

Digital Shore hardness tester SAUTER HD









Professional Shore hardness tester

Features

- Shore A, 0 and D to measure the hardness of plastics through penetration measurement
- Shore A rubber, elastomers, neoprene, silicone, vinyl, soft plastics, felt, leather and similar material
- · Shore 0 foam, sponge
- · Shore D plastics, formica, epoxides, plexiglass etc.
- · Delivered in a robust carrying case
- · Particularly recommended for internal comparison measurement. Standard calibrations e. g. to DIN 7619-1 are not possible because of very narrow standard tolerances
- · Can be attached to the test stands TI-ACL (for Shore A and 0), TI-DL (for Shore D) to improve measuring uncertainty
- · Large display with backlight
- · Selectable: AUTO-OFF function or continuous operation, battery level indicator

Technical data

- Tolerance: 1 % of [Max]
- Overall dimensions W×D×H 65×38×162 mm
- Net weight approx. 173 g
- Permissible ambient temperature 0 °C/50 °C
- Transfer via RS-232 to the PC, e.g. to Microsoft Excel®
- Measuring frequency: 30 display updates per
- · Battery operation, batteries standard 2× 1.5 V AAA
- · Material thickness of the sample, min. 4 mm

Accessories

- · Data transfer software, interface cable included, SAUTER ATC-01
- 11 7 hardness comparison plates for Shore A, tolerance up to ± 2 HA, SAUTER AHBA-01
- 2 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 HDA and HD0, SAUTER TI-ACL
- Test stand for HDD, see page 52, **SAUTER TI-DL**

STANDARD

















Model	Hardness type	Measuring range	Readout	
SAUTER		[Max] HS	[d] HS	
HDA 100-1.	Shore A	100 HA	0,1 HA	
HD0 100-1.	Shore 0	100 H0	0,1 H0	
HDD 100-1.	Shore D	100 HD	0,1 HD	



Pictograms



Adjusting program (CAL):

For quick setting of the instrument'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 measuring instrument to a printer, PC or other peripheral devices.



Data interface Infrared:

To transfer data from the measuring instrument 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 measurement data from the device to a PC.



Printer:

a printer can be connected to the device to print out the measurement data.



GLP/ISO record keeping:

of measurement data 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 (limit-setting function):

Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model



ZERO

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.

Your KERN specialist dealer: