Taikan

DRILLING AND TAPPING CENTER SERIES

High-end intelligent equipment integrated solutions service provider

TAIKAN WECHAT

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SHENZHEN CREATE CENTURY MACHINERY CO.,LTD.

Company mission

To provide precision equipment and quality services to the world and to achieve the customer dreams.

Company vision

Become an excellent brand of mechanical equipment, to make work and life more beautiful.

Core values

Customer first
Honesty and integrity
Sense of responsibility
Technological innovation
Hard working
Win-win cooperation

General principles of HR

Let the employees who have the desire to obtain job opportunities.
Let the employees who have the desire and ability to obtain development opportunities.
Let the employees who have the desire and ability and also performance to obtain higher value.

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Company
Introduction

Shenzhen Create Century Machinery CO., LTD(Taikan Seiki) was founded in 2005, is national high-tech enterprise of high-end intelligent equipment integrated R&D, manufacturing, sales and services. We have both Taikan and Yuken two named brands, machining center category is complete, including high-speed tapping center, box way guide /linear guide machining center, milling machine, high-speed machining center, specular machine, glass engraving machine, polish machine, double column machine and other series of precision equipment. Taikan has become the leading domestic high-end intelligent equipment manufacturer through years of development.

The headquarter locates in Bao'an district, Shenzhen city, existing three modern manufacturing bases, with 100000 square meters plant area and more than 1800 workers. As a national high-tech enterprise, we have a high-quality professional R & D team, won more than 200 core technology patents and the products have complete independent intellectual property rights, award as “Shenzhen well-known brand”, “Guangdong famous trademark”, “Shenzhen high-tech enterprise”, “National high-tech enterprise”, “Permanent Member of Shenzhen Machinery Industry Association”, "National key equipment manufacturing industry enterprises in the 12th Five-Year” and other honorary titles, also passed the certification of ISO9001 international quality management system and ISO14001 environmental management system.

At present, our company's sales and service network spreads both domestic and abroad, with professional after-sales service centers in Southeast Asia, Middle East, South America, East Europe, and Africa, to provide customers with comprehensive, convenient and efficient after-sales support.

Looking to the future, we will carry forward the spirit of enterprise culture "we always try our best to do better". And always adhere to the market and user demand. Based on the perfect management system and quality assurance system, we keep on providing high-efficiency and high-quality professional services for all our customers.

Honors of qualification

Shenzhen Top Brand
Guangdong Famous Trademark Certificate
National High-tech Enterprise
Shenzhen High-tech Enterprise
Shenzhen Love Enterprise
Member of China Machine Tool Association
Standing Director of China Shenzhen Machinery Association
2015 Deloitte High-tech High Growth of China's Top 50
Member Unit of Shenzhen Association of Internet of Things
China Machinery Industry Association Famous, Excellent and New Mechanical and Electrical Products List
Director of Shenzhen Baoan Robot Industrial Technology Innovation Alliance
ISO9001Quality Management System Certification
ISO14001 Environmental Management System Certification
All kinds of core technology patents more than200

R&D advantages

As a national high-tech enterprise, our company always takes technical innovation, product upgrading, technology improvement as key development targets. Put large funds to support R&D, and cooperate with national famous universities and research institutes. Obtain significant scientific and technological achievements and got more than 100 technology patents. All the products pass the certification of ISO9001, ISO14000 quality and environment system and process independent intellectual property rights. Currently, we have technical consultants consist of authoritative industry experts from China, Taiwan, Korea, Malaysia , and industry leading Hundreds of R&D team establish strong foundation for company's long-term development.

Casting technology for CNC machine bed

Make the machine maintain the geometric accuracy, movement precision and positioning accuracy in long-term by specially designed machine casting structure. Based on finite element analysis and modal analysis, through multiple optimizations, we designed high rigidity and superior vibration resistance machine structure. Applying symmetrical and heat balance design to improve the machine deformation, so as to make higher precision.

Intelligent control technology

Through intelligent system design, Taikan machine can carry high speed and high precision control, such as preread 30 program segments to calculate route automatically, large preread content make sure accurate calculation. The system can calculate acceleration and deceleration time automatically during machining based on program route. According to calculated route angle, it can get best speed control on the corner. Before machining the corner, the system automatically calculates best machining speed to make sure the accuracy according to angular dimension and machining speed. During machining, the system automatically selects the smooth route generated by vector precision interpolation. By the use of feed-forward control, the system can reduce machining allowance by the control time delay, improve machining precision.

AI tool life management technology

In the process of cutting the tool life management is very important. Taikan developed a tool life management combining Mitsubishi and Fanuc control system, including tool cutting time automatic statistics, display, and alarm, and upload these related data to the server. Take use of the tool life management to monitor the tool usage, and status, and launch the backup tool when the usage status reached the setting value, so as to prevent tool broken or other issue.

ATC tool change speed up technology

Taikan improves the operating speed based on the traditional automatic tool change equipment or faster action mechanism and drive components. Design tool magazine and tool change method and position according to high speed machine tool.

PRODUCTION WORKSHOP

At present, the company has three modern production base, with plant area of more than 100000 square meters, and monthly production of CNC machines more than 2000 sets, supporting world-class testing equipment, manufacturing capacity in the leading position of machinery industry.

The production workshop
of drilling and tapping machine

The production workshop
of parts processing machines

The production workshop
of glass processing machine

The production workshop
of hard rail machine

The production workshop
of line rail machine

The production workshop
of integrated machine

The production workshop
of frame machine

The production workshop
of frame machine

The production workshop
of gantry machining center

MARKETING NETWORK

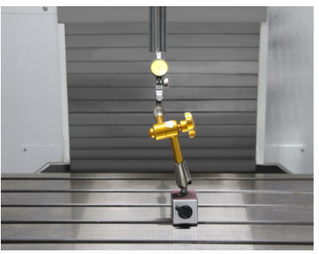
At present, the company's sales and service network spreads both domestic and all over the world.Including Southeast Asia(Vietnam, Thailand, Malaysia, Philippines, South Korea, Indonesia), Middle East(Iran, Arab), South America(Mexico, Argentina, Brazil, Peru), Europe(Turkey, Russia,Germany, France) and other countries.

Spindle vibration test

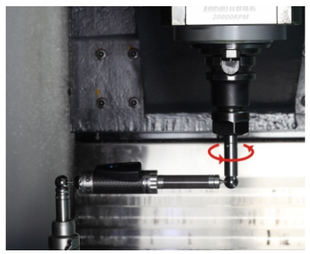
Spindle warming test

PRODUCT TESTING

1. Spindle temperature test. After the spindle is running for 24 hours, check whether the spindle temperature is normal.
2. Inspection of spindle inspection rod to ensure the accuracy of the spindle's verticality taper hole and holder.
3. Laser detection, full-stroke movement accuracy has been laser proofreading compensation to ensure the positioning accuracy of the machine.
4. Spindle pull test to detect the broach force of the spindle to ensure the tool clamping force during machining.
5. Geometric accuracy test, to detect the parallelism of each axis and the perpendicularity between each axis.
6 spindle vibration detection, vibration detection of the spindle speed range, requirements less than 3μm, ensure good the processing accuracy.
7. Telescopic ballbar system roundness test,correction of roundness and mechanical geometric accuracy, ensure the three-dimensional space of the machine movement degree.

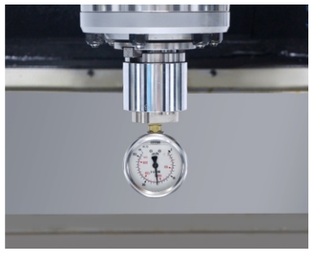


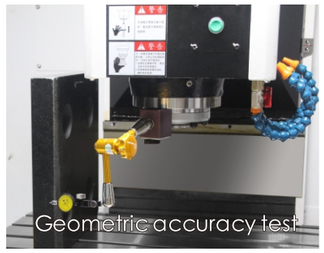
Spindle detection rod test



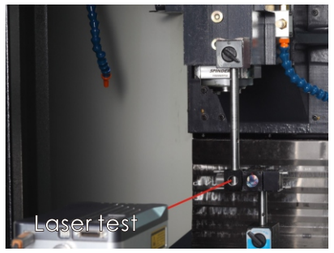
Telescopic Ballbar System roundness test

Spindle control force test





Geometric accuracy test



Laser test

PRECISION ASSEMBLY

Base shovel

Guide Rail Calibration

Bearing Housing Calibration

Tail end Calibration

Strictly check every assembly detail

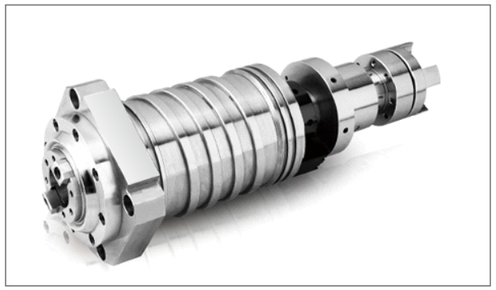
Precision assembly is the most important step of the machining center. In order to ensure the accuracy of the product.
Our company hold all the assembly 100% complete by ourself to ensure the accuracy and quality of the product.
To make sure the accuracy of each machine, we grasp every detail of each step, refine assembly all must undergo a rigorous inspection an record for each step before continuing to the next process.

High performance spindle

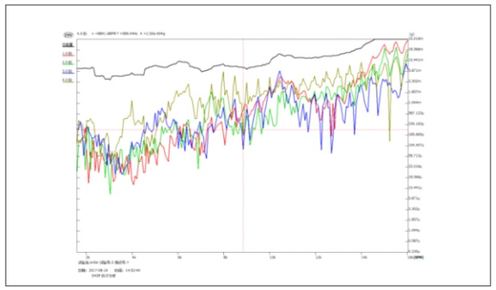
The spindle speed can reach 20000rpm (24000rpm optional)

High precision spindle with direct driven, quick response, high efficiency and reliability. The spindle is direct driven by servo motor, transmit torque directly, to achieve better drilling and tapping effect.
High speed spindle equipped with oil temperature control system, detect the temperature difference automatically, to make sure the spindle is running under the constant temperature, improve spindle precision and lifecycle.

Mechanical spindle

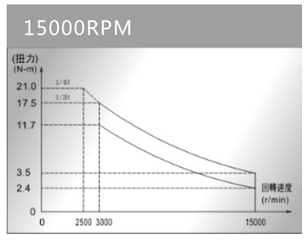


Spindle speed detecting test

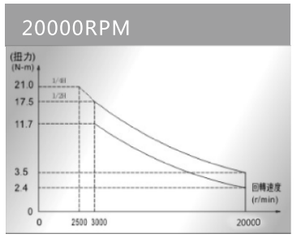


Spindle power and torque

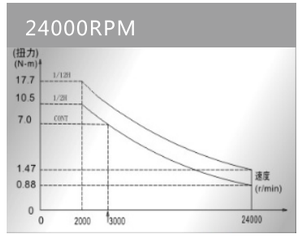
15000RPM



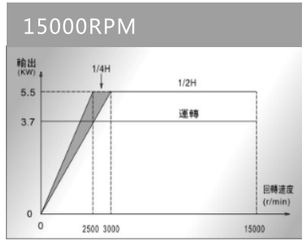
20000RPM



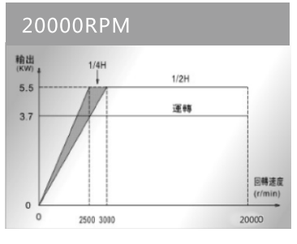
24000RPM



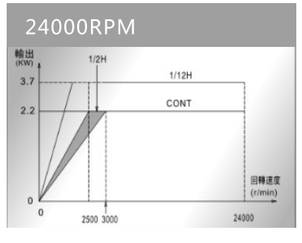
15000RPM



20000RPM



24000RPM



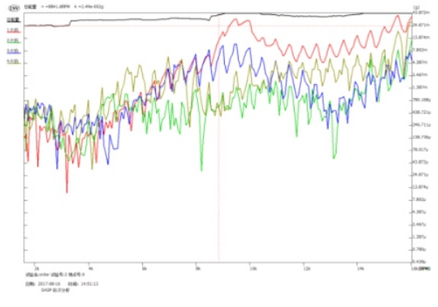
High precision electric spindle

Electric spindle adopts imported ceramic bearing to enhance rigidity. The speed, voltage, torque, power keep same level with similar spindle, reliable quality and long lifecycle.

Small vibration, low noise and minor inertia to ensure machining precision and good machining surface.

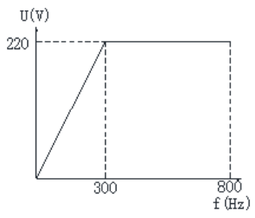
Electric spindle

Spindle speed detecting test

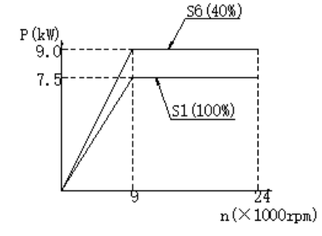


Motor character

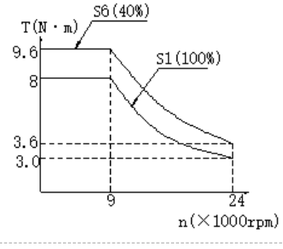
Voltage/Frequency(U/f)Curve



Power/Speed(P/n)Curve



Torque/Speed(M/n)Curve

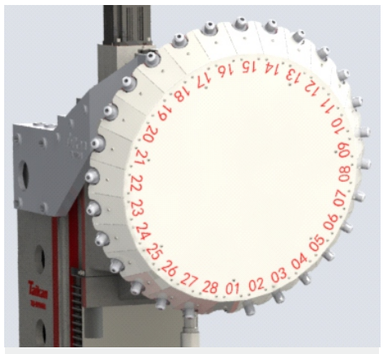


Taikan New Tool Magazine

Taikan newly researched and developed ,designed independently and produced new tool magazine with independent intellectual property rights.It adopts absolute value encoder with high precision to realize accurancy position of clamping knieves.The guide plate is optimized to make clasping knife more smooth and stable.

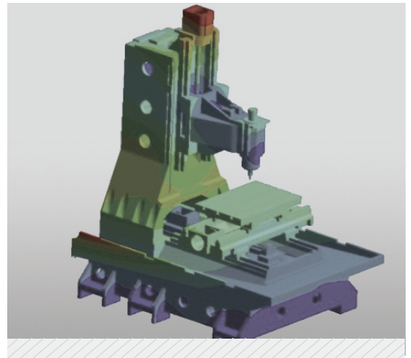
21T- Adopt Mitsubishi servo motor, equipped with M80A system ,to improve response speed and stability of tool magazine .Tool changing is only 1S.

26T-Tool to Tool 1.5S,large capacity of tool magazine to satisfy a machine to complete all processes,and support Max 3Kg.



28T-Tool to Tool 1.7S,large capacity of tool magazine to satisfy special workpiece to process multi-tool,and support Max 3Kg.

Bt40 16T-Tool to Tool 2S,suitable for drilling ang tapping machine,BT 40 spindle torque can satisfy more needs of parts machining ,and support Max 5Kg.

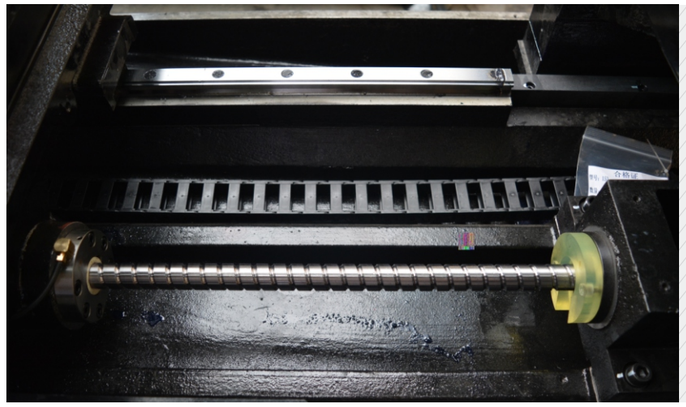


Take use of structure analysis to enhance the rigidity based on the original product, realize the lightweight. Through the finite element analysis of the machine bed, to design proper structure strength and reinforcing rib, make sure the machine with high rigidity.

X/Y/Z axis high rigidity linear guide way can support heavy load, fast movement and position accuracy.

Extra-wide base

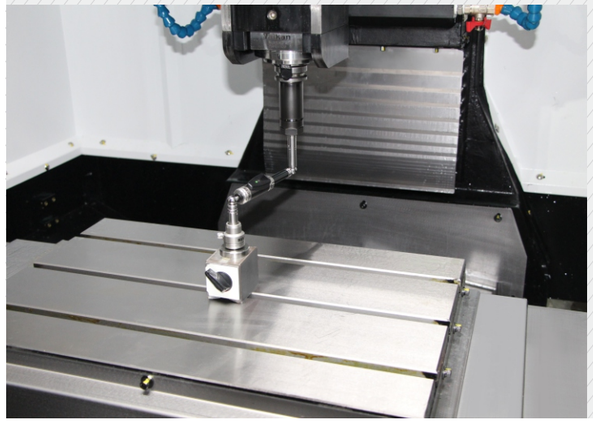
Best slanting angle base and special designed chip deflector system, avoid the chip pile up, good for the cutting fluid counter flow smoothly.

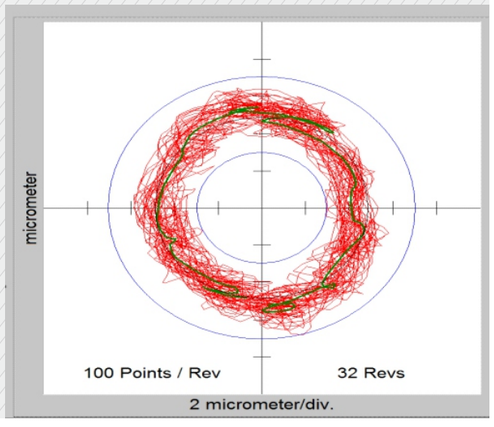


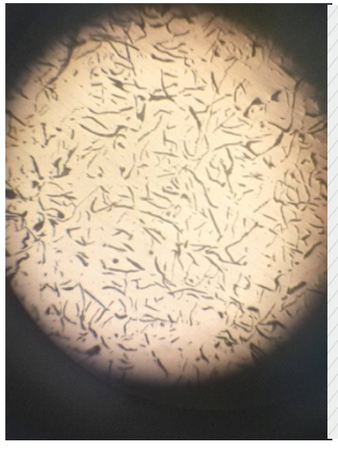
High precise C3 lead screw

Three axes are high speed noiseless C3 lead screw with low frication and high position accuracy.

High precise ball screw to ensure position accuracy. The roundness is within 0.015mm under ballbar test.



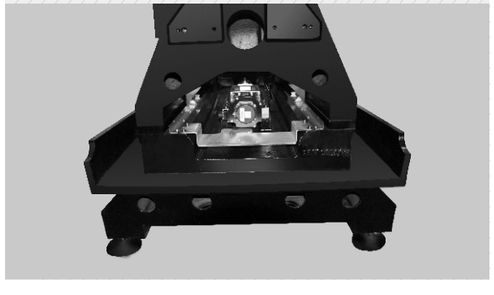




Cast iron material is HT250 with Meehanite casting technology, to ensure machine high rigidity and stability.

Extra-wide span

Big span is good for dispersing gravity and cutting force, make the force line optimized and increase load.



T-500 SERIES

HIGH RIGIDITY HIGH PRECISION TAPPING CENTER

1. FEATURE:

Taikan tapping center: Combine drilling, tapping, milling and cutting function. Win customer good praise and market feedback with high processing efficiency, high stability and yield. 40000sets sold all over the world is a good testimony of Taikan tapping center.

2. APPLICATION

The machine is widely used in 3C industry, small parts, disc-shaped parts, and shell machining of aero, auto, small mold and medical equipment industry. Specially used on mobile frame, cover and non-ferrous metals machining.

3. DURABLE IN USE

Rigorous inner protective design makes sure three axis lead screw durable in use. Perfect alarm system to prevent potential equipment damage.

4. Good machine accuracy

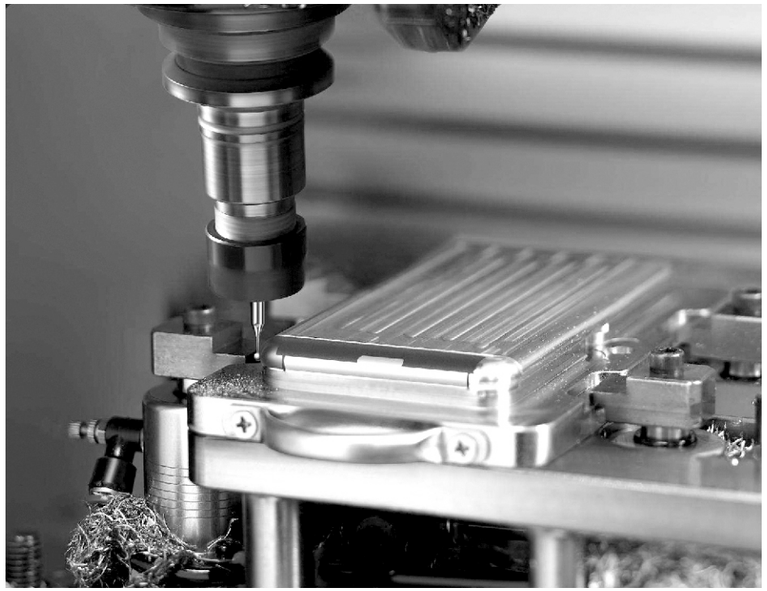
Meehanite cast iron with complete heat treatment, to eliminate internal stress, ensures the machine accuracy. X, Y and Z axis use high C3 level ball screw and P level precision linear guide.

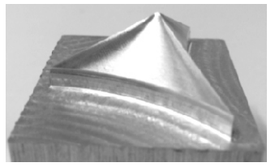
5. Easier for operation

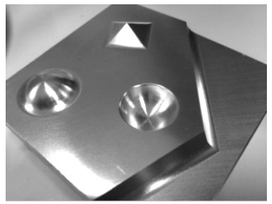
Mitsubishi cnc control is friendly human machine interface and simply operation. Extra-wide protective cover is convenient for work piece load and unload.

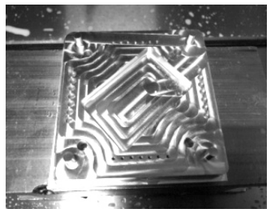
MACHINING WORKPIECE DISPLAY

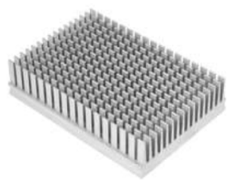
Suitable for parts and mold machining of multiple industries.
Excellent machining function and efficiency reflect good performance ratio.

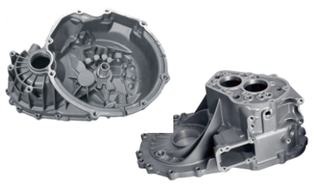












T-500B

HIGH SPEED DRILLING AND TAPPING CENTER

40000SETS MARKET APPLICATION

High efficient machining/tool change only 1S

Good stability

Extra big span with six support feet, excellent mechanical property, ensure good stability during machining.

Quick response

Three axes adopt topological optimization design, improve modular structure and drive system rigidity, decrease movement parts inertia, realize each axis high dynamic response.

Description	Unit	Specification
Working table size	mm	620*400
Spindle taper	-	BT - 30
Spindle speed	rpm	50-20000(24000)
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	500/400/320(21T) 310(26T)
X/Y/Z rapid traverse	m/min	48/48/48
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-500C

HIGH SPEED DRILLING AND TAPPING CENTER

40000SETS MARKET APPLICATION

High efficient machining/tool change only 1S

Equip with new technology-electric spindle

Electric spindle break the combination of traditional mechanical spindle and motor. Electric spindle has the advantage of quick response, acceleration and deceleration within 0.3s.

Lower weight structure

Electric spindle makes the spindle box compact, lower weight, reduce inertia and improve response speed.

Perfect machining surface

High precision electric spindle with high speed and quick response, make T-500C better machining surface comparing to other brand.

Description	Unit	Specification
Working table size	mm	620*400
Spindle taper	-	BT - 30
Spindle speed	rpm	50-24000
Spindle power	kw	9.0/7.5
X/Y/Z travel	mm	500/400/320(21T) 310(26T)
X/Y/Z rapid traverse	m/min	48/48/48
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-530

HIGH SPEED DRILLING AND TAPPING CENTER

High efficient machining/tool change only 1S

Develop based on market requirement

Deeply study stainless steel material and machining process, integrate with several years' technology, to develop the new drilling and tapping machine specially for stainless steel machining.

New servo tool magazine

Self-developed Taikan 21T new servo tool magazine, adopt high performance servo motor, realize tool changing fast and accurately. Innovate heavy and light tool double mode switch, improve tool change and reliability, T to T only is 1s.

Oil mist collection design

New inner/outer cover protection and electric box design, prevent the cutting oil mist damage to functional parts and electric parts.

Perfect customer supporting service

Establish special team to study and analyze the cutting fluid, tool, parameter, process and other machining factors, to establish entire stainless steel machining data.

Description	Unit	Specification
Working table size	mm	620*320
Spindle taper	-	BT - 30
Spindle speed	rpm	50-20000
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	500/300+100(loading and unloading travel)/300(21T) 290(26T)
X/Y/Z rapid traverse	m/min	48/48/48
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-600

HIGH SPEED DRILLING AND TAPPING CENTER

40000SETS MARKET APPLICATION

High efficient machining/tool change only 1S

X travel 600mm

Extend machining range to meet large components machining.

Description	Unit	Specification
Working table size	mm	700*400
Spindle taper	-	BT - 30
Spindle speed	rpm	50-20000
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	600/390/340(21T) 330(26T)
X/Y/Z rapid traverse	m/min	60/60/60
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-520-S

Drilling and Tapping Machine with pallet changer

Clamping & processings imultaneously/High efficiency and high reliability

Cam Mechanism + three-piece clutch teeth located double-station exchange worktable,time of exchange is 4.5S. New servo tool magazine ,26T is optional.

21T time of tool changing is 1S, and it is 1.5S for 26T.

X/Y axis is simultaneous with locating of additional axis and tool changing.

Eliminating invalid actions and reducing non-processing time to realize continuous machining.

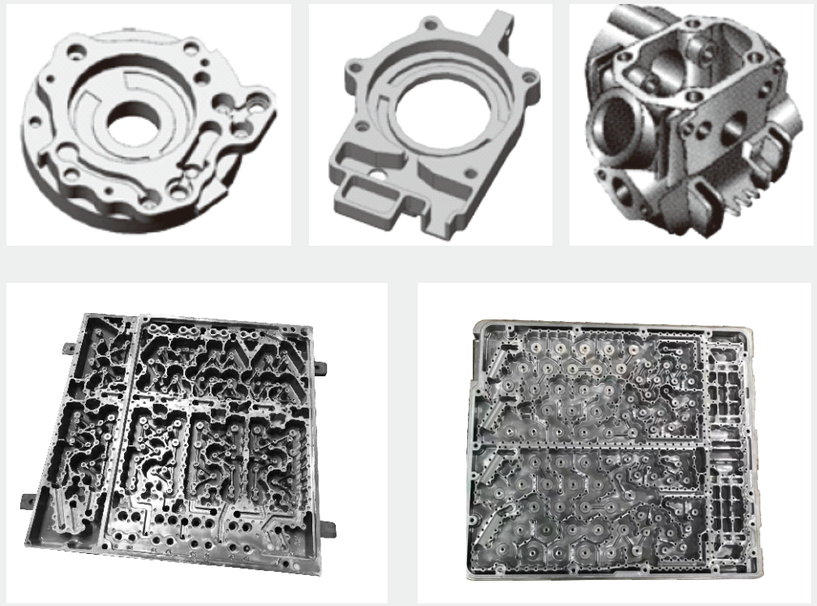
Description	Unit	Specification
Working table size	mm	650*1000 (double side)
Spindle taper	-	BT - 30
Spindle speed	rpm	50-20000
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	520/340/350(21T) 340(26T)
X/Y/Z rapid traverse	m/min	36/36/48
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

Medium size high efficiency of production series

Machine tool has characteristics of high precision, high speed and high rigidity. Drilling, tapping, milling....

Widely used in 3C industry, aviation, auto parts, small-size molds , medical devices, communications and 5G industries....

Small and medium case body, frame,board parts, disc parts,shell light processing



T-700B

HIGH SPEED DRILLING AND TAPPING CENTER

40000SETS MARKET APPLICATION

High efficient machining/tool change only 1S

X travel 700mm

Extend machining range to meet large components machining.

Description	Unit	Specification
Working table size	mm	800*450
Spindle taper	-	BT-30
Spindle speed	rpm	50-20000(24000)
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	700/450/300(21T) 290(26T)
X/Y/Z rapid traverse	m/min	60/60/60
Precision	mm	0.01
Repeat precision	mm	0.006
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-1000

HIGH SPEED DRILLING AND TAPPING CENTER

High efficient machining/tool change only 1S

X Axis travel 1050mm

Entire machine use HT250 gray cast iron, high intensity and good anti abrasion.

Wider and longer heavy base, lower center of gravity, anti torque and reduce vibration, and move vibration to non cutting area.

Big span to disperse gravity and machining load, good for rough machining.

Large travel to meet big components machining requirement.

Description	Unit	Specification
Working table size	mm	1100*510
Spindle taper	-	BT - 30
Spindle speed	rpm	50-20000(24000)
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	1050/500/340(21T) 330(26T)
X/Y/Z rapid traverse	m/min	48/48/36
Precision	mm	0.012
Repeat precision	mm	0.008
Tool magazine	ea	21 (26)
Control	-	Mitsubishi

T-1200

Three-axis long trip drilling and tapping machine

Used in 5G Industries

Medium and small base station communication box in 5G industries, radiator, filter device, vehicle terminal, intelligent locks, cell phone manufacturing,tablet computer and cavity, board,disk ,shells... processing with high efficient.Broadening processing fields of the traditional drilling and tapping machine.

Description	Unit	Specification
Working table size	mm	1300*600
Spindle taper	-	BT - 30
Spindle speed	rpm	50-12000
Spindle power	kw	5.5/3.7
X/Y/Z travel	mm	1200/650/400
X/Y/Z rapid traverse	m/min	40/48/36
Precision	mm	0.015
Repeat precision	mm	0.01
Tool magazine	ea	26 (21)
Control	-	Mitsubishi

Profile Combined Machining Center

Processing mainly inner profiles of subway;parcel rack of automobile/ pedals/window decorations;TV frame、frigerator frame、shell of communication equipment、and aluminum-wood composite profile, copper profile, PVC profile ...

Description	Unit	T-2500	T-3500	T-4500
Working table size	mm	2500*400	3500*400	4500*400
Spindle taper	-	BT-30	BT-30	BT-30
Spindle speed	rpm	50-12000 (15000)	50-12000 (15000)	50-12000 (15000)
Spindle power	kw	5.5/3.7	5.5/3.7	5.5/3.7
X/Y/Z travel	mm	2500/400/350	3500/400/350	4500/400/350
X/Y/Z rapid traverse	m/min	60/30/36	60/30/30	60/30/30
Precision	mm	0.05/0.01/0.01	0.06/0.01/0.01	0.08/0.01/0.01
Repeat precision	mm	0.03/0.006/0.006	0.04/0.006/0.006	0.04/0.006/0.006
Tool magazine	ea	21 (26)	21 (26)	21 (26)
Control	-	Mitsubishi	Mitsubishi	Mitsubishi

Mitsubishi M80 System

Features:

- ★ Faster, smoother, more accurate, and easier
- ★ Minimize the user's production cycle cost
- ★ Mitsubishi Electric is the world's largest CNC dedicated CPU
- ★ High-precision circular core electrostatic capacitive touch screen
- ★ The world's fastest mobile controlled high-speed fiber network

M80 series advanced design

- ★ Improve machine design based on new hardware
- ★ It can realize the unique operation of the machine tool factory
- ★ 2 split multiscreen
- ★ Thin graphic design
- ★ Optional front or back installation

NUM	M80 system standard function
1	Control axis: 9 axes
2	At the same time control the number of axes: 4 axes
3	Minimum input increment: 0.1μm, 0.001 degrees, 0.0001 inch
4	Given unit 1/10: 0.0001mm, 0.0001 degree, 0.00001 inch
5	Public/English conversion
6	10.4"LCD color touch screen
7	MDI operation
8	Empty operation
9	Manual feed (JOG)
10	One-way positioning: G60
11	Quasi-stop mode: G61
12	Proper stop: G09
13	Linear interpolation: G01
14	Circular interpolation: G02/G03 (can be multi-quadrant)
15	Pause: G04
16	Cylindrical interpolation
17	Thread processing/synchronization
18	Jump function: G31
19	High-speed jump function
20	Origin return: G28
21	Automatically increase the speed
22	Absolute/increment instructions (can coexist in program)
23	Plane selection: G17, G18, G19
24	Polar coordinate commands
25	Coordinate system setting
26	Workpiece coordinate system: G52, G53, G54-G59

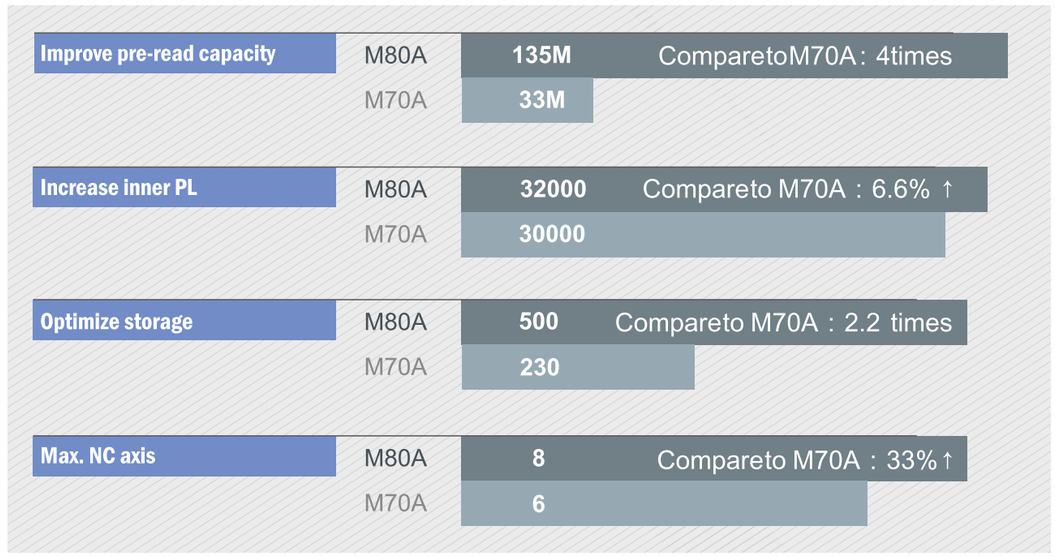
NUM	M80 system standard function
27	Added workpiece coordinate system: 48 groups
28	Optional angle: chamfer / fillet
29	Subroutine call
30	Boring and milling cycle function
31	Automatic corner/speed adjustment
32	Corner automatic deceleration
33	Scaling
34	Coordinate rotation
35	Programmable mirroring
36	Spindle speed control
37	High-speed synchronous rigid tapping
38	Tool compensation function
39	Memory storage capacity: 1280m (500K)
40	Number of programs that can be stored: 1000
41	Background programming
42	Program prompt
43	Alarm prompt
44	The time and amount added
45	Actual spindle speed and T code hints
46	Front SD card
47	Front USB interface
48	DATE SERVER large-capacity programming
49	High-speed accuracy
50	Simple inclined surface processing (G176)
51	Seven-level user password guarantee
52	3D SOLID Entity Round Program Check

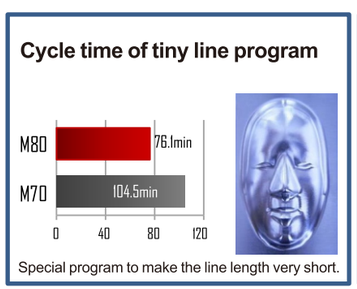
M80A control advantage

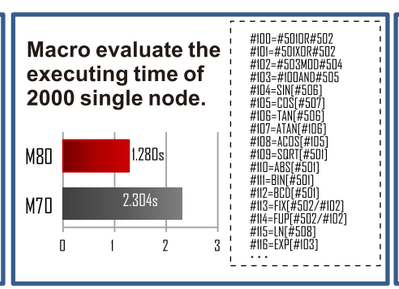
Main function of control system

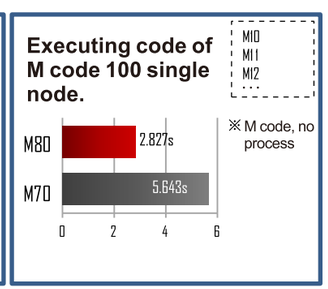
System Specification	M70A	M70B	M80A	M80B
Normal NC control axis	3	3	3	3
Max. NC control axis	6	4	8	5
Max. spindle	2	2	2	2
Min. unit	0.0001mm	0.0001mm	0.0001mm	0.0001mm

System Specification	M70A	M70B	M80A	M80B
Program storage	230KB	230KB	500KB	500KB
Max. pre-read capacity	33m	16m	135m	16.8m
SSS function	Standard	Standard	Standard	None
Inner PLC capacity	30000	20000	64000	32000









FANUC 0I–MF Plus

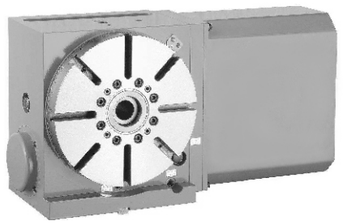
Has a powerful control function
High-speed, high-quality processing

★ Precision calculations in nanometer units, with the most advanced servo technology nano-CNC system
★ Effective AI contour control for high-speed, high-precision machining
★ Easy to adjust the machining accuracy and tolerance control
★ Intelligent overlapping function that can shorten the processing cycle time of parts
★ High-speed and high-precision servo HRV control
★ Fast servo adjustment FANUC SERVO GUIDEWAY (Servo Wizard) for high-speed, high-precision machining

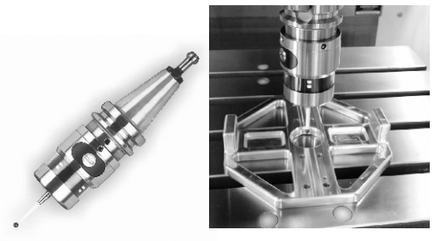
NUM	FANUC 0I-MF Plus standard function
1	8.4 inch color LCD display
2	Etherenet Web Interface (RJ45 Interface)
3	RS-232C interface
4	Memory card interface
5	USB interface
6	Program storage capacity 512KB
7	Number of login procedures: 400
8	Background editing
9	Control axis number: 3 axes
10	Axis of movement: 3 axes
11	Minimum instruction unit: 0.001mm, 0.0001inch, 0.001deg
12	Metric and Imperial conversions
13	Mechanical lock
14	Z axis lock
15	Software stroke limit setting
16	Travel limit check before moving
17	Backlash compensation
18	Interpolation pitch error compensation
19	DNC operation
20	Single execution
21	Manual Data Input (MDI)
22	Manual feed
23	Manual feed override
24	Trial operation
25	Rapid positioning
26	Fast moving percentage
27	Chip feed command
28	Chip Feed Rate Percentage

NUM	FANUC 0I-MF Plus standard function
29	Absolute/increment instructions
30	Plane selection
31	Calling subroutine
32	Canned cycle
33	Small diameter deep hole fixed cycle
34	Selective single-hop
35	Workpiece coordinate system
36	Extra workpiece coordinate system
37	Polar coordinate instruction
38	Coordinate rotation
39	G-code program mirroring function
40	Any angle chamfer C, corner R
41	Linear interpolation
42	Circular interpolation
43	Origin return
44	One-way positioning
45	Helical interpolation
46	Spindle positioning
47	Rigid tapping
48	M-code
49	Automatic power-off
50	Tool radius correction C
51	Warning message display
52	Warning message history display
53	Operation information display
54	Operation information history display
55	Automatic corner deceleration
56	Linear acceleration and deceleration

4th axis: four axis linkage to machining complicated components.



Sensor: Measure the machining products



Tool setting: Reimburse tool abrasion, to ensure machining precision.

Oil coolant: Lower cooling liquid temperature, improve coolant effect.

Control system: Equip with advanced three high speed control system.

Mitsubishi

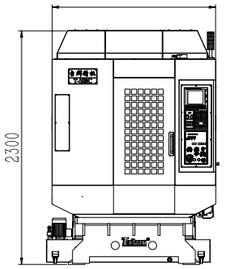
Fanuc

Siemens

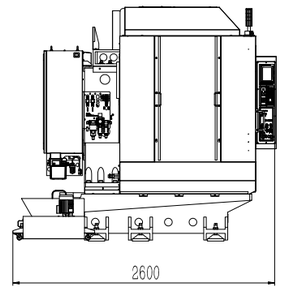
Taper-shank cleaning: use coolants to clean the taper shank of the tool, to prevent cutting in the spindle taper hole from clamping to keep the stability of processing accuracy.

Machine dimension (Unit:mm)

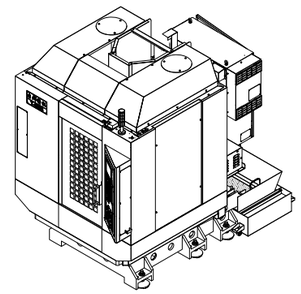
T–500B



Front view

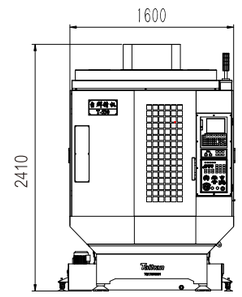


Left view

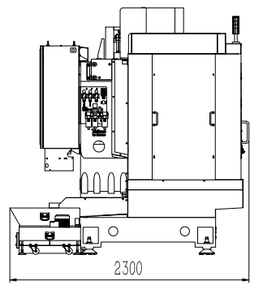


Axis view

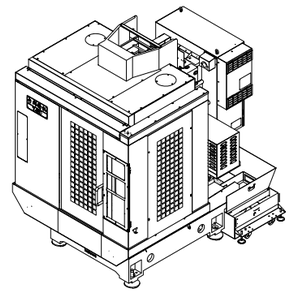
T–530



Front view

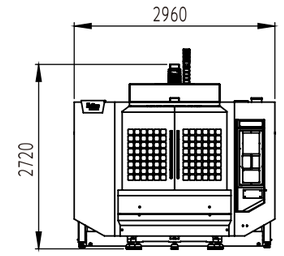


Left view

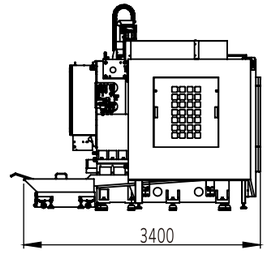


Axis view

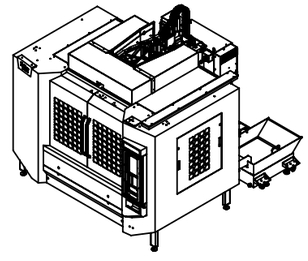
T-1200



Front view



Left view



Axis view

Parameter Table

Items		Unit	T-500B	T-500C	T-530	T-600
Working table size		mm	620×400	620×400	620×320	700×400
Travel	X axis	mm	500	500	500	600
	Y axis	mm	400	400	300+100(Loading and Unloading Travel)	390
	Z axis	mm	320(21T)/310(26T)	320(21T)/310(26T)	300(21T)/290(26T)	340(21T)/330(26T)
T slot -Dimensions		mm	3-14×120	3-14×120	3-14×120	3-18×125
Dsitance from spindle nose to working table		mm	160-480 (21T) 160-470 (26T)	160-480 (21T) 160-470 (26T)	185-485 (21T) 185-475 (26T)	180-520 (21T) 180-510 (26T)
Spindle center to body surface distance		mm	445	445	350	445
Spindle speed		rpm	50-20000 (24000)	50-24000	50-20000	50-20000
Spindle taper		#	BT-30	BT-30	BT-30	BT-30
Spindle power		Kw	5.5/3.7	7.5	5.5/3.7	5.5/3.7
X axis rapid traverse rate		m/min	48	48	48	60
Y axis rapid traverse rate		m/min	48	48	48	60
Z axis rapid traverse rate		m/min	48	48	48	60
Cutting speed		mm/min	1-30000	1-30000	1-30000	1-20000
Three axes motor power		Kw	1.5/1.5/2.2	1.5/1.5/2.2	1.5/1.5/2.2	1.5/1.5/2.2
Max Tool weight		Kg	3	3	3	3
Tool length		mm	200	200	200	200
The max diameter		mm	60/80	60/80	60/80	60/80
Tank capacity		L	145	145	160	125
Air pressure demand		Mpa	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8
Total power consumption		Kva	12	12	12	12
Positioning accuracy		mm	0.01	0.01	0.01	0.01
Repeat accuracy		mm	0.006	0.006	0.006	0.006
Max load		Kg	250	250	250	250
Machine weight(estimated)		Kg	3100	3050	2860	3100
Outline dimensions		mm	1600×2600×2300	1600×2600×2300	1600×2300×2410	1890×2600×2500
Tool magazine capacity		位	21 (26)	21 (26)	21 (26)	21 (26)

Items		Unit	T-520-S	T-700B	T-1000	T-1200	T-2500
Working table size		mm	650×1000(double side)	800×450	1100×510	1300×600	250×400
Travel	X axis	mm	520	700	1050	1200	2500
	Y axis	mm	340	450	500	650	400
	Z axis	mm	350(21T)/340(26T)	300(21T)/290(26T)	340(21T)/330(26T)	400	350(21T)/340(26T)
T slot -Dimensions		mm	3-14×120 (Two sides)	3-18×125	3-14×125	5-18×125	4-14×100
Dsitance from spindle nose to working table		mm	205-555(21T)/205-545(26T) Option low chassis worktable : 255-605(21T)/255-595(26T)	150-450 (21T) 150-440 (26T)	150-490 (21T) 150-480 (26T)	150-550	200-550 (21T) 200-540 (26T)
Spindle center to body surface distance		mm	445	505	572	727	445
Spindle speed		rpm	50-20000	50-20000(24000)	50-20000(24000)	50-12000	50-12000 (15000)
Spindle taper		#	BT-30	BT-30	BT-30	BT-30	BT-30
Spindle power		Kw	5.5/3.7	5.5/3.7	5.5/3.7	5.5/3.7	5.5/3.7
X axis rapid traverse rate		m/min	36	60	48	40	60
Y axis rapid traverse rate		m/min	36	60	48	48	30
Z axis rapid traverse rate		m/min	48	60	36	36	36
Cutting speed		mm/min	1-30000	1-20000	1-20000	1-20000	1-12000
Three axes motor power		Kw	2/2/2.2	1.5/2.2/2.2	2.2/2.2/3.0	2.2/2.2/3.0	3.0/3.0/2.2
Max Tool weight		Kg	3	3	3	3	3
Tool length		mm	200	200	200	200	200
The max diameter		mm	60/80	60/80	60/80	60/80	60/80
Tank capacity		L	145	145	170	330	260
Air pressure demand		Mpa	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8
Total power consumption		Kva	15	15	15	15	20
Positioning accuracy		mm	0.01	0.01	0.012	0.015	0.05/0.01/0.01
Repeat accuracy		mm	0.006	0.006	0.008	0.01	0.03/0.006/0.006
Max load		Kg	200 (Single side)	250	300	800	250
Machine weight(estimated)		Kg	5200	3300	4510	60000	4800
Outline dimensions		mm	3200×2085×2615	2050×2570×2340	2480×2850×2550	2960×3430×2680	5200*2500*2400
Tool magazine capacity		位	21 (26)	21 (26)	21 (26)	26	21 (26)

Our products are improved continuously, the above information is subject to change without notice.

● Standard ○ Option ▲ Need Advise △ Not Supported

	T-500B	T-500C	T-530	T-600	T-520-S	T-700B	T-1000	T-1200	T-2500
Taikan-21T NEW	●	●	●	●	●	●	●	○	●
Spindle speed 12000rpm	○	○	○	○	○	○	○	●	●
Spindle speed 15000rpm	○	○	○	○	○	○	○	○	○
Spindle speed 20000rpm	●	○	●	●	●	●	●	○	○
Spindle speed 24000rpm	○	●	○	○	○	○	○	○	○
Oil coolant	○	●	○	○	○	○	○	○	○
CTS	▲	▲	▲	▲	▲	▲	▲	▲	▲
Blow equipment	●	●	●	●	●	●	●	●	●
Rigidity function	●	●	●	●	●	●	●	●	●
Mitsubishi control	●	○	●	●	●	●	●	●	●
Fanuc control	○	●	○	○	○	○	○	○	○
Arm type (26T)	○	○	○	○	○	○	○	●	○
BT-30	●	●	●	●	●	●	●	●	●
4th axis	○	○	○	○	○	○	○	○	○
Cutting fluid coolant system	●	●	●	●	●	●	●	●	●
Circular sprinkle	▲	▲	▲	▲	▲	▲	▲	▲	△
Full closed cover	●	●	●	●	●	●	●	●	○
Tool box and adjustment tool	●	●	●	●	●	●	●	●	●
System manual	●	●	●	●	●	●	●	●	●
Operation manual	●	●	●	●	●	●	●	●	●
Work light	●	●	●	●	●	●	●	●	●
Warning light	●	●	●	●	●	●	●	●	●
Electrical cabinet heat exchanger system	○	○	○	○	○	○	○	○	○
Column increase 100mm	▲	▲	▲	▲	▲	▲	▲	▲	▲
Column increase 200mm	▲	▲	▲	▲	▲	▲	▲	▲	▲
Hand wheel	●	●	●	●	●	●	●	●	●
Back flush	○	○	○	○	○	○	○	●	○
Automatic door	○	○	○	○	○	○	○	○	○
Oil skimmer	○	○	○	○	○	○	○	○	○
Sensor	○	○	○	○	○	○	○	○	○
Tool setting	○	○	○	○	○	○	○	○	○
Taper-shank cleaning	○	▲	○	○	○	○	○	●	○
5th axis rotary	○	○	○	○	○	○	○	○	○

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