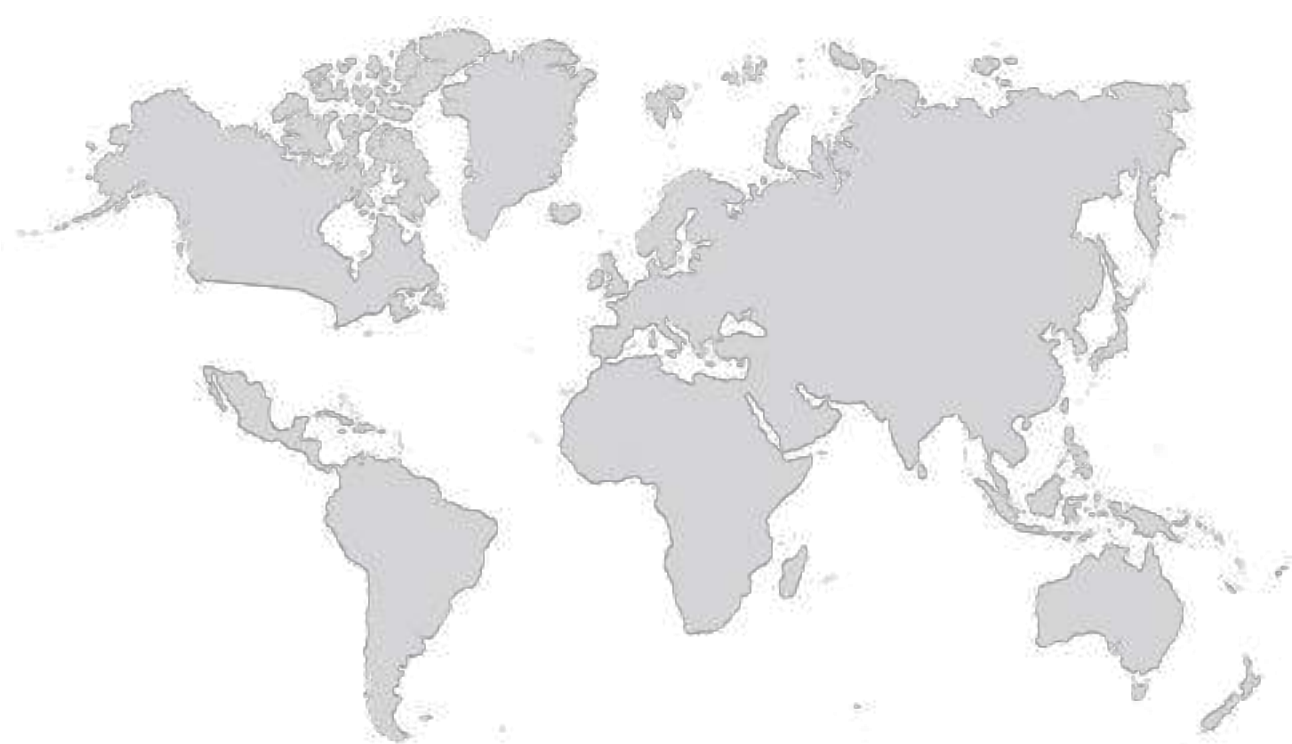


ORION
MACHINES

JT RFINE 喬鋒®



INTELLIGENT
PROCESSING SOLUTIONS

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MACHINES



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contato@orionmachines.com.br



Atendimento em todo o Brasil





Dongguan headquarters



Nanjing R&D bases



Ningxia R&D bases

Company profile

>>>>>

Jirfine Intelligent Equipment Co., Ltd., established in 2009, is a national-level specialized and innovative "Little Giant" enterprise engaged in the design, research and development, production, sales, and service of mid-to-high-end CNC machine tools. Jirfine successfully listed on the GEM Board of Shenzhen Stock Exchange in 2024. Our products are widely used in strategic industries such as aerospace, marine engineering, rail transit, automotive, semiconductors, and consumer electronics. Jirfine is committed to the mission of "making manufacturing more stable, precise, efficient, and intelligent," and aims to be a leading provider of CNC equipment with the vision of "building a century-old enterprise." The company supports the high quality development of China's manufacturing industry and contributes to the upgrade of "Made in China" to "Intelligent Manufacturing in China," helping the country transition from a major manufacturing power to a strong manufacturing power.

1700+

Employees

3

R&D Bases

200+

Patent

10000+

Customer service

10

Categories

20

Series

ON ONE-PIECE SLANT MACHINE BED



Jirfine machine tools has mastered the advanced machine tool manufacturing concept and core technology, and all assembly links adopt precision assembly instruments. At the same time, relying on the standardized operating procedure and the strict processing control, in order to obtain the product characteristics of the opposite excellence and consistency, it uses equipment, technology and standardized measures rather than human experience to control the product quality.



Roughness meter profile instrument
all-in-one machine



Three-coordinate measuring machine



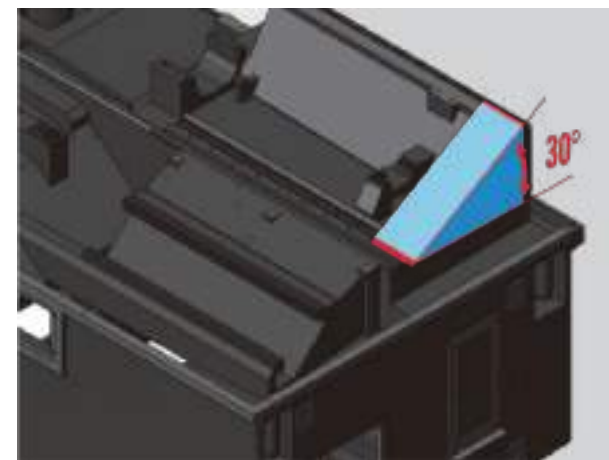
Roundness measuring instrument



Altimeter



The designed bending of 30° and torsion resistant, high rigid integral inclined bed has compact structure and reasonable shapes of ribs. The fixing surface of spindle box and Z-axis guide rail surface are processed in the same procedure to ensure higher accuracy. The high-accuracy machining could be achieved even in heavy cutting.



Features

The hybrid inclined bed structure of 30° is adopted to ensure excellent rigidity, accuracy retention performance and minimum floor area. The staggered structure ensures the status of machining, assembly is the same to that during actual



Precision Screw

The X-axis and Z-axis adopt the structure of high-precision pre-stretched screw and integral screw bearing seat, which can effectively prevent temperature rise deformation, improve positioning accuracy and increase the rigidity and stability of screw rod support.

HQT CNC lathe



HQT08-380



HQT08-580UA

ORION

DETONATE

Features

>>>>>

PRODUCTIVITY

- High Rigidity — The front bearing of the spindle is equipped with double-row roller bearings and double-row angular contact ball bearings. The spindle adopts 20CrMo material and undergoes integral quenching treatment, which enhances the rigidity and impact resistance of the spindle, enabling it to perform heavy-duty cutting operations.
- High Precision — The spindle structure is compact, assembled in a constant temperature environment of $22 \pm 1^\circ \text{C}$, and features P4-grade bearings. The strict bearing preload assembly process ensures the stability of the spindle precision.

Application field

>>>>>

Machine tool applications this series of models used in automobile, the engineering machinery and agricultural machinery, the energy industry, medical industry and large quantities of parts machining industry, machinable straight cylindrical, slash cylinder, circular arc, and a variety of complex parts, such as thread, groove, typical machining parts, such as the gear shaft, nozzle, pulley, the brake disc, piston, the filter head, the valve guide, full protection accessories, etc.



Automobile manufacturing



Construction machinery



Agricultural machinery



The energy industry



Batch parts processing



Machining of complex components



Gear bearing machining

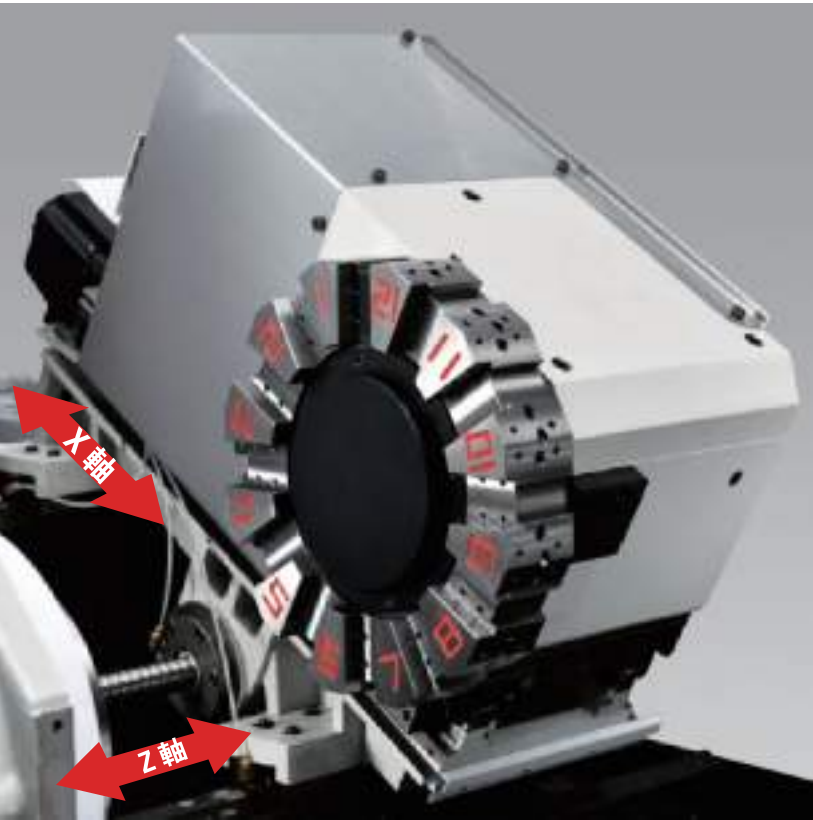


Healthcare applications



Electric power industry

ORION



Adopt NC fast indexing turret structure, no lifting action, driving with the servo, positioning of rat tooth plate with large diameter, hydraulic locking mechanism, realize the perfect combination of high precision, fast efficiency and good rigidity. The indexing action of turret can be carried out simultaneously with the coordinated movement, which further improves the working efficiency of the machine tool.

Advantage

- The tooth plate of turret adopts large diameter arc tooth plate.
- The connection between cutter tower box and screw and guide rail adopts direct connection.
- Compared with the same industry, the turret size increases.

Acceleration

- High speed acceleration of X and Z axis is realized by high precision servo control technology.
- The fast feed speed: X:30m/min, Z:36m/min.

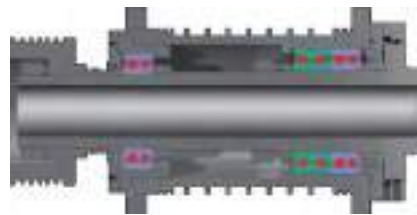
The form of turret	Servo turret
The capacity of cutters	12Positions (8Positions)
The time of cutters change(one/full)	0.185
Cylindrical tool dimensions	20mm (25mm)
Diameter of boring tool holder	Ø32mm(Ø40mm)

Achieve accurate self - centering

Accurate and automatic alignment is realized by meshing between convex and concave teeth. The main gear coupling is used in the manufacturing process, and the precision of tooth and tooth meshing is guaranteed.

Indexing accuracy stability

The inside of the cutter tower is completely sealed, and the cutter tower is rotated without lifting, which effectively prevents dust from entering and keeps the accuracy for a long time.



Front side: high-rigidity double-row cylindrical roller bearing, high-rigidity thrust angular contact ball bearing.
Rear side: high-rigidity double-row roller bearing.
Such bearing configuration has the best radial and axial stiffness and high rigidity.
The coaxial encoder is used to reduce the measurement error of the encoder.

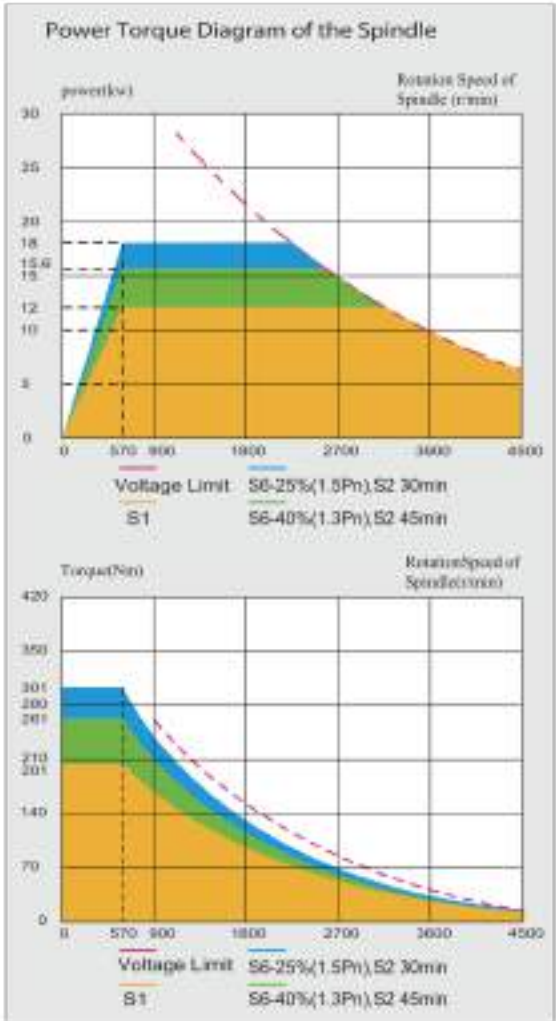


Imported High-precision Chuck

DETONATE PRODUCTIVITY

Spindle advantage

The core of spindle adopts 20 CrMo material for whole body quenching treatment, and the bearing structure adopts the optimal design by combining the angular contact thrust ball bearing and roller bearing to ensure high precision, high efficiency, high rigidity and impact resistance of the spindle.



The spindle structure is compact and assembled in a $20 \pm 1^\circ$ constant temperature and dust-free environment. The bearing accuracy grade is P4. The strict bearing preloading assembly process ensures the stability of the runout accuracy of the spindle within 0.002mm. The rated power of spindle servo motor is 12KW, the maximum speed is 4500 rpm/min, and the torque is 201 N.m.

Low Temperature Rise/High Torque/ Stable Running

The demands for high-efficiency machining have been fully met. The integrated integral spindle prevents the penetration of foreign matters and ensures that it can still work stably under harsh machining conditions.

Mechanical specifications

>>>>>

Item		HQT08-380		HQT08-580U	HQT08-580UA
Machining Range					
Maximum Rotating Diameter	mm	Ø500			Ø580
Maximum Machining Diameter × Length	mm	Ø350×360	Ø350×530		Ø350×470
Bore Diameter of the Spindle	mm	Ø62			
Maximum Diameter of Rod to be Machined	mm	Ø51			Ø51
Maximum Supporting Weight	kg	200			
Spindle					
Maximum Rotating Speed of Spindle	r.p.m	4500			
The End Type of Spindle	KAS	A2-6			
The Rotation Indexing Accuracy of Spindle	deg	(360°) 0.01			
Size of Chuck	inch	8" Hollow (Solid) Chuck			12" Hollow (Solid) Chuck
Travel					
Travel Length of Axis-X	mm	200			210
Travel Length of Axis-Z	mm	380	580		480
Feed					
Fast Moving Speed of Axis X	m/min	30			
Fast Moving Speed of Axis Z	m/min	36			
Precision					
Positioning precision	mm	0.008 (Full Travel Length)			
Repeated Positioning precision	mm	0.002 (Full Travel)			
Turret					
Total Number of Tools	pcs	12 (OPT 8)			12
Tool Changing Time	sec	0.18			0.2
Height of Outer Arbor	mm	20x20 (OPT 25x25)			25x25
Maximum Diameter of Inner Arbor	mm	Ø32 (OPT Ø40)			Ø40
Tailstock					
Tailstock Form	#	/		Programmable Servo	
Maximum Movement of Tailstock	mm	/		540	
Taper Hole Form of Tailstock	#	/		MT4	MT5
Generator					
Control System	#	Siemens 828D			
Spindle Motor	KW	12			12
Axial Servo Motor X/Z	KW	1.15/2.2			2.2/2.2
Others					
Water Tank Capacity	L	140		120	
Power Demands	KVA	25			43
Overall Dimension(L × W × H)	mm	2232x2865x1825		3735x1742x1815	3735x1862.5x1815

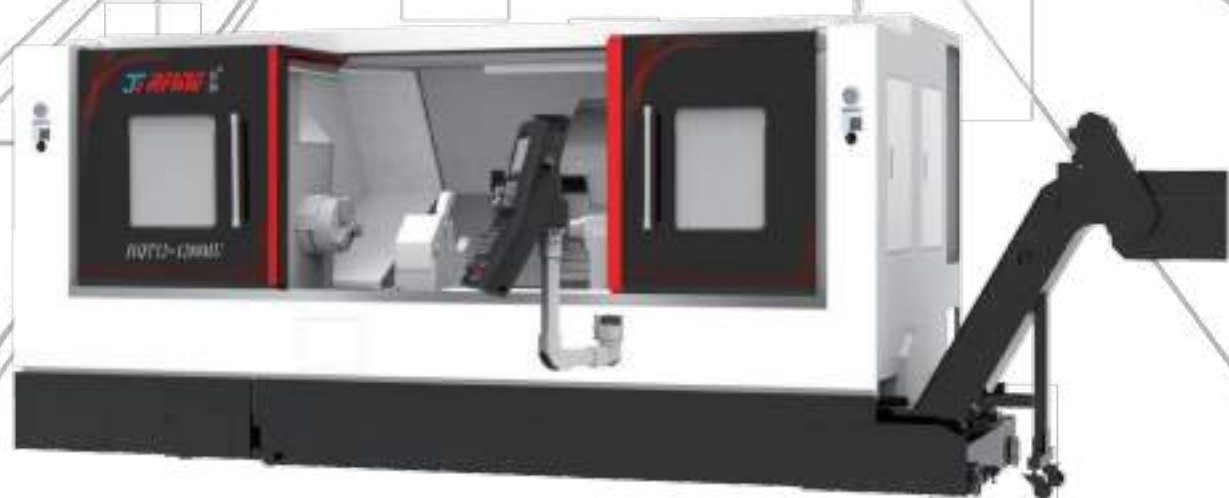
DETONATE
PRODUCTIVITY

Item		HQT12-680U		HQT12-1280RU		HQT12-1680RU	
Machining Range							
Maximum Rotating Diameter	mm	Ø720					
Maximum Machining Diameter × Length	mm	Ø420×680		Ø420×1280		Ø420×1680	
Bore Diameter of the Spindle	mm	Ø91					
Maximum Diameter of Rod to be Machined	mm	Ø74					
Maximum Supporting Weight	kg	/					
Spindle							
Maximum Rotating Speed of Spindle	r.p.m	4000					
The End Type of Spindle	KAS	A2-8					
The Rotation Indexing Accuracy of Spindle	deg	(360°) 0.01					
Size of Chuck	inch	12" Hollow (Solid) Chuck					
Travel							
Travel Length of Axis-X	mm	270					
Travel Length of Axis-Z	mm	773		1373		1773	
Feed							
Fast Moving Speed of Axis X	m/min	30				30	
Fast Moving Speed of Axis Z	m/min	30				30	
Precision							
Positioning precision X/Z	mm	0.008 (Full Travel Length)				0.008/0.012	
Repeated Positioning precisionX/Z mm		0.003 (Full Travel)				0.003/0.006	
Turret							
Total Number of Tools	pcs	12					
Tool Changing Time	sec	0.2					
Height of Outer Arbor	mm	25x25					
Maximum Diameter of Inner Arbor	mm	Φ40					
Tailstock							
Tailstock Form	#	Programmable Servo					
Taper Hole Form of Tailstock	#	MT5					
Generator							
Control System	#	Siemens 828D					
Spindle Motor	KW	26.5					
Axial Servo Motor X/Z	KW	3.55/2.9					
Others							
Water Tank Capacity	L	300		360		420	
Overall Dimension(L × W × H)	mm	4700x2022x1903		5540x2680x2020		6510x2310x2200	

HQT CNC lathe



HQT08-580MU



HQT12-1280MU

ORION

DETONATE

Features

>>>>

PRODUCTIVITY

- High Rigidity — The front bearing of the spindle is equipped with double-row roller bearings and double-row angular contact ball bearings. The spindle adopts 20CrMo material and undergoes integral quenching treatment, which enhances the rigidity and impact resistance of the spindle, enabling it to perform heavy-duty cutting operations.
- High Precision — The spindle structure is compact, assembled in a constant temperature environment of $22 \pm 1^{\circ} \text{C}$, and features P4-grade bearings. The strict bearing preload assembly process ensures the stability of the spindle precision.

Application field

>>>>

This series of models are used in automobiles, construction machinery and agricultural machinery, energy industry, medical industry and mass parts machining industry.



Automobile manufacturing



Construction machinery



Agricultural machinery



The energy industry



Batch parts processing



Machining of complex components



Gear bearing machining



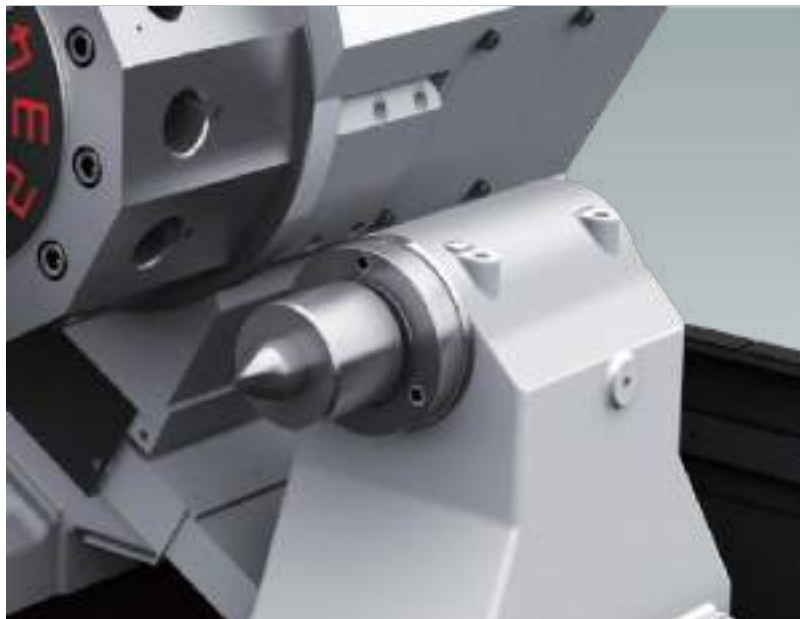
Healthcare applications



Electric power industry

ORION

ON ONE-PIECE SLANT MACHINE BED



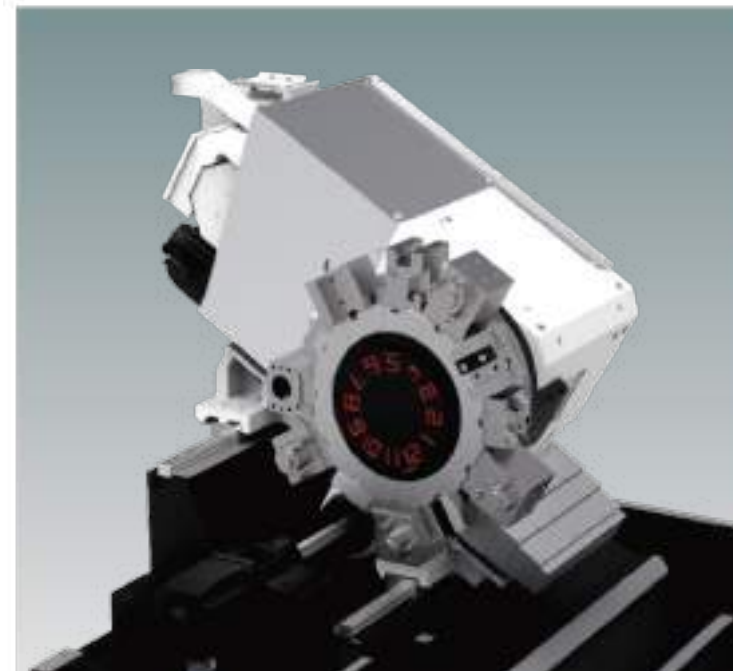
Tailstock

HQT series is a programmable servo tailstock system. We offer a number of options for tailstock jacking force, which can meet the customers' requirements for machining demands of various parts. The rapid moving speed of 10 m/min greatly shortens the moving time of the tailstock and saves the auxiliary time. The intelligent tailstock does not need to adjust the operation preparation time. Compared with the conventional tailstock, the efficiency is improved by 90%.



Screw Guide

The guide rails of HQT are all imported brands with accuracy grade P; with the fixed-fixed mode, the screw of X-axis adopts the pre-stretching structure, and is directly driven by the servo motor. In this way, it ensures the high precision and stability of the transmission, effectively suppresses the thermal displacement caused by temperature rise, and guarantees the positioning accuracy and repeated positioning accuracy. The fast moving speeds of axis-X and axis-Z are respectively 30 m/min and 36 m/min, ranking the top level in the industry. At the same time, it is equipped with absolute position motor and rigid coupling connection, which can quickly respond to cutting requirements.



The NC quick indexing turret structure is adopted, with no lifting action, servo drive, large-diameter rat tooth chuck positioning and hydraulic locking mechanism to realize high precision, fast efficiency and good rigidity at the same time. The indexing action of the turret can be carried out simultaneously with the coordinate movement, which further improves the work efficiency of the lathe.

Advantage

Large-diameter arc gear disc is adopted for the turDret.

•The turret body is directly connected with the screw and the guide rail.

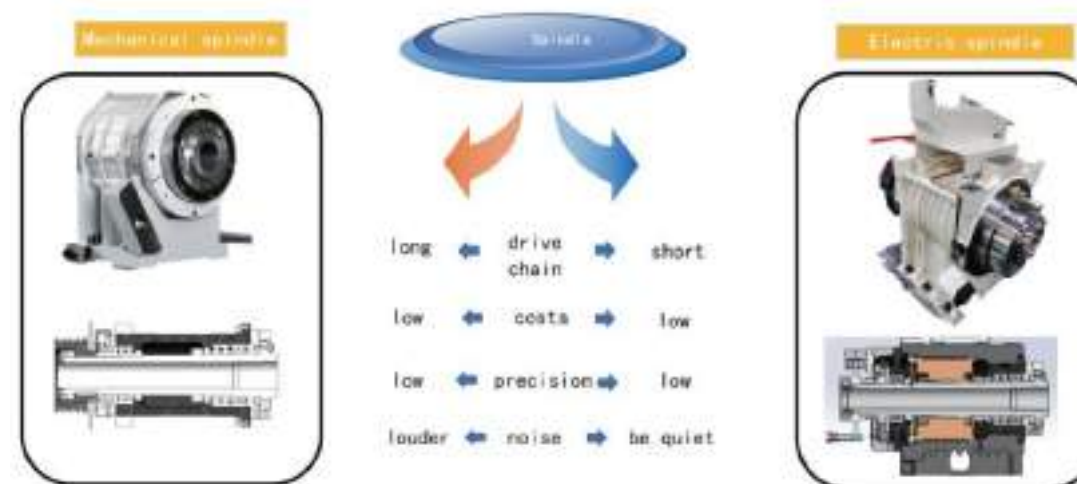
The disc is larger and thicker compared with that of the competitors to ensure rigidity of main structure of the turret.

High rigid linear guide rail is adopted, and the rapid feeding speed reaches the highest level of this structure.

Acceleration

The high-speed acceleration of X-axis and Z-axis is realized by using high-precision servo control technology.

Fast feeding speed: X: 30m/min, Z: 36m/min.



Electric spindle

The electric spindle is directly driven by the built-in motor, which shortens the length of the main drive chain to zero, realizing the "zero transmission" of the machine tool. Therefore, it has the advantages of compact structure, light weight, small inertia, low vibration, low noise, fast response, high precision.

HQT CNC lathe

HQT08-580VMYU

HQT12-1280VMYU

ORION

DETONATE PRODUCTIVITY

Features

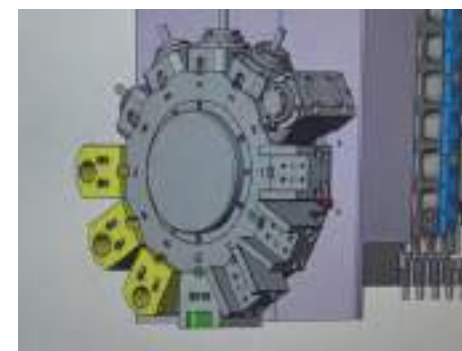
>>>>>

- High Rigidity — The front bearing of the spindle is equipped with double-row roller bearings and double-row angular contact ball bearings. The spindle adopts 20CrMo material and undergoes integral quenching treatment, which enhances the rigidity and impact resistance of the spindle, enabling it to perform heavy-duty cutting operations.
- High Precision — The spindle structure is compact, assembled in a constant temperature environment of $22 \pm 1^\circ \text{C}$, and features P4-grade bearings. The strict bearing preload assembly process ensures the stability of the spindle precision.

Features

>>>>>

12 tools positions are all capable of connecting to a power head, offering flexible operation. The turret features a BMT structure, with 12 angular positions that can accommodate 12 tools. The turret employs servo motor indexing, gear disc positioning, and hydraulic clamping, ensuring fast tool change speed, high exchange accuracy, and rigidity. There is sufficient spacing between the tool positions on the turret, allowing power tools to be installed at all 12 tools positions. The highly flexible design facilitates convenient and rapid tool preparation.



The tool change speed is faster, with a tool change time of 0.13 seconds between adjacent tool positions.

ORION

Mechanical specifications

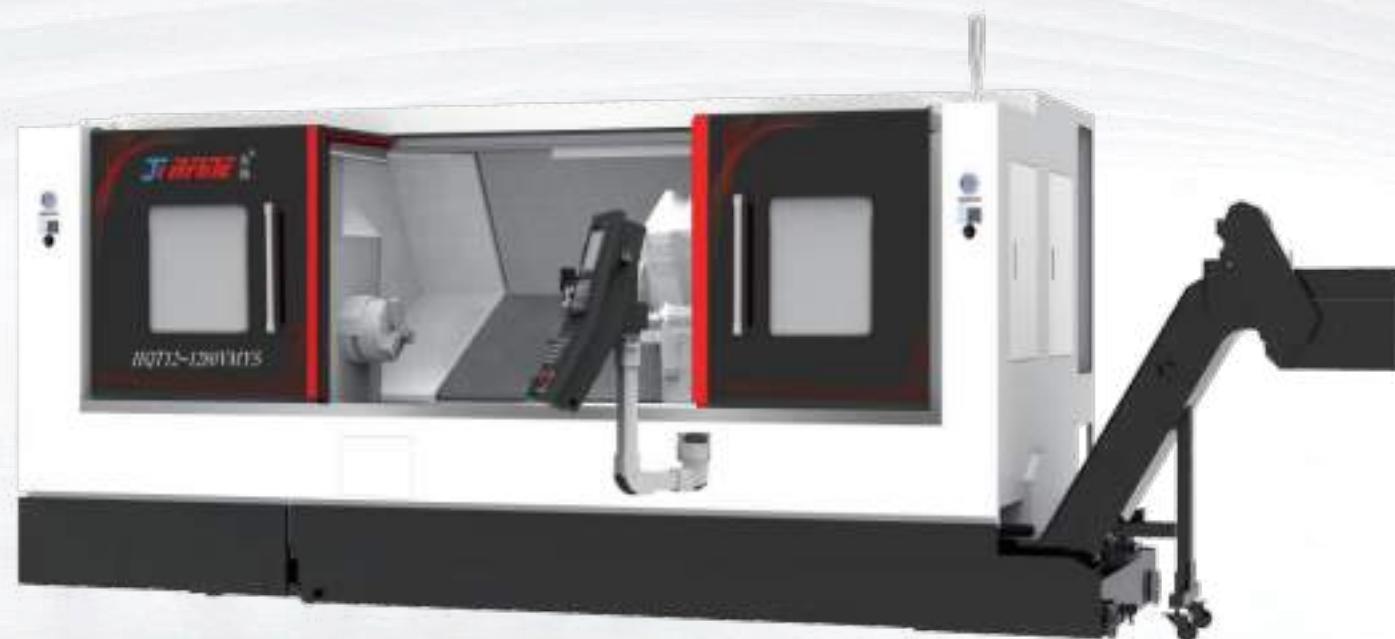


Item		HQT08-580MU	HQT12-680MU	HQT12-1280MRU	HQT12-1680MRU
Machining Range					
Maximum Rotating Diameter	mm	Ø580	Ø720		
Maximum Machining Diameter × Length	mm	Ø350×390	Ø420×595	Ø420×1195	Ø420×1595
Bore Diameter of the Spindle	mm	Ø62	Ø91		
Maximum Diameter of Rod to be Machined	mm	Ø51	Ø74		
Maximum Supporting Weight	kg	200	500		/
Spindle					
Maximum Rotating Speed of Spindle	r.p.m	4500	4000		
The End Type of Spindle	KAS	A2-6	A2-8		
The Rotation Indexing Accuracy of Spindle	deg	(360°) 0.001			
Size of Chuck	inch	8" Hollow (Solid) Chuck	12" Hollow (Solid) Chuck		
Travel					
Travel Length of Axis-X	mm	220	270		
Travel Length of Axis-Z	mm	450	773	1373	1773
Feed					
Fast Moving Speed of Axis X	m/min	30			
Fast Moving Speed of Axis Z	m/min	36	30		
Precision					
Positioning precisionX/Z	mm	0.008 (Full Travel Length)		0.008/0.012	0.008/0.012
Repeated Positioning precisionX/Z	mm	0.003 (Full Travel)		0.003/0.006	0.003/0.006
Turret					
Total Number of Tools	pcs	12			
Tool Changing Time	sec	0.29			
Height of Outer Arbor	mm	25x25			
Maximum Diameter of Inner Arbor	mm	Ø40			
The max speed of the milling spindle	rpm	5000			
Milling spindle motor power	kw	6.2(S3-40%)	7.5		
Tailstock					
Tailstock Form	#	Programmable Servo			
Maximum Movement of Tailstock	mm	540	700	1300	1700
Taper Hole Form of Tailstock	#	MT4	MT5		
Generator					
Control System	#	Siemens 828D			
Spindle Motor	KW	17.2	26.5		
Axial Servo Motor X/Z	KW	2.2/2.2	3.55/2.9		
Others					
Water Tank Capacity	L	120	300	360	400
Power Demands	KVA	30	50		
Overall Dimension(L × W × H)	mm	3735x1862.5x1815	4900x2000x2020	5540x2680x2020	6510x2680x2020

DETONATE

PRODUCTIVITY

Item		HQT08-580VMYU	HQT12-680VMYU	HQT12-1280VMYRU	HQT12-1680VMYRU
Machining Range					
Maximum Rotating Diameter	mm	Ø580	Ø720		
Maximum Machining Diameter × Length	mm	Ø350×400	Ø420×585	Ø420×1185	Ø420×1585
Bore Diameter of the Spindle	mm	Ø62	Ø91		
Maximum Diameter of Rod to be Machined	mm	Ø51	Ø74		
Maximum Supporting Weight	kg	200	500		
Spindle					
Maximum Rotating Speed of Spindle	r.p.m	4500	4000		
The End Type of Spindle	KAS	A2-6	A2-8		
The Rotation Indexing Accuracy of Spindle	deg	(360°) 0.001			
Size of Chuck	inch	8" Hollow (Solid) Chuck	12" Hollow Chuck		
Travel					
Travel Length of Axis-X	mm	220	300		
Travel Length of Axis-Y/Z	mm	±50/480	±50/773	±50/1373	±50/1773
Feed					
Fast Moving Speed of Axis X	m/min	24	30	30	
Fast Moving Speed of Axis Y/Z	m/min	10/36	10/30		
Turret					
Total Number of Tools	pcs	12	12		
Tool Changing Time	sec	0.13	0.29		
Height of Outer Arbor	mm	25x25	25x25		
Maximum Diameter of Inner Arbor	mm	Φ32	Φ40		
The max speed of the milling spindle	rpm	5000			
Milling spindle motor power	kw	6.2(S3-40%)	7.5		
Tailstock					
Tailstock Form	#	Programmable Servo			
Maximum Movement of Tailstock	mm	540	/		
Taper Hole Form of Tailstock	#	MT4	MT5		
Generator					
Control System	#	Siemens 828D			
Spindle Motor	KW	17.2	26.5		
Axial Servo Motor X/Z/Y	KW	2.2/2.2/2.2	3.55/2.9/3.55		
Others					
Water Tank Capacity	L	160	300	360	
Power Demands	KVA	43	50	54	50
Net weight	kg	4550	6200	7300	8000
Overall Dimension(L × W × H)	mm	4045x1790x2308	4900x2000x2020	5383x3125x2000	6510x2310x2020



HQT12-1280YMYS

Features



DETONATE PRODUCTIVITY

- **Main Spindle** — The main spindle adopts high-speed, high-precision built-in electric spindle structure, which eliminates the intermediate transmission mechanism, reduces vibration and thermal dislocation under high-speed operation, ensures good machining accuracy and surface roughness, and realizes good spindle rigidity and cooling effect.
- **Sub-Spindle** — The sub-spindle adopts high-power, high-torque, high-speed, high-precision built-in electric spindle structure with good low-speed characteristics, suitable for C-axis cutting. It can move at high speed and dock with the main spindle, enabling the processing of both sides of a part with a single setup.

Application field



This series of models are applied in the automotive, engineering and agricultural machinery, energy industry, and a large number of parts machining industries. It can process linear cylinders, oblique cylinders, cylinders, and various complex parts such as threads, grooves, and worms at once.



Automobile manufacturing



Construction machinery



Agricultural machinery



The energy industry



Batch parts processing



Machining of complex components



Gear bearing machining



Healthcare applications



Electric power industry

Mechanical specifications

>>>>>

Item		HQT12-680MS	HQT12-1280MS	HQT12-1280VMYS	HQT12-1680MS	HQT12-1680VMYS
Machining Range						
Maximum Rotating Diameter	mm	Ø720				
Maximum Machining Diameter × Length	mm	Ø420×595	Ø420×1195	Ø420×1060	Ø420×1585	Ø420×1460
Bore Diameter of the Spindle	mm	Ø91				
Maximum Diameter of Rod to be Machined	mm	Ø74				
Main spindle						
Maximum Rotating Speed of Spindle	r.p.m	4000				
The End Type of Spindle	KAS	A2-8				
The Rotation Indexing Accuracy of Spindle	deg	(360°) 0.001				
Size of Chuck	inch	12" Hollow Chuck				
Second spindle						
Maximum Rotating Speed of Spindle	r.p.m	5000				
The End Type of Spindle	KAS	A2-6				
Size of Chuck	inch	8" Hollow Chuck				
Travel						
Travel Length of Axis-X	mm	255		270		
Travel Length of Axis-Z (Y)	mm	733	1373	1220(±50)	1773	1620 (±50)
Feed						
Fast Moving Speed of Axis X	m/min			30		
Fast Moving Speed of Axis Z	m/min	30				
Turret						
Total Number of Tools	pcs	12				
Tool Changing Time	sec	0.29				0.2
Height of Outer Arbor	mm	25 x 25				
Max Diameter of Inner Arbor	mm	Φ40				
Milling spindle motor power	kw	7.5				
The max speed of the milling spindle	rpm	5000				
Motors						
Main spindle motor	KW	26.5				
Main spindle torque	Nm	220 (606MAX)				
Second spindle motor	KW	12.4		17		
Second spindle torque	Nm	39(130MAX)		109(214MAX)		
Axial Servo Motor X/Z	KW	3.55/2.9				
Tailstock						
Tailstock Form	#	Programmable Servo				
Control System	#	Siemens 828D				
Others						
Water Tank Capacity	L	300	360		400	360
Net weight	kg	5900	7000	7300	7700	8000
Overall Dimension(L × W × H)	mm	4900x2000x2020	5540x2680x2020		6510x2310x2200	

OPTIONAL ACCESSORIES

>>>>>

- ☐ 1. Programmable Tailstock
It's applicable for bars of different lengths, stable precision, strong operability, simplicity, flexibility and superior rigidity are ensured.
- ☐ 2. Full-automatic Tool Setting Instrument
For the operator, the tool data can be automatically compensated to the NC system only by operating the menu key or M program code in the NC system.
- ☐ 3. Online Workpiece Measuring Apparatus
By setting the contact sensor, the precision of the machined workpiece can be calculated automatically, and the tool compensation can be made to ensure the stability of continuous machining.
- ☐ 4. Automatic Workpiece Collector
Without opening the front door, the workpiece after processing is automatically transmitted to the outside of the lathe to improve the manufacturing efficiency.
- ☐ 5. Oil Mist Collector
It's used to absorb and treat the oil mist-like coolant and greases in the machine, maintain a good workshop environment, avoid the harm of oil mist to employees, prolong the service life of power system and protect the environment.
- ☐ 6. Chip Conveyor (Including Iron Chip Conveyor)
By adopting large torque reduction motor, the automatic chain plate chip conveyor is used to remove all chips in time.
- ☐ 7. High Pressure Cooling Equipment
It can improve the manufacturing efficiency, prolong the service life of the tool, and realize the high-speed chip breaking function of red copper, stainless steel and other materials. Cooling pumps of different specifications are available for options (20kg/50kg/70kg).
- ☐ 8. Automatic Opening and Closing of Chuck
During automatic machining process, the feedback of opening and closing state of chuck is gained to ensure reliable clamping of workpieces.
- ☐ 9. Oil-Water Separator
It's used to separate the waste oil from the cutting fluid, prolong the service life of the cutting fluid, save cost and protect the environment.
- ☐ 10. Coolant Temperature Management
The room temperature of the coolant is regulated by the cooling unit to realize long-time machining under constant temperature.
- ☐ 11. Air Blowing of Tool Turret
In the process of dry cutting, the air out of the turret will blow off the residual cutting during machining.
- ☐ 12. Air Blowing of Chuck
The gas from the nozzle will remove the chips left on the claw.
- ☐ 13. Bar Conveyor
The bar conveying function is configured to realize automatic feeding and long-time unmanned operation.
- ☐ 14. Hollow Oil Cylinder
- ☐ 15. Options of M Procedure Codes
- ☐ 16. Real-time Simulation of Machining
- ☐ 17. Large-torque Spindle Motor
- ☐ 18. Customized Color of Lathe (the Standard is Black and White)
- ☐ 19. Options of Automatic Door



Full-automatic Tool Setting Instrument
For the operator, the tool data can be automatically compensated to the NC system only by operating the menu key or M program code in the NC system.



Programmable Tailstock
It's applicable for bars of different lengths, stable precision, strong operability, simplicity, flexibility and superior rigidity are ensured.



Online Workpiece Measuring Apparatus
By setting the contact sensor, the precision of the machined workpiece can be calculated automatically, and the tool compensation can be made to ensure the stability of continuous machining.



Automatic Workpiece Collector
Without opening the front door, the workpiece after processing is automatically transmitted to the outside of the lathe to improve the manufacturing efficiency.



High Pressure Cooling Equipment
It can improve the machining efficiency, prolong the service life of the tool, and realize the high-speed chip breaking function of red copper, stainless steel and other materials. Cooling pumps of different specifications can be selected.



Bar Conveyor
The bar conveying function is configured to realize automatic feeding and long-time unmanned operation.

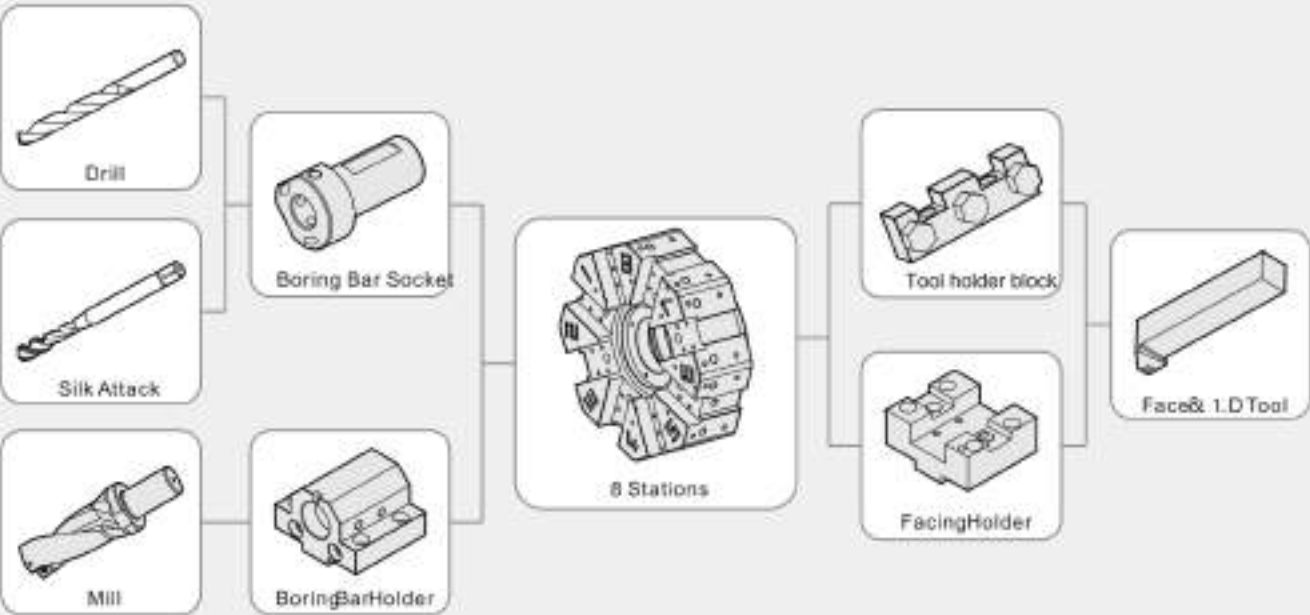


Oil Mist Collector
It's used to absorb and treat the oil mist-like coolant and greases in the machine, maintain a good workshop environment, ensure employees' health, prolong the service life of power system.



Oil-water Separator
It's used to separate the waste oil from the cutting fluid, prolong the service life of the cutting fluid, save cost and protect the environment.

HQT-08D TOOL SYSTEM



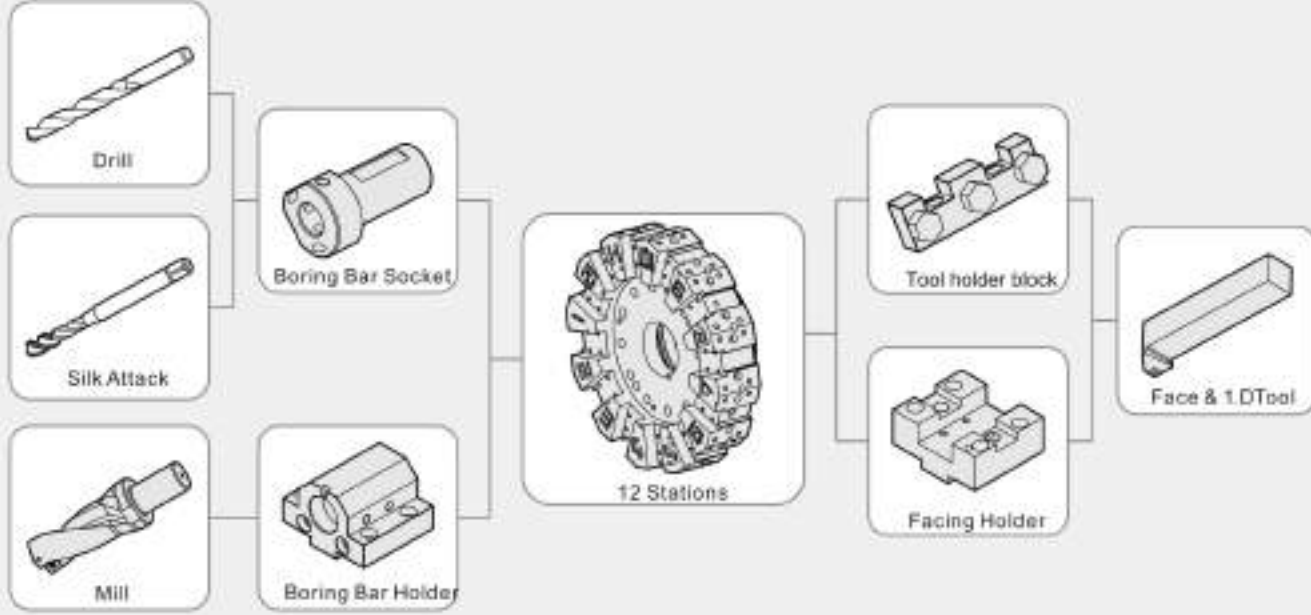
STANDARD CONFIGURATION OF TOOL HOLDER AND TOOL SLEEVE

Models	HQT-08D
Number of cutting tools	8
Tool size	Outer diameter and end cutting tool: 25×25×150
	Inside diameter tool: Ø40
Capacity of processing	Drilling: -
	Milling: -
	Tapping: -
Turret rotation form	Approximate random rotation (automatic mode) Optional bidirectional rotation (manual mode)
Turret indexing time (s)	0.2
Turret locking force (KN)	35.6

● Standard options ○ Optional Options ☆ Special design ➡ Be out of order

HQT-08D			
Turning tool holder	Outside diameter tool holder	Left/right	○
	End turning tool holder	Standard	● × 1
Boring bar tool holder	Boring tool holder	Ø40	● × 3
	High pressure internal cooling tool holder	Ø40	○
	U-shaped drilling tool holder	Ø32	○
		Ø40	○
Power tool holder	Cutter holder for straight milling	Standard	-
	Angle milling cutter holder	Standard	-
Other	Boring tool sleeve	Ø40×Ø16	○
		Ø40×Ø20	○
		Ø40×Ø25	○
	Drilling tool sleeve	MT1	○
		MT2	○
	Tool holder block	Standard	● × 8
	Cutting nozzle	Standard	● × 8

HQT-12D TOOL SYSTEM



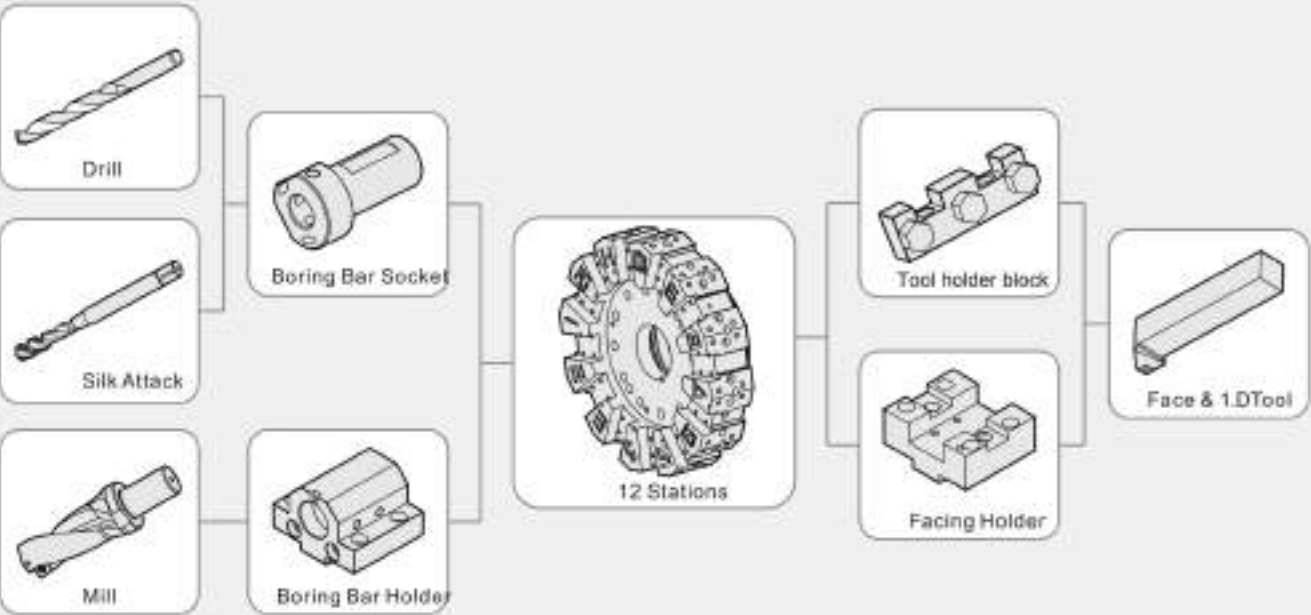
STANDARD CONFIGURATION OF TOOL HOLDER AND TOOL SLEEVE

Models	HQT-12D
Number of cutting tools	12
Tool size	Outer diameter and end cutting tool: 20×20×125
	Inside diameter tool: Ø32
Capacity of processing	Drilling: -
	Milling: -
	Tapping: -
Turret rotation form	Approximate random rotation (automatic mode) Optional bidirectional rotation (manual mode)
Turret indexing time (s)	0.2
Turret locking force (KN)	35.6

● Standard options ○ Optional Options ☆ Special design ➡ Be out of order

HQT-12D			
Turning tool holder	Outside diameter tool holder	Left/right	○
	End turning tool holder	Standard	● × 1
Boring bar tool holder	Boring tool holder	Ø32	● × 3
	High pressure internal cooling tool holder	Ø32	○
	U-shaped drilling tool holder	Ø32	○
		Ø40	-
Power tool holder	Cutter holder for straight milling	Standard	-
	Angle milling cutter holder	Standard	-
Other	Boring tool sleeve	Ø32×Ø16	○
		Ø32×Ø20	○
		Ø32×Ø25	○
	Drilling tool sleeve	MT1	○
		MT2	○
	Tool holder block	Standard	● × 8
	Cutting nozzle	Standard	● × 8

HQT-12DA TOOL SYSTEM



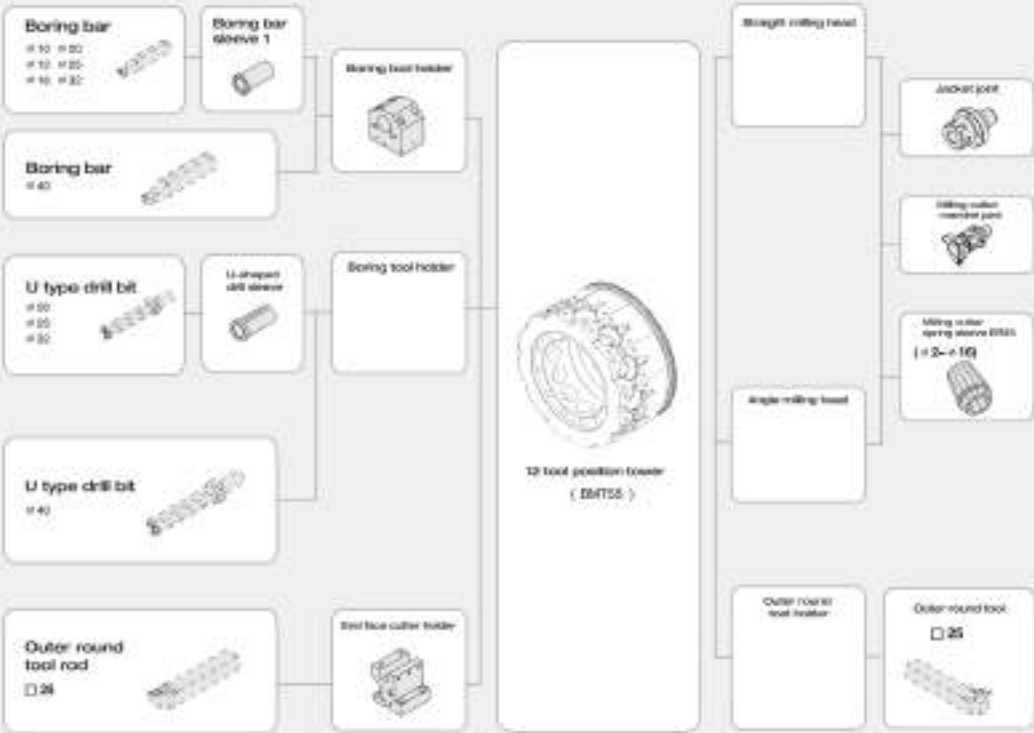
STANDARD CONFIGURATION OF TOOL HOLDER AND TOOL SLEEVE

Models		HQT-12DA
Number of cutting tools		12
Tool size	Outer diameter and end cutting tool	25×25×150
	Inside diameter tool	φ40
Capacity of processing	Drilling	-
	Milling	-
	Tapping	-
Turret rotation form		Approximate random rotation (Automatic mode) Optional bidirectional rotation (manual mode)
Turret indexing time (s)		0.2
Turret locking force(KN)		60

● Standard options ○ Optional Options ☆ Special design ➡ Be out of order

HQT-12DA			
Turning tool holder	Outside diameter tool holder	Left/right	○
	End turning tool holder	standard	● × 1
Boring bar tool holder	Boring tool holder	Ø40	● × 3
	High pressure internal cooling tool holder	Ø40	○
	U-shaped drilling tool holder	Ø32	○
		Ø40	○
Power tool holder	Cutter holder for straight milling	standard	-
	Angle milling cutter holder	standard	-
Other	Boring tool sleeve	Ø40×Ø16	○
		Ø40×Ø20	○
		Ø40×Ø25	○
	Drilling tool sleeve	MT1	○
		MT2	○
	Tool holder block	standard	● × 4
	Cutting nozzle	standard	● × 4

HQT-12DM TOOL SYSTEM



STANDARD CONFIGURATION OF TOOL HOLDER AND TOOL SLEEVE

Models		HQT-12DM
Number of cutting tools		12
Tool size	Outer diameter and end cutting tool	25×25x150
	Inside diameter tool	φ40
Capacity of processing	Drilling	●
	Milling	●
	Tapping	●
Turret rotation form		Approximate random rotation (automatic mode)
		Optional bidirectional rotation (manual mode)
Turret indexing time (s)		0.2
Turret locking force(KN)		60

● Standard options ○ Optional Options ☆ Special design ➡ Be out of order

HQT-12DM			
Turning tool holder	Outside diameter tool holder	Left/right	○
	End turning tool holder	Standard	● × 1
Boring bar tool holder	Boring tool holder	Ø40	● × 3
	High pressure internal cooling tool holder	Ø40	○
	U-shaped drilling tool holder	Ø40	○
Power tool holder	Cutter holder for straight milling	Standard	● × 1
	Angle milling cutter holder	Standard	● × 1
Other	Boring tool sleeve	Ø40×Ø16	○
		Ø40×Ø25	○
		Ø40×Ø32	○
	Drilling tool sleeve	MT1	-
		MT2	-
	Tool holder block	Standard	● × 4
	Cutting nozzle	Standard	● × 4

