



Nº: LB.TD.TA-EN.W7-8CYDWII<V3>

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

TECHNICAL AGREEMENT

W7-8CYDWII

2024.12.30



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1.Product Introduction



Figure 1: Appearance Display (Pictures for Reference Only)

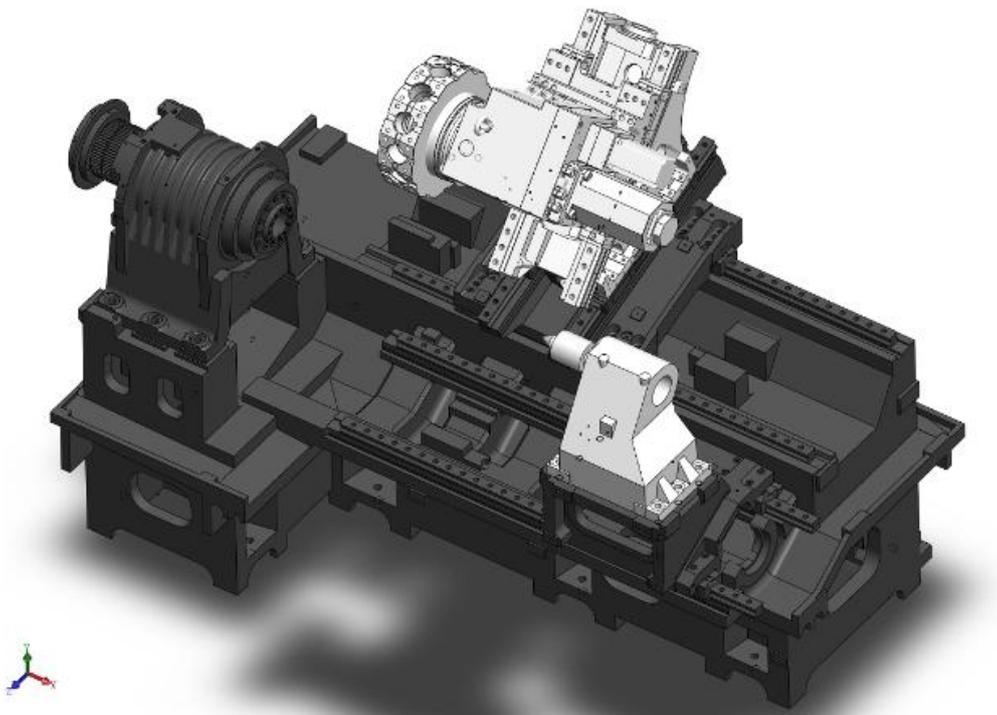


Figure 2: Mechanical Structure Display



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
	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	W7-8CYDWII Interpolated Y-axis Turning and Milling Machine Tool (Servo Tailstock Version)
1	Max. Turning Diameter	mm	Φ300
2	Max. Machining Length	mm	550
3	Max. Swing Diameter	mm	Φ500
4	Bar Feeding Diameter	mm	<Φ52
5	Spindle Bore	mm	Φ66
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	27
16	Weight	kg	4200
17	Size (Length × Width × Height)	mm	3250 × 1700 × 1900 (Excluding Chip Conveyor)
#	Configuration		
1	CNC Control System	<input type="checkbox"/> FANUC 0I-TF PLUS(3)	
	Main-spindle Rated Power / Torque of the Servo Motor	<input type="checkbox"/> 11kW / 105Nm (Belt Spindle) (Standard) <input type="checkbox"/> 15kW / 143Nm (Belt Spindle) (Optional) <input type="checkbox"/> 15kW / 95Nm (Motor Spindle) (Optional)	
	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	
	B-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	<input type="checkbox"/> Taiwan KENTURN Belt Spindle (Standard) <input type="checkbox"/> LBIE Belt Spindle(OEM by HAOZHI) (Optional) <input type="checkbox"/> Guangzhou HAOZHI Motor Spindle (Optional)	<input type="checkbox"/> A2-6 (Standard) <input type="checkbox"/> A2-6(65) (Spindle Bore: $\Phi 79\text{mm}$; Bar Feeding Diameter: $<\Phi 65$) (Optional) <input type="checkbox"/> A2-8 (Spindle Bore: $\Phi 86\text{mm}$; Bar Feeding Diameter: $<\Phi 75$, Match 10inches Chuck;Recommended to Upgrade the Motor) (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
	B-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	<input type="checkbox"/> Taiwan TCSM (Standard) <input type="checkbox"/> Taiwan GPM (Optional)
			Driving Type	Servo Motor
			Locking Type	Hydraulic Locking
			Model / Station	<input type="checkbox"/> BMT55-12 (Standard) <input type="checkbox"/> BMT45-15 (Optional)
				<input type="checkbox"/> Taiwan GPM (Optional) BMT-12 (Max. Driven Tool Speed: 6000; Indexing to 24 Stations)
5	Tailstock Form		Servo Tailstock	

6	Lubrication Form	Grease Lubrication		
7	Hydraulic System	Standard		
8	Fixture	<input type="checkbox"/> Taiwan JIAHE Hydraulic Chuck (8inch) (Standard) <input type="checkbox"/> TGT Collect Chuck (52) (Optional)		
9	Coolant Pump Power	<input type="checkbox"/> 5Bar (Standard) <input type="checkbox"/> 50Bar (Optional)		
10	Main Electrical Components Brand	Schneider		
11	Chip Conveyor	Included		
12	Electronic Door Lock	Standard		
13	Fixed Tool Holder	Type	Spec	Qty
		Boring Tool Holder	Φ32	3
		Outer Diameter Turning Tool	25*25	3
		End Face Turning Tool Holder	25*25	1
		<input type="checkbox"/> Optional	7 Included for Any Type (Extra Available)	
14	Driven Tool Holder	Spec	Qty	
		0°	1pcs	
		90° Unidirection	1pcs	
		<input type="checkbox"/> Optional		
15	Other Accessories	Item	Qty	
		Chuck Draw Tube	1pcs	
		Foot Switch	1set	
		Water Tank	1set	
		Installation Tool	1set	
		Machine Foot	9pcs	
16	System Operation Manual	E-manual		
17	Machine Tool Instruction Manual	E-manual		
18	Optional	<input type="checkbox"/> Renishaw Tool Setter		
		<input type="checkbox"/> Automatic Catcher		
		<input type="checkbox"/> Oil Mist Collector		

	<input type="checkbox"/> Automatic Door
	<input type="checkbox"/> Collision Avoidance System
	<input type="checkbox"/> 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.