ACCURATE
Metrology & Automation
Since 1984

GAUGE BLOCK COMPARATOR

CERTI.NO. CC- 2082

Gauge Block Comparator is highly precision instrument used to calibrate precision gauge block from 0.50 to 100mm length. It is an advance technology of gauge block comparison method & now widely adopted through out the world. Calibration laboratories of national metrology institutes of various countries & ISO/IEC 17025 accredited laboratories. While using this instrument it require a reference master gauge block whose exact centre point deviation has to be known before.

With this instrument we have used 2 high precision measuring probes. 1) at the Top & 2) at the base plate which ensure reliable and accurate results. We have also provided a Gauge Block Holding Fixture, which guides the probe to trace 5 different Points on the surface to calculate the Parallelism of the gauge block. All these measurement takes place with reference to centre deviation of reference master. This instrument comes with a Pneumatic Lifting System, which helps to move and calibrate the Gauge Block without any Jerk and interference caused due to Body Heat.

Features

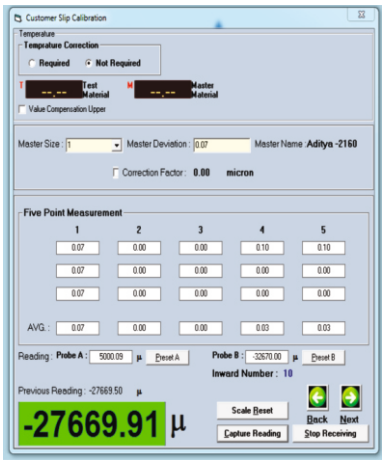
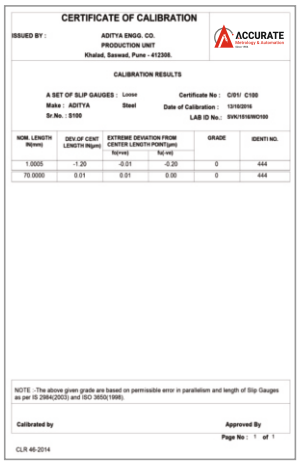
- Rigid cast iron stand for temperature stability
- Center deviation
- Parallelism by measuring at 5 points and there by selection of grade
- User friendly on handed operation to position the gauge blocks under the measuring probe
- Precision ball bearing guides for smooth control actuation

This Instrument Consist of

- Gauge block comparator stand with two templates
- Pair of LVDT probe (top & bottom)
- Pneumatic lifting system
- Heat resistance shield
- User friendly software
- Dust cover for comparator
- Operation manual

Technical Specificaation

Measuring Range	0.5 - 100mm
Measuring System	Digital
Repeatability	0.02µm
Accuracy	0.03 µm.
Display	Digital Read out with RS232 Port
Resolution	0.001mm, 0.0001mm, 0.00001mm
Lifting Device	Pneumatic pump to be operated manually
Software	Suitable for calibration of gauge block from 0.5 to 100mm in metric & Imperical

Software : Version 1.0.0

- User friendly software to calculate the grade of gauge blocks
- Stores all measured results
- Certificates can be printed and it compensates the temperature variations automatically, with reference to Thermal Co-efficient of expansion.