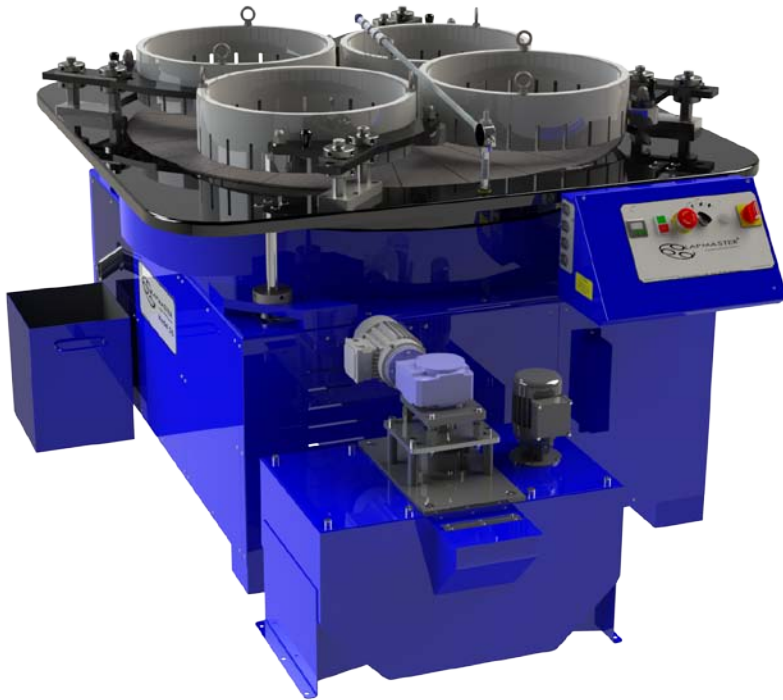


PRECISION OPEN FACE FLAT LAPPING MACHINE


The Lapmaster Model 56 is equipped with a 1422mm diameter lap plate. This is manufactured from Grade 300 grey cast iron to ISO 185(2005). It consists of individual segments bolted to a support plate.

Outlets are provided to feed each conditioning ring via a track wire, with individual control valves. This system is designed so that a circulatory flow is established. The pump is capable of delivering far more compound to the outlets than is necessary.

Excess compound is returned to the reservoir via a sloping drain tube. This together with the constant agitations provided by the stirrer minimises the tendency of the abrasive grains to settle out in the vehicle.

The machine is intended for use with free abrasive compounds. A dispensing system, for use with water and diamond compounds etc., can also be fitted.

Flatness of the machines lap plate, and consequently of the work, is controlled by adjusting the position of the conditioning rings relative to the lap plate track.

The lapping plate drive system uses a separate motor and worm & wheel mechanical reduction gearbox with multi-belt drive, and is mounted in a floor standing base.

This base is a fabricated steel channel framework with removable panels for ease of access during maintenance.

The drive system incorporates an electronic soft start which will smoothly accelerate the lap plate from standstill to full speed over a controlled time period. This is preset, though can be adjusted if required, to suit particular process conditions.

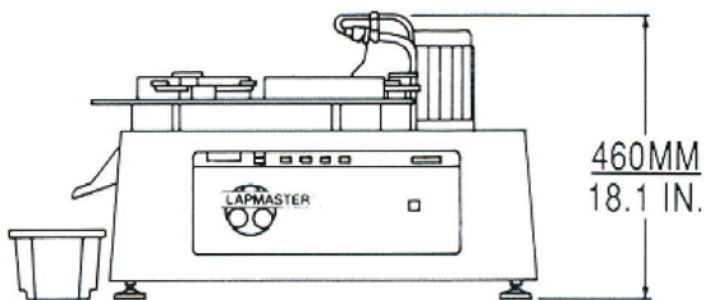
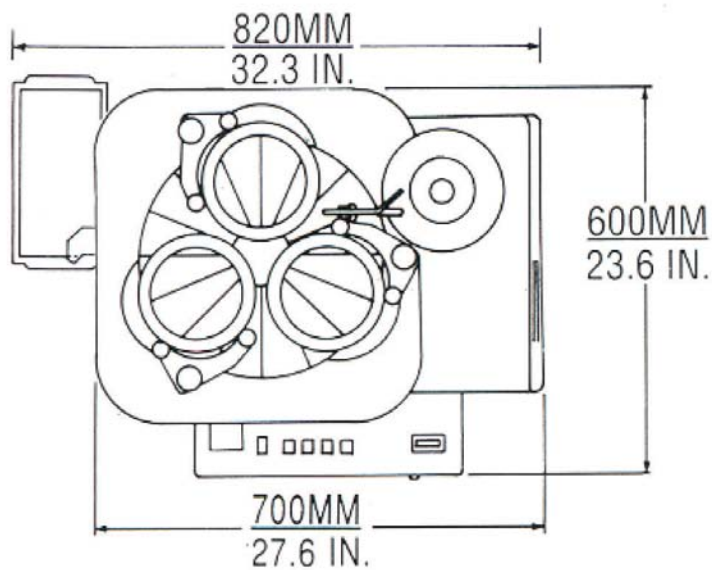
This machine is also available in a pneumatic lift version. A datasheet is available on request.

STANDARD FEATURES

- Heavy duty floor standing base with integrally mounted drive motor, reduction gearbox, abrasive distribution system, complete with control panel.
- Heavy duty work table, vertically adjustable.
- Four conditioning rings, with adjustable, sealed roller bearing yoke assemblies to maintain lap flatness.
- Free standing abrasive system complete with pump and driven stirrer tank with multiple point distribution.
- High torque drive unit consisting of 11kW motor and reduction gearbox. Lap plate speed 48 rpm.
- Operator controls at 100V, complies with EN 60 204.
- CE compliant.
- Soft start to main drive motor.
- Operator panel with start / stop controls, and multiple range digital process timer.
- Waste tank.

STANDARD TOOLING

- High density, cast iron segmented (serrated) lap plate. 1422mm O.D. x 368mm I.D.
- Four high density cast iron serrated conditioning rings. 585mm O.D. x 530mm I.D.
- Four blank workholder discs.
- Four felt pads.
- Operation and maintenance manual.



STANDARD TOOLING

- High density, cast iron radially serrated lap plate 15" O.D. x 3 1/2" I.D. / 381mm O.D. x 88.9mm I.D.
- Three high density cast iron serrated conditioning rings. 7" O.D x 5 1/2" I.D. / 178mm O.D x 140mm I.D.
- Three high density cast iron pressure plates with lifting eyebolts 5 7/16" dia. x 1 1/4" thick / 138mm dia. x 32mm thick.
- Three PVC workholder discs 5 7/16" dia. x 1/8" thick / 138mm dia. x 3.2mm thick.
- Three felt pads 5 7/16" dia. x 1/2" thick / 138mm dia. x 13mm thick. Starter sample of Lapmaster abrasive.
- Starter sample of Lapmaster vehicle.
- Operation and maintenance manual.
- Allen wrench.

AVAILABLE OPTIONS

- Soft - start (to cushion start-up).
- Electronic variable speed drive, 0-70 rpm.
- Diamond slurry dispensing systems.
- Various lapping/polishing plates.
- Non-standard voltages.
- Custom machines and tooling.

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PRECISION OPEN FACE FLAT LAPPING MACHINE



The Lapmaster Model 15 is a bench-mounted unit with a rigid, lightweight, fabricated steel base. The machine is of the "ring lapper" configuration, enabling high standards of flatness and surface finish to be routinely achieved.

The Model 15 is derived from the popular Model 12 and features a scaled-up lapping plate, conditioning rings and convenient "wrap-around" worktable.

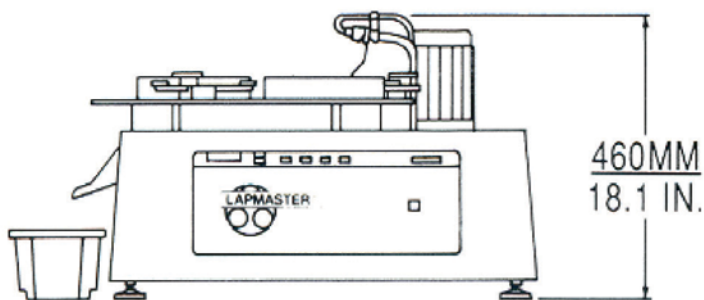
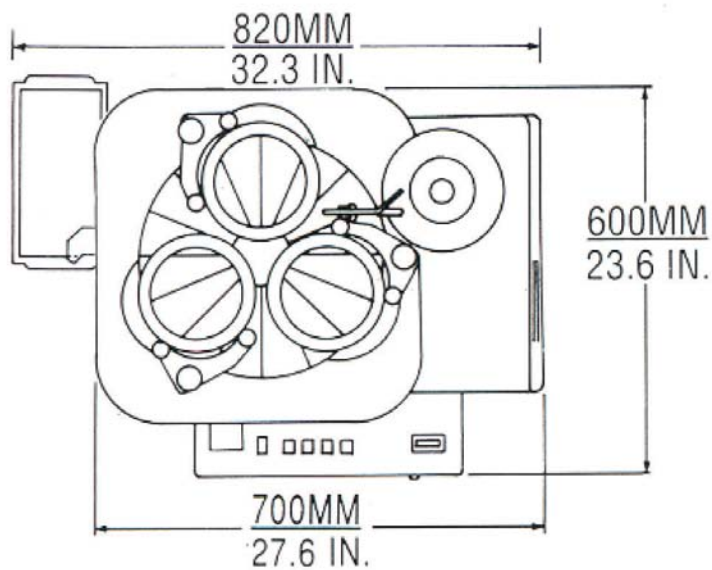
In - process lap plate flatness control is provided for by three conditioning rings, which locate in yoke/roller bearing assemblies. Workpieces are located within carriers or appropriate fixtures which run within the rings. Large parts of cylindrical shape can be substituted for the rings.

The Model 15 is ideally suited for lapping low and high production quantities. In-shop lapping reduces costs of component processing and equipment maintenance programs. Worn parts are reconditioned and salvaged, thus eliminating scrap. Valve bodies, discs, gears, vanes, valve plates and shaft seals are a few of the components benefiting from the lapping process.

The Model 15 is equally at home in the laboratory, where it can be used to process a wide variety of materials on an experimental basis. These results can then be applied to a production situation.

STANDARD FEATURES

- Heavy duty fabricated steel base.
- Epoxy finished Wrap-around work table facilitates parts handling.
- Three conditioning rings with roller yoke and bearing assemblies to facilitate inprocess plate flatness control.
- Abrasive feed system designed for water or oil based lapping slurries. Consisting of a 1/25hp/0.03 kW pump, tank and three outlet system with individual -variable flow control. This permits uniform lapping rates at each work station.
- High torque drive unit, 0.37kW/ 0.5hp motor with sealed maintenance free reduction gearbox.
- Electrical system wired for 220V 1 Phase 50Hz (single phase fixed speed and variable speed machines) or 380V 3 Phase 50Hz or 414V 3 Phase 50Hz (three phase fixed machine) complies with EN 60 204.
- Automatic digital cycle timer: time ranges from 0.1 to 999 seconds, minutes or hours.



STANDARD TOOLING

- High density, cast iron radially serrated lap plate 15" O.D. x 3 1/2" I.D / 381mm O.D. x 88.9mm I.D.
- Three high density cast iron serrated conditioning rings. 7" O.D x 5 1/2" I.D / 178mm O.D x 140mm I.D.
- Three high density cast iron pressure plates with lifting eyebolts 5 7/16" dia. x 1 1/4" thick / 138mm dia. x 32mm thick.
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- Three felt pads 5 7/16" dia. x 1/2" thick / 138mm dia. x 13mm thick. Starter sample of Lapmaster abrasive.
- Starter sample of Lapmaster vehicle.
- Operation and maintenance manual.
- Allen wrench.

AVAILABLE OPTIONS

- Soft - start (to cushion start-up).
- Electronic variable speed drive, 0-70 rpm.
- Diamond slurry dispensing systems.
- Various lapping/polishing plates.
- Non-standard voltages.
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