

YSBD-130 Horizontal Boring Machining Center Structure Characteristics:

Tool magazine structure

- 40 and 60 tools guideway type tool magazines, which are driven by a servo tool magazine, improve the overall tool change efficiency.



Hanging guideway structure

- The Y-axis adopts a box-in-box high-rigidity right and left paired lining structure;
- The Y axis installs 4 linear guide guideways, 2 front and 2 back, with high rigidity, high precision and long service life.

Spindle structure

- The main shaft installs European structure design, high rigidity, high speed and low vibration;
- Low speed and high torque for the spindle.

- The worktable installs super-large grinding gears. It is combined with twin-turbo, vortex anti-backlash structure to ensure accuracy.

Transmission structure

- The X and Z axis transmission method installs direct-acting four-wheel drive. It has stable accuracy. Also, it could eliminate backlash, improve torsional rigidity and allow angle;
- The Y-axis installs direct-drive transmission and cooperates with a German reducer to improve torsional rigidity.

Counterweight structure

- Use servo frequency conversion hydraulic station, the counterweight of the hydraulic cylinder reduces the axial load and lengthen the life.

Casting structure design

- The linear guideway installation surface and the ballscrew center are on the same plane, which makes the ballscrew drive more stable and ensures the stability of the overall accuracy of the machine tool.

YSBD Series Parameters

Model		YSBD-110/5T	YSBD-110/6T	YSBD-110/8T	YSBD-130/8T	YSBD-130/15T	YSBD-130/20T
Subject	Specifications Units						
Travel	X-Axis (Standard)	mm	2000	2000	2500	2500	4000
	X-Axis (Optional)	mm	2500	2500	2500/3000/3500/4000	2500/3000/3500	3500/4500/5500
	Y-Axis (Standard)	mm	1800	1800	2000	2600	3200
	Y-Axis (Optional)	mm	2000	2000	/	2600	3200
	Z-Axis (Standard)	mm	1500	1500	1500	1500	2000
	Z-Axis (Optional)	mm	/	/	2000	2000	2500
	W-Axis (Standard)	mm	550	550	550	700	700
Worktable	Worktable Size (Standard L*W)	mm	1250 × 1250/5T	1250 × 1500/5T	1400 × 1600/8T	1400 × 1600/8T	1800 × 2200/15T
	Worktable Size (Option L*W)	mm	/	/	/	1600 × 1800/10T	2500 × 2500/20T
	Table Indexing	deg	1°/0.001°	1°/0.001°	0.001°	0.001°	0.001°
	T-Slot	mm	22H7 × 150 × 7	22H7 × 150 × 7	24H7 × 200 × 7	24H7 × 200 × 7	24H7 × 200 × 7
Spindle	Spindle Nose to Worktable	mm	65-1665	65-1665	65-2065	75-2075	75-2675
	Spindle Nose to Table Center	mm	-125-1925	-125-1925	-25-2025	-40-2160	60-2260
	Spindle Diameter	mm	ø110	ø110	ø110	ø130	ø130
	Spindle Type	/	BT50	BT50	BT50	BT50	BT50
	Spindle R.P.M.	rpm	3500	3500	3500	3000	3000
	Spindle Transmission	/	Belt				
Motor	Spindle Motor	kw	18.5/22	18.5/22	18.5/22	22 / 30	22 / 30
	Maximum Torque	Nm	973.5/1155	973.5/1155	973.5/1155	3011/4108.5	3011/4108.5
Accuracy	Indexing Accuracy	arc/sec	6" / 10"	6" / 10"	10"	10"	10"
	Indexing Repeatability	arc/sec	±2" / ±4"	±2" / ±4"	±4"	±4"	±4"
	Position Accuracy	mm	0.01	0.01	0.01	0.01	0.01
	Repeatability	mm	0.005	0.005	0.005	0.005	0.005
Drive Type	X/Y/Z- Axis	/	Direct				
	W-Axis	/	Belt				
Feedrate	X/Y/Z/W	mm/min	10/10/10/6	10/10/10/6	10/10/10/6	10/10/10/5	10/10/10/5
	Cutting Feedrate	mm/min	10/10/10/8	10/10/10/8	10/10/10/8	10/10/10/8	10/10/10/8
	Rapid Traverse	mm/min	40	40	40	60	60
Tool Changer	Tool Storage Capacity	/	40	40	40	60	60
	Tool Selection Method	/	Servo Drive				
	Max. Tool Diameter	kg	25	25	25	25	25
	Max. Tool Weight	mm	500	500	500	500	500
	Max. Tool Length	mm	ø125/ø250	ø125/ø250	ø125/ø250	ø125/ø250	ø125/ø250
Power Required	Tool Change Time	sec	14	14	14	14	14
	Air Pressure Requirement	kg/cm²	6	6	6	6	6
Others	Power Requirement	kva	50	50	65	90	95
	External Dimensions (L*W*H)	mm	6800 × 5150 × 5250	6800 × 5150 × 5250	6800 × 6000 × 5600	6900 × 6100 × 5000	8000 × 7500 × 5600
	Gross Weight	t	30	31	34.5	41.5	45
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Standard Accessories

- ARM Type Tool Changer
- Automatic Lubricating System
- Semi-Enclosed Guard

- Rigid Tapping
- Heat Exchange for Electric Cabinet
- Coolant Tank & Chip Tray

- Dual LED Work Light
- LED 3 Color Warning Light
- M30 Auto Off

- Spindle Nose Air Blow
- Leveling Bolts and Pads
- Rotary Table

Options

- Optical Linear Scale
- CTS

- Tool Breakage System
- Chip Conveyor System

- Oil Mist Collector
- Oil Skimmer

- Workpiece & Tool Probe
- Auto Parts Probe Measuring System