

CHARACTERISTICS OF MACHINE TOOL

TY40 0 Incline bed CNC lathe is a brand new product designed and produced in accordance with the market and development requirements based on our years of experience in designing horizontal CNC lathe. The main performance indicators of the product reach the international advanced level, energy saving and environmental protection. Compared with similar machine tools, it has the following characteristics: 1. High efficiency: short processing cycle, reducing non-cutting time; 2. High accuracy: good static accuracy and machining accuracy; 3. High space efficiency: small space plays the greatest role; 4. The XZ axis adopts three-point positioning ball screw with high positioning accuracy. The XZ axis adopts linear guide rail design, which increases the guide rail, higher dynamic and static load, and improves the rigidity of the machine tool. The whole machine of this series adopts the integrated structure of machinery, electricity and hydraulics, and the overall layout is compact and reasonable. The advanced finite element analysis software is used to analyze and optimize the whole machine, so as to optimize the performance of the whole machine; The key purchased parts are selected from the standard series products of internationally famous manufacturers to ensure the accuracy and reliability of the machine tool. Therefore, this series of machine tools is particularly suitable for the automobile industry, motorcycle industry, electronics, light industrial machinery and other industries. It can process rotating parts efficiently, in large quantities and with high precision. The processing accuracy is IT6, and the Cp value is greater than or equal to 1.33.



T32

DETAILED CONFIGURATION LIST

NO.	NAME OF ACCESSORIES	SPECIFICATION	QUANTITY	BRAND	PLACE OF PRODUCTION
1	Control system	positioning system	1 set	Opening in Nanjing	Guangdong
2	Servo driver	Opening supporting facilities	1 set	Opening in Nanjing	Guangdong
3	X servo motor	6NM	1	Opening in Nanjing	Guangdong
4	Z servo motor	6NM	1	Opening in Nanjing	Guangdong
5	Spindle motor	4KW servo main motor	one	Opening in Nanjing	Guangdong
6	Spindle drive	Supporting facilities	one	Opening in Nanjing	Guangdong
7	principal axis	Mechanical spindle	1 set	Jingtai	Zhejiang

NO.	NAME OF ACCESSORIES	SPECIFICATION	QUANTITY	BRAND	PLACE OF PRODUCTION
8	Linear guide X axis	HGW30	2	Germany FZS	Jiangsu
9	Linear guide Z axis	HGW30	2	Germany FZS	Jiangsu
10	Lead screw X axis	2510	1	WanrunShenghe	Jiangsu
11	Z axis of lead screw	3210	1	WanrunShenghe	Jiangsu
12	Cylinder	Hollow swing cylinder	1	Coppertone	Jiangsu
13	Hydraulic station	High performance hydraulic station	1	Shengquan	Zhejiang

MAIN PARAMETERS OF MACHINE TOOL

ITEM	UNIT	TY32
System configuration		The system opened in Nanjing can be equipped with GDS, Cam and other systems
Swing over bed	mm	Φ360
Maximum rotation diameter on the supporting plate	mm	Φ120
Maximum travel of x-axis	mm	680
Maximum travel of z axis	mm	400
Principal axis		Mechanical spindle
Spindle speed	rpm	50-3000
Spindle nose		A2-5
Diameter of main shaft through hole	mm	Φ48
Servo main motor power	KW	4
X-axis servo motor	N.m	4
Z-axis servo motor	N.m	4
Clamping system		Hydraulic clamping
Cylinder specification		Hydraulic hollow 536
Tool holder form		Cutter arrangement
Number of cutters		4
Knife size	mm	20X20
Guide rail form z axis		Linear guide rail (FZS)
Guide rail form x axis		Linear guide rail (FZS)
Bed form		30° inclined bed
Tailstock power		nothing
Minimum setting unit	mm	0.001
Minimum movement	mm	0.001
Minimum detection amount	mm	0.001
X-axis fast movement	m/min	18
Fast movement of z axis	m/min	20
Total weight of machine tool	kg	1600
Appearance size (length x width x height)	mm	1800x1500x1680 (height does not include warning light)

(Note: The machine tool parameters are subject to the actual machine tool data.)

MACHINE TOOL OVERVIEW

CNC machine tool is the abbreviation of Computer numerical control machine tool. It is an automatic machine tool equipped with a program control system. The control system can logically process the program specified by the control code or other symbolic instructions, decode it, express it with coded numbers, and input it into the numerical control device through the information carrier. After calculation and processing, the numerical control device sends out various control signals to control the action of the machine tool, and automatically processes the parts according to the shape and size required by the drawing.



T35

BASIC CONFIGURATION OF INTEGRATED TRUSS

- Servo motor drive: Taiwan Delta
- Guide rail: customized odd block technology to ensure that the empty section will never rust 20 guide rails
- Controller: Mitsubishi
- Main machine interface: handheld Taiwan syntron
- Strong current configuration: Schneider ABB
- Contact and relay: Schneider and Japan OMRON
- Switching power supply: OMRON, Koso filter
- Wire bonding: Japan
- Gas pipe: Morita, Japan
- Solenoid valve: Japan SMC South Korea TCP Taiwan Ginea

- Proximity switch: Japan OMRON
- Oil pump: automatic micro grease pump (original with Mobil grease)
- Silo: placed in an independent lattice mode, and the silo and the host machine adopt
- Bus communication: non truss IO point is directly controlled, which is convenient for later upgrade and replacement (host, vibrating disk, Falan rotary disk, etc.)
- Truss main beam left and right X axis are of seamless square tube structure (non aluminum profile fixed guide rail)
- Surface treatment: 1 Overall sandblasting; 2 Overall phosphating; 3 Overall plastic spraying (non direct baking paint)
- Fixing screws: 304 stainless steel for light load; All heavy loads are plated with 12-9 grade and fastened with torque value
- Stuck detector: built-in installation
- Grab detection: the power supply of the equipment installed externally is 220V AC. The maximum power during movement shall not exceed 400W, and there shall be no power output during suspension. If there are technical changes to individual accessories, no further notice (such as additional configurations)

MAIN PARAMETERS OF MACHINE TOOL

ITEM	UNIT	T35	
Processing capacity	Max.saving diameter	mm	Φ400
	Swing over cross slide	mm	Φ120
	Max.turning length	mm	Φ400
	Max.turnin bar diameter	mm	Φ40
Principal axis	Work piece clamping method	N/A	Spring collet
	Spindle speed range	Rpm	Optional 100-3000 (common spindle unit) 100-4000 (precision spindle unit)
	Spindle nose size	N/A	A2-5
Fast forward give it	X-axis rapid traverse	m/min	24m (3210)
	Z-axis rapid traverse	m/min	24m (3210)
Trip	X-axis travel	mm	800
	Z-axis travel	mm	420
Accuracy	X/Z axis repeating polling accuracy	mm	0.003
	Toolholder spe	N/A	Cutter row
Other	Tool size	mm	20
	Number of tools	pcs	9 (63 turret can be installed)
	Overall size(L*W*H)	mm	2100*1450*1850
	The bed bottom spindle center eight	mm	990
Net weight	kg	About 1500	

DETAILED CONFIGURATION LIST

NAME OF ACCESSORIES	SPECIFICATION	BRAND SOURCE	NOTES
CNC system		Opening in Nanjing	It can be equipped with Guangshu, Kandi and other systems
X-axis motor	6NM with brake	Opening in Nanjing	
Z-axis motor	10NM	Opening in Nanjing	
Servo main motor	7.5KW	Supporting servo motor of the system	
tool center	Cutter bar	Jiongtai manufacturer	
Hydraulic chuck	6-inch medium solid chuck	Coppertone domestic	Optional 8-inch chuck
Cooling pump	210W	domestic	
Automatic lubrication system	Gear pump	domestic	

MACHINE TOOL OVERVIEW

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T46

DETAILED CONFIGURATION LIST

NO.	NAME OF ACCESSORIES	SPECIFICATION	BRAND SOURCE	QUANTITY	NO.	NAME OF ACCESSORIES	SPECIFICATION	BRAND SOURCE	QUANTITY
1	principal axis	7018TBT8, 7016D8B	ZYS, CSC	1 set	7	Hydraulic chuck	8-inch hollow	Letika, etc. (Taiwan brand is optional)	1 set
2	linear guide rail	X35, Z35	HI WIN, PMI, SHAG	1 set	8	Centralized lubricator	Gear pump	Zhejiang Oil Pump	1 set
3	X-axis ball screw	3210 LENGTH 610	HI WIN, PML SHAG	1 set	9	CNC system	Optional (vertical operation screen)	GSK980TC3, K1000Tfii	1 set
	Z-axis ball screw	4010 Length 1225/1210	THK, HIWIN, SHAG	1 set	10	Electrical components		Huanyu Electric	1 set
4	X-axis lead screw bearing	25TAC62B-2RZP4DBB	NACHK CSC	2 sets	11	Main motor	11kw(optional functional motor)	The system is equipped with complete set of motor	1 set
5	Z-axis lead screw bearing	25TAC62B-2RZP4DBB	NACHK CSC	2 sets	12	Slitting machine	Chain type (optional)	Domestic quality	Outsourcing
6	tool center	8 position servo hydraulic turret	Nanfeng, Lanji tool rest	1 set					

MAIN PARAMETERS OF MACHINE TOOL

ITEM	UNIT	T46	
Technical specifications	Maximum workspace rotation diameter of bed	mm	Φ500
	Maximum machining length (one clip and one)	mm	480
	Maximum length of workpiece (two tips)	mm	530
	Maximum turning disc class diameter	mm	Φ400
Main drive	Infinitely variable speed		
	The main motor	kw	Optional low-speed high torque or higher motor) 11
	Diameter of main shaft hole	mm	Φ56
	Maximum rod material through diameter	mm	Φ46
Tallstock device	Spindle speed range	r/min	50-3000
	The tallstock	mm	Φ62
	The tallstock	mm	100
	Taper of cone hole of tail seat sleeves		Mohs No. 5
Feed system	Maximum stroke of tool holder transverse (X)	mm	230
	Maximum stroke of tool holder longitudinal (Z)	mm	500
	Transverse X axis servo motor torque	n.m	130-7.5
	Transverse Z axis servo motor torque	n.m	130-7.5
	Fast lateral feed	m/min	20
	Rapid longitudinal feed	m/min	20
	Positioning accuracy transverse (X)	mm	0.005
	Positioning accuracy Longitudinal (Z)	mm	0.005
	Repeatable positioning accuracy Transverse	mm	0.005
	Repeated positioning accuracy Longitudinal	mm	0.005
	Workpiece machining accuracy		IT6
	Workpiece surface roughness		Ra1.6
Tool holder device	Servo eight-position tool rest		
	Tool rest cross section	mm	25x25
	Diameter of boring tool rod	mm	Φ32
	Repeatable positioning accuracy	mm	0.005
weight	L * W * H	mm	2800*1700*1750
	weight	kg	3500

CHARACTERISTICS OF MACHINE TOOL

1. The integral cast iron foot bed adopts high and low rails 30° Oblique layout, reasonable reinforcement of the bed, greatly improving the bending and torsional rigidity of the machine tool. (There are split cast iron bed feet, bed bodies, split steel plate welding bed feet, cast iron bed bodies, etc. in the market.)
2. The front support of the main shaft adopts double row roller bearings, and the rear support adopts 72 series paired bearings, with good processability. Imported special bearing grease is used, which is maintenance free.
3. The key functional parts such as linear guide rail, lubricating device, coupling and bearing are all well-known brands.
4. The appearance is novel and beautiful, reliable and practical, and the water, oil and electrical treatment is appropriate.
5. Easy chip removal.



STC5052D

BASIC CONFIGURATION OF INTEGRATED TRUSS

- Servo motor drive: Taiwan Delta
- Guide rail: customized cold black technology to ensure that the empty section will never rust 20 guide rails
- Controller: Mitsubishi
- Main machine interface: hardened Taiwan nylon
- Strong current configuration: Schneider ABB
- Contact and relay: Schneider and Japan OMRON
- Switching power supply: OMRON, Koso filter
- Wire: Banding Japan
- Gas pipe: Morita Japan
- Solenoid valve: Japan SMC South Korea TCP Taiwan Gilje
- Proximity switch: Japan OMRON
- Oil pump: automatic micro grease pump (original with Mobil grease)
- Site: placed in an independent lathe mode, and the lathe and the host machine adopt
- Bus communication: non-truss I/O port is directly controlled, which is convenient for later upgrade and replacement (host, vibrating disk, Fanuc rotary disk, etc.)
- Truss main beam: left and right X-axis are of seamless square tube structure (non-aluminum profile fixed guide rail)
- Surface treatment: 1 Overall sandblasting; 2 Overall phosphating; 3 Overall plastic spraying (iron direct baking paint)
- Fixing screws: 304 stainless steel for light load; All heavy loads are plated with 12.9 grade and fastened with torque value
- Stick detection: built-in installation
- Grab detection: the power supply of the equipment installed externally is 220V AC; The maximum power during movement shall not exceed 400W, and there shall be no power output during suspension; If there are technical changes to individual accessories, No further notice (such as additional configuration).

MAIN PARAMETERS OF MACHINE TOOL

ITEM	UNIT	SPECIFICATIONS	NOTES
Swing over bed	mm	Φ500	
Maximum turning diameter on sliding plate	mm	Φ300	
Type and code of spindle end		A2-8	
Diameter of spindle through hole	mm	Φ82	
Maximum spindle speed	r/min	1600	
Diameter of tube drawing through hole	mm	Φ68	With oil cylinder
Chuck	寸	10	
Main motor	Main motor power	KW	15
	Rapid traverse speed of X/Z axis	m/min	15/20
Biaxial	X-axis stroke	mm	380
	Z-axis stroke	mm	550
Tool holder form			Four position electric tool rest Standard configuration
			Double tool rest Optional
Tool carrier	Knife square	mm	25x25
	Diameter of money knife bar	mm	Φ32
Other	Net weight of machine tool	kg	About 2800
	Overall dimensions of machine tool (length x width x height)	mm	2680X1695X1800

MACHINE TOOL ACCURACY

The accuracy of the machine tool shall comply with GB1 25059-1-2010 Simple CNC Horizontal Lathe Part 1: Accuracy Inspection

Inspection items	Factory Standards
Machining accuracy	It6
Roundedness of machined workpiece (mm)	0.005/Φ70
Roughness of machined surface (μm)	Ra1.6
Repetitive positioning accuracy: X axis (mm)	0.01
Repetitive positioning accuracy: z-axis (mm)	0.011

MAIN CONFIGURATION OF MACHINE TOOL

NAME OF ACCESSORIES	SPECIFICATIONS	BRAND/SOURCE	NOTES
Cnc system		Guangshu or Kandi	Optional
X-axis motor	10NM band type brake	China	Optional
Z-axis motor	10NM	China	Optional
Main motor	Servo 15KW	China	
Principal axis	A2-8		self-control
Front bearing of main shaft	NX3024 K P5 W33	KTL	
Rear bearing of main shaft	7021 Ac P5 DBB	KTL	
X-axis lead screw	three thousand two hundred and ten	Tip opening	
Z-axis lead screw	four thousand and ten	Tip opening	
X-axis guide rail	Roller rail 35	Taiwan Yantai	
Z-axis guide rail	Roller rail 45	Taiwan Yantai	
Manual chuck	10 inches		Standard configuration
Power chuck	10 inch hollow	Leika	Optional
Power chuck	10 inch Zhongshi	Leika	Optional
Tool carrier			Four position electric tool rest (single) SanheWenchang Standard configuration
			Four position electric tool rest (double) SanheWenchang Optional
Hydraulic station	One way	China	Optional
Cooling water pump	370W, lift 14m	China	Standard configuration
Hand pulse	Extraneous hand pulse	China	Standard configuration

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T65

BASIC CONFIGURATION OF INTEGRATED TRUSS

- Servo motor drive: Taiwan Delta
- Guide rail: customized odd block technology to ensure that the empty section will never rust 20 guide rails
- Controller: Mitsubishi
- Main machine interface: handheld Taiwan vinyon
- Strong current configuration: Schneider ABB
- Contact and relay: Schneider and Japan OMRON
- Switching power supply: OMRON, Koso filter
- Wire bonding: Japan
- Gas pipe: Morita, Japan
- Solenoid valve: Japan SMC South Korea TCP Taiwan Ginea

- Proximity switch: Japan OMRON
- Oil pump: automatic micro grease pump (original with Mobil grease)
- Slit: placed in an independent lattice mode, and the slit and the host machine adopt
- Bus communication: non truss IO point is directly controlled, which is convenient for later upgrade and replacement (host, vibrating disk, Falan rotary disk, etc.)
- Truss main beam: left and right X axis are of seamless square tube structure (non aluminum profile fixed guide rail)
- Surface treatment: 1 Overall sandblasting; 2 Overall phosphating; 3 Overall plastic spraying (non direct baking paint)
- Fixing screws: 304 stainless steel for light load; All heavy loads are plated with 12-9 grade and fastened with torque value
- Stuck detection: built-in installation
- Grab detection: the power supply of the equipment installed externally is 220V AC. The maximum power during movement shall not exceed 400W, and there shall be no power output during suspension. If there are technical changes to individual accessories, No further notice (such as additional configuration).

MAIN PARAMETERS OF MACHINE TOOL

ITEM	UNIT	T65
Swing over bed	mm	540/630
Maximum turning diameter on Carriage	mm	340/420
Maximum machining length	mm	550/950
Spindle end form	GB59001	A2-B
Main shaft through hole diameter	φ /mm	82/90
Maximum bore diameter	φ /mm	67/75
Spindle speed range	R/min	20-2200
Shift mode of main shaft		Stepless speed change
main motor power(continuous value)	Kw	11KW/19KW (spindle servo)
Chuck type(standard/optional)		Hydraulic medium solid
Chuck diameter	mm	10 inch (standard configuration) (Taiwan Polarad)
Screw	P2/P3	X4010P2.Z4010P2-Harjiang/X4010C3.Z4010C3-Taiwan
Wire gauge	35/45mm	Heavy roller structure (Taiwan Shangyin, etc.)
Main shaft bearing	P4	NTN (Japan)/NTN center axle
The X/Z axis is moving fast	mm/min	18000/18000
X/Z axis servo motor torque	n/m	15/11.4
The X axis stroke	mm	320
The Z axis stroke	mm	600/1000
Tool post form		Hydraulic servo tool rest (Taiwan brand) 8 stations (center height 80/100mm)
Outertubing tool dimensions	mm	25/32,40
Talrest sleeve diameter/stroke	mm	100/120
The ballback form		hydraulic pressure
Taper of ballback sleeve		M4hs No.5
Chip removal form (purchased separately)		Optional
Machine weight	Ton	7500 about 4.77/7500 about 5.4T (including chip conveyor)
Machine size	Length (without chip conveyor) x Width x Height	3200/3800*1800*220

※ CNC system is optional. Please call for details if there is any technical change.