Automatic Shore, IRHD and VLRH Hardness Testing System

Standards: DIN ISO 7619, DIN ISO 48, DIN EN ISO 868, NF EN ISO 868, ASTM D2240, BS 903 Part. A 26, NF T 46-003, ASTM D1415, DIN ISO 27588

- ULTIMATE USER-FRIENDLINESS
- LEADING DEPENDABILITY AND RELIABILITY
- STRICT COMPLIANCE WITH INDUSTRY STANDARDS
- STOCKED CONSUMABLES AND SPARES
- TRUSTED AFTER SALES TECHNICAL SUPPORT
- LIFETIME PRODUCT SUPPORT ADVANTAGE

GET A QUOTE

Description

Digi Test II is an automatic Shore, IRHD and VLRH hardness testing system. The unit comes equipment with 4 main components: Electronic unit, the loading module (pick-up bracket), the test stand, and the interchangeable measuring unit for methods of Shore, IRHD and VLRH.

The Digi Test II is a very smart device equipped with an electronic unit that functions as the main control for the display of user information, measurement of method and time, the selection of various features and the whole system. This automatic shore / IRHD system is a the preferred solution for automotive industry, rubber and plastic industry, defense and aerospace industry, and more.

Official DAkkS-Certificates

Offering official DKD/DAkkS-Certificates for the exchangeable measuring devices.

Automatic Centering Ring for IRHD - Barofix

Centering device for quick centering of rubber tubes or hoses

Features and Benefits

- Programmable measuring time, 1-99 sec
- Accuracy: 0.1 (1/10 of shore value)
- Compliance with ASTM D2240
- Electronic unit provides clear display of measured value, navigation menu and Data Output.

- Easy to use with limited operator influence to guarantee accurate and repeatable hardness test results every time.
- Reading in the display gives assistance for the correct selection of the measuring device during your measurement when the measured value is above or below the limit value.
- USB-interface for data transfer.
- Modular, digital hardness testing system.
- Interchangeable measuring units offering industry leading flexibility of testing to be performed on a single system.
- Automatic identification of the measuring range and of the measuring time.
- Integrable in an automatic production process.
- Hysteresis function

Hardness testing on concave and convex surfaces

Different from the usual hardness testers that can only measure flat-surfaced samples, the NextGen's digitest II measures hardness on every surface by making use of an automatic surface detection technology. Also the indenter length is customizable, making it extendable to any point on the sample that is to be measured.

Sample holders and positioning devices

NextGen offers several standard sample holders however, we are committed to offering you customized holders that suits your product. Kindly contact the sales team for bespoke

solutions. Down this page you will find some of the standard positioning devices for tubes and O-Rings.

Measuring Devices

There is no need for setting up since it's a plug and play. To install the measuring unit, simply fasten the knurl nut, after this the electronic unit automatically detects the type of the installed method of measurement and time acc. to standards.

IRHD N/H/L

Suitable for plastically deformable materials from 6 up to 10 mm, highly elastic materials and soft rubbers.

IRHD L

Suitable for Hysteresis function from 10 up to 12 mm

Shore 00/000

Suitable for foam rubber, silicone, sponge and cellular rubber, and gel like materials with material thickness of 6 mm Hysteresis function.

VLRH

Suitable for foam rubber, silicone, sponge and cellular rubber, and gel like materials with material thickness of 1 mm Hysteresis function.

Shore A/B/0 Suitable for convex and concave shaped parts of a material thickness of 4 or 6 mm

Micro Shore A

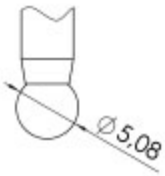
Suitable for materials with minimum material thickness of 1 mm

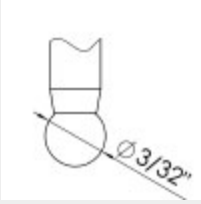
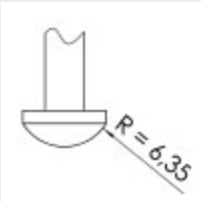
Shore D/C/D0 Suitable for shaped parts with thickness of up to 4 or 6 mm

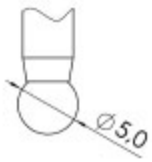
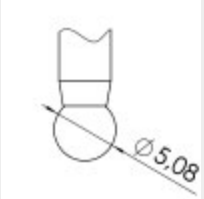
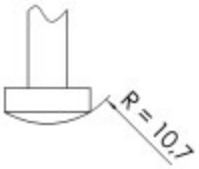
Micro Shore D

Suitable for those with minimum thickness of 1 mm.

Automated O-Ring Measuring Device Fully-automated laser measuring device for precise o-ring hardness testing

Test Method	Range of Application	Standard	Minimum Material Thickness [mm]	Indenter [mm]
Shore A	soft rubber, elastomers, natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc ...	DIN EN ISO 868 ------- DIN ISO 7619, ASTM D 2240, NFT 51-174, BS903 Part. A 26	4 ------- 6	
Asker C	see Shore A	SRIS 0101, ABNT NBR 14455	6	
Shore A0	see Shore A	DIN ISO 7619 ASTM D 2240	6	
Shore A0	see Shore A	DIN ISO 7619 ASTM D 2240	6	
Shore D	hard rubber, hard plastics, acrylic glass, polystyrene, rigid thermoplastics, Resopal, pressure rollers, Vinyl plates, cellulose-Acetate, etc ...	DIN EN ISO 868 ------- DIN ISO 7619, ASTM D 2240, NFT 51-174, BS903 Part. A 26	4 ------- 6	

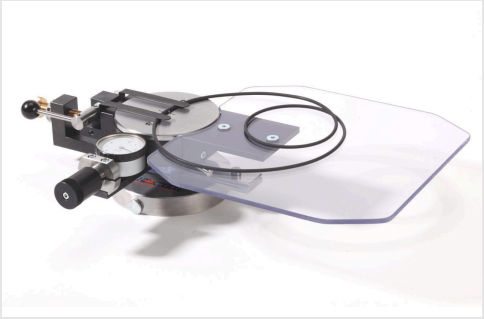
Test Method	Range of Application	Standard	Minimum Material Thickness [mm]	Indenter [mm]
Shore B	middle hard materials from rubber, typewriter roles, flat materials	ASTM D 2240	6	
Shore C	plastics and middle hard rubber materials	ASTM D 2240	6	
Shore D0	plastics and middle hard rubber materials	ASTM D 2240	6	
Shore 0	soft elastic materials, pressure rolls, middle firm, textile fabrics, nylon, orlon, perlon, rayon	ASTM D 2240	6	
Shore 00	sponge- and foam rubber, cellular rubber, silicone	ASTM D 2240	6	
Shore 000	sponge- and foam rubber, cellular rubber, silicone	ASTM D 2240	6	

Test Method	Range of Application	Standard	Minimum Material Thickness [mm]	Indenter [mm]
Shore A0 **Shore E**	see Shore A	DIN ISO 7619 ASTM D 2240	6	
Asker CS	see Shore D	SRIS 0101	6	
Shore 000 S	see Shore 00 / 000	ASTM D 2240	6	
Metal Hardness				
Barcol	fibre-glass reinforced plastics, thermosetting plastics, hard thermo-plastics, aluminum	DIN EN 59, ASTM D 2583	1.5	

Sample Holders, Positioning Devices and Accessories

Barofix

This is a device for centering in O-Rings with outer diameter of 200mm and cord diameter falling between 0,6 to 5,0 mm.
Comes with a sample clamping device and plexiglas plate of 200 x 200 mm dimension.



Barofix II/Barofix III/Barofix IV

Automatic centering device for fast centering of O-rings to enable a reduction in the influence of operators.

Compatible with only digi test II.

Centrofix Centering device for speedy centering of hose or rubber tubes.

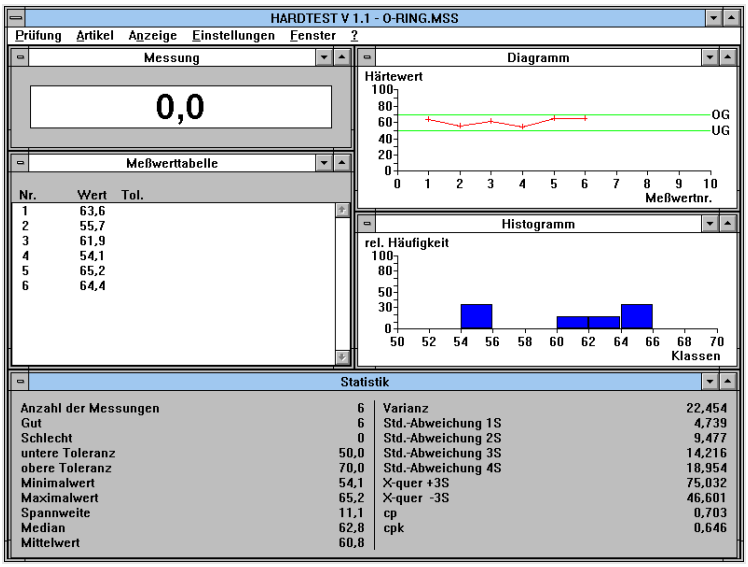
Centrofix for Oil Seals Centering device that makes measurement possible at every part of the oil seal.

Reference plates

Due to possible frequent recalibration standard rubber blocks are used to maintain the metrological capability of the measuring device account to IRHD. The rubber blocks are embedded in a stainless steel holder.

Hardtest - the test - and evaluation software program

Can be applied on every NextGen testing devices that has a serial interface. Every function needed for a fault free process is embedded in the program.



DAkkS/DKD calibration certificate

Several measurements and standard references are used to determine the given deviation during the calibration of a measuring instrument. After this, a calibration certificate will be issued showing the measuring results and the resulting measurement uncertainties is ticked as calibrated.

The calibration certificate as well as all the documents reflects the national standards.

Range of Application

Rubber - and plastics hardness

Test.Method	Range of Application	Standards	Min.Thickness
Shore A	soft rubber, elastomers, DIN EN ISO 868 4 natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc...	DIN EN ISO 868	4 mm
Shore A	soft rubber, elastomers, DIN EN ISO 868 4 natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc...	DIN ISO 7619, DIN 53505, ASTM D 2240, NFT 51-174, BS903 Part. A 26	6 mm

Test.Method	Range of Application	Standards	Min.Thickness
Asker C	soft rubber, elastomers, DIN EN ISO 868 4 natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc...	SRIS 0101, ABNT NBR 14455	6 mm
Shore A0 Shore E	soft rubber, elastomers, DIN EN ISO 868 4 natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc...	DIN ISO 7619 ASTM D 2240	6 mm
M Shore A	soft rubber, elastomers, DIN EN ISO 868 4 natural rubber products, neoprene, casting resin, polyester, soft PVC, leather, pressure rollers, etc...	Bareiss standard	0,5 mm
Shore D	hard rubber, hard DIN EN ISO 868 4 plastics, acrylic glass, polystyrene, rigid thermoplastics, Resopal, pressure rollers, Vinyl plates, cellulose-Acetate, etc...	DIN EN ISO 868	4 mm
Shore D	hard rubber, hard DIN EN ISO 868 4 plastics, acrylic glass, polystyrene, rigid thermoplastics, Resopal, pressure rollers, Vinyl plates, cellulose-Acetate, etc...	DIN ISO 7619, ASTM D 2240, NFT 51-174, BS903 Part. A 26	6 mm
Asker CS	see Shore D	SRIS 0101	6 mm
M Shore D/C/D0	see Shore D 0,5	Bareiss standard	1,5 mm
M Shore D/C/D0	see Shore D 0,2	Bareiss standard	1,5 mm
Shore B	middle hard materials from rubber, typewriter roles, flat materials	ASTM D 2240	6 mm
Shore C	plastics and middle hard rubber materials	ASTM D 2240	6 mm
Shore D0	plastics and middle hard rubber materials	ASTM D 2240	6 mm

Test.Method	Range of Application	Standards	Min.Thickness
Shore 0	soft elastic materials, pressure rolls, middle firm, textile fabrics, nylon, orlon, perlon, rayon	ASTM D 2240	6 mm
Shore 00	sponge- and foam rubber, cellular rubber, silicone	ASTM D 2240	6 mm
Shore 000	sponge- and foam rubber, cellular rubber, silicone	ASTM D 2240	6 mm
Shore 000 S	see Shore 00 / 000	ASTM D 2240	6 mm
Type AM/M	see Shore A	DIN ISO 7619 ASTM D 2240	1,5 mm
IRHD M	thin walled O-rings, moulded parts, standard plates	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	0,6 mm
IRHD H	see Shore D	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	6 mm
IRHD N	soft rubber, high elastic materials, plastic ductile materials	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	6 mm
IRHD L	sponge- and foam rubber, cellular rubber, silicone	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	10 mm
VLRH	sponge- and foam rubber, cellular rubber, silicone	DIN ISO 27588	2 mm
Pusey & Jones	rubber- or rubberlike materials, rubber rollers for the paper industry	ISO 7267-3, ASTM D 531	13 mm

Services

Services we offer:

- Testing Service
- Calibration Service
- Training
- Testing devices on loan during recalibration
- Maintenance Contract

Watch Video

Watch the Automatic Shore, IRHD and VLRH Hardness Testing System product video.

WATCH ON YOUTUBE

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