



shandong lu young machinery co.,ltd
luyoungcncmachines.com

Single Spindle TCK56 750mm 1000mm Slant Turning And Milling Machine

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Luyoung
- Certification: CE
- Model Number: TCK56



Product Specification

- Type: TURNING CENTER
- Chuck Size: 10 Inch
- Condition: New
- Distance Between Two Centers: 500 Mm
- After Warranty Service: Field Maintenance And Repair Service
- Turret Type: 12-station Hydraulic Turret
- Positioning Accuracy: $\pm 0.005\text{mm}$
- Tool Turret: 12 Station
- Turret: 12 Station Driven Turret
- Number Of Axes: 2/3/4/5
- Highlight: Single Spindle CNC lathe machine,
Slant Bed Turning and Milling Machine,
TCK56 CNC lathe with warranty

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Product Description

TCK 56-700 series multifunctional CNC lathe is a high-speed precision CNC processing equipment produced by our company using Japanese technology. The main accessories are all products from well-known domestic and foreign manufacturers, and the key components are all completed by imported precision pentahedron machining centers to ensure manufacturing accuracy.

— Machine tool structure

1. The TCK56 series multifunctional CNC lathe features a box-shaped bed constructed of tough cast iron (HT - 300) using one-piece casting technology and is machined in a single clamping process using a high-precision machining center. This results in strong overall rigidity, excellent precision retention, and high reliability.
2. The bed adopts high-rigidity 30- °degree inclined-back integral bed, which is convenient for chip removal and equipped with a separate water tank to completely prevent leakage and easy maintenance.

— Tool holder

The TCK56 series multifunctional CNC lathe features a 12-position servo- hydraulic toolholder (with an optional powered turret) , with interchangeable toolholders at all toolhead positions. Tool changes are fast (0.25 seconds for consecutive tool changes) . The toolholder's rotational repeatability is 0.003mm .

— spindle

1. TCK 56 series multifunctional CNC lathe adopts a high-rigidity spindle unit structure.
2. The spindle is internally sealed with grease lubrication to ensure high-speed and stable operation of the spindle.
3. The spindle motor adopts AC servo motor with stepless speed change and power of 11KW . It has large torque output and wide range. It can output high torque at low speed, which is suitable for heavy cutting.
4. The spindle box has a gearless structure, which greatly reduces noise and vibration.
5. It adopts center hole (optional center solid) hydraulic chuck and high-speed oil cylinder, and is equipped with a foot switch, which makes workpiece clamping convenient, safe and reliable.

Four. X, Z axis transmission

1. X- axis 4010 and Z-axis 4010 feed drive adopts Taiwan Hiwin large diameter, high precision (C3 grade) and is pre-loaded and pre-tensioned.
2. X and Z axis feed adopt Taiwan Hiwin roller linear guide (P grade RG 4 5) with strong load-bearing capacity.
- 3 . Equipped with a screw and linear rail lubrication system, it provides forced lubrication throughout the entire process to minimize friction and is protected by a stainless steel telescopic cover.
4. Both X and Z axes use servo motors, with the X-axis motor torque being 10 Nm and the Z-axis motor torque being 15 Nm.

five. tailstock

1. The machine tool adopts a standard hydraulic tailstock, and the tailstock body is moved by a hydraulic cylinder (a programmable tailstock with servo motor screw drive is optional) .
2. The tailstock guide rail is made of high-precision wire gauge Taiwan Dinghan (Taiwan and grade precision) , ensuring the best combination of machine tool feed accuracy and rigidity.

six. hydraulic system

The hydraulic system of the machine tool adopts imported components to control the variable pump system, ensuring the most energy-saving machine tool.

7. Lubrication system

The centralized lubrication system is used, and the ball screw and linear rail are fully automatically forced lubricated to ensure the machine tool's rapid movement capability and high positioning accuracy.



Part	project	TCK 56
Processing range	Maximum swing diameter on the bed (mm)	Φ 650
	Maximum cutting diameter (mm)	Φ 540
	Maximum cutting length (mm)	power turret 540
Itinerary and Feed	X-axis travel (mm)	280
	Z-axis travel (mm)	750
	Y-axis travel (mm)	+/-50
	X-axis moving speed (mm/min)	24000
	Z axis moving speed (mm/min)	24000
	Y axis moving speed (mm/min)	18
	Hand wheel (mm)	0.001/0.01/0.1
	X, Z feed speed (mm/min)	0~5000
	X, Z manual feed speed (mm/min)	0~1260
Position accuracy	X-axis repeatability (mm)	0.005
	X-axis positioning accuracy (mm)	0.01
	C axis	0.01
	Z axis repeat positioning accuracy (mm)	0.00 6
	Z-axis positioning accuracy (mm)	0.01 5
spindle	Spindle speed (rpm)	10 - 3000
	Maximum spindle torque (N.m)	72
	Spindle nose	A2-6
	Spindle through hole diameter (mm)	Φ 66
	Hollow hydraulic chuck through hole diameter (mm)	Φ 52
	Chuck	10inch
Dota	Number of tool holders	12 workstations driven turret
	Tool change time (s)	0.25
	Tool installation size (mm)	25 × 25
	Boring tool holder installation diameter (mm)	Φ 32
tailstock	Tailstock stroke (mm)	480
	Top taper	MT-5#
Main motor	Main motor power (kw)	11 (4 500rpm)
	Main motor torque (N.m)	72
X and Z axes Feed motor	X- axis feed motor power (kw)	2.3
	X- axis feed motor torque (N. m)	15
	Z- axis feed motor power (kw)	2.3
	Z- axis feed motor torque (N. m)	15
Cooling system	Coolant capacity (L)	200
	Motor type (1HP) (kw)	0.18
size	Installation (length * width * height) (mm)	3400/2060/2100
weight	Machine weight (kg)	4200