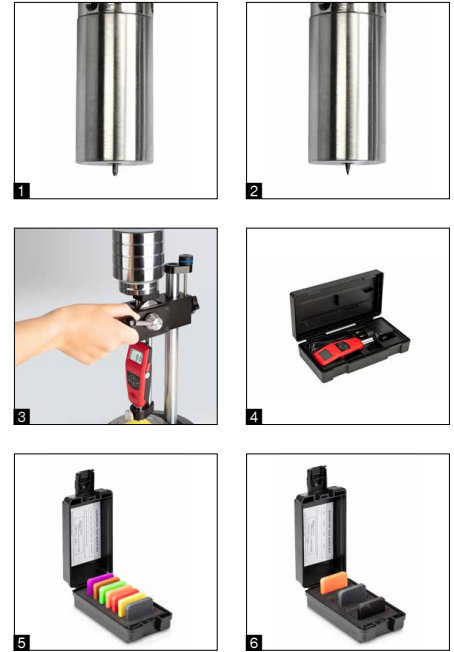


Digital Shore Hardness Tester SAUTER HE



**NEW**



## Shore hardness tester with extensive functionality

### Features

- To measure the hardness of plastics through penetration measurement
- **1** Shore A: Rubber, elastomers, neoprene, silicone, vinyl, so plastics, felt, leather and similar material
- **2** Shore D: Plastics, formica, epoxides, plexiglass etc.
- Different measuring modes: Average value, maximum value, chronological sequence
- Limit alarm function, which triggers an audible and visual signal when the value goes below or above the defined limits
- Entering the workpiece number is possible
- Setting the measuring time from 0 to 99 seconds
- Recommended for internal comparison measurement
- **3** Can be attached to the test stands SAUTER TI-HEA (for Shore A), SAUTER TI-HED (for Shore D) to improve the measurement result, see *Accessories*
- Large display with backlight
- Battery status indicator
- USB data interface, as standard
- **4** Delivered in a robust carrying case

### Technical data

- Tolerance: 1 % of [Max]
- Overall dimensions WxDxH 153x50x29 mm
- Net weight approx. 0,20 kg
- Internal memory for up to 500 results
- Test force hardness measurement  
SAUTER HEA: 10 N  
SAUTER HED: 50 N
- Diameter of measuring probe: 18 mm
- Material thickness of the sample, min. 6 mm
- Rechargeable battery pack integrated, as standard, operating time up to 20 h without backlight, charging time approx. 3 h

### Accessories

- Shore comparison plates for testing and calibration of Shore hardness testing devices. By regular comparisons the measuring accuracy increases significantly
- **5** 7 hardness comparison plates for Shore A, tolerance up to  $\pm 2$  HA, SAUTER AHBA-01
- **6** 3 hardness comparison plates for Shore D, tolerance up to  $\pm 2$  HD, SAUTER AHBD-01
- Factory calibration of the comparison plates, SAUTER 961-170
- Test stand for HEA 100, SAUTER TI-HEA
- Test stand for HED 100, SAUTER TI-HED

STANDARD



Model	Hardness scales	Measuring range	Readability
SAUTER		[Max]	[d]
HEA 100	Shore A	100 HA	0,1 HA
HED 100	Shore D	100 HD	0,1 HD

**NEW** New model

 <p><b>Adjusting program (CAL)</b> For quick setting of the instrument's accuracy. External adjusting weight required</p>	 <p><b>Bluetooth* data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring units</b> Weighing units can be switched to e.g. non-metric. Please refer to website for more details</p>	 <p><b>Conformity assessment</b> Models with type approval for construction of verifiable systems</p>
 <p><b>Calibration block</b> Standard for adjusting or correcting the measuring device</p>	 <p><b>WIFI data interface</b> To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p><b>Measuring with tolerance range (limit-setting function)</b> Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model</p>	 <p><b>DAkkS calibration possible</b> The time required for DAkkS calibration is shown in days in the pictogram</p>
 <p><b>Peak hold function</b> Capturing a peak value within a measuring process</p>	 <p><b>Data interface infrared</b> To transfer data from the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>Protection against dust and water splashes IPxx</b> The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989 +A1:1999+A2:2013</p>	 <p><b>Factory calibration (ISO)</b> The time required for factory calibration is specified in the pictogram</p>
 <p><b>Scan mode</b> Continuous capture and display of measurements</p>	 <p><b>Control outputs (optocoupler, digital I/O)</b> To connect relays, signal lamps, valves, etc.</p>	 <p><b>ZERO</b> Resets the display to "0"</p>	 <p><b>Package shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Push and Pull</b> The measuring device can capture tension and compression forces</p>	 <p><b>Analogue interface</b> To connect a suitable peripheral device for analogue processing of the measurements</p>	 <p><b>Battery operation</b> Ready for battery operation. The battery type is specified for each device</p>	 <p><b>Pallet shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p><b>Length measurement</b> Captures the geometric dimensions of a test object or the movement during a test process</p>	 <p><b>Analogue output</b> For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)</p>	 <p><b>Rechargeable battery pack</b> Rechargeable set</p>	
 <p><b>Focus function</b> Increases the measuring accuracy of a device within a defined measuring range</p>	 <p><b>Statistics</b> Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.</p>	 <p><b>Plug-in power supply</b> 230V/50Hz in standard version for EU. On request GB, AUS or US version available</p>	
 <p><b>Internal memory</b> To save measurements in the device memory</p>	 <p><b>PC Software</b> To transfer the measurement data from the device to a PC</p>	 <p><b>Integrated power supply unit</b> Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request</p>	
 <p><b>Data interface RS-232</b> Bidirectional, for connection of printer and PC</p>	 <p><b>Printer</b> A printer can be connected to the device to print out the measurement data</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by an electric motor</p>	
 <p><b>Profibus</b> For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference</p>	 <p><b>Network interface</b> For connecting the scale/measuring instrument to an Ethernet network</p>	 <p><b>Motorised drive</b> The mechanical movement is carried out by a synchronous motor (stepper)</p>	
 <p><b>Profinet</b> Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible</p>	 <p><b>KERN Communication Protocol (KCP)</b> It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems</p>	 <p><b>Fast-Move</b> The total length of travel can be covered by a single lever movement</p>	
 <p><b>Data interface USB</b> To connect the measuring instrument to a printer, PC or other peripheral devices</p>	 <p><b>GLP/ISO record keeping</b> of measurement data with date, time and serial number. Only with SAUTER printers</p>		

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