

Inclined bed CNC lathe (JN-CH108)

Technical Document

By Jiangnan CNC Machine Co., Ltd.

By Jiangnan Technology (Songyang) Co., Ltd.





The picture is for reference only, the actual appearance may vary slightly due to selected configurations.

Party A: : Party B: Jiangnan CNC Machine Tool Co., Ltd.

Date:



1. Company Profile



Jiangnan CNC Machine Tool Co., Ltd. is located in the beautiful coastal city of Wenzhou, China. It is a CNC machine manufacturing enterprise integrating research, design, manufacturing, and sales. The company was established in September 2006 and currently has a standardized plant covering an area of 85,000 square meters, with more than 180 excellent staff members. Among them, 90 employees have a college degree or above, accounting for 50% of the total staff; the company has 20 research and development personnel, accounting for 9% of the total workforce.

Adhering to the business philosophy of "technological innovation, win-win cooperation, integrity and efficiency, sincere service," and the quality policy of "quality first, customer foremost," the company provides customers with the most cost-effective products and comprehensive services, aiming to create the maximum value for customers. With advanced equipment including the world's most advanced large-scale CNC five-axis machining center and horizontal machining center, as well as contour grinding machines and high-precision Renishaw inspection equipment, the company strictly adheres to international standards. It has obtained ISO9001 certification and implements rigorous process inspections to ensure product quality.

The company mainly manufactures vertical Machining Centers, horizontal Machining Centers, drilling and tapping machine, gantry series, CNC lathes, and other series of products:

1. Vertical Machining Centers: JN-IV850, JN-NV856, JN-NV900, JN-NV1050, JN-IV1160, JN-NV1300, JN-NV1690, etc.



- 2. Horizontal Machining Centers: JN-H50, JN-IH50, JN-H63, JN-IH63, JN-H800, JN-H1810, etc.
- 3. Drilling and Tapping Machines: JN-T500, JN-T700, etc.
- 4. CNC Lathes: JN-CH106, JN-CH108, JN-CH108M, JN-CH108MY, JN-CH208, JN-CH506MSY, etc.
- 5. Gantry Series: JN-GL2013, JN-GL2015, JN-GL2518, JN-GL2720, JN-GL3023, JN-GL4023, JN-GL4027, JN-GL5030C, etc.

Our machine tools are popular in major provinces and cities in China, including Beijing, Shanghai, Chongqing, Tianjin, Hebei, Henan, Shanxi, Shandong, Jiangsu, Zhejiang, Guangdong, Anhui, Hubei, Fujian, and others, due to their excellent performance and first-class after-sales service. The company adopts a combination of direct sales and distributorship models and has cooperated with 100 distributors nationwide, covering major cities across the country.

Jiangnan CNC – A national brand, a national pride! We sincerely invite you to join with us to create a new era of high-tech machinery!

2.Introduction the Songyang Factory



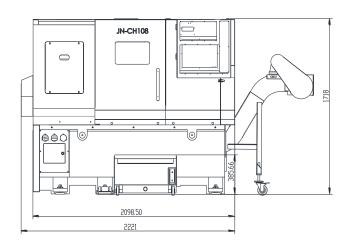
Jiangnan Technology (Songyang) Co., Ltd., a wholly-owned subsidiary of Jiangnan CNC Machine Tool Co., Ltd., was established in August 2017. Located in the beautiful scenic city of Phone: 0577-62867288-804 Address: Daqiao Industrial Zone, Yueqing City, Wenzhou, Zhejiang Province, China

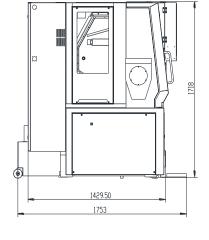


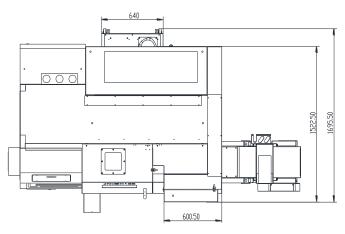
Songyang, Lishui, it covers an area of 107.69 acres with a total construction area of 29,693 square meters. The company has a registered capital of 50 million yuan, with fixed asset investment of 300 million yuan and working capital investment of 70 million yuan. It has introduced multiple sets of high-precision equipment such as the Japanese DAIWA CNC gantry five-axis machining center and horizontal machining centers.

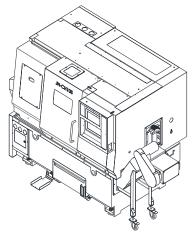
Building on the development foundation of its parent company, Jiangnan Technology actively promotes brand building and product serialization strategies. Internally, it implements ERP systems and information construction, optimizing business processes, and enhancing the company's management level and core competitiveness. Facing the challenges of economic globalization, Jiangnan will continue to focus on the CNC machining center industry, adhere to market-oriented business philosophy, and persist in the direction of "internationalization, technologicalization, and industrialization." It will vigorously introduce advanced equipment, technology, and talents, integrate resources, leverage strengths, and strive to shape "Jiangnan" into a well-known enterprise in the international CNC machining center industry.

3, Machine structure drawing









Phone: 0577-62867288-804 Address: Daqiao Industrial Zone, Yueqing City, Wenzhou, Zhejiang Province, China



4、JN-CH108 Machine technical specifications

Project	Unit	CH108		
Processing capacity				
Max. swing over bed	mm	480		
Max. turning diameter	mm	320		
Max. turning length	mm	480		
Max. bar capacity	mm	52		
		Spindle		
Spindles		1		
Spindle speed	r/min	30-4000		
Number of variable speed segments		1		
Min. orientation accuracy		0.001		
Spindle nose		A2-6		
Spindle bore	mm	63		
Spindle bearing diameter	mm	100		
Tailstock (Heart Pressing Platform)				
Tailstock travel	mm	435		
Tailstock arbor diameter	mm	75		
Tailstock morse taper	mm	MT.4		
Arbor travel	mm	100		
Dota				
Tool Capacity		1		



Turret type		T12		
X travel	mm	180		
Z travel	mm	530		
X/Z rapid feed	mm/min	X : 24000 Z : 24000		
Cutting feed	mm/min	10000		
Manual cutting feed	mm/min	0~1200		
Tool Capacity		12		
Toolholder type(Pocket spec)	mm	25		
Boring tools diamater	mm	32		
Tool change time	S	0.52		
Motor/Pump				
Spindle motor	KW	11 βil 12/10000		
X-axis motor	KW	1.2 βis 8/3000		
Z-axis motor	KW	2.5 βis 22/2000		
Cutter tower index motor	KW	1.2 βis 8/3000		
Hydraulic pump	KW	1.5		
Bed surface lubrication oil pump	KW	0.004		
water pump	KW	0.4		
Power Supply				
Power supply	KVA	20		
Power voltage	V	380		
Frequency	HZ	50/60		



Air pressure	Мра	0.5		
Pneumatic flow rate	L/min	10		
Fuel tank capacity				
Oil tank capacity	L	40		
Oil pressure	L	2		
Lubrication oil tank	L	200		
size				
Lathe height	mm	1709		
Machine size	mm	2219X1565		
Lathe weight	Т	3.95		

5. Main configuration details

Name		Unit	Brand Origin	Brand Origin
CNC System		0I-TF	Japan	FANUC
Spindle Motor		βil 12/10000	Japan	FANUC
SERVO	X axis	βis 8/3000	βis 8/3000	
MOTOR	Z axis	βis 22/2000	- Japan	FANUC
Pallsgrau	X axis	32	Japan/Taiwa	PMI/HIWIN
Ballscrew	Z axis	40	n	
Linear				
Guidewa	X axis	SRG-30R-QZ-620L	Japan	PMI/HIWIN
у				
Linear				
Guidewa	Z axis	SRG-35R-QZ-1080L	Japan	PMI/HIWIN
У				
Lead	X axis	19-20		
screw	Z axis	28-35	Taiwan	Janetech
coupling	Z UNIS	20 33		



	6205Z	Japan	NTN
Bearing	6206		
	BST25*62-1BP4		
	BST30*62		
Spindle	TAC-20-KD-B	Taiwan	POSA
Transformer	20KWA	Joint Venture	LUHO
Dota		Germany	GPM
Electrical components		Germany	SCHNEIDER
Pneumatic Components		Japan	SMC
Lubrication system		Joint Venture	HERG
shield	Retractable guard	China	ETEK
Sfileid	Roller shield	China	AEGIS
Boring tool holder	Chip-removing machine	China	CHNCIT
End tool holder			
Reducing sleeve	4РСЅФ40		
Pressing knife block (upper and lower)	2PCS		
	Φ8 Φ10 Φ12 Φ14		
Dota	Ф 16 Ф 20 Ф 25 Ф 32aa1PCS		
Electrical components	8		

Note: If any supplier fails to supply, it will be replaced with a brand of equal quality without further notice.

6. Machine Mechanical Indicators

1. Machine Structure



Machine Structure The main structural components of the machine tool are made of high-tensile cast iron, optimized in design for high static rigidity. The spindle features a high-rigidity structure, high mechanical efficiency, suitable for high-precision heavy cutting machining. The spindle motor adopts AC servo technology, enabling stepless speed regulation in both forward and reverse directions. The three-axis ball screw and servo motor drive directly, with no transmission cumulative error, ensuring high repeatability and positioning accuracy. Automatic tool changing structure, quick and smooth tool changing operation. All machine components and various measurement units comply with international (ISO) standards.

2. Machine Protection

Machine Protection The machine protection device is safe, complete, and reliable. Machine noise: in compliance with national standards, 75dB. Electrical control cabinet sealed to prevent dust and water, IP65 rating.

3. Lubrication System

Lubrication System Adopts TZ electric lubrication device to quantitatively lubricate all sliding surfaces and ball screws. Adjustable lubrication time intervals and amounts to ensure 100% lubrication at all lubrication points. Machine displays an alarm in case of low oil level (oil shortage). Uses 68# guide rail lubricating oil. Lubrication tank capacity: 2 liters. Lubrication pump voltage: 220V, motor output power: 25W, maximum pressure: 2.5MPa, discharge flow rate: 110ml/min.

4. Pneumatic System

Pneumatic System Pneumatic system, pressure switches, solenoid valves, etc., realize pneumatic tool changing, pressure: 6-8KG/C m², flow rate: 220L/MIN, can clean the working area.

5. Electrical System

Electrical System The standard system has complete and reliable interlocking, safety protection, and fault self-diagnosis alarm functions. Equipped with RS232 standard communication interface, can use computer floppy disk for program storage. (Other systems can be provided according to user requirements).

7. Product Services

- 1. Installation and Commissioning
 - 1.1. Before equipment installation, Party A should prepare the site, power supply, air supply, and related supporting measures in advance.
 - 1.2. After the equipment arrives at Party A's location, Party A is responsible for the foundation, unloading, and hoisting of the machine tool, and should promptly notify



- Party B. Party B will send installation and commissioning personnel to Party A's site upon receiving notification.
- 1.3. Upon delivery of the machine tool, our company will dispatch engineers to the customer's site for free installation and commissioning of the equipment. Party A should designate operators and maintenance personnel for the machine tool and assign dedicated personnel to assist with installation and commissioning.

2. Training

Training Provide customers with training on machine tool operation and routine maintenance knowledge, and guide operators in troubleshooting simple faults and related techniques.

3. Product Technical Services

Product Technical Services Our company can provide customers with technical consulting and after-sales technical support. As long as it is related to machine tool technology and operation issues, our company can handle customer inquiries.

4. Acceptance Methods

- 4.1. Acceptance will be conducted at Party A's site.
- 4.2. Appearance inspection: Personnel from both parties visually inspect the appearance of the machine tool, and tools and accessories are checked and accepted according to the contract and attachment.
- 4.3. Mechanical accuracy acceptance: When the machine tool is delivered from Party B to Party A, relevant qualification certificates and factory accuracy inspection reports should be provided. Acceptance will be conducted at Party A's site, and the machine tool accuracy acceptance should be based on the static accuracy provided in the qualification certificate from Party B. The inspection tools required for acceptance will be provided jointly by both parties.

5. After-Sales Service Commitment

5.1. Warranty Period and Scope

The warranty period is one year from the date of shipment of the machine tool, but lifetime maintenance is provided.

During the warranty period, if there are any quality issues with components, our company will provide free repair or replacement.



- 5.2. Exclusions from Free Warranty during the Warranty Period
 - 5.2.1. Equipment damage caused by natural disasters such as earthquakes, floods, fires, lightning, typhoons, etc.
 - 5.2.2. Human factors caused by Party A's personnel disassembly, modification, and improper operation.
 - 5.2.3. Equipment damage caused by prolonged storage.
 - 5.2.4. Equipment relocation, secondary training, etc.
- 5.3. Outside the warranty period, our company will also provide timely repairs. Cost of parts replacement will be charged, while related labor costs will be negotiated between both parties.
 - 5.3.1. After-Sales Service Content Upon receiving a customer's repair call, our company will respond by phone within half an hour; if personnel are needed on-site, our company will arrange for maintenance personnel to arrive at the site within 24 hours for locations within the province and within 48 hours for locations outside the province, with special circumstances subject to confirmation through mutual agreement.
 - 5.3.2. Other Commitments in After-Sales Service (Regular Inspection, etc.) When customers require our company to service or maintain the machine tool, our company will send maintenance engineers for on-site service through negotiation, and conduct regular inspections of the machine tool.
 - 5. 3. 3. After-Sales Service Contact Information Our company's after-sales service hotline: 18957736620, 18968800655.