

# MACHINE SPECIFICATIONS

MODEL	UNIT	JL-100VG	
ROTARY TABLE	Inner diameter of work piece	mm	Ø50~Ø950
	Outer diameter of work piece	mm	~Ø1250
	Installing height of work piece (incl. clamp)	mm	600
	Max. grinding length of ID	mm	325 (ID smaller than Ø250) 500 (OD longer than Ø250)
	Max. grinding length of OD	mm	500
	Max. table load	KG	1200
	Diameter of work table	mm	Ø1050
GRINDING WHEEL	Table speed	rpm	10~80
	Rotary speed	rpm	Linear velocity <33 M/S
	Dimension of wheel for bore grinding (OD x W x ID)	mm	Ø100 x 50 x Ø50.8
X-AIXS LONGITUDINAL MOVEMENT	Dimension of wheel for external grinding (OD x W x ID)	mm	Ø305 x 75 x Ø127
	Stroke	mm	1800
	Ballscrew (diameter x pitch)	mm	Ø50 x 16
	Movement speed	m/min	24
	The least input increment	mm	0.0001
Z-AXIS VERTICAL MOVEMENT	Guideway		Linear guideway
	Stroke	mm	700
	Ballscrew (diameter x pitch)	mm	Ø50 x 16
	Movement speed	m/min	12
HEAD	The least input increment	mm	0.0001
	Guideway		Steel guideway
MOTOR	Angle of inclination	Degree (°)	22.5°
	Spindle motor	KW	20 (Built x in)
	X-axis servomotor	KW	4.5
	Z-axis servomotor	KW	5.5
ATC	Servomotor for rotary table	KW	11
	Numbers of tool	SET	6
CURRENT	Types of tool		HSKA100
	Rated current	A	-
WEIGHT	Net weight	Kg	17640
	Gross weight	Kg	-
SPACE	Machine floor space (L x W)	mm	4400 x 5700 (with coolant system)

\*Machine specifications and design characteristics are subject to change without prior notice.



## HIGH PRECISION CNC VERTICAL ROTARY GRINDER



**JL-100VG**



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# JL-100VG

## HIGH PRECISION CNC VERTICAL ROTARY GRINDER

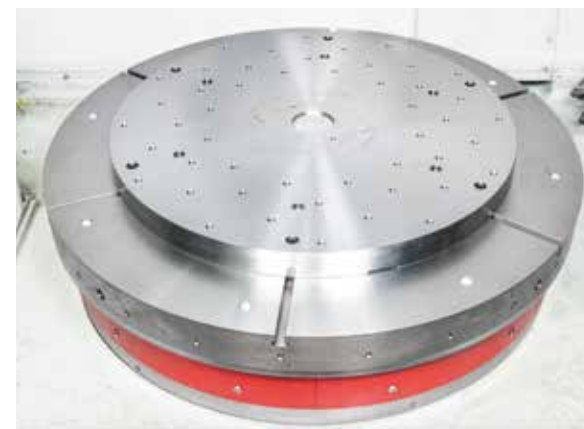
The Joen Lih JL-100VG CNC Vertical Grinder is designed specifically for internal and external diameter grinding on cylindrical parts. With its double column structure and the use of a rotary table with loading capacity up to 1200kg, the machine fully presents exceptional stability. As a result, high cylindricity accuracy can be achieved.

### DOUBLE COLUMN STRUCTURE OUTSTANDING RIGIDITY AND GRINDING STABILITY

- All machine structural parts are manufactured from high quality cast iron, stress relieved to ensure deformation-free structure as well as grinding accuracy for many years.
- The X-axis is mounted with linear guideways, and steel guideways on Z-axis, to balance the wheel head stability and rapid traverse rate.
- The machining area is designed with an opening, allowing the operator to use lifting devices electronic crane for convenient loading/unloading of workpieces.

### MACHINE FEATURES

- Internal grinding size  $\varnothing 50\sim\varnothing 950$  mm
- Max. external grinding size  $\varnothing 1250$  mm
- The double column machine structure provides superior grinding stability and quality
- The wheel head tilts  $22.5^\circ$
- Equipped with a built-in type high speed wheel spindle
- Automatic tool changer for increasing efficiency
- CNC controller provides user-friendly operation
- Fully enclosed splash guard with opening on top of machine makes workpiece loading / unloading more convenient



### HYDROSTATIC ROTARY TABLE

- Rotary table diameter is 1050 mm.
- Maximum load of table is 1200 kg.
- Choice of magnetic chuck, gripper and automatic jig, and fixture for clamping workpiece.
- Independent hydraulic system allows for precise control of hydraulic temperature. Hydrostatic rotary table won't contact bearing, thus no issues of noise, friction and thermal deformation on workpiece.



### AUTOMATIC TOOL CHANGER

- The tool loading capacity of the magazine is 6 grinding wheels.
- Fast tool change with smooth motions.
- Tool shank type is HSKA100



### A BUILT-IN TYPE WHEEL SPINDLE

- The wheel spindle features high running speed, high precision, low vibration, low noise, light weight, and low thermal displacement.
- Linear speed of grinding wheel  $<33\text{m/s}$ .



### B RING GAUGE

- The ring gauge is mounted on the base.
- The ring gauge is used for checking, calibrating comparing the machining accuracy of a workpiece.



### C ONLINE MEASURING DEVICE (OPTIONAL)

- The online measuring device is used for measuring the height, inner and outer diameters of a workpiece, One probe touches the ring gauge, and the other probe touches the workpiece to compare the machining accuracy.



### D WHEEL DRESSER

- The wheel dresser is mounted on the base. Two-axes inclinable wheel dresser avoids machining interference and saves space.
- Applicable for dressing the profile of the grinding wheel.

