### High speed horizontal machining center



#### **Product characteristics**

- •This machine tool is a horizontal five axis machining center with a box in box structure.
- •This machine tool is a fully automatic composite machining center that integrates milling, awning, drilling, cutting, tapping, and other functions, resulting in extremely high consistency of the processed workpieces
- One clamping can complete pentahedral machining, reducing secondary clamping time and clamping accuracy.

  One clamping time and clamping accuracy. exchange workbenches can be equipped to achieve online clamping of workpieces, greatly reducing clamping time and improving production efficiency.
- Applied to LED display box, 5G communication (filter, radiator), large antenna, automotive engine, gearbox end cover, explosion-proof box shielding cover, new energy vehicle control box, battery pack, photovoltaic inverter.
- Processing size range, 500x500640x640640x680960x9601000x500 and other specifications of box body



# **Basic technical parameters**

	name	unit	HMH1200	HMH1212
route or	X-axis stroke	mm	1200	1200
distance of	Travel Y-axis	mm	800	1200
travel	Z-axis travel	mm	500	600
	Distance from spindle end face to workbench surface	mm	300-1100	500-1700
	Distance from spindle center to workbench	mm	200-700	200-800
	surface	mm	200-700	200-800
staging	Workbench size	mm	500x500	500x500
	Maximum load-bearing capacity of the workbench	Kg	200	700
	T-shaped groove (groove number x groove	mm	5x18x100	5x18x100
	width x spacing)	com		
principal axis	width x spacing)  Electric spindle power (rated/peak)  Speed range  Spindle diameter	nim <sup>ch</sup> kw	20/30 50~18000	20/30
	Speed range	r/min ny	50~18000	50~18000
	Spindle diameter	o@namm	φ 150	ψ 150
	Spindle diameter  Rigid tapping speed  Knife handle specifications	r/min	6000	6000
	Knife handle specifications		BT40	BT40
guide	Three axis roller linear guide rail	mm	45x2	45x2
drive	Three axis ball screw	mm	4016	4016
	Sun Wu's electric power exceeds the power	kw	2.9/2.9/2.9	3.9/3.9/3.9
	of the idiot machine X/Y/Z			
velocity	X. Y and Z axis fast moving speed	m/min	48	48
	X. Y, Z cutting feed speed range	mm/min	1-10000	1-10000
seat	Positioning accuracy (X/Y/Z)	mm	±0.005/300	±0.005/300
precision	Repetitive positioning accuracy (X/Y/Z)	mm	±0.003	±0.003
Tool	Magazine capacity	grasp	24	32
magazine	Tool length	mm	300	300
	Maximum diameter (full blade/adjacent empty blade)	mm	Ф80/Ф160	Ф80/Ф160
	Tool change time (knife to knife)	S	1.2	1.2
other	Total power capacity	KVA	30	40
	Air source	MPa	0.6	0.6
	Overall dimensions (length x width x height)	mm	3000x2700x2500	3000x5000x3200
	Total weight (approximately)	kg	5000	10000

# Small high-speed drilling center





#### **Product characteristics**

- The machine tool adopts a dual zero level high-precision marble integrated body design, ensuring long-term stability and deformation of the body
- The high-speed displacement reaches 48 meters/minute, and the servo tool library automatically changes tools. Multiple processes such as milling, drilling, and tapping can be completed in one clamping operation.
- The spindle adopts a high speed, high torque, and high-precision permanent magnet synchronous motor, which can meet the needs of high-speed machining and ensure accuracy.
- Suitable for high-speed drilling, milling, and 6000 rpm high-speed rigid tapping of small precision components.
- The control system can be either a standard CNC numerical control system or a programmable numerical control system independently developed by microcontrollers. The programmable CNC system is the first in China and can automatically generate machining codes by importing 2D drawings, which can be operated by ordinary workers.

Website: https://www.himcnc.com

Get-a-Quote email: info@harmonywolrd.com

# **Parameter Table of Small High Speed Drilling and Tapping Center**

	type	HM740H	HM1040H				
	unit	parameter	parameter				
route or distance of travel							
X-axis stroke	mm	700	1000				
Travel Y-axis	mm	himchc.co.400	400				
Z-axis travel	mm. / WWW.	180 volrd.com	180				
Gantry width	hsite: h mm	harm 800	1200				
Distance from spindle end face	mm email: In	170-350	170-350				
to workbench	ebsite: htmm  mm email: in						
	stag	ging					
Workbench size	mm	700x450	1100x450				
T-shaped groove (groove	mm	4x14x100	4x14x100				
number x groove width x							
spacing)							
	princip	al axis					
Spindle speed	rpm	12000	12000				
Spindle rigid tapping speed	rpm	5000-6000	5000-6000				
Spindle taper		BT30	BT30				
	Automatic tool	change system					
Tool change form		Hat type servo tool	Bucket style uniform knife				
		magazine	magazine				
Magazine capacity		10T	10T				
Maximum tool length	mm	200	200				
Tool change time	mm	3.5 om	3.5				
	Feed	rate himchc.co	com				
X/Y/Z rapid feed	m/min	48/30/30	48/30/30				
Cutting feed	mm/min	10000 info@1	10000				
	Quote prec	ision					
positioning accuracy	Get-mm	±0.005/300	±0.005/300				
Repetitive positioning accuracy	mm	±0.003	±0.003				
	oth	ner					
Total power	kw	10	11				
Machine weight (approximately)	Kg	2200	2500				
Overall dimensions (length,	mm	2200x1600x2000	2600x1600x2000				
width, height)	Standau	d configuration					
•Shangyin/Yintai screw guide rail	•Automatic tool setting instrum	_	rem				
	• Automatic tool setting instrum • Delta Tongfu Motor	Permanent magnet synchror					
Clectionic nandwheel	Deita loligiu Motor	•reimanent magnet synchror	ious spinule motor				

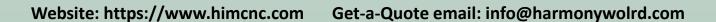
## High speed drilling center



#### **Product characteristics**

- •Adopting new technology permanent magnet synchronous spindle, it has high-speed, high-precision, high gloss, and high efficiency in processing. Not only is it suitable for processing high-precision, smooth, and aesthetically pleasing mobile phone shells, keyboards, and metal frames, but it is also capable of processing high-precision parts such as watch movements, aerospace, and medical devices.
- •Multiple processes such as milling, drilling, reaming, and tapping can be completed through one clamping operation, with a precision machined appearance without tool lines. The processing qualification rate of high-precision parts is as high as 99%, making it the best choice for batch processing of high-precision parts





# **Parameter Table of High Speed Drilling Center**

	model	НМТ6	НМТ8				
	unit	Parameters	Parameters				
route or distance of travel							
X-axis stroke	mm	600	800				
Travel Y-axis	mm	400	500				
Z-axis travel	mm	330	550				
Distance from spindle end face to workbench surface	mm	150-480	120-670				
Distance from spindle center to column guide rail	mm	460	560				
workbench size	ing C.Co.	, d com					
Workbench size	mmywo	700x420	1000x500				
Maximum load-bearing capacity of the workbench	harn <sub>Kg</sub>	250	550				
T-shaped groove (groove number x groove width x spacing)	mm	3x14x120	3x18x102				
Get-a-Quote principa	al axis						
Electric spindle power (rated/peak)	kw	3.7/5.5	5.5/7.5				
Speed range	r/min	50~20000	50~20000				
Spindle diameter	mm	ψ 100	φ 100				
Rigid tapping speed	r/min	6000	6000				
Knife handle specifications		BT30	BT30				
guid	de						
Three axis linear guide rail	mm	30x2	35x2				
Screw	rod						
Three axis ball screw	mm	3216	3616				
velo	city						
X. Y and Z axis fast moving speed	m/min	48	48				
X. Y, Z cutting feed speed range	mm/min	1-10000	1-10000				
sea	nt						
Positioning accuracy (X/Y/Z)	mmc.con	±0.005/300	±0.005/300				
precis	sion	±0.003/300 ±0.003					
Repetitive positioning accuracy (X/Y/Z)	mmrmol	±0.003	±0.003				
Website. Tool ma	gazine						
Magazine capacity  Tool length	grasp	21	21				
Tool length	mm	300	300				
Maximum diameter (full blade/adjacent empty blade)	mm	Ф80/Ф100	Ф80/Ф100				
Tool change time (knife to knife)	S	1.5	1.5				
other							
Total power capacity	KVA	15	20				
Air source	MPa	0.6	0.6				
Overall dimensions (length x width x height)	mm	1800x2200x2200	2480x2350x2200				
Total weight (approximately)	kg	3000	4000				
Standard configuration							
Shangyin/Yintai screw guide rail Automatic tool settii	ng instrument	CNC numerical conti	rol system				
Electronic handwheel Delta servo motor		Permanent magnet s	ynchronous spindle				

## **Parts Center Machine Series**









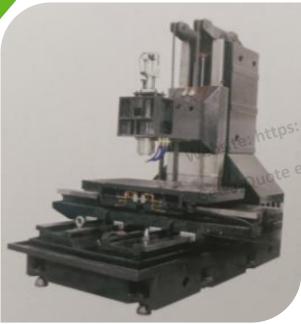
# **Basic technical parameters**

	item	HMV6	HMV8	HMV11
Proce	X-axis stroke	600mm	800mm	
ssing	Travel Y-axis	400mm	500mm	
scope	Z-axis travel	450mm	550mm	
	Spindle center to column guide rail surface	480mm	550mm	
	Distance from spindle end face to workbench surface	170-620mm	100-600mm	
Workt	Workbench size	700x420mm	1000x450mm	
able	Maximum load-bearing capacity of the workbench	300KG	350KG	
	Number of T-slots	3	4	
princi	Spindle taper hole	ВТ40/Ф120	ВТ40/Ф140	
pal	Spindle type	Direct connection	Belt/direct	
axis			connection	
	Spindle motor power/speed	5.5KW/12000rpm	7.5KW/ 12000rpm	
Servo	X/Y/Z axis feed motor power	1.5/1.5/3.0KW	204/204/303B	
feed	XYZ fast movement speed	48m/min	48m/min	
	feed rate	12m/min	12m/min	
	XYZ Ball Screw Specifications	3216	3216	
	XYZ Linear Rail Specifications	HGW30	RGW35 Roller type	
Tool	ATC form handle type	BT40 disc type	BT40 disc type	
magaz	Magazine capacity	24T	24T	
ine	Tool change time (knife to knife)	himc1.8s	1.8\$	
Machi	XYZ positioning accuracy (JIS)	24T 1.8S ±0.005/300mm ±0.003	±0.005/300mm	±0.005/300mm
ne	Repetitive positioning accuracy (JIS)	±0.003	±0.003	±0.003
accur	West email:	Illio		
асу	Repetitive positioning accuracy (JIS)			
other	Power capacity demand	10KVA	15KVA	
	Air pressure requirements	6.0kg/cm <sup>2</sup>	6.0kg/cm <sup>2</sup>	6.0kg/cm <sup>2</sup>
	Machine weight (approximately)	3.5T	4.5T	7.0T
	Standard CNC system	Mitsubishi, Japan	Mitsubishi, Japan	Mitsubishi, Japan
		M80	M80	M80
	Machine tool appearance (L * W * H)	Approximately	Approximately	Approximately
		2200x1800x2200mm	2500x2300x2500mm	2800x2300x2700mm

Standard accessories					
Working air blowing system	USB transfer interface				
Mechanical tool magazine system	Fully enclosed rice gold				
Cutting fluid system	Electrical box heat exchanger				
Automatic lubrication system	Work lights				
Spindle oil cooler	Foundation cushion block and horizontal adjustment screw				
Rigid tapping	Three color warning light				
Chip flushing device	Toolbox and basic tools				
Pulse electronic handwheel	Technical manual				

#### Mold processing center series





#### **Machine tool characteristics**

Gb300 resin sand mihanna cast iron casting Strengthening the cutting strength of the large box main axle box

Wide base column reduces vibration and improves rigidity

Belt drive platform P4 level 8000-12000 rpm spindle

Three axis platform system silent C3 level screw 20m/min rapid displacement

Three axis hard rail design suitable for high-strength cutting mold processing
The combination of imported laminated guide rails and hardened grinding guide rails improves

durability and maintains high accuracy

# **Basic technical parameters**

	type	HM850	HM1060	HM1270	HM1580	HM1890
Process	X-axis stroke	800mm	1000mm	1200mm	1500mm	1800mm
ing	Travel Y-axis	500mm	600mm	700mm	800mm	900mm
scope	Z-axis travel	500mm	600mm	650mm	700mm	680mm
	Spindle center to column guide rail surface	550mm	600mm 600mm	785mm	com 800mm	950mm
	Distance from spindle end face to workbench surface	105-655mm	180-780mm	130-780mm	170-870mm	160-840mm
Workta	Workbench size	1050x500mm	1300x600mm	600x600mm	1700x800mm	2000x900mm
ble	Maximum load-bearing capacity of the workbench	600KG	800KG	1000KG	1500KG	1650KG
	Number of T-slots	5	5	5	5	5
principa	Spindle taper hole	ВТ40/Ф150	ВТ40/Ф150	ВТ40/Ф150	ВТ40/Ф150	ВТ40/Ф150
l axis	Spindle type					
	Spindle motor power/speed	leather belt				
Servo feed	X/YIZ axis feed motor power	7.5KW/8000rpm	11KW/8000rpm	15KW/8000rpm	18.5KW/8000rp m	22.0KW/8000rpm
	XYZ fast movement speed	3.0KW	3.0kW	3.5KW	4.5/7.5/4.5KW	7.5KW
	feed rate	20m/min	20m/min	20m/min	20m/min	20m/min
	XYZ Ball Screw Specifications	12m/min	12m/min	10m/min	8m/min	8m/min
	Number of Y-axis slides	4010 site:	12m/min 4010 2	10m/min 5010	6310/6310/5010	5512
Machin e	XYZ positioning accuracy (JIS)	get-a-Q	uote 2	4	4	4
accurac y	Repetitive positioning accuracy(JIS)	±0.005/300mm	±0.005/300mm	±0.005/300mm	±0.010/300mm	±0.010/300mm
other	Power capacity demand	±0.005	±0.005	±0.005	±0.005	±0.005
	Air pressure requirements	20KVA	25KVA	35KVA	40KVA	50KVA
	Machine weight (approximately)	6.0kg/cm <sup>2</sup>	6.0kg/cm <sup>2</sup>	8.0kg/cm <sup>2</sup>	8.0kg/cm <sup>2</sup>	8.0kg/cm <sup>2</sup>
	Standard CNC system	Mitsubishi, Japan M80				
	Machine tool	About	About	About	About	About
	appearance(L*W*H)	2500x2200x2500	2800x2350x2700	3100x2500x2980	4400x3700x3600	4850x3950x3400
		mm	mm	mm	mm	mm

## Tool magazine drilling and tapping machine





The tool magazine drilling and tapping machine is a vertical automatic tool changing CNC drilling and tapping equipment, widely used in drilling, tapping, and milling of porous positions such as radiators, die-casting parts, hardware processing, and mold manufacturing. The system has an automatic tool change function, and multiple specifications of threaded holes can be clamped in one go to complete positioning processing, thereby solving the positioning error of secondary clamping and ensuring processing accuracy. Especially suitable for processing parts with diverse product specifications that require frequent replacement of products with different specifications. Thread processing range: M1.2~M12, inch and non-standard threads only need to input pitch. Compared with traditional CNC machining centers, multi axis machines, and other equipment, its biggest advantage is that when replacing products of different specifications, CAD drawings can be imported and exported to coordinate data through a USB flash drive or directly input coordinate data, without the need for tedious mechanical alignment adjustment or CNC programming. Ordinary workers can complete the

#### Parameter table of tool magazine drilling and tapping machine **Technical indicators** HM740 HM1040 remarks type unit parameter Support for parameter Website: https:0/5 www.himcnc.com pecking drilling Maximum drilling diameter mm 13 0.5 Minimum drilling diameter mm Maximum tapping specification M12 BT30Mechanical spindle Spindle specifications BT30Mechanical spindle 700x450 Workbench size mm 1100x450 X-axis stroke 700 1000 servo motor mm Travel Y-axis 400 400 mm servo motor Z-axis travel 180 180 mm servo motor XY/100 million rapid feed speed m/m 48/30/30 48/30/30 servo motor in Drilling spindle speed 6000 6000 rpm Rigid tapping spindle speed 3000 3000 servo motor rpm Collet specifications **ER20 ER20** PLC/IPC PLC/IPC Control system Input and display methods Import coordinate data/CAD Import coordinate data/CAD drawings from USB flash drive drawings from USB flash drive Double zero level Double zero level Rack countertop high-precision marble high-precision marble Ball screw and precision transmission Ball screw and precision Shangyin/Yinta linear guide rail linear guide rail Get-a-Quot.01 positioning accuracy 0.01 mm Repetitive positioning accuracy 0.005 0.005 mm Protection form Stainless steel protective Stainless steel protective cover cover Tool change method Servo tool magazine Servo tool magazine servo motor automatic tool change (10 automatic tool change (10 tool positions tool positions structural style Gantry structure Gantry structure Tool cooling method Electric pump circulation Electric pump circulation system system lubrication system Fully automatic intelligent Fully automatic intelligent lubricating oil pump lubricating oil pump aggregate capacity kw 4.5 5 Additional electronic 4-axis apolegamy 4-axis handwheel 2200x1600x2000 2600x1600x2000 Overall dimensions (length, mm width, height) 2000 Machine weight 2300 kg



#### Double axis drilling and tapping machine

#### **Product characteristics**

The dual axis drilling and tapping machine is a vertical dual axis CNC drilling and tapping equipment, widely used in the drilling, tapping, milling and other integrated parts processing of porous positions such as radiators, die-casting parts, hardware processing, and mold manufacturing. It is particularly suitable for the processing of parts with diverse product specifications that require frequent replacement of different specifications. Thread processing range: M1.2~M8, inch and non-standard threads only need to input pitch. Compared with traditional CNC machining centers, multi axis machines, and other equipment, its biggest advantage is that when replacing products of different specifications, CAD drawings can be imported and exported through a USB flash drive or directly input coordinate data, without the need for tedious mechanical alignment adjustment or CNC programming. Ordinary workers can complete the operation. The equipment has the characteristics of low investment cost, high processing accuracy, good product consistency, and easy to learn operation.

# Parameter Table of Dual Axis Drilling and Tapping Machine

Technical indicators	model	HM540	HM860	remarks
	Company	parameter	parameter	
Maximum drilling diameter	mm	10	10	Support for pecking drilling
Minimum drilling diameter	mm	0.5	0.5	
Maximum tapping specification		M8	M8	
Spindle specifications		Electric spindle	Electric spindle	
Workbench size	mm	580x450	850x600	
X uranium stroke	mm	500	om 800	servo motor
Travel Y-axis	mm	500 400	600 m	servo motor
Z-axis travel	mm, ht	90 30/15/15	onywon 90	servo motor
X/Y/Z rapid feed speed	m/min	30/15/15	30/15/15	servo motor
Drilling spindle speed	rpm	24000	24000	
Rigid tapping spindle speed	Gerpm	3000	3000	servo motor
Collet specifications		ER20	ER20	
navar		PLC/industrial	PLC/industrial computer	
		computer		
Input and display methods		Import coordinate	Import coordinate	
		data/CAD drawings	data/CAD drawings from	
		from USB flash drive	USB flash drive	
Rack countertop		Double zero level	Double zero level	
		high-precision marble	high-precision marble	
transmission		Ball screw and precision	Ball screw and precision	Shangyin/Yintai
		linear guide rail	linear guide rail	
positioning accuracy	mm	0.01	0.01	
Repetitive positioning accuracy	mm	0.005	0.005	
Protection form		Stainless steel	Stainless steel protective	
		protective cover	cover	
Shaandao method		Manual tool change	Manual tool change	
structural style		Gantry structure	Gantry structure	
Tool cooling method	Mep	Electric pump	Electric pump circulation	
		circulation system	system	
lubrication system	Get		Fully automatic intelligent	
		intelligent lubricating oil	lubricating oil pump	
		pump		
Total power	kw	4.5	5	
Additional electronic handwheel		4-axis	4-axis	apolegamy
Overall dimensions (length, width, height)	mm	1700x1500x1700	1950x1900x1700	
Machine weight	kg	1500	1800	

# Horizontal drilling center series



#### Standard accessories

Clean the air gun
Cleaning water

Spindle oil cooling of New generation CNC system in CNC indexing plate
Oil water senarate

Cutting and blowing Auto chip-removal system

### **Optional accessories**

Mitsubishi CNC System in Japan Cleaning water gun Magazine: 24/36 pieces Rigid tapping (optional for internal installation) Other special configurations

# Main specifications and technical parameters

		item	unit	parameter	remarks
Processing scope	X-a	xis stroke	mm	1700	
	Y-axis sliding saddle stroke		mm	190	
	Z-axis travel before and after the		mm	150	
	S	pindle	moo		
staging	Work	bench size	whimcmm com	800*800	
	Workbench size  Worktable load-bearing  Tiglet (number of slots, slot width		Kg	250	
	1-Slot (Hullibel	r of slots - slot width spacing)	Info@lmm	800*800 250 7*16*100	
	Distance from workbench to ground		mm	800	
principal axis	Main moto	or power (rated)	kw	11	
	Spe	ed range	r/min	24000	
	Spind	le diameter	mm	ψ 125	
	Spindle rig	id tapping speed	r/min	5000~6000	
	Knife hand	le specifications		BT30	
	Pulling na	il specifications		BT30-45degrees	
guide	X/Y/Z axis	linear guide rail	mm	30*2/25*2/15*2ball	
drive	X/Y/Z ball screw		mm	4020/2510/1605	
	Motor	power X/Y/Z	kw	2/0.75/0.40	
velocity	X. Y and Z axis fast moving speed		m/min	40/30/30	
	Cutting feed speed range		mm/min	1-10000	
Position accuracy		accuracy (X/Y/Z)	mm cnc.co	±0.005/300	GB/T18400.4
	Repetitive positioning accuracy (X/Y/Z)		WWW.mm	±0.005/300 ±0.003	GB/T18400.4
Tool magazine	Magaz	ine capacity	eil: ingrasp	10	
1001 magazine	Magazine capacity  Tool length		mm	100	
	Maximum diameter (full blade)		mm	Ф50	
	Tool change time		S	1.5	
other		ower capacity	KVA	15	
	Air source	pressure	MPa	0.5~0.7	
		flow	L/min	180	
	Cooling box volume		L	150	
	Machine tool appearance		mm	2900x2400x1550	
	dimensions (length * width *				
	height)				
	Total weight (approximately)		Kg	3000	



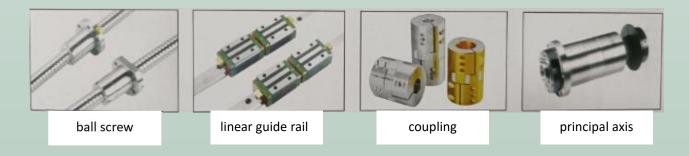
## High performance CNC numerical control system

Adopting CNC systems such as Huazhong, Mitsubishi, Fanuc, Siemens, New Generation, and Baoyuan.



#### Machine tool accessories

The main components are all imported from Japan, Germany, and Taiwan (servo motors, wire rails, couplings, screw rods, etc.), with high precision and endurance characteristics. They can be precision processed for different materials (steel, copper aluminum graphite, organic glass, etc.)



#### **Tool magazine system**



- •The swashplate servo automatic tool changing device is fast, accurate, and stable, with a tool changing time of 1.2 seconds.
- •The hat type automatic tool changing device uses the pressure system, which is suitable for small and medium-sized tools. The action is simple and the tool changing is fast.
- •The disc type automatic tool changing device uses a 3D cam to change tools in just 1.8 seconds. The cutter head can accommodate 24 tools, which can adapt to various processing needs. The tool loading and unloading is easy, and tool management and registration are very convenient.
- •The main shaft adopts P4 grade precision bearings, which are highly rigid and heavy cutting. The main shaft has belt type and direct connection type for customers to choose from, and each type of main shaft has high efficiency and strong processing ability.

Website: https://www.himcnc.com Get-a-Quote email: info@harmonywolrd.com