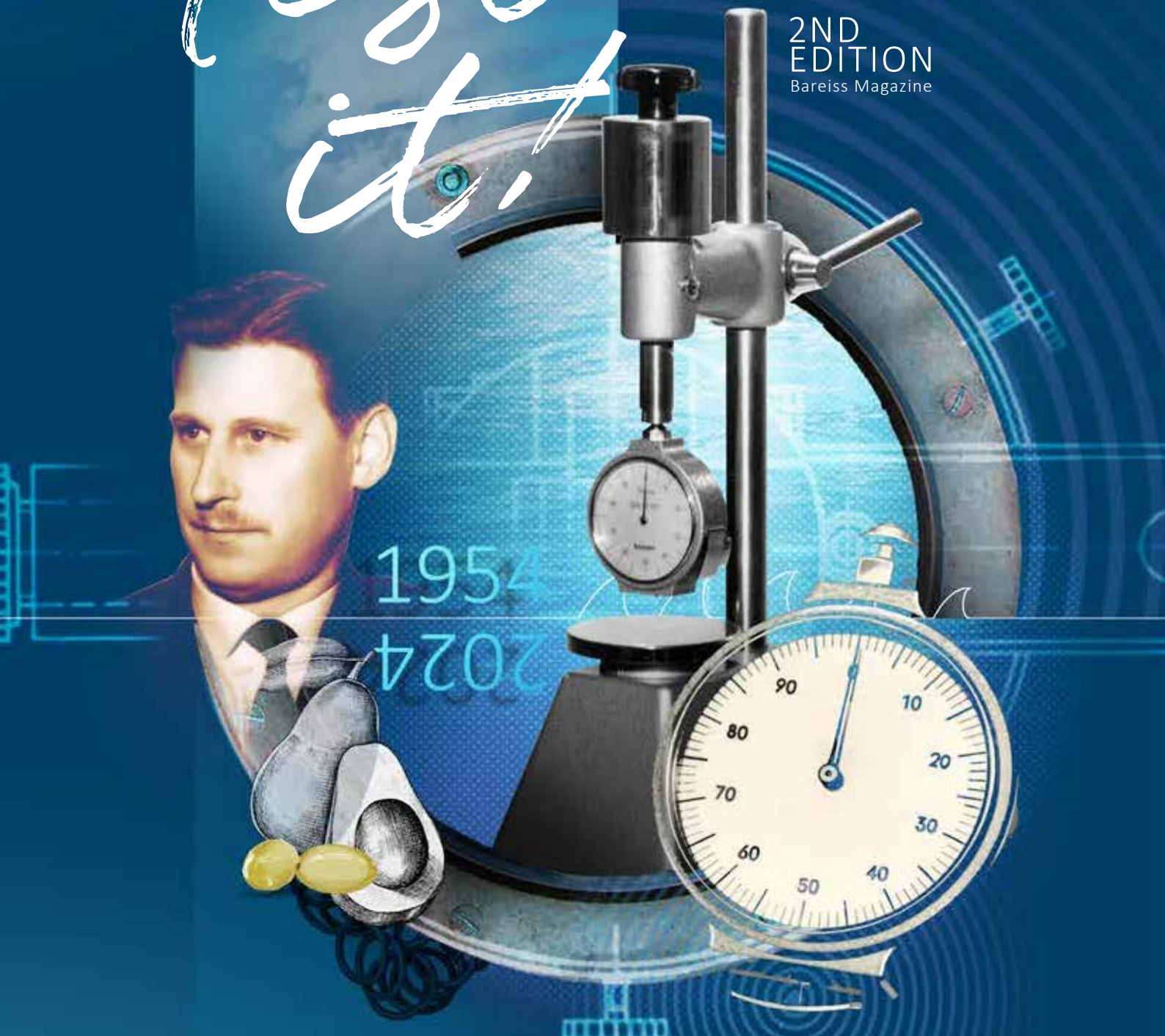
EN

bareiss®

Test it.!

2ND EDITION
Bareiss Magazine



70 YEARS OF EXPERIENCE bareiss

Celebrating 70 years of Experience

In 1954, while Elvis Presley launched his career with the song “It’s All Right,” Mercedes Benz introduced the first 300 SL, Texas Instruments announced the world‘s first transistor radio, and the first Burger King restaurant opened in Miami, Heinrich Bareiss founded Bareiss Prüfgerätebau GmbH in the former blacksmith‘s workshop on Herrengasse in Oberdischingen.

Driven by the pursuit of perfection, the initially analog handheld hardness testing devices evolved into fully automatic testing equipment over the following decades, with a continually expanding customer base. Before long, the first devices made their way to then-distant China, Japan, and the USA.

Starting with the ideas of a tinkerer in a back building, who found his first employee in his son Peter, many people have contributed over the past seven decades to making Bareiss Prüfgerätebau GmbH an international hidden player. Without these employees, from Oberdischingen and the surrounding area and now with colleagues worldwide, we wouldn’t be where we are today. We want to take this opportunity to thank them all.

Our gaze is fixed on the future. Even after 70 years and in the third generation, our inventive spirit remains strong. We have managed to grow and transform, developing visions for today and the future. We look back with pride and forward with anticipation, cherishing all that our grandparents and parents have built and all that is yet to come. Here’s to many more successful decades!

Katrin Shen

Oliver Wirth

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PHARMA

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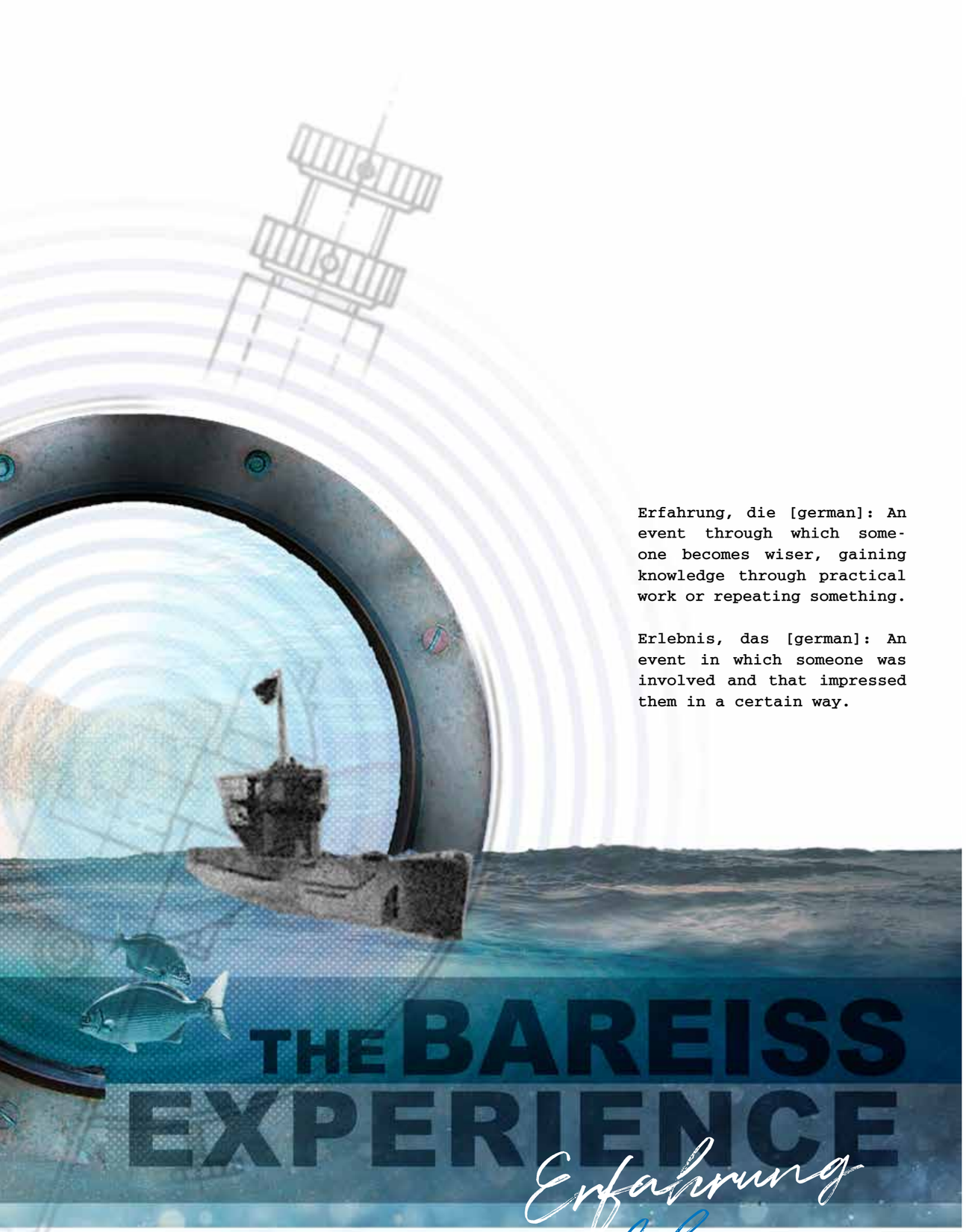


Erfahrung, die [german]: An event through which someone becomes wiser, gaining knowledge through practical work or repeating something.

Erlebnis, das [german]: An event in which someone was involved and that impressed them in a certain way.

When the word „Experience“ is translated into German, you get two meanings: „Erfahrung“ as practical acquired knowledge and „Erlebnis,“ an event in which you were involved. Upon closer examination of this combination, the term „knowledge“ cannot be viewed solely as a collection of information. The question is: What actually defines knowledge?

The renowned physicist Albert Einstein, who was born just a few kilometers from our headquarters in Oberdischingen, once said, “Information is not knowledge. The only source of knowledge is experience.” Our founder Heinrich Bareiss would certainly have agreed with this quote. He also developed his ideas through experiences and rooted his drive for improvement in what he had lived through. For us at Bareiss, “Erfahrung” und “Erlebnis” are the core of our work and the foundation of our drive. They are both fascination and passion. For this reason, we have been living “The Bareiss Experience” for 70 years.

Heinrich Bareiss in naval uniform, 1945. ▶

EXPERIENCES THAT STIR

Heinrich Bareiss was born in Oberdischingen in 1925. Even as a child, he was a tinkerer, building models that could drive and fly from the sparse resources of the time. After training as a mechanical engineer, he was drawn to the other end of Germany, to the Navy. The technology of submarines fascinated him so much that he signed on for two and a half years on a U-boat. During this time, the experiences of the dives, the interaction between humans and technology, and the sounds of materials under immense pressure in the depths impressed him.

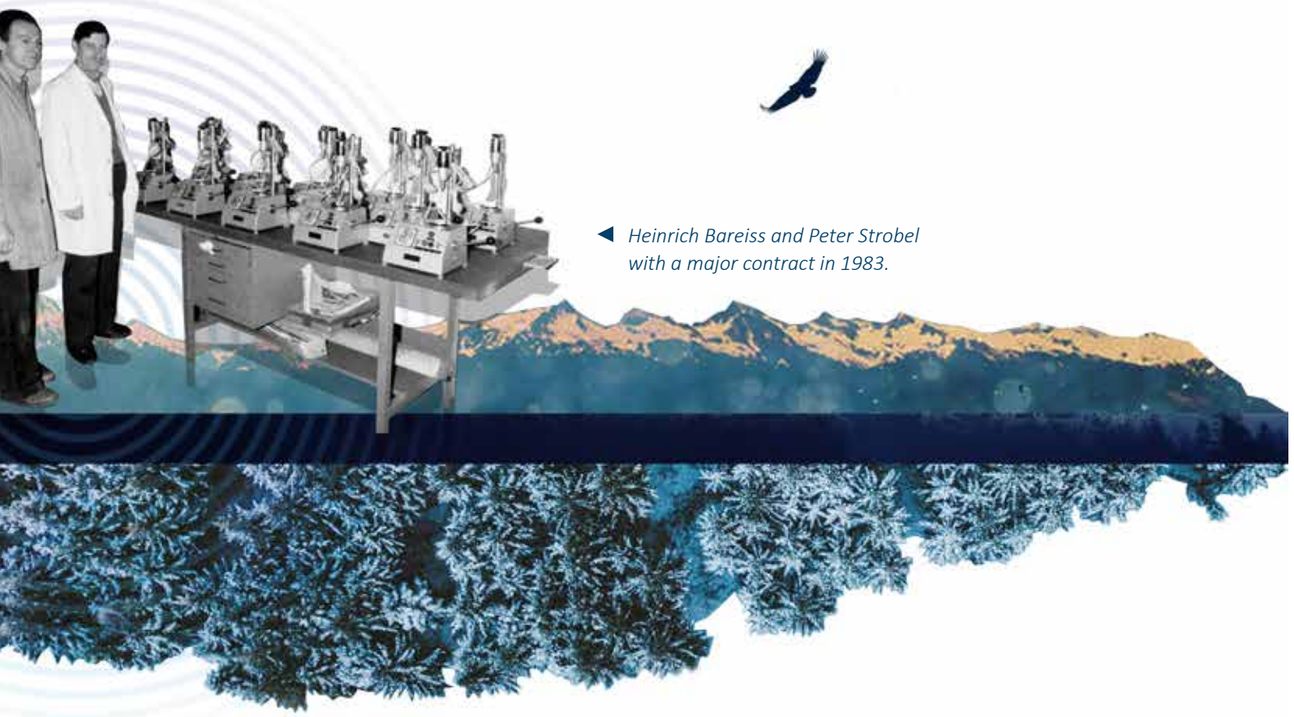
How much stress do the materials endure? Can the seals withstand the enormous pressure of the water masses? How can the quality of seals that are repeatedly loaded and relieved, such as with hatches, be measured? How can one achieve tightness in rotating parts at great depths? At that time, the durability of rubber had not been extensively researched.

Upon his return, these questions continued to occupy him, and he began to conduct experiments and design initial hardness testing devices. Thus, in the former courtyard smithy of the Malefizschenk in the historic Herrengasse in Oberdischingen, Heinrich Bareiss' vision for the production of mechanical hardness testing devices emerged from his experiences, laying the foundation of today's Bareiss Prüfgerätebau GmbH.

With the support of his family, Heinrich Bareiss ventured into entrepreneurship in 1954 and officially founded Bareiss Prüfgerätebau GmbH. Due to high demand, his son Peter Strobel soon had to join the production and development of hardness testing devices. The two men designed and manufactured everything by hand, with attention to detail and a commitment to the highest quality.

VISIONS THAT GROW

Yet, the spirit of an inventor never stands still. Over time, everyday life inspired further developments. The offerings of Bareiss Prüfgerätebau GmbH expanded, and employees were hired. The space in the production facility became insufficient. A new company building was erected, and in 1993, the next generation, Peter Strobel and Brigitte Wirth, joined the business. The company continued to grow and eventually became a globally active hidden player, whose name stands for the highest quality. Who would have considered this to be possible in 1954?



◀ *Heinrich Bareiss and Peter Strobel with a major contract in 1983.*

"Whether it's lipstick, a shower head, or a luxury watch – there's a little bit of Bareiss in everything. I'm proud of that!"

Katrin Shen, CEO

“We see ourselves as equal partners and enjoy developing fitting solutions for our customers’ challenges – that’s why we pursue a holistic approach and consider adjacent processes as well.”

Oliver Wirth, CEO

Innovation and progress are in the DNA of Bareiss.

A DRIVE THAT NEVER ENDS

What contribution can we make with our measurement technology to support a sustainable and economical production process in materials development? How can technologies be transferred to other industries? Which components in a rubber compound can be replaced by others without changing their properties? How do we support and simplify the development of meat substitute products? How do we reduce food waste through more precise determination of ripeness? How do we make the intake of medications more pleasant through optimized break resistance?

These and numerous other questions drive us – every day. Together with our international team in Oberdischingen, Taiwan, and North America, we develop solutions. The world and the requirements of our customers have evolved, and the future presents us with ever-new challenges. This inspires us to new approaches in measurement technology.

In recent years, we have taken new paths with our research in the field of rheology and are very proud to have developed two globally unique rheometers, the RPA ultra and the CCR ultra, which revolutionize and elevate the possibility of characterizing and developing mixtures in the rubber and food sectors to a new level.

To support our customers in process optimization, we have developed a fully automated physical testing laboratory, „SmartLab“, to perform test tasks independently and automatically. The standardized modular system allows for the individual assembly of automated test laboratories according to the wishes and circumstances of the customers using a construction kit principle.

Our first SmartLab includes hardness and density testing as well as thickness testing on different sample geometries and tensile testing on S2 bars and R1 rings. The past years with all the geopolitical, societal, and economic challenges have shown us the importance of resilience. New projects in the food sector and the expansion of our product portfolio for Bareiss Pharma fill us with anticipation for the future.

Even though we no longer produce in the small courtyard smithy, but in a state-of-the-art production facility in southern Germany with branches for sales and development on two other continents, our drive has remained the same: experiences that impress us.

BECOME PART OF THE **BAREISS EXPERIENCE.**

We want to share our knowledge with you and ignite your fascination. Hardness testing is part of our DNA. We share our diverse and decades-long experience with you in various ways. Further your education in our seminars and training sessions. Or join us at our annual Bareiss Experience Day and witness our expertise firsthand.

THE “BAREISS EXPERIENCE DAY”

The Bareiss Experience Day offers exclusive insights into our mindset and the production facility in Oberdischingen, interesting seminars by our experts and guest speakers, as well as exclusive consultations on your samples by our team. Once a year, we open our doors and provide a select group of interested individuals with the opportunity to become part of the “Bareiss Experience.”

In addition to insights into the background and innovations in the field of material testing, we invite you to our Bareiss Bistro for a cozy atmosphere of exchange and networking.

TRAINING AND SEMINARS

Our training sessions and seminars cater to a wide spectrum of customers, from beginners to experienced professionals. We offer both standard and customized training tailored to your specific requirements.

Our experienced staff not only impart theoretical knowledge but also practical skills and techniques that you can directly apply in your work. You will learn how to optimize the use of our testing equipment and how to correctly interpret measurement results. By attending our training sessions and seminars, you will not only enhance your knowledge and skills but also increase your work efficiency and make your results more precise. All of this will contribute to boosting your productivity and the quality of your work.

FOR MORE ABOUT OUR OFFERINGS, VISIT BAREISS.DE.
In the “Service” section of our website, you’ll find all additional information about the “Bareiss Experience,” training, seminars, and the “Bareiss Experience Day.” Sign up now!

FROM RAW MATERIAL TO HIGHLY PRECISE TESTING DEVICE

Raw material for manufacturing
a pick-up bracket | digi test II

Before you are allowed to hold one of our testing devices in your hands, we've handled it many times ourselves – estimated up to 1000 times. This is due to our demand for precision and highest quality which requires that many steps are carried out by our skilled employees.

Each of our highly precise testing devices is manufactured from raw material in our production facility in Oberdischingen.

A manufacturing depth of up to 80% requires perfect organization. "The interaction of all processes from the procurement of raw materials to final assembly is enormously important," says Bareiss Assembly and Production Manager Markus Raible. He coordinates logistics and is responsible for efficient operations and resource planning.

To ensure the production of devices within the desired delivery time, good work preparation, short distances, and solution-oriented action are essential. "Our standards are high. Therefore, our devices are exclusively manufactured by qualified employees, most of whom we have trained ourselves," Markus Raible continues. Quality and precision are indeed the core of the Bareiss DNA.

Markus Raible
Assembly and Production Manager

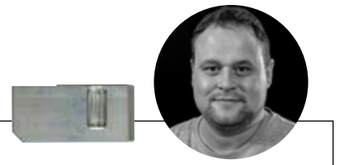
We'd like to illustrate our workflow to you using the example of the pick-up bracket of our digi test II. The digi test II consists of 4 components, with the pick-up bracket being one of them. The pick-up bracket itself consists of 10 main components and numerous connecting parts. In small series, up to 10 pick-up bracket are assembled using the Kanban principle to ensure quick availability.

Pick-up bracket

digi test II

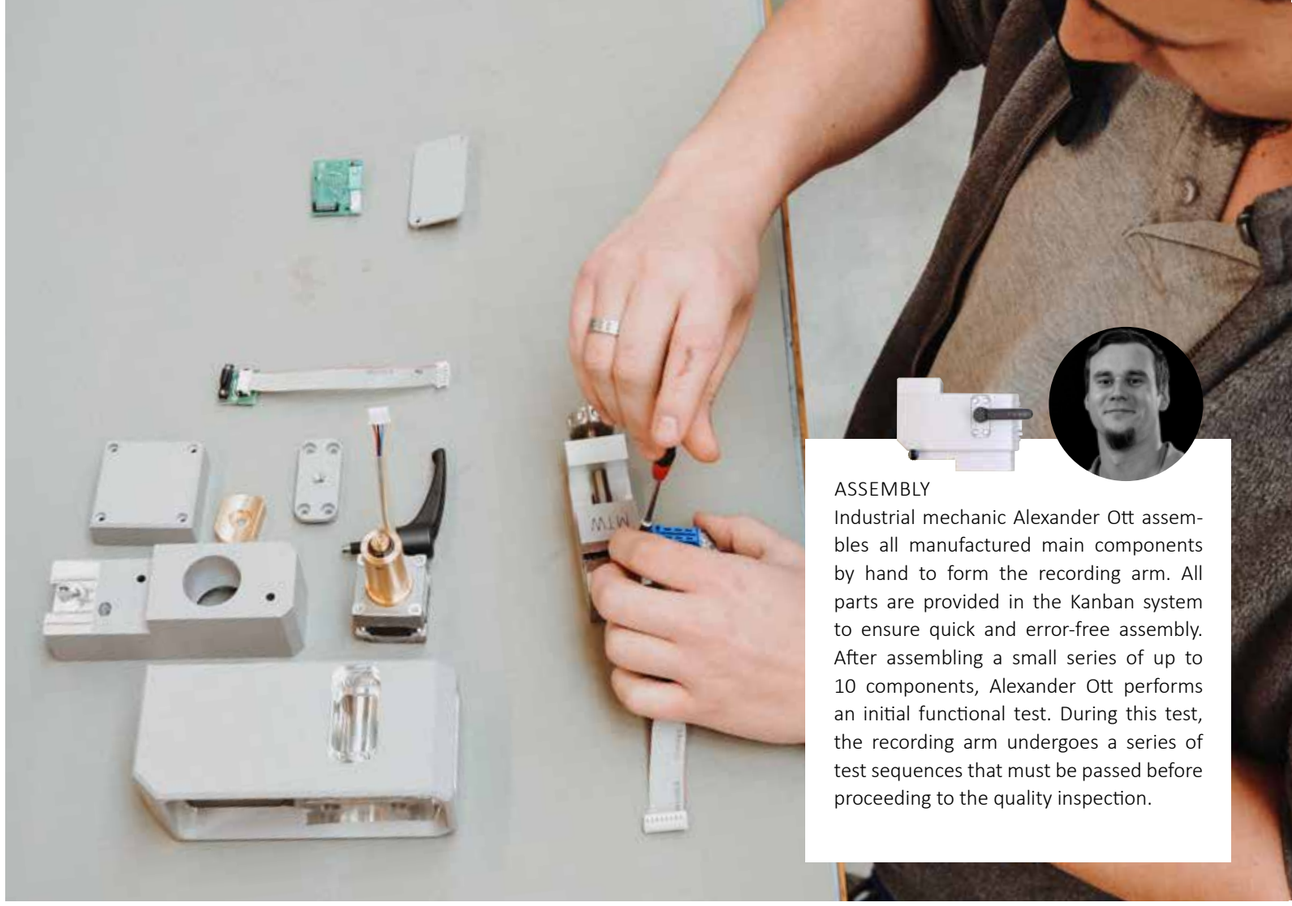
MATERIAL WAREHOUSE

The raw material for our high-quality testing devices is purchased as bar stock. Maintenance fitter Harald Kästle conducts a quality control check on each incoming shipment. The bar material is mechanically cut to the required lengths for the CNC machines. To counteract material shortages, we keep material in stock for six months.



CNC

Industrial mechanic Matthias Arnold machines the sawn semi-finished product. First, the material is completely processed on five sides in the 5-axis milling machine before the 3-axis milling machine gives the semi-finished product its final touch. Just for this step, we handle the component numerous times.



ASSEMBLY

Industrial mechanic Alexander Ott assembles all manufactured main components by hand to form the recording arm. All parts are provided in the Kanban system to ensure quick and error-free assembly. After assembling a small series of up to 10 components, Alexander Ott performs an initial functional test. During this test, the recording arm undergoes a series of test sequences that must be passed before proceeding to the quality inspection.

PAINT SHOP

In the Bareiss paint shop, painter Isar Kaçar paints all visible parts of the testing devices. Washing, masking, priming, painting, demasking, and drying phases require a lot of time and precision work.

“Before you are allowed to hold one of our testing devices in your hands, we’ve handled it many times ourselves – estimated up to 1000 times.”

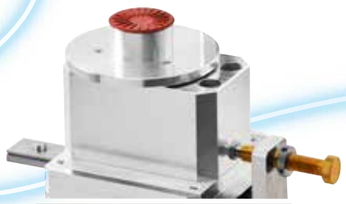
QUALITY ASSURANCE

With 45 years of service, Erich Rieger is one of our most experienced employees. Before a testing device is delivered to the customer, the seasoned precision mechanic assembles the device exactly according to the customer’s order and conducts not only a complete functional test but also a DGUV inspection. Together with the DAkkS calibration certificate or factory calibration certificate prepared by our accredited laboratory, we then send your device on its journey to you.

DIGI TEST II – OUR SMART AND RELIABLE CLASSIC.

HARDNESS TESTING FROM 0.7 MM MATERIAL THICKNESS.

VLRH	IRHD micro	IRHD H	IRHD L	IRHD N	SHORE A
Foams	O-Rings	Sheet Material Finished Parts	Sheet Material Finished Parts	Sheet Material Finished Parts	Sheet Material



CUSTOM SAMPLE HOLDERS

CENTERING DEVICE WITH VICE FOR MOLDED PARTS

CENTROFIX FOR HOSES AND CABLES

ROTOFIX FOR MULTIPLE SAMPLES

BAROFIX FOR MANUAL SAMPLE POSITIONING

BAROFIX 4 FOR AUTOMATIC SAMPLE POSITIONING

The modular digi test II offers you maximum flexibility in hardness testing of elastomers, polymers, soft elastic materials, composite materials, and foams. In just a few simple steps and without tools, the numerous measuring devices can be exchanged for Shore, VLRH, or IRHD, allowing for a quick transition between different measurement methods.

NOW WITH FREE QUICKMEASURE SOFTWARE.

EXPANDABLE TO A COMPREHENSIVE SOFTWARE PLATFORM.

SHORE D	SHORE A/B/O	SHORE D/C/D0	micro SHORE A	micro SHORE D	SHORE 00	SHORE 000	SHORE AM
Sheet Material	Finished Parts	Finished Parts	Foams	Finished Parts	Foams Silicones	Foams Silicones	Finished Parts

The free software tool “BareissOne QuickMeasure” offers you the possibility to easily capture, print, and export your data in just a few steps.

Upgrading to the paid full version “BareissOne”, our unique and modular software platform, allows you to centrally store and evaluate all measurement values of your Bareiss testing devices. The user-friendly interface provides statistical analysis of the measurement values with user management and automatic generation of test reports.

Whether it’s a standard test for single measurements or a test series with complex text sequences, BareissOne meets your specific requirements. Features such as E-Signature for tamper-proofing of measurement values and Audit Trail complete the offering of the software platform.

DIGI TEST II

Modular hardness testing system for fully automatic hardness testing according to Shore, VLRH, and IRHD on composite materials, flexible materials, elastomers, plastics, and foams with variable test geometries.

ASTM D2240 | ASTM D1415 | DIN EN ISO 868 | DIN ISO 48-2 | DIN ISO 48-3 | DIN ISO 48-4 | NFT 46-003 | TD00002001 | TD00002002

SHORE A, A0, D, 0, 00, 000, 000S, E, B, C, D0, MA, MD, AM, M
IRHD L, N, M, H
VLRH

AREAS OF APPLICATION
Flat, sloped, convex, and concave geometries of composite materials, flexible materials, elastomers, plastics, and foams

MODULAR EXPANDABLE
Interchangeable measuring devices enable effortless switching between the numerous measuring methods in the Shore, IRHD, and VLRH ranges without the need for tools and with just a few simple steps. With a variety of positioning and measuring devices available, the digi test II is the ideal choice for laboratory, production, quality control, and development, when testing a wide range of product portfolios.

SECURE MEASURING VALUES WITHOUT USER INFLUENCE
In addition to perfect alignment as a tabletop unit, the digi test II ensures the optimal measuring position of test specimens through its numerous positioning devices. Most accurate measurements without user influence and manual pre-adjustment are guaranteed, giving you time for the important things.

COMPREHENSIVE ANALYSIS THROUGH VARIOUS MEASURING MODES
Measure not only the hardness grade of your test specimen but also the material's flow curve during the test. With the option for hysteresis measurements, the digi test II provides additional insights into the material's characteristic properties.

MANY SHAPES – ONE SOLUTION
The modular expandability of the digi test II enables the measurement of all sample geometries. Whether you want to conduct measurements on flat, sloped, concave, or convex geometries, you will obtain precise measuring values starting from a sample thickness of 0.7 mm, thanks to the approach system.

CENTROFIX

Manual positioning device for measuring individual test specimens for the digi test II and the Gelomat. Through modular attachments on the Centrofix, samples and molded parts of any kind can be clamped and fixed for measurement.

AREAS OF APPLICATION
Cables, hoses, molded parts, flat, sloping, convex, and concave geometries of composite materials, soft elastic materials, elastomers, plastics, and foams, gel capsules, gelatinous materials, nutrient media

- Secure measurement results without user influence
- Numerous attachments for positioning your samples

ROTOFIX

Positioning device available as an accessory for the automatic measurement of specimens for the digi test II and the Gelomat. Different templates allow for the measurement of a varying number of samples and measuring positions.

AREAS OF APPLICATION
Sheet materials and round samples made of soft elastic materials, elastomers, plastics, and foams.

- Flexible number of samples
- Number of measurement points freely definable
- Custom sample templates

BAROFIX 4

Fully automatic positioning of O-rings and sheet material for hardness testing with the digi test II.

DIN ISO 48-2 | TD00002001

MICRO SHORE A
IRHD M

AREAS OF APPLICATION
Plane-parallel sheets, molded parts, and O-rings without user influence.

TIME SAVING THANKS TO MULTIPLE MEASUREMENTS
The function of multiple measurement allows generating measurement values for multiple samples in a single measurement process.

EXPERIENCE A SEAMLESS ADJUSTMENT PROCESS
The necessary basic settings can be automated with the push of a button before starting the measurement, significantly reducing potential human errors.

HIGH-PRECISION MEASURING POSITION THANKS TO LASER
A highly precise laser locates the standard-compliant measurement position of the sample. The centering is done automatically and independently of the operator.

MEASUREMENT OF HARDNESS AND THICKNESS IN ONE STEP
The 2-in-1 measurement method allows for a step to be saved in determining or verifying the specifications.

BaRotation

Automated hardness test system for O-rings according to IRHD Micro and Micro Shore A.

DIN ISO 48-2 | TD00002001

IRHD MICRO, MICRO SHORE A

AREAS OF APPLICATION
O-rings, molded parts, round components

TIME SAVING THANKS TO ROUTINE TESTING
The multiple measurement function of the BaRotation allows generating measured values for multiple samples in one measurement process. One or two measurements per O-ring are possible.

EXPERIENCE A SEAMLESS ADJUSTMENT PROCESS
The necessary basic settings can be automated at the push of a button before the start of the measurement, significantly reducing potential human errors.

HIGH-PRECISION MEASURING POSITION THANKS TO LASER
A high-precision laser determines the standard-compliant measurement position of the sample. The centering process is automatic and operator-independent.

MEASUREMENTS ACCORDING TO DIFFERENT TESTING METHODS
Interchangeable measuring devices allow for an effortless switch between IRHD Micro and Micro Shore A without the need for tools.

MEASUREMENT OF HARDNESS AND THICKNESS IN ONE SYSTEM

BaroVision

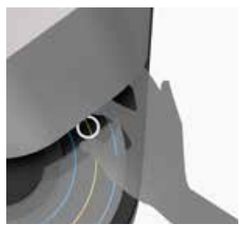
Automatic O-ring hardness testing system with machine vision for measuring the outer and inner diameters as well as checking the cord thickness.

DIN ISO 48-2 | TD00002001

IRHD MICRO, MICRO SHORE A

AREAS OF APPLICATION
O-Rings

THE 2-IN-1 SOLUTION FOR O-RING TESTING
With BaroVision, we combine hardness testing with optical inspection in a single device.



SAVE TIME AND COSTS
The automated process provides a complete characterization of your O-ring in a single measurement.

OPTICAL INSPECTION
In addition to hardness and thickness, BaroVision measures the outer and inner diameters of the O-ring as well as the cord thickness. Furthermore, the O-ring is checked for uniform cord thickness.

SOFTWARE
The BareissOne software provides graphical guides for quickly learning the system.

COMPACT 4

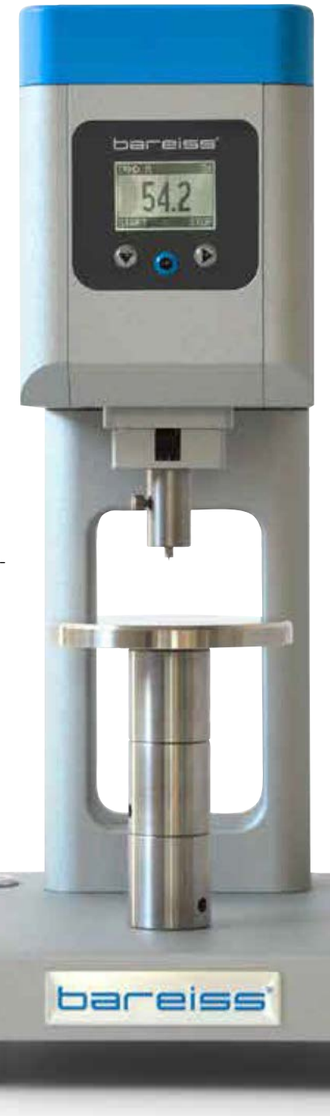
Our user-friendly hardness tester Compact 4 offers you the ability to perform fully automatic hardness tests using the IRHD M and IRHD N methods – all with the usual Bareiss quality.

ASTM D1415 | DIN ISO 48-2

IRHD Micro, IRHD Normal

AREAS OF APPLICATION
Hoses, O-rings, molded parts, standardized test specimens, seals, soft rubber, highly elastic materials, and plastically deformable materials

COMING SOON



FOR YOUR INTRODUCTION TO IRHD HARDNESS TESTING
The Compact 4 is the ideal entry-level model into the world of IRHD measurement. With an easy-to-use testing process, hardness testing can effortlessly be performed on your desired samples.

EXPANSION POSSIBILITIES THROUGH ACCESSORIES
For hardness testing of molded parts, we offer numerous accessories to ensure the accurate measurement of your samples.

digiChamber

HARDNESS TESTING SOLUTION FOR RUBBER PERFORMED IN EXTREME TEMPERATURES

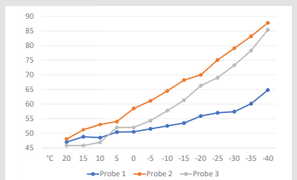
Performing hardness tests in a temperature simulated environment.

DIN ISO 48-4 | DIN ISO 48-2
DIN EN ISO 868
ASTM D 2240 | ASTM D 1415

SHORE A, IRHD N

AREAS OF APPLICATION
Tire manufacturers, sealing material, hardness testing of rubber compounds of all kinds under temperature influence

SIMPLE AND INTUITIVE OPERATION
In the intuitively operable digiCenter software, you can create test plans for different materials or requirements and save them as templates.



Hardness testing at room temperature and under temperature influence.

With graphic tutorials integrated in the software digiCenter, users can quickly learn how to set up and use digiChamber with much less effort.

HIGH FLEXIBILITY OF THE TESTING PROCEDURE
The digiChamber offers flexible options for defining measuring points on each individual sample and for serial measurement.

BEST QUALITY
High-quality Bareiss hardness tester combined with high-quality temperature chamber from „Vötsch Technik“ for best test results.

PUSEY & JONES

Digital hardness testing device with integrated test stand and adjustable base for measuring the hardness of rubber or rubber-like materials on rollers or similarly curved geometries.

ASTM D531 | DIN ISO 48-8

PUSEY & JONES

AREAS OF APPLICATION
Rubber-like materials on rollers or curved surfaces.

BARCOL

Digital handheld hardness tester with stabilization ring for determining Barcol hardness on plate-shaped specimens made of glass fiber reinforced plastics, thermosetting plastics, hard thermoplastics, and light metals.

ASTM D2583 | DIN EN 59

BARCOL

AREAS OF APPLICATION
Determination of hardness on glass fiber reinforced plastics, thermosetting plastics, hard thermoplastics, and aluminum.

KFZ INTERIEUR | BAUCHOMETER

Handheld hardness tester for measuring the hardness of large parts of automotive interiors made of foam or in sandwich construction with flexible outer skin and hard base shell.

DIVERSE WERKSNORMEN (AUTOMOBILHERSTELLER)

MEASURING METHODS: KFZ

AREAS OF APPLICATION
Determination of hardness on foamed materials, e.g., dashboards, automotive interiors, etc.

HPE III BASIC L | L/c

Hardness tester with special centering device and bracket for hardness measurements on foamed materials of automotive steering wheels.

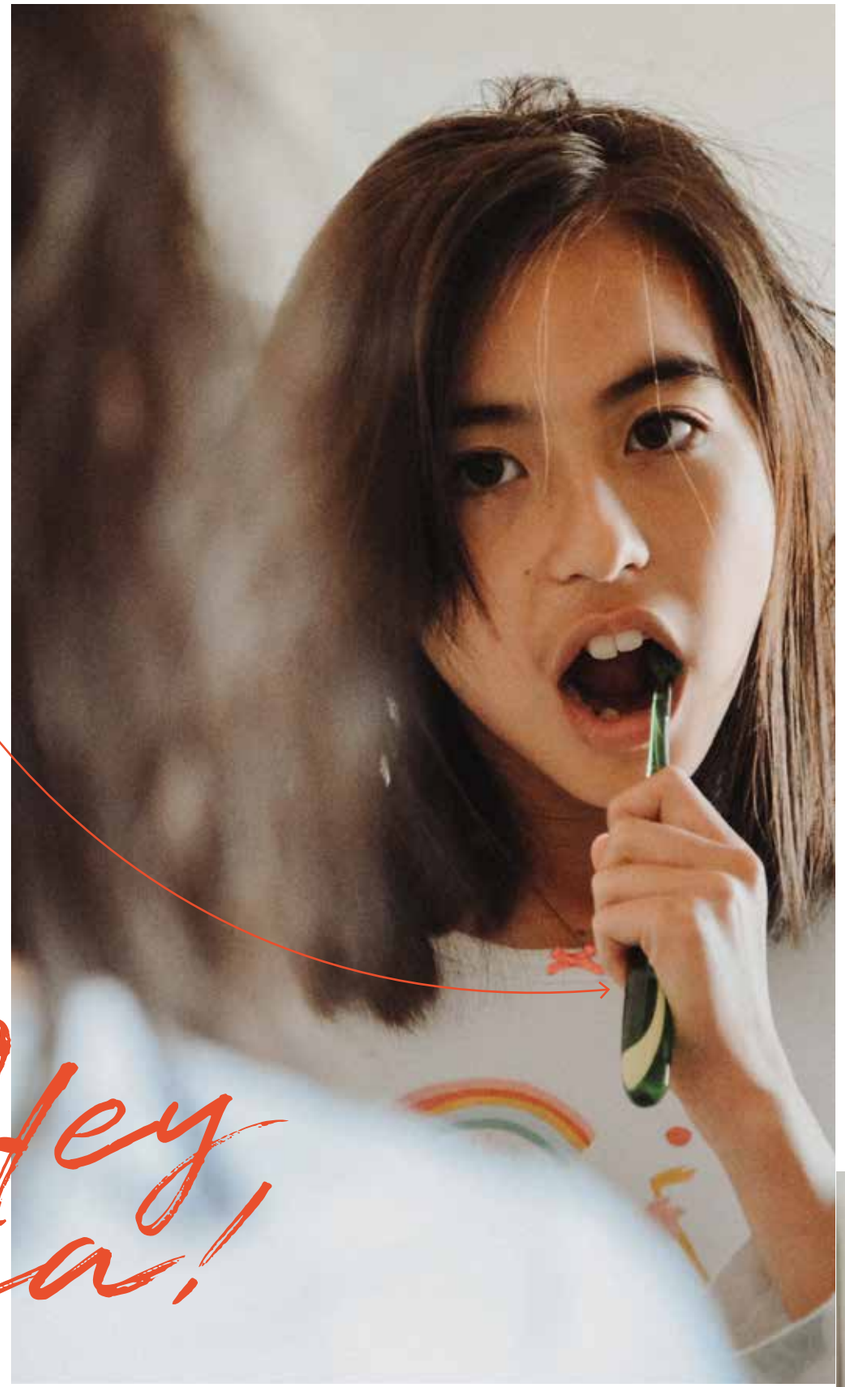
ASTM D2240 | DIVERSE WERKSNORMEN

MEASURING METHODS: KEINE

AREAS OF APPLICATION
HPE III basic L: Hardness testing on steering wheels.
HPE III basic L/c: Hardness testing on foams, flexible materials, and foamed interior linings in the automotive field with plastic covering, leather covering, or similar materials.

"Good morning Anna! Oh I know, it‘s far too early to get up.“

Tooth brush –
tested with our digi test II.



Hey Anna!

HAVE A NICE DAY.

We manufacture measuring devices that are used in the production and quality assurance of most everyday products. Even though it may seem that there aren‘t many points of contact with testing devices in daily life, we are present in many moments of your everyday life.

"Some yummy fruits will make you fit for the day.“

Fruits – tested
with our HPE III Fff.

"Hurry up! School is not waiting for you!“

Rubber – tested with our
Rebound Elasticity Tester.

Pencil refill – tested
with our digi test II.

"Keep going, Anna! The lessons are almost over...“

Vegan patty – developed with our CCR ultra.

"Enjoy, Anna. You‘ve certainly earned that now.“

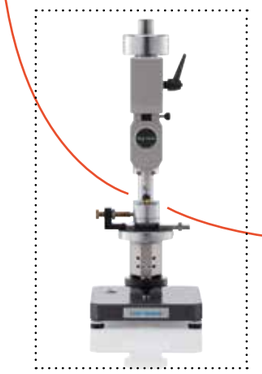
"Anna, don‘t forget your daily vitamins!“

"That‘s beautiful. Well done, Anna.“

Building blocks – tested with our digi test II.

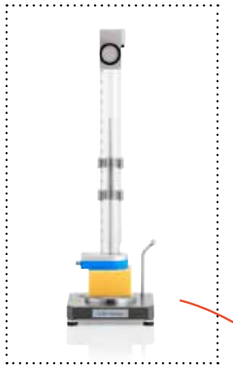
Rolls – tested with our HPE III.

"Roll as fast as the wind on your roller skates!“



Gel capsules and Lipstick – tested with our Gelomat.

"What are you doing there? It‘s time to go to bed!“



Mattress – tested with our Ball Rebound Tester.

"What an exciting day. Good night, sleep tight, Anna!“

Seal – tested with our digi test II.

"Some say, if your knees aren‘t green at the end of the day, it wasn‘t a good day...“

ACCREDITED SERVICE ON TOUR

WE ALSO CALIBRATE DIRECTLY AT YOUR LOCATION – TAKE ADVANTAGE OF OUR ON-SITE CALIBRATION SERVICE.

At Bareiss, we understand that time and flexibility are of utmost importance to our customers. That's why we offer our on-site calibration service to ensure that our customers can quickly and efficiently check and calibrate their testing devices, avoiding any interruptions in their production processes.

"Our time is your gain. With on-site calibration, we offer maximum flexibility, minimal downtime, and highest precision."

Michael Aierstock, Bareiss Service

Our experienced team of technicians comes to your location and calibrates your testing devices directly within your company. This saves time and costs for shipping while minimizing downtime for your devices. The service covers all types of our testing equipment. Additionally, we perform on-site testing with the highest standards and in accordance with our accreditation by the German Accreditation Body DAkkS and our ISO 17025 certification.

Schedule an appointment today or feel free to contact us with any further questions at service@bareiss.de.

MANUFACTURER AND CALIBRATION LABORATORY – COMPREHENSIVE SERVICE FROM ONE SOURCE.

As a manufacturer of hardness testing devices and a DAkkS accredited calibration laboratory, we have dual expertise. You as a customer benefit from this knowledge because we not only develop hardness testing devices but also maintain and calibrate them ourselves.

We have a deep understanding of how hardness testing devices need to be designed and developed to ensure accurate measurements. As a manufacturer, we know our hardness testing devices best and have all parts in-house to perform comprehensive maintenance before calibration. This combination of maintenance and calibration services provides you with the optimal service to save time and costs and guarantee the longevity of your devices.

70 YEARS OF EXCELLENCE, NOW DIGITAL.

EXPLORE HP DIGITAL.

HP DIGITAL

The HP Digital is a portable digital Shore hardness tester, available for both Shore A and Shore D measurements. The device features a robust aluminum alloy housing with anodized surfaces. In addition to the hardness value, it records the date, time, and peak value. Afterwards, the values can be conveniently transferred to a PC.

ASTM D2240 | DIN ISO 48-4 | DIN EN ISO 868

SHORE A, SHORE D

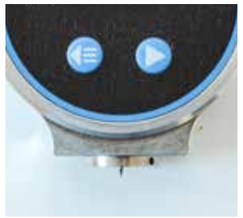
AREAS OF APPLICATION
Hardness determination on composite materials, viscoelastic materials, elastomers, plastics, or rubber.

LESS PRONE TO OPERATIONAL ERRORS
Thanks to the digital nature of HP Digital, all measurments can be completed within the set testing time, automatically avoiding any untimely measurments.

SAVE AND VIEW UP TO 100 MEASURMENTS
The HP Digital has a memory capacity to save up to 100 measurments and it allows viewing of all the measurements directly on the device.

USB TYPE-C INTERFACE
Easily transfer your data to a computer using the most common interface without any issues.

OUTSTANDING MECHANICAL QUALITY
Manufactured with German craftsmanship, each HP Digital is laid-out to pursue minimal mechanical friction, ensuring the most reliable and consistent measuring results.



HP

Analog handheld hardness tester for determining hardness according to Shore and Asker scales on flat specimens made of composite materials, flexible materials, elastomers, and polymers.

ASTM D2240 | DIN EN ISO 868 | DIN ISO 48-4 | JIS K 7312 | WORKS STANDARDS

SHORE A, A0, B, C, D, D0, E, 0, 00, 000, 000-S, 000-SA
HÄRTE L, HÄRTE L/C, ASKER C, ASKER CS, ASKER F

AREAS OF APPLICATION
Composite materials, flexible materials, elastomers, plastics, foams, as well as automotive interior equipment.

LIGHTWEIGHT AND COMPACT
The compact size of the handheld hardness tester allows for easy transportation to the desired location. The HP is lightweight and easy to carry, while being well-protected by the convenient carrying case.

TWO MEASUREMENTS IN ONE
With the optional trailing pointer, the peak value of the hardness test is displayed on the dial even after the measurement.

UNIVERSALLY APPLICABLE
In combination with our manual testing stand BS 61, the HP also serves as a desktop unit for measurements in a laboratory environment.

HPE III BASIC

Digital handheld hardness tester for Shore hardness measurement with illuminated display, sensor for capturing ambient conditions, and integrated pressure sleeve for vertical support and contact pressure conforming to standards.

ASTM D2240 | DIN ISO 48-4 | DIN EN ISO 868 | JIS K 7312 | WORKS STANDARDS

SHORE A, A0, B, C, D, D0, E, 0, 00, 000, 000-S, 000-SA
HARDNESS L, HARDNESS L/C, ASKER C, ASKER CS, ASKER F

AREAS OF APPLICATION
Hardness determination on composite materials, flexible materials, elastomers, plastics, foams, and automotive interiors

RELIABLE MEASUREMENT VALUES
The integrated spring system in the handle ensures that the HPE III applies the force conforming to standard and the correct angle to the specimen. Operator influence is thus minimized, allowing you to focus on the important things.

The free software tool “BareissOne QuickMeasure” offers you the possibility to easily capture, print, and export your data in just a few steps.

Upgrading to the paid full version “BareissOne”, our unique and modular software platform, allows you to centrally store and evaluate all measurement values of your Bareiss testing devices. The user-friendly interface provides statistical analysis of the measurement values with user management and automatic generation of test reports.

Whether it’s a standard test for single measurements or a test series with complex text sequences, BareissOne meets your specific requirements. Features such as E-Signature for tamper-proofing of measurement values and Audit Trail complete the offering of the software platform.

INTUITIVE MENU NAVIGATION
The simple menu navigation is operated via 3 buttons and is intuitively understandable after just a few steps. Changing the measurement time, viewing up to 300 measurement values, and many other functions are displayed to you in a few clicks.

LIGHTWEIGHT AND COMPACT
The compact size of the handheld hardness tester allows for comfortable transportation to the desired location. Whether in the factory, warehouse, receipt of goods, or during quality inspections at the supplier, the HPE III is easy to carry and well protected by the practical carrying case.

UNIVERSALLY APPLICABLE
In addition to its use as a flexible and lightweight handheld hardness tester, the HPE III offers a stationary solution with the extension of a test stand that adapts to your requirements. In combination with our manual test stand BS 61 or our automatic test stand BSA, the HPE III also serves as a tabletop unit for measurements in a laboratory environment.

REFERENCE BLOCKS

Plane-parallel test specimens made of reference materials embedded in a metal frame for daily verification of the hardness testing device, ensuring the quality of the measurement results between calibration intervals.

ASTM D531 | ASTM D2240 | ASTM D2583 | DIN ISO 48-2 | DIN ISO 48-3 | DIN ISO 48-4 | DIN ISO 48-8 | DIN EN ISO 868 | DIN EN 59 | VLRH | JIS K 6253 | JIS K 7312

SHORE A, A0, AM, D, 0, C, D0, 00, 000, 000S E, B
ASKER C, ASKER CS, ASKER F

AREAS OF APPLICATION
With the help of the reference block, you regularly check the indenter, measurement range, and spring force of your hardness testing device between calibration intervals.

REFERENCE MATERIAL EMBEDDED IN A METAL FRAME
By encasing the reference material in metal, a plane-parallel surface contact of the reference block is ensured during the verification of the hardness testing device.

DAILY SECURE MEASUREMENT RESULTS
With the help of the reference block, you regularly check the indenter, measurement range, and spring force of your hardness tester between calibration intervals. This ensures that contaminations and damages to the indenter and hardness tester are quickly detected, and you always receive accurate measurement results.

VERIFIED QUALITY WITH DAKKS ACCREDITED CERTIFICATE
Thanks to our in-house accredited calibration laboratory according to ISO 17025, we can ensure the highest quality for our reference blocks.

NEWAGE AND BAREISS: A 50-YEAR LEGACY REDEFINING MATERIAL HARDNESS TESTING

The intertwining legacy of NewAge Industries and Bareiss Prüfgerätebau traces back to the pivotal year of 1954, a time when Ray Baker founded NewAge Industries and Heinrich Bareiss established Bareiss Prüfgerätebau. Little did they know that their parallel beginnings would culminate in a groundbreaking partnership that reshaped the landscape of material hardness testing over the next five decades.

Ray Baker's venture into NewAge Industries initially focused on importing portable metal hardness testers from Italy, aiming to resell these instruments in America. Concurrently, Heinrich Bareiss's Bareiss Prüfgerätebau was making strides in Europe as a leader in plastic hardness testing, pioneering innovations in the field.

The US Government swiftly became one of NewAge's primary clients, employing these imported testers to scrutinize the hardness of military airframes, marking the genesis of a substantial clientele. Industries such as automotive, steelmaking, and general manufacturing clamored for tools to measure the physical properties of metal, necessitating accuracy in abrasion, hardness, resistance, ductility, tensile strength, and bendability. The significance of hardness, especially in plastic materials, gained prominence across diverse industrial and consumer applications. NewAge Industries, recognizing this burgeoning demand, pivoted towards plastic testing, marking a pivotal shift in their trajectory.

Gordon Baker assumed leadership of NewAge's Hardness Tester Division from 1973 to 1995, steering the company through pivotal developments. Simultaneously, Ray's youngest son, Ken Baker, spearheaded the NewAge Plastics Division, focusing on manufacturing plastic and rubber tubing, along with polyurethane shapes. The synergy between NewAge and Bareiss emerged organically, with the introduction of Bareiss's handheld durometer for Shore hardness testing, which quickly found relevance across multiple applications in America. This collaboration stemmed from NewAge acquiring distribution rights for Bareiss's tester line in North America during the mid-70s.

As the industry clamored for more sophisticated testing capabilities, NewAge collaborated with multiple global manufacturers to amalgamate mechanical tester components with cutting-edge electronics and Statistical Process Control (SPC) software. This collaboration birthed the Exacta Hardness Testing System, revolutionizing the landscape of material hardness testing.

The partnership continued to flourish, with NewAge providing crucial electronics and software for Bareiss's second-generation digital testers, catering to a global market starting in the mid to late 1980s. The Bareiss benchtop tester, revered for its adherence to international standards, remained a cornerstone for testing samples and small parts. A pivotal milestone arrived in the early 90s when NewAge's Tester Division supplied the first national standard hardness testers to Boeing Aircraft and the National Institute for Standards and Testing (NIST), establishing a benchmark for hardness evaluation.

The acquisition of NewAge Industries' Tester Division by Ametek in 2005 marked a transformative phase. NewAge Industries refocused its efforts, venturing into the production of high-purity tubing, hoses, and single-use systems for the biotech and pharma industries.

In a testament to their enduring collaboration, NewAge Industries, decades later, recognized the need for enhanced testing capabilities and acquired Bareiss Shore Hardness testers, specifically the Digi Test II series, for multiple plants across different locations in 2020, 2021, and 2023.

As NewAge Industries continues to evolve and diversify, the adoption of the Digi Test II series signifies a dedication to preserving and advancing the legacy of a 50-plus-year partnership with Bareiss. This enduring collaboration stands as a testament to their commitment to excellence and innovation in material hardness testing.

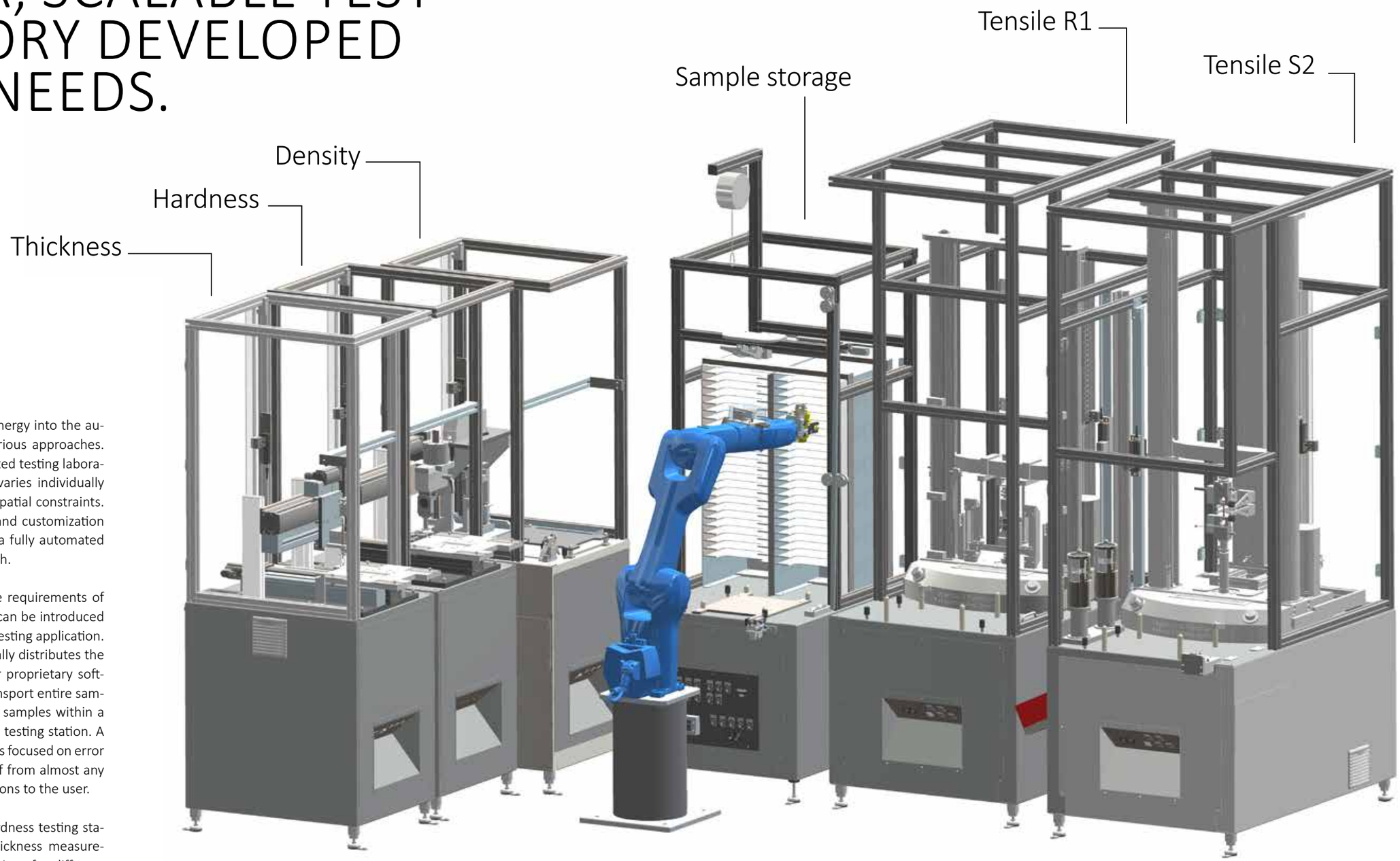
SmartLab

MODULAR, SCALABLE TEST LABORATORY DEVELOPED TO YOUR NEEDS.

In recent years, we have invested a lot of energy into the automation of testing methods, exploring various approaches. While the core requirements for an automated testing laboratory are very similar, the execution often varies individually due to differences in testing methods and spatial constraints. We have considered both standardization and customization in the design of our SmartLab, developing a fully automated physical laboratory using a modular approach.

SmartLab intelligently combines the unique requirements of our customers. Various sample geometries can be introduced into the machine exactly as needed for the testing application. The industrial-grade 6-axis robot automatically distributes the samples within the machine, thanks to our proprietary software. Its unique gripper system can also transport entire sample trays as well as seperate the numerous samples within a tray and introduce them into the respective testing station. A significant part of the development effort was focused on error handling, allowing the machine to free itself from almost any situation and provide helpful recommendations to the user.

Our first SmartLab was delivered with a hardness testing station, a density determination station, a thickness measurement station, and two tensile testing machines for different sample geometries (S2 bars and R1 rings).



Instrument status indicator lights

High sampling rate for improved FT-Rheology

Pressurized closed cavity

Fully rotational lower die

Expansive viewing window and ergonomic workplace

Extrusion-relevant shear rates possible (up to 500 s^{-1})

UNVEILING THE POTENTIAL OF PLANT-BASED FOODS

The CCR ultra emerges as an indispensable tool for food scientists, researchers, and material suppliers dedicated to the burgeoning plant-based food and meat analogue industry. Engineered to transcend the capabilities of traditional rheometers, the CCR is your partner in navigating the complexities of food material behavior under the rigorous conditions of food processing.

CCR ultra

RPA ultra

REVOLUTIONIZING ELASTOMER ANALYSIS

The RPA ultra by Bareiss marks a significant leap forward in the analysis of rubber and elastomer materials. Innovatively engineered to tackle the rubber industry's unique needs, this pioneering RPA ultra solution stands out with its fully rotating lower die. It is an essential tool for researchers, quality control specialists, and production managers who are at the forefront of elastomer innovation and process optimization.

KEY FEATURES TAILORED FOR THE ELASTOMER INDUSTRY

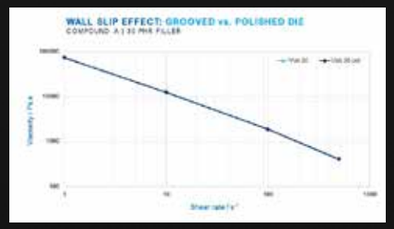
The RPA ultra boasts a fully rotational lower die, mirroring the dynamic conditions of rubber processing and manufacturing. This feature is critical for simulating real-world scenarios, allowing for the precise characterization of elastomer behavior during processes such as molding, extrusion, and curing.

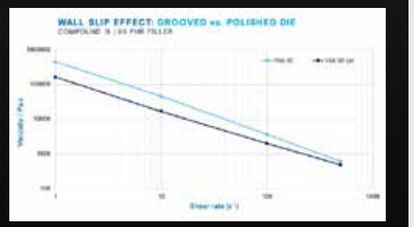
The RPA Ultra's capabilities extend to:

Recovered carbon black characterization (rCB):
Assess the quality and performance implications of rCB in rubber compounds, enabling sustainable practices and material reuse.

Optimizing processability behavior
Fine-tune rubber compounds for optimal processing, reducing waste and improving throughput.

Wall slip measurements
Utilize a polished die for the upper cone to accurately measure wall slip phenomena, ensuring reliable data for process adjustments.





Precise FT Rheology
Benefit from a high sampling rate that enables precise Fourier Transform (FT) Rheology, capturing the intricate details of the material's response to deformation.

COMPREHENSIVE TEST METHODS FOR IN-DEPTH MATERIAL INSIGHTS

Processability Tests

Optimize for extrusion
Employing the steady shear method, the RPA ultra performs processability tests at various extrusion-relevant shear rates. This approach enables the precise evaluation of flow characteristics and processing behavior of rubber compounds, essential for optimizing production efficiency and enhancing mold filling capabilities.

Strain Sweep

Characterize material behavior
Examine viscoelastic properties, identify the linear viscoelastic range, and assess the branching index of polymers to offer insights into compound formulation and stability evaluation

Frequency Sweep

Understand viscoelasticity
Explore how the material behaves under various frequencies to predict performance in dynamic applications.

Stress Relaxation and Recovery

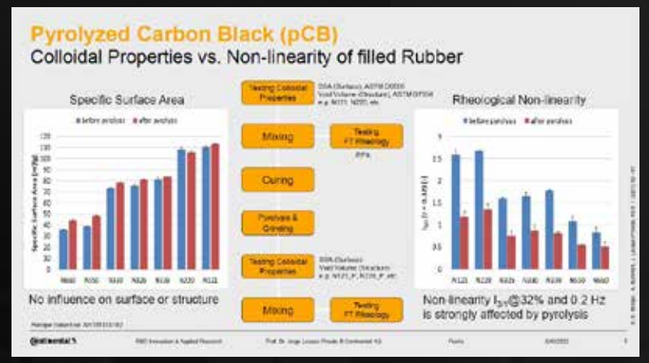
Assess product performance
Measure how quickly a material recovers after deformation, an indicator of product durability and longevity.

EMPOWER YOUR ELASTOMER DEVELOPMENT WITH RPA ultra

The RPA ultra by Bareiss is not just an instrument; it's a strategic asset in the elastomer industry. By offering a simulation of the processing environment and delivering detailed rheological properties, the RPA ultra empowers you to:

Develop superior rubber compounds
Utilize advanced rheological data to create materials that meet stringent performance and quality standards.

Refine manufacturing processes
Apply insights from the RPA ultra to optimize every stage of the rubber manufacturing process, from compounding to curing.



RPA ultra

TAILORED FOR PLANT-BASED FOOD INNOVATION

Unlock the full potential of plant-based food innovation with the CCR ultra, a cutting-edge closed cavity rheometer engineered to revolutionize the way you analyze and optimize food systems. Designed with precision and user-friendly operation in mind, the CCR ultra offers unparalleled insights into the structuring behavior of plant-based food under extrusion-like conditions.

WITH THE CCR ULTRA, YOU WILL UNLOCK A VARIETY OF WAYS TO UTILIZE ITS CAPABILITIES, ENABLING YOU TO:

Discover material behavior
Determine the viscoelastic properties within the linear range, assessing the material's gel or liquid-like nature.

Optimize processing conditions
Gain insights into how your product will respond to small deformations during mixing or gentle processing.

Evaluate under stress
Explore the non-linear viscoelastic behavior and how your material's structure changes with significant deformations.

Improve product formulation
Utilize essential data on yield stress, thixotropy, and strain behaviors to guide product formulation for demanding processing conditions.

Assess structural stability
Measure the material's ability to return to equilibrium post-deformation, a key factor in maintaining product quality.

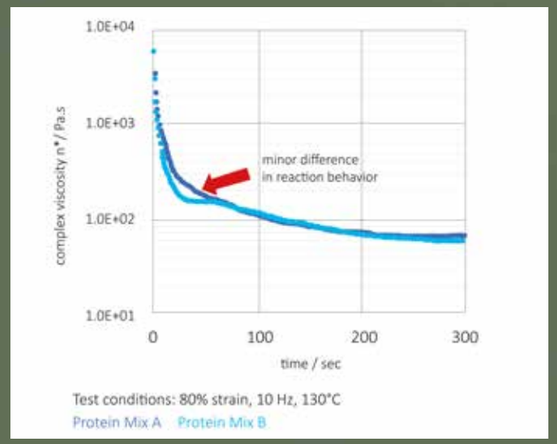
Ensure consumer acceptance
Ensure the final product retains its desired shape and texture, influencing consumer satisfaction.

REDEFINE RHEOLOGICAL EXCELLENCE WITH CCR ULTRA

The CCR ultra is not just an instrument; it's a gateway to innovation in the plant-based protein sector. By providing a deeper understanding of rheological properties at conditions that mirror actual food processing, the CCR empowers you to:

Design superior products
Leverage precise rheological data to create plant-based meats with the ideal texture and consistency.

Optimize processing parameters
Apply rheological insights to refine extrusion and other processing techniques, enhancing product quality while reducing costs and improving efficiency.



JOIN THE FOREFRONT OF FOOD TECHNOLOGY

Embrace the CCR ultra's advanced capabilities to stay ahead in the competitive landscape of plant-based foods. With its unique fully rotational lower die and comprehensive rheological analysis, the CCR ultra by Bareiss unlocks the secrets of food rheology, transforming your approach to research, product development, and material supply strategies.

For a future where plant-based proteins are not just an alternative but a preference, the CCR ultra is your scientific companion.

bareiss
ThermoFisher SCIENTIFIC

CCR ultra

HPE III Fff

NON-DESTRUCTIVE TESTING OF FRUIT FLESH FIRMNESS

The firmness of the pulp is a reliable indicator of fruit ripeness, allowing conclusions about their freshness, ability for storage, and transportability. With the handheld hardness tester HPE III Fff, you can non-destructively determine the firmness of fruits and vegetables without peeling or cutting. The fruits remain suitable for consumption even after the test.

FLEXIBILITY THANKS TO INTERCHANGEABLE INDENTERS
Depending on the type of fruit, the measuring method can be adjusted by exchanging the indenters. Thus, the HPE III Fff enables testing of pulp firmness on many different types of fruits and vegetables.

SUITABLE FOR ANY FRUITS
Not only through the exchange of the indenter but also through various versions of the HPE III Fff, all fruits can be measured, from soft raspberries to unripe, hard avocados.

EASY CLEANING
By removing the indenter, the device is easily cleaned of fruit juices and residues from the measurement, ensuring persistence of the hardness tester.

With our mobile handheld hardness testing device HPE III Fff, you can assess the firmness of fruits and vegetables without damaging them, determining the perfect harvest time or the optimal display time on the shelf.

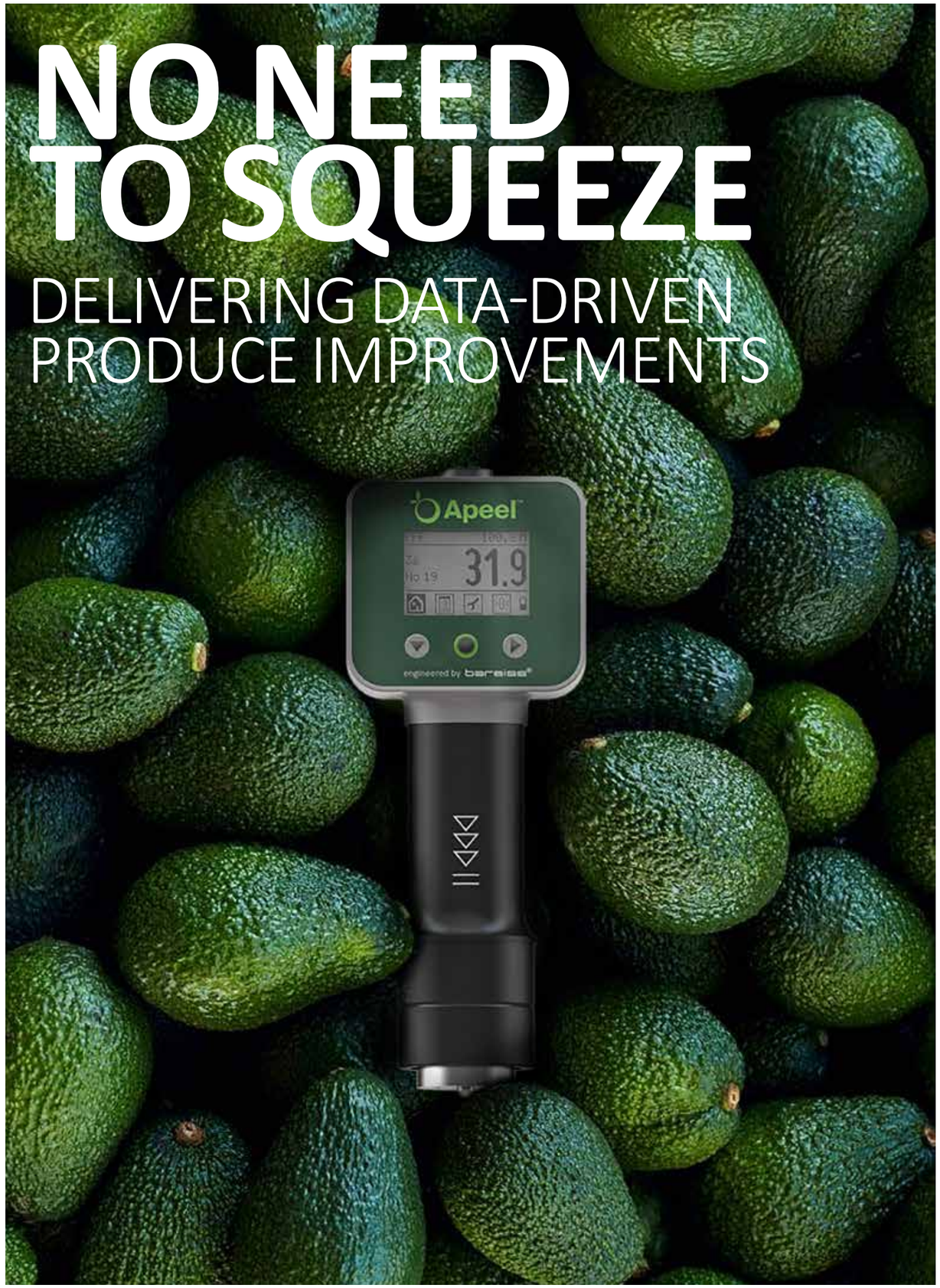
With our CCR ultra, you can analyze and optimize your food systems, assessing processability even in small quantities.

Our measuring devices actively contribute to reducing food waste and save a significant amount of money.

With the Gelomat, you can reliably measure the strength and hardness of gelatin, agar agar, gummy bears, jam, nutrient media, or gel-like substances. Various measurement setups allow for the characterization of a wide range of food items.

WE DEVELOP PRODUCTS THAT CONTRIBUTE TO REDUCING FOOD WASTE AND ENABLE NEW METHODS OF FOOD PRODUCTION.

With every discarded food item, there's a significant consumption of energy, water, and other resources throughout the chain from cultivation to retail, which could be otherwise utilized through better food testing and monitoring. That's why at Bareiss, we focus on developing testing devices in this area to contribute our expertise towards resource conservation.



NO NEED TO SQUEEZE

DELIVERING DATA-DRIVEN PRODUCE IMPROVEMENTS

Avocado lovers across the globe share the same experience: a craving for the delicious, buttery fruit becomes a waiting game for your avocados to become perfectly ripe (but not go bad). In fact, this challenge extends across all fruits and vegetables, and more than two-thirds of shoppers of apples, avocados and citrus produce have felt the frustration of throwing away produce purchases that go bad before they've had a chance to enjoy them.

That's why California-based Apeel Sciences is working with nature to reduce waste across the fresh food system, and have relied on the HPE III Fff to create a data-led approach to accomplishing their mission.

A MISSION TO REDUCE FOOD WASTE

In 2011, Apeel's founder, James Rogers, Ph.D., was driving home through the lush California farmlands while he was listening to a podcast about global hunger. The UN FAO estimated at the time that 1/3 of all food produced globally is lost or wasted. This amounts to 1.3 billion metric tons of food every year. And, fruits and vegetables have some of the highest waste rates: 45% of all fresh produce is lost or wasted. On top of all of that, food waste is responsible for 3.6 million metric tons CO2-eq of greenhouse gas emissions annually, 8-10% of all GHG emissions. Food waste is a huge global challenge. Apeel sees it as an opportunity.

The company has developed a suite of food chain technologies that allow produce purveyors to protect, monitor and maximize produce quality in the face of supply chain and climate-related challenges. Apeel's technology starts with an edible, plant-based coating that extends the shelf-life of fresh fruits and vegetables by keeping moisture in and oxygen out - the two primary causes of spoilage. Additionally, Apeel develops new tools to more effectively digitize produce quality, and allow the food system to do more with the extra time created by Apeel's plant-based protection.

ASSESSING RIPENESS WITH HPE III

To understand the impact and effectiveness of Apeel's plant based coating, the company develops unique methodologies to objectively assess the ripeness of various fruits and vegetables. Apeel sought a way to test the same piece of fruit over time, and the destructive methodologies widely adopted by the industry simply wouldn't work. They found that the durometer was an ideal way to assess firmness, a leading quality indicator for products like avocados and citrus, and implemented it through their quality assurance practices across production sites globally.

According to a recent study from the University of Illinois Urbana-Champaign's Applied Research Institute, Apeel Sciences' proprietary method of testing avocado ripeness is up to three times more accurate than current industry testing mechanisms. The durometer is an efficient and non-destructive alternative to testing avocado ripeness and is more consistent in testing ripe fruit, when compared to the existing method of using a penetrometer. The durometer has the ability to transform the way produce testing has been done for years. Today, Apeel is helping retailers and suppliers adopt this methodology to unlock significant improvements to their overall ripeness programs.

REDUCING WASTE & IMPROVING CUSTOMER EXPERIENCE

The durometer uses a pressure sensor, which when applied to the exterior of the fruit closely resembles the way a consumer would assess ripeness while shopping. The HPE III offers a previously unavailable level of ripeness accuracy that allows distributors and retailers to deliver fruit that matches consumer needs. Due to the speed and efficiency of testing using a durometer, distributors and grocery retailers can test more fruit, offering a more data-driven approach to shifting specifications to ripe and ready-to-eat avocados at shelf. Apeel has also released a digital insights platform, called RipeTrack to help retailer quality teams and produce executives capture and analyze this ripeness data at scale.

Ripe Track software by Apeel enables precise analysis and tracking of produce ripening processes.

RipeTrack is designed to meet the unique needs of QC experts. With measurements powered by durometers, the integrated system is easy to use, lightweight and portable, and seamlessly digitizes data to unlock actionable insights that can improve the quality of the produce shoppers will encounter in store.

Bareiss Managing Director Katrin Shen and Bareiss North America Chief Operating Officer Umair Waheed visited the Apeel Headquarters in Goleta, California. Developer of the Ripe Track Software Dave Giannini demonstrated the analysis capabilities of the measurements via the software and the resulting benefits for the customer. ▼

◀ *The Bareiss Handheld Firmness Tester HPE III Fff measures the firmness of fruit and vegetables. Through non-destructive testing, the tested fruits can still be used for their intended purposes after the examination.*

BAREISS AND APEEL – A COLLABORATION TO BREAK NEW GROUND

As a leading user of the HPE III Fff device, Apeel has entered into an exclusive partnership with Bareiss North America to distribute this powerful device in North, Central and South America.

The collaboration between Bareiss and Apeel is a remarkable demonstration of the power of innovation and collaboration in the food industry. By utilizing the capabilities of the HPE III Fff Fruit Firmness Durometer, we are redefining the way we measure ripeness, reduce waste and meet consumer demands, ushering in a new era of quality management for fruits and vegetables. Bareiss is excited about the opportunity to work with Apeel to reduce food waste and improve the sustainability and effectiveness of quality measurement in the food industry.

Laboratory Manager Savanah Braden explained the use of Bareiss equipment at Apeel. ▲

bareiss®

BAREISS NORTH AMERICA INC.

ADVANCED MATERIAL TESTING IN NORTH AMERICA

Under the leadership of our Chief Operating Officer, Umair Waheed, we have strategically positioned ourselves in the North American market, showcasing a distinguished commitment to quality and precision, which is also a hallmark of our legacy.

Located in Toronto, our newly opened state-of-the-art Experience center showcases our entire product portfolio, providing clients with in-depth consultations. This cutting-edge facility is designed to provide our clients with a hands-on experience where they can bring their own product samples for testing that goes beyond traditional product demonstrations. Together, we will identify the optimal solutions for your testing requirements, ensuring a seamless and efficient experience. We also extend our services to on-site visits for added convenience.

We are proud to inform our US, Canadian and Mexican partners that our North American branch now has a calibration center. This strategic approach not only ensures the utmost precision but also saves our clients valuable time and resources. In a continued attempt to improve our premium service, If an end customer is looking for a loaner device during the calibration period, that option is also available on the table.

"Celebrating 70 years of success, I'm filled with pride for our achievements and commitment to excellence. Together, we've overcome challenges, embraced opportunities, and built an inspiring legacy. Cheers to our past, present, and the promising future ahead."

Umair Waheed, Chief Operating Officer

Focused, Teresa Graf stands at the lathe, working on a workpiece. Later, she calmly assembles the smallest components into a new device or repairs existing ones. Always with a smile on her lips, focused and composed. She has a kind word for every colleague. She has been part of the Bareiss team for almost 5 years. After completing her secondary school education and a 2-year vocational school specializing in metal, she began her training as an industrial mechanic at Bareiss and graduated in 2022 with the top grade of 1.1. Today, she works as a permanent team member in assembly. What continues to fascinate her about this profession, and what keeps her as a woman in a male-dominated field like that?

“At the end of a workday, seeing what I’ve accomplished makes me happy.”

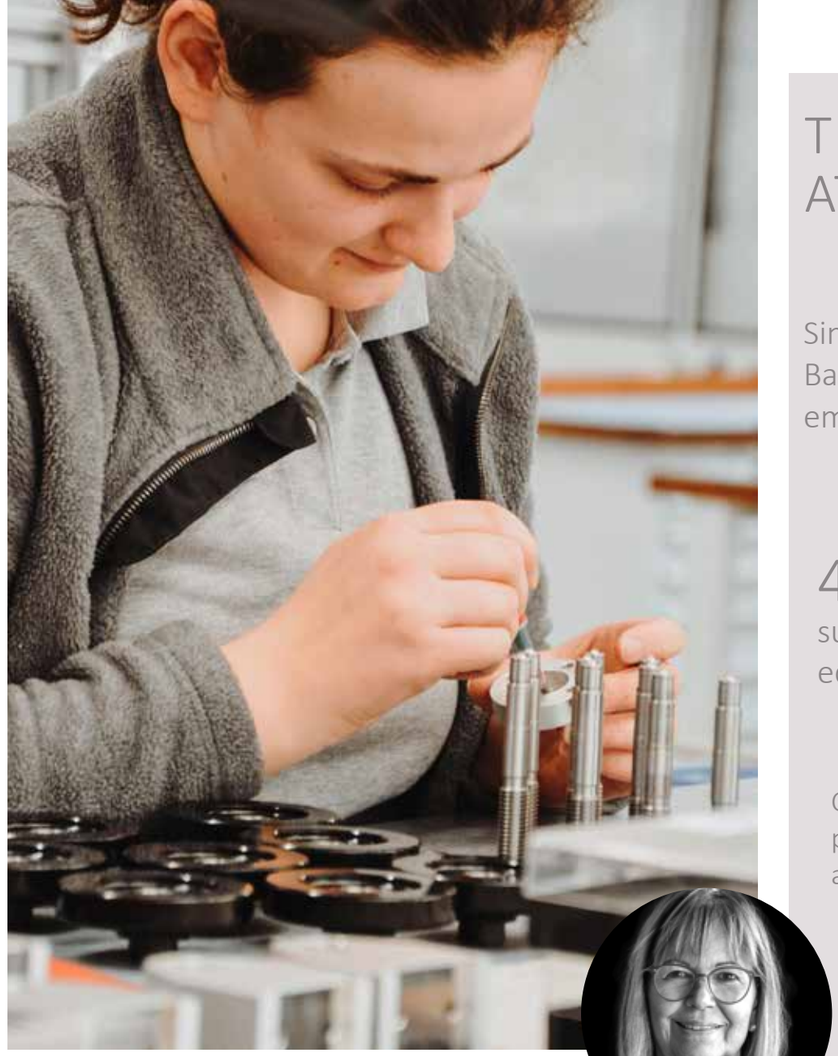
Teresa Graf,
Industrial mechanic at Bareiss

After various school internships, Teresa Graf knew that she wanted to pursue a craft profession in the metal industry. „Working with my hands and being involved in technology has always excited me since I was a child. It was clear to me early on that I wanted to do something in this field.“ Since working with wood is often more physically demanding for a woman, she chose metal. She came across Bareiss as a training company by chance. Today, she appreciates the varied tasks and the working atmosphere in the medium-sized family business. In addition to turning and milling, her tasks include assembling new devices, maintenance, and repairs. „The good thing about Bareiss is that we are not specialized in assembly, but have very diverse tasks. So it always remains exciting and varied.“ She doesn’t prefer any of her activities.

„The mix is what makes it.“

„At the beginning, I had to prove myself among my colleagues,“ says Teresa Graf looking back. Of course, some were skeptical when a young girl was hired as an apprentice industrial mechanic. Today, she is highly valued and recognized by her colleagues. The relaxed environment and sense of togetherness are important factors for Teresa Graf to feel comfortable at work. „For me, it was a conscious decision to choose this profession. I didn’t feel pressure from societal expectations.“ The skills needed as an industrial mechanic, such as manual dexterity and skill, are purely based on interest and not on gender.

◀ *With a steady hand, Teresa Graf inserts the tip of an indenter into its holder.*



Brigitte Wirth
Geschäftsführerin der 2. Generation

The employees are the key to success at Bareiss. „For many decades, we have also been training women in male-dominated professions,“ says Brigitte Wirth, managing director of the second generation. Experienced trainers, who are committed to the apprentices, ensure a solid training period. At Bareiss, great value is placed on the personal and professional development of each employee, as this is the cornerstone of the company‘s successful growth.

The fact that a finely crafted testing device is created from a rough piece of metal through her work still fascinates Teresa Graf to this day. The precision and quality of Bareiss‘s finished testing devices literally lie in her hands, as she and her colleagues handle each component multiple times. Teresa Graf is aware that this responsibility is not only a challenge but also an opportunity. As an industrial mechanic, she has chosen a future-proof profession with many opportunities for further education and has found a company in Bareiss that supports her development.

TRAINING AT BAREISS

Since 1975, Bareiss has been training employees annually.

45 Since then, apprentices have successfully completed their training.

Continual education and professional development are supported.

“Those who think about tomorrow today can meet the challenges in metrology at Bareiss in the future.”

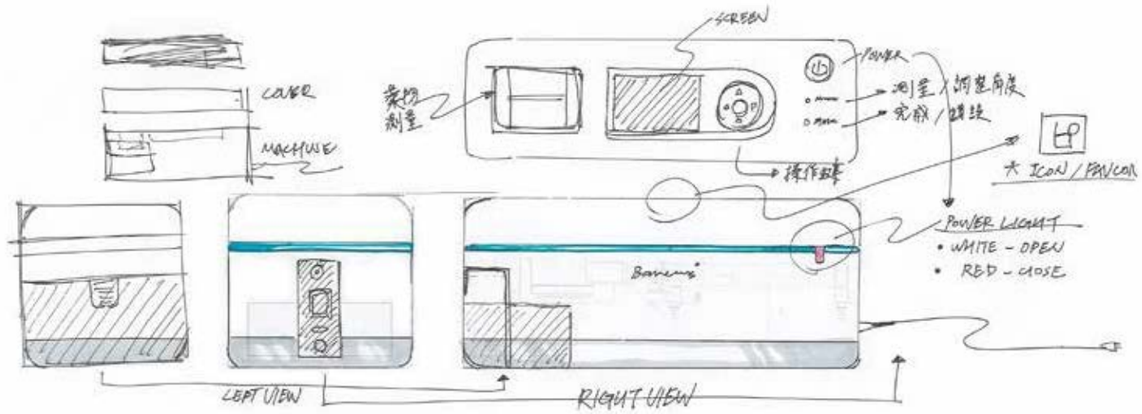
Current Training Opportunities (m/f/d)

- Industrial Mechanics
- Industrial Clerk
- Technical Product Designers

THE TESTING SOLUTIONS FOR THE WELLBEING OF MANKIND.

INTRODUCING BAREISS PHARMA

Little did you know that besides the polymer industry, Bareiss has also maintained a strong presence in other sectors, most notably in the pharmaceutical industry. The idea was formed through a collaboration with Merck to develop a special hardness testing solution for softgel capsules, known as “Gelomat”. Today, the name Gelomat has almost become an industry standard as the same testing method has been adopted by the world’s most notable pharmaceutical companies across the globe.



The world we once knew is very different today. With constant reminders of the issue of global warming and our responsibilities as global citizens to combat this worsening problem, we can anticipate significant changes in various aspects of our lives, all with a hope to reduce our carbon footprint. All these changes will have some degree of impact on the supply-chain of different industries, one very notable change would be the rising of the electric vehicle in the automotive industry. The adoption of cleaner and more sustainable energy sources is an inevitable trend, leading many industries through a transitioning process to meet new demands.

As a manufacturer, Bareiss sees itself as a participant who needs to actively join this global carbon reduction efforts. As an enterprise, Bareiss needs to remain vigilant regarding the potential negative impacts all these changes may have on our business. In light of these circumstances, Bareiss needs to expand its products range to serve a wider variety of applications and industries. The success with the Gelomat in the pharmaceutical industry has motivated Bareiss to further explore new opportunities in this business avenue.

The sleek and user-friendly design of THT500 known as tablet hardness tester or breaking force tester seems to be a great addition to the Bareiss pharma product family. The whole engineering development of THT500 took place in our R&D facility at Bareiss Taiwan – our newest subsidiary founded in year 2020. Though the nature of our business doesn't necessarily require the products to look stylish, one of our distinctive approaches in developing our pharma product family however is to infuse them with a sense of style which hopefully becomes a recognizable trademark in the market.

The topic of 21 CFR Part 11 is going to be something very important to address in order to successfully launch a series of our pharma products. It is the part of Title 21 of the code of Federal regulations that establishes the United States Food and Drug Administration regulations on electronic records, electronic signatures, audit trail and user management. With that said, all the Bareiss pharma products will have our self-developed pharma software incorporated to make sure the testing process is fully compliant with the regulations.

The new Bareiss pharma software is designed to facilitate your data collection, analysis, approval, and reporting processes. It complies with 21 CFR Part 11 regulations to ensure the data integrity, security, and confidentiality of electronic records and signatures. Features such as advanced user management, comprehensive records of all users' activities in an audit trail, electronic signatures, and data mapping from one database to another are all at your fingertips.

The most anticipated Tablet Breaking Force Tester of the year.

Built for Pharmaceutical. Designed for style.

The THT500 is a versatile tablet-breaking force tester designed to analyze various physical characteristics of tablets (an oral dosage form). The breaking force test, also known as the hardness test, offers a load range of up to 500N and allows users to set desirable test speed (mm/sec) and force increment (N/sec). In addition to the hardness measurement, the THT500 is capable of providing other measurements such as length, width, thickness, and weight (through an external scale).

reddot winner 2024

GELOMAT

Testing device for fully automated hardness and strength test on gelatin capsules, gel nutrient solutions, and other flexible materials.

MEASURING METHODS: 0-20 N, 0-2

AREAS OF APPLICATION
Flexible materials such as gelatin, gelatin capsules, gel nutrient solutions, modeling clay, nutrient media, jam, paraffin, etc.

IN COMBINATION WITH
BAREISSONE SOFTWARE
CFR 21 PART 11 COMPLIANT

GLOBALLY UNIQUE TESTING METHOD FOR GEL CAPSULES
Our long tradition of innovations is reflected in the Gelomat: the testing method developed jointly with a customer is recognized by ISO 17025. It allows the properties of gel-like substances to be determined. Even the smallest changes in formulations are detected and measured by our Gelomat.

SIMPLE AND INTUITIVE OPERATION
With our continuously expanding portfolio of sample templates to ensure correct positioning during testing, we offer the perfect solution for simple hardness testing of gel capsules.

TIME SAVING THROUGH SERIAL MEASUREMENT
The Gelomat's multiple measurement function allows generating measuring values on multiple samples in one measurement process.

MEET BAREISS Taiwan

Founded in late 2020, Bareiss Taiwan is the newest subsidiary of its headquarters in Germany. Unlike Bareiss's other foreign subsidiaries, which are mainly for local sales and marketing, Bareiss Taiwan's primary focus is on the engineering development of pharmaceutical testing solutions. This is a new business avenue that Bareiss is aiming to explore in order to expand its foothold into more diversified industries.

TAIWAN IS A CRADLE FOR TECHNOLOGY
Not only is Taiwan known worldwide for its advanced semiconductor industry, but its manufacturing industries in consumer electronics, IT, footwear, machinery, sports equipment, automotive, and various other sectors are also renowned for their prestigious quality and innovations. Based on these facts, Bareiss sees a great opportunity to leverage the engineering resources in Taiwan for software development, vision inspection, pharmaceutical testing solutions, and product design.

STRATEGIC ROLE
Located at the heart of the Asia-Pacific region, Bareiss Taiwan serves as our extended calibration facility, catering to our customers across Asia. This strategic placement offers the advantages of faster turnaround times and reduced logistics costs. To maintain consistency and reliability in calibration results, the calibration equipment utilized at the Taiwan facility mirrors that of our main facility in Germany. Additionally, the personnel responsible for calibration must undergo a rigorous training process, encompassing both theoretical knowledge and practical skills. Only upon successful completion of this training are they officially authorized to conduct calibration work.

The National Center for Traditional Arts in Yilan

Shennong Street in Tainan

Bitou Cape Park in New Taipei city

Taoyuan Valley Trail in New Taipei city

The tango is more than just a dance—it's a passion that penetrates deep into the hearts of its dancers and creates an unparalleled connection. Partners in tango merge on the dance floor into a single entity. Their passion for this dance is reflected in every step, every precise turn, and every glance. Similarly, as a manufacturer of hardness testing equipment and an accredited calibration laboratory, we form a harmonious unity. As partners, we complement each other perfectly. Like dancers on the dance floor, we as manufacturers and calibration laboratories under one roof are an inseparable entity, jointly setting the highest standards in hardness testing and delighting our customers with double expertise.

bareiss® × ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-K-15206-01-00

WHAT IS ACCREDITATION?

Accreditation is a process in which conformity assessment bodies are assessed and monitored for their professional competence, reliability, and independence. This is done through a transparent and impartial evaluation by a national accreditation body acting on behalf of the government, such as the DAkkS in Germany. Accreditation ensures that products, processes, and services are tested by competent entities and brought to required levels of quality and safety. In short, accreditation is the government's examination of the examiners.

A TEAM FOR OVER 25 YEARS.

As the first DAkkS-accredited laboratory for the hardness testing field in Germany, customers have valued our expertise and reliability since 1996 when it comes to ensuring accurate measurement results. Prior to this accreditation, the traceability of devices was a significant challenge. Bareiss was the first company to recognize the potential of combining a manufacturer with an accredited laboratory. An elaborately prepared manual paved the way for the initial accreditation, and excerpts from it later served as the basis for the development of the International Testing Standard for Calibrators according to DIN ISO 18898. With our visions and commitment, we have shaped the world of standards and continue to influence the standards in the field of hardness testing to this day.

WE KNOW HOW IT'S DONE.

With our dual expertise as a manufacturer and accredited laboratory, we are able to adjust, maintain, and calibrate your equipment in one go. This saves you time and costs, and your device is ready for use again in no time.

WE ARE ACCREDITED BY THE GERMAN ACCREDITATION BODY DAKKS FOR THE FOLLOWING AREAS:

bareiss® × ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-K-15206-01-00

ALL IN ONE – ADDITIONAL BENEFITS:

SAVE TIME AND MONEY.
Our in-house calibration includes, of course, the maintenance and adjustment of your device. If necessary, parts are replaced and everything is restored to optimal condition. Only then does the calibration, accredited by the DAkkS, take place with a certificate. This means you only have to do without your hardness testing device for a short time and get it back in the best condition.

KNOWING WHAT TO EXPECT.
To provide you with a completely transparent overview of our maintenance and calibration services, we list all contents in our service packages transparently. Choose the package that suits you best, the desired certificate, and optionally additional options such as our rental device service or the 48-hour express processing.

WE ARE ACCREDITED.
To ensure our commitment to the highest quality and precise measurement results, we are accredited to ISO 17025. This ensures the best possible comparability of your measurements. For us, this means renewing our accreditation every 18 months through a rigorous testing process. But only through this can we meet our own and your expectations.

DON'T MISS ANY CALIBRATIONS.
With our free calibration reminder, we will notify you in time when your device needs to be recalibrated within the specified interval. This ensures that your test equipment always delivers precise and reliable measurement results. We are happy to think ahead for you.

MANY QUESTIONS - ONE POINT OF CONTACT.
Maintenance and calibration is a complex topic. We understand that and want to support you as best as possible. As a competent partner for hardness testing and the calibration of hardness testing devices, we are always here to assist you. Feel free to use our service hotline at 07305- 9642-0 or send an email to service@bareiss.de.

BALL REBOUND TESTER

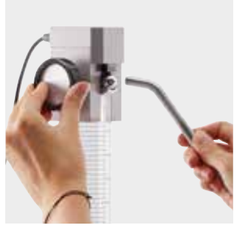
Measuring device for determining the ball rebound elasticity by the free fall of a ball on flexible, polymer foams.

ASTM D3574 DIN EN ISO 8307

SINGLE MEASUREMENT
MEASUREMENT ACCORDING TO DIN EN ISO 8307
MEASUREMENT ACCORDING TO ASTM D3574
SEVERAL BAREISS MODES

AREAS OF APPLICATION
Method for determining the rebound elasticity of polymer foams.

DIFFERENT MEASUREMENT MODES
To calculate median values or average values, you can choose between different measurement modes according to the standard. Additional Bareiss-specific measurement modes, deviating from the standard, enable additional measurement results that cannot be covered by a standard measurement.



SIMPLE AND INTUITIVE OPERATION
In two steps to the measurement result: After inserting the ball, only one handwheel needs to be turned 90° to initiate the test procedure.

REBOUND RESILIENCE TESTER

Fully automated testing device for determining the rebound resilience of elastomers.

ASTM D7121 DIN 53512 ISO 4662

MEASURING METHODS: PUSH PENDULUM PRINCIPLE

AREAS OF APPLICATION
Method for determining the behavior of the resilience of elastomers.

DIFFERENT MEASUREMENT MODES
In addition to measurements according to standard, it is possible to perform customized measurements. The major advantage is that the measurement results of the preconditioning are also displayed and can be considered for evaluation.

EASY AND INTUITIVE OPERATION
With the simple clamping fixture with integrated scale, you can position your samples easily and intuitively. After a few simple steps, you can start the measurement.

WITH THE OPTIONAL HEATING MODULE
By measuring the rebound resilience under temperature influence, you can directly simulate the material characteristics in real-world conditions and draw conclusions. The heating module enables measurements up to 100°C. In addition to the setpoint of the sample temperature, the temperature can also be directly verified at the measuring point.

ABRASION TESTING MACHINE

Automated testing device for determining the abrasive characteristics of elastomers based on the loss of material during abrasion testing. If the density of the material is known, the accuring loss of volume can also be determined additionally.

ASTM D5963 DIN ISO 4649

Abrasion hardness, Method A with fixed, non-rotating sample
Abrasion hardness, Method B with rotating sample
Abrasion path adjustable to 20 or 40 meters
Abrasion hardness Method A or B with tempered roller

AREAS OF APPLICATION
Tires, conveyor belts, shoes, flooring, and many other materials used in abrasive application area.

MAXIMUM FLEXIBILITY FOR YOUR MEASUREMENT REQUIREMENTS
Conduct various types of abrasion testing with one machine: choose between a fixed or rotating sample and select either a 20m friction path for very soft samples or a 40m friction path.

EASY OPERATION
With the sample fixed in the quick-release holder and simple conditioning of the abrasive sheet, the abrasion testing machine is quickly ready for use.

SAFE AND CLEAN FUNCTIONING
Thanks to the integrated cleaning mechanism, the test abrasive sheet is automatically cleaned during the testing. This saves time and reduces user's influence. The lowerable protective housing ensures further cleanliness and the user's safety.

TESTING UNDER REAL CONDITIONS
Use our additional tempered roller up to 100°C to simulate the temperature in the material's intended field of application.

PUNCHING PRESS SP 1000

Manual punching device for the production of test specimens for standard test specimens used for material testing on rubber, elastomers, and flexible polymer foams.

- Bracket for a punching device

PUNCHING PRESS SP 4000

Manual punching device with interchangeable brackets for four revolvers for the production of standard test specimens for material testing on rubber, elastomers, and flexible polymer foams.

- Bracket for up to 4 punching devices

For the punching press SP 1000 and SP 4000, punching devices for samples from flat materials are manufactured according to all standards upon customer request. Customized special shapes according to drawings are also possible. Please inquire with us.

Examples of standard test specimens:

- Shouldered test bars according to DIN 53504
- Strip specimen according to ISO 34-1
- Graves angle test specimen according to ISO 34-1

Features:

- Reduced effort due to eccentric lever
- Firm design
- Height-adjustable plunger for different material thicknesses

The Bareiss Sustainability Promise.

We have a deep connection to nature and the world around us. For 70 years, we have been based in Oberdischingen, a village with 2000 inhabitants on the edge of the Swabian Alps. This is our home, where we are rooted. We know the people and appreciate personal interactions. Our success has given us the opportunity to spread our wings and now operate worldwide. Meeting new people, gaining different inspirations, and continuing to evolve. With full gratitude for life and nature, we want to give something back and advocate for sustainable thinking and action.

#1 Our employees are part of the Bareiss family.

#2 We prioritize occupational health and safety.

#3 Family and work are compatible.

#4 Qualified training and further education are part of who we are.

#5 We support people and associations in our region.

#6 We are a voluteer-friendly employer.

#7 We are all equal.

#8 Good interaction, appreciation, and peaceful coexistence.

#9 We develop products that are food-friendly.

#10 Water is a precious resource and is protected.

#11 We use photovoltaics to generate our electricity.

#12 We only use electricity from renewable sources.

#13 We promote electro-mobility.

#14 We reduce our carbon footprint.

#15 We reduce our resource consumption.

#16 We take responsibility in organizations and associations.

#17 We are expanding our product portfolio to include additional industries.

#18 We are certified.

#19 We are there for our customers on site.

#20 Our devices are repair-friendly and recyclable.

It‘s still a long journey ahead, but we‘ve set the course: At Bareiss, we are committed to the community, the environment, and the circular economy. Under the motto „Wings thanks to roots,“ we harness the power of our down-to-earth heritage to inspire sustainable and better business practices. Whole-heartedly.

bareiss® SERVICE

IF YOU HAVE ANY QUESTIONS ABOUT HARDNESS TESTING, WE'RE HERE TO HELP!

IMPRESSUM

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Laboratory accredited by DAkkS according to DIN EN ISO/IEC 17025:2018. The accreditation is only valid for the scope of accreditation mentioned in the document annex D-K-15206-01-00.

Managing Directors
Katrin Shen
Oliver Wirth

k78-01538 | 06/2024


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YEARS OF
EXPERIENCE
bareiss