



№: LB.TD.TA-EN.BG1000-10TW<V3>

Turning Machine Tool with Normal Turret

# **TECHNICAL AGREEMENT**

*BG1000-10TW*

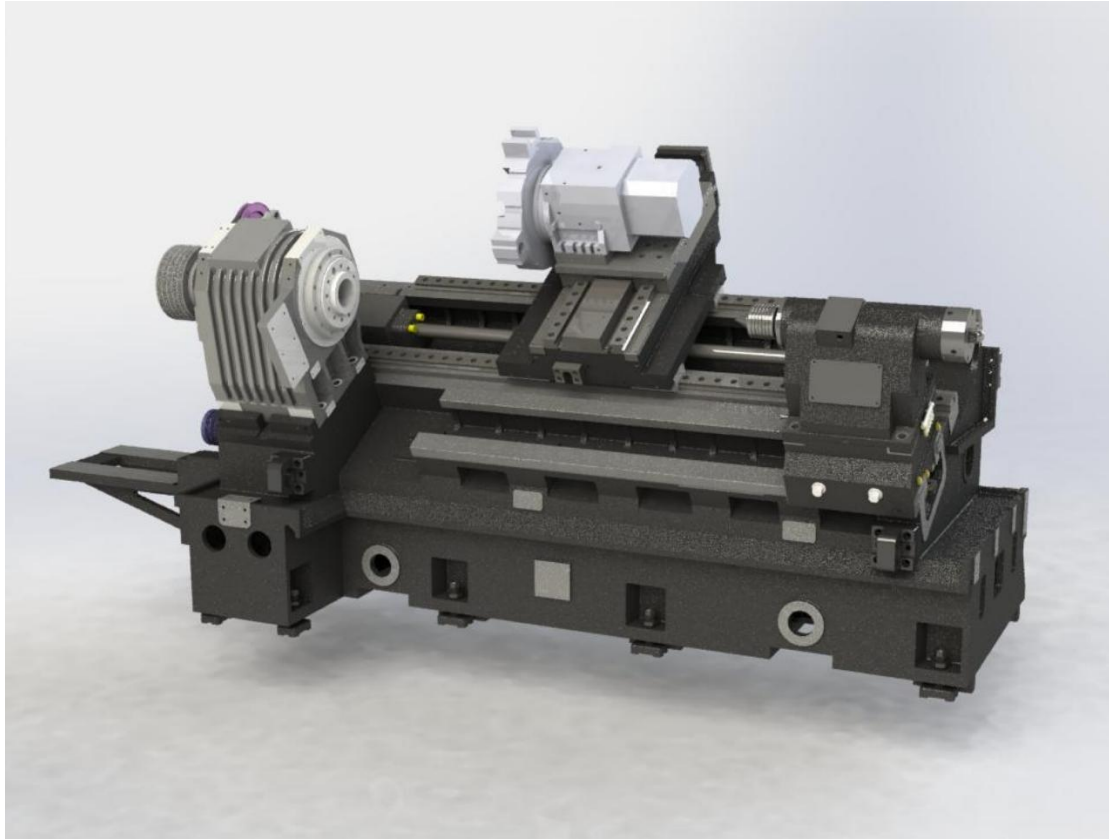
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## 1. Product Introduction



*Figure 1: 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 / $\Phi$ 70mm	0.003mm / $\Phi$ 70mm
Machining Straightness Accuracy	0.010mm / 150mm	0.010mm / 150mm
Machining Flatness Accuracy	0.008mm / $\Phi$ 100mm	0.006mm / $\Phi$ 100mm
Machining Roughness Accuracy	Ra1.6 $\mu$ m	Ra0.4 $\mu$ 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	BG1000-10TWI Turning Machine Tool with Normal Turret
1	Max. Turning Diameter	mm	Φ550
2	Max. Machining Length	mm	1000
3	Max. Swing Diameter	mm	Φ600
4	Bar Feeding Diameter	mm	<Φ75
5	Spindle Bore	mm	Φ86
6	Max. Spindle Speed	RPM	2500
7	X-axis Travel	mm	260
8	Z-axis Travel	mm	1005
9	Tailstock Travel	mm	900
10	Morse Taper	mm	65(5#)
11	Rapid Feedrate	m / min	22
12	Voltage (3phase)	V	380±10%
13	Frequency	Hz	50
14	Power	kW	19
15	Weight	kg	4600
16	Size (Length × Width × Height)	mm	5100 × 2050 × 2150
#	Configuration Table		
1	CNC		<input type="checkbox"/> FANUC 0I-TF PLUS(3)
	Spindle Rated Power / Torque of the Servo Motor		15kW / 143Nm
	X-axis Rated Power / Torque of the Servo Motor		1.8kW / 11Nm
	Z-axis Rated Power / Torque of the Servo Motor		3kW / 20Nm
2	\	Brand	
		Type / Spec	
2	Spindle	<input type="checkbox"/> LBIE Belt Spindle (OEM by HAOZHI) (Standard)	
		<input type="checkbox"/> Taiwan KENTURN Belt Spindle (Optional)	
3	X-axis	Linear Guide Rail	HIWIN / PMI
			45

	Z-axis	Lead Screw	HIWIN / PMI / THK	40
		Bearing	NSK / NACHI	25
		Linear Guide Rail	HIWIN / PMI	45
		Lead Screw	HIWIN / PMI / THK	40
		Bearing	NSK / NACHI	25
4	Tool Carrier Form	Turret	<b>Brand</b>	Taiwan TCSM
			<b>Driving Type</b>	Servo Motor
			<b>Locking Type</b>	Hydraulic Locking
			<b>Model / Station</b>	12 Stations
5	Tailstock Form	Servo Tailstock		
6	Lubrication Form	Oil Lubrication		
7	Hydraulic System	Standard		
8	Fixture	<input type="checkbox"/> Taiwan JIAHE Hydraulic Chuck (10inch) (Standard) <input type="checkbox"/> Taiwan JIAHE Hydraulic Chuck (12inch) (Optional)		
9	Coolant Pump Power	<input type="checkbox"/> 5Bar (Standard) <input type="checkbox"/> 50Bar (Optional)		
10	Main Electrical Components Brand	Schneider		
11	Electronic Door Lock	Standard		
12	Fixed Tool Holder	<b>Type</b>	<b>Spec</b>	<b>Qty</b>
		Bore Tool Holder	Φ32	2
		Radial Square Tool Holder	25*25	2
		<input type="checkbox"/> Optional	4 Included for Any Type (Extra Available)	
13	Other Accessories	<b>Item</b>	<b>Qty</b>	
		Chuck Draw Tube	1pcs	
		Foot Switch	1set	
		Water Tank	1set	
		Installation Tool	1set	
		Machine Foot	8pcs	
14	System Operation Manual	E-manual		

15	Machine Tool Instruction Manual	E-manual
16	Optional	<input type="checkbox"/> Hydraulic Steady Rest
		<input type="checkbox"/> Steady Rest Tool Following Function
		<input type="checkbox"/> Chip Conveyor
		<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.