

2025.B



费因

实用 可靠 专业



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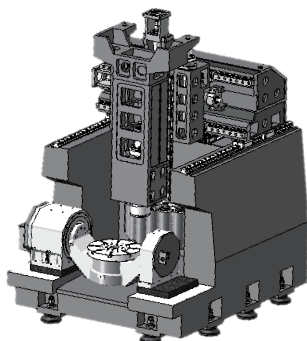
横梁移动式 摇篮五轴加工中心

高转速 | 大扭矩 | 车铣复合

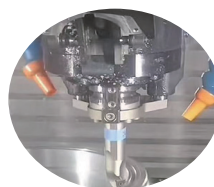
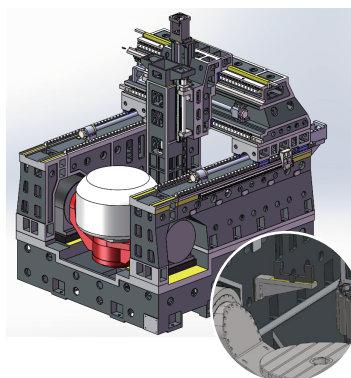


» Design Feature

RTV5A400



RTV5A630/800



With combined turning and milling function, it means you can easily achieve light turning by choosing the appropriate turning tool holder.

1. Uses a gantry structure, with a one-piece bed that offers high rigidity and dynamic performance;
2. Gantry with dual-drive four-rail structure, featuring internationally advanced synchronous control technology;
3. Increased travel to expand the limits of machining range;
4. Equipped with imported high-precision ball screws and large imported roller linear guides;
5. Comes with a dual-drive cradle rotary table, providing high precision and dynamic response;
6. Dual-speed, high-torque high-speed spindle, suitable for both titanium and aluminum machining;
7. Standard umbrella-style tool magazine;
8. Tool setter fixed on the bed to reduce measurement errors;
9. Paired with absolute value linear scales to improve machine accuracy.

Electric spindle

High-speed milling of aluminum is effortless;
high-torque milling of titanium is no problem—I also offer turning capabilities.

双速电主轴 HSK-A63(RTV5A400)

Low speed: 42/50 kW, 71.7/85
Nm, max speed 14,000 rpm

High speed: 42/50 kW, 28.6/33.7
Nm, max speed 20,000 rpm

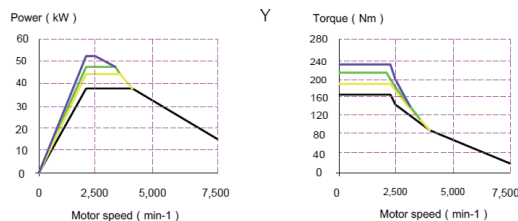
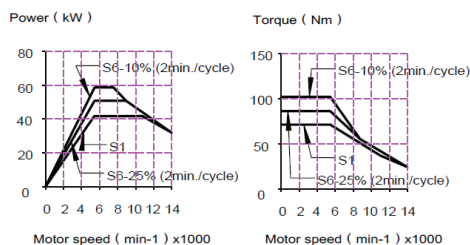
双速电主轴 HSK-A63/A100(RTV5A630/800)

Low speed: 37/45 kW, 163/196.5
Nm, max RPM 7500

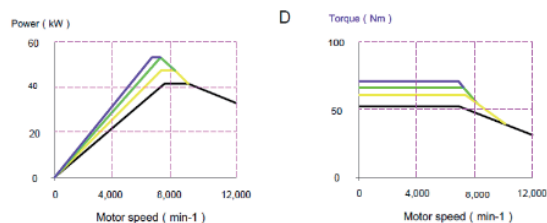
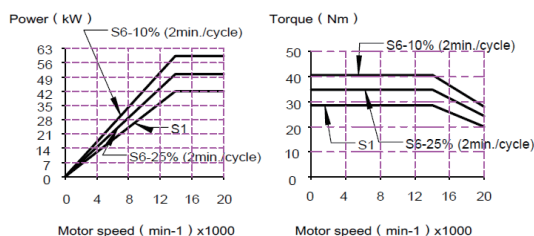
High speed: 42/50 kW, 54/65
Nm, max RPM 12000

Max RPM for A63: 15000

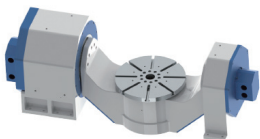
Y(400V)



△ (400V)



Direct-drive cradle turntable

Technical Specs	T5A400	T5A630	T5A800
Workbench mm	400	630	800
Swing diameter mm	500	800	1000
A-axis swing angle	±120	±110	±110
C-axis swing angle	n*360	n*360	n*360
图片	Single drive on the A axis 	A-axis dual drive 	A-axis dual drive 

Cradle Five-Axis Machining Center Series

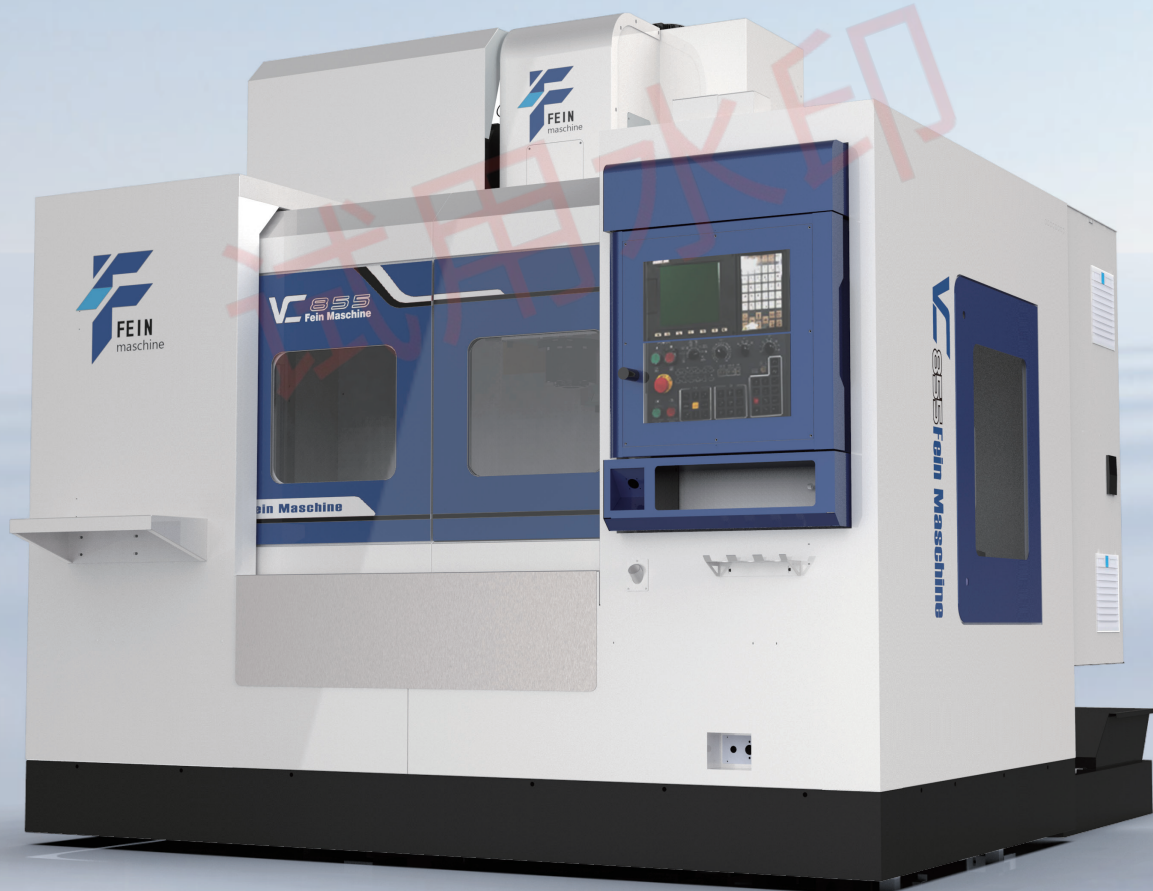
Technical Specifications	unit	RTV5A400	RTV5A630	RTV5A800
Workbench size	mm	Φ400	Φ630	Φ800
Maximum load of the workbench	Kg	200	1000	1200
Distance from spindle end face to worktable	mm	150-600	150-760	150-760
X-axis travel	mm	500	1000	1000
Y-axis travel	mm	650	1150	1150
Z-axis travel	mm	450	610	610
spindle		Direct-drive spindle / electric spindle	Direct-drive spindle / electric spindle	Direct-drive spindle / electric spindle
X/Y/Z Axis Rapid Move Speed	m/min	48	48/36	48/36
X/Y/Z Axis Cutting Speed	m/min	48	0-15	0-15
Tool magazine capacity		20	24	24
Positioning accuracy	mm	0.006	0.006	0.006
Repeat positioning accuracy	mm	0.004	0.004	0.004
Weight	t	9	17	18
Typical CNC system configuration		Siemens One; domestically made		

*更多资料请咨询费因

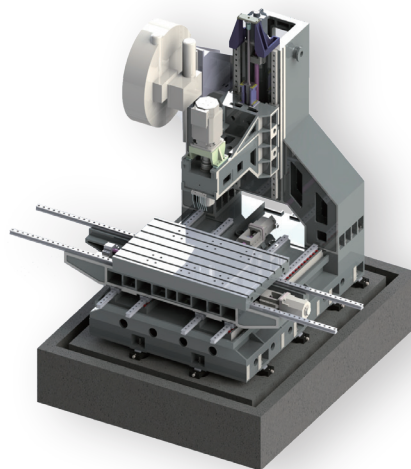


立/卧式加工中心系列

高速度 | 高精度 | 高刚性



High speed 48 m/min, cutting 5mm steel



CNC Vertical Milling Center					
Technical Specs	unit	VC855	VC1165	VC1270	VC1580
Workbench area	mm	550×1000	600×1200	700×1360	900×1600
T-slot	mm	5-18×90	5-18×100	5-18×120	7-22×110
Maximum load of the workbench	Kg	500	800	1000	1500
X/Y/Z axis travel	mm	800×550×550	1100×650×600	1200×700×700	1500×800×700
Linear guide specifications	mm	X:35/Y:45/Z:45滚柱	X:45/Y:45/Z:45滚柱	X:45/Y:55/Z:55滚柱	X:55/Y:45/Z:55滚柱
Spindle end face to worktable surface	mm	120-670	120-720	175-875	160-860
Spindle center to guideway surface	mm	590	665	770	855
Spindle speed	rpm	Belt type 8000/10000; direct drive 12000			Belt drive 6000; Direct drive 8000
spindle bore taper		BT40-150	BT40-150	BT40-150/BT50-155	BT50-155
Spindle motor power	Kw	9/13.5 (Siemens)	9/13.5(Siemens)	12/18(Siemens)	12/18(Siemens)
Cutting feed rate	m/min	48	24	24	20
Fast movement speed	m/min	48	24	24	20
Tool magazine capacity		Disc 24			
Tool change time	s	1.8			
定位精度	mm	0.01			
Positioning accuracy	mm	0.006			
Overall weight	Kg	5500	6500	8000	12000
Dimensions	mm	2600×2200×2600	2950×2550×2600	3450×2800×2700	4300×3200×3000
Total power supply	Kw	22	25	30	35
Typical CNC system configuration		Siemens、Fanuc、domestically made			

切削效率:45#钢 VC855:200mm³/min VC1165:250mm³/min VC1270:320mm³/min
铝件(高速) VC855:1000mm³/min VC1165:1100mm³/min VC1270:1300mm³/min

- Heavy cutting and high precision, it can replace imported horizontal machining centers and perform

Ideal model for mass production

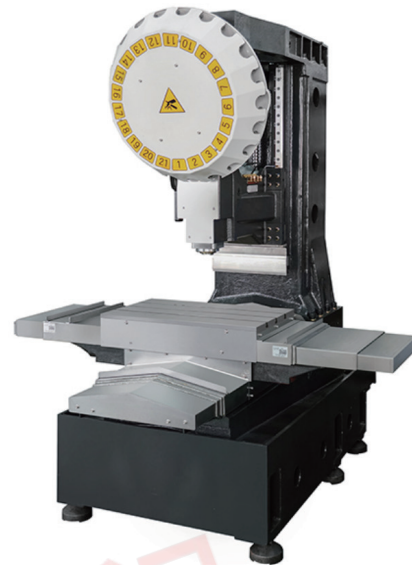


» Design Features

1. The spindle has high power and strong cutting force, suitable for low-speed machining of cast iron and steel, especially for large molds;
2. Large travel, wide processing range;
3. Self-made CNC rotary table allows machining four surfaces in one setup;
4. T-slot integral structure, offering high rigidity, high precision, and high stability.

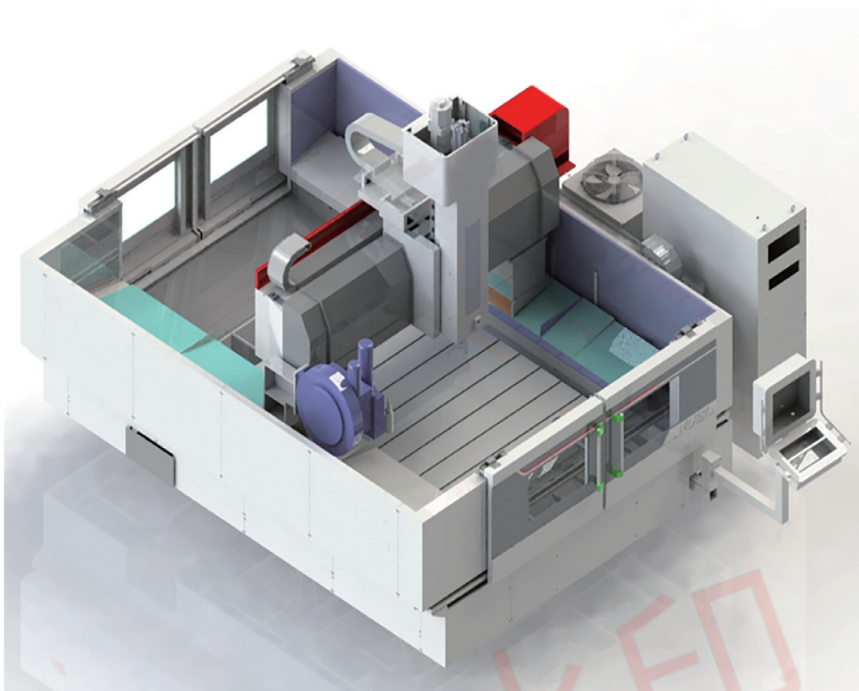
CNC horizontal milling machining center

Technical Specs	unit	HC500	HC630	HC800	HC1000	HC630 (双工作台)	HC800 (双工作台)
Workbench area	mm	500×500	630×700	800×800	1000×1000	2×630×700	2×800×800
Workbench indexing	°	1×360					
T-slot		5-18	24×M16 (Quantity × Screw Holes)				
graduation accuracy	"	10				12	
Maximum load of the workbench	Kg	700	1000	1500	2000	950	1500
X/Y/Z-axis travel	mm	700/600/580	1050/750/900	1300/1000/1000	1600/1000/1000	1050/750/900	1300/1000/1000
Guide rail type		三轴滚柱					
Spindle center to worktable	mm	50-650	120-870	120-1120	120-1120	0-750	0-1000
From spindle end face to table center	mm	160-740	130-1030	200-1200	200-1200	130-1030	200-1200
Spindle bore taper		BT40	BT50				
Spindle speed	rpm	8000	6000				
Spindle motor power	Kw	11/15	15/18.5				
Cutting feed rate	m/min	10					
Fast movement speed	m/min	30	30	24	24	24	24
Tool magazine capacity / tool change time		24T/3S	30T/5.5S	40T/5.5S	40T/5.5S	40T/5.5S	40T/5.5S
Positioning accuracy	mm	0.012	0.012	0.012	0.012	0.012	0.012
Repeat positioning accuracy	mm	0.008	0.008	0.008	0.008	0.008	0.01
Overall weight	t	7	12	17	18	14	18
Dimensions	mm	3050×2050×2500	3500×6000×3000	4800×6400×3900	4800×6400×3900	3500×7500×3000	5500×8000×3000
CNC system		Fanuc Oi MF Plus/Siemens 828D					



Drilling and tapping center

Technical Specs	unit	T6	T7	T8
Workbench area	mm	700×420	780×420	1000×500
T-slot	mm	3-14×125	3-14×125	5-18×100
Maximum load of the workbench	kg	250	250	350
X/Y/Z axis travel	mm	600/400/300	700/400/300	800/500/330
Linear guide specifications	mm	X:30/Y:30/Z:30	X:30/Y:30/Z:30	X:35/Y:35/Z:35
Spindle end face to worktable surface	mm	150-450	150-450	160-490
Spindle center to guideway surface	mm	464	464	546
Spindle speed	rpm	直连式20000		
Spindle bore taper		BT30		
Spindle motor power	kw	5.5 (Mitsubishi)		
Cutting feed rate	mm/min	1-10000		
Fast movement speed	mm/min	48/48/48		
Tool magazine capacity		21		
Time to change the blade	s	1.4/1.9		
Positioning accuracy	mm	0.01		
Repeat positioning accuracy	mm	0.006		
Overall weight	kg	2900	2900	4500
Dimensions	mm	1760×2320×2240	1760×2320×2240	2500×2500×2300
Total power supply	Kw	15	15	20
CNC system		Mitsubishi M80B		



A handy tool for processing new energy vehicle battery boxes

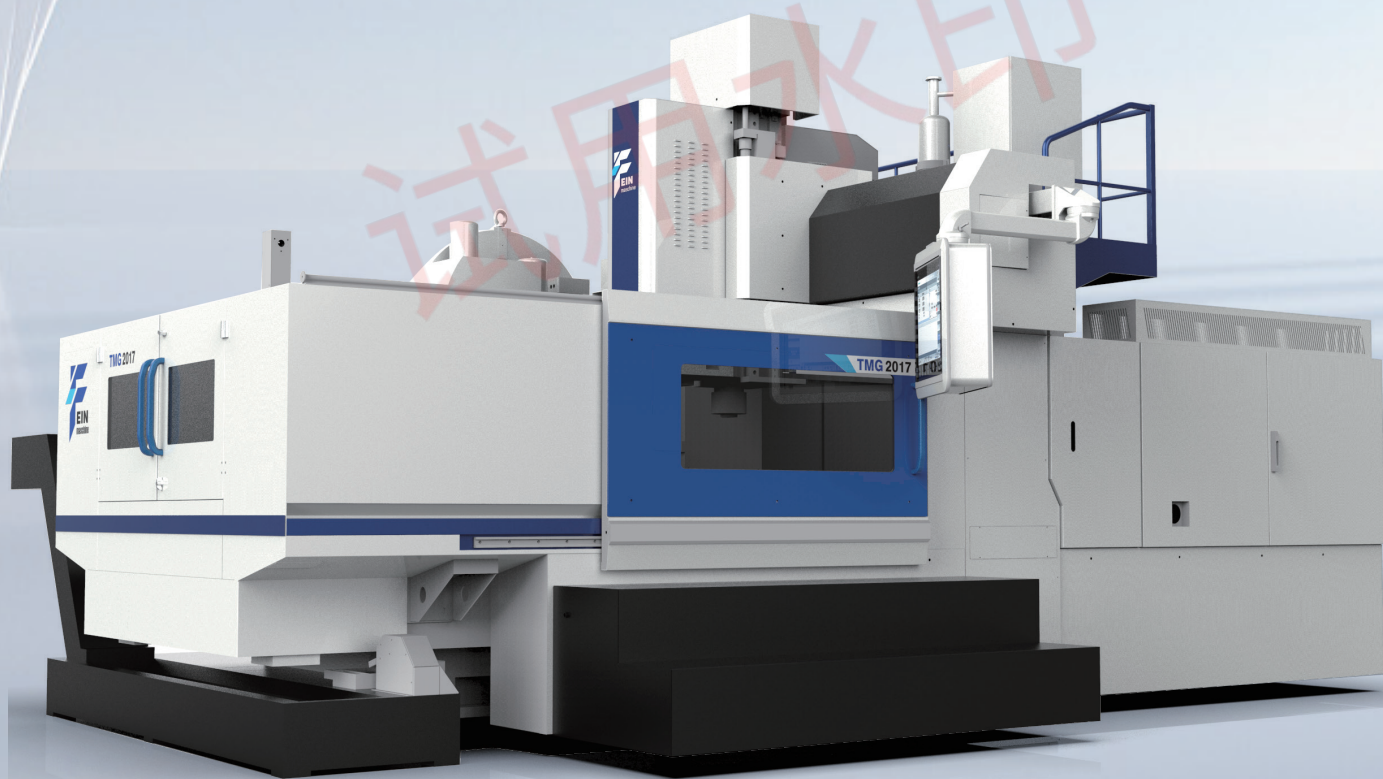
High-speed light machining center

Technical Specs	unit	LQI2520	Technical Specs	unit	LQI2520
Workbench area	mm	2500×1800	Cutting feed rate	m/min	20
T-slot	mm	9×18	Fast move speed	m/min	40/30/20
Maximum load of the workbench	t	10	Tool magazine capacity		24
X-axis travel	mm	2000	Tool change time	s	4
Y/Z travel distance	mm	2500×450	Positioning accuracy	mm	0.02
Guide rail type		Three-axis rails, two roller bars on the Z-axis	Repeat positioning accuracy	mm	0.01
From the spindle end face to the workbench	mm	180-630	Overall weight	t	13
Spindle taper		BBT40	Dimensions	mm	5250X4160X3300
Spindle speed	rpm	15000 (Direct connection)	Total power supply	Kw	22
Spindle motor power	Kw	8.4	CNC system		Siemens 828D、Fanuc Oi MF plus

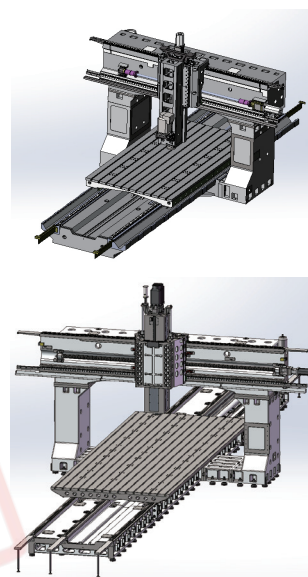
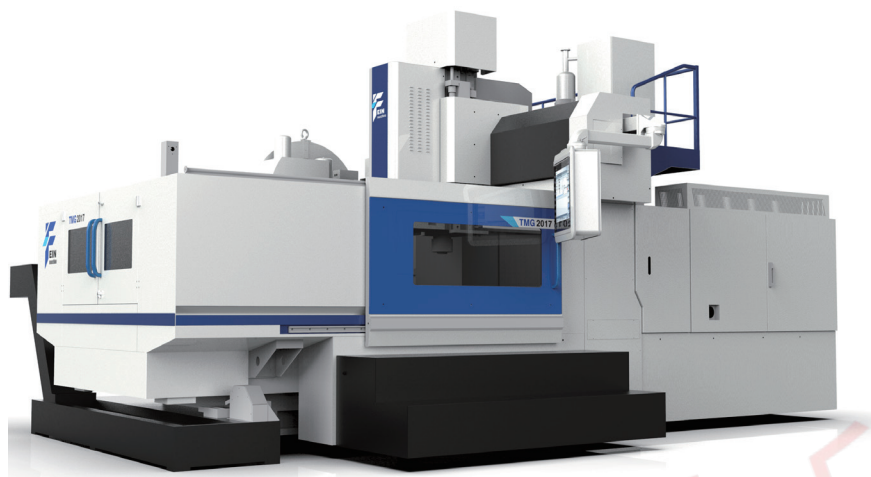


工作台移动式龙门加工中心

高精 | 高效 | 高稳定



» Overall structure design



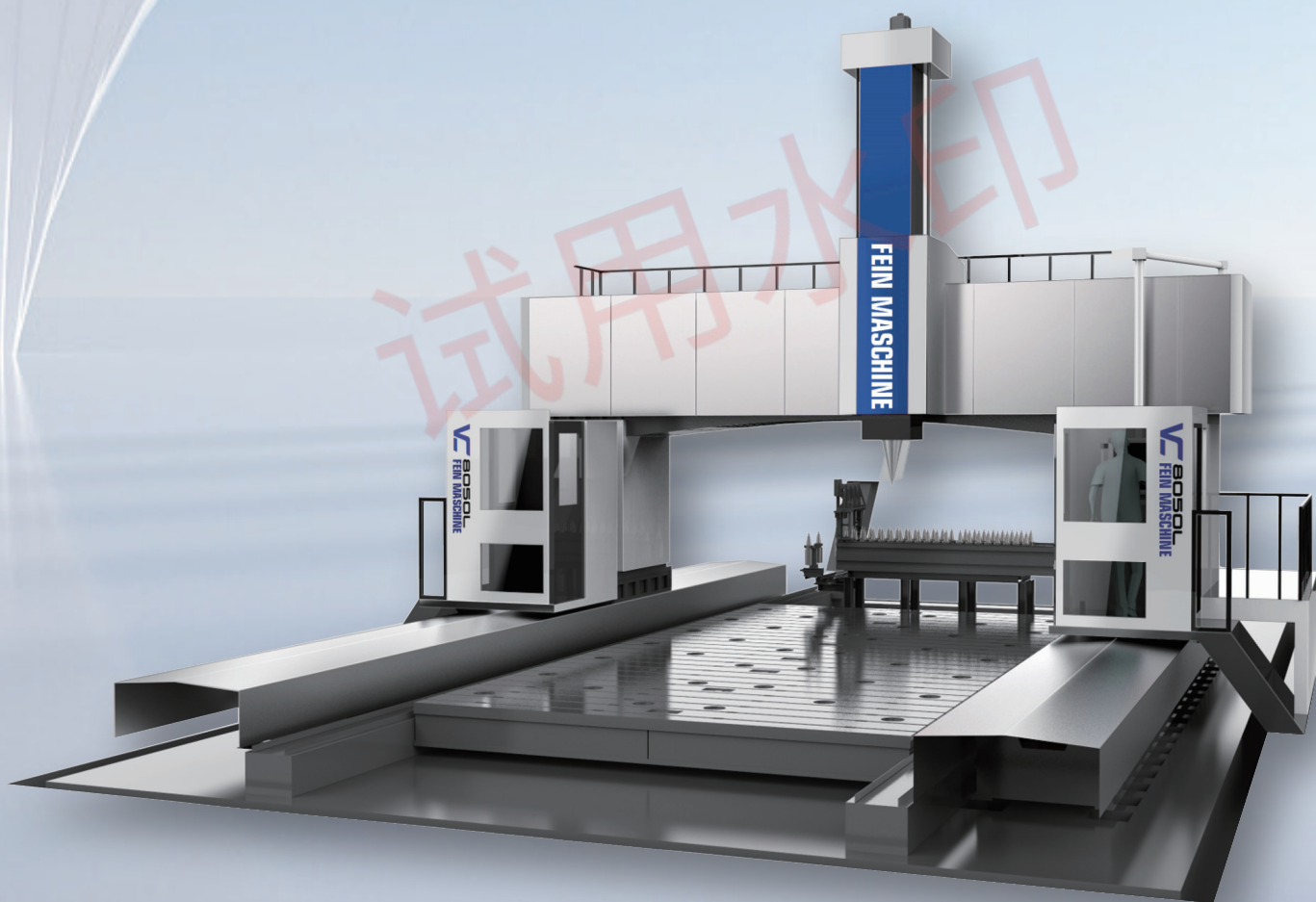
TMG Series

Technical Specs	unit	TMG1614	TMG2018	TMG3220	TMG4028	TMG6032
Workbench surface size W × L	mm	1200×1700	1600×2200	1800×3000	2500×4000	3000×6000
X-axis travel	mm	1600	2000	3200	4000	6000
Y-axis travel	mm	1500	1900	2000	2800	3200
Z-axis travel	mm	800	800	1000	1250(选配1500)	1250(选配1500)
Dragon Gate Width	mm	1500	1900	2000	2800	3200
Spindle end face to worktable surface	mm	70 ~ 870	205 ~ 1005	180 ~ 1180	240 ~ 1490	330 ~ 1580
T-slot (number – size × spacing)	mm	7-22×170	9-22×180	9-22×190	11-28×200	中间15-28×200
Spindle Specifications		BT50				
Spindle drive type		皮带6000r/min				长直连4000r/min
spindle motor	Kw	15/18.5		15/18.5	22/26	22/26
Fast feed rate	m/min	15			10	8
Cutting feed rate	m/min	10			6	5
Workbench load capacity	t	2.5	4.5	5	12	20
The total weight of the machine is about	t	15	19	23	45	62
Typical CNC system configuration		Fanuc Oi MF plus/Siemens 828D				



龙门移动式龙门系列

高刚性 | 重切削 | 通用性强

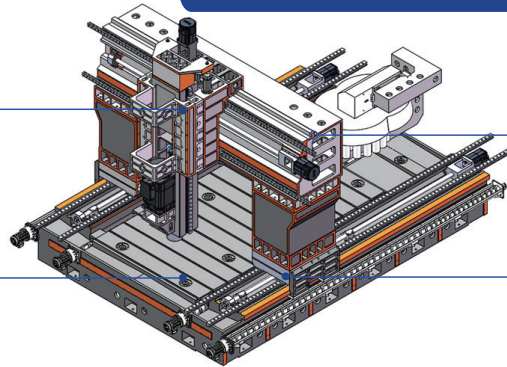


► Integrated design, compact and affordable

Integrated structure, three-axis composite guide rail with hardened rails, fixed worktable, moving gantry, small footprint, strong load capacity, high torque.

The Z-axis uses a 490x320 composite guideway square slide, which replaces the traditional keyway with a linear guide to greatly improve guiding accuracy, while still keeping the rigidity of the square slide. It's especially good for machining with heavy cutting and tough-to-machine materials.

The workbench is fixed and can carry heavy loads. In theory, there's no limit to the weight it can handle. When processing heavy workpieces, it's easy to achieve high profile accuracy, and since the workpiece's weight doesn't affect it, the precision can be maintained over a long time.



The Y-axis uses our company's proprietary composite guide rail technology. Basically, we added a rectangular guide rail on top of the two existing linear guide rails on the beam, which extends the cutting resistance moment and bearing area. This greatly boosts cutting resistance and effectively overcomes the common weakness of gantry machines and large vertical machining centers, where the cutting point has an overly long cantilever.

The X-axis uses our company's proprietary composite guide rails, with two heavy-duty linear guides plus a rectangular guide in both directions, effectively preventing the gantry from tipping during fast movements and cutting.

GMI Integrated Series 20, 25

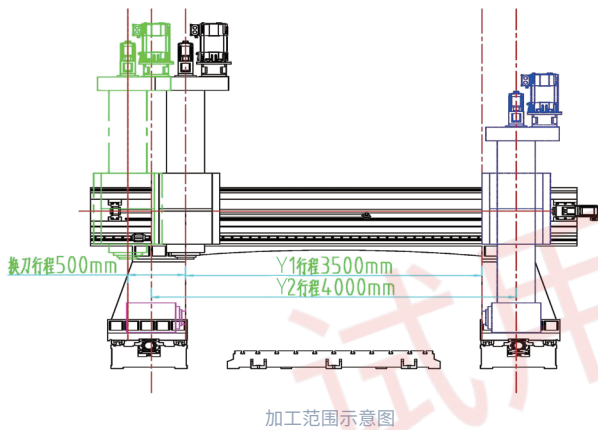
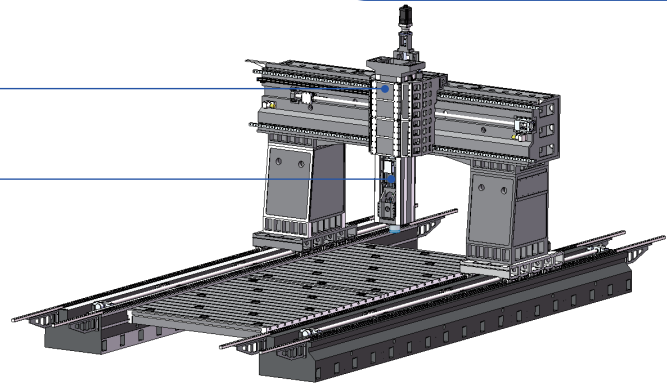
Technical Specs	unit	GMI3020	GMI4025
Workbench area	mm	3000×1800	4000×2300
Maximum load of the workbench	t	30	35
Y1/Y2 travel	mm	2000/2500	2500/3000
X/Z Axis Travel	mm	3200×1000	4200×1000
Guide rail type		The X-axis is precisely driven on both sides, with each side supported by two linear guides plus a rectangular rail. The Y-axis has dual parallel linear rails supplemented by rigid guide support. The Z-axis uses a hard guide plus double linear rails on the sides for a composite sliding block.	
Spindle end face to worktable surface	mm	200-1200 (customizable)	
Spindle speed	rpm	Standard with BT50-8000, choose 1:4 high-speed gearbox	
spindle motor		20/25L系列: 22/26Kw 140/210Nm (560/840Nm)	
Tool magazine capacity		24-bit disc	
Maximum loading width (above the hood)	mm	2000	2500
Rapid/Feed Speed	m/min	15 / 0-15	
Positioning Accuracy / Repeat Positioning Accuracy	mm	0.01/0.005	
Overall weight	t	32	37
Dimensions (excluding electrical cabinet)	mm	6700×5200×4200/5200	7800×5800×4200/5000
Typical CNC system configuration		Standard with Siemens 828D and Fanuc Oi MF plus, optional Siemens ONE	

► Solutions for heavy cutting of extra-large, extra-heavy, wide parts

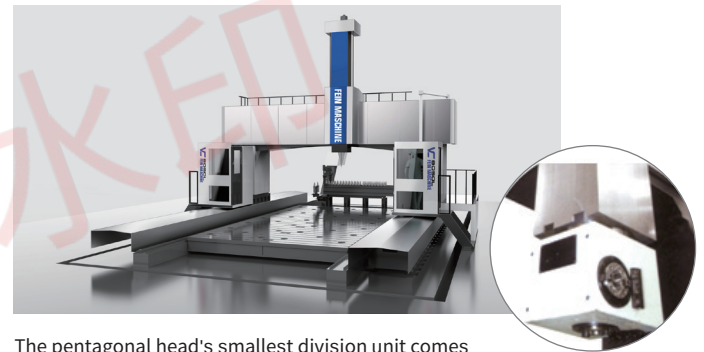
The Z-axis sliding saddle uses a 500X580 ductile iron square sliding saddle, precision-ground, and combined with advanced German injection molding technology, giving it really strong rigidity.

Optional: Uses an imported 2500rpm BT50 (or 2000rpm BT60) spindle, combined with imported roller bearings for extremely high rigidity, capable of handling heavy cutting. With an imported high-power high-speed gearbox, the machine also achieves a cutting torque of 3000Nm.

Square slip pillow: 500×580 mm



► Five-sided efficiency! High precision! Heavy cutting!



The pentagonal head's smallest division unit comes standard at 5 degrees and can be optionally set to 1 degree, with a positioning accuracy of 1 second.

GMS Split-Type 30, 35 Series

Technical Specs	unit	GMS60/80- 30	GMS60/80- 35	GMSXXX35
Workbench area	mm	2100×6000/8000	2600×6000/8000	2600×XXX
Maximum load of the workbench	t/m²	5	5	5
Y1/Y2 travel	mm	3000/3500	3500/4000	
X/Z Axis Travel	mm	6200/8200×1200	6200/8200×1200	/
Guide rail type		The X-axis is driven precisely in both directions, with both sides supported by two linear guides plus a rectangular rail. The Y-axis has dual linear rails supplemented by hard guides for strong vertical support, and the Z-axis has a square slide with a hard guide.		
From spindle end face to worktable surface	mm	Standard 350-1550, optional 350-1850		
Spindle drive type	rpm	Standard with built-in short direct-connect BT50-6000 dual-speed gearbox (BT50-3000 roller bearing / BT60-2000 roller bearing) / Optional top-mounted long direct-connect with central water outlet		
spindle motor		30/35L Series: Standard 37/55.5 kW (rated 1500 rpm) 236/354 Nm (twin-speed gearbox 944/1416 Nm); Optional 28/42 kW (rated 1000 rpm) 268/401 Nm (twin-speed gearbox 1070/1604 Nm)		
Tool magazine capacity		24-position rotary/cassette tool magazine		
Column spacing	mm	3000	3500	
Rapid/Feed Speed	m/min	15 (screw drive) 20 (rack drive) / 0-10		
Positioning Accuracy / Repeat Positioning Accuracy	mm	0.01/0.005		
Overall weight	t	53/62	58/67	/
Dimensions (excluding electrical cabinet)	mm	11650/13650×6850×5200	11650/13650×7750 ×5200	/
Typical CNC system configuration		Standard with Siemens 828D, Fanuc Oi MF plus; optional Siemens ONE		

* X向6米为丝杆传动螺母旋转, 8米及以上为双齿轮齿条消除结构

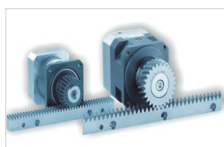


GMS extra-wide series 40, 50, 60 and above

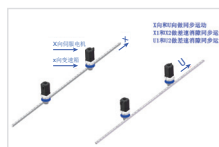
Technical Specs	unit	GMS60/80- 40	GMS60/80- 50	GMS80/100- 60	GMSXXX50
Workbench area	mm	6000/8000×3100	6000/8000×4100	8000/10000×5100	XXX×4100
Maximum load of the workbench	t/m²	5	5	5	5
Y-axis travel	mm	4000/4500	5000/5500	6000/6500	5000/5500
X/Z Axis Travel	mm	6200/8200 ×1200	6200/8200×1200	8200/10200×1200	/
Guide rail type		The X-axis is driven precisely in both directions, with both sides supported by two linear guides plus a rectangular rail. The Y-axis has dual linear rails supplemented by hard rails for strong vertical support. The Z-axis has a square sliding carriage with hard rails.			
Spindle end face to worktable surface	mm	Standard 350-1550, optional 350-1850			
Spindle drive type	rpm	Standard with built-in short direct-connect BT50-6000 dual-speed gearbox (BT50-3000 roller bearing / BT60-2000 roller bearing) / Optional top-mounted long direct-connect with central water outlet			
spindle motor		30/35L Series: Standard 37/55.5 kW (rated 1500 rpm) 236/354 Nm (twin-speed gearbox 944/1416 Nm); Optional 28/42 kW (rated 1000 rpm) 268/401 Nm (twin-speed gearbox 1070/1604 Nm)			
Tool magazine capacity		24-position rotary disk / warehouse-style tool magazine			
Column spacing	mm	4000	5000	6000	5000
Rapid/Feed Speed	m/min	15 / 0-10			
Positioning Accuracy / Repeat Positioning Accuracy	mm	0.01/0.005			
Overall weight	t	62/72	69/79	84/95	/
Dimensions (excluding electrical cabinet)	mm	11650/13650×7350×5200	11650/13650×8350×5200	13650/15650×9350×5200	/
Typical CNC system configuration		Standard with Siemens 828D, Fanuc Oi MF plus; optional Siemens ONE			

* 超宽型系列机型工作台长度及Y轴行程按每1米增加, 型号将相应改变
Y向6米及以上采用双齿轮齿条 消除结构

For gantries 6 meters and above, gear and rack rotation is used, with a synchronized dual-drive four-motor same-direction differential backlash-eliminating movement structure.



Using high-precision large-modulus grinding for gear racks, they're strong and highly accurate.



Synchronized dual-drive four-motor motion with same-direction differential gap elimination.

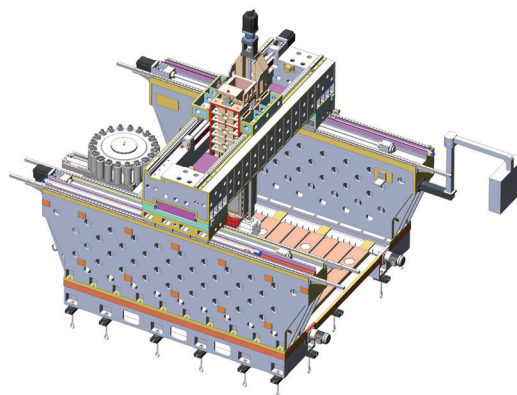


模具高速机系列

高速 | 高精 | 大承载



High-speed Mold Machine Series



MOLD Series

Technical Specs	unit	MOLD1813	MOLD2515	MOLD3019
Workbench area	mm	1900×1300	2500×1600	3000×2000
Maximum load of the workbench	t	9	15	30
X/Y/Z axis travel	mm	2000×1300×550	2500×1500×800	3200×1900×800
Guide rail type		X: four-rail track on both sides; Y: two-rail track arranged vertically, hard rail; Z: four-row roller linear guide distributed in four directions	X: two lines on each side, four lines in total, arranged in parallel; Y: four lines arranged vertically, top and bottom; Z: four roller lines arranged in four directions	
Spindle end face to worktable surface	mm	230-780	200-1000	
Spindle speed specification	rpm	BBT50-155 -12000	BBT50-155 -12000	
Power	Kw	18		
Torque	Nm		57	
Maximum loading height × width	mm	660×1550	950×1900	950×2300
Fast move speed	m/min	20		
Feed rate	m/min	0-15		
Positioning / Repositioning Accuracy	mm	0.01/0.005		
Overall weight	t	17	30	32
Dimensions (excluding the electrical cabinet)	mm	4800×3400×2900	6000×4300×4200	6800×4820×3700
Typical CNC system configuration		Standard with Siemens 828D, Fanuc Oi MF plus		

MOLD Series

Technical Specs	单位	MOLD5A3020	MOLD5A4025
Workbench area	mm	3200×2000	4000×2500
Maximum load of the workbench	t	20	30
X/Y/Z axis travel	mm	3200×2000×1000	4200×2500×1200
Guide rail type		X: Four linear rails in total, two on each side, arranged in parallel Y: Two pairs, four heavy-duty large linear roller rails in total Z: Four roller rails arranged in four directions	
Spindle end face to worktable surface	mm	200 - 1200 (Customizable)	150 - 1350(Customizable)
Can install a spindle		42Kw/67Nm	
Tool magazine capacity		Standard 20 digits	
Maximum loading height	mm	1200 (Customizable)	
Maximum loading width	mm	2400	3300
Cutting feed rate	m/min	0- 20	
Fast movement speed	m/min	20	
Positioning accuracy	mm	0.01	
Repeat positioning accuracy	mm	0.005	
Overall weight	t	39	60
Dimensions (excluding electrical cabinet)	mm	7400×4300×5500	9080×6800×5500
Typical CNC system configuration		5-axis 3+2 standard configuration Siemens 828D	

ABOUT US

About Fei Yin

From the birth of precision gears in the 19th century to becoming the crown jewel of modern industry, German manufacturing has written an epic of mechanical art in steel. Today, this spark of precision has crossed the Eurasian continent and is revitalized in the hands of Eastern craftsmen. When these technical genes meet the innovative drive of Chinese manufacturing, a uniquely Eastern philosophy of precision is born—maintaining the strict craftsmanship standards of Germany while integrating an Eastern understanding of efficiency and adaptability.

“Feinmaschine” witnesses this dialogue of precision manufacturing. Our five-axis machining centers, while keeping German rigidity, feature a proprietary thermal displacement compensation algorithm; the high-precision measurement system not only upholds German laboratory standards but also incorporates a self-developed intelligent diagnostic system. Just like the tiny beam of light on our logo symbolizing precision, it points both to the bronze gears in Stuttgart's Precision Mechanical Museum and to the CNC clusters in smart factories across the Yangtze River Delta.

This isn't just a simple technology transfer; it's the evolution of a civilization of precision manufacturing. We pay tribute to tradition with the name "Feinmaschine," and use Eastern wisdom to redefine precision—when Chinese private manufacturing companies break through core technological barriers, new coordinates rise on the global precision machinery map. Here, the birth of every component carries dual certification from Chinese and German manufacturing genes, and every optimization continues the story of precision manufacturing. From the Rhine to the Yangtze, the mechanical heart beats with the same rhythm of accuracy. "Feinmaschine" is proving that true precision knows no borders, only an endless pursuit of perfection. This is the gift of Chinese intelligent manufacturing to industrial civilization, and a declaration of manufacturing that belongs to our time.

Practical / Reliable / Professional

费因



实用 / 可靠 / 专业