



# MICRO-IRHD LASER REVOLUTION

**MICRO-IRHD HARDNESS TESTER WITH LASER CENTRING DEVICE AND ROTATING SAMPLE HOLDER FOR THE AUTOMATIC SERIAL MEASURE OF O-RING AND SMALL RUBBER PARTS**

STANDARDS: ASTM D1414; ASTM D1415; FIAT 50408; ISO 48-2;

NOTE: COMPLIANCE WITH SOME STANDARDS MAY REQUIRE OPTIONAL ACCESSORIES OR SETUPS.



The instrument permits to increase productivity and accuracy in performing Micro-irhd measurements by eliminating the human influence in the sample positioning. You only need to place the items to be tested on the test line of sample positioning disk. The instrument will use the laser beam to detect the right test point for each sample and perform automatically the measure of Micro-irhd hardness in the target point. The instrument allows to identify and position different types of pieces on the measuring plane and automatically manages the execution and the correct saving of the entire sequence of

measurements.

### Key Features

- Full conformity with ISO 48-2 and ASTM D 1415 standards
- ACCREDIA Calibration Certificate issued by Gibitre ISO 17025 Accredited laboratory
- Gibitre exclusive Micro-irhd test technology (ruby-sphere indenter, test force application using load cell)
- Fully automatic positioning of each sample in the target test point with 0.005 mm accuracy
- Automatic control of items with thickness between

1 and 15 mm

- Laser scanning of the profile of non-standard test pieces to choose and record to test position for each product
- Measure of Micro-irhd hardness, Angle coefficient of the hardness relaxation curve and Hysteresis curve
- Automatic verification of tolerance limits for each product tested
- Storage of results and curves in the standard Gibitre SQL database.

**Unit of measure:** IRHD-M (micro)

**Resolution:** 0.01 irhd point

**Test modality:** Serial automatic testing of the parts placed across the test line of the sample holding disk

**Calculated Results:** • IRHD Hardness; • Angle coefficient of hardness relaxation curve; • Hysteresis (sample return after load removal); • Correction of hardness

according to the thickness of the sample

**Laser Device:** Class 2 laser sensor; Resolution: 0.005 mm;

**Sample thickness:** Between 1 and 15 mm

**Personal Computer (optional):** Minimum Setup: Windows 10 or 11, Intel Core i5, 5GB RAM

