№：LB.TD.TA-EN.TS-8/6ZYD/D<V3>

Dual-spindle Dual-turret Turning and Milling Machine Tool

TECHNICAL AGREEMENT

TS-8/6ZYD/D

2024·12·30

Contents

1.Product Introduction

Figure 1: Appearance Display (Pictures for Reference Only)

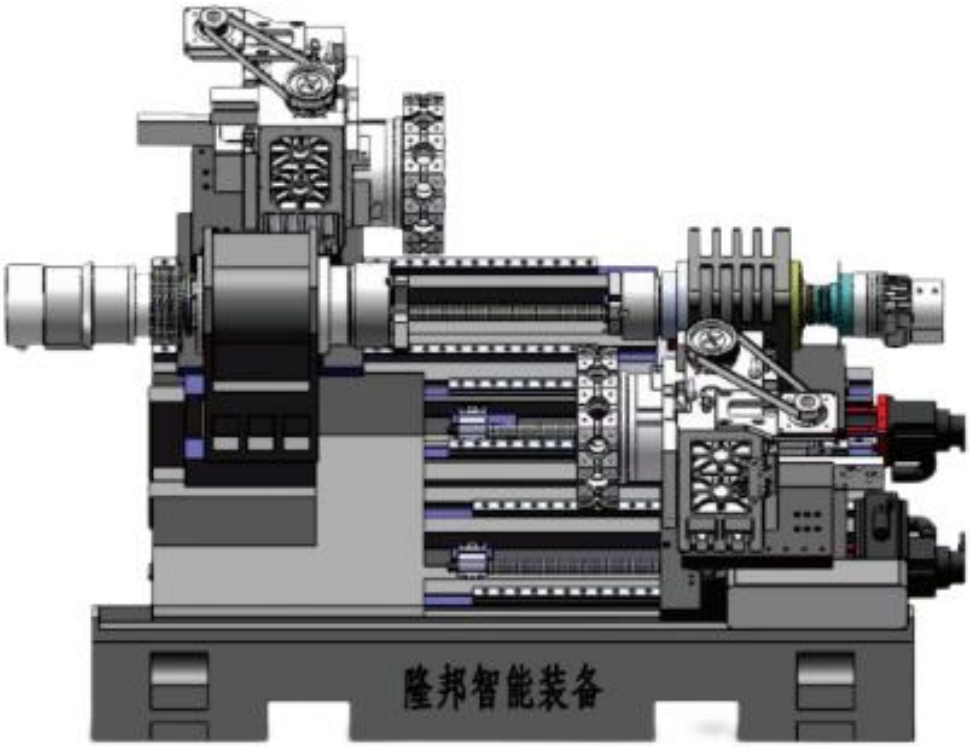

Figure 2: Mechanical Structure Display

2.Working Conditions

(1) Power supply: AC380V ± 10%, 50HZ ± 1HZ three-phase AC.

(2) Operating temperature: 5℃ - 40℃.

(3) Optimal environmental temperature: 15℃ - 25℃.

(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 / Φ70mm	0.003mm / Φ70mm
Machining Straightness Accuracy	0.010mm / 150mm	0.010mm / 150mm
Machining Flatness Accuracy	0.008mm / Φ100mm	0.006mm / Φ100mm
Machining Roughness Accuracy	Ra1.6μm	Ra0.4μm 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	TS-8/6ZYD/D Dual-spindle Dual-turret Turning and Milling Machine Tool	
1	Max. Turning Diameter	mm	Φ200	
2	Max. Machining Length	mm	550	
3	Max. Swing Diameter	mm	Φ200	
4	Bar Feeding Diameter	mm	<Φ52	
5	Spindle Bore	mm	1st Spindle: Φ66; 2nd Spindle: Φ56	
6	Max. Spindle Speed	RPM	1st Spindle: 3500; 2nd Spindle: 4000	
7	X-axis Travel	mm	X1: 250	X2: 250
8	Y-axis Travel	mm	Y1: 90	Y2: 90
9	Z-axis Travel	mm	Z1: 600	Z2: 600
10	B-axis (Tailstock) Travel	mm	550	
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	42	
16	Weight	kg	6000	
17	Size (Length × Width × Height)	mm	3000 × 2300 × 2100	

#	Configuration Table	
1	CNC	☐ Siemens 828D (With Shop Turn/Mill Function)
	C1-axis Rated Power / Torque of the Servo Motor	12kW / 115Nm
	C2-axis Rated Power / Torque of the Servo Motor	9kW / 57Nm
	X1-axis Rated Power / Torque of the Servo Motor	2.2kW / 12Nm
	X2-axis Rated Power / Torque of the Servo Motor	2.2kW / 12Nm
	Y1-axis Rated Power / Torque of the Servo Motor	2.2kW / 12Nm
	Y2-axis Rated Power / Torque of the Servo Motor	2.2kW / 12Nm

	Z1-axis Rated Power / Torque of the Servo Motor			2.2kW / 12Nm
	Z2-axis Rated Power / Torque of the Servo Motor			2.2kW / 12Nm
	B-axis Rated Power / Torque of the Servo Motor			2.2kW / 12Nm
	A1 Driven Tool Rated Power / Torque of the Servo Motor			3.6kW / 22Nm
	A2 Driven Tool Rated Power / Torque of the Servo Motor			3.6kW / 22Nm
2	\		**Brand**	**Type / Spec**
	1st Spindle		☐ Guangzhou HAOZHI Belt Spindle (Standard) ☐ Taiwan KENTURN Belt Spindle (Optional)	A2-6 (Belt-driven)
	2nd Spindle		☐ Guangzhou HAOZHI Belt Spindle (Standard) ☐ Taiwan KENTURN Belt Spindle (Optional)	A2-5 (Belt-driven)
3	X1-axis	Linear Guide Rail	Rexroth	35 Roller Guide
		Lead Screw	NSK	32
		Bearing	NSK	20TAC
	X2-axis	Linear Guide Rail	Rexroth	35 Roller Guide
		Lead Screw	NSK	32
		Bearing	NSK	20TAC
	Y1-axis	Guide Rail	\	50 Hard Guide
		Lead Screw	NSK \ THK	32
		Bearing	NSK	25TAC
	Y2-axis	Guide Rail	\	50 Hard Guide
		Lead Screw	NSK \ THK	32
		Bearing	NSK	25TAC
	Z1-axis	Linear Guide Rail	Rexroth	35 Roller Guide
		Lead Screw	NSK	32
		Bearing	NSK	20TAC
	Z2-axis	Linear Guide Rail	Rexroth	35 Roller Guide
		Lead Screw	NSK	32
		Bearing	NSK	20TAC

	B-axis	Linear Guide Rail	Rexroth	35 Roller Guide
		Lead Screw	NSK	32
		Bearing	NSK	20TAC
4	Tool Carrier Form	Driven Tool Turret	**Brand**	Taiwan TCSM
			Driving Type	Servo Motor
			Locking Type	Hydraulic Locking
			Model / Station	☐ BMT55-12 (Standard) ☐ BMT45-15 (Optional)
5	Tailstock Form		Sub-spindle	
6	Lubrication Form		Oil Lubrication	
7	Hydraulic System		Standard	
8	Fixture		Hydraulic Chuck (1st: 8inch ; 2nd: 6inch)	

9	Coolant Pump Pressure / Power	**Type**	**Spec**	**Qty**
		Machining Water Pump	☐ 5Bar (Standard) ☐ 20Bar (Optional) ☐ 50Bar (Optional)	2pcs
		Chip Flushing Pump	2Bar	1pcs

10	Chip Conveyor	Standard		
11	Electronic Door Lock	Standard		
12	Main Electrical Components Brand	Schneider		
13	Fixed Tool Holder	**Type**	**Spec**	**Qty**
		Boring Tool Holder	Φ32	6
		Outer Diameter Turning Tool Holder	25*25	6
		End Face Turning Tool Holder	25*25	2
		☐ Optional Available	14 Included for Any Type (Extra Available)	
14	Driven Tool Holder	**Spec**	**Qty**	
		0°	2pcs	
		90° Unidirection	\	

		90° Bidirection	2pcs
		☐ Optional Available	
15	Other Accessories	**Item**	**Qty**
		Chuck Draw Tube	2pcs
		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	☐ Automatic Catcher	
		☐ Renishaw Tool Setter	
		☐ 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.