world leaders in the art of linear measurement

Calibrator Kit

For checking and inspecting the readings from a linear transducer

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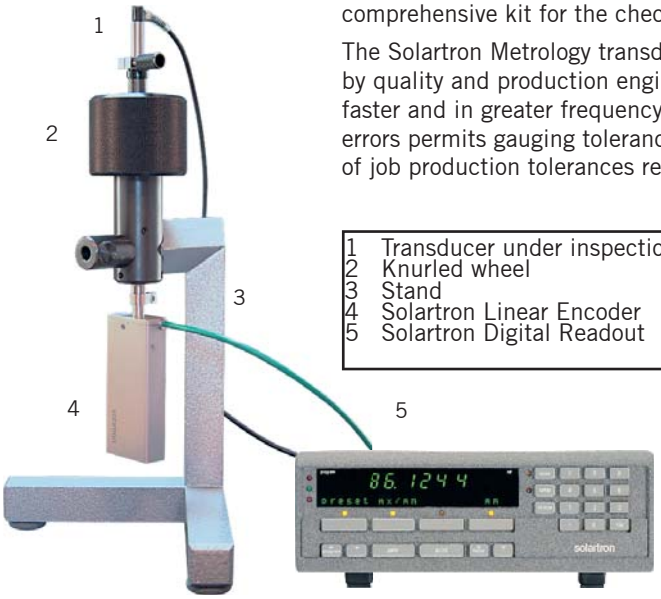

1 Transducer under inspection
2 Knurled wheel
3 Stand
4 Solartron Linear Encoder
5 Solartron Digital Readout

The Solartron Metrology Calibrator combines our successful LE/25/S (IP50) Linear Encoder with the DR600 Digital Readout and a (customers own) dial gauge to provide a comprehensive kit for the checking and inspection of readings from a linear transducer.

The Solartron Metrology transducer calibration fixture satisfies an increasing demand by quality and production engineers for ways to inspect dial gauges and gauging probes faster and in greater frequency. Knowledge of the size and position of the transducer errors permits gauging tolerances to be narrowed which in turn allows greater utilization of job production tolerances resulting in an increase in 'pass' volume.

The calibration fixture pays for itself by;

- increasing the volume of 'in tolerance' work
- ease of operation
- augmenting the usefulness of expensive electronics that often do not enjoy full utilisation

The design of the Solartron Calibrator is fully in accordance with Abbe's principle. A hardened plug, supported concentrically in the body of the fixture, is displaced axially by the means of a special purpose thread and ball assembly and actuated by a knurled wheel (2). This assembly ensures absolute proportional uniformity of displacement of the spindles (plungers) in measuring probe (4) and in the dial gauge being inspected (1).

The easily portable, sturdy stand (3) has been especially designed to be used in a vertical or horizontal inpection position. The body portion can be moved up or down within the fixture by loosening the socket head screw in the face of the stand. The body may be inverted by pulling off the lower split collet.

How To Use

- rotate the knurled wheel (2) until it is close to the lower stop
- lock the measuring probe (4) in the lower split collet with the spindle fully depressed
- lock the transducer to be inspected (1) in the upper split collet
- set digital display (5) to zero
- rotating the knurled wheel (2), advance the position of the transducer under inspection (1) by the amount of travel to be inspected and read the amount of actual travel from the Linear Encoder (4). Or, advance the Linear Encoder (4) by the amount of travel to be inspected and compare this to the reading on the transducer under inspection (1)
- enter the reading into inspection certificate (or actuate printer if fitted)
- inspect inward and outward displacement to check for hysteresis

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