

# Slant Bed CNC lathe

Model: TCK36A



**Supplier: Shanghai ANTS Machine Equipment Co.,Ltd**

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## Technical proposal

### Part 1: Technical parameter

Specifications		Unit	TCK36A
Max. Swing over Bed		mm	Φ360mm
Max. Swing over slide		mm	Φ140mm
Top distance		mm	350
Max. disc machining diameter			Φ360mm
Max. turning length		mm	300
Spindle end type			A2-5
Spindle through hole diameter		mm	Φ48
Bar diameter		mm	Φ41
Hydraulic chuck		mm	6 inch hollow
Hydraulic chuck pull rod through hole		mm	Φ40
Rail form			Line rail
Spindle taper taper		No	40°
Spindle limit speed		rpm	4000
Tailstock sleeve diameter		mm	Φ65
Tailstock sleeve inner hole taper		No	Morse 4#
Tailstock sleeve stroke		mm	60
Tailstock form			manual
Tool turret			8
Knife square size		mm	20x20
Screw type	X direction	mm	2810
	Z direction	mm	3210
Rail type	X direction	mm	MSR30S2SSF1A+R960
	Z direction	mm	MSR30S2SSF1+R630
X/Z motor torque		N.M	6/6
X/Z rapid traverse speed		m/min	24/24
X travel		mm	185
Z travel		mm	350
Min. setting unit		mm	0.001
Main motor power		KW	5.5
Total power		KW	9
Machine net weight		Kg	about 2400
Dimensions (L×W×H)		mm	2200x1610x1850

**Part 2 : Product Reference Picture****Part 3: Equipment Introductions****Product Description**

Machine tool description: This machine tool is a high-speed, high-precision, high-reliability inclined-bed machine tool. The main components such as the bed base, bed body, and headstock are all cast with high-strength materials to ensure the long-term stability of the machine tool.



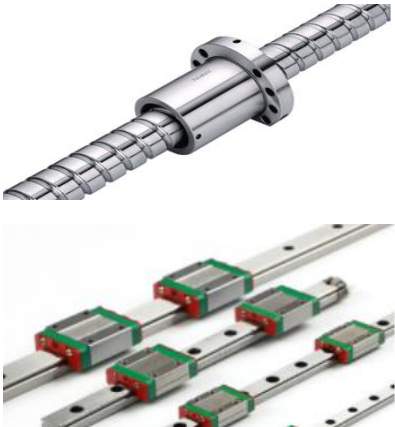
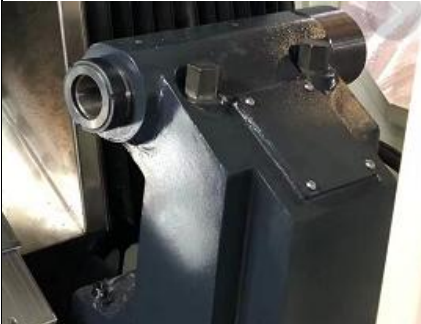
The machine tool adopts a 45° overall inclined bed structure, and is equipped with high-precision preloaded Taiwan linear rolling guides. The servo motor is directly connected to the lead screw through a high-torque low-inertia elastic coupling. The lead screw support adopts a pre-stretching structure, which can eliminate transmission Backlash and pre-compensation for the influence of thermal deformation on the accuracy of the machine tool during long-term operation to ensure positioning accuracy and repeat positioning accuracy; the machine tool has high position accuracy, smooth chip removal, and is suitable for high-speed and high-precision machining.


Using high-speed, high-precision and high-rigidity cartridge-type spindle unit and servo spindle motor, it can achieve higher spindle speed. The spindle unit is assembled in a constant temperature room. After assembling, it runs at constant temperature for 72 hours, and then goes on the machine for 72 hours of continuous trial operation to ensure the reliability of high-speed and high-precision performance.

The arranging method is adopted, the tool changing speed is fast, and the positioning accuracy is high.

Machine tool protection adopts full protection design, which is pleasant, unique in appearance, reliable in waterproof and chip prevention, and easy to maintain.

## Features

	<p><b>Tool Turret</b> The structure is compact, the tool change speed is fast, and the cutter head can be selected nearby; the hydraulic or servo drive cutter head is used to rotate, index and release and lock, with smooth movement and large torque, suitable for heavy cutting; the repeat positioning accuracy can reach 0.003mm.</p>
	<p><b>Chuck</b> Wedge-shaped through-hole chuck, in line with Japanese and Taiwan standards; all sliding surfaces are hardened and precision ground; high rigidity structure and high clamping accuracy.</p>
	<p><b>Transmission</b> The screw and nut are processed, ground, assembled and quality controlled in the constant temperature workshop, which can ensure their high precision and stability. The linear guide adopts 4-row roller type 45° contact angle and high-rigidity section design, which has the characteristics of strong load bearing capacity, low friction force, good rigidity, low noise and good lubrication effect.</p>
	<p><b>Tail stock</b> After the manual tailstock is manually moved to a certain position, release the locking handle, rotate the handwheel to move the sleeve, press the workpiece, and then lock the sleeve before turning. The hydraulic tailstock is processed by hydraulic adjustment, locking, and hydraulic piston pressing the workpiece.</p>

	<p>Machine tool lubrication Each lubricating point adopts a forced automatic lubricating device for fixed-point quantitative lubrication of the lead screw and guide rail. When there is an abnormal state or the oil quantity is insufficient, a warning signal is automatically generated, and the work is stable and reliable.</p>
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## Part 4: Standard Equipment

### Standard Equipment:

Name	Specifications	Quantity	Supplier
Control System	GSK 980TC3	1 set	GSK
Spindle motor	ZJY208A-5.5BL-B35Y1	1 set	GSK
Spindle	SQ140-300-4-3V	1 set	China
Spindle bearing	Front: 2-7015AC Rear: 2-7013AC	1 set	China
Guide	X:MSR30S2SSF1A+R960 Z:MSR30S2SSF1+R630	1 set	HIWIN/PMI
Ball screw	2810/3210	1 set	China
Screw bearing	25TAC62	1 set	China
Machine tool turret	Hydraulic: TX120-8T Servo: SH63820-R	1 set	China
Automatic lubricating device	RBCLB-3ZK	1 set	China
Cooling pump	PMY-50A-4	1 set	China
Hydraulic station	SDPLT-02-3W-55L-TCK36A	1 set	MONFR
Hydraulic chuck	6 inch hollow	1 set	China
Chip conveyor	Chain plate	1 set	China

## Part 5 :Manufacturing Time

Around 30-45 days , the machine will be ready for FAT(Factory Acceptance Test) after received deposit and after confirmed contract and technical proposal.

Remark: If the customer has special requirements for the delivery time, please confirm with Shanghai ANTS machine

**Part 6 : Acceptance Test**

Test items		Standard tolerance (mm)
Periodic axial play of the main shaft		0.005
Radial run-out of spindle chuck positioning cone		0.005
Position accuracy	Repeat positioning accuracy A	X: $\pm 0.003$ Z: $\pm 0.003$
Diameter uniformity		0.01/150
Flatness		0.02/ $\phi 200$
Thread pitch product error		0.010/50
Surface roughness		Ra1.6 $\mu$ m

**Part 7 : Quality Assurance & After-sales Service**

Shanghai ANTS Machine Equipment Co., Ltd. fully fulfills the terms of machine tool technical services promised to users.

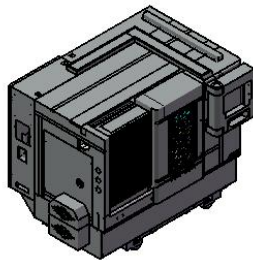
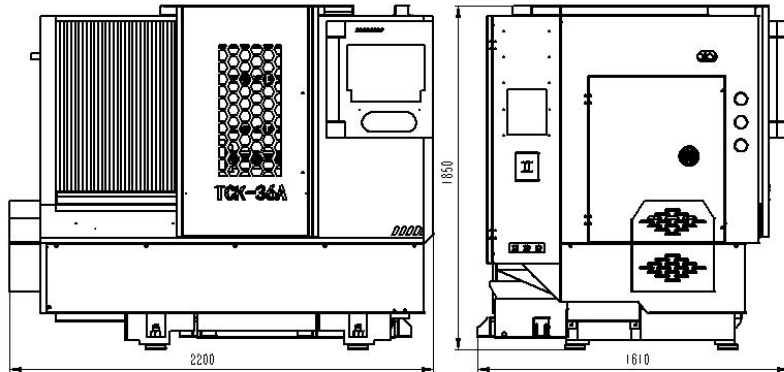
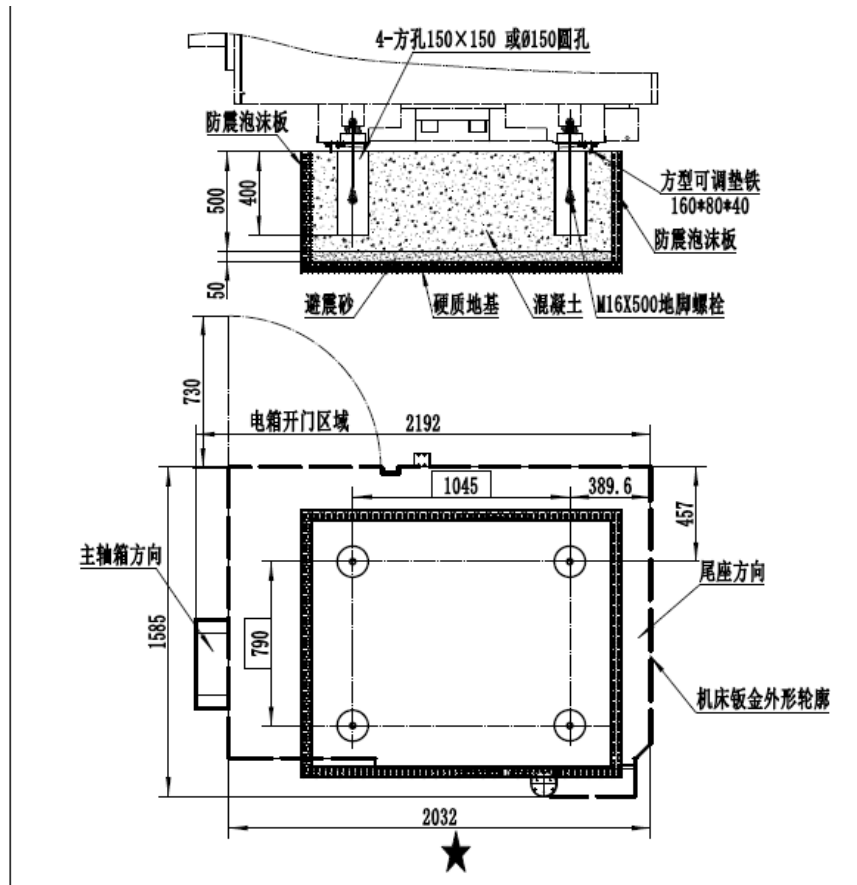
1. Since the final acceptance of the machine tool, all failures caused by quality problems will be guaranteed for one year free of charge.
2. Since the final acceptance of the machine tool, the failure of other parts caused by quality problems will be guaranteed for one year free of charge.
3. Since the final acceptance of the machine tool, we also guarantee to actively cooperate with the user to repair the failure caused by the quality of the machine tool, and free labor costs within one year.
4. Lifetime guarantee to provide spare parts supply at preferential prices.

**Warranty service:**

one year warranty( 12 months since customer receive & use the machine).

The manufacturer guarantees to provide life-long paid maintenance services for the product.

**Part 8: Packing & Shipping Terms****1. Machine Dimensions&Foundation Drawing**



2. Provide the following technical documents when the equipment is delivered

Packing List 1 copy

Certificate of conformity (including precision inspection sheet) 1 copy

Machine tool manual 1 copy

CNC system manual 1 copy

Electric knife holder manual 1 copy

Inverter manual 1 copy

Motor manual 1 copy

Driver manual 1 copy

Oil pump manual 1 copy

### **3.Packaging and transportation**

Factory ordinary packaging, please confirm with the ANTISHI for more details

The transportation is carried out in accordance with the contract terms.

### **Part 9: Company Introduction**

Shanghai ANTS Machine Company is mainly engaged in Universal lathe, CNC lathe, Heavy duty lathe, Special purpose lathe, Sawing machine, Drilling machine, Milling Machine, VMC(Vertical Machining Centre), HLC(Horizontal Machining Centre), Gantry Machining Centre and other equipment. The products are sold to Hebei, Shaanxi, Hunan, Henan, Jiangsu, Shandong, Guangdong, Shanghai and other places. More than 300 professional after-sales service personnel in 83 offices across the country provide customers with pr-sales and after-sales services at any time. The products are deeply trusted by customers and are exported to more than 20 countries and regions such as the United States, Germany, Italy, India, Thailand, and Russia. Especially in recent years, they have been widely used in major domestic well-known enterprises such as China National Heavy Duty Truck, Ministry of Aeronautics and Space, Zhongyuan Special Steel, Zhengmei Machinery, Shanghai Heavy Industry, Wuhan Iron and Steel, Anshan Iron and Steel and Sany Heavy Industry have the characteristics of rich experience, excellent.

## Factory Pictures



**ISO 14001 Environment Management System**

**ISO 9001 Quality Management System**

**European CE Certificate**



**Part 10: Quotation & Transaction Terms.****QUOTATION SHEET**

CURRENCY UNIT : USD

Date: April 4th, 2023

Machine Type	Equipment Model	Technical Parameter	PRICE in USD (EXW Factory)
Slant Bed CNC Lathe	TCK36A	GSK980TC3 CNC system 5.5KW GSK servo main motor 6 inch hollow hydraulic chuck 8-station servo turret	<b>17,500USD/set</b>

\* The sea freight cost fluctuate everyday due to the global shipping situation, The final confirmed price can be checked when the machine is about to ship.

**Remarks :**

- 1.Origin:** The People's Republic of China
- 2.Delivery Time:** 45-60 Days ready for the factory acceptance test.
- 3.Payment terms:** 30% payment in advance for deposit,70% balance after the pre-acceptance test before shipment
- 4.Package:** Factory ordinary packaging, please confirm with the ANTISHI for more details
- 5.Validity:** 30 Days.(The buyer has to re-check with seller if the quotation validity is expired)