



№: LB.TD.TA-EN.W7-10CYDWI<V3>

Interpolated Y-axis Turning and Milling
Machine Tool
(Hydraulic Tailstock Version)

TECHNICAL AGREEMENT

W7-10CYDWI

2024·7·5

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1.Product Introduction



Figure 1: Appearance Display (Pictures for Reference Only)

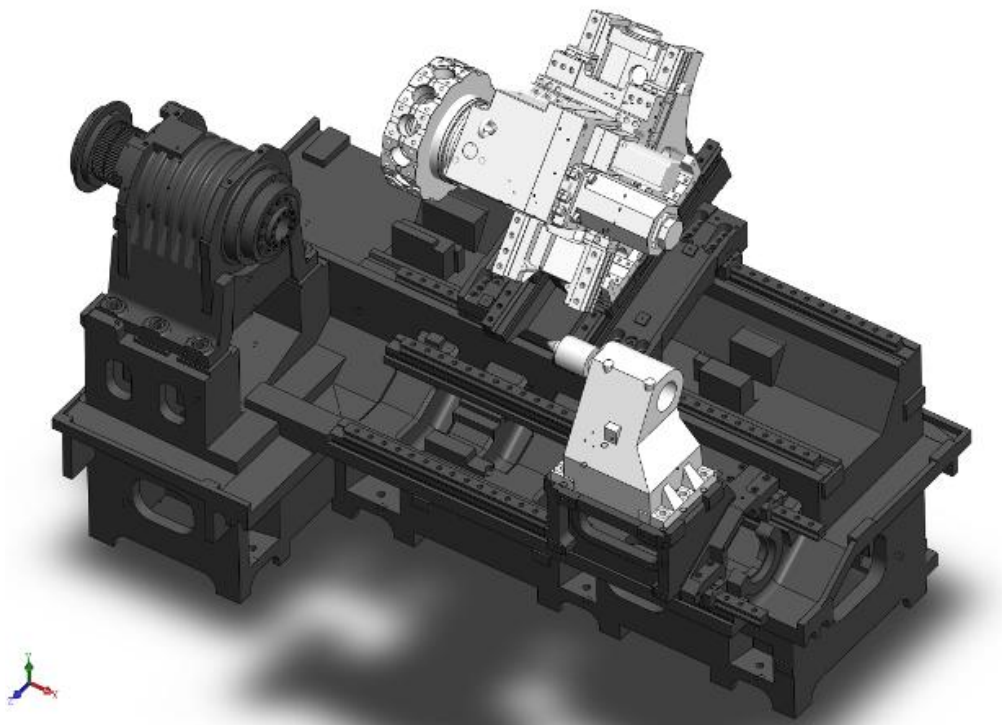


Figure 2: Mechanical Structure Display

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
	Y-axis0.016mm	Y-axis0.008mm
	Z-axis0.020mm	Z-axis0.008mm
Axial Repeatability Positioning Accuracy	X-axis0.007mm	X-axis0.004mm
	Y-axis0.007mm	Y-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	W7-10CYDWI Interpolated Y-axis Turning and Milling Machine Tool (Hydraulic Tailstock Version)
1	Max. Turning Diameter	mm	Φ300
2	Max. Machining Length	mm	550
3	Max. Swing Diameter	mm	Φ500
4	Max. Bar Through Diameter	mm	Φ75
5	Spindle Bore	mm	Φ88
6	Max. Spindle Speed	RPM	3500
7	X-axis Travel	mm	220
8	Y-axis Travel	mm	110
9	Z-axis Travel	mm	600
10	B-axis (Tailstock) Travel	mm	610
11	Rapid Feedrate	m / min	22
12	Max. Driven Tool Speed	RPM	4000
13	Voltage (3phase)	V	380±10%
14	Electric Frequency	Hz	50
15	Power	kW	24
16	Weight	kg	4200
17	Size (Length × Width × Height)	mm	3250 × 1700 × 1900 (Excluding Chip Conveyor)
#	Configuration		
1	CNC Control System	☑ FANUC 0I-TF PLUS(3)	
	Main-spindle Rated Power / Torque of the Servo Motor	☐ 11kW / 105Nm (Belt Spindle) (Standard 1) ☐ 15kW / 95Nm (Motor Spindle) (Standard 2)	
	X-axis Rated Power / Torque of the Servo Motor	1.8kW / 11Nm	
	Y1-axis Rated Power / Torque of the Servo Motor	1.8kW / 11Nm	
	Z-axis Rated Power / Torque of the Servo Motor	1.8kW / 11Nm	

	Driven Tool Rated Power / Torque of the Servo Motor			2.7kW / 12Nm	
2	\		Brand	Type / Spec	
	1st Spindle		☐ Taiwan KENTURN Belt Spindle (Standard 1) ☐ Guangzhou HAOZHI Motor Spindle (Standard 2)	☐ A2-6 (Standard) ☒ A2-8 (Max. Bar Through Diameter: Φ75, Match 10inches Chuck) (Optional)	
3	X-axis	Linear Guide Rail	HIWIN / PMI / Rexroth	35 Roller Guide	
		Lead Screw	HIWIN / PMI / NSK	32	
		Bearing	NSK	20TAC	
	Y1-axis	Linear Guide Rail	HIWIN / PMI / Rexroth	35 Roller Guide	
		Lead Screw	HIWIN / PMI / NSK	32	
		Bearing	NSK	20TAC	
	Z-axis	Linear Guide Rail	HIWIN / PMI / Rexroth	35 Roller Guide	
		Lead Screw	HIWIN / PMI / NSK	32	
		Bearing	NSK	20TAC	
4	Tool Carrier Form	Turret	Brand	Taiwan TCSM	
			Driving Type	Servo Motor	
			Locking Type	Hydraulic Locking	
			Model / Station	☒ BMT55-12 (Standard) ☐ BMT45-15 (Optional)	
5	Tailstock Form		Hydraulic Tailstock		
6	Lubrication Form		Grease Lubrication		
7	Hydraulic System		Standard		
8	Fixture		☒ Taiwan JIAHE Hydraulic Chuck (10inch) (Standard) ☐ TGT Collect Chuck (52) (Optional)		
9	Coolant Pump Power		☒ 5Bar (Standard) ☐ 50Bar (Optional)		
10	Main Electrical Components Brand		Schneider		
11	Chip Conveyor		Included		
12	Fixed Tool Holder		Type	Spec	Qty
			Boring Tool Holder		7 Included for Any
			Outer Diameter Turning		

		Tool	Type (Extra Available)
		End Face Turning Tool Holder	
		☐ Optional	
13	Driven 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	9pcs
15	System Operation Manual	E-manual	
16	Machine Tool Instruction Manual	E-manual	
17	Optional	☐ Renishaw Tool Setter	
		☐ Automatic Catcher	
		☐ Oil Mist Collector	

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.