

## PRODUCT BROCHURE

# SAUTER HO 1K

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ENGLISH



Premium UCI hardness testing device for Rockwell, Brinell and Vickers

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## PRODUCT SHOWCASE



## DESCRIPTION

- **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 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 and thus only microscopic indentation craters
- **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

- Standards: 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
- 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
- Calibration: The device can be set to both standard hardness test blocks as well as 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
- 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

## SPECIFICATIONS

### Article codes, product groups & Status information

Model article-code	HO 1K
Model-Serie	HO
Assortment	Sauter
Product Type	Hardness measurement
Product group	Hardness testers (UCI)
Product usage type	Main article
EAN code (Model)	4045761184138
Customs tariff number	90248000
CE Label	yes

### Technical data - Primary

Measuring range Rockwell - scale A	37-85HRA
Measuring range Rockwell - scale B	41-100HRB
Measuring range Rockwell - scale C	20,3-68HRC

### Technical data - Construction

Dimension housing (W×D×H)	28×83×160 mm
Material housing	coated metal

### Technical data - Display

Display type	LCD graphic
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### Technical data - Power supply

Power supply	Battery & Power supply
Battery type	Li-Ion
Input voltage power supply / max. voltage	110 - 240 V
Power socket for power supply unit	Micro-USB
Mains adapter/adaptor included	EURO
Protection Class	no protection class

### Technical data - Measuring system

Measuring range Vickers	80-1599HV
Measuring range Brinell	79-618HB
Measuring range tensile strength	255-2180MPa
Hardness scales	HV 1
Test force Hardness measurement	10 N
Units	HB;HL;HRA;HRB;HRC;HV;MPa
Test item - weight - minimum	300 g
Measuring probe - length	15,5 cm
Measuring probe - diameter	18 mm

### Technical data - Functions

Statistic-Function	yes
Averaging	yes
Auto-Off	30 min
Limit value (Min - Max)	yes
Audible ready signal	yes
Optical ready signal	yes
360° Measuring	yes
Interfaces	USB-Device

### Technical data - Packing & Shipping

Dimensions packaging (W×D×H)	395×325×150 mm
Gross weight	4.6 kg
Net weight	0.95 kg
Shipping method	Parcel service

UN number	Li-Ion, packed with device (UN 3481, Packing Instruction #7, Lithium ion batteries in compliance with Section II of PI 967)
Packaging component - by weight - cardboard	1740 g
Packaging component - by weight - styrofoam	1740 g
Delivery time	1 d

### Technical data - Counting data

Memory	yes
Memory - Number of results	1.000

### Optional Services

Factory calibration	961-270
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### FUNCTIONS

#### Standard



#### Option



## ACCESSORIES

Model	Description
AHMO D	External recoil sensor (Type D) SAUTER AHMO D
HMO-A04	Cable SAUTER HMO-A04
HO-A01	UCI probe SAUTER HO-A01
HO-A02	UCI probe SAUTER HO-A02
FL-A01	Interface cable FL-A01
HO-A08	Manual Test Stand SAUTER HO-A08
HO-A09	Plate SAUTER HO-A09
HO-A10	Plate SAUTER HO-A10
HO-A11	Plate SAUTER HO-A11
HO-A12	Plate SAUTER HO-A12
HO-A14	UCI probe SAUTER HO-A14
HO-A16	UCI probe SAUTER HO-A16
HO-A17	UCI probe SAUTER HO-A17
HO-A19	Manual Test Stand SAUTER HO-A19
HO-A21	Transport case SAUTER HO-A21
RHO-7001	Rechargeable battery pack SAUTER RHO-7001
HO-A04N	Supporting Ring SAUTER HO-A04N
HO-A05N	Supporting Ring SAUTER HO-A05N
HO-A06N	Supporting Ring SAUTER HO-A06N
HO-A23	Plate SAUTER HO-A23

## SERVICES

Model	Description
961-270	Factory calibration KERN 961-270
970-117	Warranty extension KERN (+2 years) 970-117

## SPARE PARTS

Model	Description
HO-A03	Display device HO-A03
RHO-7001	Rechargeable battery pack SAUTER RHO-7001
HO-A22	Power supply KERN HO-A22

Model	Description
OBB-A1569	UK power supply unit KERN OBB-A1569

## RELATED ARTICLES DATA

Model name	Measuring range Rockwell - scale A	Measuring range Rockwell - scale B	Measuring range Rockwell - scale C
HO 1K	37-85HRA	41-100HRB	20,3-68HRC
HO 2K	61-85,6HRA	41-100HRB	20,3-68HRC
HO 5K	61-85,6HRA	41-100HRB	20,3-68HRC
HO 10K	61-85,6HRA	41-100HRB	20,3-68HRC