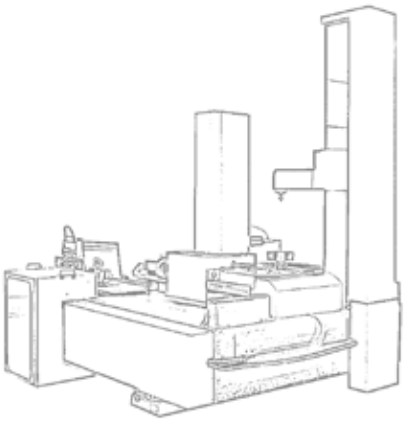
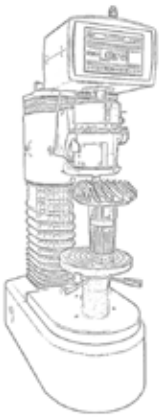
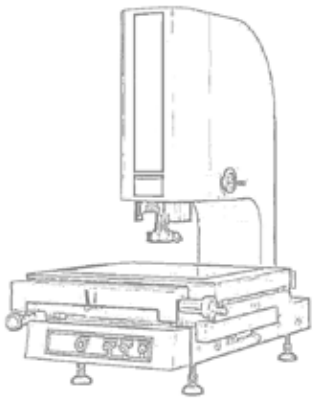
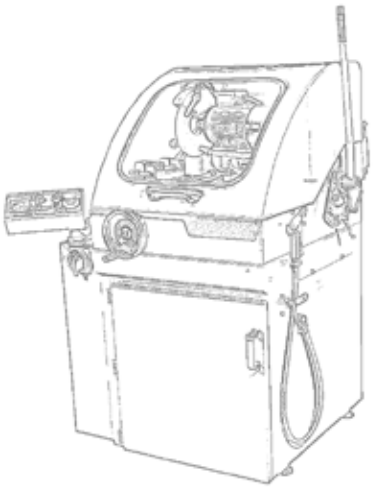
# PORTABLE HARDNESS TESTERS







kiwa
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# COMPUTEST LITE

Computest Lite, a 5kgf load portable Rockwell hardness tester, distinguishes itself from its larger sibling, the E-Computest, through its language-independent operation, onboard display, absence of data management or sharing functionalities, and a comprehensive set of preset scales.
Computest Lite prioritizes simplicity and autonomy, providing users with a hassle-free hardness testing experience without compromising on accuracy or functionality.


## Advantages:

• Language independence: Computest Lite breaks language barriers, offering seamless operation without the need for language selection or customization. This ensures straightforward usability across diverse linguistic backgrounds, eliminating any language-related complexities.
• Onboard display: Equipped with an onboard display, Computest Lite provides instant results without the necessity for external devices or software. This feature streamlines the testing process, offering real-time feedback directly on the device, enhancing efficiency and convenience.
• No data management or sharing: Unlike its larger counterpart, Computest Lite focuses solely on hardness testing, omitting complex data management and sharing functionalities. This streamlined approach simplifies operation, catering to users who prioritize straightforward testing procedures without the need for data handling.
• Set of preset scales: Computest Lite comes preconfigured with a comprehensive set of preset scales, catering to common testing requirements across various industries. This eliminates the need for custom scale configurations, offering immediate usability out of the box.

## Features:

• Portable miniaturised Rockwell hardness tester – On-site measurement of pieces of any size.
• Adjustable in all directions – Savings on handling and cutting costs.
• One diamond indenter for the entire range of metals – Speed and simplicity of the testing process.
• Testing is not affected by any yielding or bending – Reliable results in all test conditions.
• ACCREDIA certification (ILAC MRA-Mutual Recognition Arrangements) – Offers a competitive advantage in markets where certification is required.

## Computest Lite technical features

| | |
|---|---|
| Loads | 5 kgf (49 N) |
| Power supply | 100 - 240 V |
| Norms and certifications | DIN 50157, ASTM E-110, ACCREDIA certificate upon request |
| Min. measurable diameter | 2 mm with stand 12 mm with base for rounds |
| Selectable functions | Scales, tollerances, calibration, test load, stats, language, sequence, files, materials, partial average, clock, auto off timer, add notes, barcode scanner, geo-localization |
| Output interfaces | Wifi, Bluetooth, micro USB, micro SD slot |
| Reading | Tablet display touch-screen 6" |
| Languages | Italian, English, German, other languages on request |
| Load application method | Manual |
| Weight | Mechanical unit 750 g - Electronical unit 360 g |
| Preload | 1.2 kgf (11.8 N) |
| Accuracy | HRC 0,3 HB < 1% |
| Working principle | Rockwell |
| Standard scales | HRC (10-70) - HB5 (21-190) - HB30 (80-700) - HV (35-1080) - DPTH (0-100) |
| Load time | Selectable 1 - 60 sec |

# E-COMPUTEST

Rockwell portable hardness tester, an essential tool for precision metal quality control. Designed for versatility and ease of use, this advanced, miniaturized device is ideal for direct on-site measurements of any-sized parts, supporting a broad range of industrial applications.
For professionals in the metalworking and industrial sectors seeking fast, accurate, and reliable quality control solutions, the Rockwell portable hardness tester is an invaluable resource.


## Advantages:

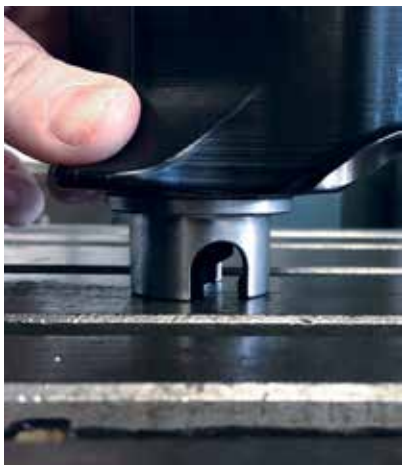
• On-site measurement capability: The Rockwell portable hardness tester eliminates the need for transporting large parts to laboratories. By enabling direct measurements at the job site, it significantly cuts down on handling costs and reduces the waiting period for results, optimizing overall productivity in metal quality control.
• Flexible orientation: This device's ability to adjust to all directions makes it exceptionally user-friendly. It accesses hard-to-reach areas with ease, reducing the necessity to disassemble complex parts, thereby saving time and operational costs.
• Universal diamond penetrator: With a single diamond penetrator suitable for all metals, this hardness tester streamlines the setup process. It accelerates the measurement cycle, maintaining high precision and reducing downtime in industrial settings.
• Consistently reliable results: Engineered to withstand material deflections and deformations, the Rockwell portable hardness tester guarantees accurate and dependable outcomes essential for upholding stringent quality standards in metalworking industries.
• Global certification advantage: Compliant with ACCREDIA (ILAC MRA), the hardness tester not only meets international testing standards but also provides a significant competitive edge in global markets where equipment and result certification are crucial.

## Standard supply:

• Diamond indenter
• Standard batteries for mechanical part
• 50 mm internal extension base extension
• Base for flat surfaces
• Lanyards
• Wrench for removing the battery cover
• HRC (~60 HRC) and HB30 (~210 HB/30) specimens
• Base with magnetic feet
• Base for rounds
• 3 non-magnetic non-slip feet for flat surfaces
• Wireless Charger
• Rechargeable battery (included in tablet)
• Android tablets
• Battery charger
• Measuring head
• Pin for E-Computest
• Shockproof case
• Pawl for Computest series

## E-Computest technical features

| | |
|---|---|
| Loads | 5 kgf (49 N) |
| Power supply | 100 - 240 V |
| Norms and certifications | DIN 50157, ASTM E-110, ACCREDIA certificate upon request |
| Min. measurable diameter | 2 mm with stand 12 mm with base for rounds |
| Selectable functions | Scales, tollerances, calibration, test load, stats, language, sequence, files, materials, partial average, clock, auto off timer, add notes, barcode scanner, geo-localization |
| Output interfaces | Wifi, Bluetooth, micro USB, micro SD slot |
| Reading | Tablet display touch-screen 6" |
| Languages | Italian, English, German, other languages on request |
| Load application method | Manual |
| Weight | Mechanical unit 750 g - Electronical unit 360 g |
| Preload | 1.2 kgf (11.8 N) |
| Accuracy | HRC 0,3 HB < 1% |
| Working principle | Rockwell |
| Standard scales | HRC (0-70) - HV (35-1080) - HB30 (80-700) - HB/5 (21-190) - DPTH (0-100) |
| Load time | Selectable 1 - 60 sec |



# E-DYNATEST


The E-Dynatest stands out for its high test load of 100 kgf (980 N), making it a powerful tool for precise hardness measurements. This high test load ensures reliable and consistent measurements, as the testing process is unaffected by the surface condition of the material. It is particularly ideal for testing large pieces that are difficult to move, as it can be used directly on-site. Combined with the wireless data transfer between the test head and the tablet, the E-Dynatest allows for quick, precise, and straightforward hardness testing, with results displayed directly on the 6-inch tablet display. The wireless connection ensures that data is captured without delay and can be evaluated in real-time.
The Android app allows test results to be not only stored but also efficiently managed, shared, and printed. The combination of high test load, precision, and user-friendliness makes the E-Dynatest an excellent choice for on-site hardness testing.

## Features:

- Portable miniaturised Rockwell hardness tester – On-site measurement of pieces of any size.
- Adjustable in all directions – Savings on handling and cutting costs.
- High test load (100 kgf) – Two tools in one: measurements are comparable to a bench-top hardness tester.
- Measurement via a single manual pressure – Speed and simplicity of the measurement processes.
- ACCREDIA certification (ILAC MRA-Mutual Recognition Arrangements) – Offers a competitive advantage in markets where certification is required.

## E-Dynatest technical features

| | |
|---|---|
| Loads | 100 kgf (980 N) |
| Power supply | 100 - 240 V |
| Norms and certifications | DIN 50157, ASTM E-110, ACCREDIA certificate upon request |
| Min. measurable diameter | 25 mm standard - 12 mm with special penetrator shroud |
| Selectable functions | Scales, tollerances, calibration, test load, stats, language, sequence, files, materials, partial average, clock, auto off timer, add notes, barcode scanner, geo-localization |
| Output interfaces | Wifi, Bluetooth, micro USB, micro SD slot |
| Reading | Tablet display touch-screen 6" |
| Languages | Italian, English, German, other languages on request |
| Load application method | Manual |
| Weight | Mechanical unit 2050 g - Electronic unit 360 g |
| Preload | 3.45 kgf (33.8 N) |
| Accuracy | HRC 0.3 HB < 1% |
| Working principle | Rockwell |
| Standard scales | HRC (10-70) - 1HB30 (160-700) - 2HB30 (100-500) |

## E-Brio-W

E-Brio-W Brinell Optical Scope is a cutting-edge solution meticulously crafted to redefine efficiency and precision in Brinell testing. Developed with a keen eye on market needs and technological advancements, this innovative device embodies the essence of quality and user-centric design.

### Features:

• Seamless wireless integration: The E-Brio-W seamlessly integrates wireless technology from Ernst's portable devices into an optical Brinell scope. With wireless functionality, users can experience safe and straightforward usage in any environment, ensuring unparalleled convenience.
• Precision simplified: Precision meets simplicity with the E-Brio-W. Engineered to offer unparalleled accuracy without compromising on usability, this device ensures that users can achieve precise measurements effortlessly.
• Adaptable performance: The E-Brio-W epitomizes adaptability, serving as an "essential" product that can be effortlessly enhanced with additional features as needed. This flexibility allows users to tailor their testing experience to meet evolving requirements without hassle. It operates seamlessly as a stand-alone unit, providing immediate measurements with its onboard display. Furthermore, users can enhance its capabilities at any time by purchasing the E-Brio-W Software, compatible with PC or tablet running Windows 10 or 11. This software unlocks a plethora of additional features, including data management, manual adjustment of the Brinell indentation, statistics, and report generation, providing users with comprehensive control over their testing processes.

### Advantages:

• Exceptional precision – Advanced algorithm for edge detection ensures reliable and precise readings on any material and surface.
• Enhanced efficiency – Reduced Brinell indentation reading time to increase productivity.
• Unmatched flexibility – Stand-alone unit with integrated display or enhancement with additional software for data management, manual adjustment of Brinell indentations, and report generation.
• Wireless connectivity – Integrated wireless technology for a cordless experience, providing flexibility and freedom of movement in the work environment.
• Optimal price-performance ratio – High-level performance at a competitive price, ideal for companies seeking efficiency and precision in Brinell hardness testing.

## Technical features E-Brio-W

| | |
|---|---|
| Norms and certifications | ACCREDIA (ILAC MRA) |
| Selectable functions | Brinell impression reading, test histogram, statistics, report, manual adjustment of Brinell indentation |
| Reading | Automatic - Camera resolution 752 x 480 Pixel |
| Weight | 750 gr |
| Accuracy | 0.001 mm |
| Working principle | Automatic Brinell hardness reader |
| Standard scales | HB30: HBW10/3000 - HBW5/750 - HBW2.5/187.5 - HB15: HBW10/1500 - HB10: HBW10/1000 HBW5/250 - HBW2.5/62.5 - HB5: HBW10/500 - HBW5/125 - HBW2.5/31.25 HB2.5: HBW10/250 - HBW5/62.5 - HBW2.5/15.625 - HB1.25: HBW10/125 - HB1: HBW10/100 also includes every scale for Ernst Shear Pins |
| Working area dimensions | Support base: Ø 30 mm |
| Overall dimensions | h 170 mm - Ø 66 mm |
| Resolution | 1 µm optical resolution |
| Supported operating systems | Windows 10 - Windows 11 |
| Connectivity | Wireless |



## STE/A and STE/B

Face the challenges of hardness testing with the STE hardness tester, a reliable solution used globally since the 1980s. At the heart of the STE hardness tester are our innovative shear pins, ensuring precise and consistent results. This system precisely controls the force applied during indentation, ensuring reliable and repeatable measurements. The versatility of the STE hardness tester is undeniable. Thanks to its compact design, it can perform hardness tests on small surfaces and parts of various shapes and sizes, even in challenging positions. Whether you work in a crowded industry or a remote location, the STE hardness tester easily adapts to your needs. A distinctive feature of the STE hardness tester is its user-friendly design and the ability to measure all Brinell hardnesses from 100 to 700 HB with minimal investment.

Even non-expert operators can perform hardness tests with ease and precision thanks to the intuitive design of our instrument.

Our commitment is to provide a complete and reliable solution for hardness testing at an affordable cost. Each STE hardness tester comes with original ERNST patented shear pins and corresponding reading tables, ensuring a seamless testing procedure.

Join the numerous industries that rely on the STE hardness tester for their hardness testing needs. Invest in a proven solution that offers precision and reliability at a low cost, supporting your hardness testing processes with effectiveness and efficiency.

### Features:

• Small and handy – Can be used on small surfaces, in all positions, on parts of any shape and size.
• Simple and versatile hardness tester – All Brinell hardnesses from 100 to 700 HB are available with a limited investment.
• Makes a standard Brinell measurement – It allows the immediate optical reading with ANTARES portable microscope or automatic e-Brio system that, being equipped with Ernst tables, gives back in real time the result in Brinell points.
• Complete and stand-alone system – It is supplied with original ERNST patent calibrated pins and with the corresponding reading tables.

## STE/A and STE/B technical features

| MODEL | STE/A | STE/B |
|---|---|---|
| Loads | 1580 kgf (15500 N) | |
| Min. measurable diameter | 30 mm without preparation | |
| Reading | On ERNST reading table | |
| Load application method | Static | Dynamic |
| Weight | 6.7 kg | 6 kg |
| | (Weight of the clamp 3.6 kg - clamp capacity 150 mm) | |
| Working principle | STE PAT Ernst | |
| Standard scales | HB/30 - N/mm² - kg/mm² on reading table | |
| Load time | Instant | |
| Working area dimensions | Min. 20 x 20 mm | |
| Overall dimensions | 40 x 23 x 8 cm | 30 x 18 x 6 cm |
| Optics | STANDARD: 8x OPTIONAL: e-brio - Antares | |

# COMBINED HARDNESS TESTER T-UD2

The device works with both UCI (*Ultrasonic Contact Impendance*) and dynamic (*Leeb*) probes. User gets the benefits of two methods of measurement.

The **Leeb probe** is used for measuring the hardness of non-ferrous metals, cast iron, coarse-grained materials, massive products etc.

The **UCI probe** is used for measuring the hardness of small items, objects with a thin wall, complex form, and to measure the hardness of surface hardened layers.

Available with Bluetooth


UCI probe Leeb probe

## THE ADVANTAGES OF T-UD2

- Hardness measurement of any mass products with a thickness of 1 mm – inaccessible to the dynamic (Leeb) hardness testers (small parts, thin-walled structures, pipes, tanks, steel sheets, articles of complex shape, hardness control of metal coatings, etc.)
- Small imprint after measuring
- Measuring the hardness of surface hardened layer
- Wide range of hardness
- Only basic function, nothing extra
- Possibility to use in field conditions with high humidity and dust
- Convenience and ease of measurement
- Optimized number of buttons
- Contrast display with bright back-lighting
- Automatic recognition of probe
- Indication of the type of connected probe
- Calibrations stored in memory of probe
- Very easy in operation and calibration
- Internal memory and communication with PC
- New, intuitive menu with tips on the buttons
- Temperature range down to - 40°C
- Water resistant case
- Rubber bumper protected case

## MANY MODES OF MEASUREMENT


Normal mode


Statistics mode


Smart mode


Signal mode

## OPTIONAL BLUETOOTH MODULE

Thanks to the special NOVOTEST app for Android, it is possible to do hardness measurements, calibrate the device, set up a convenient display of values, save the results of hardness measurements, synchronize the archive with your other devices and a PC, transfer measurement results to your colleagues with your smartphone.

Using a Bluetooth connection, your smartphone connects to the hardness tester and you have a completely new device. The intuitive interface, ample opportunities for documenting results, Internet access, touch screen, camera, microphone and GPS receiver of a smartphone turn the hardness tester T-UD2 into something completely unique and previously inaccessible.

## WITH NOVOTEST APP IS POSSIBLE TO:

- Set and calibrate the hardness tester.
- Display measurement results in real time in numerical form with the construction of a graph, histogram or statistics.
- Take a picture of the test object with the putting of hardness marks.
- Create a video of the measured product.
- Recording audio notes about the tested object.
- Automatically save measurement's geolocation on Google maps.
- Display a Google map with markers of places of measurements made on it and the ability to view these measurements.
- Create the final comprehensive report on the measurement.
- Send a finished report to e-mail, messenger (or in any convenient way) directly from the application.
- Create folders and files with any names thanks to the flexible structure of the archive of measurements.
- Synchronize with PC and other smartphones.
- Access a cloud service for storing the archive of measurements.
- Automatically and manually synchronize the cloud measurement archives between devices.
- Use the Google navigation mode, building a route and accompanying to the point at which the measurements were made.
- Store archives of other devices with Bluetooth in one application.

## THREE TYPES OF UCI PROBES

| Load | Advantages or benefits | Typical applications |
|---|---|---|
| 98 N<br>(10 kgf) | Leaves relatively large dent. Suitable for low finished surfaces. | Small forged products, cast materials, heat-treated materials, etc., turbine blades, inside tubes with ø> 90 mm. |
| 50 N<br>(5 kgf) | Considered to be the universal type for most general applications. 50 N of downward hand pressure is required to activate the probe. Surface finish equivalent to 80 grind or better. | Induction or carburized machined parts, e.g.. camshafts, turbines, weld inspection, HAZ. Measurement in grooves, gear tooth flanks and roots, turbine blades, inside tubes with ø> 90 mm. |
| 10 N<br>(1 kgf) | Load is easy to apply; provides control to test on a sharp radius. Only 10 N of downward hand pressure is required to activate the probe. Surface finish equivalent to 150 grind or better. | Ion-nitrided stamping dies and molds, forms, presses, thin-walled parts. Bearings, tooth flanks, turbine blades, inside tubes with ø> 90 mm. |

## TECHNICAL FEATURES

| | |
|---|---|
| UCI probe types | 1 kgf (10 N) - 5 kgf (50 N) - 10 kgf (98 N) |
| Leeb probe types | D, DC, DL, C, D+15, E, G |
| Indenter | Diamond indenter (UCI), hardened ball (Leeb) |
| Measuring direction | Any direction 360° |
| Data storage | Limited only by the memory card |
| Measurement hardness range:<br>- Rockwell, HRC<br>- Brinell, HB<br>- Vickers, HV<br>- Tensile strength, MPa | <br>20 - 70<br>90 - 450<br>230 - 940<br>370 - 1740 |
| Measuring accuracy | HV ± 3%; HRC ± 1.5%; HB ± 3% |
| Hardness scale | HRC, HB, HV, MPa |
| Materials | - UCI probe: pre-calibrated for steel<br>- Leeb probe: pre-calibrated for steel, alloy steel, cast iron, stainless steel, aluminum, bronze, brass, copper<br>- Additional custom materials for calibration |
| Operating temperature range | -20 to +50° C |
| Power supply | 2 AA batteries |
| Instrument dimensions | 120 x 60 x 25 mm |
| Weight of electronic unit with batteries | 0.2 kg (without probes) |
| Battery life | Not less than 20 hours |

# COMBINED HARDNESS TESTER T-UD3

The device works with both UCI (*Ultrasonic Contact Impendance*) and dynamic (*Leeb*) probes. User gets the benefits of two methods of measurement.

The **Leeb probe** is used for measuring the hardness of non-ferrous metals, cast iron, coarse-grained materials, massive products etc.

The **UCI probe** is used for measuring the hardness of small items, objects with a thin wall, complex form, and to measure the hardness of surface hardened layers.

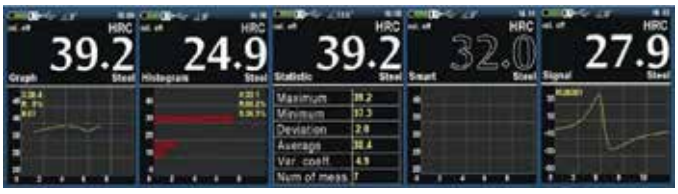
Available with Bluetooth


UCI probe Leeb probe

## THE ADVANTAGES OF T-UD3

- Hardness measurement of any mass products with a thickness of 1 mm – inaccessible to the dynamic (Leeb) hardness testers (small parts, thinwalled structures, pipes, tanks, steel sheets, articles of complex shape, hardness control of metal coatings, etc.)
- Small imprint after measuring
- Measuring hardness of the surface hardened layer
- Wide range of hardness
- Various measurement modes
- Calibration of any scale in any range
- Convenience and ease of measurement
- Large full color graphic display with bright back-lighting
- Automatic recognition of probe
- Indication of the type of connected probe
- Calibrations stored in memory of probe
- Extended temperature range down to - 40°C
- Internal memory and communication with PC
- New, intuitive menu with tips on the buttons
- Optional wireless mini-printer
- Water resistant case
- Rubber bumper protected case

## MANY MODES OF MEASUREMENT




1 2 3 4 5

**1.** GRAPH - the mode of building the graph
**2.** HISTOGRAM - the mode of building the histogram
**3.** STATISTIC - the mode of statistics
**4.** SMART - the mode of filtering incorrect measurements
**5.** SIGNAL - the mode of displaying the signal (only for Leeb probe)

## OPTIONAL BLUETOOTH MODULE

Thanks to the special NOVOTEST app for Android, it is possible to do hardness measurements, calibrate the device, set up a convenient display of values, save the results of hardness measurements, synchronize the archive with your other devices and a PC, transfer measurement results to your colleagues with your smartphone.

Using a Bluetooth connection, your smartphone connects to the hardness tester and you have a completely new device. The intuitive interface, ample opportunities for documenting results, Internet access, touch screen, camera, microphone and GPS receiver of a smartphone turn the hardness tester T-UD3 into something completely unique and previously inaccessible.

## WITH NOVOTEST APP IS POSSIBLE TO:

• Set and calibrate the hardness tester.
• Display measurement results in real time in numerical form with the construction of a graph, histogram or statistics.
• Take a picture of the test object with the putting of hardness marks.
• Create a video of the measured product.
• Recording audio notes about the tested object.
• Automatically save measurement's geolocation on Google maps.
• Visualizzare una mappa di Google con le indicazioni dei luoghi delle misurazioni fatte e la possibilità di visionarle.
• Display a Google map with markers of places of measurements made on it and the ability to view these measurements.
• Create the final comprehensive report on the measurement.
• Send a finished report to e-mail, messenger (or in any convenient way) directly from the application.
• Create folders and files with any names thanks to the flexible structure of the archive of measurements.
• Synchronize with PC and other smartphones.
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• Automatically and manually synchronize the cloud measurement archives between devices.
• Use the Google navigation mode, building a route and accompanying to the point at which the measurements were made.
• Store archives of other devices with Bluetooth in one application.

## THREE TYPES OF UCI PROBES

| Load | Advantages and benefits | Typical applications |
|---|---|---|
| 98 N (10 kgf) | Leaves relatively large dent. Suitable for low finished surfaces. Surface finish equivalent to 30 grind or better. | Small forged products, cast materials, heat-treated materials, etc., turbine blades, inside tubes with ø> 90 mm. |
| 50 N (5 kgf) | Considered to be the universal type for most general applications. 50 N of downward hand pressure is required to activate the probe. Surface finish equivalent to 80 grind or better. | Induction or carburized machined parts, e.g.. camshafts, turbines, weld inspection, HAZ. Measurement in grooves, gear tooth flanks and roots, turbine blades, inside tubes with ø> 90 mm. |
| 10 N (1 kgf) | Load is easy to apply; provides control to test on a sharp radius. Only 10 N of downward hand pressure is required to activate the probe. Surface finish equivalent to 150 grind or better. | Ion-nitrided stamping dies and molds, forms, presses, thin-walled parts bearings, tooth flanks, turbine blades, inside tubes with ø> 90 mm. |

## TECHNICAL FEATURES

| | |
|---|---|
| UCI probe types | 1 kgf (10 N) - 5 kgf (50 N) - 10 kgf (98 N) |
| Leeb probe types | D, DC, DL, C, D+15, E, G |
| Measuring range | HV: 230 ~ 940; HRC: 20 ~ 70; HB: 90 ~ 650<br>Tensile strength, MPa: 370 ~ 1740 |
| Measuring accuracy | HV ± 3%; HRC ± 1.5%; HB ± 3% |
| Indenter | Diamond indenter (UCI), hardened ball (Leeb) |
| Data storage | Limited only by the memory card |
| Communication | Upload data to PC and export as a spreadsheet<br>(USB cable and software included) |
| Hardness scale | HRC, HB, HV, HRB, HS, HL, MPa |
| Materials | - UCI probe: pre-calibrated for steel<br>- Leeb probe: pre-calibrated for steel, alloy steel, cast iron, stainless steel, aluminum, bronze, brass, copper<br>- Additional custom materials for calibration |
| Data display | Load applied/contact (UCI), angle (Leeb), single test result.<br>Max., min., average of tests, number of tests, deviation, var. coeff, histogram, signal and smart mode |
| Indication | Color LCD display (320 x 240) |
| Operating environment | Temperature: -20 to +40° C; Humidity: 30 to 80% RH |
| Power supply | DC 4.5 V (3 AA batteries) |
| Instrument dimensions | 160 x 75 x 30 mm |
| Net weight | Approx. 0.3 kg (without probe) |
| Battery life | Approx. 10 hours |

# COMBINED HARDNESS TESTERS T-UD2/3

## STANDARD SET T-UD2

- Electronic unit
- UCI probe
- Leeb probe
- 2 AA batteries
- Charger
- USB cable
- Operating manual
- Software for PC
- Case

## AVAILABLE OPTIONS T-UD2

- UCI probe
- Leeb probe
- Batteries
- Charger
- USB cable
- Set of hardness measures
- Case


## STANDARD SET T-UD3

- Electronic unit
- UCI probe
- Leeb probe
- 3 AA batteries
- Charger
- USB cable
- Operating manual
- Software for PC
- Case

## AVAILABLE OPTIONS T-UD3

- UCI probe
- Leeb probe
- Rubber bumper protected case
- Wireless printer
- Portable grinding machine
- Set of hardness measures
- Three types of UCI probes (10 - 50 - 98 N)
- Batteries
- Charger
- USB cable
- Case

# WIRELESS HARDNESS TESTER LAB UCI


Wireless portable hardness tester which implements the UCI (*Ultrasonic Contact Impendance*) method.

## FEATURES

• Ultra-portable device for quick hardness testing anywhere – in laboratories or in field conditions, with autonomous continuous operation up to 20 hours.
• UCI hardness test method has almost no boundaries in relation to the test object, so this method is the most versatile of the existing ones.
• Multifunctional application with a user-friendly interface and cloud archive.

**The NOVOTEST Lab application allows users to:**

• Set up and calibrate the device;
• Get illustrations of measurements as graphs, histograms, and statistics;
• Save measurements with text-, audio-, photo- and even videos protocols;
• Transfer the protocol in one click by any convenient messenger or e-mail;
• Synchronize archive with cloud storage.

# WIRELESS HARDNESS TESTER LAB UCI


ULTRAPORTABLE
Wireless connection allows user to get rid of wires, blocks, and it makes the device as portable as possible. It fits in any bag or even just a pocket.

HIGH AUTONOMY
The device charges from any USB 5V port, be it a PC, car, or a power bank. From one full charge, the device can work for more than 20 hours in a row.

SPECIAL NOZZLE
The special nozzle for products helps test radius surfaces and get accurate measurements on the flat products, included in the standard set. The device can also be used without a nozzle for narrow and hard-to-reach places.

CALIBRATION FOR ANY METAL
The device has preset calibrations for steel, aluminum and brass. If necessary, users can calibrate the device for any metal-scale combination if samples are available.

CROSS-PLATFORM ARCHIVE MANAGEMENT INTERFACE
Create comprehensive protocols and synchronize your archive with cloud storage managed in the Google Chrome browser.

# WIRELESS HARDNESS TESTER LAB UCI


## ADVANTAGES OF LAB UCI

- Wireless
- Ultraportable
- Autonomous
- Universal
- Accurate
- Widely applicable
- Multifunctional
- Easy to use

The device connects with your smartphone through the NOVOTEST application!

SCARICALA DA Google Play

## TECHNICAL FEATURES

| | |
|---|---|
| Measuring range | HRC: 20~70, HB: 90~650, HV: 230~940, Tensile strength, MPa: 370~1740, User calibrations for any range (e.g.: HV20-2000) |
| Scales | HRC, HB, HV, HRA, HRB, MPa, and can be calibrated for any other |
| Materials | Steel, aluminum, brass and can be calibrated for any other |
| Weight | 170 g |
| Dimensions | 160 x 26 (36 with nozzle) mm |
| Battery life | 20 hours |
| Power supply / Charging | Built-in battery / USB 5V |
| Operating environment | Temperature: -30°C ~ 60°C – Humidity: 30% ~ 80% R.H. |

# WIRELESS HARDNESS TESTER LAB UCI

## STANDARD SET LAB UCI

- Hardness tester
- Special nozzle
- Software
- USB cable
- Case
- Operating manual

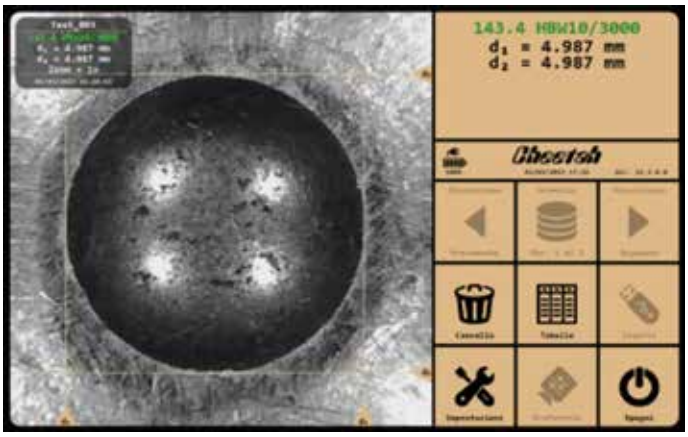
## AVAILABLE OPTIONS LAB UCI

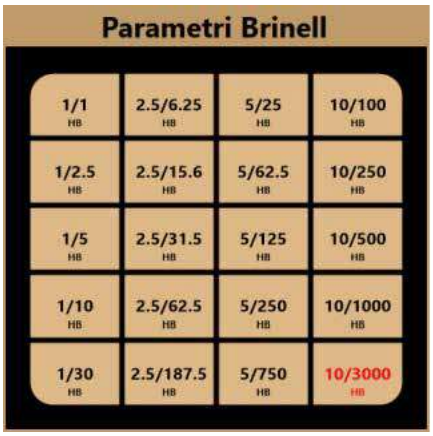
- Hardness test blocks
- UCI probe test stand for thin sheets
- Portable grinding machine

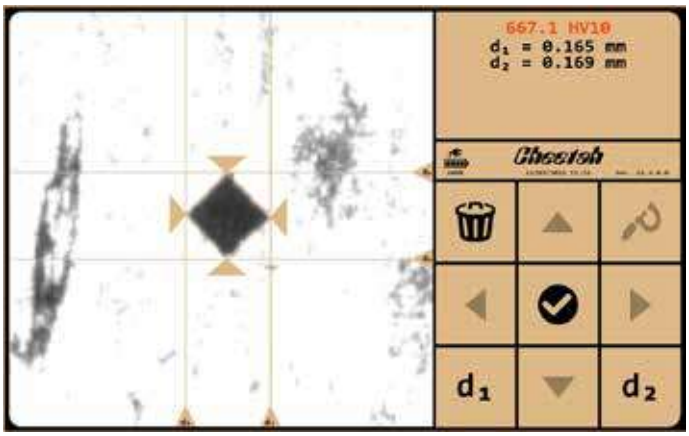
## APPLICATIONS

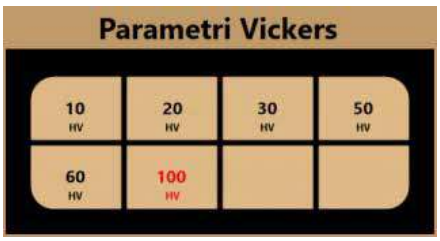
## Brinell and Vickers indentation's digital reader

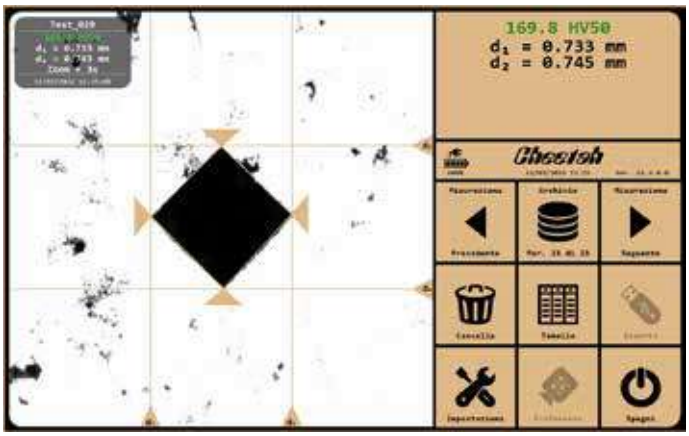
The software allows the user to measure Vickers and Brinell indentation in compliance with ISO and ASTM.

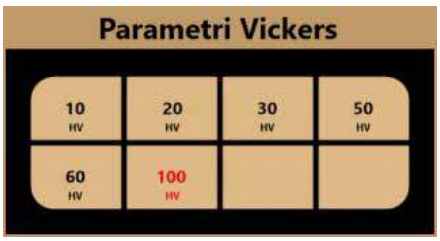


# CHEETAH MEASURING SYSTEM

## INSTRUMENT'S COMPOSITION:

- PC Tablet
- Measuring probe with built-in LED light and USB3 cable
- Measuring software on Windows operating system for automatic and manual reading of Brinell / Vickers indentation
- High-definition camera for optical evaluation of Brinell / Vickers indentation with digital zoom
- Connection cable
- Operating manual

## TECHNICAL FEATURES

Typical parameters of a file are:

- File name, with creation of a tests storage
- Measuring mode Archive/Live
- Digital zoom 1x - 1.5x - 2x - 3x - 5x
- HRC conversion
- Tolerance with insert of min/max limits
- Instrument calibration
- Printing of the report with customisation of company details and own logo
- Indentation images memorisation
- Data export to PDF and EXCEL format
- Images export

- Dimensions: h 140 mm - Ø 50 mm
- Weight: 0.600 kg
- Camera resolution: 1440 x 1080 Pixel
- Brinell diameters range: 0.3 - 6.0 mm
- Vickers diameters range: from diagonals 100 micron

## BRINELL HARDNESS TESTER HBX 0,5

### TECHNICAL FEATURES

**Brinell** hardness tester designed to measure steel and cast iron hardness up to 350 - 400 Brinell; the measurements can be carried out anywhere and in any testing direction.
With this instrument the classic consumables can be saved; it is lightweight, small and portable.
When **HBX 0,5** is pushed down, a pre-loaded spring sets free and releases the load on the underlying workpiece; the force of the spring is guided directly on the indenter. This creates the indentation.
After that, the indentation diameter will be measured thanks to the supplied micrometrical microscope or through digital measuring systems.

## ROCKWELL HARDNESS TESTER PHT

### TECHNICAL FEATURES

The mechanical **Rockwell** hardness tester, even if smaller than a bench one, does not lose in accuracy.
The smallest model weights only 0.7 kg and its use is similar to a classic micrometer. **PHT** directly measures 15 Rockwell scales: A, B, C, D, E, F, G, H, K, L, M, P, R and S (depending on the model).
Its accuracy is compliant with ISO 6508 and ASTM E-18 standards.
The measuring process is fast and easy, it leaves only a small test indentation on the piece's surface.

# PORTABLE WIRELESS HARDNESS TESTER E-HANDY

## Principle based on the measurement of electrical resistance

The E-Handy portable hardness tester is the ideal solution for those seeking precision and reliability in hardness measurements. Based on the patented ESATEST® principle by ERNST, E-Handy uses an innovative testing method that leverages the correlation between penetration depth and residual electrical resistance. This advanced method generates a precise measurement curve as the applied load varies, allowing the hardness tester to accurately determine hardness by comparing the curve with a previously acquired calibration.
Thanks to its cutting-edge technology, E-Handy stands out for its unique ability to measure hardness in extremely small areas, providing reliable and detailed results. Choose e-handy for your hardness measurement needs and discover how this tool can transform your industrial operations.


## Advantages:

• Advanced measurements: Thanks to the ESATEST® principle, E-Handy offers the ability to measure in physically inaccessible points for traditional hardness testers, such as internal cavities, joints, and already assembled components, while preserving the integrity of the parts thanks to the use of very low loads.
• Versatility and precision: Accurately measures even on weld seams and in the Heat Affected Zone (HAZ), providing detailed information about the hardness and surface treatment of materials.
• Advanced connectivity: Allows wireless data sharing up to 100 meters, ensuring a state-of-the-art test results management system.
• Certifications: Compliant with the DIN 50158 standard and certifiable by ACCREDIA (ILAC MRA), the E-Handy hardness tester is designed to operate precisely in all positions.

## Features:

• Principle based on the measurement of electrical resistance – Tests in points inaccessible to traditional hardness testers: gears, couplings, cavities, interiors, weld seams, HAZ (Heat Affected Zone).
• One diamond indenter for the entire range of metals – Simplicity and speed of the testing process.
• Continuous measurement of hardness at various loads and immediate evaluation of the surface heat treatment – A single tool, various detections.
• ACCREDIA certification (ILAC MRA-Mutual Recognition Arrangements) – Offers a competitive advantage in markets where certification is required.

## E-Handy technical features

| | |
|---|---|
| Loads | Real time continuous progressive application with acquisition of load values and electrical resistance from 1kgf to 10kgf (9.81N to 98.1N) |
| Power supply | 100 - 240 V |
| Norms and certifications | DIN 50158, ASTM E-110, ACCREDIA certificate upon request |
| Min. measurable diameter | 5 mm - it is possible to execute tests in small cavities with the use of special penetrators |
| Output interfaces | Tablet with micro USB, micro TF slot, WiFi, Bluetooth, gps |
| Reading | Tablet display touch-screen 5,9" |
| Languages | Italian, English, German, other languages on request |
| Load application method | Manual |
| Weight | Mechanical unit 670 g - Electronic unit 380 g |
| Working principle | ESATEST® Pat ERNST - by means of electrical resistance |
| Standard scales | DRE - HB10 - HB30 - HB5 - HRA - HRB - HRC - HRF - HV - N/mm$^2$ |
| Working area dimensions | 2 x 2 mm |
| Memory | 16 GB |

# CONTACTS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