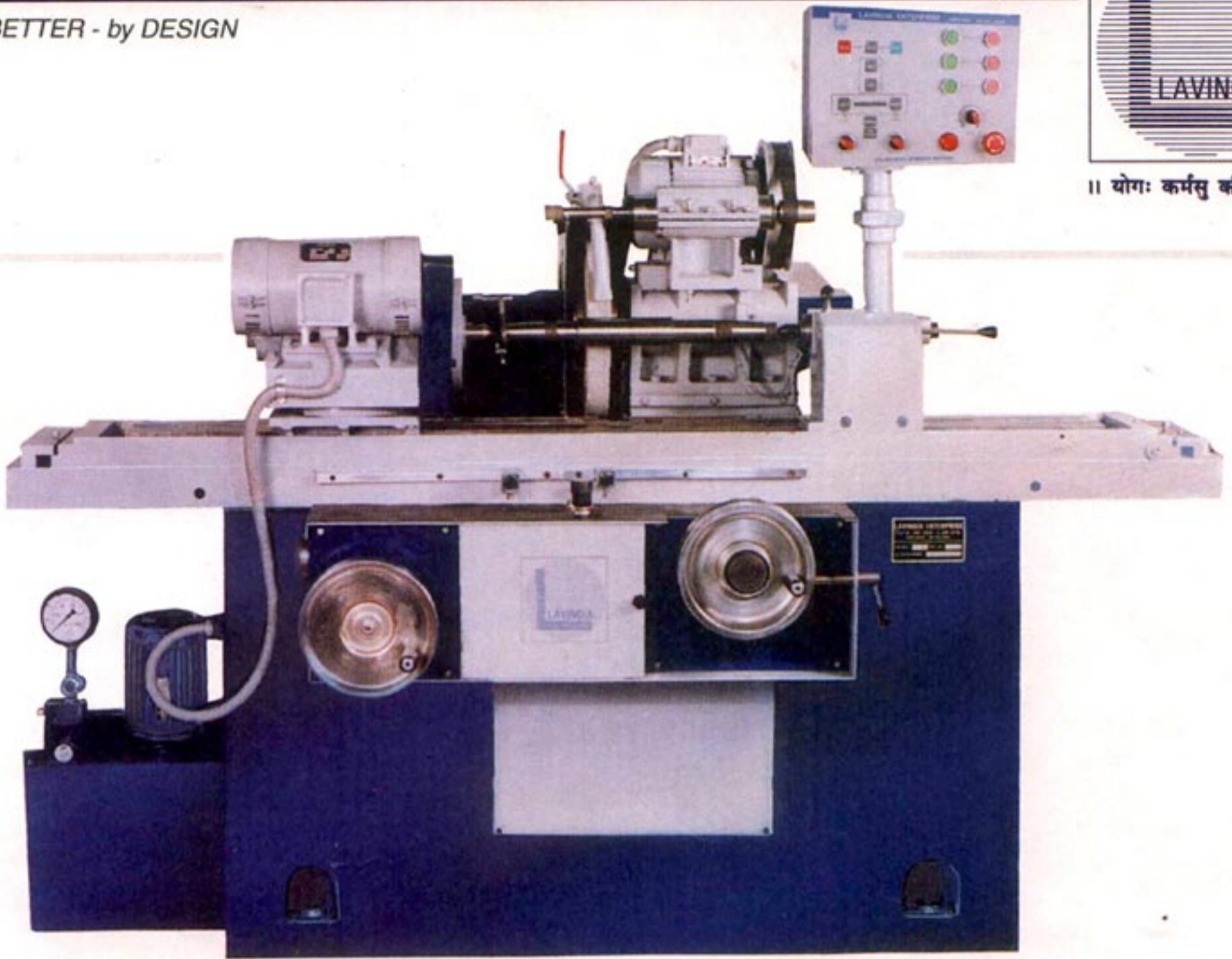


CYLINDRICAL GRINDING MACHINE

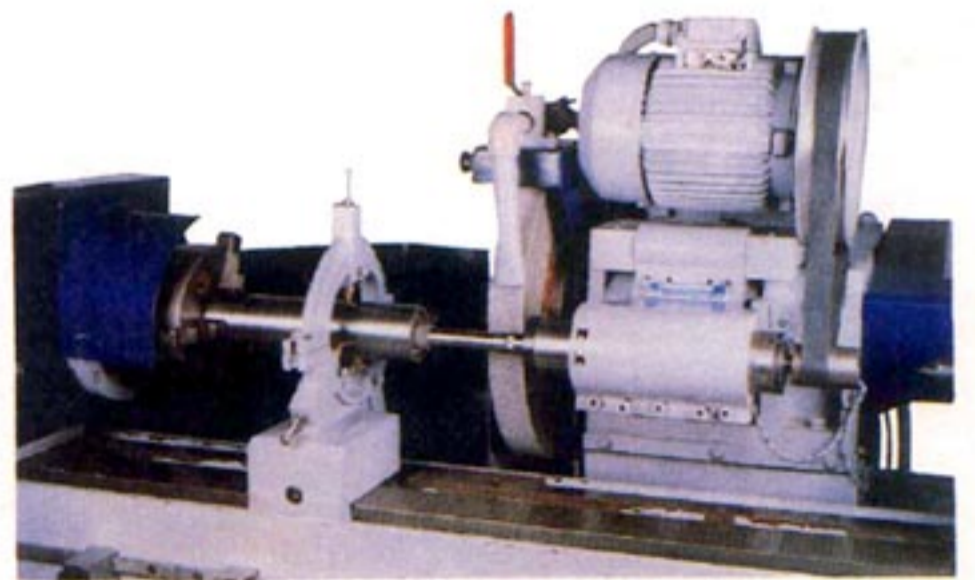
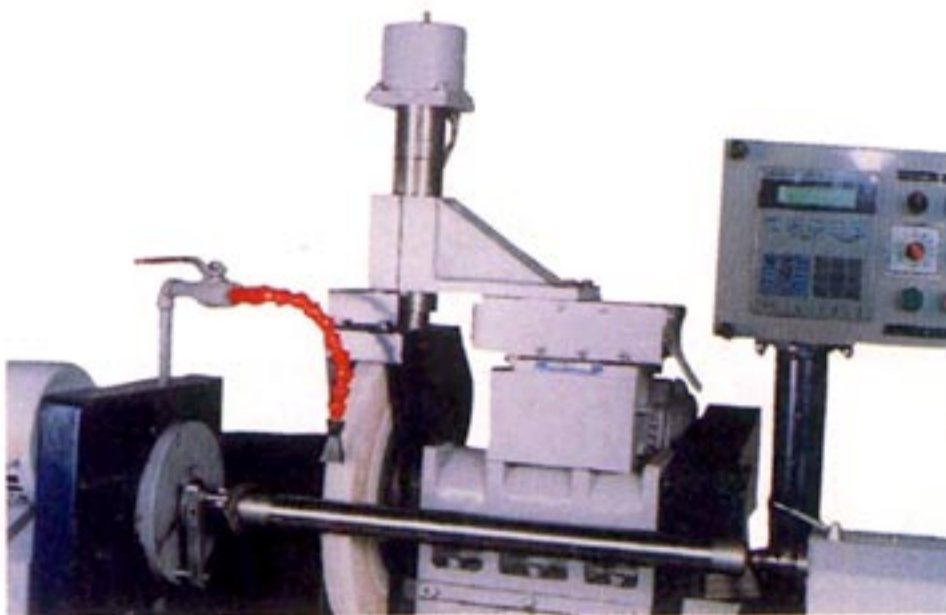
its BETTER - by DESIGN



॥ योग: कर्मसु कौशलम् ॥



PRECISE + PRODUCTIVE + RELIABLE



CLG - 500 AE
CLG - 650 AE
(Auto Cycle M/c.)



CLG - 500 M
CLG - 650 M



LAVINGIA ENTERPRISE

PLOT 4901, PHASE-IV, GIDC ESTATE-VATVA, AHMEDABAD - 382 445, (GUJ.) INDIA.

PRECISE + PRODUCTIVE + RELIABLE

SPECIFICATION	MODEL	UNIT	
		CLG 500/750	CLG 650/1000
WORK SPACE			
Centre Height		mm	150
Table Stroke		mm	500
ADMIT BETWEEN CENTRE		MM	750
Max. wt. of work(Between Centers)		kg.	60
WORK TABLE			
Swivel		Deg.	±6.5
Speed of Traverse		m/Min.	0-2.0
Dwell on Reversal		Sec.	0 to 10
Movement by			Hyd.
Min. stroke		mm	20
Micro Feed for shoulder			Yes
WORK HEAD			
Spindle Support		P4 Class Angular-Contact Brg.	
Speed - Range		RPM	10-800
- Variation			Stepless
Drive Motor : DC		HP	1.0
Nose Taper			MT4
Swivel		Deg.	+90/30
WHEEL HEAD : EXTERNAL			
Spindle		Cartridge Type	
Spindle Support		P4 Class Angular Contact Brg.	
Accuracy (TIR < -)		mm	0.003
Wheel Size - STD		mm	350x40
- Optional		mm	400x40
Drive Motor : AC STD		HP	3.0
-Optional (Dia.400Wheel)		HP	5.0
Cutting Velocity		M/Sec.	38
WHEEL HEAD:INTERNAL (Swing Type)			
Spindle ODxL.		mm	60x250
Speed		RPM	17000
Drive Motor : AC		HP	1.5
WHEEL SLIDE			
Support		Preloaded Linear Bearings.	
Min.Feed Resolution		mm	0.001
Rapid Retraction - Hyd.		mm	40
Rapid Positioning Accuracy (<)		mm	0.002
ACCURACIES :			
Live Centre TIR < - : STD		mm	0.003
: Optional		mm	0.001
Straightness (<)		mm/300L	0.005
Cylindricity (<)		mm	0.002

BED : Close grained graded C.I. extensively ribbed box structure provides very high rigidity. The table runs on fine, hand scrapped lubricated 'V' and Flat guideways.

WORK TABLE : Table travel is effected by means of hydraulic cylinder. It's speed can be infinitely varied by speed control valve. Table stroke can be varied by means of dogs provided on the table. Work slide has a micro feed for shoulder grinding and for control of axial dimensions.

WORK HEAD : Work-head is mounted on a swivel base to facilitate grinding of steep tapers. It has a D. C. Drive permitting stepless speed variation. Work-head spindle is supported on super precision (ISO-P4) Antifriction Bearing providing exceptionally high running accuracy & rigidity. It is grease packed for life.

WHEEL HEAD : Wheel head slide moves on preloaded linear bearings. This guarantees absolutely stick-slip free movement and repeat positioning accuracy. Wheel spindle is supported on super precision (ISO-P4) antifriction bearings. It is cartridge type and packed with long life grease which ensure maintenance free running.

Rapid approach/retract is by hydraulics where as grinding feed is manual. Minimum feed resolution is 0.001 mm(One micron). Auto feed machines have stepper motor feed drive.

TAIL STOCK : The ram is carried on precision honed sleeve and is kept under adjustable spring load. Hydraulic actuation can be provided optionally.

INTERNAL GRINDING ATTACHMENT : The spindle bracket is hinged on the wheel head and can be quickly lowered into grinding position to register accurately against solid stop. The unit has independent drive motor.

HYDRAULIC POWER PACK : Hydraulic power pack is housed outside the machine. Thereby the thermal effect on the machine is eliminated. It also facilitates easy accessibility for maintenance.

ELECTRICAL CABINET & CONTROL : The electrical cabinet is mounted on one side of the machine. The logic controls are inside operator console.

CLG -500AE & CLG-650AE (AUTO CYCLE)

These machines are suitable for batch production. The Auto Cycle is operational in both PLUNGE as well as TRAVERSE grinding modes. The machine operations are managed by a micro controller based system. The following parameters are programmable:

- OSCILLATION MODE :**
 - Rough cut : Depth of Cut, No of Cuts, No of Spark-out Passes.
 - Finish cut : Depth of Cut, No of Cuts, No of Spark-out Passes.
 - Dressing : Depth of Cut, Frequency.
- PLUNGE MODE :**
 - Air Cut : Depth of Cut, Feed Rate.
 - Rough Cut : Depth of Cut, Feed Rate, Dwell/Spark-out.
 - Finish Cut : Depth of Cut, Feed Rate, Spark-out.
 - Dressing : Depth of Cut, Frequency.

Dressing cut compensation & size control are part of the AUTO cycle. Size control is by control of wheel slide & dresser positions. Dresser is mounted on wheel-head has stepper- motor/Ball-screw feed. Dresser slide is on linear bearings.

CONFIGURATIONS OFFERED

Model	C.H.	STROKE/ABC	Execution
CLG - 500 M	150	500/750	Ext, Ext & Int
CLG - 650 M	150	650/1000	Ext, Ext & Int
CLG - 500 AE	150	500/750	Ext (AUTO)
CLG - 650 AE	150	650/1000	Ext (AUTO)
CLG - 500 AI	150	400/-	Int (AUTO)
CLG - 500 CE	150	500/750	Ext CNC
CLG - SPM	To Suit Application.		

OUR PRODUCT RANGE

- INTERNAL GRINDING M/C. (AUTO)**
 - Straight Bore
 - Spherical Profiles.
 - Complex Profiles
 - Straight Bore & Inside Face
 - Straight Bore & Outer Face
- EXTERNAL TRACK GRINDING M/C. (AUTO)**
 - Straight (Cylindrical/Conical) Track.
 - Spherical Track
 - Complex Profiles
- FACE GRINDING M/C. (AUTO) - For Flat Circular Components**
 - Dia. 400 mm, Dia. 600 mm, Dia 1200 mm, Dia. 2000 mm

LAVINGIA ENTERPRISE