PREMIUM ★★★


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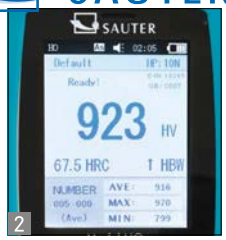

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Premium UCI hardness testing device for Rockwell, Brinell and Vickers

Features

- **Application:** This ultrasound hardness testing device is ideally suited for mobile hardness testing, where the main emphasis is on obtaining rapid and precise results.
- **Principle:** The SAUTER HO measures by using a vibrating rod which vibrates at ultrasonic frequency and is pressed onto the sample at a defined test force. At the lower end there is a Vickers indenter. Its resonant frequency increases as soon as an indentation is created when it comes into contact with the sample. Through appropriate adjustment of the device, the resulting change in resonant frequency is matched with the corresponding Vickers hardness.
- **Examples:** The HO ultrasound hardness testing system is primarily used for measuring small forgings, castings, welding points, punched parts, casting tools, ball bearings and the flanks of gear wheels as well as for measuring the influence of warmth or heat
- **Advantages compared with Rockwell and Brinell:** Less test force and therefore only microscopic, small penetrations means that the testing is less destructive
- **Advantages compared with Vickers:** Demanding optical measuring is not required. You can therefore carry out measurements directly on-site, for example, on a permanently installed workpiece
- **Advantages compared with Leeb:** The high requirements for the weight of the test object are no longer required, in most cases
- **Standards:** The device meets following technical standards: DIN 50159-1-2008; ASTM-A1038-2005; JB/T9377-2013
- 2 **Mini statistics function:** Display of the measuring result, the number of measurements, the maximum and minimum value as well as the average value and the standard deviation
- **Measurement data memory** saves up to 1000 measurement groups each with 20 individual values
- **Calibration:** The device can be set to both standard hardness test blocks and also to up to 20 reference calibration values. When doing this it is possible to measure different materials quickly, without having to re-adjust the device to the individual materials
- 1 Scope of delivery: Display unit, UCI sensor unit, transport case, software to transfer the saved data to the PC, accessories

Technical data

- Measuring ranges: HRC: 20,3–68; HRB: 41–100; HRA: 61-85,6; HV: 80–1599; HB: 76–618; Tensile strength: 255–2180 N/mm²
- Precision: ± 3 HV; ± 1,5 HR; ± 3 % HB
- Measuring time: adjustable from 1-5 sec.
- Display units: HRC, HV, HBS, HBW, HK, HRA, HRD, HR15N, HR30N, HR45N, HS, HRF, HR15T, HR30T, HR45T, HRB.
- Rechargeable battery integrated, standard, operating time up to 12 h without backlight, charging time approx. 8 h
- Minimum weight of the test object: 300 g for direct measurement with the sensor (included); 100 g with support ring (optional)
- Minimum thickness of the test object: 1 mm
- Minimum dimensions the test surface size around: approx. 5×5 mm (recommended)
- Overall dimensions W×D×H 160×83×28 mm
- Permissible ambient temperature -10 °C/40 °C
- Net weight approx. 0,7 kg

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Accessories

- **External impact sensor** Type D, Leeb standard sensor, as standard, can be reordered at any time, SAUTER AHMO D
- 3 **Support ring, flat,** SAUTER HO-A04
- 4 **Support ring, small cylinder,** SAUTER HO-A05
- 5 **Support ring, large cylinder,** SAUTER HO-A06
- 6 **Deep-hole protective cover,** SAUTER HO-A07
- 7 **Calibration and adjustment plate** (hardness test blocks) with defined and tested steel hardness for regular testing and adjustment of hardness testing devices. The hardness values are indicated. A key feature of the plates is the low-granular, homogenous finish of the steel, ⌀ 90 mm, including calibration certificate
  28 to 35 HRC: SAUTER HO-A09
  38 to 43 HRC: SAUTER HO-A10
  48 to 53 HRC: SAUTER HO-A11
  58 to 63 HRC: SAUTER HO-A12
- 8 **Test stand** for repeatable movements during testing. In this way you can avoid errors which could occur with manual handling of the sensor. This ensures even more stable measurements and more precise measuring results. Smooth-running mechanical system, stroke length 34 mm, maximum height of the test object within the test bench 240 mm, swivel probe device for measurements outside the base plate, very robust construction, net weight approx. 9 kg, SAUTER HO-A08

STANDARD: MEMORY · USB · SOFTWARE · UNIT · TOL · ACCU · 230 V · 1 DAY · 2 YEARS WARRANTY

OPTION: ISO +4 DAYS

Model SAUTER	Hardness scale		Option Factory calibration certificates KERN	
HO 1K	HV 1		961-270	
HO 2K	HV 2		961-270	
HO 5K NEW	HV 5		961-270	
HO 10K NEW	HV10		961-270	

NEW New model

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SAUTER Pictograms:

Adjusting program (CAL):
For quick setting of the balance's accuracy. External adjusting weight required.

Calibration block:
standard for adjusting or correcting the measuring device.

Peak hold function:
capturing a peak value within a measuring process.

Scan mode:
continuous capture and display of measurements.

Push and Pull:
the measuring device can capture tension and compression forces.

Length measurement:
captures the geometric dimensions of a test object or the movement during a test process.

Focus function:
increases the measuring accuracy of a device within a defined measuring range.

Internal memory:
to save measurements in the device memory.

Data interface RS-232:
bidirectional, for connection of printer and PC.

Data interface USB:
To connect the balance to a printer, PC or other peripheral devices.

Data interface Infrared:
To transfer data from the balance to a printer, PC or other peripheral devices.

Control outputs (optocoupler, digital I/O):
to connect relays, signal lamps, valves, etc.

Analogue interface:
to connect a suitable peripheral device for analogue processing of the measurements.

Statistics:
using the saved values, the device calculates statistical data, such as average value, standard deviation etc.

PC Software:
to transfer the measurements from the device to a PC.

Printer:
a printer can be connected to the device to print out the measurements.

GLP/ISO record keeping:
of measurements with date, time and serial number. Only with SAUTER printers.

Measuring units:
Weighing units can be switched to e.g. non-metric at the touch of a key. Please refer to website for more details.

Measuring with tolerance range:
Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.

ZERO:
Resets the display to "0".

Battery operation:
Ready for battery operation. The battery type is specified for each device.

Rechargeable battery pack:
rechargeable set.

Mains adapter:
230V/50Hz in standard version for EU. On request GB, AUS or USA version available.

Power supply:
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.

Motorised drive:
The mechanical movement is carried out by a electric motor.

Motorised drive:
The mechanical movement is carried out by a synchronous motor (stepper).

Fast-Move:
the total length of travel can be covered by a single lever movement.

DAkkS calibration possible:
The time required for DAkkS calibration is shown in days in the pictogram.

Factory calibration:
The time required for factory calibration is specified in the pictogram.

Package shipment:
The time required for internal shipping preparations is shown in days in the pictogram.

Pallet shipment:
The time required for internal shipping preparations is shown in days in the pictogram.

Warranty:
The warranty period is shown in the pictogram.

Your SAUTER specialist dealer: