



Premium UCI hardness testing device for Rockwell, Brinell and Vickers



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



Scope of delivery:

Standard block for calibration (approx. 61 HRC), USB cable, display unit, UCI sensor unit, transport case, software to transfer the saved data to the PC, protective case (turquoise), further accessories



Test stand for repeatable movements during testing. In this way you can avoid errors which could occur in manual handling of the sensor. This ensures even more stable measurements and more precise measuring results, see *accessories*

Mobile Ultrasound Hardness Testing Device SAUTER HO



Features

- This ultrasound hardness testing device is ideally suited for mobile hardness testing, where the main emphasis is on obtaining rapid and precise results
- The SAUTER HO measures by using a vibrating rod with ultrasonic frequency and which is pressed onto the sample with a predefined 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. This frequency displacement is matched with the corresponding Vickers hardness using appropriate adjustment of the device
- The SAUTER 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: Almost non-destructive testing by smaller test force
- 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 concerning the proper weight of the test object can be widely omitted
- The device meets following technical standards: DIN 50159-1; ASTM-A1038-2005; JB/T9377-2013
- Measurement data memory saves up to 1000 measurement groups each with 20 individual values

- The device can be set to both standard hardness test blocks and also to up to 20 reference calibration values. In this way different materials can be measured rapidly without having to re-adjust for individual materials

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
- Measurement precision: $\pm 3\%$ HV; $\pm 1,5$ HR; $\pm 3\%$ HB
- Display units: HRC, HV, HBS, HBW, HK, HRA, HRD, HR15N, HR30N, HR45N, HS, HRF, HR15T, HR30T, HR45T, HRB.
- Minimum weight of the test object: 300 g for direct measurement with the sensor (included); 100 g with supporting ring (optional)
- Minimum dimensions the test surface size around: approx. 5×5 mm (recommended)
- Rechargeable battery pack integrated, as standard, operating time up to 12 h without backlight, charging time approx. 8 h
- Overall dimensions W×D×H 28×83×160 mm
- Net weight approx. 0,95 kg

Accessories

- External impact sensor Type D, as standard, can be reordered, SAUTER AHMO D
- 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, $\varnothing 90$ mm
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

- Test stand for repeatable movements during testing. Smooth-running mechanical system, stroke length 34 mm, maximum height of the test object within the test stand 240 mm, swivel probe device for measurements outside the base plate, very robust construction, net weight approx. 9 kg, SAUTER HO-A08
- Motorised probe. Enables testing at the touch of a button while maintaining the same procedure (while stocks last)
HV 0,3, SAUTER HO-A15
HV 0,5, SAUTER HO-A16
HV 0,8, SAUTER HO-A17
HV 1, SAUTER HO-A18

SAUTER HO 1K, HO 2K

- Support ring, flat, SAUTER HO-A04N
- Support ring, small cylinder, $\varnothing 8$ -20 mm, SAUTER HO-A05N
- Support ring, large cylinder, $\varnothing 20$ -80 mm, SAUTER HO-A06N

SAUTER HO 5K, HO 10K

- Support ring, flat, SAUTER HO-A04
- Support ring, small cylinder, $\varnothing 8$ -20 mm, SAUTER HO-A05
- Support ring, large cylinder, $\varnothing 20$ -80 mm, SAUTER HO-A06
- Deep-hole protective cover, SAUTER HO-A07

STANDARD



OPTION



Model	Hardness scale	Min. weight of test item	Min. thickness of test item	Option
				Factory Calibration Certificate
SAUTER		g	mm	KERN
HO 1K	HV 1	300	2	961-270
HO 2K	HV 2	300	2	961-270
HO 5K	HV 5	300	2	961-270
HO 10K	HV 10	300	2	961-270