



MODEL 48

PRECISION PNEUMATIC LIFT FLAT LAPPING MACHINE



- The Lapmaster Model 48 is equipped with a 48 inch (1219mm) diameter serrated lap plate. This is manufactured from Grade 300 grey cast iron to BS1452. It consists of 16 individual segments bolted to a support plate.
- On this version of the machine the four 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.
- 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 that the operator cannot injure his hands or arms when lowering the weights.
- A further safety feature is that the pressure weights are mechanically latched when in the raised position, so that should the compressed air supply or electrical power fail, the weights will not fall.
- The machine is intended for use with free abrasive slurries - abrasive particles suspended in an oil based or water based vehicle. A diamond slurry dispensing system can also be fitted if required.
- Flatness of the lap plate, and consequently of the work, is controlled by adjusting the position of the four conditioning rings relative to the lap plate track. The pneumatic cylinders and pressure weights are also capable of the corresponding adjustment.
- The abrasive supply system consists of a floor standing tank fitted with a separately powered paddle type agitator. Abrasive slurry is pumped to four adjustable outlets which feed individual track wires. More slurry is pumped than is required for lapping. The excess is returned to the tank by gravity, and this together with the constant agitation minimises the tendency of the abrasive grains to settle out
- This machine is also available in Open Face version, see Product Data Sheet.

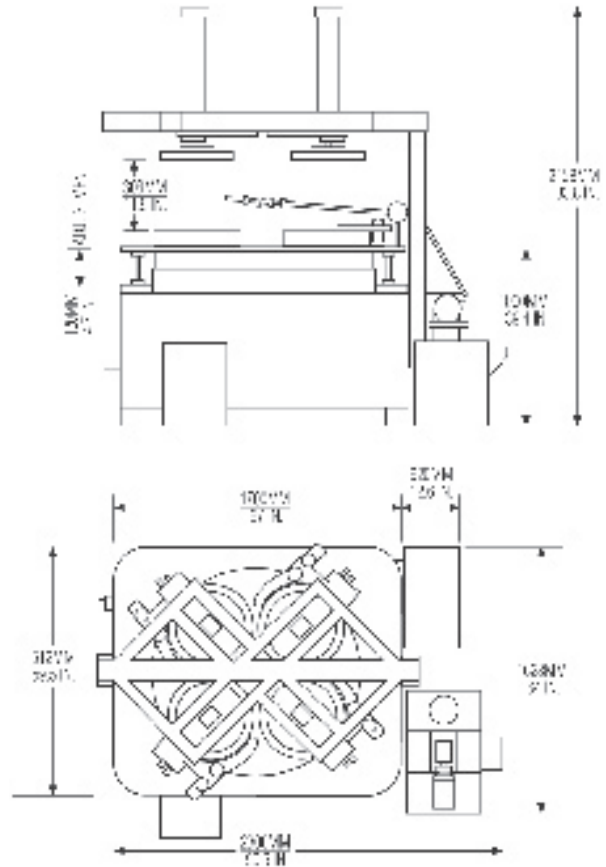


MODEL 48 STANDARD FEATURES

- 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.
- Range of loads for pressure weights (machine connected to 4 bar supply.) 47kg/103lbs to 488kg/1077lbs. Controls for raise /lower are of two hand anti-tie down type.
- Four conditioning rings, with adjustable roller bearing yoke assemblies to maintain lap flatness.
- Freestanding abrasive system complete with pump driven stirrer tank and multiple point distribution.
- Electrical system wired for; 230/460V 60Hz 3 phase with operator controls at 110V complies with EN 60 204.
- Operator control panel with start and stop controls, and multiple range automatic cycle timer.
- High torque drive unit consisting of 7.5kW/10hp motor and reduction gearbox. Lap plate speed 48 rpm.
- Waste container.

STANDARD TOOLING

- High density, cast iron serrated lapping plate (consisting of sixteen individual segments) 1219mm O.D. x 330mm I.D./ 48" O.D. x 13" I.D.
- Four high density cast iron serrated conditioning rings. 508mm O.D. x 432mm I.D./ 20" O.D. x 17" I.D.
- Four work holder blanks.
- Four felt pads.
- Starter sample of Lapmaster abrasive.
- Starter sample of Lapmaster vehicle.
- Set of Allen Keys.
- Operation and maintenance manual.



Weight: 304kg/6705 lbs.
Shipping weight: 455kg/10,010 lbs

AVAILABLE OPTIONS

- 3-ring Model.
- Variable speed lap plate drive (using frequency inverter).
- Water cooled lap plate.
- Non-standard voltages.
- Enlarged, moveable work table to improve multiple parts handling.



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Lapmaster has a policy of continued development and the specifications outlined above are subject to change without notice.