

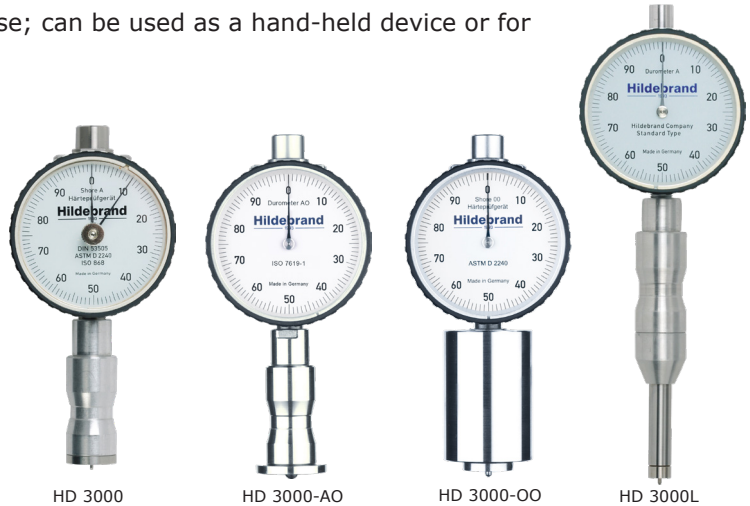
HARDNESS TESTER

Series HD 3000: SHORE-Hardness Tester with analog display

Low cost SHORE-Hardness tester for the universal use; can be used as a hand-held device or for series tests in the operating stand model OS-2.

Features:

- Drap pointer available
- Large dial surface
- Full 360° dial
- Superior 1/2 point accuracy
- Ergonomic handheld design
- Conform to DIN ISO 7619, ISO 868, ISO 7619 and ASTM D2240
- Special version „HD3000L“ for measurement in hard-to-reach places



Series HDD2: SHORE-Hardness Tester with digital display

The digital SHORE-Hardness tester for precise and reproducible measurements; can be used as a hand-held device or for series tests in the operating stand model OS-2 or OS-3.

Features:

- Conform to DIN ISO 7619, ISO 868, ISO 7619 and ASTM D2240
- Large LCD display
- Time set-up from 1 ... 99 s
- Resolution 0,1
- Superior 1/2 point accuracy
- Ergonomic handheld design
- AUTO-OFF function
- HOLD-function
- Low battery warning
- Data port: RS 232
- Windows compatible PC Software (multi lingual) real time visualisation, processing of results, etc.- optional



Options:

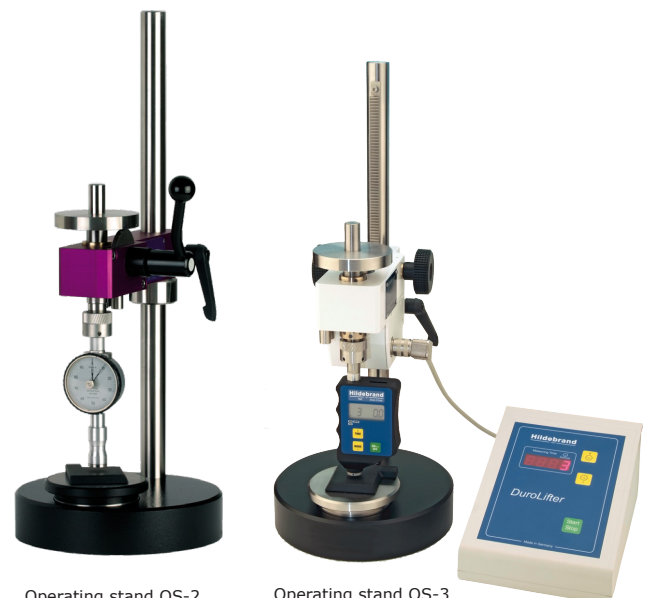
Operating stand OS-2

The Operating stand model OS-2 was developed for series testing in order to be able to determine accurate and reproducible results.

Subjective measurement errors caused by incorrect contact pressure or non-vertical measurement are eliminated.

Operating stand type OS-3

The durometer operating stand OS-3 is a fully automatic system for Shore hardness testing. The system consists of the operating stand and the DuroLifter control panel.



Technical data:

	HD 3000	HDD2	OS-2 / OS-3
Description			
HardnessTester for SHORE	A,B,C,D,DO,O, OO	A,B,C,D,DO,O, OO and Asker C	A, AO, B,C,D,DO,O, OO ¹⁾
Display	SHORE analog	SHORE digital	-
Characteristics			
Range [Shore]	0 ... 100	0.5 ... 100	
Accuracy [Shore]	±0.5	±0.5	
Resolution [Shore]	1	0.1	
Weight [kg]	0.213	0.250	16.4 / 18
Data port	-	RS232	-
Dimensions			
Dial diameter [mm]	57	-	
Total length [mm]	121	-	
Width [mm]	-	64	
Height [mm]	-	112	
Depth [mm]	-	26	
Extension [mm]	-	-	115 / 105
Support table diameter [mm]	-	-	98
Max. sample thickness [mm]	-	∞	180

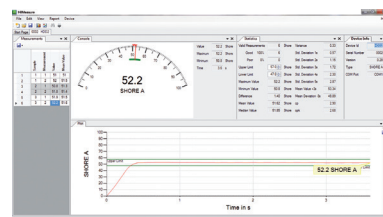
¹⁾ Special variant (OS-2-OO) excl. for SHORE OO measurements

Micro IRHD Hardness Tester

The MICRO IRHD SYSTEM provides hardness readings on elastomers according to MICRO IHRD. Recommended specimen thickness is 1 to 5 mm. It complies to international standards such as DIN ISO 48, ISO 48, ASTM D 1415 and BS 903:Part 26A.

Features:

- Automatic measurement
- Modular system
- Automatic table movement
- Built-in Auto-Diagnostics
- PC-controlled
- User friendly Windows Software



Options:

O-Ring centering device

The patented O-Ring Center Device fully automatically cooperates with the MICRO IRHD SYSTEM. O-Rings with a cord diameter of 0.6 mm to 8 mm will be placed on the measuring table and pushed to the positioning pin. The cord is keyed into the MICRO IRHD software. Integrated electric motors are exactly driving the measuring table to the measuring axis. This results in measuring the highest position of the O-ring.



X-Table centering device with sample holder

The centering device with sample holder fully automatically cooperates with the MICRO IRHD SYSTEM. This fixture is designed to measure O-Rings and round style parts. Each sample requires a sample holder which has an identification number. This number is keyed into the MICRO IRHD software. An integrated electric motor is driving the measuring table to the exact position of the measuring axis. After the first measurement, the sample holder can rotate to the next measurement at a different spot.

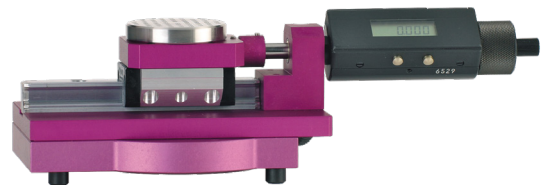


X-Table centering device

The X-Table centering device with digital gauge has to be used with the MICRO IRHD SYSTEM. This fixture is designed to measure small irregular parts. Two straight pins are used as rest positions for the sample. The sample can be easily fixed with modelling clay. The digital gauge enables exact measuring at the measuring axis e. g. the highest point of the sample.

Features:

- Digital gauge: 0...25 mm, resolution: 0.001 mm
- Standard sample holder: Exterior dia.: 50 mm, Matrix 5 mm x 5 mm, 60 holes dia. 2H7
- Connecting hole in base for sample holder: 8H7
- Sample holder is fixed with a straight pin preventing rotation



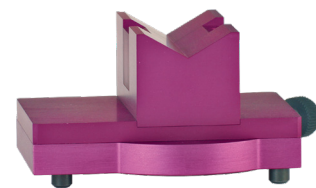
Prism centering device

The prism centering device is designed to measure hoses and cables and can be used with the following systems:

- Micro IRHD System
- IRHD N, H, L / Durometer Hardness System
- Durometer operating stands

Features:

- Fixture enables exact measuring at the measuring axis
- Exterior diameter of sample: 4...50 mm
- Centering prism is removable to measure bigger parts



Technical data:

	Micro IRHD
Characteristics	
Resolution [IRHD]	0.1
Weight [kg]	17.5
Data port	RS 232
Power supply [V/Hz]	230 / 50
Dimensions	
Measuring unit [mm]	Ø 200 x 470
Controller	
Width [mm]	290
Height [mm]	75
Depth [mm]	260
Max. sample thickness without centering device [mm]	90