

ATLANT INDUSTRIES

- HIGH-SPEED CNC DRILLING CENTER
- HARD AND BRITTLE MATERIAL PROCESSING MACHINES
- HIGH-SPEED VERTICAL MACHINING CENTER
- HORIZONTAL MACHINING CENTER
- VERTICAL FIVE-AXIS DOOR TYPE MACHINING CENTER
- GANTRY MACHINING CENTER
- FIVE-AXIS MACHINING CENTER
- MILLING AND BORING MACHINES OF JOINERY TYPE
- POLISHING MACHINES



ATLANT INDUSTRIES

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I

High-speed CNC drilling center



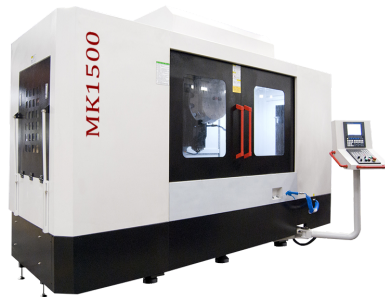
MK1000-A



MK1000



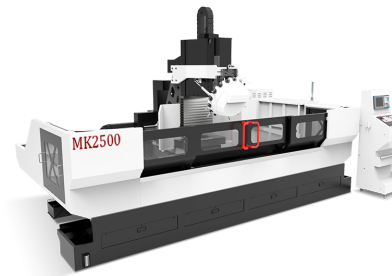
MK1200



MK1500



MK450



MK2500



MK2000

I

High-speed CNC drilling center

Specifications	Unit	MK1000-A	MK1000	MK1200	MK1500	MK450	MK2500	MK2000
Workbench size	mm	650×400	1100×500	1300×800	1600×500	600×840	2600×400	2100×700
T-slot (number × slot width × gap)	mm	3×100×14	4 ×100×14	6×125×18	4×100×14	X axis-3-T14H8	3×100×14	7×100×18
Maximum load	kg	250	350	400	300	120/200	2000	1000
X/Y/Z travel length	mm	1000/500/350	1000/500/350	1200/800/420	1500/400/350	450/320/320	2500/670/500	2000/950/650
Distance from the main spindle approach end to the work surface of workbench	mm	150-500	100-450	100-520	100-450	200-520	350-850	350-1000
Distance from the center of the spindle to the column	mm	450	550	850	450	465	520	800
Rotating speed of the main spindle	rpm	20000	21000	12000	30000	20000	12000	10000/20000
Spindle conical degree		BT30	BT30	BT30	BT30	BT30	BT40	BT40 / BT30

Specifications	Unit	MK1000-A	MK1000	MK1200	MK1500	MK450	MK2500	MK2000
X/Y/Z-axis rapid traverse speed	mm/min	60000	48000	36000	36000	48000	60000/48000/48000	24000/24000/32000
Cutting speed	mm/min	1-10000	1-10000	1-10000	1-10000	1-10000	1-10000	1-10000
Setting accuracy	mm	X/Y/Z: 0.01	0.012	0.012	0.012	0.008	0.015/0.01/0.01	0.014/0.012/0.012
Repeat setting accuracy	mm	X\Y\Z: 0.006	0.008	0.008	0.008	0.005	0.008/0.005/0.005	0.008
Capacity of tool magazine	t	21	16	20	20	20	24	24 / 16
Maximum cutting tool diameter / length / weight		φ60/φ80 / 200mm	φ80/200 mm/ 3 kg	φ80/200 mm	80/250/30	80/250/30	80/350/8	φ80/300/8 φ100/200/3
Tool exchange time (T-T)	s	2	1.9	1.6	5	2	2	2.1
System		FANUC 0i-MF	FANUC 0i MF/Mitsubishi M80	FANUC 0i-MF	FANUC 0i-MF	FANUC 0i MF	FANUC 0i-MF	FANUC 0i-MF
Machine weight	kg	2800	2800	6200	5000	4000	8500	8850
Machine sizes (length × width × height)	mm	1840×2290×2645	1840×2290×2645	2900×3000×2640	4300×2700×2640	1600×2800×2300	5060×2850×3160	5185×3262×2984



II

Hard and brittle material processing machines



MK-400A

MK-4040 / MK-4040-DS / MK-4040-C

MK-500UA

MK-1050 / MK-1050A

II

Hard and brittle material processing machines

Specifications	Unit	MK-400A	MK-4040	MK-4040-DS	MK-4040-C
			Precision engraving and milling machining center		
Workbench area	mm	500*440	570×50	2-400×400	570×500
T-slot (number × slot width × gap)	mm	8×80×5	8×80×5		
Workbench maximum load	kg	150	100		
Travel length X/Y/Z	mm	400/400/200	400/400/160	400/400/160 - 400/400/160	400/400/160
Distance from the main spindle approach end to the tabletop	mm	80-280	60-220		
Distance from the center of the spindle to the column	mm	340	110		
Rotating speed of the main spindle	rpm	32000 (built-in)	40000 (built-in)	40000 (built-in)	36000 (built-in)
Spindle conical degree		HSK E40	ISO-20	ISO-20	HSK E40

Specifications	Unit	MK-400A	MK-4040	MK-4040-DS	DG4040C
X/Y/Z-axis rapid traverse speed	mm/min	30000	15000		
Cutting speed	mm/min	1-10000	1-10000		
Setting accuracy (total travel length)	mm	0.006	X/Y: 0.008/400 Z: 0.006/160		
Repeat setting accuracy (total travel length)	mm	0.006	X/Y: 0.006/400 Z: 0.005/160		
Capacity of tool magazine	T	12	9	T1:9 T2:9	8
Tool-change time	S	7.5	2	2	2
Spindle motor power	kw		3.7	3.7	11
Machine weight	kg	3100	1700	3000	1900
Exterior size (length× width ×height)	mm	2042×1709×2323	1530×1650×1710	1550×2210×1900	1530X1650X1800



II

Hard and brittle material processing machines

Specifications	Unit	MK-1050	MK-1050A	MK-500UA
		Multi-head engraving and milling machine		Ultrasonic Machining Center
Workbench area	mm	1100×500	1400×500	650×400
T-slot (size x distance x number of slots)	mm	14 × 100 × 4		14×100×3
Workbench maximum load	kg	350		250
X/Y/Z -axis travel length	mm	300 / 500 /160		510 / 400 /350
Distance from the main spindle approach end to the tabletop	mm	100~260	80~240	100~450
Distance from the center of the spindle to the column	mm	320	300	450
Rotating speed of the main spindle	rmp	12000 (direct drive)	30000	20000 (direct drive)
Spindle conical degree		BT30	HSK E40	BT30
Cutting speed	mm/min	1-10000		1-10000
X/Y/Z Rapid traverse speed	mm/min	X\Y\Z:15000	X\Y\Z:24000	60000/60000/48000

Specifications	Unit	MK-1050	MK-1050A	MK-500UA
Setting accuracy	mm	X/Y/Z:0.012	X/Y/Z:0.010	X/Y/Z:0.01
Repeat setting accuracy	mm	X/Y/Z:0.008	X/Y/Z:0.006	X/Y/Z:0.006
Linear guide system	mm	X:30/2/4 bearing ball Y:35/2/4 bearing ball Z:25/2/4 bearing ball(four-head)	X:30/2/6 bearing ball Y:35/2/6 bearing ball Z:25/2/4 bearing ball(four-head)	X/Y: bearing ball Z: roller / X/Y/Z:25/2/4
Net weight of the machine	kg	4250	7000	2800
Machine size (length × width ×height)	mm	2635*2340*2655	2400*2340*2600	1840×2290×2645
Spindle servo motor		SVM-90L-15-12		aiI2/20000
Rated power	kw	3.7		2.2/3.7
Rated torque	n•m	23.3		7
Three-axis servo motor		X:130ST-M1461530LMDD / Y:180ST-M23020HMBB / Z:150ST-M191115HBB-Z		X:aiS 8/4000、 Y:aiS 8/4000 / Z:aiS 12/4000
Rated power	kw	X: 2.3, Y: 4.7, Z: 3.0	X: 2.3, Y: 4.7, Z: 3.0	X: 2.5、 Y: 2.5、 Z: 2.7
Rated torque	N•M	X: 14.6, Y: 23, Z: 19.1	X: 14.6, Y: 23, Z: 19.1	X: 8、 Y: 8、 Z: 12
Number of tools				16
Tool-change time	sec			2.1
Maximum cutting tool diameter				φ60/φ80 / 200mm / 3kg



MKV-850 / MKV-850B



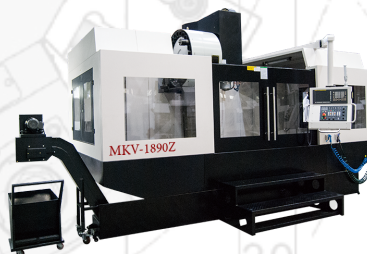
MKV-1160



MKV-1280



MKV-1370



MKV-1890Z / MKV-1580Z

III

High-SPEED vertical machining center

Specifications	Unit	MKV-850	MKV-850B	MKV-1160	MKV-1280 / MKV-1280A	MKV-1370	MKV- 1370	MKV- 1580Z	MKV- 1890Z
Workbench size	mm	1000×500	1350×500	1350×600	1300×800	1400×700		1600×800	1900×900
T-slot (number of items - number of slots x distance)	mm	4-14×100	4-14×100	5-18×100	6-18×125	7-18×100		7-22×110	5-22×165
Maximum load	kg	700	600	700	400	800		1500	1600
X/Y/Z axis travel length	mm	800 / 500 / 500	800/500/650	1100/600/650	1200/800/420 1200/800/650	1300/700/650		1500/800/7 00	1800/900/7 20
Distance from the main spindle approach end to the work surface of workbench	mm	90-590	150-800	120-770	100-520 / 120-770	120-770		700	720
Distance from the center of the spindle to the column	mm	550	550	700	850	750		175-875	115-835
Rotating speed of the main spindle	rpm	10000	8000/10000	8000/10000	8000	8000/10000	6000		6000
Spindle conical degree		BT40	BT40	BT40	BT40	BT40	BT50		BT50

Specifications	Unit	MKV-850	MKV-850B	MKV-1160	MKV-1280 / MKV-1280A	MK-1370	MK-1370	MKV-1580Z	MKV-1890Z
X/Y/Z-axis rapid traverse speed	mm/min	48000	48000/48000/32000	32000	36000/36000/32000	32000		20000/20000/12000	
Cutting speed	mm/min	1-10000	1-10000	1-10000	1-10000	1-10000		1-10000	
Positioning accuracy (JIS)	mm	±0.005/300	±0.005/300	±0.005/300	±0.005/300	±0.005/300		±0.005/300	
Repeat positioning accuracy (JIS)	mm	±0.003/300	±0.003/300	±0.003/300	±0.003/300	±0.003/300		±0.003/300	
Capacity of tool magazine	T	24	24	24	24	24		24	
Maximum cutting tool diameter/length/weight		φ80/300/8	φ80/300/8	φ80/300/8	80/300/8	φ80/300/8	φ112/350/15	112/350/18	
Tool exchange time (T-T)	s	1.55	2.5	2.5	2.5	2.5		2.5	
System version		FANUC 0i-MF	FANUC 0i-MF	FANUC 0i-MF	FANUC 0i-MF	FANUC 0i MF		FANUC 0i-MF	
Spindle motor power	kw	7.5	11	11	11	11	15	15	
Machine weight	kg	4500	6200	8300	7500			12000	16000
Exterior size (length×width×height)	mm	2300×2810×2855	2400×2838×3107	3050×2780×3280					



MKH-500/
MKH-500-APC

MKH-630/
MKH-630-APC

MKH-800/
MKH-800-APC

MKH-1000/
MKH-1000-APC

IV

Horizontal machining centers

Specifications	MKH-500/ MKH-500-APC	MKH-630/ MKH-630-APC	MKH-800 /MKH-800-APC	MKH-1000/ MKH-1000-APC
Workbench size (1- standard / 2- optional)	500×600 mm	630×630 mm	800×800 mm	500×630 mm
Workbench graduate	1°X360 (optional configuration 0.001°)			
Maximum workbench load	600 kg	950 kg	1500 kg	2000 kg
Workbench surface type	24×M16 threaded hole			
Maximum workpiece rotation diameter	φ 750 mm	φ 820 mm	φ 1600 mm	φ 1600 mm
X/Y/Z Travel length	740 / 680 / 650 mm	1050 / 750 / 900 mm	1300 / 1000 / 1000 mm	1600 / 1000 / 1000 mm
Spindle bearing inner diameter	100 mm	100 mm	100 mm	100 mm
Maximum speed (BT50)	6000 rpm	6000 rpm	6000 rpm	6000 rpm
Distance from the center of the spindle to the work surface of the workbench	120 ~ 800 mm (0 ~ 680 mm)	120~870 mm (0~750 mm)	120~1120 mm (0~1000 mm)	
Distance from the end face of the spindle to the center of the workbench	130~780 mm	130~1030 mm	200~1200 mm	130~780 mm
Rail protection type	X-direction, Z-direction stainless steel rail guard shield; Y-direction steel armor protective curtain			
Guide rail, guide screw, guide screw Special bearing lubrication method	X-direction, Y-direction, Z-direction positive displacement oil lubrication			

Specifications	MKH-500/ MKH-500-APC	MKH-630/ MKH-630-APC	MKH-800 /MKH-800-APC	MKH-1000/ MKH-1000-APC
Rail specifications (Taiwan)	X/Y-direction heavy-duty 45 roller linear guides ; Z-direction heavy-duty 55 roller linear guide		3-axis heavy-duty 55 roller linear guides	
X-direction, Y-direction (diameter × pitch)	40×12	40×12	50×12	50×12
Z-direction (diameter × pitch)	50×12	50×12	50×12	50×12
Rapid traverse speed (axis X, axis Y, axis Z)	24 m/min	24 m/min	24 m/min	24 m/min
Rapid traverse speed (axis B)	10 rmp	10 rmp	10 rmp	10 rmp
Setting accuracy (national standard) X, Y, Z	0.01 (total distance)	0.01 (total distance)	0.012 (total distance)	0.01 (total distance)
Axis B	10"	10"	10"	10"
Repeat setting accuracy (national standard) Axis X, Y, Z	0.006 (total distance)	0.006 (total distance)	0.008 (total distance)	0.006 (total distance)
Axis B	5"	5"	5"	5"
System (FANUC-0I-MF) X-direction servo motor	22N.m	22N.m	30N.m	30N.m
Y-direction servo motor (mechanical brake)	30N.m	30N.m	30N.m	30N.m
Z-direction servo motor	22N.m	22N.m	30N.m	30N.m
B-axis servo motor	8 H·m	8 H·m	22N.m	22N.m
Spindle servo motor	15/18.5KW	15/18.5KW	15/18.5KW	15/18.5KW
APC servo motor (optional)	8N.m	8N.m	22N.m	22N.m
Length × width × height (mm)	3260×2875×2485	3510×3190×2485	3260×2875×2485	5770×5570×4500
Net weight of the whole machine	12000 kg	12500 kg	12000 kg	19000 kg



MKFA-1000

MKFA-550

V

Vertical five-axis door type machining centers

Specifications	Unit	MKFA-1000	MKFA-550
Workbench area	mm	1100×600	600×440
T-slot (size x distance x number of slots)	mm	18 × 120 × 5	14 × 100 × 4
Workbench maximum load	kg	500	200
X/Y/Z travel length	mm	1000/600/500	550/400/350
Distance from the main spindle approach end to the tabletop	mm	150-650	125-475
Distance from the center of the spindle to the column	mm		243
Rotating speed of the main spindle	rmp	24000 (built-in)	40000 (built-in)
Spindle conical degree		HSK E50-150	HSK E32-100

Specifications	Unit	MKFA-1000	MKFA-550
X/Y/Z-axis rapid traverse speed	rmp	36000/36000/30000	15000/15000/15000
Cutting speed	rmp	1-10000	1-10000
Setting accuracy	mm	X/Y/Z: 0.008	X\Y\Z: 0.006
Repeat setting accuracy	mm	X/Y/Z: 0.004	X/Y/Z: 0.004
Tool magazine type (disk type)	T	40	20
Maximum tool diameter \ length\weight		φ75/250/6	φ60/150/3
Tool-change time	s	2	1.4
Spindle motor power	kw	6.8	7.5
Machine weight	kg	7400	4200
Appearance size	mm		2400×1930×2675

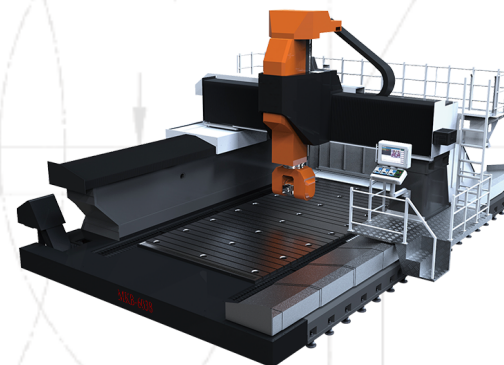




MKG-3013Z



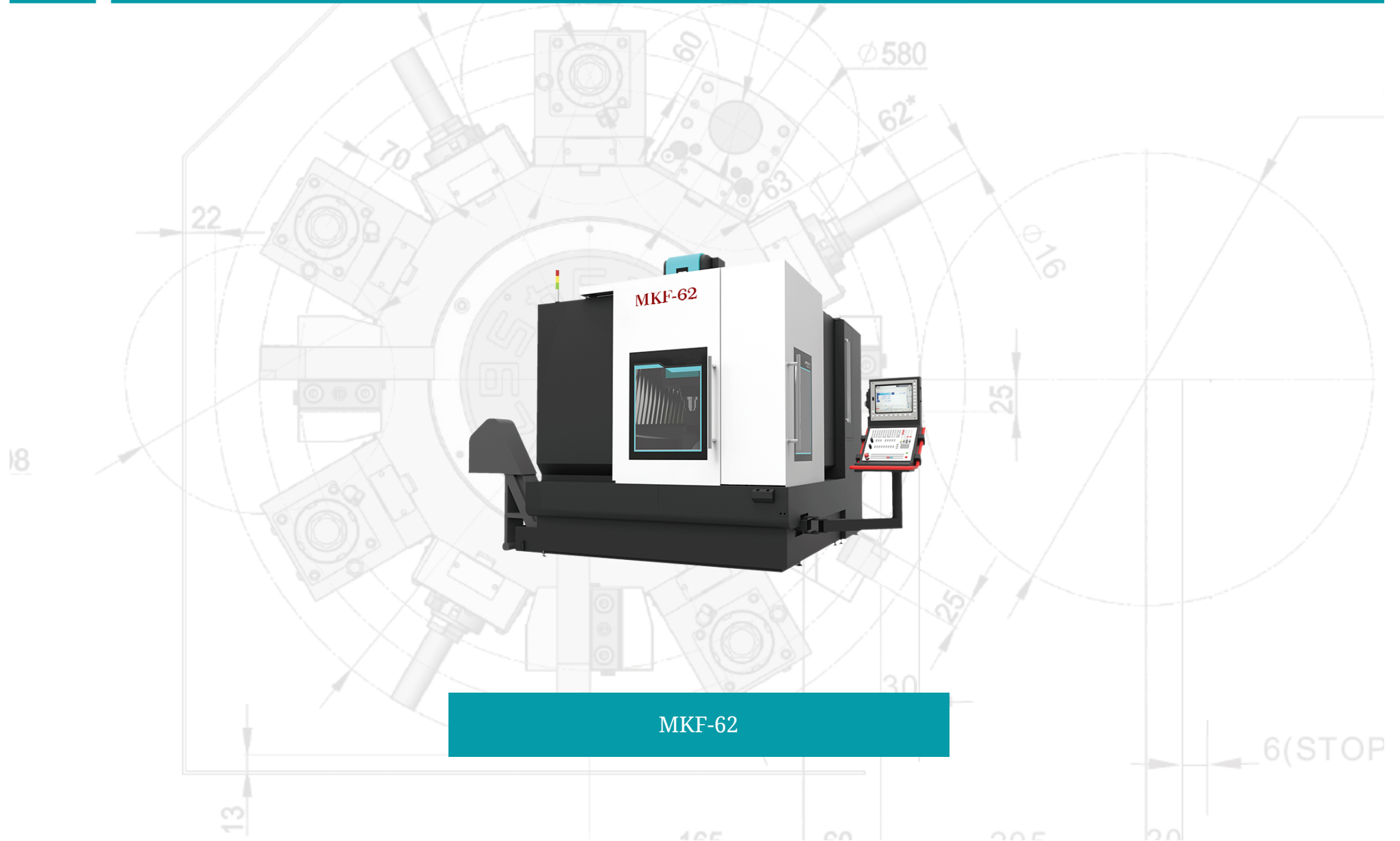
MKG-2317Z / MKG-3317Z



MKB-6038 / MKB-6038

Specifications	Unit	MKG-3013Z	MKG-2317Z	MKG-3317Z	MKB-6038	MKB-6038
		1300mm valve width series gantry machining center	1700mm valve width series gantry machining center		Single-acting column	Bridge type
Workbench size	mm	3000×1000	2300×1500	3300×1500	6000×2800	
T-slot (number of items x number of slots x distance)	mm	7×22×150	8×21×170	8×22×170	28 × 28 × 200	
Maximum load	kg	5000	8000	10000	3000	
X/Y/Z travel length	mm	3000 / 1200+250 / 800	2300/1600+250/800	3300/1600+250/800	6000/3000/1000	
Distance from the main spindle approach end to the tabletop	mm	1300	130-930	240-1040	200-1200	
Distance from the center of the spindle to the column	mm	220-1000	455	455		The distance between the two columns 3800
Rotating speed of the main spindle	rmp	6000	6000	6000	6000	
Spindle conical degree		BT50	BT50	BT50	BT50	
Transmission ratio		1: 1	1: 1	1: 1		
Standard spindle (standard set)		Direct drive	Direct drive	Direct drive	Five-sided machining spindle (five-sided direct drive + belt type)	

Specifications	Unit	MKG-3013Z	MKG-2317Z	MKG-3317Z	MKB-6038	MKB-6038
X/Y/Z-axis rapid traverse speed	mm/min	X/Y/Z: 10/10/8	X/Y/Z: 10/10/8		X: 20000、Y: 20000、Z: 10000	
Cutting speed	mm/min	1-10000	1-10000		1-10000	
Setting accuracy X / Y / Z	mm	0.015/0.015/0.012	0.015/0.015/0.012		0.04/0.025/0.015	
Repeat setting accuracy X/Y/Z	mm	0.01/0.01/0.008	0.01/0.01/0.008		0.025/0.015/0.01	
System version		FANUC Oi MF	FANUC Oi MF			
Spindle motor power	kw	15/18.5	15/18.5			
Triaxial motor turning force	N·m	36/27/27	36/27/27			
Three-axis guide rail type					X/Y: bearing ball, Z: roller + hard rail	
Guide screw diameter/pitch					X: φ63/20 (one for left and one for right), Y: φ63/20, Z: φ50/12	
Machine weight	kg	20000	24000	27000	53000	60000
Machine tool size (length×width×height)	mm	7700×4300×4250	6300×4800×4300	8300×4800×4300	10300 × 7650 × 5550	



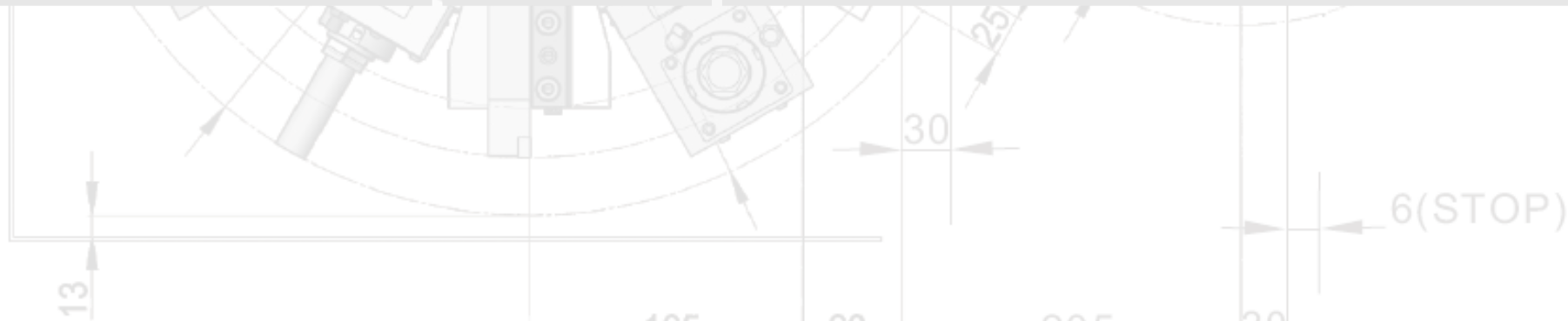
MKF-62

VII

Five-axis machining centers

Specifications	Unit	MKF-62	
Workbench diameter (inner diameter/outer diameter)	mm	Φ500/Φ650	
T-slot (number × gap × slot width)	mm	5×100×18	
Maximum workbench load	kg	Level 300/tilt 200	
Minimum graduation unit	°	0.001	
Tiltable angle	°	±110	
Driving mode		DDM transmission	Worm gear drive
Travel length X, Y, Z	mm	650/535/460	
Distance from the end of the spindle to the tabletop	mm	150-610	
Spindle speed	rmp	Direct drive 12000 (15000)/built-in 16000 (20000)	
Spindle conical degree		HSK-A63	
Maximum disc speed	°/min	B: 50/C: 100	B: 25/C: 25
Fast moving speed	m/min	36/36/36	
Cutting speed	mm/min	1-20000	
Setting accuracy B/C	s	B:20" C:10"	B:10" C:10"

Specifications	Unit	MKF-62	
Setting accuracy X/Y/Z	mm	X/Y/Z: 0.01	X/Y/Z: 0.01
Repeat setting accuracy B/C	s	B/C:4"	B/C:5"
Repeat setting accuracy X/Y/Z	mm	X/Y/Z: 0.005	X/Y/Z: 0.004
Tools storage capacity	T	16/32	
Tool maximum diameter (full cutting tool/empty cutting tool)	mm	Φ75/Φ127	
Maximum tool length	mm	250	
Maximum tool weight	kg	6	
System type		Heidenhain ITNC-640	
Rated power	kw	15	
Rated torque	H-m	12.1	
Machine weight	kg	8500	
Machine size	mm	4950×3900×3100	





MK-MB-110 / MK-MB-130

VIII

Milling and boring machines of joinery type

Specifications	Unit	MK-MB--110	MK-MB-130
Workbench size	mm	1200×1400	1600×1800
Workbench height	mm	1250	1300
T-slot	mm	22H8×160×9	22H8×160×11
Maximum workbench load	kg	8000	10000
X/Y/Z-axis travel length	mm	2000/2000/1500	2500/2500/1500
W1-axis	mm	500	700
W2-axis	mm	/	/
Distance from the end of the spindle to the work surface of workbench	mm	- 500~1500	- 700~2000
Spindle taper		BT50	BT50
Transmission method		Belt (1:1.25) + gearbox (1:4)	
Spindle speed	rmp	3000	2500
X/Y/Z/W-axis cutting speed	mm/min	1-6000	
B-axis cutting speed	mm/min	1-6000	
X/Y/Z/W axis fast moving speed	mm/min	12000/12000/12000/60000	

Specifications	Unit	MK-MB-110	MK-MB-130
Positioning accuracy of the swivel table	arc-sec.		10
Repeat positioning accuracy of the swivel table	arc-sec.		6
Swivel table decoder accuracy	sec		±5
Tool magazine type	mm	Chain tool magazine manipulator for tool exchange	
Tools storage capacity	T		40
Tool exchange time (T-T)	sec		3
Machine weight	kg	28000	35000
Machine size (length×width ×height)	mm	5500×4500×4500	5500×5000×5000





MKP-300



MKP-480A

Specification		Unit	MKP-300
A axis	Driving mode	/	Servo motor with gear synchronous transmission
	Rotation angle	°	±60°
	Reduction ratio	/	70 : 1
B-axis	Driving mode	/	Servo motor with independent transmission reducer
	Rotation angle	°	±45°
	Reduction ratio	/	50 : 1
Travel length	X, Y, Z travel length	mm	300/200/160
	Distance from the end of the spindle to the work surface of workbench		20-180
	W-axis distance		200
	Distance from the end of the spindle to the work surface of workbench (W axis)		20-380
	A-axis rotating disk surface		300*100-9
	A-axis interval between axles		210
	B-axis interval between axles		340
Speed	X/Y/Z-axis rapid traverse speed	m/min	15/15/15

Specification		Unit	MKP-300
Spindle	Spindle specification	/	HSKE32-100
	Spindle rated speed/maximum speed	rmp	20000/36000
	Spindle rated power/maximum power	kw	6.0/7.2
Accuracy	Positioning accuracy	mm	X/Y/Z:0.04
	Repeat positioning accuracy	mm	X/Y/Z:0.025

Specification	Unit	MKP-480A
Workbench diameter*quantity	mm	Ø420*5
T-slot (number × gap × slot width)	mm	5×100×18
Work station		A-work station and B-work station
Workbench gear ratio		1:2
Workbench rotating speed	rmp	0~60
X-axis distance	mm	1250
Y-axis distance	mm	280
Work station distance between AB disks	mm	1250
Distance between upper disk and lower disk	mm	10~290
Upper disk diameter*quantity	mm	Ø500*4
Maximum speed of upper disk	rmp	278
Upper disk pressure range	kg	5~700
Lower disk motor / Rated power	kw	5.5
Rated torque	N·M	36
Plastic extruder reduction ratio of lower disk		1:49.43

Specification	Unit	MKP-480A
Upper disk motor / Rated power	kw	3.0
Rated torque	N·M	14.8
Plastic extruder reduction ratio of upper disk		1:5.21
Z-axis servo motor		VRSF-S9D-750
Rated power	kw	0.75
Allowable torque	N·M	18.2
Machine weight	kg	4000
Appearance size	mm	2333×2423×2837





ATLANT

WE PURSUE EXCELLENCE IN EVERYTHING WE DO

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