

HARDNESS TESTING ON ELASTOMERS AND PLASTICS  
ACCORDING TO SHORE, IRHD, VLRH



# dig<sub>i</sub> test II

The modular dig<sub>i</sub> test II consists of 4 major components, the test stand, the loading module, the electronic unit and the interchangeable measuring unit for methods of IRHD, Shore and VLRH. The dig<sub>i</sub> test II with standard specification is designed to be used in laboratories and customization is possible to make dig<sub>i</sub> test II an ideal integration into customer's production lines.



## TYPES OF MEASURING METHODS

Shore A, A0, 0, C, D, D0, 00, 000, 000 S, E, micro Shore A, micro Shore D, Shore AM/M, IRHD L, IRHD N, IRHD M, IRHD H, VLRH

## STANDARDS

DIN ISO 7619, DIN EN ISO 868, DIN 53505, ASTM D 2240, DIN ISO 48, DIN ISO 27588, NFT 46-003, ASTM D 1415, JIS K 6253

## BASIC SPECIFICATION

The basic specification of dig<sub>i</sub> test II consists of a test stand, a loading module and an electronic unit.



digi test II - Basic Specification

## MEASURING UNITS

The easy plug-and-play solution requires no complicated setup. The measuring unit can be securely installed simply by hand fastening a knurl nut and once done, the electronic unit automatically detects the type of the installed measuring method and time.



IRHD N



M Shore A



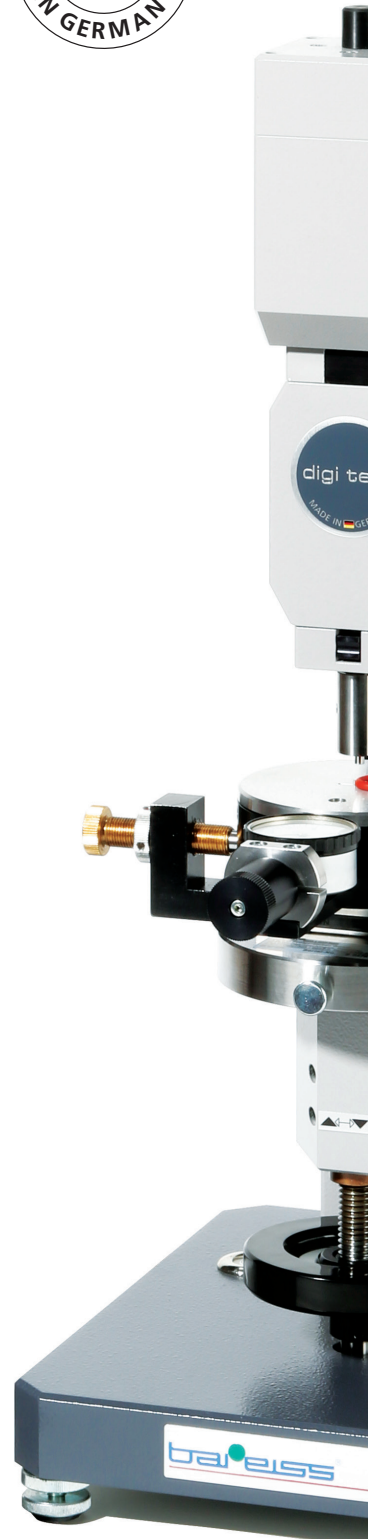
Shore D/C/D0



Shore A/B/0



Shore 00



MADE BY BAREISS IN GERMANY – YOUR SOLUTION PROVIDER SINCE 1954!

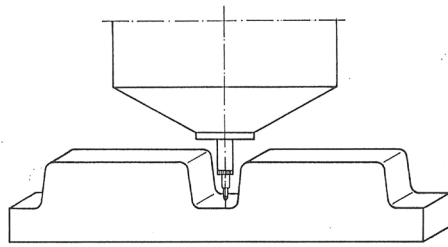
## AREAS OF APPLICATION

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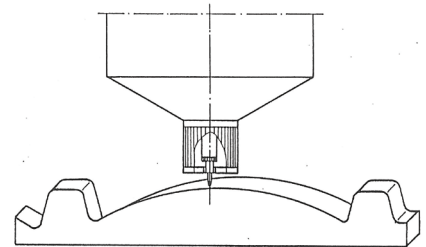
THE REVOLUTIONARY DIGI TEST II IS DESIGNED AS AN ALL-IN-ONE SOLUTION TO COPE WITH THE DIVERSE HARDNESS MEASURING REQUIREMENTS NOWADAYS ON RAW MATERIALS, STANDARD TEST PIECES AND EVEN FINISHED PRODUCTS. THE BAREISS DIGI TEST II IS COMMONLY USED IN INDUSTRIES SUCH AS RUBBER AND PLASTIC PARTS MANUFACTURE, AUTOMOBILE AND PARTS MANUFACTURE, MATERIAL TESTING AND DEVELOPING INSTITUTES, QUALITY CONTROL LABORATORIES AND SO ON.

### HARDNESS TESTING ON CONVEX AND CONCAVE SURFACES

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Hardness testing on a concave surface



Hardness testing on a convex surface

Unlike the conventional hardness testers which are limited to only flat-surfaced samples measuring, the Bareiss digi test II is making hardness testing on all surfaces possible by using the automatic surface detection technology.

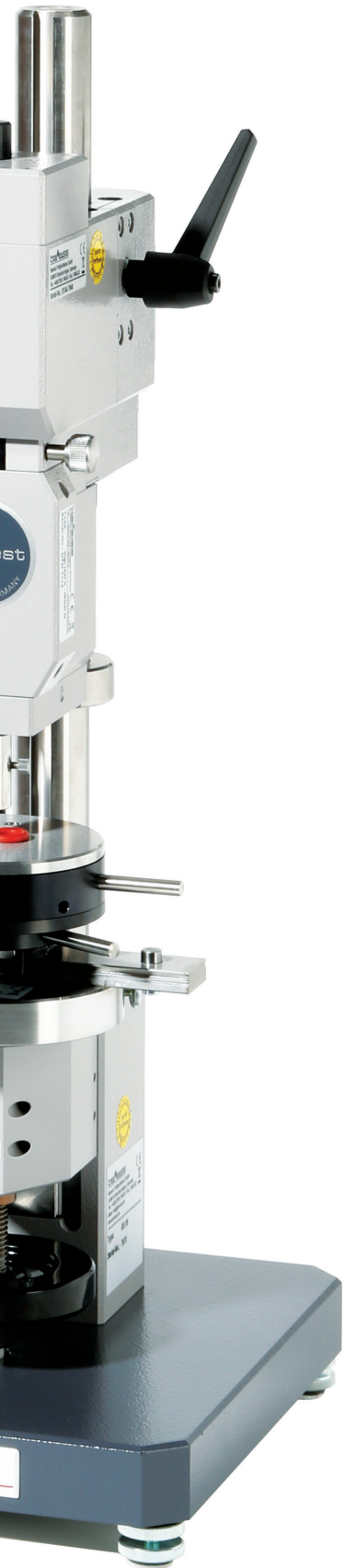
In addition to that, we are able to customize our indenter length so that it can reach any point on the sample which is required for measuring.

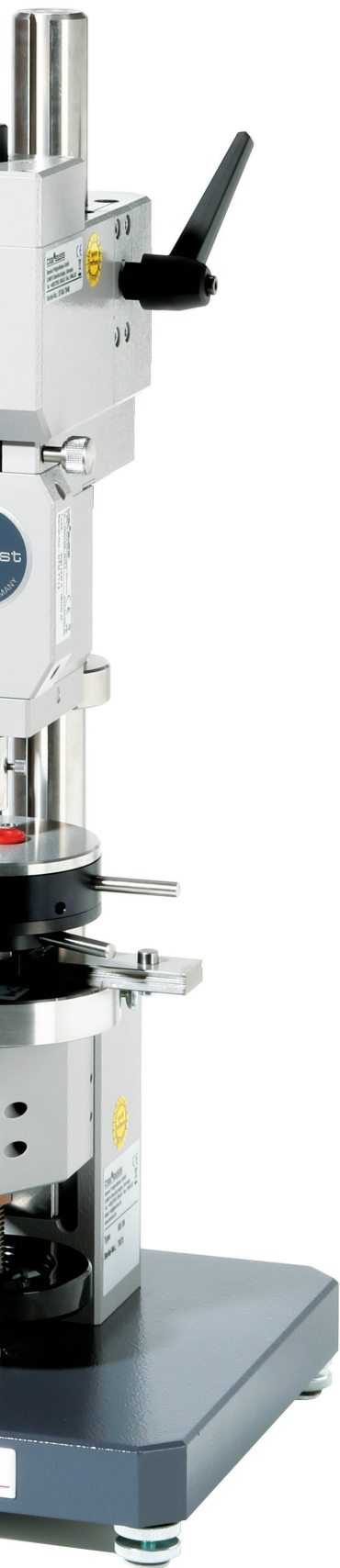
### HARDNESS TESTING ON THIN PARTS WITH SHORE METHODS

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The Bareiss developed micro Shore A and micro Shore D solutions are the first and the only in the market that make Shore method measuring on as thin as 0.5 mm thickness samples possible. This revolutionary technology has greatly reduced the penetration depth and force required for the standard Shore measuring methods.

The measuring results obtained are comparable to all the international standards such as DIN ISO 7619, DIN 53505, DIN EN ISO 868, ASTM D 2240. One other superior advantage for the Bareiss micro Shore A method is that because of its broader measuring range 0- 100 compared to the IRHD 30 – 100, it can be the substitute solution for materials which are too soft to be measured by the IRHD method (under IRHD 30).





## digi test II THE ELECTRONIC UNIT

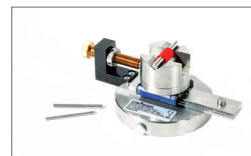
The highly intelligent digi test II is equipped with an electronic unit which serves as the main control of the entire system and the display of the user's information for measuring time and method, measurement and various selectable features.



Selectable Language, Mode and Measuring Time

## SAMPLE POSITIONING DEVICES

With the help of a sample positioning device, measuring on irregular shaped samples can be much easier and result accurate.



Sample positioning device for hoses



Customized solutions for special rubber parts



Barofix – the manually adjusted sample positioning device



Barofix II – the fully automatic sample positioning device
















## ACCESSORIES

Optional DAkkS or Manufacturer certification is available when purchasing Bareiss testing instruments. Standard Reference Blocks come with DAkkS certification to ensure the highest quality and accuracy. Hard Test software is available for data analysis.



Standard Reference Block with DAkkS certification

# TECHNICAL DATA

MEASURING METHOD	APPLICATION	STANDARD	MINIMUM MATERIAL THICKNESS (MM)	INDENTER TYPE Ø (MM)
Shore A	soft rubber, elastomers, natural rubber products, neoprene, resin, polyester, soft PVC, leather, roller, etc.	DIN EN ISO 868 DIN ISO 7619, ASTM D 2240, NFT 51-174, BS903 Part. A 26	4	
			6	
Shore A0/E	foamed materials	DIN ISO 7619, ASTM D 2240	6	
M Shore A	as Shore A	Bareiss Standard	0,5	
Shore D	hard rubber, hard plastics, acrylic glass, polystyrene, rigid thermoplastics, resopal, rollers, vinyl, cellulose acetate, etc.	DIN EN ISO 868 DIN ISO 7619, ASTM D 2240, NFT 51-174, BS903 Part. A 26	4	
			6	
Asker CS	as Shore D	SRIS 0101	6	
M Shore D/C/D0	as Shore D	Bareiss Standard	0,5	
Shore B	medium-hard rubber, typewriter roller, flat panels	ASTM D 2240	6	
Shore C	plastic and medium hard rubber	ASTM D 2240	6	
Shore D0	plastic and medium-hard to hard rubber	ASTM D 2240	6	
Shore 0	soft elastic fabrics, pressure rollers, middle fixed, textile fabrics, nylon, orlon, nylon, rayon	ASTM D 2240	6	
Shore 00/000	cellular rubber, foam rubber, silicone	ASTM D 2240	6	
Shore 0005	foams	ASTM D 2240	6	
IRHD M	thin-walled O-rings, molded, standard plates	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	0,6	
IRHD N	soft rubber, high-elastic materials, plastically deformable materials	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	6	
IRHD L	cellular rubber, foam rubber, silicone	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	10	
IRHD H	as Shore D	DIN ISO 48, ASTM D 1415, NFT 46-003, BS903 Part. A 26	6	
VLRH	cellular rubber, foam rubber, silicone	DIN ISO 27588	2	



# BAREISS – YOUR SOLUTION PROVIDER FOR MATERIAL HARDNESS TESTING

digiChamber – HARDNESS TESTING UNDER THE INFLUENCE OF TEMPERATURE



Management requirements of C.O.C.P. and ISO 9001:2008 are fulfilled.



Deutsche Akkreditierungsstelle  
D-K-15206-01-00



## BAREISS – GERMAN ACCREDITATION BODY

CALIBRATION LABORATORY FOR THE MECHANICAL MEASUREMENT CATEGORY HARDNESS. ACCREDITED AND MONITORED BY THE ACCREDITATION BODY OF DAKKS (FORMERLY KNOWN AS DKD).

Bareiss, as the first accredited calibration laboratory in Germany since 1996, is allowed to perform calibration services on Shore and IRHD hardness instruments in accordance with DIN EN ISO / IEC 17025 and also the issuance of the official DAKKS (formerly known as DKD) calibration certificate. Over the years, Bareiss has continuously pursued on its accreditation by extending the official calibration services to Brinell, Vickers and Rockwell hardness instruments.

Not only we provide recalibration services for our own products, the Bareiss Official DAKKS Recalibration Services are also available for other brands of hardness testers.



10/2012 Techn. Änderungen vorbehalten



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