Kemtech Spherimatch - Match Lapping Machine

The Kemtech Spherimatch provides an automated method to match lap two valve halves, or similar components, together: For example - matching the concave barrel of a hydraulic piston pump to its convex swash plate. These faces need a perfectly matching radius to maintain performance and minimise leakage.

The Spherimatch enables the removal of even deep scoring and final match lapping of bodies up to 400mm high and ranging from 75mm diameter up to 250mm.



Specification

- Match laps parts from 75 to 250mm diameter and up to 400mm high
- Fabricated steel body with adjustable levelling feet
- Heavy duty adjustable worktable
- Integrally mounted high torque drive unit with 0.37kW (0.5HP) motor
- Sealed maintenance free reduction gearbox
- Electronic digital timer with variable time ranges
- 3 jaw chuck
- Lap plate speed variable up to 70 rpm
- Variable speed sweep action
- Electrical: 230V-single phase-50Hz or 110V-single phase-60Hz
- Initial supply of lapping abrasives included along with full instructions in their use
- Product code: 359599

With a fully programmable process timer, this versatile machine can match lap curved or flat surfaces, of the same or different materials, with variable rotation speeds up to 70 rpm and a range of sweep arm strokes and speeds to suit the components being lapped.

Used in combination with Kemet's diamond compounds and conventional aluminium oxide pastes, the Spherimatch is an essential tool for any hydraulic servicing centre.

Kemet offer free tests complete with a full test report showing process times and stages for each pair of parts.



Match lapped 125mm piston pump body and swash plate

One component part is held in a fully guarded, three jaw chuck with reversible jaws and the opposing part located under the sweep arm with a specially designed location and anti-rotation fixture. Pressure is applied to the top part being lapped.