

PRECISION PNEUMATIC LIFT FLAT LAPPING MACHINE


The Lapmaster Model 56 is equipped with a 56 inch (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.

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

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 their electrical supplies fail, the weights will not fall.

Flatness of the machine's 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.

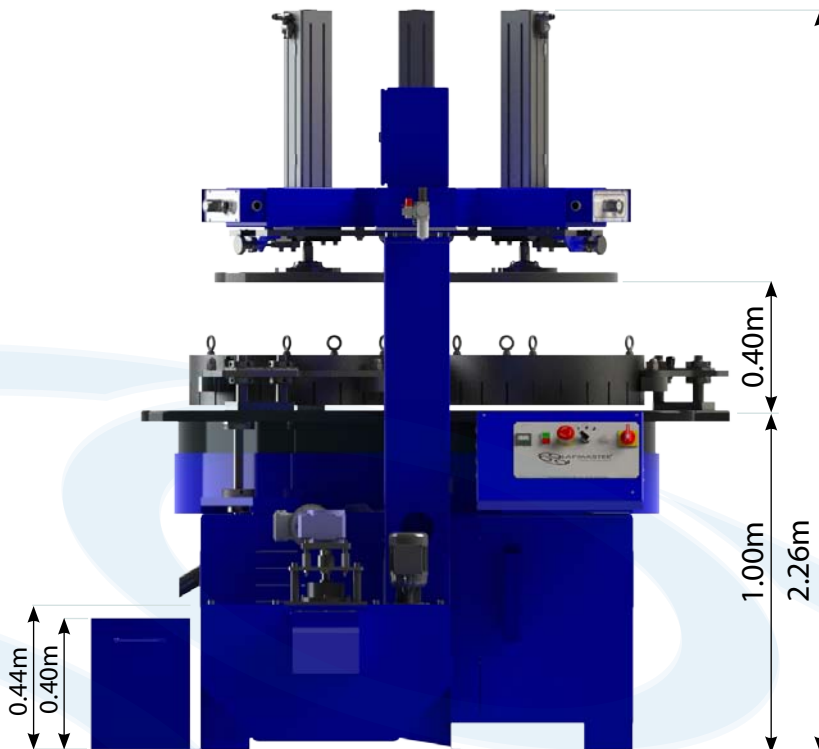
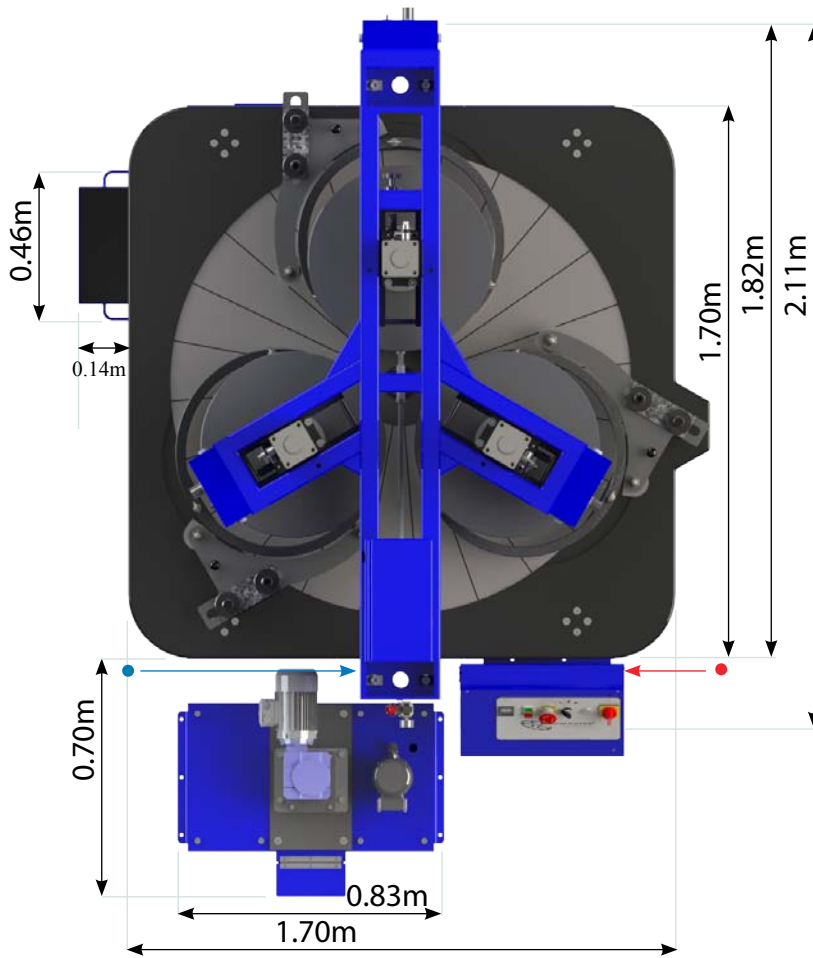
STANDARD FEATURES

- Heavy duty floor standing base with integrally mounted drive motor, reduction gearbox, abrasive distribution system, complete with control panel.
- Range of loads for pressure weights 74 kg to 325 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.
- 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 578mm I.D.
- Three high density cast iron serrated conditioning rings. 641mm O.D. x 578mm I.D.
- Three blank workholder discs.
- Three felt pads.
- Operation and maintenance manual.

MODEL 56 - PRECISION PNEUMATIC LIFT FLAT LAPPING MACHINE



OPTIONAL TOOLING

- Solid stainless steel backing plates.
- Composite faced segments.
- Polishing pads.

OPTIONAL FEATURES

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

APPROXIMATE WEIGHT

- 5000 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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