Mobile ultrasound hardness testing device SAUTER HO











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 using a Vickers diamond tip, which is pressed into the test piece with a defined force. After that the tip is moved into high-frequency ultrasound vibrations. The hardness is derived from the attenuation
- 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 fulfils these 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 adjusted to standard hardness comparison plates as well as to individual reference standards
- II 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

- Measurement time: 2 Sek
- Display units: HRC, HV, HBS, HBW, HK, HRA, HRD, HR15N, HR30N, HR45N, HS, HRF, HR15T, HR30T, HR45T, HRB.
- Rechargeable battery pack 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 supporting ring (optional)
- Minimum thickness of the test object: 1 mm
- Minimum dimensions the test surface size around: approx. 5 x 5 mm (recommended)
- Overall dimensions WxDxH 160x83x28 mm
- Permissible ambient temperature -10 °C/40 °C
- Net weight approx. 0,7 kg

Accessories

- 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**

STANDARD

























Model	Hardness scale		Option ISO Calibration Certificate	
			ISO	
SAUTER	kg		KERN	
HO 1K	HV 1		961-270	
HO 2K	HV 2		961-270	

SAUTER Pictograms:





Adjusting program (CAL):

For quick setting of the balance's accuracy. External adjusting weight required.



Data interface Infrared:

(optocoupler, digital I/O):

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



Battery operation:

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



Rechargeable battery pack:

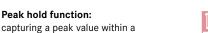
rechargeable set.



Calibration block:

measuring process.

standard for adjusting or correcting the measuring device.





SWITCH

Analogue interface:

Control outputs

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

to connect relays, signal lamps, valves, etc.



ACCU

Mains adapter:

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



PEAK

Scan mode:

Push and Pull:

continuous capture and display of measurements.



Statistics:

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



Power supply:

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

by a single lever movement.



PC Software:

to transfer the measurements from the device to a PC.



Motorised drive:

The mechanical movement is carried out by a motorised drive.



Length measurement:

and compression forces.

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

the measuring device can capture tension



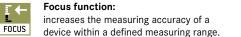
Printer:

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



Fast-Move:

the total length of travel can be covered





GLP/ISO record keeping:

of measurements with date, time and serial number. Only with SAUTER printers.



ISO Calibration:

The time required for ISO calibration is shown in days in the pictogram.



Internal memory:

to save measurements in the device memory.

Data interface RS-232:

bidirectional, for connection



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.



1 DAY

in days in the pictogram.

Package shipment:

Pallet shipment: The time required for internal shipping preparations is shown

The time required for internal

shipping preparations is shown



ZERO:

Resets the display to "0".



Warranty:

The warranty period is shown in the pictogram.

in days in the pictogram.



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RS 232

Data interface USB:

of printer and PC.

To connect the balance to a printer, PC or other peripheral devices.



Your SAUTER specialist dealer: