



№: LB.TD.TA-EN.XL2-6DW<V1>

Servo Turret Hydraulic Tailstock Lathe

TECHNICAL AGREEMENT

XL2-6DW

2024.12.30



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1.Product Introduction



Figure 1: Appearance Display (Pictures for Reference Only)

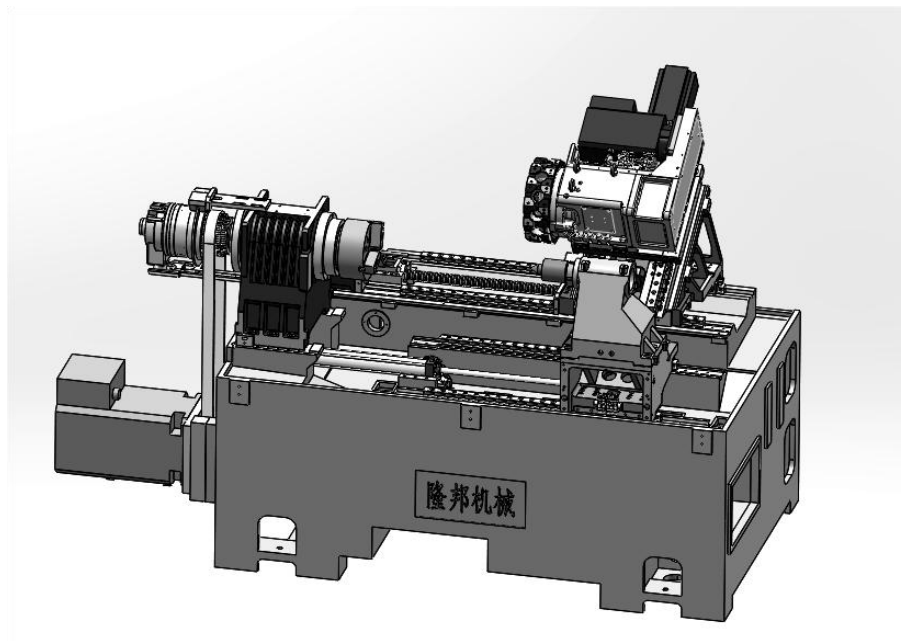


Figure 2: Mechanical Structure Display



2. Working Conditions

- (1) Power supply: AC380V $\pm$ 10%, 50HZ $\pm$ 1HZ three-phase AC.
- (2) Operating temperature: 5°C - 40°C.
- (3) Optimal environmental temperature: 15°C - 25°C.
- (4) Relative humidity: 40 - 75%.

3. Precision Standard

Precision	GB Standard	Company Standard
The Level of Machining Accuracy	IT6	IT6
Machining Roundness Accuracy	0.003mm / Φ 70mm	0.003mm / Φ 70mm
Machining Straightness Accuracy	0.010mm / 150mm	0.010mm / 150mm
Machining Flatness Accuracy	0.008mm / Φ 100mm	0.006mm / Φ 100mm
Machining Roughness Accuracy	Ra1.6 μ m	Ra0.4 μ m Parameter Reference: Material: Al; Spindle Speed: 2200RPM; Feed Rate: 0.06mm/rev; Tool: PCD R0.2
Spindle End Face Runout	0.01mm	0.003mm
Spindle Radial Runout	0.008mm	0.003mm
Axial Positioning Accuracy	X-axis0.016mm	X-axis0.008mm
	Z-axis0.020mm	Z-axis0.008mm
Axial Repeatability Positioning Accuracy	X-axis0.007mm	X-axis0.004mm
	Z-axis0.008mm	Z-axis0.004mm
Turret Indexing Repeatability Positioning Accuracy	Y-Z Direction0.01mm	Y-Z Direction0.006mm
	Z-X Direction0.01mm	Z-X Direction0.006mm

4. Technical Specifications

#	Parameter	Unit	XL2-6DW Servo Turret Hydraulic Tailstock Lathe
1	Max. Turning Diameter	mm	Φ420
2	Max. Machining Length	mm	500
3	Max. Swing Diameter	mm	Φ560
4	Bar Feeding Diameter	mm	<Φ46
5	Spindle Bore	mm	Φ56
6	Max. Spindle Speed	RPM	4000
7	X-axis Travel	mm	240
8	Z-axis Travel	mm	450
9	Tailstock Travel	mm	500
10	Rapid Feedrate	m / min	22
11	Max. Driven Tool Speed	RPM	4000
12	Voltage (3phase)	V	380±10%
13	Frequency	Hz	50
14	Power	kW	18
15	Weight	kg	3700
16	Size (Length × Width × Height)	mm	2550×1750×1850 (Excluding Chip Conveyor)
#	Configuration		
1	CNC		☐ FANUC 0I-TF PLUS(3)
	Spindle Rated Power / Torque of the Servo Motor		☐ 11kW / 52Nm (Standard) ☐ 15kW / 71Nm (Optional)
	X-axis Rated Power / Torque of the Servo Motor		1.2kW / 7Nm
	Z-axis Rated Power / Torque of the Servo Motor		1.2kW / 7Nm
	Driven Tool Rated Power / Torque of the Servo Motor		2.7kW / 12Nm
2	\	Brand	Type / Spec
	Spindle	☐ LBIE Belt Spindle (OEM by HAOZHI) (Standard)	A2-5

		☐ Guangzhou HAOZHI Motor Spindle (Optional) ☐ Taiwan KENTURN Belt Spindle (Optional)			
3	X-axis	Linear Guide Rail	HIWIN / Rexroth	35 Roller Guide	
		Lead Screw	PMI / NSK	32	
		Bearing	NSK	20TAC	
	Z-axis	Linear Guide Rail	HIWIN / Rexroth	35 Roller Guide	
		Lead Screw	PMI / NSK	32	
		Bearing	NSK	20TAC	
4	Tool Carrier Form	Turret	Brand	Western Power	
			Driving Type	Servo Motor	
			Locking Type	Hydraulic Locking	
			Model / Station	BMT45-12	
5	Tailstock Form		Hydraulic Tailstock		
6	Lubrication Form		Oil Lubrication		
7	Hydraulic System		Standard		
8	Fixture		☐ 46 Type Collect Chuck (Standard) ☐ 6inch Hydraulic Chuck (Optional)		
9	Coolant Pump Power		☐ 5Bar (Standard) ☐ 50Bar (Optional)		
10	Main Electrical Components Brand		Schneider		
11	Electronic Door Lock		Standard		
12	Fixed Tool Holder		Type	Spec	Qty
			Bore Tool Holder	Φ32	3
			Radial Square Tool Holder	25×25	3
			Axial Square Tool Holder	25×25	1
			☐ Optional	7 Included for Any Type (Extra Available)	
13	Static Tool Holder		Spec	Qty	
			0°	1pcs	
			90° Unidirection	1pcs	

		☐ Optional	
14	Other Accessories	Item	Qty
		Chuck Draw Tube	1pcs
		Foot Switch	1set
		Water Tank	1set
		Installation Tool	1set
		Machine Foot	4pcs
15	System Operation Manual	E-manual	
16	Machine Tool Instruction Manual	E-manual	
17	Optional	☐ Chip Conveyor	
		☐ Renishaw Tool Setter	
		☐ Automatic Catcher	
		☐ Oil Mist Collector	
		☐ Automatic Door	
		☐ Collision Avoidance System	
		☐ Machine IoT Remote Monitoring	

5.Safety Precautions

- (1) Always follow the manufacturer's guidelines and instructions for safe operation.
- (2) Ensure proper training and qualification of personnel operating the machine tool.
- (3) Use appropriate personal protective equipment (PPE) as required.
- (4) Regularly inspect and maintain the machine tool to ensure its optimal functioning.
- (5) Keep the work area clean and organized to prevent accidents or injuries.

This technical description provides an overview of the key features, capabilities, specifications, and safety precautions associated with the Machine Tool. It serves as a useful reference for understanding the machine's functionality and characteristics in technical documentation.