

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:

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

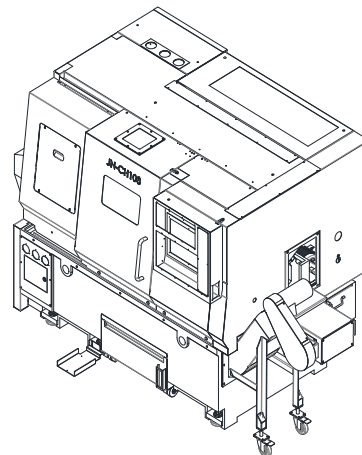
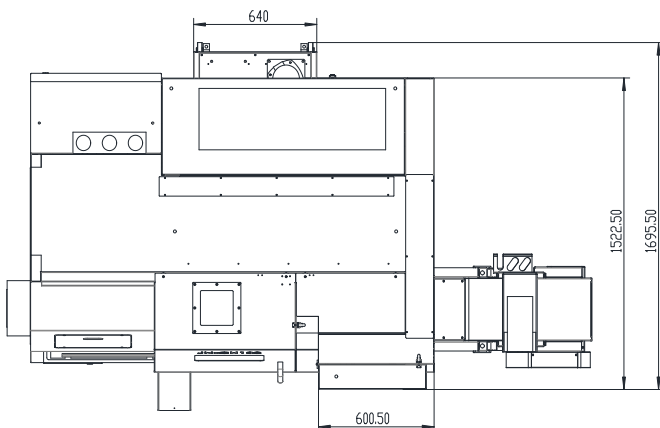
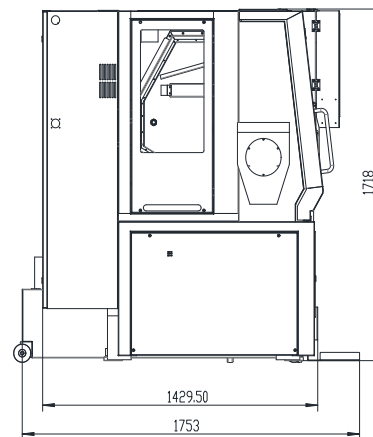
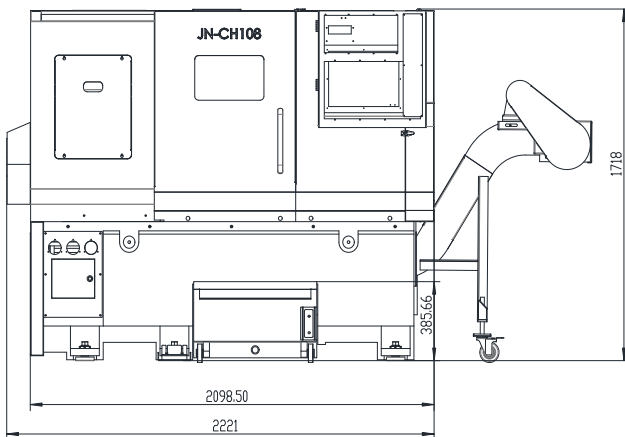


Jiangnan Technology (Songyang) Co., Ltd., a wholly-owned subsidiary of Jiangnan CNC Machine Tool Co., Ltd., was established in August 2017. Located in the beautiful scenic city of

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



4.JN-CH108 Machine technical specifications

Project	Unit	CH108
Processing capacity		
Max. swing over bed diameter	mm	480
Max. turning diameter	mm	320
Max. turning length	mm	480
Max. bar capacity diameter	mm	52
Spindle		
Spindles		1
Spindle speed	r/min	30-4000
Number of Speed Ranges		1
Min. Indexing Angle		0.001
Spindle nose		A2-6
Spindle Bore Diameter	mm	63
Spindle Bearing Inner Diameter	mm	100
Tailstock (Heart Pressing Platform)		
Tailstock Quill Travel	mm	435
Tailstock Quill Diameter	mm	75
Tailstock morse taper		MT.4
Quill Stroke	mm	100
Turret		
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
<i>OD tool shank diameter</i>	mm	25
Boring bar diameter	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
Turret motor	KW	1.2 βis 8/3000
Hydraulic pump	KW	1.5
Bed lubrication 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	Mpa	0.5
Pneumatic flow rate	L/min	10
Fuel tank capacity		
Oil tank capacity	L	40

Lubrication oil tank	L	2
Water tank	L	200
Size		
Lathe height	mm	1709
Machine size	mm	2219X1565
Lathe weight	T	3.95

5.Main configuration details

Name		Unit	Brand Origin	Brand Origin
CNC System		0I-MF	Japan	FANUC
Spindle Motor		βil 12/10000	Japan	FANUC
Servo Motor	X axis	βis 8/3000	Japan	FANUC
	Z axis	βis 22/2000		
Ball Screw	X axis	32	Japan/Taiwan	PMI/HIWIN
	Z axis	40		
Roller Guide	X axis	SRG-30R-QZ-620L	Japan	PMI/HIWIN
	Z axis	SRG-35R-QZ-1080L	Japan	PMI/HIWIN
Screw Coupling	X axis	19-20	Taiwan	Janetech
	Z axis	28-35		
Ball Screw Bearings		6205Z	Japan	NTN
		6206		
		BST25*62-1BP4		
		BST30*62		
Spindle		TAC-20-KD-B	Taiwan	POSA
Transformer		20KWA	Joint Venture	LUHO
Turret			Germany	GPM
Electrical components			Germany	SCHNEIDER
Pneumatic Components			Japan	SMC

Lubrication system		Joint Venture	HERG
Shield	Retractable guard	China	ETEK
	Roller shield	China	AEGIS
Chip conveyor	Chip-removing machine	China	CHNCIT
Hydraulic tailstock			
Boring Bar Tool Holder	4PCSΦ40		
End Face Tool Holder	2PCS		
Boring Bar Bush	(Φ8 Φ10 Φ12 Φ14 Φ16 Φ20Φ25 Φ32) per 1PCS		
Upper and lower tool clamping block	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).