

# Kemet

## Precision Diamond Flat Lapping & Polishing Machines Series 72



Picture of Kemet 72 lapping machine without Kemet Diamond Dispensing System

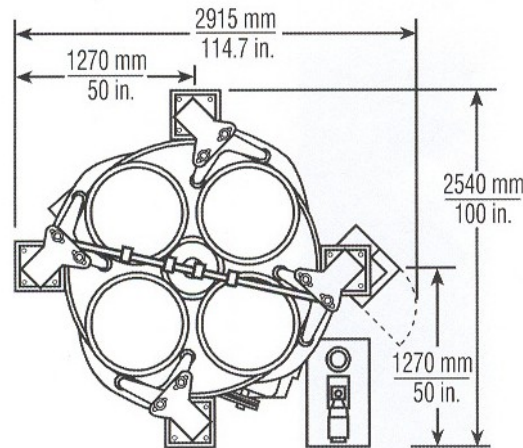
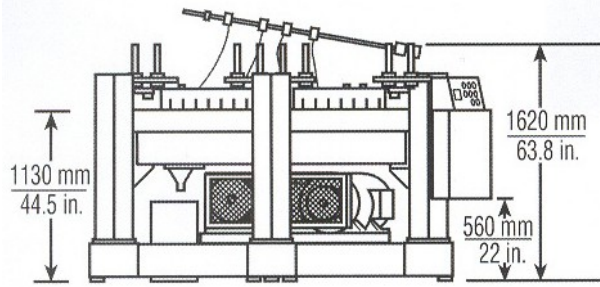
The Kemet 72 Lapping Machine is equipped with a 72 inch (1829mm) diameter serrated lap plate. The lap plate consists of 16 cast iron individual segments, which are bolted to the support plate.

Kemet 72 lapping machines are available in Open Face or Pneumatic lift versions. 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 Kemet 72 lapping machine uses a cruciform shaped structural steel base. The mechanical reduction gearbox is mounted at the centre of the base, with the drive motor to one side. Drive is transmitted via multiple vee belts, and the moving parts of the system are enclosed within a mesh guard. At the end of each arm of the cross, are mounted hollow section upright columns. These support the trough surrounding the lap plate and provide the mounting point for each of the four roller yokes.

The drive system incorporates, as standard, an electronic soft start which will smoothly accelerate the lap plate from standstill to full speed (36 rpm) over a controlled time period. This is a preset, though it can be adjusted if required to suit particular process conditions.

The machine can be used with conventional abrasive slurries or Kemet Diamond slurries. The conventional abrasive supply system consists of a separate free-standing reservoir, equipped with a pump and driven blade stirrers. Abrasive slurry is pumped to four adjustable outlets which feed individual track wires with individual control valves. 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.



#### Packing Specifications

Weight: 5883 Kg/12,972 lbs.  
 Export packed in 6 wooden cases:  
 2750mm x 2600mm x 2585mm  
 2010mm x 2010mm x 660mm  
 2 off 1200mm x 830mm x 445mm  
 790mm x 790mm x 630mm  
 955mm x 800mm x 860mm  
 Gross weight: 7846 Kg/17,300 lbs.

### Standard Tooling

- Cast iron serrated lapping plate (16 segments) 72" O.D. x 18" I.D. (1829mm O.D. x 457mm I.D.).
- Four cast iron serrated conditioning rings 30" O.D. x 27.3" I.D. (762mm O.D. x 692mm I.D.).
- Four work holder blanks (3.2mm thick).
- 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 structural steel base, with drive motor, reduction gearbox, integrally mounted drive motor, abrasive distribution system, and complete with control panel.
- Four conditioning rings, with adjustable roller bearing yoke assemblies to maintain lap flatness. They are also adjustable vertically to maintain constant height above the lap plate surface as it wears.
- 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 30kW / 40hp motor and reduction gearbox. An electronic soft start unit is fitted as standard which smoothly accelerates the lap plate from standstill to full speed, 36rpm, 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. Complies with EN 60 204.
- Waste container (37 Litre).

### Available Options

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