

Laxman Centerless Grinding Machine

High Precision Compact & Economical



Model LM-3 Centerless

Introduction

The 'Laxman' Centreless Grinders models L.M. 1 L.M. 2 and L.M. 3 have been designed with the operator in mind. These are suitable for grinding work piece from 2 M.M. to 75 M.M. diameters to a very fine limits of accuracy. A wide Range of work can be ground including Plain, Cylindrical taper Shouldered Special comprise & grinding wheel, a Control wheel and a work rest. This arrangement provides a three points support. The Machines are meant for quality, quantity & efficiency.

Specifications

	L.M.-1	L.M.-2	L.M.-3
Range of Dia to be ground	2 to 35 M.M.	2 to 50 M.M.	2 to 75 M.M.
Max. Length of Parts for infeed grinding	62 M.M.	78 M.M.	98 M.M.
Dimension of Grinding Wheel	250 x 63.5 x 76.5	300 x 80 x 140	350 x 100 x 127 or 350 x 150 x 127
Dimension of Control Wheel	125.4 x 63.5 x 63.5	200 x 80 x 75	230 x 100 x 76.2
Grinding Wheel speed	2000	1800	1600
Number of Control wheel speed	3 / VFD	3 / VFD	4 / VFD
Grinding wheel Motor	3 H.P./1440 R.P.M.	5 H.P./1440 R.P.M.	7.5 H.P./1440 R.P.M.
Control wheel Motor	0.25 H.P./1440 R.P.M	0.25 /1440 R.P.M.	0.5 H.P./1440
Minimum included angle for taper work (without using forming attachment)	5 deg.	5 deg.	5 deg.
Grinding wheel spindle bearing	Bronze metal / White metal bush bearing/ Tapper Roller bearing	Bronze metal / White metal bush bearing/ Tapper Roller bearing	White metal bush bearing
Control wheel Spindle bearing	Bronze Metal Bush Bearing	Bronze Metal Bush Bearing	Bronze Metal Bush Bearing
Grinding & Control wheel Spindle lubrication.	splash	splash	pump
Coolant pump motor	0.15 H.P.	0.15 H.P.	0.15 H.P.
Floor space for machine	19" x 26"	21" x 36"	30" x 52"
Approximate weight	400 Kgs.	800 Kgs.	1400 Kgs.
Optional	Cartridge spindle / Hydrodynamic or filmatic bearing spindle		
	Dressing		
	Manual /Hydraulic Operated/Ball screw Motor operated		
	variable speed Control AC drive in work head with digital read out		
	Hydraulic cam operated auto plunge grinding		
	CNC One axis Ball screw and servo operated plunge Grinding		

	CNC Two Axis PLC and servo operated compensate dressing type
	Auto Loading / Unloading/ Feeder/ Vibrator / Job injector
	Form grinding attachment & Dressing
	Micro feeding attachment
	D.R.O. Scale
	Coolant Filter System
	Magnetic Separator / Paper Band filter/ paper band filter cum magnetic separator

Standard Equipment

- Motor Pulley
- Water Tank
- Vee Belt
- Grinding Wheel
- Diamond Tools
- Control Wheel
- Dressing attachment
- Base for work plates

Extra Accessories

- Extra Work Plates.
- Additional wheel Flange.
- Grinding wheel balancing arbor & balancing stand.
- Hand pump lubrication
- Bar Feeding attachment.
- Machine Lamp

Laxman Centerless Grinding Machine Model LM-3

Model LM-3 have filmatic hydrodynamic tilting pad type high precision bearing type spindle or bearing and hydrostatic lobe type bearing both model are available which can give high radial accuracy in jobs ,good Ra value in jobs compare to bearing And we also get very long spindle life compare to other bush or any ball and roller bearings.

Hydrodynamic spindle head have some safety feature which can give long spindle life.

1. Special lubrication circuit and rotary pump for lubrication of spindle and hydrodynamic bearing.
2. Entry and exit oil filter for long life spindle.



Model LM-3 Auto Plunge

3. Special designed white metal adjustable and self centering hydrodynamic pad for giving presser rise oil film between spindle and pad.

4. Specially designed oil circuit for hydrodynamic pad and long life for spindle, without complete oil circuit spindle cannot run, if come oil brakeage in oil circuit then spindle immediate stop.

6. Oil lubrication window for viewing lubrication of spindle

Auto plunge centerless grinding machine

Laxman automatic plunge sizer is design for take high accuracy in plunge grinding. It is a combination theory of hydraulic cylinder and cylindrical face cam. It has high accuracy harden came which can give ideal grinding feed by hydraulically operated solenoid valve without any wear and tear of lead screw and nut. It has precision control valve for adjust feed speed as per job requirement. We also adjust grinding depth of cut by proxy switches. It have also secondary solenoid valve for rapid approach and quick return. It has a timer to adjust spark out time in grinding process. It has many more function to gate perfect and accurate plunge grinding.



Model LM-2 Centerlees

Centerless Grinder LM-2 Model.

Our Model LM-2 specially designed for low power consume, hi precision, compact, economical.

Our Centerless Grinding machine model LM-2 has hydrostatic bush bearing and taper roller bearing both model available. It is very compact, high precision and economical model.

Hydraulic dressing, micro feeding, Speed control AC drive and rpm read out in regulating wheel, auto plunge grinding, auto lubrication or hand pump lubrication, coolant filtration systems are available as extra accessories

Our Centreless Grinders models L.M. 2 have been designed with the operator in mind. These are suitable for grinding work piece from 2 M.M. to 50 M.M. Diameters to very fine limits of accuracy. A wide Range of work can be ground including Plain, Cylindrical taper Shouldered Special comprise & grinding wheel, a Control wheel and a work rest. This arrangement provides a three points support. The Machines are meant for quality, quantity & efficiency.

CenterlessGrinderLM-1 Model



Our Model LM-1 specially designed for low power consume, hi precision, compact, economical.

Our Centerless Grinding machine model LM-1 has hydrostatic bush bearing and taper roller bearing both model available. It is very compact, high precision and economical model.

been designed with the operator in mind. These are suitable for grinding work piece from 2 M.M. to 35 M.M. Diameters to very fine limits of accuracy. A wide Range of work can be ground including Plain, Cylindrical taper Shouldered Special comprise & grinding wheel, a Control wheel and a work rest. This arrangement provides a three points support. The Machines are meant for quality, quantity & efficiency.

Model LM-1 Centerless

1 Axis CNC Centerless Grinder LM-2

Our Model LM-2 specially designed for low power consume, hi precision, compact, economical.

Our Centerless Grinding machine model LM-2 have hydrostatic bush bearing and cartridge precision bearing spindle both model available.

Grinding wheel head spindle have oil safety feature

Main slide control by Roller LM guide way, Precision and ground ball screw, gear box and servo motor for rigid and accurately traveling

Regulating wheel head control by high speed gear box with A/c variable speed control drive and bearing type spindle to get best grinding perforce and hi radial accuracy for every size of jobs

Both Dressing slide Control by Gear Motor with A/c Variable speed control drive, LM Guide way and ball screw to get fine and long life dressing for good ra value in jobs

Auto lubrication in slide, Continues pump lubrication in both spindle

Entry and exit oil filters, oil level switch, oil pressures switch, oil circuit



complete indication switch to get long life hi accuracy and maintenance free machine

Magnetic coolant filter in coolant tank to achieve close tolerance in jobs

Mounted Electrical Control Panel for easy maintenance, operating and handling

1 Axis CNC Centerless Grinding Machine LM-2



LAXMAN MACHINE TOOLS

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