

Kemet

Precision Diamond Flat Lapping & Polishing Machines Series 56 Pneumatic Lift



Picture of Kemet 56
pneumatic lift lapping
machine

The Kemet 56 pneumatic lift Lapping Machine is equipped with a 56 inch (1422mm) diameter serrated lap plate. The lap plate consists of 24 cast iron individual segments **faced with Kemet composite material** bolted to a support plate.

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

The height of the surrounding worktable can be adjusted so that it can be set just above the lap plate surface to prevent the sharp edge being exposed.

The lap plate drive system uses a separate motor and worm and wheel reduction gearbox with multi-belt drive and is mounted in a substantial floor standing base. The base is fabricated from welded hollow-section steel, clad with removable panels for maintenance. The electrical controls are housed in a console mounted at the front of the machine, and a second emergency stop button is fitted at the rear of the machine.

The machine can be used with conventional abrasives slurries or Kemet Diamond slurries. The conventional abrasive supply system consists of a separate reservoir, equipped with a pump and driven blade stirrers. Abrasive slurry is pumped to four adjustable outlets which feed individual track wires. The Diamond Dispensing system consists of an electronic dispenser for fully controlled metering of liquid diamond and lubricating fluid, Liquid diamond stirrer unit, dual dispensing bars and spray heads.

Standard Tooling

- High density, cast iron serrated lapping plate faced with Kemet composite material (24 segments) 56" O.D. x 14.5" I.D. (1422mm O.D. x 368mm I.D.).
- Four high density cast iron serrated conditioning rings 23" O.D. x 20.8" I.D. (585mm O.D. x 530mm 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 normally 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.
- Free-standing 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.
- High torque drive unit with 11kW / 15hp motor and reduction gearbox. An electronic soft start unit is fitted as standard which smoothly accelerates the lap plate from standstill to full speed, 48rpm, over a controlled time period.
- 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 Litre).

Available Options

- 3-ring model - I.D 22.8" (I.D. 578mm)
- Variable speed lap plate drive (using frequency inverter).
- Water cooled lap plate.
- Non-standard voltages.
- Customised machines and tooling.