

## PRECISION PNEUMATIC LIFT DIAMOND FLAT LAPPING MACHINE



The pneumatic lift version of the Lapmaster Model 36 is based on the open face machine.

Pressure weights are attached through self aligning bearings to the rods of the pneumatic cylinders. The cylinders are mounted on a framework located over the lap plate on two upright columns.

The primary function of the pneumatic arrangement is to permit loading and unloading to be carried out without the need to lift pressure weights manually. However, they can be used to supply additional loading to the components within the conditioning ring should this be required.

The machine is intended for use with an electronic dispensing system for use with water and diamond compounds etc. A standard abrasive system is also fitted for periodic reconditioning of the lap plate.

Operator safety is a primary concern in the design. Movement of each pressure weight up or down is controlled by a two hand anti tie down control box. This arrangement requires the use of both hands on two separate buttons to function and ensures the operator cannot injure their hands or arms when lowering the weights.

A further safety feature is that the pressure weights are locked in any position, so that should the air or electrical supplies fail, the weights will not fall.

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.

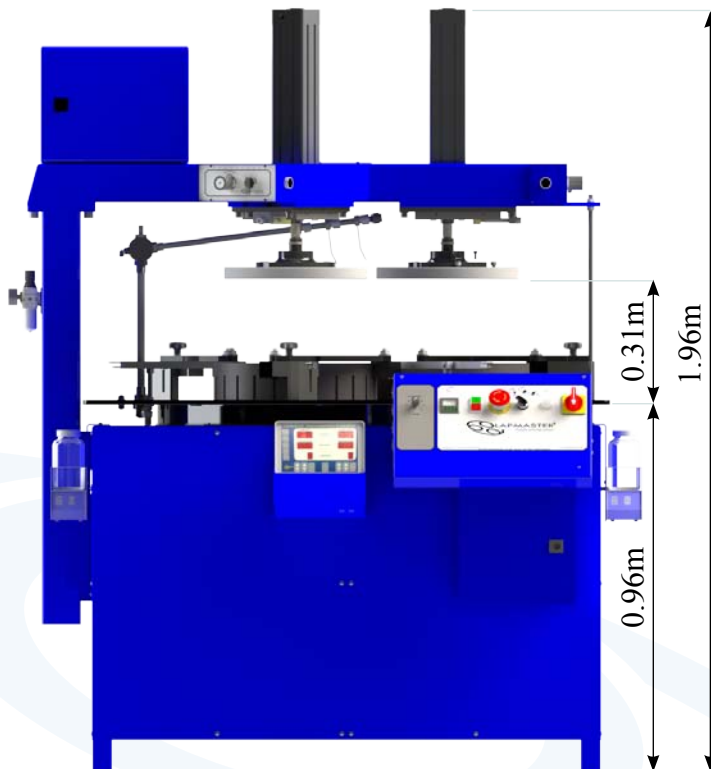
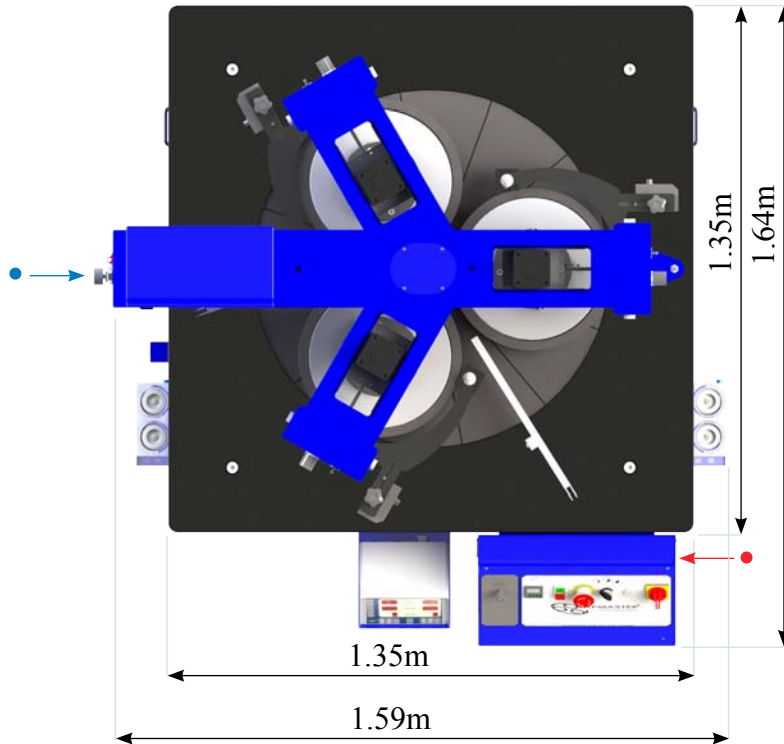
### STANDARD FEATURES

- Heavy duty floor standing base with integrally mounted drive motor, reduction gearbox.
- Range of loads for pressure weights 33 kg to 195 kg @400 kPa / 4 bar.
- Heavy duty work table, vertically adjustable.
- Three conditioning rings, with adjustable, sealed roller bearing yoke assemblies to maintain lap flatness.
- Multi purpose dispensing system, complete with electronic dispensing unit, spray arm and electronic stirrer.
- Free standing abrasive system complete with pump multiple point compound distribution.
- High torque drive unit consisting of 4.0kW motor and reduction gearbox. Lap plate speed 58 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

- Composite iron faced serrated lap plate. 914mm O.D. x 172mm I.D.
- Three high density cast iron serrated conditioning rings. 419mm O.D. x 368mm I.D.
- Three blank workholder discs.
- Three felt pads.
- Lap plate lifting tool.
- Operation and maintenance manual.

# MODEL 36 - PRECISION PNEUMATIC LIFT DIAMOND FLAT LAPPING MACHINE



## OPTIONAL TOOLING

- Flatness gauge.
- Solid stainless steel backing plates.
- Composite faced polishing plates.
- Cast iron lap plate.
- Polishing pads.

## OPTIONAL FEATURES

- Four ring model.
- Open face version.
- Electronic variable speed main drive.
- Water cooled lap plate.
- Non-standard voltages.
- Stainless steel wetted parts.
- Peristaltic pump.
- Corporate colours.
- Fixed or light beam guarding.

## APPROXIMATE WEIGHT

- 1250 kg.

## SERVICES

- Electrical: 230/380V, 3 Phase, 50Hz.
- Air: 400 kPa / 4 bar minimum.
- Water: 100 kPa / 1 bar minimum.  
(if applicable).

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