	●	●	●	●
Air gun/water gun with flushing function	●	●	●	●	●	●	●	●
Oil skimmer	●	●	●	●	●	●	●	●
Automatically power off/Tool kit	●	●	●	●	●	●	●	●
Transformer	●	●	●	×	×	●	×	×
Adjustable level bolts and foundation block (with screws)	●	●	●	●	●	●	●	●
Safety door interlock / Operation manual	●	●	●	●	●	●	●	●
Roof spraying system	○	○	○	○	○	○	○	○
Mass flow chip flushing function	○	○	×	×	×	×	×	×
Cutting view Window	○	○	○	○	○	○	○	○
Drawer type water tank	○	○	○	○	○	○	○	○
Buzzer alarm lamp	○	○	○	○	○	○	○	○
Low temperature blowing device	○	○	○	○	○	○	○	○
Air dryer	○	○	○	●	●	○	●	●
Oil mist collection machine (LOSMA)	○	○	○	○	○	○	○	○
Coolant through spindle center 20/30/70bar	○	○	○	○	○	○	○	○
3 axes ball screw hollow cooling	×	×	×	×	×	○	○	○
Voltage stabilizer	○	○	○	○	○	○	○	○
Collision avoidance device	○	○	○	○	○	○	○	○
Measuring system (tool, workpiece)	○	○	○	○	○	○	○	○
Smart spindle temperature compensation (Fanuc/Mitsubishi)	●	●	●	●	●	●	●	●
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○	○	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○	○	○	○	○	○	○	○
Full enclosed iron box package	○	○	○	○	○	○	○	○
Warranty prolong 1 year	○	○	○	○	○	○	○	○

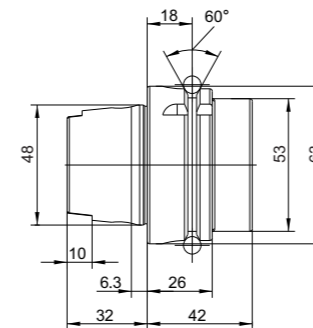
● Standard ○ Optional × Not available



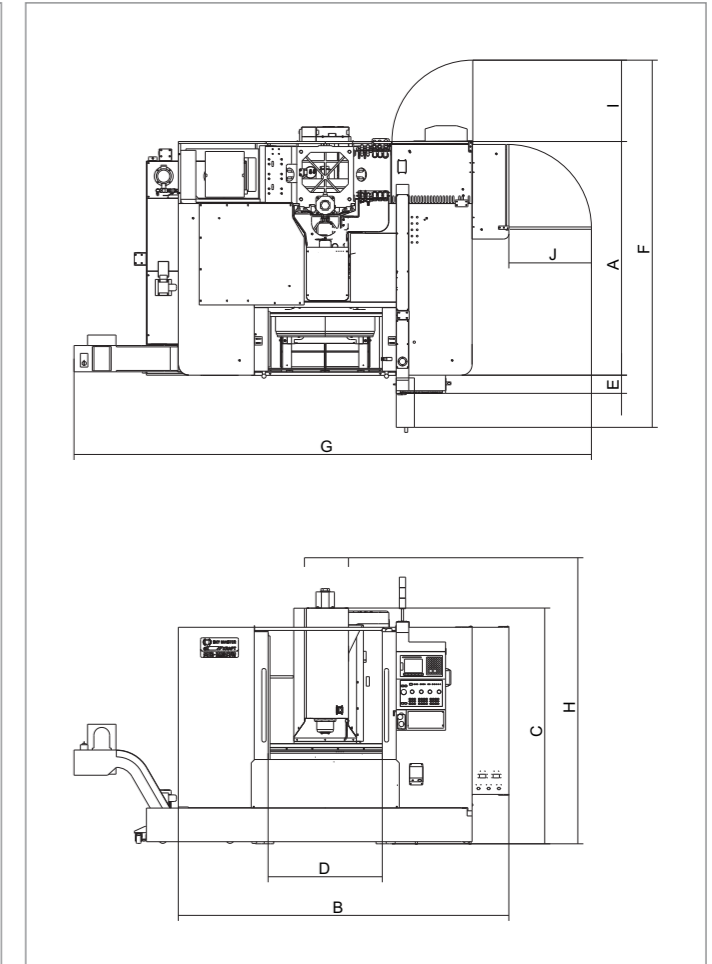
### Dimensions

	A	B	C	D	E	F	G	H	I	J
VF1290/1290A/1290B	4808	4773	3215	4066	3906	3567	2270	1260	870	740
VF1615/1615A/1615B	5657	5403	3954	5052	4785	3650	3010	1430	870	650

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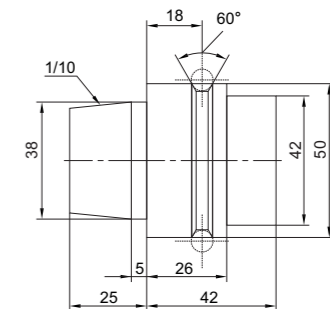
■ HSK -A63 Tool Shank



### Dimensions

	A	B	C	D	E	F	G	H	I	J
VF68	1915	2180	2200	650	175	3200	3900	2700	750	400
VF108	2223	3144	2370	1100	180	3510	4920	2970	765	785

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■ HSK E50 Tool Shank



# VU 5 Axis Series

- VU vertical 5 axis machining center is widely used in 5 axis type products components and complicated mold cutting.
- Designed with outstanding structure and high rigidity ,the world famous brand of linear guide way are used on all three axis to achieve high accuracy machining ability.
- 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.
- Double support design on the A axis, compact structure, great rigidity, optimized loading capacity and precise positioning accuracy.
- Cradle type structure, higher machining efficiency, tool length has no effect on the machining accuracy; make sure the 3D space shape accurate.
- The grease lubrication system comes as standard, low maintenance budget, environmental friendly.

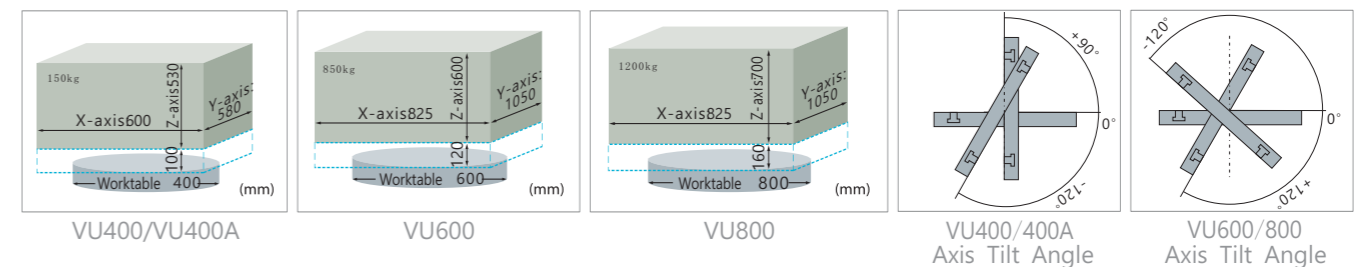


## Technical Parameter

Item	Unit	VU400	VU400A	VU600	VU800	
Standard controller		FANUC Oi MF (5 axis 4 axis synchronization)		HEIDENHAIN TNC620		
				HEIDENHAIN TNC640		
Travel	X axis travel(work-table)	mm	600	825		
	Y axis travel(saddle)	mm	580	1050		
	Z axis travel(spindle head)	mm	530	600	700	
	Distance from spindle nose to table	mm	100~630	120~720	160~860	
Work table	Table diameter	mm	400	600	800	
	T slot size (quantityXwidth)	mm	8X12	5X14	7X14	
	Workpiece max. diameter	mm	600	960	1000	
	Max. table load	kg	250	850	1200	
	Rotation angle	A axis		+90 °~-120 °		+120 °~-120 °
		C axis		360 °		
Max. speed	A axis	rpm	33.3	50		
	C axis	rpm	33.3	100		
Spindle	Spindle taper		BT40	HSK-A63		
	Max. spindle speed	rpm	10000(Direct driven)	15000(Direct driven)		
	Spindle motor power (continual working/Max.)	kW	11/20.4	10/17		
	Spindle torque(continual working/Max)	N.m	52.5/130	63.7/108.6		
X/Y/Z	Rapid traverse X/Y	mm/min	36000		40000	
	Rapid traverse Z	mm/min	24000		40000	
	Cutting feed rate on X/Y/Z	mm/min	1~10000			
ATC	ATC type		Arm type			
	Tool capacity	pcs	24	32		
	Max. tool diameter	mm	80/ 130	75/ 130		
	Max. tool length	mm	300			
	Max. tool weight	kg	8			
Accuracy	VDI/DGQ3441	mm	Full travel positioning accuracy			
		mm	Repeatability accuracy			
	Air pressure	MPa	0.6~0.8			
	Supply voltage & frequency		3/PE, AC380V, 50Hz			
	Power requirement	kVA	30	60	80	
	Machine size (L/W/H)	mm	4920×3510×3170		5090X3250X3510	
	Machine weight	kg	7650	22000		

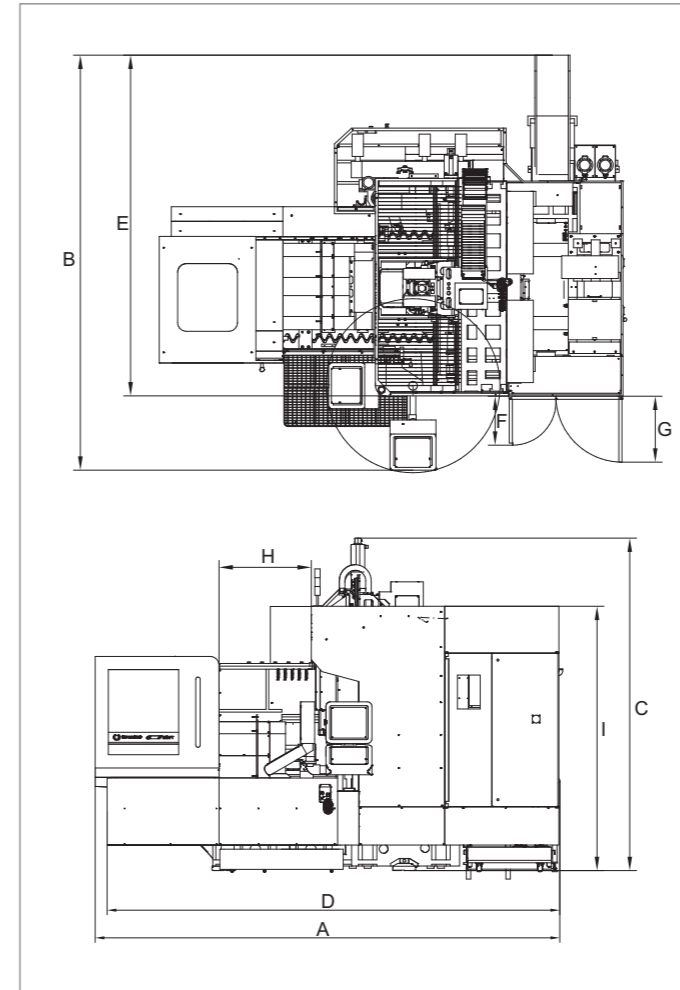
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### Moveable Area:



Standard&Option	VU400	VU400A	VU600	VU800
HEIDENHAIN TNC620, 15"LCD	○	●	●TNC640	●TNC640
FANUC Oi-MF, any 4 axis in synchronization, absolute type (without linear scale)	●	×	○	○
Direct driven spindle 15000rpm HSKA63	○	●	●	●
Direct driven spindle 15000rpm BBT40	○	○	○	○
Electric spindle 24000rpm HSK A63 IBAG (HEIDENHAIN)	×	○	○	○
Electric spindle 36000rpm HSK E50 IBAG (HEIDENHAIN)	×	×	○	○
Arm type ATC BT40 24T (pneumatic)	●	×	×	×
Arm type ATC HSKA63 24T (pneumatic)	×	●	×	×
Chain type ATC HSKA63 32T (pneumatic)	○	○	●	●
Chain type ATC HSKA63 40T (pneumatic)	×	×	○	○
Rigid tapping	●	●	●	●
Full-enclosed splash guard	●	●	●	●
Spindle chiller	●	●	●	●
Spindle air sealing	●	●	●	●
Air blowing device	●	●	●	●
Coolant surrounding spindle	●	●	●	●
Working area light/3 colors warning light	●	●	●	●
A/C for electric cabinet	●	●	●	●
Portable MPG	●	●	●	●
Grease lubrication device	●	●	●	●
Coolant system/pneumatic system	●	●	●	●
Chain chip conveyor	●	●	●	●
Coil chip conveyor	×	×	●	●
Air gun/water gun with flushing function	●	●	●	●
Oil skimmer	●	●	●	●
Automatically power off	●	●	●	●
Transformer	●	×	×	×
Tool kit	●	●	●	●
Adjustable level bolts and foundation blocks	●	●	●	●
Safety door interlock	●	●	●	●
Operation manual	●	●	●	●
Roof spraying system	○	○	○	○
Mass flow chip flushing function	○	○	○	○
Cutting view window	○	○	○	○
Drawer type water tank	○	○	×	×
Buzzer alarm lamp	○	○	○	○
Low temperature blowing device	○	○	○	○
Air dryer	○	○	○	○
Oil mist collection machine (LOSMA)	○	○	○	○
Coolant through spindle center 20/30/70bar	○	○	○	○
3 axes ball screw hollow cooling	×	×	○	○
Voltage stabilizer (CHNT)	○	○	○	○
Smart spindle temperature compensation (Fanuc/Mitsubishi)	○	×	×	×
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	×	×	×
Basic ball accuracy automatic compensation device (with hardware and software)	○	○	○	○
Collision avoidance device	○	○	○	○
Measuring system (tool, workpiece)	○	○	○	○
3 axis absolute linear scale (FAGOR/HEIDENHAIN)	○	●	●	●
A/C axis absolute linear scale (FAGOR/HEIDENHAIN)	○	●	●	●
Full enclosed iron box package	○	○	○	○
Warranty prolong 1 year	○	○	○	○

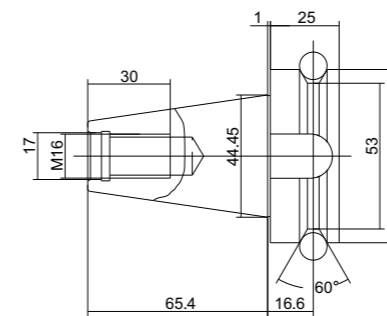
● Standard ○ Optional × Not available



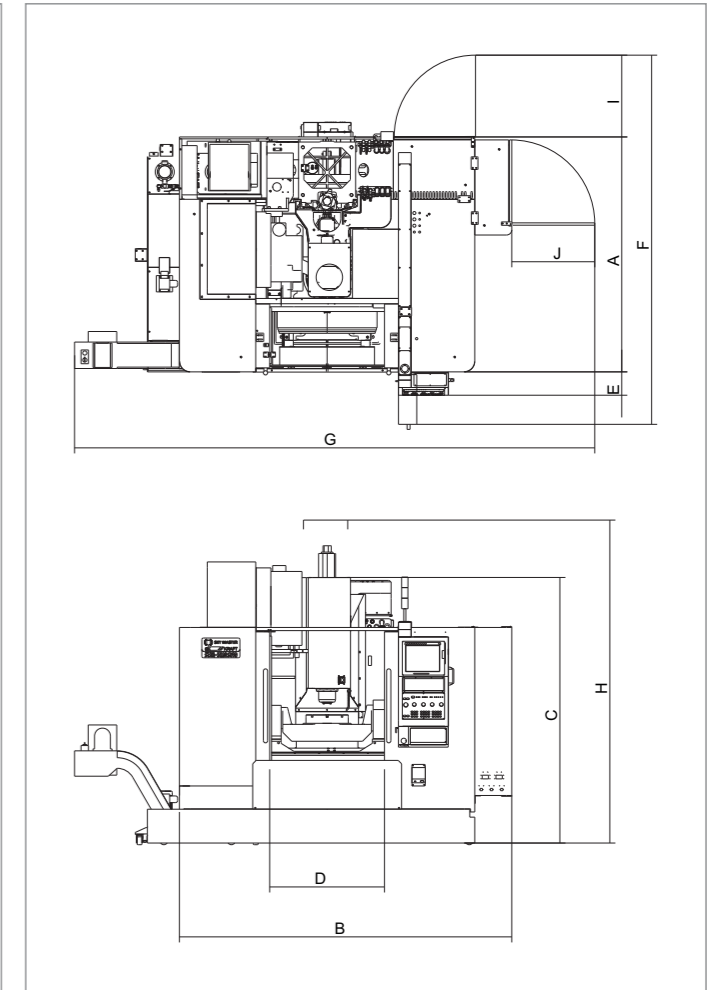
Dimensions

	A	B	C	D	E	F	G	H	I
VU600	5300	4730	4140	5133	3880	540	730	1050	2900
VU800	5300	4730	4250	5133	3880	540	730	1050	3010

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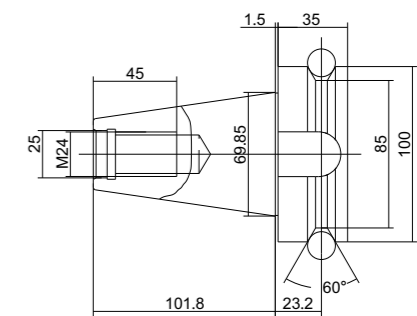
■ BBT40 Tool Shank



Dimensions

	A	B	C	D	E	F	G	H	I	J
VU400	2223	3144	2570	1100	180	3510	3730	3170	765	785
VU400A	2223	3144	2570	1100	180	3510	4920	3170	765	785

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



■ BBT50 Tool Shank



# UM Five-axis Double Column Series

- Um series five axis double column machining center is widely used in precision machining of aerospace, automobile mold, complex curved surface and other industries.
- The main body is designed with a high rigidity double column structure, and the base casting is treated by three times of aging to ensure the long-term stability of mechanical accuracy.
- Both A and C rotating axes are driven by direct drive motor, with high speed, high response, no backlash and never wear performance.
- Five axis anti-collision function as standard, the response time is less than 10ms, which can effectively protect tools, workpieces and equipment.

Machine is equipped with a fully enclosed safety cover, which has good sealing performance and can effectively prevent the splashing of iron chips and coolant. Ergonomics design, machine operation is comfortable and pleasant.

## UM3018



## Technical Parameter

Item	Unit	UM3018	UM3225A			
Standard controller		FANUC -32i	SINUMERIK 840D			
Travel	X axis travel(work-table)	mm	3200	3200		
	Y axis travel(saddle)	mm	2000	2900		
	Z axis travel(spindle head)	mm	700	800		
	Rotation Angle	A axis		±110°	±110°	
		C axis		±360°	±360°	
	Distance from spindle nose to table	mm	200~900	160~960		
Distance from columns/work piece access height	mm	1820/1500	2550/1500			
Work table	Table size(length×width)	mm	3200×1600	3350×2200		
	Max. table load	kg	10000	15000		
	T slot size(width×distance×quantity)	mm	22×180×8	28×250×13		
Spindle	Spindle taper		HSK-A63	HSK-A63		
	Max. spindle speed	rpm	18000 Build-in)	24000 (Build-in)		
	Spindle motor specification(rate)	kW	18.5	40		
	Spindle torque(rate)	N.m	29	67		
X/Y/Z	Rapid traverse X/Y/Z	mm/min	20000/20000/12000	15000/12000/12000		
	Cutting feed rate on X/Y/Z	mm/min	1~10000	1~8000		
		Max speed	A axis	rpm	46.6	60
			C axis	rpm		60
ATC (option)	ATC type			Arm type		
	Tool capacity	pcs		32		
	Max. tool diameter	mm		75/ 130		
	Max. tool length	mm		300		
Max. tool weight	kg		8			
Accuracy	VDI/DGQ3441	Full travel positioning accuracy	mm	P0.025		
		Repeatability accuracy	mm	Ps0.020		
Air pressure	MPa		0.6~0.8			
Supply voltage & frequency			3/PE, AC380 V, 50Hz			
Power requirement	kVA	60	120			
Machine size (L/W/H)	mm	8027×5535×4950	9731×6025×5898			
Machine weight	kg	26500	47000			

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

# Vertical Series

Smart, compact ,more utility



Sky Master constantly improves and renovates the structures and designs of the Vertical Series, updating the standard configurations to



# Linear Guide Way Series

(automation solution integration)

- The VL-series vertical CNC machines is designed for effective and productive machining. Widely used for high precision plastic moulds, forging dies, auto, 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 get the 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.
- 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 large contact surface result in excellent strength.
- Z axis is driven by big power motor which can eliminate the defect of large current and mechanical balance run-out if with counter weight. It improves the response speed too.

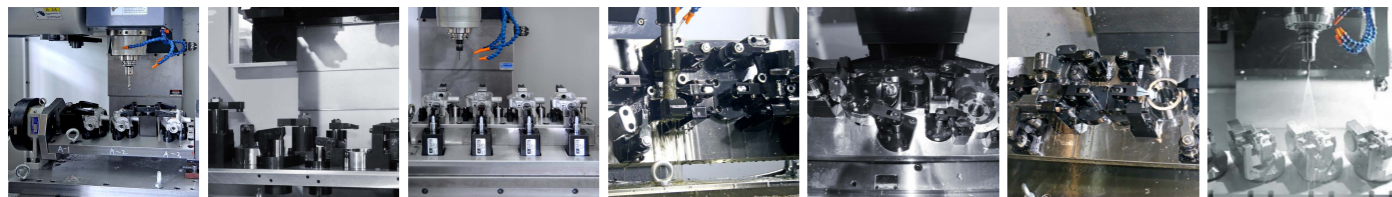
Patent column structure design provides extraordinary rigidity.



## VL1100A



The automatic production is an inexorable trend since industry 4.0 been proposed. The Skymaster VL series can provide a full solution for automation by achieving work piece lifting, clamping, locating, machining, inspecting and other functions.

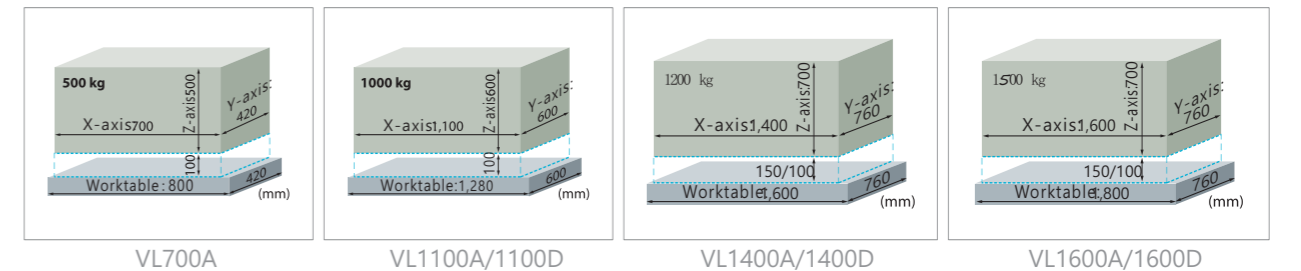


## Technical Parameter

Item	Unit	VL700A	VL1100A	VL1100D	VL1400A	VL1400D	VL1600A	VL1600D	
Standard controller		FANUC 0i MF							
Travel	X axis travel(work-table)	mm	700	1100	1400		1600		
	Y axis travel(saddle)	mm	420	600	760				
	Z axis travel(spindle head)	mm	500	600	760				
	Distance from spindle nose to table	mm	100~600	100~700	60~660	150~910	100~860	150~910	100~860
	Distance from spindle center to column cover	mm	480	630	780				
Work table	Table size(length×width)	mm	800×420	1280×600	1600×760		1800×760		
	Max. table load	kg	500	1000	1200		1500		
	T slot size(width×distance×quantity)	mm	14×80×5	18×100×5	18×125×5				
Spindle	Spindle taper		BT40		BT50	BT40	BT50	BT40	BT50
	Max. spindle speed	rpm	10000(Direct driven)		6000(Direct driven)	10000	6000	10000	6000
	Spindle motor power (continual working/Max.)	kW	11/20.4		6000	11/20.4	15/20.4	11/20.4	15/20.4
	Spindle torque	N.m	52.5/130		6000	52.5/130	143/259	52.5/130	143/259
X/Y/Z	Rapid traverse X/Y	mm/min	40000	36000	20000				
	Rapid traverse Z	mm/min	32000	30000	20000				
	Cutting feed rate on X/Y/Z	mm/min	1~10000						
ATC	ATC type		Arm type						
	Tool capacity	pcs	24				24		
	Max. tool diameter	mm	80/ 130	110/ 220	80/ 150	110/ 220	80/ 150	110/ 220	
	Max. tool length	mm	300	350	300	350	300	350	
Max. tool weight	kg	8	20	8	20	8	20		
Accuracy	VDI/DGQ3441 Full travel positioning accuracy	mm	P0.010				P0.012		
	Repeatability accuracy	mm	Ps0.008				Ps0.010		
Air pressure	MPa	0.6~0.8							
Supply voltage & frequency		3/PE AC380V 50Hz							
Power requirement	kVA	20	30		40				
Machine size (L/W/H)	mm	3900×3200×2700	4920×3510×2850			4500×4300×3350			
Machine weight	kg	4500	7250	7500	12200	12500	13200	13500	

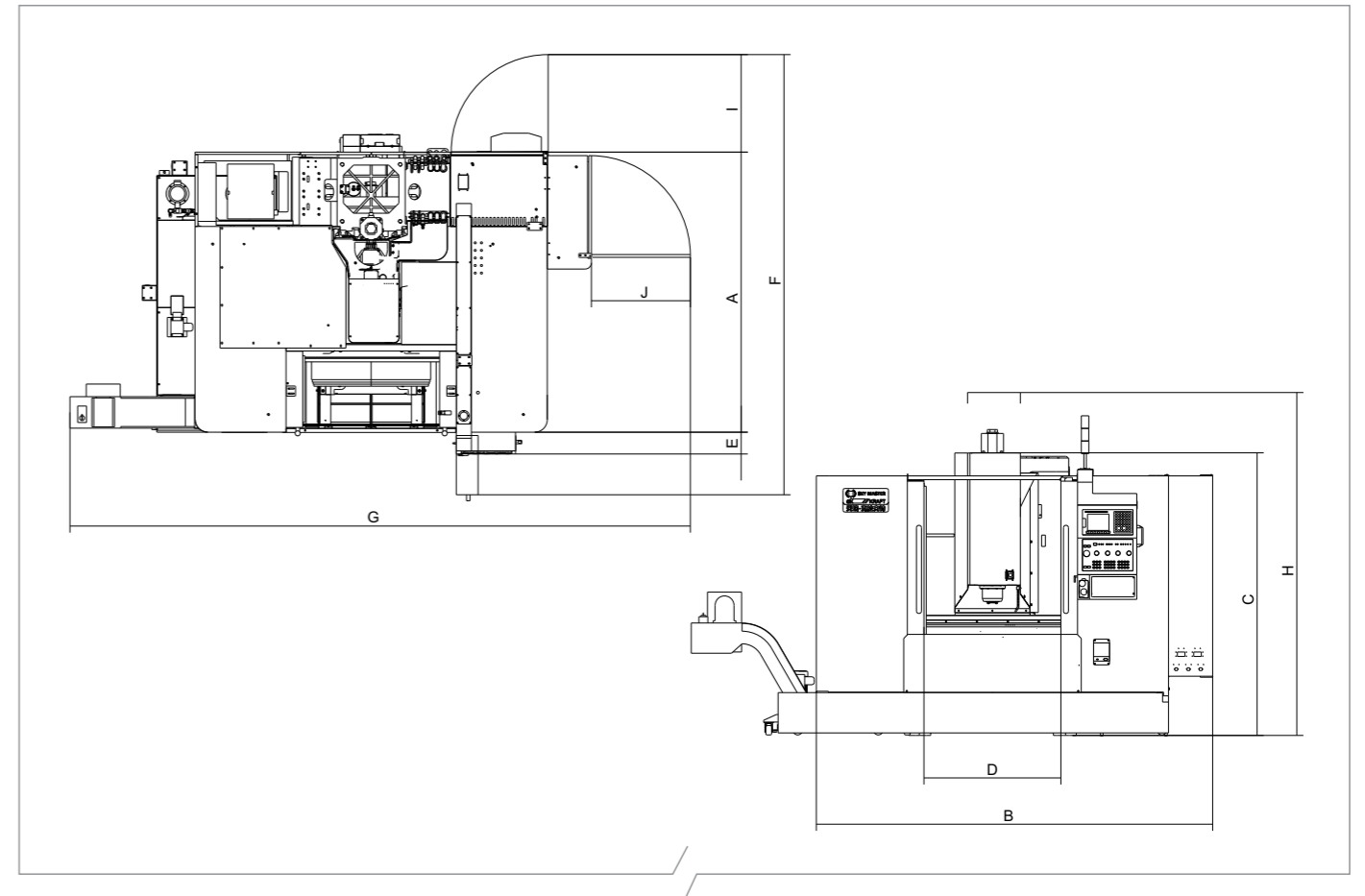
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### Moveable Area:



Standard&Option	VL700A	VL1100A	VL1100D	VL1400A	VL1400D	VL1600A	VL1600D
FANUC Oi-MF absolute type 1, 15" LCD	○	○	○	○	○	○	○
FANUC Oi-MF absolute type 1, 10.4" LCD	●	●	●	●	●	●	●
Mitsubishi M80A, 15" touch type LCD	○	○	○	○	○	○	○
SIEMENS 828D, 10.4" LCD	○	○	○	○	○	○	○
Fine quality machining package	●	●	●	●	●	●	●
Spindle 6000rpm	x	x	●	x	●	x	●
Spindle 8000rpm	○	x	○	x	○	x	○
Spindle 10000rpm	●	●	○	○	○	○	○
Column raise 200	x	○	○	○	○	○	○
Column raise 300	x	○	○	○	○	○	○
Arm type ATC 24T (pneumatic)	●	●	●	●	●	●	●
Arm type ATC 30T (pneumatic)	x	○	x	○	○	○	○
Chain type ATC 32T (pneumatic)	x	○	x	○	○	○	○
BF/GTP gear box	x	○	○	○	○	○	○
Rigid tapping	●	●	●	●	●	●	●
Full-enclosed splash guard	●	●	●	●	●	●	●
Spindle chiller	●	●	●	●	●	●	●
Spindle air sealing	●	●	●	●	●	●	●
Air blowing device	●	●	●	●	●	●	●
Working area light/3 colors warning light	●	●	●	●	●	●	●
Heat exchanger in electrical cabinet	●	●	●	●	●	●	●
Portable MPG	●	●	●	●	●	●	●
Coolant system/Lubrication system/Pneumatic system	●	●	●	●	●	●	●
Chain chip conveyor	●	●	●	●	●	●	●
Coil chip conveyor	x	x	x	●	●	●	●
Air gun/water gun with flushing function	●	●	●	●	●	●	●
Oil and water separator box	●	●	●	●	●	●	●
Automatically power off	●	●	●	●	●	●	●
Transformer	●	●	●	●	●	●	●
Tool kit	●	●	●	●	●	●	●
Adjustable level bolts and foundation blocks	●	●	●	●	●	●	●
Safety door interlock	●	●	●	●	●	●	●
Operation manual	●	●	●	●	●	●	●
Coolant surrounding spindle (with separated pump)	●	●	●	●	○	●	○
Drawer type water tank	○	○	○	○	○	○	○
Mass flow chip flushing function	○	○	○	○	○	○	○
Oil skimmer	○	○	○	○	○	○	○
Automatic door	○	○	○	○	○	○	○
Coolant through spindle center 20/30/70 bar	○	○	○	○	○	○	○
A/C for electric cabinet	○	○	○	○	○	○	○
Buzzer alarm lamp	○	○	○	○	○	○	○
Voltage stabilizer (CHNT)	○	○	○	○	○	○	○
Smart spindle temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○	○
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○	○	○	○	○	○	○
Iron box package	○	○	○	○	○	○	○
Warranty prolong 1 year	○	○	○	○	○	○	○

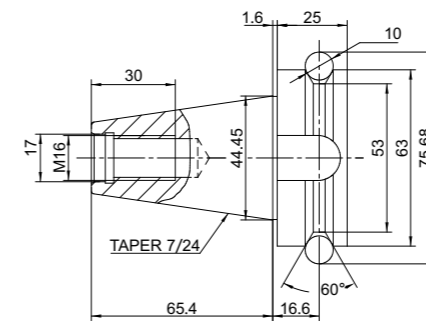
● Standard ○ Optional × Not available



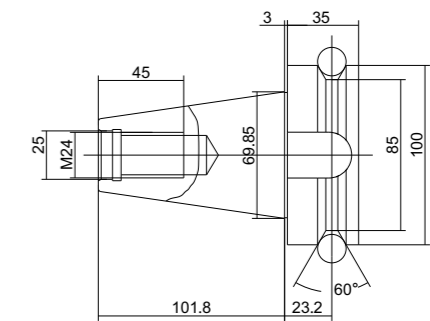
### Dimensions

	A	B	C	D	E	F	G	H	I	J
VL700A	1915	2180	2200	650	175	3200	3900	2700	750	400
VL1100A/1100D	2223	3144	2237	1100	180	3510	4920	2850	765	785
VL1400/1400D	2628	4123	2998	1570	600	4300	4500	3350	745	636
VL1600/1600D	2628	4123	2998	1570	600	4300	4500	3350	745	636

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■ BT40 Tool Shank



■ BT50 Tool Shank

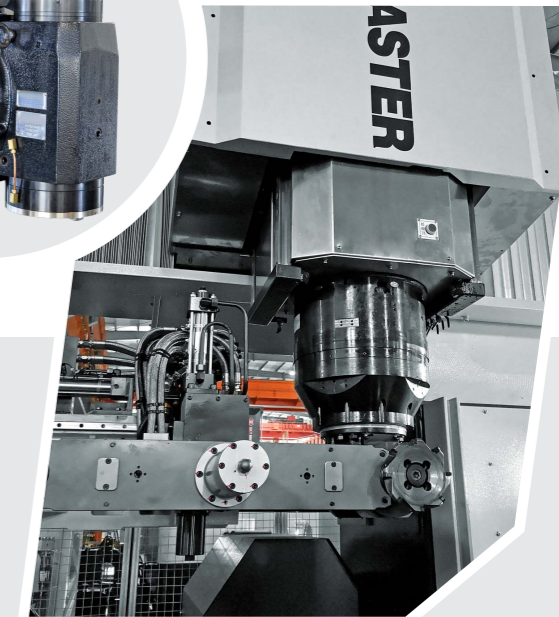
# Double Column Series convenience in processing large products



Fully automatic head exchange AAC



Fully automatic horizontal and vertical ATC



Floor standing head storage device stand aside the machine independently, precise servo movement control, can be extended, store and exchange multiple heads.

Horizontal and vertical tool change motion can be achieved in one tool magazine, easier for automatic production and labor saving.



Manual orthogonal milling head

Prolong milling head

Orthogonal prolong milling head

Manual universal head

Automatic orthogonal milling head

Automatic swiveling head

The Double Column Series of Sky Master include such features as high rigidity and modularization. The spindle and BF/ZF gearbox are designed with unique direct driven to eliminate intermediate

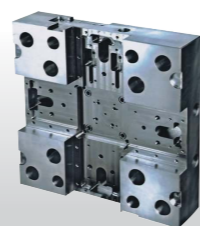


# VM double-column series

## High efficient cutting equipment specialized for precision mould base

- Designed for the latest high precision mold base and components.
- The bed adopts an unique "M" type rib structure, even stress and stable bearing.
- Integrated structure for column and crossbeam, the box cavity is set with circular through cavity and "claw" type reinforcement ribs, machine with high anti-torque and anti-bending features.
- Equipped with 15 inch large screen color display and calculator as standard to improve the operator's operation experience.
- Select Japanese brand lubrication and pneumatic system to ensure high reliability, which is installed centrally in front of the machine, it's convenient for the operator to observe and maintain.
- Double door design to provide large loading and unloading space.

# VM2000

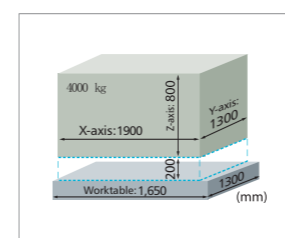


## Technical Parameter

Item	Unit	VM2000
Standard controller		FANUC Oi-MF absolute type model 1 15"LCD
Travel	X axis travel	mm 2000
	Y axis travel	mm 1300
	Z axis travel	mm 800
	Distance from spindle nose to table	mm 200~1000
	Distance between columns/work piece access height	mm 1820/1000
Work table	Table size (length×width)	mm 1650×1300
	Max. table load	kg 4000
	T slot size (width×distance×quantity)	mm 22×180×7
Spindle	Spindle taper	BT50
	Max. spindle speed	rpm 6000 (Direct driven)
	Spindle motor power (continual working/ Max.)	kW 15/36
	Spindle torque	N.m 427/1025
X/Y/Z	Rapid traverse X/Y/Z	mm/min 20000/20000/12000
	Cutting feed rate on X/Y/Z	mm/min 1~10000
ATC (Option)	ATC type	Chain type
	Tool capacity	pcs 24/32/40/60
	Max. tool diameter	mm 110/ 220
	Max. tool length	mm 350
Accuracy	Max. tool weight	kg 20
	VDI/DGQ3441	Full travel positioning accuracy
		Repeatability accuracy
	Air pressure	MPa 0.6~0.8
	Supply voltage & frequency	3/PE, AC380V, 50Hz
	Power requirement	kVA 40
	Machine size (L/W/H)	mm 4820×4800×4480
	Machine weight	kg 18000

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

### Moveable Area:



VM2000

Standard&Option	VM2000
FANUC Oi-MF absolute type 1, 15" LCD	●
Mitsubishi M800S, 15" touch type LCD	○
HEIDENHAIN TNC620, 15" LCD	○
Fine quality machining package	●
Direct driven spindle with gear box 6000rpm (BF/GTP)	●
Direct driven spindle 8000rpm (BBT50)	○
Direct driven spindle 10000rpm (BBT50)	○
15000rpm direct driven spindle FANUC Oi-MF HSKA63-15000 (controller included)	○
15000rpm direct driven Mitsubishi M800W HSKA63-15000 spindle (with controller, 19" touch type LCD)	○
Column integrated raise 200mm	○
Column separated raise 200mm	○
Column separated raise 300mm	○
Z travel enlarge to 1000mm (including column integrated raise 200mm)	○
Coolant through spindle center 20/30/70 bar	○GTP Gear box
Arm type ATC 24T (pneumatic)	○
Chain type ATC 32/40/60T (pneumatic)	○
Rigid tapping	●
Double door	●
Spindle chiller	●
Spindle air sealing	●
Air blowing device	●
Coolant surrounding spindle	○
Working area light / 3 colors warning light	●
Heat exchanger in electrical cabinet	●
Portable MPG	●
Tool coolant system/Lubrication system/Pneumatic system	●
Chain chip conveyor	●
Coil chip conveyor	●
Air gun/Water gun with flushing function	●
Automatically power off	●
Transformer	●
Tool kit	●
Adjustable level bolts and foundation block (with screws)	●
Safety door interlock	●
Tool release pedal switch	○
Operation manual	●
Smart spindle temperature compensation (Fanuc/Mitsubishi)	○
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○
Buzzer alarm lamp	○
A/C for electric cabinet	○
Oil-feed tool shank port (15kg with water pump)	○
Oil skimmer	○
Grease lubrication	○
Voltage stabilizer	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○
Full enclosed iron box package	○
Warranty prolong 1 year	○





# Double Column Series

## Medium Size Component Machining Center

- It is widely used in milling, drilling, boring and tapping of large , medium-sized moulds and parts.
- Various spindle speed choice such as 6000/8000/10000/15000rpm.
- Integrated structure for column and crossbeam, machine has high anti-torque and anti-bending features.
- Optional extra milling head is able to enlarge the machining range of machine.
- Fully automatic chain and coil chip conveyor device, chips removal is convenient and high efficient.

# VM3018A



ATC is designed with safety enclosure guard and safety switch in order to protect the operator(For example, if the door is opened during running, the machine will stop automatically)



One shaft line of spindle drive chain



Tank chain cable tubing  
All cable tubing inside the tank chain uses special made fixtures to avoid cable tangle and rubbing damage.



Vertical guideway layout for Y axis



Integrated chip removal groove in casting base



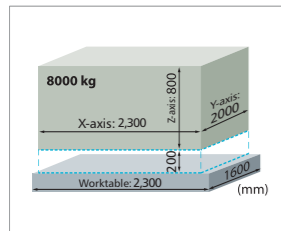
Use Germany IGUS cable and wire, Phoenix terminals, Schneider contactor, the whole machine's wire arrangement is according to European CE standard.

# Technical Parameter

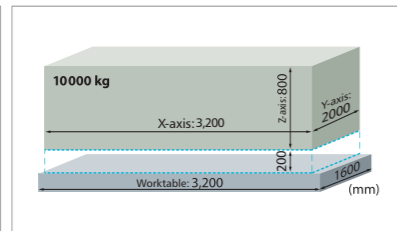
Item	Unit	VM2018A	VM2018B	VM3018A	VM3018B	VM4018A	VM4018B
Standard controller		FANUC Oi-MF absolute type model 1 15"LCD					
Travel	X axis travel	2300		3200		4100	
	Y axis travel	2000					
	Z axis travel	800					
	Distance from spindle nose to table	200~1000					
	Distance between columns/work piece access height	1820/1000					
Work table	Table size(length×width)	2300×1600		3200×1600		4100×1600	
	Max. table load	8000		10000		12000	
	T slot size(width×distance×quantity)	22×180×8					
Spindle	Spindle taper	BT50	BBT50	BT50	BBT50	BT50	BBT50
	Max. spindle speed	6000(Direct driven)	10000(Direct driven)	6000(Direct driven)	10000(Direct driven)	6000(Direct driven)	10000(Direct driven)
	Spindle motor power (continual working/ Max.)	22/54	22/57.6	22/54	22/57.6	22/54	22/57.6
	Spindle torque	689/1692	140/344	689/1692	140/344	689/1692	140/344
X/Y/Z	Rapid traverse X/Y/Z	20000/20000/12000				15000/20000/12000	
	Cutting feed rate on X/Y/Z	1~10000					
ATC (Option)	ATC type	Chain type					
	Tool capacity	24/32/40/60					
	Max. tool diameter	110 / 225					
	Max. tool length	350					
	Max. tool weight	20					
Accuracy	Full travel positioning accuracy VDI/DGQ3441	P0.020		P0.025		P0.030	
	Repeatability accuracy	Ps0.015		Ps0.020		Ps0.025	
Air pressure	MPa	0.6~0.8					
Supply voltage & frequency		3/PE, AC380V, 50Hz					
Power requirement	kVA	60					
Machine size (L/W/H)	mm	7027×5535×4450		8927×5535×4450		10327×5535×4450	
Machine weight	kg	23000		26000		29000	

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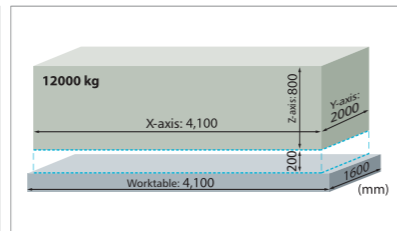
## Moveable Area:



VM2018A/B



VM3018A/B



VM4018A/B

Standard&Option	VM2018A	VM3018A	VM4018A	VM2018B	VM3018B	VM4018B
FANUC Oi-MF absolute type 1, 15" LCD	●	●	●	●	●	●
Mitsubishi M800S, 15" touch type LCD	○	○	○	○	○	○
HEIDENHAIN TNC620, 15" LCD	○	○	○	○	○	○
Fine quality machining package	●	●	●	●	●	●
Direct driven spindle with gear box 6000rpm (BF/GTP)	●	●	●	×	×	×
Direct driven spindle 8000rpm (BBT50)	×	×	×	○	○	○
Direct driven spindle 10000rpm (BBT50)	×	×	×	●	●	●
15000rpm direct driven spindle FANUC Oi-MF HSKA63-15000 (controller included)	×	×	×	○	○	○
15000rpm direct driven Mitsubishi M800V HSKA63-15000 spindle (with controller, 19" touch type LCD)	×	×	×	○	○	○
Column integrated raise 200mm	○	○	○	○	○	○
Column separated raise 200mm	○	○	○	○	○	○
Column separated raise 300mm	○	○	○	○	○	○
Z travel enlarge to 1000mm (including column integrated raise 200mm)	○	○	○	○	○	○
Coolant through spindle center 20/30/70 bar	○GTP Gear box	○GTP Gear box	○GTP Gear box	○	○	○
Arm type ATC 24T (pneumatic)	○	○	○	○	○	○
Chain type ATC 32/40/60T (pneumatic)	○	○	○	○	○	○
Rigid tapping	●	●	●	●	●	●
Full splash guard	●	●	●	○	○	○
Multi laper door with full protective cover	○	○	○	●	●	●
Spindle chiller	●	●	●	●	●	●
Spindle air sealing	●	●	●	●	●	●
Air blowing device	●	●	●	●	●	●
Coolant surrounding spindle	○	○	○	○	○	○
Working area light / 3 colors warning light	●	●	●	●	●	●
Heat exchanger in electrical cabinet	●	●	●	●	●	●
Portable MPG	●	●	●	●	●	●
Tool coolant system/Lubrication system/Pneumatic system	●	●	●	●	●	●
Chain chip conveyor	●	●	●	●	●	●
Coil chip conveyor	●	●	●	●	●	●
Air gun/Water gun with flushing function	●	●	●	●	●	●
Automatically power off	●	●	●	●	●	●
Transformer	●	●	●	●	●	●
Tool kit	●	●	●	●	●	●
Adjustable level bolts and foundation block (with screws)	●	●	●	●	●	●
Safety door interlock	●	●	●	●	●	●
Tool release pedal switch	●	●	●	●	●	●
Operation manual	●	●	●	●	●	●
Smart spindle temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○
Buzzer alarm lamp	○	○	○	○	○	○
A/C for electric cabinet	○	○	○	○	○	○
Oil-feed tool shank port (15kg with water pump)	○	○	○	○	○	○
Oil skimmer	○	○	○	○	○	○
Grease lubrication	○	○	○	○	○	○
Voltage stabilizer	○	○	○	○	○	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○	○	○	○	○	○
Full enclosed iron box package	○	○	○	○	○	○
Warranty prolong 1 year	○	○	○	○	○	○

● Standard ○ Optional × Not available

# VM25/30

## Double Column Series Large size double column series

- It is widely used in rough and fine machining of various large plates, plates, shells, boxes, moulds, etc.
- Optional automatic universal milling head is able to realize five-face machining.
- CAE analysis and design of main basic parts with high rigidity and large cross-section to ensure strong cutting and heavy load machining.

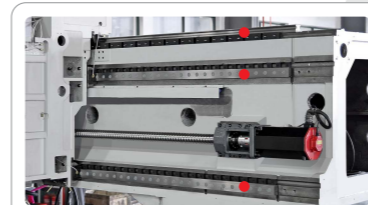
## VM5225A



Available option:  
Extended Z axis  
(1300/1500mm)  
travel with 4  
linear guide ways  
and square ram.



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



Y axis use a special ladder design with three linear guide ways, combine with world well known brand roller type linear guide way, increases machine's rigidity and



Both X and Y axis equipped with high quality linear guide way, the machine bed use four linear guide ways to provide great support for the worktable, it also increases worktable's loading ability



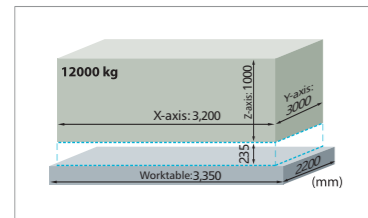
Separated strong and weak electric can eliminate the electromagnetic field interference generated by working electrical components; lower the electrical cabinet's temperature; increases electrical component's life span and system stability.

# Technical Parameter

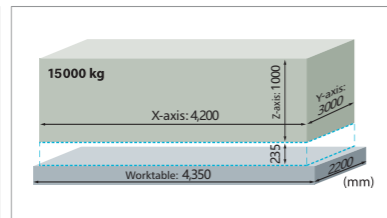
Item	Unit	VM3225A	VM3225B	VM4225A	VM4225B	VM5225A	VM5225B	VM3230A	VM4230A	VM5230A		
Standard controller		FANUC Oi-MF absolute type model 1 15"LCD										
Travel	X axis travel(work-table)	mm	3200		4200		5100	3200	4200	5100		
	Y axis travel(saddle)	mm	3000			3400						
	Z axis travel(spindle head)	mm	1000									
	Distance from spindle nose to table	mm	235~1235									
	Distance between columns/work piece access height	mm	2550/1235			3050/1235						
Work table	Table size(length×width)	mm	3350×2200		4350×2200		5350×2200		3350×2500	4350×2500	5350×2500	
	Max. table load	kg	15000		18000		21000		15000	18000	21000	
	T slot size(width×distance×quantity)	mm	28×250×13		28×250×17		28×250×21		28×250×13	28×250×17	28×250×21	
Spindle	Spindle taper		BT50	BBT50	BT50	BBT50	BT50	BBT50	BT50			
	Max. spindle speed	rpm	6000(Direct driven)10000(Direct driven)			6000(Direct driven)10000(Direct driven)			6000(Direct driven)			
	Spindle motor power (continual working/ Max.)	kW	22/54	22/57.6	22/54	22/57.6	22/54	22/57.6	22/54			
	Spindle torque	N.m	689/1692	140/344	689/1692	140/344	689/1692	140/344	689/1692			
X/Y/Z	Rapid traverse X/Y/Z	mm/min	15000/18000/12000		12000/18000/12000			15000/15000/12000	12000/15000/12000			
	Cutting feed rate on X/Y/Z	mm/min	1~8000									
ATC (Option)	ATC type		Arm type									
	Tool capacity	pcs	32/40/60									
	Max. tool diameter	mm	110/ 225									
	Max. tool length	mm	350									
Accuracy	VDI/DGQ3441 Full travel positioning accuracy	mm	P0.025		P0.030		P0.040		P0.025	P0.030	P0.040	
	Repeatability accuracy	mm	Ps0.020		Ps0.025		Ps0.030		P0.020	P0.025	P0.030	
Air pressure	MPa	0.6~0.8										
Supply voltage & frequency		3/PE, AC380V, 50Hz										
Power requirement	kVA	60										
Machine size (L/W/H)	mm	9120×6488×4833		11120×6488×4833		13120×6488×4833		9120×6738×4833	11120×6738×4833	13120×6738×4833		
Machine weight	kg	42000		47000		52000		45000	50000	55000		

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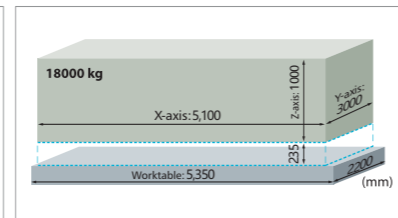
Moveable Area:



VM3225A/3225B



VM4225A/4225B



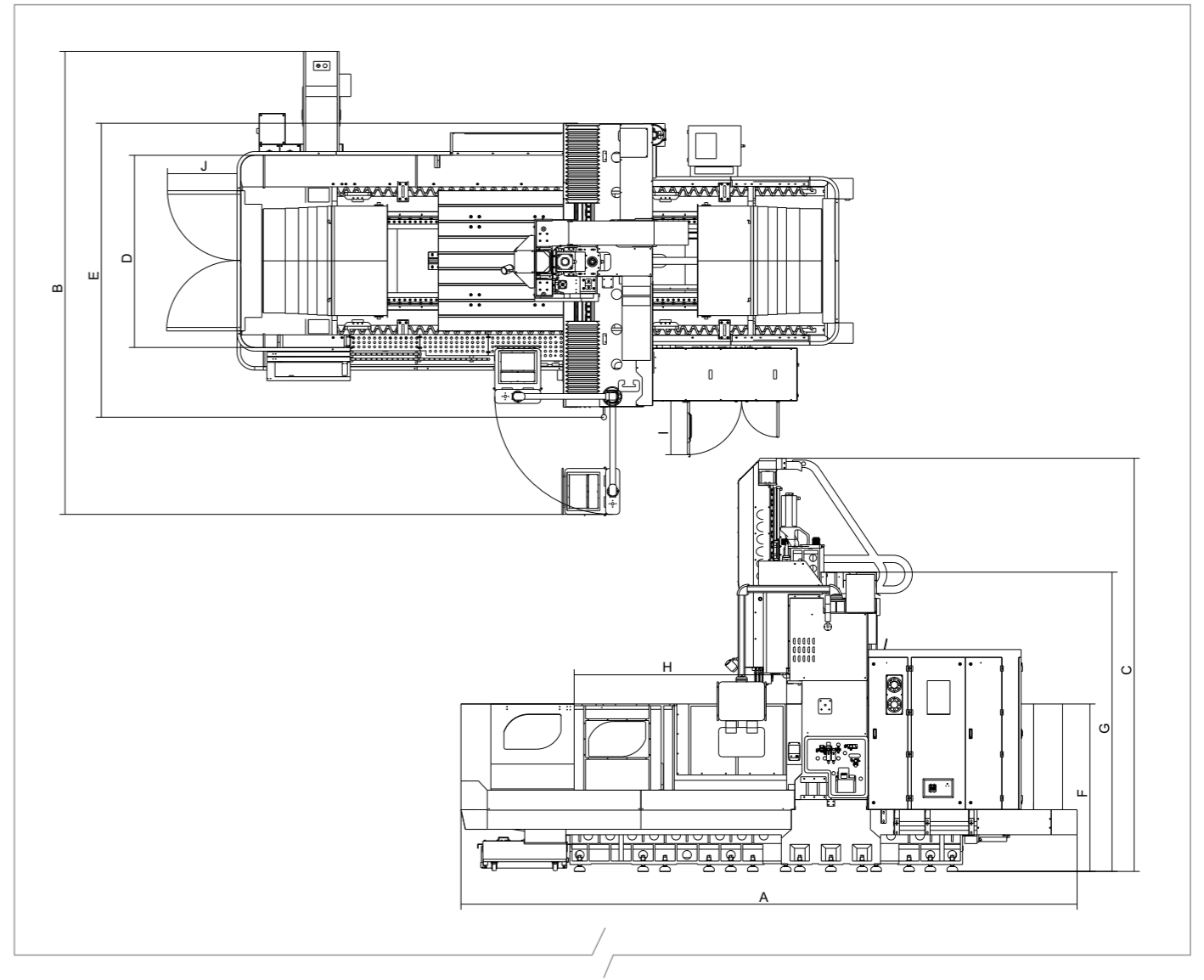
VM5225A/5225B

Standard&Option	VM3225A	VM3225B	VM4225A	VM4225B	VM5225A	VM5225B
FANUC Oi-MF absolute type 1, 15" LCD	●	●	●	●	●	●
Mitsubishi M800S, 15" touch type LCD	○	○	○	○	○	○
HEIDENHAIN TNC620, 15" LCD	○	○	○	○	○	○
Fine quality machining package	●	●	●	●	●	●
Direct driven spindle with gear box 6000rpm (BF/GTP)	●	×	●	×	●	×
Direct driven spindle 8000rpm (BBT50)	×	○	×	○	×	○
Direct driven spindle 10000rpm (BBT50)	×	●	×	●	×	●
15000rpm direct driven spindle FANUC Oi-MF HSKA63-15000 (controller included)	×	○	×	○	×	○
15000rpm direct driven Mitsubishi M800W HSKA63-15000 spindle (with controller, 19" touch type LCD)	×	○	×	○	×	○
Column integrated raise 200mm	○	○	○	○	○	○
Column separated raise 200mm	○	○	○	○	○	○
Column separated raise 300mm	○	○	○	○	○	○
Z travel enlarge to 1300mm	○	○	○	○	○	○
Z travel enlarge to 1500mm (including column integrated raise 200mm)	○	○	○	○	○	○
Coolant through spindle center 20/30/70 bar	○GTP Gear box	○	○GTP Gear box	○	○GTP Gear box	○
Chain type ATC 32/40/60T (pneumatic)	○	○	○	○	○	○
Rigid tapping	●	●	●	●	●	●
Full splash guard	●	●	●	●	●	●
Full enclosed guard with roof with multi layer doors	○	○	○	○	○	○
Spindle chiller	●	●	●	●	●	●
Spindle air sealing	●	●	●	●	●	●
Air blowing device	●	●	●	●	●	●
Coolant surrounding spindle	○	○	○	○	○	○
Working area light / 3 colors warning light	●	●	●	●	●	●
Heat exchanger in electrical cabinet	●	●	●	●	●	●
Portable MPG	●	●	●	●	●	●
Tool coolant system/Lubrication system/Pneumatic system	●	●	●	●	●	●
Chain chip conveyor	●	●	●	●	●	●
Coil chip conveyor	●	●	●	●	●	●
Air gun/Water gun with flushing function	●	●	●	●	●	●
Automatically power off	●	●	●	●	●	●
Transformer	●	●	●	●	●	●
Tool kit	●	●	●	●	●	●
Adjustable level bolts and foundation block (with screws)	●	●	●	●	●	●
Safety door interlock	●	●	●	●	●	●
Tool release pedal switch	●	●	●	●	●	●
Operation manual	●	●	●	●	●	●
Smart spindle temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	○	○	○	○	○
Buzzer alarm lamp	○	○	○	○	○	○
A/C for electric cabinet	○	○	○	○	○	○
Oil-feed tool shank port (15kg with water pump)	○	○	○	○	○	○
Oil skimmer	○	○	○	○	○	○
Grease lubrication	○	○	○	○	○	○
Voltage stabilizer	○	○	○	○	○	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○	○	○	○	○	○
Full enclosed iron box package	○	○	○	○	○	○
Warranty prolong 1 year	○	○	○	○	○	○

● Standard ○ Optional × Not available

Standard&Option	VM3230A	VM4230A	VM5230A
FANUC Oi-MF absolute type 1, 15" LCD	●	●	●
Mitsubishi M800S, 15" touch type LCD	○	○	○
HEIDENHAIN TNC620, 15" LCD	○	○	○
Fine quality machining package	●	●	●
Direct driven spindle with gear box 6000rpm (BF/GTP)	●	●	●
Direct driven spindle 8000rpm (BBT50)	○	○	○
Direct driven spindle 10000rpm (BBT50)	○	○	○
15000rpm direct driven spindle FANUC Oi-MF HSKA63-15000 (controller included)	○	○	○
15000rpm direct driven Mitsubishi M800W HSKA63-15000 spindle (with controller, 19" touch type LCD)	○	○	○
Column integrated raise 200mm	○	○	○
Column separated raise 200mm	○	○	○
Column separated raise 300mm	○	○	○
Z travel enlarge to 1300mm	○	○	○
Z travel enlarge to 1500mm (including column integrated raise 200mm)	○	○	○
Coolant through spindle center 20/30/70 bar	○ GTP Gear box	○ GTP Gear box	○ GTP Gear box
Chain type ATC 32/40/60T (pneumatic)	○	○	○
Rigid tapping	●	●	●
Full splash guard	●	●	●
Full enclosed guard with roof with multi layer doors	○	○	○
Spindle chiller	●	●	●
Spindle air sealing	●	●	●
Air blowing device	●	●	●
Coolant surrounding spindle	○	○	○
Working area light / 3 colors warning light	●	●	●
Heat exchanger in electrical cabinet	●	●	●
Portable MPG	●	●	●
Tool coolant system/Lubrication system/Pneumatic system	●	●	●
Chain chip conveyor	●	●	●
Coil chip conveyor	●	●	●
Air gun/Water gun with flushing function	●	●	●
Automatically power off	●	●	●
Transformer	●	●	●
Tool kit	●	●	●
Adjustable level bolts and foundation block (with screws)	●	●	●
Safety door interlock	●	●	●
Tool release pedal switch	●	●	●
Operation manual	●	●	●
Smart spindle temperature compensation (Fanuc/Mitsubishi)	●	●	●
Smart 3 axis temperature compensation (Fanuc/Mitsubishi)	○	○	○
Buzzer alarm lamp	○	○	○
A/C for electric cabinet	○	○	○
Oil-feed tool shank port (15kg with water pump)	○	○	○
Oil skimmer	○	○	○
Grease lubrication	○	○	○
Voltage stabilizer	○	○	○
Absolute linear scale (FAGOR/HEIDENHAIN)	○	○	○
Full enclosed iron box package	○	○	○
Warranty prolong 1 year	○	○	○

● Standard ○ Optional × Not available



### Dimensions

	A	B	C	D	E	F	G	H	I	J
VM2000	4632	4802	4750	2740	3438	2300	3213	1350	740	0
VM2018A/2018B	7027	5535	4450	2190	3400	1920	3750	2400	620	800
VM3018A/3018B	8927	5535	4450	2190	3400	1920	3750	3000	620	800
VM4018A/4018B	10327	5535	4450	2190	3400	1920	3750	3000	620	800
VM3225A/3225B	9120	6488	4833	3284	4514	2137	4060	3000	740	1200
VM4225A/4225B	11120	6488	4833	3284	4514	2137	4060	4000	740	1200
VM5225A/5225B	13120	6488	4833	3284	4514	2137	4060	4000	740	1200
VM3230A	9120	6738	4833	3784	4514	2137	4060	3000	740	1400
VM4230A	11120	6738	4833	3784	4514	2137	4060	4000	740	1400
VM5230A	13120	6738	4833	3784	4514	2137	4060	4000	740	1400

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# 03 Workshop & Equipment

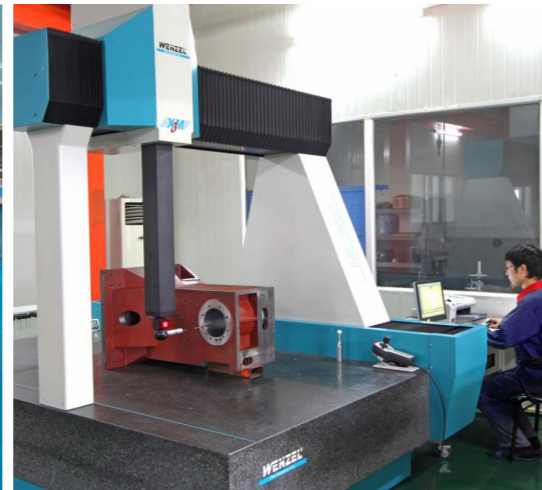
Decades experience and Germany technology keep Sky Master always supplying reliable products.



# 04 R&D,Manufacture

- Sky Master work steadily in a spirit of responsibility for clients.
- Every machine is under strict quality control and inspection in order to keep the accuracy.
- We understand quality is essential to a company and more understand that product is important to the client.

Small steps make large distance



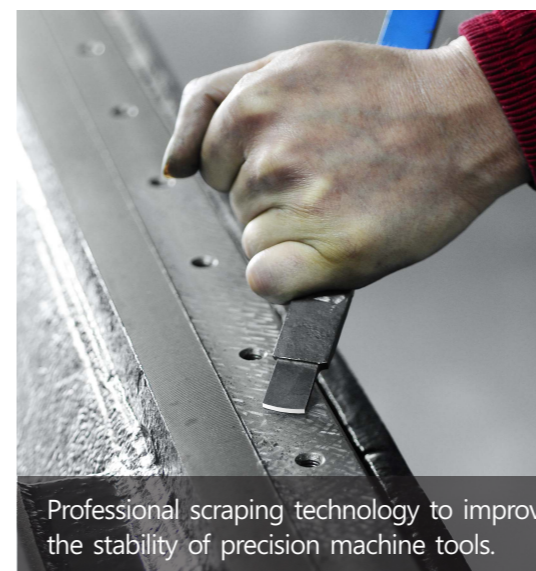
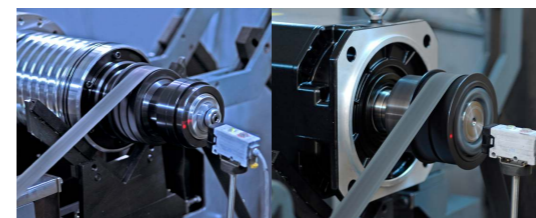
Quality! Control every detail always



innovate  
Development



Different types of technical experience exchanges with various industries and departments from China and abroad accumulate valuable wealth for our development.



Professional scraping technology to improve the stability of precision machine tools.



Mr. neckermann, a famous shoveling and scraping master in Germany, come to give us guidance.

# 05 Service

Use our wisdom to supply you the best solution

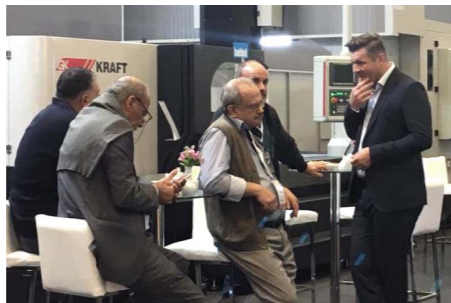


# 05.1 Trial Processing

Supply the trial processing for clients



Union



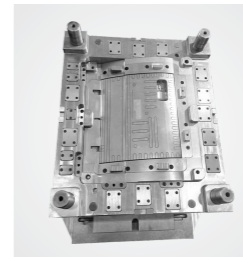
Efficiency



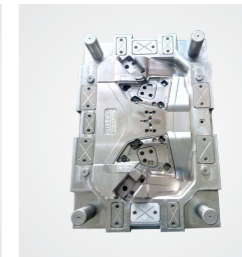
Round testing sample



Aluminum die casting mould



Auto interior decoration mould



Auto lamp mould



Auto lamp mould



# 06 Trust & Support

Gain the customers reliance and support by manufacturing with heart always



Your suggestion is our development direction; your trust is our growth power.

