CNC-CYLINDRICAL GRINDING MACHINE

Model: CLG: 150 x 1k - CNC



Center Height: 150mm Swing Diameter: 300mm

Admit Between Centers: 1000mm Traverse Stroke: 1100mm

Grinding Wheel Size : ODxHxID : 400x50x127

Drive : AC 7.5 Hp Stroke : 125mm Max

Servo Drives: Linear Motors, Cog-Free, AC

Feedback - Optical Linear Scales

Resolution X-axis- 0.0005mm(0.5micron)

Z-axis- 0.005mm(5micron)

EasyGrind - for codeless part programming



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SALIENT FEATURES

- Traversing wheel-head: X-axis (Radial) and Z-axis (Axial) feeds are imparted to the wheel-head, the work-piece is imparted only rotational movement. This results in a compact footprint (2mx1.5m) and facilitates auto-loading/unloading of components.
- ▶ Wheel-Head slides driven by core-less cog-free linear-servomotors. There is no physical connection between the slide base and slide saddle no ball-screw. This means no back-lash compensation and ball screw related maintenance problems
- ▶ Both slides are supported on rolling element linear bearings; X-axis on cross-roller linear bearings and Z-axis on LM guide ways. These result in highly responsive and backlash free slides.
- Linear scales for position feedback on both axis provide actual position feedback and not interpolated position feedback. This results in much higher reliability and operational accuracy. X-axis (radial feed) resolution is 0.5micron (0.0005mm). Z-axis (axial feed) resolution is 5micron. Both feedback scales are distance coded (absolute).
- Grinding wheel shaft and work-head shafts supported on super precision angular contact bearings. These are packed with long life grease for maintenance free operation through out the bearing life.
- Our proprietary **EazyGrind** query based component profile/data entry eliminates ISO programming by operator. The operator is led through a step-by-step building of the component profile/parameters via a query based data entry; he simply provides the necessary numeric values. During data entry **EazyGrind** recommends the optimum speeds/feeds based on the component dimensions. Operator has freedom to decide the most desirable feed/speed within a specified range; thus, eliminating suboptimal machine utilization and guestimate based speed/feed values. Following this data entry session **EasyGrind** generates the grinding program, stores it and is ready for execution automatically. Dressing and dressing compensation are also part of the same query based data entry. Programming in G-code is, of course, possible
- Work-Head (Spindle) drive is by AC variable frequency drive; the drive is controlled by the CNC controller. Tails-stock is spring loaded and retracted by pneumatic cylinder. Tails-stock has taper adjusting facility.
- ▶ Rotary (cup-wheel type) dresser is driven by an air-motor. Dresser is mounted on the Tail-stock. Single-point-dresser, as well as diamond-roller-dresser for wheel profiling are also available. Besides 'programmable' dressing frequency, 'on-demand-dressing' is also standard.

PRODUCT RANGE

CYLINDRICAL GRINDING MACHINES

Туре	Center Height	Admit Bet Centers	Traverse Length
CNC	150	1000	1100
	150	600	700
	150	350	400
PLC	150 / 185	1000	650
	150 / 185	750	500
Hyd.	150 / 185	1000	750
	150 / 185	750	500
	110	500	400
Manual	85	350	400

Traversing Wheel Head

INTERNAL GRINDING MACHINES

PLC or PC based controls.

FACE GRINDING MACHINES

For flat circular objects, for gear-face.

EXTERNAL TRACK GRINDING MACHINES

PLC or PC based controls.

SPMs:

FACING & CENTERING - Shaft L 350 to 1000mm
DUPLEX FACE GRINDER - Disk brake rotors
SOCKET MILLING - Brass cages for bearings
HOLLOW GRINDING SPM - Compressor valve spring

Drilling SPMs



LAVINGIA ENTERPRISE

Plot No. 4901, Phase IV, GIDC Vatva Industrial Area Ahmedabad - 382 445. India.

Phone: ++91 79 2584 2401 Fax: ++91 79 2584 1928. website: www.lavingia.co.in email: sales@lavingia.co.in