

Precision Diamond Flat Lapping & Polishing Machines Series 48



Picture of Kemet 48
open face lapping
machine without Kemet
Diamond Dispensing
System

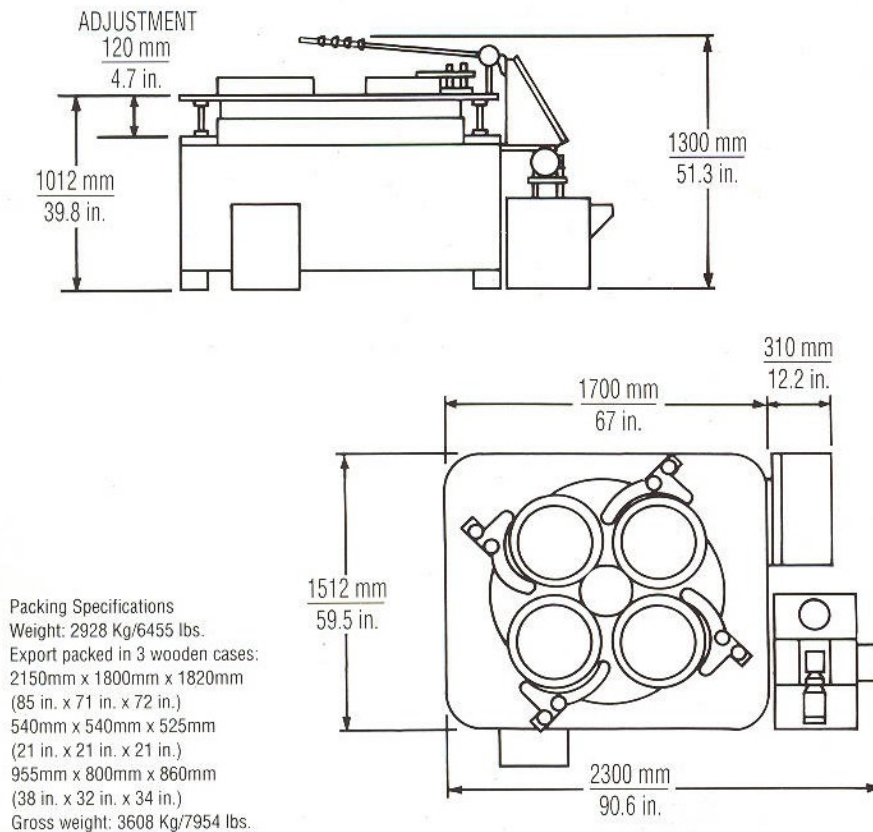
The Kemet 48 Lapping Machine is equipped with a 48 inch (1219mm) diameter serrated lap plate. The lap plate consists of 16 cast iron individual segments bolted to a support plate. These provide long life in high production environments, even with multi-shift operation.

The lap plate drive system uses a separate motor and worm and wheel mechanical reduction gearbox with multi-belt drive, and is mounted in a floor standing base. This is a fabricated steel channel framework with panels, easily removed for ease of access during maintenance.

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

The machine can be used with conventional abrasives slurries or Kemet Diamond slurries. The conventional 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. The system is designed so that a circulatory flow is established – the pump is capable of delivering far more slurry to the outlets than would ever be used. The excess is returned to the tank via a sloping drain tube. The Diamond Dispensing system consists of a electronic dispenser for fully controlled metering of liquid diamond and lubricating fluid, Liquid diamond stirrer unit, dual dispensing bars and spray heads.

Kemet 48 lapping machines are also available in Pneumatic lift versions –please refer to corresponding datasheet.



Standard Tooling

- High density, cast iron serrated lapping plate (16 segments) 48" O.D. x 13" I.D. (1219mm O.D. x 330mm I.D.).
- Four high density cast iron serrated conditioning rings 20" O.D. x 17" I.D. (508mm O.D. x 432mm I.D.).
- Four work holder blanks.
- Starter sample of abrasive.
- Starter sample of vehicle.
- Operation and Maintenance Manual.
- Allen Keys.

Note: No pressure weights or felt pads are supplied as standard as for most work using this size of machine, sufficient lapping load is obtained from the weight of the components themselves.

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 roller bearing yoke assemblies to maintain lap flatness.
- Freestanding abrasive feed system designed for water or oil based lapping slurries with pump driven stirrer tank (115 Litres) and multiple point distribution.
- Operator control panel with start and stop controls, and multiple range automatic cycle timer. Second emergency stop button at rear.
- High torque drive unit with 7.5kW / 10hp motor and reduction gearbox. Lap plate speed 48 rpm. Soft start fitted as standard.
- Electrical system wired for 220V 3 phase 50 Hz or 380V 3 phase 50Hz or 415V 3 phase 50Hz. Operator controls at 110V.
- Waste container (37 Litres).

Available Options

- 3-ring model. I.D 19.9" (505mm).
- Variable speed lap plate drive (using frequency inverter).
- Water cooled lap plate.
- Non-standard voltages.
- Customised machines and tooling.
- Light guarding.