digiChamber

EN
ASTM D2240 | DIN EN ISO 868 | DIN ISO 48 | DIN ISO 7619-1

Hardness test solution for rubber performing in extreme temperatures

Performing hardness tests in a temperature simulated environment.

The hardness of rubber changes dramatically when the environmental temperaure changes. Therefore it is crucial to study how the change of temperature can influence the hardness of your rubber products. Tires for example usually need to perform in different extreme temperatures are prone to this factor.

The Bareiss digichamber is a perfect solution to analyse how rubber hardness changes as temperature changes. In collaboration with the renowned temperature solution provider „Weiss Technik", the digichamber uses the LabEvent chamber series providing temperature simulations with the best accuracy. Maximize your testing capability and capacity with digiChamber-R, the model with multiple-sample tray and self-programmable test sequences.

TEST METHODS

Shore A	IRHD N

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MAIN FEATURES

A Web based measuring and control system with 1/0 unit and **WEB**Season software in a 7" touch panel.

**C** Electronic console with digital I/O for controlling the hardness system.

D Hardness scales interchangeable between Shore A and IRHD N.

B Large test volume of 200 liters with polished stainless steel walls for test load of up to 125 kg.
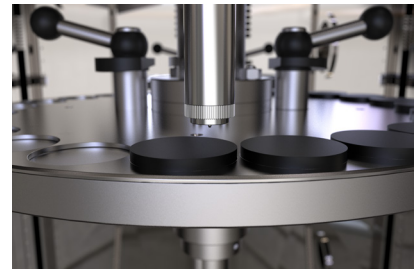
E Air-cooled refrigeration unit with continously variable power adjustment by S!MPAC and chloride-free refrigeration cycle.
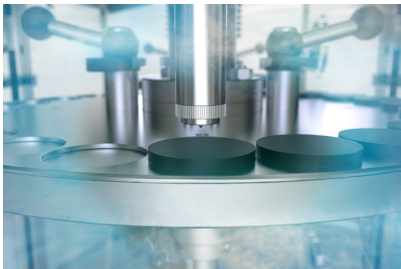
Rubber becomes hardened in an extreme cold environment. Simulate an environment as cold as -40° C with digiChamber.
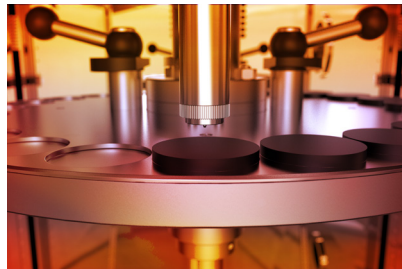
Crank up the digichamber to +180°C (recommended at +150°C) to anaylse how rubber changes its hardness in extreme heat.

The automatic rotating tray can carry up to 25 pcs of samples. Users can design a test sequence by selecting number of measurements per sample and the desired temperature.

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BareissOne is a modularized software that is aimed to provide a common platform with integration of different test categories.

Whether it is a standard test for one single measurement or a series of tests that requires a complex test sequence editing, BareissOne is designed to offer all levels of user's demands.

Features such as user authorization, system log, project management, version control and custom report are all at your fingertips.
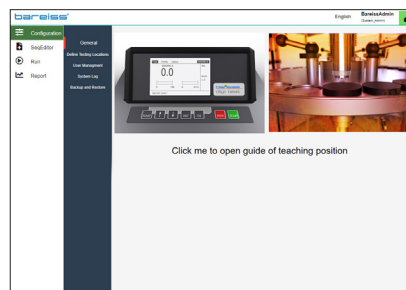

BareissOne has made software use easier than it ever was before.

User management

Allows the administrator to assign permissions to each individual user. Add, amend and delete roles quickly and implement them across platforms and applications.

Graphic tutorials

With graphic tutorials integrated in BareissOne, users can quickly learn how to set up and use digiChamber with much less effort.
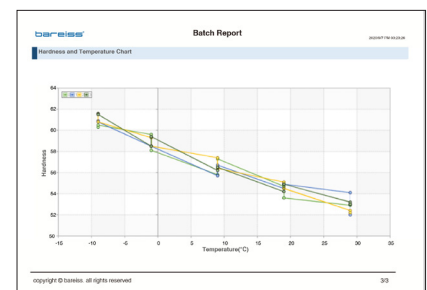
Report and Analysis

Generate your custom test report with Microsoft Word-like user interfaces. Export the report in either CSV or Excel format.

bareiss®

PRÜFGERÄTEBAU GMBH

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SPECIFICATIONS

Shore A hardness system

Standard:	DIN ISO 7619, ASTM D 2240
Spring force:	8050 mN
Force on presser foot:	1kg
Presser foot size:	Ø 18 mm
Indenter:	35°
Penetration:	2.5 mm

IRHD N hardness system (Optional)

Standard:	DIN ISO 48, ASTM D 1415
Initial load:	0.3 N
Primary load:	5.7 N
Force on presser foot:	8.3 N
Presser foot size:	Ø 20 mm
Indenter:	Ø 2.5 mm
Penetration:	1.8 mm

Temperature chamber

Temperature range:	-70°C to 180°C
Recomm. max. temp.:	150°C
Temp. rate of change:	±0.2 K to ±0.5 K
Temp. homogeneity:	±0.5 K to ±1.5 K
Test volume:	approx. 200 liters
Heat compensation:	800 W
Noise level:	56 dB (A)
Refrigerant:	Chloride-free R449A

Electrical and interfaces

Voltage:	100-240 VAC, 50/60 Hz; 12 A
Power:	approx. 1.8 kW
Protection Class:	IP 54
USB:	3.0(1 port)
Ethernet:	100/10 megabit

Specimen

Type:	O-rings
Color:	Non-transparent
OD (Outer diam.):	≤33 mm
CD (Cross diam.):	≤1 mm
Resolution:	0.027 mm

164 cm

85 cm   130 cm

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P R Ü F G E R Ä T E B A U   G M B H

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ACCESSORIES

IRHD Normal measuring device
As an optional measuring device to the digiChamber.

Notebook
A 14" premium brand notebook with BareissOne software installed.

Standard block
Choices of 1, 3 and 6 pcs set premium quality standard blocks with DAKKS certificates.

DAkkS
Deutsche
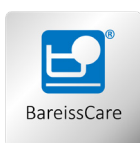Akkreditierungsstelle
D-K-15206-01-00

DAKKS calibration certificate
Bareiss offers the most prestigious certificate for your quality assurance.

BareissOne software
A modular software that provides ease of use for all levels of user demands. It includes many key features that are essential for effective testing process and accurate results.

BareissCare

BareissCare Service
The BareissCare service package provides extended calibration and maintenance services.

REFERENCE
Bareiss offers a comprehensive range of consumables and accessories for you to conduct your tests.
All these products are proven to be premium quality.