Anton Paar

since
1922

Great **people**
Great **instruments**

At the forefront of analytical instrumentation

We empower scientists around the globe so game-changing science finds answers to humanity's biggest challenges. This means outside-the-box ideas from people who don't just defy the status quo, but reshape it. At Anton Paar, we think the unthinkable to create the exceptional. For you. Every day anew, since 1922.

When Mr. Anton Paar founded the Austrian-based company, it was just the first step of a long journey. Since then, Anton Paar has continuously explored – and determined – new ways to merge high-precision engineering with scientific curiosity.

In the picture from left to right: Dominik Santner (COO), Katharina Christopoulos (CSO) and Jakob Santner (CTO).

Anton Paar develops, produces, distributes, and provides support for analytical instruments used in research, development, and quality control worldwide, as well as highly accurate process measuring systems and custom-tailored automation and robotics solutions.

The Anton Paar GmbH Group currently has more than 4,200 employees and is active in over 110 countries across the globe.

Customers include the biggest international soft drink producers and breweries as well as petroleum, food, chemical, and pharmaceutical companies, and many more.

Anton Paar is committed to long-term partnerships with our customers and employees as well as responsibility towards society in general.

Since 2003, the Anton Paar GmbH Group, as part of the Anton Paar Group AG, has been owned by the Santner Foundation, a non-profit organization exclusively and directly aimed at charitable work. The foundation supports non-commercial scientific work and research in the field of natural science and technology for public utility, addiction prevention, and the rehabilitation of drug addicts.

INNOVATION AND TRADITION
Innovation builds on research and development, but goes beyond technology and involves all of Anton Paar's employees. Innovation is the art of finding answers to tomorrow's questions. Customers need reliable application solutions that are precise and economic. Here are some of the reasons why our customers can expect more:

14.5 %
↓
of Anton Paar GmbH's turnover invested in research and development

Cooperation
with leading universities and research institutes

100 %
↓
of instrument production in-house following strict quality guidelines

Traditionally close-knit contact with the **international scientific community**

Longstanding tradition **of high-precision manufacturing**

ANTON PAAR OFFERS A RANGE OF INSTRUMENTS THAT PROVIDE COMPLETE CONFORMITY AND TRACEABILITY TO MEET STRINGENT REFERENCE STANDARDS AS WELL AS NATIONAL AND INTERNATIONAL REGULATORY REQUIREMENTS.

Anton Paar is Present Around the World

Our local experts are here for you:

SALES AND SERVICE NETWORK
In addition to a broad product portfolio, Anton Paar meets your needs with our worldwide sales and service network. Specialists trained and certified in-house are at your service.

CERTIFIED SERVICE
From the preventive maintenance programs to traceable calibrations and emergency service, Anton Paar accompanies you with certified service programs throughout the whole life cycle of your instrument.

ON-SITE INSTALLATION
Your measurement solution of choice is installed on-site by an Anton Paar certified sales representative or certified service engineer in accordance with your individual requirements.

APPLICATION SUPPORT
Benefit from Anton Paar's application know-how for a measurement solution that's customized to your application. Anton Paar provides a wide range of application solutions based on decades of technical expertise.

TRAINING PROGRAMS
Anton Paar offers customer trainings and qualification tailored to every knowledge level. You're provided with future-oriented tips and advice for your measuring requirements, as well as the opportunity to exchange information with Anton Paar engineers experienced in your field of application.

ANALYTICAL INSTRUMENT AND SYSTEM QUALIFICATION
For compendial use, Anton Paar offers instrument-specific qualification packages and compliant maintenance to meet the requirements of cGMP, GAMP 5, USP <1058>, and EU GMP Vol. 4, Annex 15. The software of the respective instruments covers the data security features according to 21 CFR Part 11, EU GMP Vol. 4 Annex 11, and ALCOA++.

CHARACTERIZATION

DOUGH CONSISTENCY

MILLING

LAB SOFTWARE FOR BRABENDER DEVICES

MOISTURE ANALYSIS

EXTRUSION

TORQUE RHEOMETRY

HARDNESS TESTING

PARTICLE CHARACTERIZATION

RHEOMETRY

SCRATCH TESTING

SOLID DENSITY DETERMINATION

SURFACE AREA AND PORE SIZE ANALYSIS

SURFACE CHARGE AND ZETA POTENTIAL ANALYSIS

THERMAL ANALYSIS

TRIBOMETRY AND COATING THICKNESS TESTING

X-RAY ANALYSIS

MEASUREMENT

ALCOHOL ANALYSIS

ANALYSIS OF COLD FLOW PROPERTIES, CONSISTENCY

DENSITY AND CONCENTRATION DETERMINATION

DISSOLVED CO_2 AND O_2 ANALYSIS

FLASH POINT TESTING

DISTILLATION ANALYSIS

LAB PRODUCTIVITY SYSTEMS

MULTIPARAMETER MEASUREMENT SYSTEMS

OXIDATION STABILITY TESTING

POLARIMETRY

RAMAN TECHNOLOGIES AND FTIR SPECTROSCOPY

REFRACTOMETRY

SOFT DRINK ANALYSIS

SUGAR ANALYSIS

THERMOMETRY AND CALIBRATION

VISCOMETRY

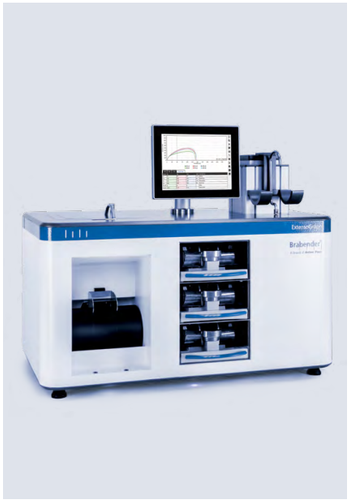
SOLUTION

AUTOMATION AND ROBOTICS

MICROWAVE DIGESTION

MICROWAVE SYNTHESIS

PROCESS INSTRUMENTATION



- → Measures the extensibility and processing properties of dough
- → Standardized: comparability through ISO, AACCI and ICC
- → Accurate: determination of the rheological optimum for the best baking result
- → Flexible: “Micro Extensograph” version for small volumes
- → Brabender MetaBridge software: user-guided workflows, reference limits, correlations, customizable methods and parameters
- → Connectivity: support for third-party solutions (ERP, LIMS) and OPC UA

- → Separates bran or fine bran and husks from the bran fractions resulting from milling
- → Yield increase of up to 10 %
- → Throughput of up to 12 kg/h
- → Adjusts the flour obtained to the desired ash content
- → Mesh size 200 µm (others available upon request)
- → Maintenance-free design

- → Grinds multiple materials reproducibly at the desired degree of fineness
- → Stepless adjustment of milling gap / degree of fineness
- → Minimal grist heating
- → Reduced loss of moisture during milling
- → Wide range of applications, e.g., grains, pseudocereals, pulses, coffee beans

Brabender ExtensoGraph

On the basis of the recorded Extensogram, reliable information on rheological dough properties – and therefore later baking results – are determined. Recognize and determine the effects of flour additives, such as for example enzymes or ascorbic acid, and flexibly adapt the short methods to your own particular application.

Brabender Bran Duster

Use our bran duster to ensure your ground product achieves the yield and ash content you specify. Not only is the flour yield increased, but also the ash content can be precisely set and increased. Quality assessments of flours can be made in the laboratory just as effectively as in the mill. The standard design of the bran duster features a sifter with a mesh size of 200 µm. Sifters with other mesh sizes are available on request.

Brabender Break Mill SM 4

Due to the milling system’s special design, heating of the grist and loss of moisture during the milling process are reduced. The SM 4 is therefore especially well suited to preparing samples for moisture determination, as well as for analyses of protein or fat content, for example.

- → Grinds multiple fibrous, tough and firm materials to the desired degree of fineness
- → Adjustable degrees of fineness
- → Low-dust material shredding
- → Sieves and blades are simple to change
- → Diverse application areas
- → Mesh sizes: 0.5 mm to 5 mm

- → Grinds cereals to flours with production-like properties
- → High-performance milling of up to 500 g in five minutes
- → Sample preparation of grain with up to max 18 % moisture
- → Aspiration attachment prevents clogging of the rollers
- → Straightforward collection of flour and bran from separate drawers

- → One-step production of four milling products (break flour, reduction flour, shorts and bran)
- → High performance: approx 8 kg to 10 kg per hour
- → Milling of grain with up to max 18 % moisture
- → 2 x 3 different milling zones in one operation
- → Gentle milling thanks to profile-ground rollers
- → Approx 65 % to 75 % yield
- → Self-emptying sifter and straightforward operation

Brabender Rotary Mill

The Brabender Rotary Mill enables you to grind a multitude of materials at your preferred degree of fineness. The interchangeable sieves are available in mesh sizes of 0.5 mm to 5 mm, with other sizes available on request. The knife mill is easy to maintain thanks to its interchangeable blades. And in comparison to other mills, the level of cleaning required after use is also low, as effective sealing ensures a considerable reduction in the amount of dust that escapes.

Brabender Quadrumat Junior

The Quadrumat Junior mill operates quickly and precisely, achieving up to 500 g of laboratory flour in five minutes. In the latest version, the mill is easier to clean thanks to the round sifter being simpler to remove. As well as the standard version, it is also available in a version especially for durum wheat and a version for manufacturing special flours (including other comparable devices). Sifters of various mesh sizes round off the selection. The standard sifter’s mesh size is 280 µm. Together with the Brabender Bran Duster, in a further procedure you can increase ash content and yield by approximately 10 %.

Brabender Quadrumat Senior

Thanks to the profile-ground, toughened rollers, preparation of samples with the Brabender Quadrumat Senior is a gentle procedure. On average, 8 kg to 10 kg can be milled per hour. Two 4-roller units (a whole grain unit and a meal/semolina release unit) are used to prepare the samples. After milling, you receive four products: meal, flour, bran and semolina bran. The Quadrumat Senior is also available as a semolina mill, which can also be used for milling durum wheat into semolina. And by connecting the Brabender Bran Duster, you can increase ash content and yield by approximately 5 %.

- → Connect devices: seamless data flow, zero transcription errors
- → Access results from any device at any time
- → An array of standards and predefined methods, just a click away
- → Export data to third-party systems and share with colleagues

- → Analyze residual moisture content (water selective and ISO-compliant)
- → Prep for MFR test: Dry samples effectively for accurate results
- → High-precision reference method without calibration
- → Simple operation without special staff or training
- → Connectivity: Seamlessly retrieve data and share across devices
- → Suitable for lab QC and process control

- → Precise moisture analysis for various powders and solids
- → Automated procedure based on the drying oven method
- → Meets grain, flour, and tobacco testing standards
- → Globally proven method for moisture meter calibration
- → Simultaneous measurement of 10 samples saves time
- → Brabender MetaBridge software for data access at MT-CA or mobile device

Brabender MetaBridge

Our Brabender MetaBridge operating software is the industry benchmark and empowers users to gain comprehensive data insights, with hardly any training required. Connect multiple Brabender instruments with Brabender MetaBridge and access data from an instrument, a PC, or a mobile device. Export your data to third-party systems such as LIMS or Excel, or simply email them to a colleague. Transfer data between instruments and set them as base values for further measurements. Whether you use straightforward workflows or more flexible ones, Brabender MetaBridge meets your daily requirements.

Brabender Aquatrac-V

The Brabender Aquatrac-V moisture analyzer is the only instrument on the market that determines the water-selective, residual moisture in plastics in compliance with DIN EN ISO 15512:2019, with an accuracy of 0.0001 % (H_2O resolution). Since it uses the globally recognized calcium hydride method, it offers reliable measurements that you can access from any device. It can also prepare dried polymer samples for Melt Flow Rate (MFR) determination. An extensive method database, which can be expanded with customer methods, covers various polymer types.

Brabender Moisture Tester MT-CA

The Brabender MT-CA moisture analyzer, using automated oven drying, measures raw material moisture in a measuring range of >0.1 % and up to 99.9 % moisture content. It reduces test times by 65 % and avoids weighing errors by eliminating the cooling step in the desiccator and automatic back-weighing after drying. It's the perfect choice for moisture determination of powders like flour, tobacco, and solid items with predefined methods that meet international standards. The Brabender MetaBridge software connects devices, lets you select drying times, enables real-time data sharing, and monitors tests.

- → Single-screw extruders as attachments for Brabender MetaStation drive units or as standalone versions
- → Ideal for processing prepared mixtures into semi-finished products
- → Adjustable throughputs of 1 kg/h to 25 kg/h
- → Various cylinder designs (length, surface, material)
- → Process food, plastics, ceramics, battery masses, etc.
- → Produce diverse profile geometries at lab scale or adapt melt characterization technologies

- → Twin-screw extruder as attachments for Brabender MetaStation drive units or as standalone versions
- → For producing material mixtures in food, feed, plastic, rubber, and other non-food applications
- → Available at laboratory and pilot scale
- → Throughputs from 0.06 kg/h to 100 kg/h
- → Various configurations, feeding options, and alloys for specific needs
- → Patented clam shell design allows for easy opening of the liner to evaluate the extrudate, as well as simplified cleaning

- → Measure oil absorption of powdery materials (OAN)
- → Complies with ASTM standards for testing carbon blacks and silica
- → Replace manual methods, enhance precision and reproducibility
- → Stainless steel housing: extended lifetime, effortless cleaning
- → Titration: ready for different dosing rates, high viscosities up to 1,000,000 mPas
- → Guided software with reference and correlations curves

Brabender Single-Screw Extruder Series

Laboratory single-screw extruders are employed to plasticize finished mixtures and generate the necessary process pressures for shaping processed materials through extrusion dies of various geometries. The primary advantage of Anton Paar single-screw extruders is their ability to adapt to individual customer requirements. Whether it is the steel grades of the elements in contact with the extrudate, the design of the processing unit, or the integration of application-specific peripherals and sensors, every component of the system can be customized.

Brabender TwinLab Series

The Brabender TwinLab series stands out due to its unique barrel design, which is split horizontally into two halves that can be opened. This design makes cleaning much easier and provides a clear view of the process, allowing for the evaluation of mixing and conveying behavior. Adjustments to the process, such as changing the screw configuration, can be made quickly on the device. The two-piece liner concept, comprising the liner carrier and the liner inserts, enables the use of different alloys for the inserts. This flexibility allows for the use of inserts with enhanced resistance to abrasion or corrosive substances.

Brabender AbsorptoMeter

The Brabender AbsorptoMeter is the market-leading instrument for testing oil absorption of carbon black, silica, and other chemicals, compliant with key ASTM standards. It replaces outdated manual methods for testing powders, reducing errors and enhancing precision and repeatability. The stainless steel housing extends the instrument's lifespan and ensures straightforward cleaning. Specific mixing bowls for carbon black and silica applications optimize usability and durability. The instrument's software allows real-time comparisons of previous measurements and reference results, data export, and pre-scheduling of measurements.

- → Worldwide most applied instrument for measuring flour quality
- → Gives information about water absorption and kneading properties
- → Compliant: Cover flour and dough standards (ICC, AACCI, ISO)
- → Efficient: Your data. Anywhere at any time. From any device.
- → Versatile: 7 attachments for the right sample type and size
- → Flexible: Measure any kind of flour – also gluten-free doughs
- → Precise and safe: Automate water dosing for zero glass hassle

- → Latest modular torque rheometers for maximum flexibility with extrusion and mixer attachments
- → Three power classes (4 kWh to 16 kWh) available with varying speed and torque ranges
- → Brabender MetaBridge software for measurement and process monitoring
- → Connectivity between devices and with integrated IT infrastructure
- → Central control of all devices, including complex extrusion lines, via a single HMI

- → Maximum load of 50 mN or 100 mN (optional)
- → Load resolution of 3 nN
- → Depth range up to 50 µm or 100 µm (optional)
- → Depth resolution of 0.003 nm
- → Temperature tests up to 200 °C
- → True creep measurements
- → Dynamic mechanical analysis with sinus mode
- → 600 measurements per hour
- → Complies with ASTM E2546 and ISO 14577

Brabender FarinoGraph

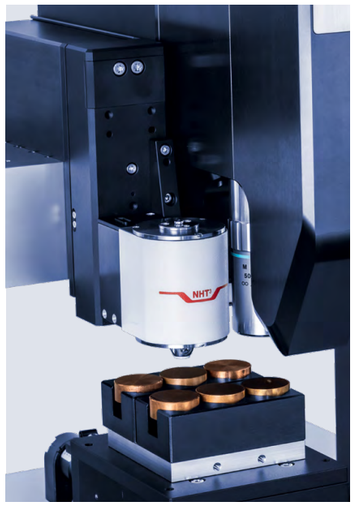
The Brabender FarinoGraph determines the water absorption of flour and rheological properties of dough. It addresses key national and international standards like ICC, AACCI, and ISO. It ensures confidence in grain, flour, and dough quality across the entire value chain with a universally recognized language: Brabender/Farinograph Units (BU/FU). The Brabender MetaBridge software sets the benchmark in the industry, providing features like automated titration curves, predicted curve progression and correlation curves.

Brabender MetaStation Series

Torque rheometers from the MetaStation series, paired with MetaBridge software, are crucial parts of Anton Paar's modular laboratory processing and testing machines. Thanks to a universal connection mechanism, various mixers, as well as different single- and twin-screw extruders, can be integrated. This provides users with diverse applications and a level of flexibility unmatched by standalone versions of these individual devices.

Ultra Nanoindentation Tester: UNHT³

This ultra-high-resolution nanoindenter measures mechanical properties, such as modulus, creep, and viscoelastic properties, of all types of materials at the nanoscale. It eliminates thermal drift (10 fm/sec) and mechanical compliance thanks to its patented active surface referencing system and measuring head. For high-temperature measurements up to 800 °C, a vacuum chamber version (UNHT³ HTV) is available. For soft and biological materials, we offer UNHT³ Bio.



- → Maximum load of 500 mN
- → Load resolution of 20 nN
- → Depth range up to 200 µm
- → Depth resolution of 0.01 nm
- → Negligible thermal drift down to 0.05 nm/sec
- → Dynamic mechanical analysis (DMA) with sinus mode
- → 2-minute indenter exchange
- → No thermal stabilization needed
- → Complies with ISO 14577 and ASTM E2546

- → Maximum load of 500 mN
- → Load resolution of 20 nN
- → Depth range up to 200 µm
- → Depth resolution of 0.01 nm
- → Active anti-vibration table
- → <1 mm positioning accuracy without microscope
- → Guided software workflow
- → 600 measurements per hour
- → Complies with ISO 14577, ISO 19278, and ASTM E2546

- → Compact two-in-one design, for measurement of both wet and dry samples
- → Liquid measurement range from 0.04 µm to 2,500 µm
- → Dry measurement range from 0.1 µm to 2,500 µm
- → Measurement reproducibility better than 1 % variation
- → Complies with ISO 13320

Nanoindentation Tester: NHT³

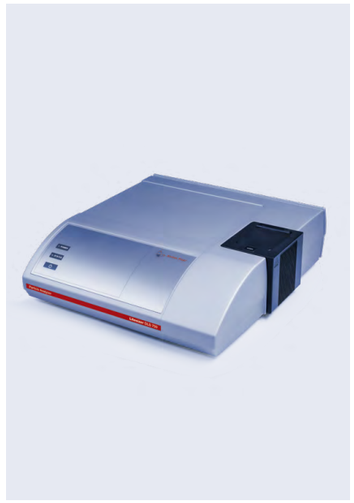
NHT³ applies low normal forces with depths in the nanometer range to measure hardness, elastic modulus, viscoelastic properties, and creep. It characterizes organic, inorganic, hard, and soft materials. Thanks to the "Quick Matrix" mode and the unique top surface referencing technique, NHT³ provides high throughput (600 measurements per hour), high precision, and stability.

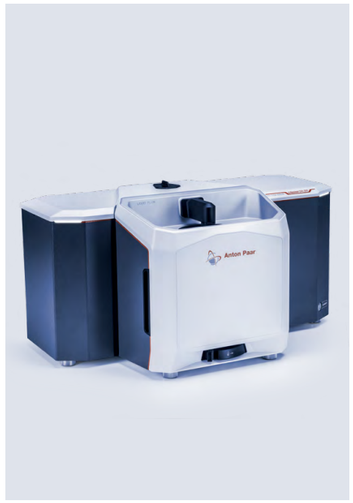
Nanoindentation Tester: Hit 300

Hit 300 is a nanoindentation tester built for all users and all environments. Ready to use after only one hour of training, it measures hardness, elastic modulus, and viscoelastic properties. It can characterize PVD and CVD hard coatings, polymers, and metals.

Laser Diffraction Particle Sizing: PSA Series

Based on laser diffraction technology, PSA instruments provide information about the size distribution of dry powders and particles in dispersion. The PSA series stands out for its broad measuring range and ability to measure both liquid dispersions and dry powders with a single instrument. Switching between both modes is done with a click. Its design gauarantees realignment-free operation even in the harshest environments.





- → Particle size measurements from the nanometer to the micrometer range (0.3 nm to 10 µm)
- → Three different measurement angles
- → Continuous transmittance measurement
- → Determination of zeta potential using patented cmPALS
- → Molecular mass and refractive index measurements
- → High resolution of different size populations via multi-angle particle sizing (MAPS)
- → Concentration determination of up to three different size classes

- → Measures particle size and shape, particle by particle
- → Up to hundreds of thousands of particles per second
- → Disperses particles using liquids, compressed gas and free fall.
- → 5 MPix camera with up to 144 fps
- → Minimal training; three clicks get you started
- → Finds even a single particle among millions

- → One-page workspace offers full information about a measurement, from settings to results
- → Minimal training; three clicks get you started
- → Recalculation and analysis of results at any moment
- → Quality control mode
- → FDA CFR Part 11-compliant
- → Simple export and report building

Dynamic Light Scattering Particle Sizing: Litesizer DLS Series

The Litesizer DLS series characterizes nanoparticles and microparticles at the touch of a button. With these dynamic light scattering instruments, you can determine particles in dispersion and peptides or macromolecules in solution over a broad concentration range. Perform highly-sensitive zeta potential measurements with the patented cmPALS technique, which enables shorter measuring times and minimal sample degradation.

Dynamic Image Analyzer: Litesizer DIA 500

Based on dynamic image analysis, Litesizer DIA 500 measures up to hundreds of thousands of particles per second and provides size and shape data. Three powerful dispersion units handle nearly any sample. A unique analysis mode enables finding even a single particle among millions. The instrument complies with a range of standards, including ISO 13322-2, ISO 13322-1, ISO 9276-2, ISO 9276-6, ISO 9276-11, and ISO 14488.

Particle Analysis Software: Kalliope

One software to operate all Anton Paar's particle sizing instruments: the Litesizer DLS series, the PSA series and the Litesizer DIA series. It provides understanding of all measurement settings and results on one page. It enables easy recalculation of results, analysis, and report building. It's also available with an FDA CFR Part 11-compliant software package.

- → Low torque and deflections measurable down to 0.5 nNm and 0.05 µrad
- → Testing under real-life conditions: temperatures from -160 °C to +1,000 °C, humidity from 5 % RH to 95 % RH
- → Custom adaptation via 200+ accessories
- → Typical testing modes: torsion, tension and compression, flexure, peel, puncture, and friction

- → Automatic spindle recognition with Toolmaster™
- → Peltier temperature system for quick heating (8 K/min) and cooling rates (4 K/min)
- → Temperature range of -20 °C to +180 °C
- → 21 CFR Part 11-compliant package (optional)
- → PC control via RheoCompass™ software

- → TruRay illumination for a clear view of your sample
- → Software guiding you through rheological measurements
- → QuickConnect for fast mounting of the measuring system
- → EDU Edition for academia
- → Toolmaster™ automatic tool recognition and configuration
- → Air-cooled Peltier temperature units (H-PTD, C-PTD, or P-PTD)

Universal Testing Machine: UTM Micro

A whole new world of low-force and low-torque mechanical parts testing – to a never-before-accessible micro range. Use it as a UTM or as a sophisticated combination of rheometer, tribometer, and device for dynamic mechanical analysis (DMA) with optical methods to further investigate the behavior of components. Time and personnel costs are optimized: minimal training is required and automated test procedures are included in the software.

Rotational Rheometer: RheolabQC

RheolabQC is a rotational rheometer that combines performance with a robust design for fast, routine rheological checks. It investigates the flow behavior of paints and coatings, food, cosmetics, pharmaceuticals, adhesives, oils, asphalt, and much more. RheolabQC can be operated either as a stand-alone or software-controlled rheometer. Several measuring geometries and accessories, including a Peltier temperature device, are available.

Modular Compact Rheometers: MCR 72, MCR 92

MCR 72 and MCR 92 are streamlined for daily lab routines. A range of accessories are available for both models. For academic use, both instruments are available as an EDU Edition, which includes special packages for both teachers and students.

- → Wide range of temperature accessories for temperatures from -160 °C to +1,000 °C
- → 200+ accessories for the perfect custom fit
- → Customized solutions on request
- → Torque range from 0.5 nNm to 300 mNm
- → Normal force measurements up to 70 N
- → Full pharma compliance

Modular Compact Rheometers: MCR 102e, MCR 302e, MCR 502e Power

Backed by 25 years of experience in EC technology, the MCR Evolution rheometer series conducts any type or combination of rheological tests (rotational or oscillatory) based on low-friction, air-bearing-supported permanent magnet synchronous EC motor technology. The system's modularity lets users integrate a wide range of temperature devices and application-specific accessories to solve all kinds of measurement tasks.

- → High-end rheometer for sophisticated research
- → One rheometer, two drive units, all rheological working modes
- → Torque range of 0.5 nNm to 230 mNm
- → Maximum rotational speed of 6,000 rpm
- → Ready for DMA in torsion, tension, bending, or compression mode
- → 200+ accessories
- → Temperature range of -160 °C to +1,000 °C

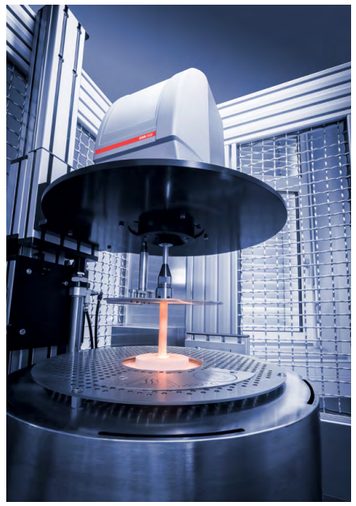
Modular Compact Rheometer: MCR 702e MultiDrive

The MCR 702e MultiDrive can perform rheological tests with two torque transducers and drive units at once. Due to its modular setup, the high-end rheometer can work in combined motor transducer (CMT) mode using one EC motor as well as in counter-rotation, counter-oscillation, and separate motor transducer mode (SMT) using two EC motors. This means it covers all possible rheological applications.

- → Glovebox-ready
- → Combinable with external setups
- → One rheometer, two drive units, all rheological working modes
- → Torque range of 0.5 nNm to 230 mNm
- → Maximum rotational speed of 6,000 rpm
- → Ready for DMA in torsion, tension, bending, or compression mode
- → 200+ accessories
- → Temperature range of -160 °C to +1,000 °C

Modular Compact Rheometer: MCR 702 Space MultiDrive

MCR 702e Space MultiDrive is the top-level rheometer based on the technology and concept of the MCR 702e MultiDrive that can additionally easily be combined with external setups (e.g., confocal microscope) to conduct advanced material characterization.



- → Rotation and oscillation at a temperature range of 300 °C to 1,730 °C
- → Complies with ISO and ASTM standards
- → Viscosity measurements between 1 mPa.s and 10^8 Pa.s
- → Speed of 300 rpm
- → CE safety concept

Furnace Rheometer Systems: FRS 1800, FRS 1600

The FRS 1800 and FRS 1600 furnace rheometer systems combine a DSR 502 rheometer head and a lab furnace. Both instruments measure viscosity and the viscoelastic properties of all kinds of melts in rotation and oscillation. They also characterize the softening/melting and solidification behavior of a sample. The instruments provide high-quality data for R&D, QC, and process development.

- → Complies with standards, including AASHTO, ASTM, DIN EN, FGSV, AGPT, GOST, IS, and SATS
- → Temperature range of -50 °C to +400 °C
- → Peltier temperature device for dry sample heating from -50 °C to +220 °C
- → Toolmaster™ technology ensures accuracy
- → Fully automatic temperature calibration and verification routines

Dynamic Shear Rheometers: SmartPave 92, SmartPave 102e

The SmartPave series is based on the latest technology used by MCR rheometers with the well-established EC motor system. It incorporates innovative features that take bitumen and asphalt binder rheology to previously unattained levels of accuracy and comfort.

- → Analyzes any powder in any state
- → Patented dust protection
- → Fluidization and quality control tests with outstanding reproducibility
- → Temperature control from -160 °C to +980 °C
- → Humidity option
- → Complies with ASTM D6773, DIN 1055, USP 1174, Ph.EUR:2.9.49, and ISO 8130-15:2023
- → Envelope density measurement accessory available

Modular Compact Rheometers: True Powder Rheology

Our MCR Evolution rheometer combined with the powder shear and flow cell enables comprehensive powder characterization. This system guarantees the determination of powder behavior in any state with high precision. Due to its extreme versatility, the powder cells can be used for in-depth powder characterization (e.g., shear, compressibility, and wall friction tests) or as a quality control tool.

- → Structure analysis and optics
- → Rheo-SALS/SAXS/SANS, particle image velocimetry, microscopy, polarized imaging, Raman, IR spectroscopy, dielectric spectroscopy
- → Material characterization
- → Building material cell, starch cell, DMA, extensional rheology, tack tests, interfacial rheology cell, powder cell, tribology cell
- → Additional parameter setting
- → Pressure, humidity, magnetic and electric field, UV light

- → Maximum load of 1,000 mN
- → Load resolution of 0.01 µN
- → Depth range up to 600 µm
- → Depth resolution of 0.1 nm
- → Patented Synchronized Panorama Mode
- → Active force feedback
- → Fast response time to small applied forces
- → Post-scan software measurements
- → Wear testing mode with bidirectional cycles
- → Complies with ASTM D7187

- → Maximum load of 30 N
- → Load resolution of 10 µN
- → Depth range up to 1 mm
- → Depth resolution of 0.05 nm
- → Friction force measurement
- → Detection of acoustic emission
- → Automatic detection of critical loads
- → Patented Synchronized Panorama Mode
- → Complies with ISO 14577, 20502 and 27307:2015, ASTM C1624, E2546, and G171

Modular Compact Rheometers: Accessories

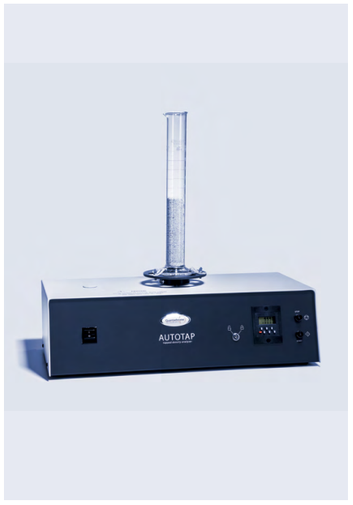
More than 200 application-specific accessories are available for integration into MCR rheometers. We offer accessories specially designed for additional parameter settings, for structural analysis, and RheoOptics. Parameters include magneto- and electrorheology, UV, pressure, and humidity. Other accessories are available that transfer MCR rheometers' capabilities into other material characterization applications.

Nano Scratch Tester: NST³

The NST³ nano scratch tester is particularly suited for the characterization of adhesion and scratch resistance of thin films and coatings with a typical thickness of less than 1,000 nm. It can be used for the analysis of organic and inorganic coatings of both soft and hard materials.

Micro Combi Tester: MCT³

The MCT³ micro combi tester combines instrumented indentation testing (IIT), scratch, and tribology in one measurement head. The wide load range of this instrument lets users characterize hardness, elastic modulus, adhesion, scratch resistance, friction, and wear of thin films and bulk materials. MCT³ can be used for the analysis of organic and inorganic as well as soft and hard coatings.



- → Maximum load of 200 N
- → Load resolution of 0.1 mN
- → Depth range up to 1,000 µm
- → Depth resolution of 0.05 nm
- → Speed from 0.4 mm/min to 600 mm/min
- → Patented Synchronized Panorama Mode
- → Pre- and post-scan feature
- → Vickers hardness tester capabilities
- → Complies with ASTM C1624, D7027, G171, ISO 20502, and DIN EN 1071

- → Low sample amounts (5000 Micro: 0.25 cm^3 to 4.5 cm^3, Ultrapyc 3000 and Ultrapyc 5000: 4.5 cm^3 to 135 cm^3)
- → TruPyc technology ensures accuracy across sample cell sizes
- → PowderProtect mode eliminates risk of elutriation of fine powders
- → Integrated Peltier temperature control from 15 °C to 50 °C
- → Disposable cups for tough-to-clean samples
- → AP Connect-compatible

- → 260 taps per minute
- → 3 mm drop height
- → Automatic cylinder rotation
- → Compatible with cylinders from 5 mL to 1,000 mL (requires adapter)

Revetest® Scratch Tester: RST 300

The Revetest® scratch tester is the industrial standard for characterizing hard-coated materials with a typical film thickness exceeding 1 µm. It characterizes both coating/substrate adhesion and surface scratch resistance. The software package performs scratch tests in a wide variety of testing modes, including simple scratch testing and bidirectional cycles for wear testing.

Solid Density Analyzers: Ultrapyc Series

The Ultrapyc Series measure true density of solids, semi-solids, and foams using gas expansion. The instruments are equipped with Peltier temperature control and a graphical interface. The instruments conduct density measurements of solids, powders, semi-solids, and slurries in many industries, including the automotive, battery, building materials, ceramics, food, mining, personal care, petroleum, and pharmaceutical industries.

Tapped Density Analyzers: Autotap, Dual Autotap

These one- and two-station automated tapped density analyzers for powders, granules, and small pellets comply with various internationally recognized standards. They provide high-level test method control with a user-selectable, lockable number of taps. A large range of sample sizes can be accommodated with different graduated cylinders.

- → Envelope density setup for the MCR Evolution rheometers
- → Buy an envelope density setup and benefit from the full rheometer functionality
- → Budget-friendly option for envelope density determination
- → 21 CFR Part 11 compliant
- → Automatic detection of setup to save time and eliminate errors

Envelope Density Analyzer: MCR Rheometer Setup for Envelope Density

The accessory for the measurement of envelope density of solids is the most budget-friendly addition to an existing Anton Paar rheometer on the market. The setup facilitates the automated, standards-compliant analysis of powder flowability, improving production, transportation and storage processes, and saving time while eliminating manual errors with the Anton Paar patented Toolmaster feature. Together with the Ultrapyc instruments you can determine the porosity of your sample.

- → High-vacuum physisorption analyses with Autosorb 6100, and chemisoprtion analyses with Autosorb 6200 and 6300
- → Advanced measurement routines made accessible with DoseWizard point selection and PowderProtect
- → Up to three samples, three gases, and three temperatures can be measured simultaneously with independent analysis stations
- → Perform a complete catalyst characterization with TCD, pulse titration loop, integrated mass spectrometer and vapor option

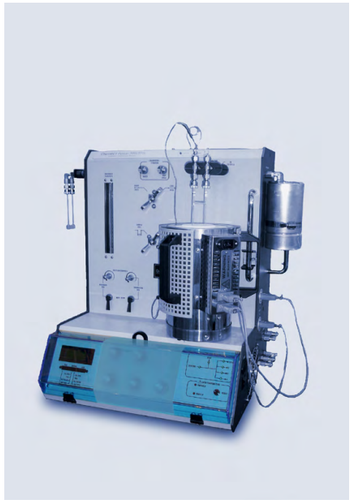
High-Vacuum Physisorption and Chemisorption Analyzers: Autosorb Series

Autosorb instruments are high-vacuum physisorption and chemisorption analyzers designed for advanced measurements of BET surface area, active area, and pore size distributions. Independent analysis stations, exclusive TruZone active coolant control, and accessible Kaomi software let you meet your current measurement needs, while factory and field upgradeable options let you adapt to future ones. For your most important gas sorption measurements, the choice is clear: Absolutely Autosorb.

- → Four analysis and four degassing stations in one compact footprint
- → 5-point BET analysis on four samples in as little as 20 minutes
- → 4 x 40-point mesopore runs in under eight hours
- → PowderProtect: Intelligent sample cell evacuation reduces risk of fine powder elutriation
- → Eliminate cylinders and simplify setup with Nitro ReGen concept which channels nitrogen gas evaporating for use in experiments

Surface Area and Pore Size Analyzers: Nova 600 BET, Nova 800 BET, Nova 600, Nova 800

The new-generation Nova analyzers deliver operational simplicity across the entire workflow from sample preparation to analysis to reporting of results. The series consists of four models – 600 BET, 800 BET, 600, and 800 – that combine up to four analysis stations with four degassing stations to deliver analysis with unprecedented velocity: speed vectored at precision.



- → 1,100 °C max furnace temperature
- → 1 °C to 50 °C per minute furnace ramp rates
- → Automated, built-in fan for furnace cooling
- → Automated injection/titration loop
- → One analysis station, one dedicated degassing station
- → Tungsten/rhenium two-filament TCD
- → Five gas input ports

Chemisorption Analyzer: ChemBET Pulsar

ChemBET Pulsar combines affordability and automation in a compact benchtop catalyst characterization unit. Programmable analysis sequences combined with an automatic loop injector, gas switching, and furnace temperature ramping enable easy pulse titration and temperature-programmed analyses with minimal user intervention. It includes an advanced data reduction package with peak deconvolution.

- → One- or two-station gas sorption analyzer
- → High-pressure measurements up to 100 or 200 bar
- → High-precision transducers
- → Precise manifold temperature control from 35 °C to 50 °C
- → Performs measurements from 15 K to 773 K with optional temperature control accessories
- → Library of advanced equations of state included

High-Pressure Gas Sorption: iSorb HP

The iSorb HP series provides high-quality gas adsorption and kinetic data to a maximum of 100 bar or 200 bar absolute. The iSorb HP series is perfect for evaluating materials in gas storage, gas separation, or emission control applications.

- → Two low-pressure stations and one or two high-pressure stations
- → Pore size range from 0.036 µm (PM 60 models) or 0.064 µm (PM 33) to 1,100 µm
- → Pressures from 0.2 psi to 60,000 psi available
- → Process up to 12 samples a day

Mercury Intrusion Porosimeters: PoreMaster Series

These bench-top mercury intrusion porosimeters rapidly and accurately determine the pore size distribution of meso- and macroporous materials. Simultaneous operation of low- and high-pressure stations maximizes sample throughput. With built-in safety features that significantly reduce exposure to mercury, the PoreMaster series is ideal for a wide range of applications such as catalysts, batteries, pharmaceuticals, and ceramics.

- → Measures through-pore size ranges from 0.018 µm to 500 µm
- → Sample flow rates of 0.01 L/min to 200 L/min
- → Unique pressure sense line technology eliminates need for sample-specific calibrations
- → Complies with ASTM E128, ASTM F316, ISO 14003
- → 30-minute measurement results

- → Single-point zeta potential determination in less than two minutes
- → Automated detection of the isoelectric point
- → Time-dependent recording of liquid-on-solid adsorption kinetics
- → Modular setup
- → Quick measuring cell exchange

- → Solutions for various sample geometries
- → Fast sample mounting
- → Automatic recognition of the measuring cells by the software

Capillary Flow Porometers: Porometer 3G Series

These instruments are compact and adaptable capillary flow porometers designed to deliver accurate and repeatable through-pore size distribution results in minutes. Measure specific air permeability and pore size characteristics of a wide range of membranes and other filtration media, including flat sheets, hollow fibers, and ceramic tubes, using the standard and optional sample holders. A liquid permeability accessory is also available.

Electrokinetic Analyzer for Solid Surface Analysis: SurPASS 3

The SurPASS 3 electrokinetic analyzer is used in surface analysis to investigate the zeta potential of macroscopic solids based on streaming potential and streaming current measurements. The zeta potential provides information on the charging behavior of a surface in contact with an aqueous electrolyte solution. SurPASS 3 Eco is available for routine solid surface analysis.

Measuring Cells for Solids of Various Shapes: SurPASS 3

SurPASS 3 provides information on surface charge and related properties, and detects small changes in the outermost material surface. Several different measuring cells accommodate a variety of sample geometries, including natural and technical fibers, porous ceramics, coarse particles, and samples with a planar surface. Surface charge analysis can also be performed on contact lenses, hollow fiber membranes, and flexible tubings.

- → All in one: tension, torsion, bending, and compression
- → Force range of 0.5 mN to 40 N
- → Displacement range of 10 nm to 9.4 mm
- → Temperature range of -160 °C to +1,000 °C

- → Toolmaster™ technology provides automatic tool recognition
- → Measuring systems with temperature sensor included
- → QuickConnect functionality for one-handed connection to the device
- → Convection temperature devices based on Peltier elements or electrical heating
- → Options for measurements in controlled relative humidity and immersion tests

- → Maximum normal load of 20 N or 60 N (optional)
- → Maximum friction force of 20 N
- → Friction force resolution of 0.06 mN
- → Integrated temperature and humidity sensors
- → Minimal thermal drift
- → Straightforward user calibration
- → Modelization software for contact mechanics simulation
- → Complies with ASTM G99, ASTM G133, and DIN 50324

Dynamic Mechanical Analyzer: MCR 702e MultiDrive

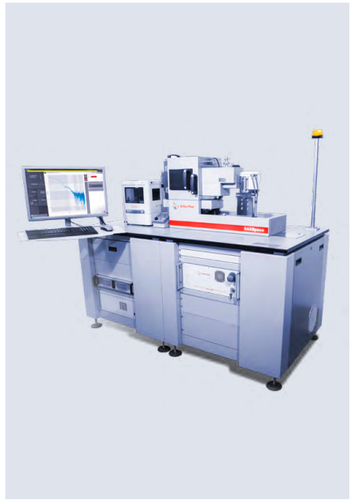
MCR 702e MultiDrive is a versatile platform for DMA in tension, torsion, bending, and compression as well as one that conducts rheological investigations and thermomechanical analysis (TMA). The modularity of the system allows the integration of a wide range of temperature devices, application-specific accessories, and measuring systems to cover the requirements of a variety of different applications.

DMA Accessories

Our specialized measuring systems cover the demands of DMA in bending, tension, torsion, and compression, and guarantee precise results. The temperature sensors that are included ensure the highest reproducibility over the entire temperature range without manual positioning of the sensor. Further accessories include a low-temperature option that's based on liquid nitrogen or gas chiller, and a humidity option.

Pin-on-Disk Tribometer: TRB³

TRB³ is the industry standard for the measurement of friction and wear in sliding contacts. Its flexible configuration and plug-in options enable a wide range of test parameters, contact geometries, and environmental conditions that simulate real-life conditions. The instrument comes with a reference sample kit, which lets users verify instrument performance at any time.



- → Fast measurements in two to five minutes
- → No sample preparation
- → Accurate thickness results of both single- and multi-layers
- → Suitable for flat and curved surfaces
- → Software for coating thickness measurement
- → Standard ball diameters: 10 mm, 15 mm, 20 mm, 25.4 mm, 30 mm
- → Complies with ISO 1071-2, VDI 3198

- → ASX autosampler automates up to 192 liquid samples
- → Sample stages and holders for ambient and non-ambient studies
- → Automated X-ray component and sample stage alignment
- → Line and/or point collimation for all SWAXS applications

- → Slidemaster moving detector technology provides SAXS and WAXS data in one go
- → Powerful X-ray sources
- → X-ray beam formation with very high spectral purity and flux
- → Software packages for automated operation and data analysis
- → Automated X-ray component and sample stage alignment

Calotest: CAT^2

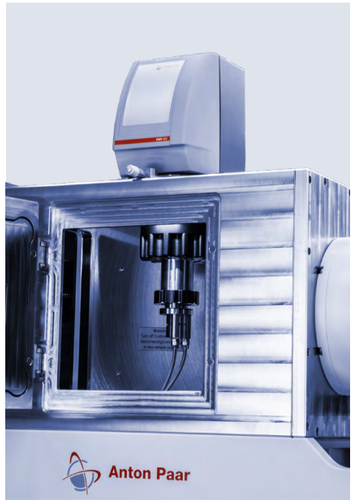
CAT^2 characterizes coating thicknesses between 0.1 µm and 50 µm on a wide range of materials. With the simple ball-cratering method, the thickness of any kind of single or multi-layered coating stack is accurately determined in a short time. CAT^2 complies with relevant international standards. Depending on the application, three different models are available: CAT^{2}c, CAT^{2}i, and CAT^2 combo.

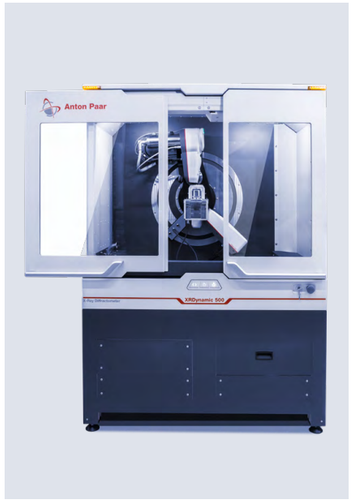
High-Throughput Nanostructure Analysis: SAXSpace

SAXSpace is a modular small- and wide-angle X-ray scattering (SWAXS) system for characterizing nanostructured materials and samples. It offers a variety of precise sample stages and smooth operation. SAXSpace is especially suited for high-throughput analysis of isotropic colloidal and biological samples (Bio-SAXS).

The Laboratory SAXS/WAXS/ GISAXS System: SAXSpoint 5.0

The SAXSpoint 5.0 system is an innovative solution for SAXS, WAXS, GISAXS, USAXS, and RheoSAXS studies in the home laboratory. SAXSpoint 5.0 employs scatterless beam collimation and a moving detector feature with the latest detector technology. It integrates brilliant X-ray sources providing outstanding flux, such as the Primux 100 micro X-ray source, a high-performance microfocus X-ray source that delivers premium X-ray beam brilliance at low power.





- → RheoSAXS stage: Combined, in situ measurements of SAXS and full rheological properties
- → GISAXS stage: Precision stage for GISAXS studies of nanostructured surfaces
- → USAXS stage: USAXS measurements to resolve particle sizes of up to 2.5 µm
- → Low-volume autosamplers: Sample volume down to 5 µL

- → TruBeam™ concept for automation of beam geometries and all X-ray optics
- → 20 % better measurement resolution than with conventional instruments due to larger measurement radius
- → Evacuated beam path for top signal-to-noise ratio
- → Automated instrument and sample alignment routines as well as component recognition

- → Evacuated beam path to remove all parasitic air scattering
- → Delivers high-quality XRD and SAXS data in reflection or transmission geometry
- → Dedicated SAXS optics provide SAXS data comparable to a stand-alone SAXS system
- → Measure without any restriction of the 2θ range

Versatile Sample Stages: Full Experimental Flexibility

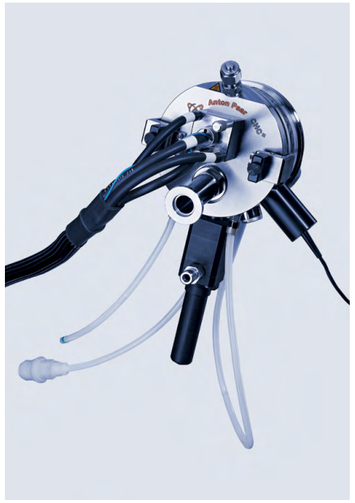
Dedicated sample stages and holders for SAXSpoint 5.0 and SAXSpace provide limitless possibilities. The TCStages provide precise temperature control from -150 °C to +600 °C. The autosamplers enable automatic measurements of up to 192 liquid samples. Temperature-controlled samplers offer autosampling of solid, liquid, and paste-like samples. Other sample stages enable GISAXS studies of nanostructured surfaces, SWAXS studies under controlled tensile stress or controlled atmosphere, and RheoSAXS studies correlating structural changes with macroscopic properties.

Automated Multipurpose Powder X-Ray Diffractometer: XRDynamic 500

XRDynamic 500 offers top XRD data quality with maximum efficiency. It's a versatile platform that covers a wide variety of applications in powder XRD, non-ambient XRD, PDF analysis, SAXS, and much more. Fully automated optics and alignment routines allow for quick collection of top-quality XRD data.

XRDynamic 500 Accessories (EVAC Module)

The EVAC module for XRDynamic 500 provides a fully evacuated beam path for SAXS and XRD measurements to remove parasitic air scattering, which provides maximum beam intensity on the sample and an unbeatable signal-to-noise ratio. All XRD or SAXS sample holders can be used, and the module is suitable for high-resolution XRD studies in reflection or transmission.



- → One-click instrument configuration changes (XRDdrive)
- → Automated data collection and alignment routines (XRDdrive)
- → Data visualization and plotting tools (XRDview)
- → Peak search and profile fitting (XRDanalysis)
- → Search/match functionality for phase ID (XRDanalysis)
- → Rietveld method for quantitative and crystal structure analysis (XRDanalysis)
- → 21 CFR Part 11 package available for regulated environments

- → BTS 150: Temperature range: -10 °C to +150 °C
- → BTS 500: Temperature range: 25 °C to 500 °C
- → TTK 600: Temperature range: -190 °C to +600 °C
- → DCS 500: Temperature range: -180 °C to +500 °C

- → CHC plus+: Temperature range: -180 °C to +400 °C, Relative humidity: 5 % to 95 %
- → TS 600: Mechanical load: max. 600 N

XRDynamic 500 Software

The XRDdrive, XRDview, and XRDanalysis software packages help users collect and evaluate X-ray powder diffraction data. XRDdrive automates instrument configurations, measurements, and instrument and sample alignments. XRDview offers straightforward plotting comparison of diffractograms, and graph export. XRDanalysis performs profile fitting, phase identification/quantification, and microstructure analysis for both ambient and non-ambient experiments.

Low- to Medium-Temperature X-Ray Diffraction Attachments

Several attachments are available for non-ambient XRD under low-to-medium temperatures. The portfolio includes BTS 150 and BTS 500 (heating attachments for benchtop instruments), TTK 600 (a versatile sample stage for different measurement geometries), and DCS 500 (a cooling attachment for 4-circle goniometers).

Humidity and Mechanical Load X-Ray Diffraction Attachments

Relative humidity is an important parameter, for example in finding optimal storage conditions for pharmaceutical substances or food ingredients. In addition to temperature variations, CHC plus+ investigates the influence of humidity on powder samples. TS 600 measures the effect of mechanical load on the structure of fibers or thin foils.

- → XRK 900: Temperature range: 25 °C to 900 °C, maximum pressure: 10 bar
- → HTK 1200N: Temperature range: 25 °C to 1,200 °C
- → HTK 1500: Temperature range: 25 °C to 1,500 °C
- → HTK 16N: Temperature range: 25 °C to 1,600 °C
- → HTK 2000N: Temperature range: 25 °C to 2,300 °C
- → DHS 1100: Temperature range: 25 °C to 1,100 °C

- → Measuring range: 0 % v/v to 100 % v/v
- → Snap 41: Accuracy of 0.2 % v/v at 5 °C to 30 °C
- → Snap 51: Accuracy of 0.1 % v/v at 0 °C to 40 °C
- → On-site measurements at distilleries and craft distilleries
- → Sample identification via RFID tag
- → Stores results and prints or exports to PC via Bluetooth
- → PQP-S available

- → Measures alcohol and extract of liqueurs at once
- → Reduces time-consuming distillations
- → Up to 400 predefined measurement settings
- → Covers creamy and turbid liqueurs
- → Automatic sample processing
- → Complies with officially accepted methods
- → Storage for 10,000 measurements

High-Temperature and High-Pressure X-Ray Diffraction Attachments

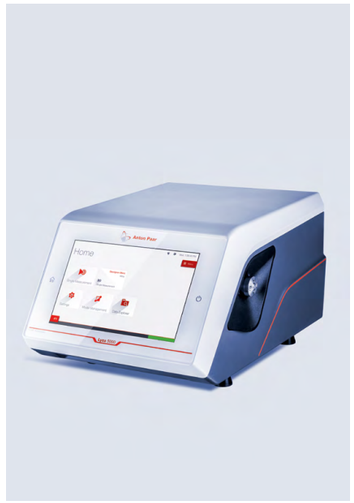
These instruments extend the temperature range for XRD applications up to 2,300 °C. XRK 900 allows investigation of the influence of pressure (up to 10 bar) and temperature on the properties of the sample. DHS 1100 is designed for high-temperature studies on 4-circle goniometers. HTK 1500 is the only environmental chamber allowing temperatures up to 1,500 °C.

Portable Alcohol Meters for Distilled Spirits: Snap 41, Snap 51

The Snap 41 and Snap 51 portable alcohol meters measure the alcohol concentration of extract-free distilled spirits in all strengths, replacing all glass hydrometers in the distillery. They measure samples directly at the container in 30 seconds. Results are temperature-compensated and reported in % v/v or °Proof.

Liqueur Measurement System

The Liqueur Measurement System is a dedicated system for the simultaneous analysis of alcohol and extract content of all types of liqueurs. The basic modular setup consists of a density meter and a refractometer. Another configuration comprising an Alcolyzer 3001 Spirits and an MCP 100 Polarimeter is dedicated to the analysis of sucrose-based liqueurs.



- → Results in less than a minute
- → 15+ key parameters for wine, must, and must in fermentation
- → Guided workflows with automatic data analysis
- → 5-year warranty on the measuring cell
- → ±0.03 °C temperature control accuracy
- → Operates stand-alone, automated, or connected to your existing benchtop instruments

- → Beer: 0.5 % v/v to 15 % v/v
- → Wine: 8 % v/v to 20 % v/v
- → Cider: 2 % v/v to 10 % v/v
- → Spirits/liqueurs: 10 % v/v to 47 % v/v
- → Measures alcohol and extract
- → Built-in peristaltic pump
- → Visual fermentation monitoring

- → Repeatability s.d.: 0.01 % v/v
- → Up to five optional measuring modules
- → Up to 10x faster than distillation
- → Automatic check/calibration with built-in SOP
- → Simple calibration and product-independent adjustment

FTIR Wine Analyzer: Lyza 5000 Wine

With Lyza 5000 Wine's modern user interface, determining the grapes' maturity, monitoring the primary and secondary fermentation progress, or checking the quality of the final product has never been easier. Complex measurement routines are now only a tap away.

Alcohol and Extract Meter: Alex 500

Alex 500 is a compact alcohol and extract meter that can analyze beers, wines, spirits, and liqueurs. Besides alcohol and extract content, it determines related parameters such as calories or degree of fermentation. Whether juice, wort, or mash, Alex 500 accurately measures all types of samples in all production steps.

Alcohol Meters: Alcolyzer M Series

Alcolyzer M models measure the alcohol content of almost all alcoholic beverages, such as wine, beer, spirits, or sake, using a unique NIR measuring method. Other sample constituents don't influence the alcohol analysis. When combined with a density meter, the system also determines the total extract of the sample. These parameters are provided after a typical measuring time of just three minutes.

- → Beer: 0 % v/v to 12 % v/v
- → Wine: 0 % v/v to 20 % v/v
- → Spirits: 35 % v/v to 65 % v/v
- → Up to 30+ industry-specific parameters
- → No reference analysis needed
- → Automatic check/calibration with built-in SOP
- → Automated filling
- → AP Connect-compatible

- → Alcohol repeatability s.d.: 0.01 % v/v
- → No sample preparation
- → Results in three (beer) to four (wine) minutes
- → Up to 9x faster than conventional methods
- → Works on all closure types direct from the can or bottle
- → Preconfigured, customizable setup
- → AP Connect-compatible

- → Selective alcohol, headspace oxygen, and dissolved oxygen determination
- → Obtain all data at the push of a button in a single data set
- → Measure 50+ beer-specific parameters from a single package
- → Fully automated cleaning and leak check

Alcohol Measurement System

With up to four measuring modules and 30+ industry-specific parameters, the Alcohol Measurement System conducts direct and selective alcohol determination. From mash to finished product, it can monitor your whole production process for all types of beer, cider, hard seltzer, kombucha, wine, and spirits.

Packaged Alcohol Measurement System

Packaged Alcohol Measurement Systems come in dedicated configurations for craft beer, beer and wine. They determine all relevant quality parameters, such as alcohol content, extract, CO_2, O_2, pH, in all types of beers and wines, including kombucha and hard seltzer.

Packaged Beer Measurement System

Experience the ultimate laboratory equipment for beer analysis by combining the advantages of a Packaged Beer Measurement System with selective TPO measurement and headspace volume determination. With the powerful combination of the Packaged Beer Measurement System and TPO 5000, you can enjoy the most complete and comprehensive analysis of your beer.

- → Measures 15+ key parameters in one filling and one measurement
- → Analyzes a sample with spectroscopy and physical methods in one run
- → Automated filling and measurement for up to 24 samples
- → Guided workflows combined with automatic data processing
- → No distillation required

Wine Measurement System

The Wine Measurement System helps analyze samples from various points in the wine production process. By integrating an FTIR analyzer, density meter, and alcohol meter into the same automated system, users get accurate measurement results of alcohol content and density as well as detailed acid and sugar profiles.

- → Complies with ASTM D6371, EN 116 and 16329, IP 309, and JIS K2288
- → Simple and fast setup, preset standard methods
- → Quick start function
- → Peltier technology for methanol-free cooling
- → All test details are displayed during measurement

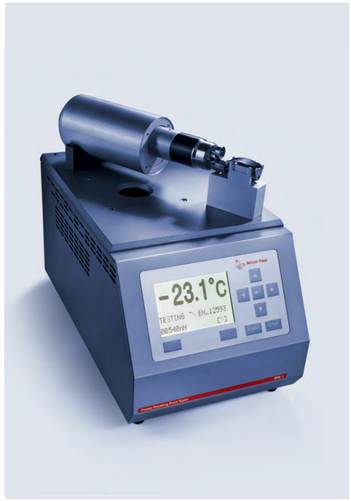
Cold Filter Plugging Point Tester: Callisto 100

Callisto 100 is an automated, stand-alone CFPP tester that determines the low-temperature operability of diesel fuel, biodiesel, diesel blends, and domestic heating fuels. The instrument comes with a state-of-the-art Peltier element concept, which allows a methanol-free cooling system to be connected.

- → Complies with ASTM D5, ASTM D217, ASTM D1321, ASTM D1403, EU Pharmacopoeia 2.9.9., and US Pharmacopeia 915
- → The patented force sensor plunger (optional) detects the surface of semi-solid samples
- → Automatic surface detection of any electrically conductive samples
- → Storage for 200 results
- → Measuring range up to 80 mm

Penetrometer: PNR 12

The PNR 12 penetrometer automatically measures the penetration depth of a material with suitable test bodies, such as needles, cones, rods, or discs. Various applications are supported by a large variety of test kits for bitumen, grease, wax, food, cosmetics samples, or pharmaceuticals.



- → Complies with EN 12593, IP 80, and JIS K2207
- → PC software BPACon for sophisticated analysis
- → Touchkey panel with large LC display
- → Optional: calibration set, melting apparatus BPM 5

Fraass Breaking Point Tester: BPA 5

The automatic Fraass Breaking Point tester determines the brittle behavior of bitumen, resins, and polymers down to -45 °C. In combination with the BPACon software, the instrument provides customized user flexibility and serves as a research tool for different coatings.

- → Accurate: Automated compression-based rubber density testing
- → Efficient: Rapid measurement, no peripherals, no auxiliary media
- → Smart design: Ergonomic control panel, integrated balance
- → Robust: Designed for demanding environmental conditions
- → Precise: User-independent test execution
- → Ready-to-use: Operation with browser-based Brabender MetaBridge software

Brabender ElaTest

Density is an important process-relevant parameter in rubber production and is therefore of particular importance for both formulation development and continuous production-accompanying quality control. The Brabender ElaTest enables reproducible determination of the density of non-vulcanized, i.e. non-crosslinked, rubbers and rubber compounds.

- → Highly accurate with a handcrafted precision glass measuring cell
- → Smart device with in-app calculations for numerous measurement units
- → Measurements from start to finish – before, during, and after fermentation
- → Simple monitoring via mobile app, where results are stored, displayed, and managed

Smart Density Meter: EasyDens

EasyDens determines the extract content of beer wort, the must weight of wine, the sugar content in fruit juices, and the alcohol content in distilled sugar-free spirits. It shows results for density, specific gravity, °Plato, °Brix, or alcohol by volume/weight, offers automatic temperature compensation, and allows precise in-app fermentation process monitoring of beer and wine. In combination with the SmartRef, it's possible to determine the alcohol content of finished beer, wine, liqueur, kombucha and more.

Buy online
www.easydens.com

- → Accuracy of 0.001 g/cm³
- → Lightweight and flat design helps with measuring hard-to-reach samples
- → In-field quality checks
- → One device replaces all of your glass hydrometers
- → Only 2 mL of sample needed
- → IP54 leakproof design
- → Built-in hand pump

Portable Density Meter: DMA 35 Basic

DMA 35 Basic is the entry-level portable density meter which takes samples directly from the storage container with the help of the built-in pump and measures them on-site. Results are given as density or concentration, such as °Brix, % v/v alcohol, and % w/w H_2SO_4.

- → Accuracy of 0.001 g/cm³
- → 1-second sample filling
- → Only 2 mL of sample needed
- → IP54 leakproof design
- → Suitable for both left- and right-handed users
- → Viscosity correction
- → Wireless export of results via Bluetooth
- → Intrinsic safety (EX & EX Petrol version): ATEX: II 2G Ex ib IIB T4 Gb, IECEx: Ex ib IIB T4 Gb
- → PQP-S available
- → AP Connect-compatible

Portable Density Meters: DMA 35 Standard, Ex and Ex Petrol, Ampere

DMA 35 is a portable density meter that identifies sampling points via RFID, and measures the sample within a few seconds on-site. Thanks to its integrated concentration tables, it replaces all hydrometers in the workspace and reduces time and effort spent on measurements. For beer and wine applications, it shows the fermentation curve and is therefore the perfect tool to monitor the process.

- → 3-digit accuracy
- → Results in two minutes
- → 1 mL of sample needed
- → 7”, glove-friendly touchscreen
- → 60+ conversion tables
- → Ready for pasty, inhomogeneous, and particle-containing samples
- → Complies with 21 CFR Part 11 and Chinese pharmacopoeia (CN)
- → Guided workflows
- → PQP and PQP-S available
- → AP Connect-compatible

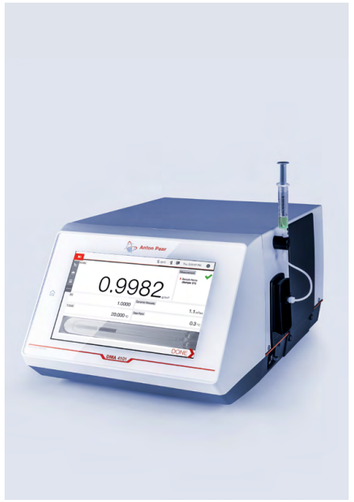
Density Meter: DMA 501

DMA 501 is a compact and standalone three-digit density meter. It fits into tight spaces in the production area, storage facilities, or in the lab. It’s ready for operation at sites outside the traditional lab space. The instrument delivers stable density results even with challenging samples (e.g., creams, pastes, varnish, aerosol sprays).

- → 4-digit accuracy
- → Repeatability of 0.00005 g/cm³
- → Results in two minutes
- → 1 mL of sample needed
- → 7”, glove-friendly touchscreen
- → Splash-proof housing
- → 60+ conversion tables
- → Complies with ASTM D4052 and D5002, ISO 12185, 21 CFR Part 11, and pharmacopeia (US, EU, JP, CN)
- → PQP and PQP-S available
- → AP Connect-compatible

Density Meter: DMA 1001

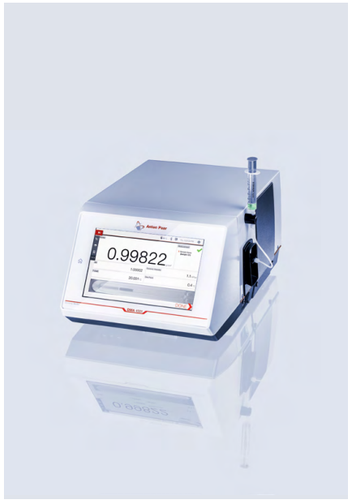
DMA 1001 offers four-digit accuracy with comprehensive documentation of activities and user support. Anyone can use it with minimal training due to its range of support features, including its guided user workflow, customizable touchscreen, and automatic bubble detection technology, FillingCheck™. The ventilation-free cooling unit enables operation in harsh environments.



- → 4-digit accuracy in 20 seconds
- → 10.1” touchscreen
- → Storage for 10,000 measurements
- → Attachable: 7+ measuring modules, 7+ sample changers
- → FillingCheck™, U-View™ for reliable sample filling
- → Complies with ASTM D4052 and D5002, ISO 12185, 21 CFR Part 11, and pharmacopeia (US, EU, JP, CN)
- → PQP and PQP-S available
- → AP Connect-compatible

Density Meter: DMA 4101

DMA 4101 is the fastest four-digit density meter on the market, giving you results in 20 seconds. It incorporates 200+ conversion tables. A modular approach allows upgrades for additional measuring modules and enables integration of sample changers for the automation of quality assurance tasks. The Pulsed Excitation Method delivers the most stable density results based on comprehensive knowledge of oscillation characteristics.



- → 5-digit accuracy in 30 seconds
- → 10.1” touchscreen
- → Storage for 10,000 measurements
- → Attachable: 7+ measuring modules, 7+ sample changers
- → FillingCheck™, U-View™ for reliable sample filling
- → Complies with ASTM D4052 and D5002, ISO 12185, 21 CFR Part 11, and pharmacopeia (US, EU, JP, CN)
- → PQP and PQP-S available
- → AP Connect-compatible

Density Meter: DMA 4501

Thousands of users around the world count on DMA 4501 density meters whenever accurate five-digit density values are required. The density meters can be combined with other measuring modules for multiparameter setups for specific industries. They provide five industry-specific user profiles and 30+ guided user workflows.

- → 6-digit accuracy
- → 10.1” touchscreen
- → Storage for 10,000 measurements
- → Attachable: 7+ measuring modules, 7+ sample changers
- → FillingCheck™, U-View™ for reliable sample filling
- → Complies with ASTM D4052 and D5002, ISO 12185, 21 CFR Part 11, and pharmacopeia (US, EU, JP, CN)
- → PQP and PQP-S available
- → AP Connect-compatible

Density Meter: DMA 5001

With its six-digit accuracy, DMA 5001 is the most precise digital density meter on the market. It’s ideal for high-end R&D applications, government authorities, and standards organizations. No other digital density meter is able to deliver comparably accurate results over the entire range. As for the whole density meter series, it compensates the influence of viscosity twice as effectively as ever before.

- → Density and sound velocity in one instrument
- → 6-digit accuracy in density
- → Repeatability up to 0.1 m/s for sound velocity
- → Measures the whole concentration range of sulfuric acid and oleum as well as three-component mixtures
- → FillingCheck™, U-View™ for sample filling
- → ThermoBalance™ technology ensures accurate measurements up to 100 °C
- → AP Connect-compatible

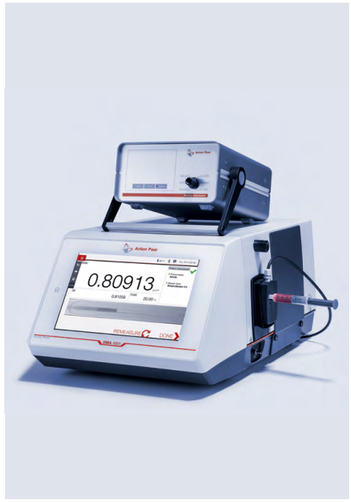
Density and Sound Velocity Meter: DMA 5001 Sound Velocity

DMA 5001 Sound Velocity allows determination of two- and three-component solution concentration, e.g., acetic acid and formaldehyde/methanol. It provides coverage of the complete sulfuric acid and oleum concentration range and enables measurement of two parameters – density and sound velocity – in one go. It permits efficient analysis in quality control and R&D, with throughput of up to 20 samples per hour and minimal sample volume of just 3.5 mL for maximum safety.

- → 4-digit accuracy
- → Measurements from 0 bar to 500 bar and from -10 °C to +200 °C
- → 10x faster analysis than with pycnometer methods
- → Only 2 mL to 3 mL of sample required
- → FillingCheck™ detects filling errors
- → Complies with ASTM D4052, ASTM D5002, ASTM D8188, and ISO 12185
- → AP Connect-compatible

Density Meter: DMA 4200 M

DMA 4200 M, the density meter for the heavy petroleum industry, measures the density and specific gravity of highly viscous samples, e.g., bitumen and asphalt, bunker oil and even LPG. With Temperfect™, it conducts immediate density measurements at any temperature between 0 °C and 150 °C at ambient pressure. The U-tube is made of Hastelloy C-276 and is very resistant to chemicals, such as sour gas, hydrochloric acid, and hydrofluoric acid.



- → Heated injection adapters prevent sample freezing
- → Supports filling of viscous samples at elevated temperature
- → Temperature control from 40 °C to 90 °C
- → Can be added to all DMA 4101, DMA 4501, and DMA 5001 instruments

Heating Attachment

The heating attachment allows straightforward filling and removal of highly viscous samples into and from the measuring cell of the DMA 4101, DMA 4501, and DMA 5001. It’s quickly mounted, and heats the density meters’ injection adapters to temperatures between 40 °C and 90 °C.

- → 4-digit density accuracy
- → Measurements up to 1,400 bar and between temperatures of -10 °C to +200 °C
- → Remote data reading with mPDS 5
- → Storage for 999 results
- → Oscillating U-tube made of Hastelloy C-276

External Measuring Cell: DMA HPM

The DMA HPM external density measuring cell measures density at high pressures and/or high temperatures. DMA HPM is commonly used in reservoir studies, either integrated into a pressure volume temperature (PVT) system or into a slim-tube apparatus for enhanced oil recovery (EOR) experiments, and in studies for determining the density for the equation of state.

- → Measuring range CO_2: 0 g/L to 20 g/L (0 vol to 10 vol) <15 °C
- → Fast detection: CO_2 in 55 sec or CO_2 and O_2 in 90 sec
- → Correct results: guided CO_2 system check and FillingCheck™
- → Selective CO_2 determination without influence of other dissolved gases
- → At-line instruments: leakproof (IP67), 11-hour battery life

Lab and At-Line CO_2 and O_2 Meters: CarboQC/CarboQC At-Line, CarboQC 1001, CarboQC ME, CboxQC/CboxQC At-Line

Whether at-line, directly at the production line, or in the lab, CarboQC measures the true amount of dissolved carbon dioxide in soft drinks, beer, wine, and sparkling water. The CarboQC ME measuring module can be integrated into beverage analysis systems. CboxQC combines CO_2 and O_2 determination in one measuring cycle.

- → Measuring range: 0 ppm to 4 ppm (Standard) or 0.015 ppm to 45 ppm (Wide Range)
- → Results in 50 seconds
- → Accurate O_2 results, even from small packages
- → At-line instrument: leakproof (IP67), 11-hour battery life

- → Repeatability TPO: ±8 ppb or ±6 %, whichever is greater
- → Measures TPO selectively, head space oxygen, and dissolved oxygen, direct from the package
- → Results in down to 4 minutes
- → Self-cleaning function
- → Rugged design for safe use in production areas
- → 7” touchscreen
- → Storage for 5,000 measurements
- → Optional CO_2 measurements

- → Complies with ASTM D93, ISO 2719, IP 34, and other standard test methods
- → Electric igniter system offers 10x longer lifetime than competitor versions
- → Efficient cooling and simple cleaning for fast turnaround times between samples
- → Modern, customizable user interface
- → Status light and automated measuring head
- → Built-in fire extinguisher
- → AP Connect-compatible

Lab and At-Line O_2 Meters: OxyQC, OxyQC Wide Range

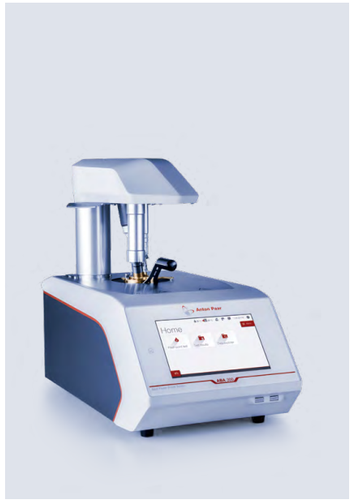
OxyQC and OxyQC Wide Range are precise O_2 meters that analyze beer, wine, juices, soft drinks, and water. Unaffected by other dissolved gases, they can be used either as an at-line solution from process lines, tanks, kegs, and casks during the production process or as a stand-alone solution for the laboratory.

Total Package Oxygen Meter: TPO 5000

TPO 5000 selectively measures the total amount of oxygen in beverages directly out of cans, glass bottles, and PET bottles at the production line or in a laboratory. This is critical for the quality control of finished beer and soft drinks. It’s available as a stand-alone option or can be combined with a CarboQC to determine O_2 and CO_2 from one vessel and can even be integrated into a beer measurement system.

Pensky-Martens Flash Point Testers: PMA 500, PMA 300

These Pensky-Martens closed-cup flash point testers are for automatic high-precision flash point testing. Among other samples, these are suitable for biodiesel and biodiesel-blended fuels, distillate fuels (e.g., diesel or kerosene), lubricants, bitumen, and edible oils. The lifespan of their unique electric igniter is 10x longer compared to any other igniter on the market, maximizing productivity and saving costs.



- → Complies with ISO 13736, ISO 1516, ISO 1523, IP 170, IP 492, EN 924, IP 491, and more
- → Electric igniter system offers 10x longer lifetime than the competition
- → Two-in-one cooling concept provides flexibility and a -35 °C to +130 °C temperature range
- → Fail-safe fire detection and extinguishing system

- → Complies with ASTM D56, ASTM D3934, ASTM D3941, EN 924, ISO 1516, ISO 1523, IP 491, IP 492, and more
- → Electric igniter system offers 10x longer lifetime than the competition
- → Two-in-one cooling concept provides flexibility and a -35 °C to +130 °C temperature range
- → Fail-safe fire detection and extinguishing system

- → Complies with ASTM D92, ISO 2592, and other standards
- → Automatic test flame lighting and relighting
- → Space for 1,000 tests, 20 operators, 100 sample names
- → Predefined as well as up to 10 user-defined programs
- → Skimmer and skin prevention set according to ASTM D8254 available
- → Out-of-spec results notification

Abel Closed-Cup Flash Point Testers: ABA 500, ABA 300

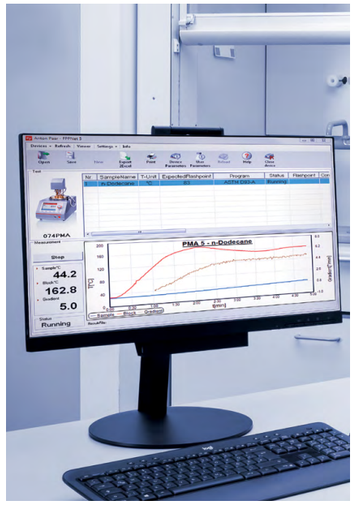
Innovative cooling options permit flash point testing across a temperature range from -35 °C to +130 °C. Both flash point testers offer excellent heating control and a full feature set for accurate flash point results. The lifespan of their unique electric igniter is 10x longer compared to any other igniter on the market, maximizing productivity and saving costs.

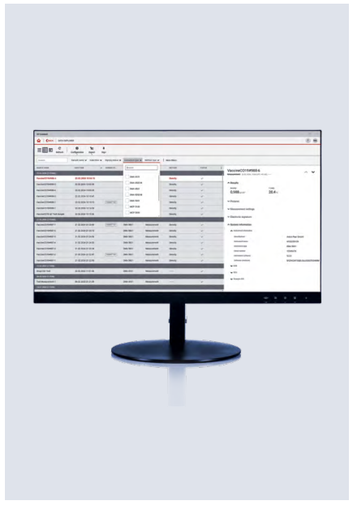
TAG Closed-Cup Flash Point Testers: TAG 500, TAG 300

Innovative cooling options permit flash point testing across a temperature range from -35 °C to +130 °C. Both flash point testers offer excellent heating control and a full feature set for accurate flash point results. The lifespan of their unique electric igniter is 10x longer compared to any other igniter on the market, maximizing productivity and saving costs.

Cleveland Flash and Fire Point Tester: CLA 5

CLA 5 is an automatic open-cup flash and fire point tester with a measurement range of up to 400 °C. It’s suitable for lubricants and bituminous material.





- → Real-time monitoring of test progress on PC
- → Excel or LIMS export
- → Traceable documentation, including all measurement-relevant parameters
- → Manages test procedures for Pensky Martens, Cleveland, Abel, and Tag methods as well as user-defined ones

- → Complies with ASTM D86, ASTM D850, ASTM D1078, ISO 3405, IP 123, IP 195, GOST 2177, JIS K2254
- → Multi-plug with indestructible vapor temperature sensor (Diana 700)
- → Smart user interface with condition monitoring
- → Fast tempering enables measurements to start quickly
- → Peltier cooling ensures low maintenance efforts
- → AP Connect-compatible

- → Establish a vendor-independent data repository
- → Connect to 80+ AP instruments
- → Connect to instruments from other vendors with the AP Connect Instrument Adapter
- → Create a unified interface to your LIMS
- → Access data from across the company network
- → A single interface between all your instruments and your data management system
- → Automated measurement scheduling and execution
- → Generate sample lists directly on a PC

Software for Automatic Flash Point Testers: FPPNet

The FPPNet software is an effective solution for reading and evaluating data and monitoring the automatic flash point testers CLA 5 as well as older models (PMA 5, ABA 4, TAG 4, PMA 4 SC, PMA 4, CLA 4). FPPNet has self-explanatory menus.

Distillation Analyzers: Diana 700, Diana 300

Our distillation analyzer portfolio covers two instruments: Diana 700 and Diana 300. They conduct automatic precision distillation range analysis at atmospheric pressure. Along with characterizing petrochemical product samples, Diana 700 is able to distill a wide range of volatile samples, including fuels and solvents. Diana 300 is an instrument optimized for fuels. Both come with safety features like a built-in fire extinguisher.

Lab Execution Software: AP Connect

AP Connect offers vendor-independent digitization and integration for various laboratory instruments, creating a unified and secure central data repository. This addresses common laboratory challenges such as partial digitization, data loss, and delays due to disparate systems, and enables immediate, real-time data access across the lab network. By streamlining data management, the AP Connect lab execution software not only enhances decision-making and data analysis but also ensures data security, thereby improving overall lab quality and efficiency.

- → Short filling times
- → Automated cleaning
- → Adjustable pump speed
- → Quick sample replacement
- → Filling viscosity: up to 3,000 mPa.s
- → AP Connect-compatible

- → Automated cleaning and drying
- → Compatible with user's own syringes
- → Temperatures up to 95 °C

- → Unattended filling and measurements
- → Maintenance-free operation
- → Space for up to 96 samples in one magazine

Single-Sample Changers: Xsample 320, Xsample 330, Xsample 370

Our range of sample changers are designed for efficient and accurate handling of single samples. Once parameters are configured, these changers expedite operations, ensure user-independent filling, and minimize handling errors. Xsample 330 is ideal for consecutive measurement of low-viscous samples with diverse properties, featuring automated cleaning. Paired with Lyza 5000 Wine, Xsample 370 facilitates fully automated FTIR wine analysis, handling filling, referencing, cleaning, and drying without the need for user interaction.

Single-Sample Changers: Xsample 340, Xsample 610

The Xsample 340 and Xsample 610 are sample changers designed for different types of syringes, automatically filling Anton Paar instruments. Featuring two cleaning agents and adjustable filling speed, Xsample 340 and Xsample 610 ensure perfect measuring conditions regardless of operator and sample. Xsample 610 is a heated single sample changer operating at temperatures up to 95 °C.

Multi-Sample Changer: Xsample 520

Xsample 520 is a sample changer for multiple samples. It ensures user-independent filling of numerous Anton Paar instruments with its stepless adjustability and smart pump lock. Equipped with a peristaltic pump, Xsample 520 fills the sample into the measuring cell without rinsing and drying, saving valuable time when sample recovery isn't necessary.

- → Automated filling, rinsing, and drying
- → Up to three cleaning solvents
- → Removable magazine handles 71 samples (12 mL vials) or 35 samples (20/40 mL vials)
- → Automated air check
- → Customized magazines

- → Automated cleaning and drying
- → Temperatures up to 95 °C
- → Outstanding temperature stability
- → Works with heated and non-heated samples at the same time
- → Handles up to 56 samples (36 heated)
- → Removable magazine
- → Complies with ASTM standards

- → The multi-sample changer with no limits for high viscosities
- → Handles up to 56 samples with heated (up to 95 °C) and non-heated samples at the same time
- → Automated cleaning and drying

Multi-Sample Changer: Xsample 530

The Xsample 530 sample changer handles liquids with a wide range of viscosities. Its automated filling, rinsing, and drying routines ensure perfect results without sample cross-contamination. Since it uses up to three cleaning liquids, Xsample 530 can measure multiple samples in one run. Its mechanical components and a resistance to chemicals lead to increased uptime of the system and low maintenance costs.

Multi-Sample Changer: Xsample 631

The Xsample 631 sample changer handles up to 36 heated sample positions for all Anton Paar master instruments. Improved heating leads to short heating periods, time saving, and increased performance. Temperatures up to 95 °C are achieved in the system. Even challenging samples can be measured according to strict ASTM standards. The robust design ensures reliable and maintenance-free operation. A removable magazine with dedicated non-heated positions saves time by facilitating sample handling and even makes a second measuring system obsolete.

Pharma Measurement System

The Pharma Measurement System combines a density meter, a refractometer, and a rolling ball viscometer with a versatile sample changer, which means users can get more parameters from one sample filling. Comprehensive software features for the pharmaceutical industry eliminate measuring errors, track every instrument action, and keep data safe. The available PQP documents help you fulfill all the required specific qualifications and documentation from the pharmaceutical industry.

- → Measures density and turbidity from single sample
- → Only 5 mL of sample
- → No glass cuvette maintenance
- → Accurate temperature control
- → Multisample changer with up to 96 samples
- → Compliance features like user management, audit trail, and electronic signature
- → PQP/PQP-S available

- → Combined measurement of density, refractive index, optical rotation, and color
- → 10 mL of sample required – perfect for precious samples
- → Simplifies quality control with defined limit
- → Automated filling, measurement, cleaning, and data transfer
- → Saves costs due to sample recovery option after measurement

- → Combined density and refractive analysis
- → Seamless operation for comprehensive lubricant analysis
- → Automated sample handling for efficiency and reproducibility
- → Accurate data capture for enhanced productivity
- → Complies with international standards (ASTM D1250, ASTM D1475, ASTM D2501, ASTM D4052, ASTM D4806, ASTM D5002, ASTM D6448)

Turbidity Measurement System

The Turbidity Measurement System quickly measures specific gravity and turbidity for pharma applications from one sample filling. It offers various filling options as well as accurate temperature control to provide fast and accurate measurement results. Features like Filling Check™, U-View™, and the available PQP documents help you to fulfill all the required specific qualifications and documentation from the pharmaceutical industry.

Flavor & Fragrance Measurement System

The Flavor & Fragrance Measurement System enables multiple measuring parameters. With a full automation option, it delivers all necessary information about substances in the flavors and fragrances industry with just one measurement. It's the best time- and cost-saving solution for quality control in a challenging industry.

Lubricant Measurement System

The Lubricant Measurement System measures density and refractive index but can also be extended for the analysis of viscosity, viscosity index and carbon-type analysis in a single setup from a single sample. It's an effective time saver for laboratories and companies dealing with quality control of lubricants.

- → Determine viscosity, density and refractive index
- → Peltier temperature control
- → Xsample 530 sample changer for automated measurements
- → No need for manual calculations
- → No counter-cooling for viscosity measurements down to -20 °C
- → Complies with international standards (ASTM 1655, ASTM D7042, and bias-corrected D445, ASTM D1250, ASTM D6448, ASTM D4052, ASTM D1218)

- → Automatic measurements up to 8x faster than other accelerated aging methods
- → Broad application range with flexible method design
- → Less than five minutes for setup and cleaning
- → No sample preparation needed
- → Many investigation possibilities with OxyLogger 100 software
- → Highest safety standards

- → Complies with ASTM D7525, D7545, EN 16091, IP 595
- → Fastest fuel test on the market
- → Fully automatic
- → Quick setup and cleaning
- → Highest safety standards
- → Only 5 mL sample required
- → Compact size

Jet Fuel Measurement System

The Jet Fuel Measurement System is a versatile multiparameter fuel analysis solution for single-measurement determination of parameters such as viscosity, density, cloud point, freezing point, and refractive index. It's an effective time saver for laboratories and companies performing fuel testing and quality control.

Oxidation Stability Tester: RapidOxy 100

RapidOxy 100, a Rapid Small-Scale Oxidation Test (RSSOT) instrument, simulates the aging process in an accelerated procedure with increased temperature and an excess of oxygen. Preset test programs for various sample types ensure perfect results and standards compliance (e.g., with ASTM D8206). There are many applications with food samples, flavors, and fragrances, as well as cosmetics and pharmaceutical formulations.

Oxidation Stability Tester: RapidOxy 100 Fuel

RapidOxy 100 Fuel delivers precise results for spark ignition fuels, diesel fuels (B0 to B100), and heating oils – all with one instrument. Its Rapid Small-Scale Oxidation Test (RSSOT) procedure ensures that the measuring time for liquid fuels is only a fraction of that associated with conventional oxidation stability methods. The test is, for example, 20x faster than the alternative method included in the diesel specification EN 590.

- → Complies with ASTM D381, ISO 6246, DIN 51784, IP 131, IP 540, JIS K 2261, and FTM 791-3302
- → Measures five samples simultaneously
- → Draining system, thermal protection shield, and overheating protection
- → Operates at up to 260 °C (with air and steam supply) or 246 °C (with air supply)

- → Complies with 21 CFR Part 11, EU GMP Annex 11 (MCP 150), and international pharmacopeia
- → Electronic signature (MCP 150)
- → Built-in Peltier temperature control for short cycle times
- → Automatic, wireless accessory identification for quartz control plates and sample cells
- → Guided check and adjustment processes
- → Analysis at 589 nm

- → Fast temperature control for short cycle times
- → Customizable wavelengths (365 nm to 880 nm)
- → Built-in camera for error-free measurements
- → Complies with 21 CFR Part 11, EU GMP Annex 11, and international pharmacopeia
- → Guided check and adjustment workflows
- → Comprehensive pharma qualification documentation
- → AP Connect-compatible

Gum Content Tester: GUM

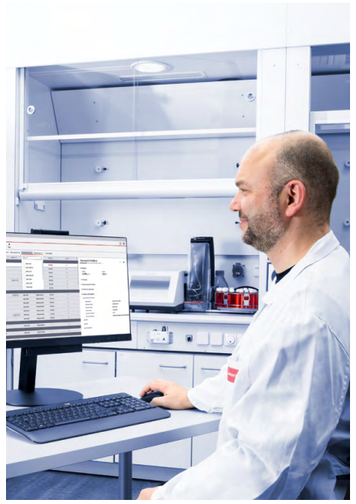
GUM helps to detect non-volatile residues and to prevent induction system difficulties by measuring the unevaporated residue of fuel that may lead to deposits and sticking of intake valves. It's suitable for aircraft fuels, motor gasoline, and other volatile distillates. Its multifunction head for simultaneous positioning of all five sample tubes increases accuracy, safety, and throughput.

Modular Compact Polarimeters: MCP 100, MCP 150

The MCP 100 and MCP 150 polarimeters provide proven technology. They fit into every laboratory and are ideal for multi-parameter measuring systems due to their small dimensions.

High-Performing Polarimeter Series: MCP 4100, MCP 5100, MCP 5500

Measure. Comply. Perform. MCP 4100, MCP 5100, and MCP 5500 are audit-proven solutions complying with 21 CFR Part 11 and EU GMP Annex 11. They eliminate errors before they occur, bringing you maximum efficiency, reduced costs, zero errors, and full compliance. Results are ready in seconds. They are the right choice for analysis in the pharmaceutical, cosmetics, food, and chemical industries as well as for R&D and medical applications.



Instrument software

→ Straightforward data management for a few samples per day
→ No IT effort needed

Desktop software

→ Many samples per day
→ Instrument control, data storage, and system administration on PC
→ SQL database

AP Connect

→ Central data management
→ Server-client solution
→ SQL database
→ Data signing on server

→ Small size to fit into pockets
→ Results in seconds for rapid at-site decisions
→ Pre-installed reference libraries
→ 3.5” screen
→ Range of accessories to suit sample type
→ IP67 waterproof
→ Ready for conditions from -20 °C to +40 °C

→ Laser class 1 for safe measurement within sample compartment. No further precautions needed.
→ Autofocus for straightforward, reproducible analysis
→ Guided workflows
→ Small footprint
→ Battery option for mobile operation
→ Tailored accessories to suit every sample
→ Fiber probe for measuring outside the instrument

MCP Data Integrity Solutions: Desktop Software and AP Connect

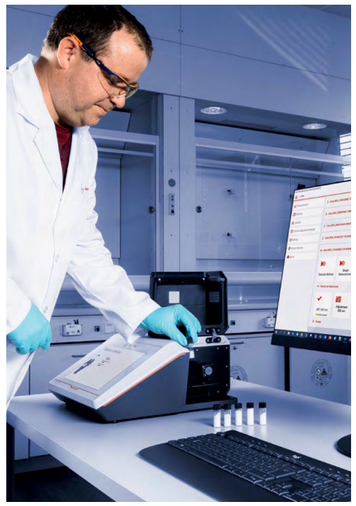
For every level of data volume and IT policies, there is a compliant data management solution: the instrument’s embedded software, the desktop software, and Anton Paar Connect as a data management hub. It complies with 21 CFR Part 11 and EU GMP Annex 11.

Handheld Raman Spectrometer: Cora 100

Cora 100 identifies unknown substances quickly. It helps government authorities assess potentially hazardous materials and provides on-the-spot identification of narcotics, listed substances, explosives, and chemicals. It’s also ideal for verification measurements on incoming goods in industrial applications.

Raman Spectrometer: Cora 5001

Cora 5001 is a Raman analyzer that identifies substances based on their chemical fingerprint or monitors chemical changes. A Fiber model offers flexible analysis outside the instrument via a probe, while the Direct model analyzes samples in a closed compartment. The small footprint and battery option make these benchtop Raman instruments versatile tools for analytical tasks in-house or in the field.



→ Autofocus for user-independent measurement
→ Versioned and electronically signed reference libraries and library entries
→ Operator only allowed to use approved methods
→ Complies with 21 CFR Part 11 and EU GMP Annex 11
→ Guided workflows
→ Secure SQL database
→ Laser class 1

→ Real-time, in situ molecular changes monitoring
→ Quick setup
→ Measuring wavelengths 532, 785 or 1,064 nm (rheological measurements) and 785 nm (microwave synthesis measurements)
→ Operating temperature of up to 200 °C
→ Triggering of Raman measurement with rheometer / Anton Paar Monowave
→ Possibility to operate as stand-alone devices
→ Live onscreen analysis of spectra

→ Measures hundreds of sample types with one instrument
→ Modular cell concept, compatible with a variety of ATR and transmission cells
→ Fast pass/fail spectral analysis helps optimize quality and efficiency
→ Handles complex measurement routines
→ Powerful embedded software that works right out of the box
→ Full compliance in pharma and other regulated environments with the AP Spectroscopy Suite software (incl. 21 CFR Part 11)

Raman Spectrometer: Cora 5001 for Regulated Environments

Cora 5001 for compliance in regulated environments features the Anton Paar Spectroscopy Suite software to ensure data integrity and compliance. It provides rigorous versioning and signing procedures for methods, reference data, and results. Guided workflows and clearly defined user privileges avoid errors before they can occur.

In Situ Reaction Monitoring: Rheo-Raman and Monowave-Raman Combination

Cora 5001 Raman spectrometers and MCR series rheometers can be easily combined. The combination gives both viscoelastic and molecular real-time information. The combination contributes to better understanding the relationship between macroscopic properties and microscopic molecular changes. Combining the Cora 5001 with a synthesis microwave (Monowave 400 R) enables the user to monitor chemical changes during a synthesis live and in situ.

FTIR Spectrometer: Lyza 7000

Lyza 7000 can measure hundreds of sample types. Solid, liquid, or gaseous, Lyza 7000 measures them all. The software combines measurement, processing, and spectral analysis in an automated method with a customizable measuring report.

- → Equipped with 40+ measurement units
- → Accuracy of 0.2 °Brix with a measuring range of 0 °Brix to 85 °Brix
- → Smart device with in-app calculations and automatic temperature compensation
- → Simple handling with quick zero adjustment and easy cleaning
- → Waterproof with an IP66 rating and a stainless-steel sample well

- → Measurements within seconds
- → Minimal operation costs and maintenance-free
- → 200+ methods for a broad range of applications
- → Small lab footprint

- → Accuracy from ±0.0001 nD to ±0.00002 nD
- → Complies with 21 CFR Part 11 and EU GMP Annex 11
- → Graphic pass/fail display for QC
- → On-site temperature calibration and adjustment
- → Connects to other Anton Paar instruments for multiparameter measurements
- → Wide range of accessories to meet every measuring task
- → AP Connect-compatible

Digital Pocket Refractometer: SmartRef

The SmartRef digital refractometer determines the extract content of beer wort, the sweetness of fruits and vegetables, the moisture in honey, the cutting oil and sodium chloride concentration, the blend ratio of heat transfer fluids like ethylene glycol/ propylene glycol, and more. With a mobile app, the smart refractometer provides highly accurate results with intelligent guidance during measurement. Combined with the EasyDens, it's possible to determine the alcohol content of finished beer, wine, liqueur, kombucha and more.

Buy online
www.my-smartref.com

Compact Refractometers: Abbemat 3000, Abbemat 3100, Abbemat 3200

Precise and economic: Abbemat 3000, Abbemat 3100, and Abbemat 3200 refractometers combine technical expertise and straightforward operation for refractive index, Brix, and concentration measurements. The Abbemat 3000 series ensures highly efficient quality control and confidence in results.

Performance Line (Plus) Refractometers: Abbemat 300, Abbemat 500 and Abbemat 350, Abbemat 550

The Abbemat performance line series consists of four instruments that are ideal for R&D, routine analysis, and quality control. The high-end series (Abbemat 350 and Abbemat 550) is audit-proof even under strict pharma regulation interpretations and IT policies. All four can be combined with DMA density meters, MCP polarimeters, and SVM viscometers.

Buy online
shop.anton-paar.com

- → Accuracy from ±0.0001 nD to ±0.00002 nD
- → Rugged, waterproof housing (IP68) for operation in harsh environments
- → Temperature control range of 4 °C to 125 °C
- → Flow-through option to automate continuous measurements
- → High chemical resistance (e.g., against HF or NaOH)
- → Complies with 21 CFR Part 11 and EU GMP Annex 11
- → AP Connect-compatible

Instrument software
- → Straightforward data management for a few samples per day
- → No IT effort needed

Desktop software
- → Many samples per day
- → Instrument control, data storage, and system administration on PC
- → SQL database

AP Connect
- → Central data management
- → Client-server solution
- → SQL data base
- → Data signing on server

- → Production monitoring from (diet) syrup to finished beverages
- → Simultaneous determination of %Diet, °Brix, and pH
- → 6x quicker results than with conventional methods
- → Automated measurement eliminates operator influence
- → Guided diet adjustments let anyone manage QC of diet products
- → AP Connect-compatible

Heavy-Duty Refractometers: Abbemat 450, Abbemat 650

The Abbemat 450 and Abbemat 650 heavy-duty refractometers combine robustness with high precision for stable results at-line or in harsh environments. Via remote operation, the instruments can be used in production, in fume hoods, or in gloveboxes. To investigate the product quality, vertical positioning enables reliable results for samples containing particles or pulp.

Abbemat Data Integrity Solutions: Desktop Software and AP Connect

For every level of data volume and IT policies, there is a compliant data management solution: the instrument's embedded software, the desktop software, and Anton Paar Connect as a data management hub. Complies with 21 CFR Part 11 and EU GMP Annex 11.

Soft Drink Measurement System

The Soft Drink Measurement System monitors the production of regular and diet drinks from syrup to the finished product. The analyzing system determines °Brix and %Diet concentration and can be upgraded with different types of sample changers for automated filling and cleaning.
It provides precise results for exact dilution ratio setting, tracks and eliminates variations in production, and helps users achieve consistency in every batch.

- → Determines °Brix, %Diet and CO_2 in one go in 3 to 6 minutes
- → Reduce your diet reference analysis time by 75 %
- → Follow built-in wizards that guide measuring and adjustment steps
- → Upgrade and increase system efficiency with modular extensions to measure dissolved O_2 and pH
- → Combine with TPO 5000 and selectively determine dissolved oxygen and headspace oxygen
- → Accuracy from 0.01 °Z to 0.006 °Z
- → VIS (589 nm) and NIR (880 nm) wavelengths
- → Straightforward operation
- → LED light with 100,000-hour lifetime
- → Rugged, maintenance-free optical setup
- → Complies with ICUMSA methods
- → Peltier temperature control (optional)
- → AP Connect-compatible
- → Automatic and efficient purity analysis of sugar products
- → Multiparameter measurement in one go, boosting lab efficiency
- → Peltier temperature control for fast and homogeneous temperature control
- → Long-lasting LED light sources
- → AP Connect compatible

Packaged Soft Drink Measurement System

The Packaged Soft Drink Measurement System combines up to four instruments to determine all quality parameters for regular, mid-calorie, and diet soft drinks as well as (diet) energy drinks and carbonated bottled water in one go. There's zero prior preparation or intermittent cleaning, which saves you up to two hours a day. This fast quality control for soft drinks helps you optimize your blending process, ensures ideal carbonation levels, and guarantees confidence in the final bottled product.

Saccharimeters: MCP 5300, MCP 5500 Sucromat

The MCP Sucromat series determines sugar content (Pol, °Z) with an accuracy of up to 0.006 °Z across the entire measuring range of ±259°. These instruments measure at 589 nm (equal to Sodium D-line). The optional 880 nm NIR wavelength is ideal for analyzing lead-free clarified solutions. Both wavelengths are generated by maintenance-free LEDs.

Sugar Measuring System

The sugar measuring system substantially increases sugar factory performance. It conducts automatic, efficient purity analyses of raw, intermediate, and final sugar products. It delivers temperature-compensated analysis of °Brix and °Z at up to 120 measurements per hour. The instrument complies with ICUMSA methods and other national and international standards (e.g., OIML, Australian Standard K157).

- → Accepted for the analysis of recoverable sugar content by farmer associations and factories
- → Complies with the applicable ICUMSA methods
- → Throughput of 120 samples per hour
- → Proven in 24/7 operation for more than 50 years
- → Simple to operate and calibrate
- → Qualified service at site
- → Temperature measuring range: 0 °C to +100 °C (MKT 10); -260 °C to +962 °C (MKT 50)
- → Measuring accuracy of 0.01 °C (MKT 10) or 0.001 °C (MKT 50)
- → Lightweight and portable
- → Battery-operated
- → Ethernet interface connects to other Anton Paar instruments
- → Sensors: ITS 90, EN 60751, and ASTM E1137 (MKT 50)
- → Complies with ISO 17025 and even ISO 17034
- → Density standards from 0.75 g/cm³ to 1.25 g/cm³ on hand
- → Online certificate with lifetime reference values guarantee
- → Safety glass ampoule for zero contamination

Determination of Sugar Beet Quality: Betalyser

The Betalyser system analyzes sugar content, sodium, potassium, and α-amino nitrogen content in 30 seconds. From this, the expected sugar yield and sugar molasses loss are calculated automatically. It can be used as a stand-alone operation or integrated into automated beet reception stations (tare house). It also offers seamless data exchange with process control systems.

Millikelvin Thermometers: MKT 10, MKT 50

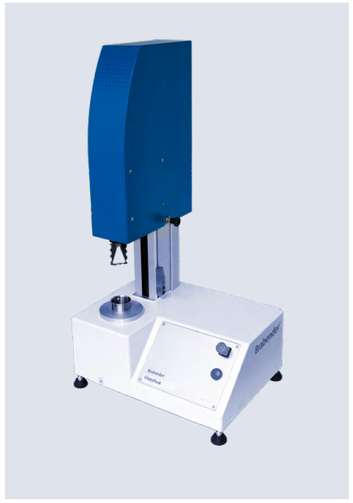
Millikelvin thermometers can be used for lab, at-line, and mobile measurements. The MKT 50 Millikelvin thermometer is designed for the most accurate temperature measurements, comparison calibrations, and fixed-point calibrations.

Buy online
shop.anton-paar.com

ISO 17034 Density Standards

The quality of density measurements determines the quality of final products. Regular calibration of a density meter ensures that measurements are always accurate and traceable to the International System of Units (SI). Our density standards are measured with hydrostatic weighing, which guarantees the highest possible accuracy.

Buy online
shop.anton-paar.com



- → Density and temperature calibration of density meters:
- → Range: 650 kg/m³ to 1,550 kg/m³ and 15 °C to 50 °C
- → Smallest achievable uncertainty: 0.02 kg/m³ | 15 mK
- → Temperature calibration of resistance thermometers:
- → Range: 0 °C to 200 °C
- → Smallest achievable uncertainty: 10 mK
- → ISO 17025 calibration experts on hand

- → Measure enzyme activity and gelatinization properties of starch in flour
- → Mimics real baking conditions for an accurate baking simulation
- → Indicates crumb structure and quality
- → ICC, ISO, and AACCI compliant
- → Diagram and multiple evaluation points inform decision making
- → Data management with Brabender MetaBridge software
- → Used within the Brabender 3-Phase-System

- → Quality and performance testing: Accurate, rapid tests to determine gluten quality
- → Determine flour, baking mixes or wet gluten in 1 min to 10 min
- → In-depth view on gluten aggregation properties with various evaluation points
- → Brabender MetaBridge software: user-guided workflows, reference limits, measurement correlations, customizable methods & parameters, and more
- → Connectivity: support for third-party solutions (ERP, LIMS)

ISO 17025 Calibration of Density Meters and Thermometers

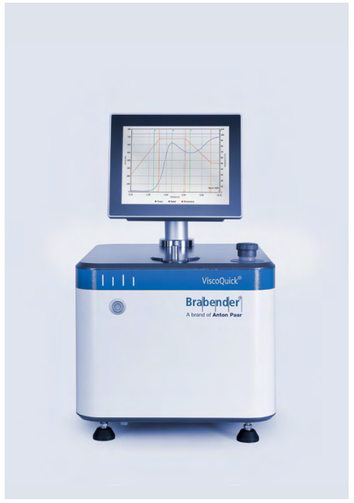
We offer traceable calibrations of density meters and thermometers according to ISO 17025. With the traceability according to the International SI units and to the International Temperature Scale 1990, the calibrated instrument provides absolutely accurate and internationally comparable results.

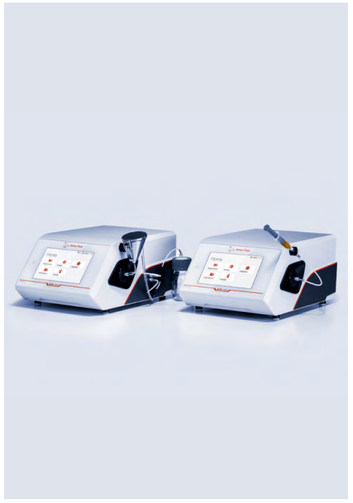
Brabender Amylograph-E

The Brabender Amylograph-E assesses starch properties and enzyme activity in flours according to ICC, ISO, and AACCI standards. Its gradual heating replicates baking conditions and captures the entire enzyme spectrum without starch damage. High-precision measurements are visually displayed in a diagram with multiple evaluation points. Real-time temperature measurements are devoid of fluctuations and guarantee precision throughout the process. Paired with the Brabender MetaBridge software, it ensures standards conformity, allowing real-time flour quality monitoring and streamlined workflows.

Brabender GlutoPeak

Quickly qualify cereal milling products based on the aggregation behavior of gluten. The use of Brabender GlutoPeak is suitable as a rapid method for quality assessment in the grain receiving process. The device measures within 1 min to 10 min at a constant rotational speed. The process runs automatically and requires only small sample quantities, ranging from 2.5 g to 12 g (depending on the sample material). Unsuitable material can be quickly identified, avoiding the need for further time-consuming measurements.





- → Starch-testing device compliant with ICC and AACCI
- → Analysis with globally recognized Brabender Units
- → Temperature determination directly at the sample
- → No disposables: Reduce waste due to stainless steel parts
- → See and share data with Brabender MetaBridge from any device at any time

- → 25 % faster than other instruments testing starch gelatinization
- → Rapid heating and cooling rates (-15 °C/min | +20 °C/min)
- → Brabender MetaBridge software with all functionalities, including data export, application database and more
- → Dose additives during the measurement for real-time insights
- → Compact: Integrated temperature control, PC, and touchscreen

- → Automated kinematic viscosity (15 °C to 100 °C)
- → Up to 150 % higher throughput than manual capillary viscometers
- → Minimum of 1.5 mL of sample required
- → Integrated ASTM bias correction for D445 results
- → Direct filling of samples through Simple Fill funnel
- → One unbreakable cell instead of 12 glass capillaries

Brabender Viscograph-E

Ensure compliance with Brabender Viscograph-E, a standard starch viscometer that measures the gelatinization properties of starch according to ICC and AACCI. Real-time quality monitoring through reference curves and precise temperature measurements enhance accuracy, while a 40 g sample size guarantees homogeneity and minimizes errors. The durable stainless steel beaker and stirrer design are resistant to wear and tear and ensure precision over the instrument's lifetime, letting you avoid follow-up orders associated with disposable systems.

Brabender ViscoQuick

Brabender ViscoQuick is a compact and reliable digital torque viscometer that's 25 % faster than comparable devices. Its integrated PC, touchscreen and temperature control system (Peltier) optimize space and costs. Heating and cooling rates of +20 °C/-15 °C per minute ensure short measuring times (e.g., starch gelatinization below 10 min). The Brabender MetaBridge software allows access and data export from any instrument. Brabender ViscoQuick enables real-time dosing of substances and rapid rheological determination at temperatures below 20 °C.

Kinematic Viscometers: SVM 1001, SVM 1001 Simple Fill

SVM 1001 and SVM 1001 Simple Fill are entry tickets into the world of digital automated kinematic viscometry. The wide-range cell lets users measure samples from diesel to lubricants. No stopwatch nor liquid temperature bath are needed, nor are several glass capillaries. ASTM-compliant results are available in both D7042 and D445. SVM 1001 Simple Fill makes direct filling of samples possible without the need for pipettes or syringes.

- → ASTM D4052- and ISO 12185-compliant density measurement, in combination with fast viscosity results
- → Easy filling with the Simple Fill Funnel
- → 2-minute operator time per measurement
- → 6.5 kg, and optional battery
- → Temperature range of 15 °C to 100 °C
- → Integrated API functions

- → Five-minute operator time per measurement
- → Kinematic viscosity at any temperature between 15 °C and 100 °C
- → Complies with ASTM D396, D975, D3699, D6158, D6823, D7467, and other standards
- → An unbreakable, metal measuring cell reduces capillary costs
- → AP Connect-compatible

- → Wide temperature range: -60 °C to +135 °C
- → No external cooling required down to -20 °C
- → Fast heating and cooling rates of up to 20 °C/min
- → Complies with ISO 23581, EN 16896, ASTM D396, D975, D7666, and other standards
- → Reports results in both D7042 and D445 (ASTM bias corrected)
- → AP Connect-compatible

Kinematic Viscometer: SVM 1101 Simple Fill

The SVM 1101 Simple Fill viscometer combines viscosity and density analysis to offer unmatched precision and value. Say goodbye to syringes or pipettes. At only 6.5 kg, SVM 1101 Simple Fill is a real portable viscometer, running on an optional battery with low power consumption of only 75 W. SVM 1101 Simple Fill redefines possibilities in analysis, delivering simplicity, accuracy, and portability.

Kinematic Viscometer: SVM 2001

SVM 2001 is our multiparameter kinematic viscometer with a full automation option that conducts fast viscosity measurements for every type of sample from diesel fuels and lube blends to used oils. It lets users cover the full viscosity range without changing capillaries or having to worry about glass breakage. Density and Viscosity Index (VI) according to ASTM D4052 and D2270 are available as an option.

Kinematic Viscometer: SVM 3001

SVM 3001 is a viscometer that delivers kinematic and dynamic viscosity as well as density and viscosity index (VI) of a wide variety of samples, from jet fuel to wax, in compliance with international standards. Users can cover the full viscosity range without needing to change capillaries or having to worry about glass breakage. A quick temperature scan delivers information about the temperature behavior of samples. ASTM D4052 Density is included. With its support for AP Connect, going fully paperless is possible.

- → Temperature range of -60 °C to +100 °C
- → Viscosity borderline temperature (temperature at 12 cSt)
- → Quick temperature scans for jet fuel pumpability
- → Sub-zero temperature cleaning and drying
- → Complies with ASTM D1655, D2880, D7566, D975, D7467, DEFSTAN 91-91, and JIG AFQRJOS
- → AP Connect-compatible

- → Fast viscosity index (VI) complies with ASTM D2270
- → Only 2.5 mL of sample needed
- → Two viscosity and density cells for simultaneous measurements at any two temperatures between 15 °C and 100 °C
- → Integrated viscosity-temperature extrapolation
- → AP Connect-compatible

- → Minimum of 100 µL of sample required
- → High chemical resistance: borosilicate glass or breakproof PCTFE capillaries
- → Temperature range of -30 °C (with counter cooling) to +100 °C
- → Flow-through filling for high sample throughput
- → Sample changer for automatic filling
- → Referenced in American and European Pharmacopeia
- → AP Connect-compatible

Kinematic Viscometer: SVM 3001 Cold Properties

SVM 3001 Cold Properties is the five-in-one solution for low-temperature applications. Along with conducting kinematic viscosity measurements on a variety of samples, it delivers dynamic viscosity, density, cloud, and freezing point from one test. Users can cover the full viscosity range without changing capillaries or having to worry about glass breakage. Measurements down to -20 °C can even be done without counter-cooling.

Kinematic Viscometer: SVM 4001

Thanks to its double-cell design, SVM 4001 is suited for fast viscosity index determination. It measures viscosity and density simultaneously at any two temperatures between 15 °C and 100 °C and provides results within minutes. The small sample and solvent volume (minimum 2.5 mL) and the low energy consumption make SVM 4001 highly cost-effective. A variety of sample changers can be connected to enhance productivity.

Rolling-Ball Viscometer: Lovis 2000 M/ME

The Lovis 2000 M/ME rolling-ball microviscometer determines the dynamic, kinematic, relative, and intrinsic viscosity of liquids with high precision. With the integrated polymer software, sample molar mass can automatically be determined. Flow-through filling facilitates handling and high throughput. The instrument can also be combined with Anton Paar density meters, sample changers, or Abbemat refractometers.

- → For single point dynamic viscosity tests
- → 3.5” display
- → Automatic spindle recognition (Toolmaster™)
- → Magnetic coupling included
- → Digital leveling and constant status monitoring included
- → Free V-Collect PC data storage software

Rotational Viscometer: ViscoQC 100

ViscoQC 100 is a rotational viscometer for measuring liquid and semi-solid samples. It conducts single-point measurements with a viscosity range from 0.2 mPa.s to 320 M mPa.s depending on the measuring system and torque model. Measuring capabilities can be easily extended with optional accessories for helical movement, cone-plate measurement, and temperature control.

Buy online
shop.anton-paar.com

- → For multipoint dynamic viscosity tests
- → 7” touch display
- → Automatic spindle recognition (Toolmaster™)
- → Magnetic coupling included
- → Digital leveling and constant status monitoring included
- → Software upgrade: V-Curve for flow curve and analysis, V-Comply for compliance with 21 CFR Part 11
- → AP Connect-compatible

Rotational Viscometer: ViscoQC 300

ViscoQC 300 is a rotational viscometer for multipoint measuring of liquids and semi-solids from 0.2 mPa.s to 320 M mPa.s depending on the measuring system and torque model. The capability of this future-proof instrument can be easily extended with optional accessories for helical movement, cone-plate measurement, and temperature control. It can also be upgraded with extra software packages for extended analysis and pharma compliance.

Buy online
shop.anton-paar.com

- → Fast and accurate temperature control
- → No extra bench space needed
- → Full control via ViscoQC display
- → 9.4 K/min (heating) and 2.3 K/min (cooling) rates with PTD 175
- → Built-in Pt100 sensor for precise sample temperature monitoring
- → Automated ASTM D2983 and D5133 (with PTD 175)

Peltier Temperature Devices for ViscoQC: PTD 80, PTD 175, PTD 100 Cone-Plate

The PTDs are accessories for fast and maintenance-free, air-cooled temperature control. PTD 80 supports DIN/SSA measuring systems, while PTD 175 is also suitable for UL/ASTM measuring systems. PTD 100 Cone-Plate is used for testing small sample volumes down to 0.5 mL. Temperature ranges are: 15 °C to 80 °C (PTD 80), -45 °C to +175 °C (PTD 175), and 0 °C to 100 °C (PTD 100 Cone-Plate).

Buy online
shop.anton-paar.com

- → Full control via ViscoQC display
- → No extra bench space needed
- → Fast and accurate temperature control
- → Built-in Pt100 sensor for precise sample temperature monitoring
- → Automated ASTM D4402 method

Electrical Temperature Device for ViscoQC: ETD 300

ETD 300 is an accessory for dynamic viscosity measurements of bitumen, hot melts, wax, and polymers at elevated temperatures, covering a temperature range from 25 °C to 300 °C. ETD 300 supports SSA/DIN measuring systems, available as standard or as solid shaft versions. The cups used are available as reusable stainless steel or as disposable aluminum versions.

Buy online
shop.anton-paar.com

- → Full control via ViscoQC display
- → Set points digitally defined
- → Create methods with individual set points to maximize repeatability
- → Manual control for height adjustment possible
- → Motorized stand instead of manual height adjustment in normal operation

Motorized Stand for ViscoQC: Heli-Plus

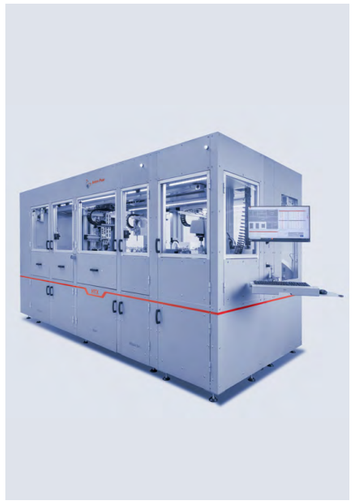
Heli-Plus is an accessory that facilitates an automated helical movement of the spindle between set points that can be digitally set via the ViscoQC display. The Heli-Plus supports T-Bar spindles specifically designed for measurements of non-flowing samples, preventing the channeling problem that might occur with standard spindles.

Buy online
shop.anton-paar.com

- → Fully automated, 24/7 operation
- → Storage capacity of up to 54 samples
- → Measurements of up to 250 samples per day
- → Wide range of features (e.g., pH station, cooled rack)
- → One company, one measuring system, seamless instrument compatibility

The Automated Benchtop Rheometer: HTR 3000

HTR 3000 conducts automated rheological measurements with Anton Paar’s MCR 102e or MCR 302e rheometers. It’s ideal for concentric cylinder and other relative measuring geometries, and can be used in a production facility or in a lab. Automated measurements guarantee highly accurate, reproducible results.



- → Fully automated, 24/7 operation
- → Walkaway time up to 48 hours
- → Automated sample preparation
- → Automated trimming tool for highest reproducibility (patented)
- → Connects to LIMS
- → One company, one measuring system, seamless instrument compatibility

- → Fully automated, 24/7 operation
- → Automated sample preparation and sub-sampling
- → Automated weighing, diluting, and pipetting features for low-viscous samples
- → Connects to LIMS
- → Compatible with density meters, rheometers, polarimeters, refractometers, and particle size analyzers
- → One company, one measuring system, seamless instrument compatibility

- → Real-time, at-line measurement results of important QC parameters
- → No manual sample preparation
- → Fully automated, 24/7 operation
- → Designed to perform in rough production environments
- → One company, one measuring system, seamless instrument compatibility

The Automated High-Throughput Rheometer: HTR 7000

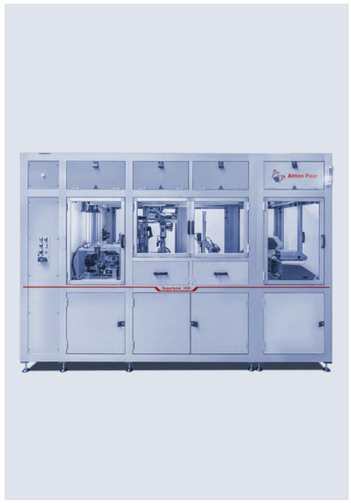
The HTR 7000 offers an optimized analysis workflow for rheological investigations. With its integrated rheometer MCR 702e, HTR 7000 can perform all types of rheological measurements with common measurement geometries (e.g., CC, CP, PP) to cover the needs of various industries. Its range of features (e.g., a dispensing system, code reader, decapper, cleaning unit) and built-in flexibility make it the ideal solution for high-throughput R&D or QC work.

The Customized Automated Lab: HTX

Our HTX system is a platform that can handle customized workflows for sample conditioning, preparation, and measurement. With the HTX, miscellaneous parameters can be measured with only one sample. Since all of the instruments come from Anton Paar, the whole measuring system and instruments are seamlessly integrated into one powerful analysis platform.

The Automated Lab for the Beverage Industry: ALAB 5000 Analytic

Designed for filling lines and analysis labs, the ALAB 5000 series provides quick, at-line quality control for various beverages, including beer, soft drinks, and sake. With ALAB 5000 Analytic, measure the most relevant parameters on one sample. Combined with our total package oxygen meter TPO 5000 and our Packaged Beverage Analyzer (PBA) system, parameters like density, alcohol concentration, and extract can be determined.



- → Measurement of opening torque and ring crack torque in 30 seconds
- → Minimizes human interaction for higher efficiency and safer operation
- → Fully automated, 24/7 operation
- → Designed to perform in rough production environments
- → Can be integrated into new or existing filling lines or used as a stand-alone solution

- → Fully automated, 24/7 operation
- → Storage capacity of up to 72 samples
- → Measurements of up to 300 samples per day
- → Conclusive results out of one sample (e.g., sugar content (°Z), dry substance (°Brix), apparent purity, turbidity, density, color, pH)
- → Automated sample preparation (e.g., dosing, homogenization, pre-heating, filtration)
- → Fully automated cleaning of sample cups
- → Configurable workflows to set SOP

- → Holds up to 28 vials
- → Operating parameters up to 300 °C and 199 bar
- → Temperature and pressure control of all vials
- → Pressure-sealed glass, quartz, or PTFE-TFM vials available
- → Plug-on caps facilitate closing of vials
- → GS and ETL safety-certified
- → Pharma qualification documents
- → Customized application support

An Extension for the Automated Lab: ALAB 5000 Torque

ALAB 5000 Torque measures the opening torque and ring crack torque of twist-off caps and crowns for bottles. Various bottles with a cap diameter ranging from 25 mm to 40 mm can be analyzed with it. It also comes with our gold-bottle torque verification, which means measurement results are always reliable.

Fully Automated Factory-Control Lab: Sugarlyzer 5000

Combining multiple state-of-the-art Anton Paar instruments, Sugarlyzer 5000 is a ready-to-use lab that can reliably conduct all stages of the sugar analysis process. This includes all liquid-, syrup-, molasse-like and sugar crystal samples. Integrating sample preparation, high-precision measurement and data transfer, Sugarlyzer 5000 substitutes a whole lab, eliminating up to eight manual worksteps with one conclusive system that mobilizes pre-defined steps.

Microwave Digestion Systems: Multiwave 7101, Multiwave 7301, Multiwave 7501

With their Pressurized Digestion Cavity (PDC), Multiwave 7101, Multiwave 7301, and Multiwave 7501 allow acid digestion at temperatures up to 300 °C. This high temperature ensures the complete digestion of any sample type (e.g., food, environmental, polymer, cosmetic, pharmaceutical, geological, chemical, alloy, and petrochemical samples) even in one run with the same method. An integrated cooling system (Multiwave 7301, Multiwave 7501) ensures short cycle times for increased sample throughput.

- → Holds up to 64 samples
- → Operating parameters up to 300 °C and 100 bar
- → Temperature and pressure control in all positions (rotor-dependent)
- → 600+ pre-installed methods
- → Tool-free vessel handling
- → GS and ETL safety-certified
- → Pharma qualification documents
- → Customized application support

- → HVT rotors – for routine samples: 50 mL, 56 mL, 80 mL available, up to 41 samples
- → SVT rotor – for demanding samples: Up to 20 samples in one run
- → 8N high-end rotor for highly reactive samples: Simultaneous, wireless pressure control in all vessels
- → 64MG5 microsample rotor – for less than 20 mg of sample

- → HVT closing station is ideal for high-throughput laboratories for reproducible closing of all HVT vessels
- → Magnetic stirrer device for enhancing the process of leaching, extraction, and acid digestion of floating samples
- → Accessories for extraction, evaporation, oxygen combustion, hydrolysis, and drying available

Microwave Reaction Platform: Multiwave 5000

Multiwave 5000 is a microwave reaction platform for the digestion of a wide range of samples (varying in difficulty or volume), evaporation, acid leaching, and extraction. Thanks to the flexible platform concept, Multiwave 5000 can be configured to match specific applications.

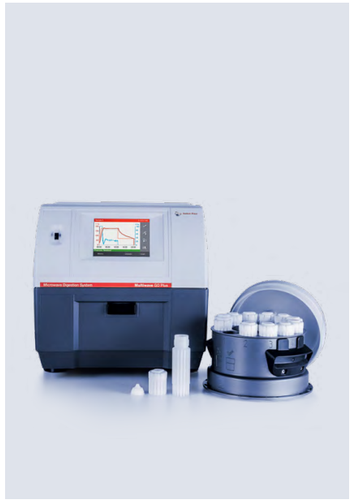
Microwave Reaction Platform: Rotors for Multiwave 5000

Thanks to SmartVent technology employed in all HVT and SVT vessels, our rotors are robust, lightweight, and accommodate more samples on a smaller footprint. Made for fast, safe, tool-free operation, our vessels provide a new level of performance and convenience for the sample preparation laboratory. Their practical design impacts all steps of operation: from sample weighing and reagent addition to closing, opening, and cleaning.

Microwave Reaction Platform: Accessories for Multiwave 5000

A variety of accessories are available for Multiwave 5000 that make sample preparation more convenient than ever. The simple handling and durable setup complement the HVT vessel concept used with Multiwave 5000 or Multiwave GO Plus. Different racks are available to adequately store the various vessel types and liners.

Buy online
shop.anton-paar.com



- → Holds up to 12 vessels
- → Operating parameters up to 250 °C and 45 bar
- → Temperature and pressure control in all positions
- → Single vessel mode
- → Integrated cooling
- → Compact size
- → GS and ETL safety-certified
- → Pharma qualification documents

- → Reaction volumes between 0.5 mL and 20 mL available
- → Operating parameters up to 300 °C and 30 bar
- → Ruby thermometer
- → Silicon carbide vessels
- → Integrated camera
- → Unattended, automatic processing of 24 vessels
- → Magnetic stirrer with variable speed
- → Compliant with 21 CFR Part 11

- → Real-time, in situ reaction monitoring
- → Attachable 785 nm Raman probe
- → No cleaning, sample preparation, or cross-contamination
- → Operating parameters up to 300 °C and 30 bar
- → Protective interlock connection for a safe Laser Class 1 setup

Microwave Digestion System: Multiwave GO Plus

Multiwave GO Plus, with its revolutionary Directed Multimode Cavity (DMC), combines monomode and multimode microwaves. The TURBO cooling process enables the shortest cooling times on the market. With its SmartVent vessel technology, Multiwave GO Plus is the most convenient microwave digestion option today.

Microwave Synthesis: Monowave 200, Monowave 400, Monowave 450

Monowave 200, Monowave 400, and Monowave 450 are high-performance monomode microwave reactors designed for small- to medium-scale chemical synthesis of nanomaterials, organic, and inorganic compounds. These are useful choices for any kind of microwave synthesis in academic and industrial R&D.

In Situ Reaction Monitoring: Monowave 400 R

Monowave 400 R combines precise temperature profiles with real-time information about the chemical composition of a reaction mixture to provide better understanding of reaction mechanisms and kinetics. When coupled with Anton Paar's Cora 5001 Raman spectrometer, it offers flawless in situ reaction monitoring of microwave reactions.

- → For highly accurate concentration measurements
- → Wide flow range: 0.4 g/min to 1,400 t/h
- → Covers process temperature needs with a broad temperature range of -200 °C to +350 °C
- → Comes with either stainless steel or alloy C-22 wetted parts for tough environments
- → Perfect for batching processes
- → Up to ±0.1 % mass flow accuracy
- → Single straight tube design provides best possible hygiene conditions
- → Titanium alloy wetted parts are chemically resistant
- → EHEDG-certified sensors are available for hygienic process environments
- → Straight tube design ensures solids-laden fluids don't block the sensor
- → ±0.15 % mass flow accuracy
- → ±0.002 g/mL density accuracy
- → Robust mass flow and concentration measurements
- → Up to 30 % lower pressure drop compared to complex tubes
- → Self-draining design for reduced cleaning time
- → ±0.2 % mass flow accuracy
- → ±0.003 g/mL density accuracy

High-Accuracy Coriolis Flow Meters: L-Cor 8000, L-Cor 8100, L-Cor 8200, L-Cor 8300

This cutting-edge meter not only provides highly accurate measurements at 0.1 % accuracy but also boasts fast response times. Its precision and efficiency streamline batching operations to ensure optimal performance and productivity. From micro dosing applications for handling fragrances to large-volume custody transfer measurements, the sensor covers the entire spectrum. The versatile sensors are available in various configurations, including cryogenic and explosion-proof versions.

Coriolis Mass Flow Meter for Hygienic Applications: L-Cor 6000

These hygienic mass flow meters, built with titanium single straight tubes, are the solution for highly accurate measurements of shear-sensitive or viscous liquids, slurries, aggressive media, or media with a low flow velocity. If fast and positive process fluid replacement or draining of the pipeline are required, then this is the right mass flow meter.

Coriolis Mass Flow Meter: L-Cor 4000

Designed to conduct mass flow and concentration measurements, these mass flow meters are the budget-friendly solution for accurately measuring liquids in a range of standard applications in various industries. With a design that facilitates self-draining and sensors that reduce pressure loss, these mass flow meters are the go-to general-purpose mass flow meter.

- → Outstanding accuracy of up to 5 x 10^{-5} g/cm³
- → Modular system – simple to integrate
- → Many different materials, applicable in all industries
- → No maintenance, no consumables
- → Large database of concentration formulas
- → Transmitter version with many communication options
- → Explosion-proof version available
- → Cost-effective, entry-level model with 1 kg/m³ accuracy
- → Stand-alone sensor, especially for low flow rates
- → Many concentration formulas are already stored in the sensor
- → Optional HMI
- → Wetted material made of stainless steel and borosilicate glass for non-corrosive and corrosive liquids
- → OEM process density sensors, especially for low flow rates
- → Continuously measures the density with 1 kg/m³ accuracy
- → Very little room required – can be installed even in tight spaces
- → Wetted material made of stainless steel and borosilicate glass for non-corrosive and corrosive liquids

Density Sensors: L-Dens 7000 Series

The L-Dens 7000 series combines high accuracy and a compact design, making it the best in its class for precise density and concentration measurements. Thanks to the modular system and the wide range of accessories, these sensors can be integrated into a measuring system or production plant.

Density Sensor: L-Dens 3300

The L-Dens 3300 density sensor is a powerful, flexible, and budget-friendly instrument for process density and concentration measurement at three-digit accuracy. It's designed as a stand-alone sensor, so there's no additional integration expenses. The sensor is best suited for lab reactors, pilot plants, or production plants.

Density Sensor: L-Dens 2300

L-Dens 2300 density sensors are very small and flexible OEM modules that can be integrated into measuring systems. They measure the density of liquids with an accuracy of 1 kg/m³, especially at low flow rates. These sensors are used for a wide range of applications, from fuel density measurement to dialysis concentrate measurement.

- → Highly accurate, all-in-one density and sound velocity sensor
- → Ideal for measuring three-component mixtures
- → Modular system – simple to integrate
- → No maintenance, no consumables
- → Transmitter version with many communication options
- → Explosion-proof version available

- → Highly precise (repeatability up to 0.005 m/s)
- → Flowrate >0 m/s to 6 m/s
- → Maintenance-free
- → Quick integration and installation
- → Most cost-effective solution
- → No bypass, pumps, or valves needed
- → Insensitive to bubbles
- → Wetted parts for even the toughest situations
- → Explosion-proof version available
- → EHEDG-certified

- → Maintenance-free
- → Inline and highly accurate up to ±0.0001 nD (equivalent to ±0.05 % mass)
- → Quick integration and installation
- → Standard and custom-specific concentration formulas
- → Optional HMI and various fieldbus interfaces
- → CIP/SIP up to 145 °C for 30 minutes
- → EHEDG-certified

Combined Density and Sound Velocity Sensor: L-Com 5500

L-Com 5500 is our density and sound velocity sensor combination for measuring three-component mixtures, such as beers (alcohol, extract, and water), with one instrument. It provides the highest accuracy on the market and is ideal for the production control of beverages or chemicals like formaldehyde-methanol-water mixtures.

Sound Velocity Sensors: L-Sonic 5100, L-Sonic 6100

The L-Sonic sound velocity sensors are high-tech sensors with an outstanding repeatability of up to 0.005 m/s. They can be installed directly in the main line or in a tank. With wetted parts for the toughest situations and cost-efficient installation options, the L-Sonic sensors are a maintenance-free and bubble-resistant solution. They're ready for inline concentration measurements, interface detection, quality control, or OCR determination.

Inline Refractometers: L-Rix 4100, L-Rix 5100, L-Rix 5200

L-Rix 4100, L-Rix 5100, and L-Rix 5200 are durable, maintenance-free inline refractometers for real-time concentration measurements and production control of raw, intermediate, and final products. All L-Rix models are suitable for hygienic applications such as measurements of pharmaceuticals, milk, sugar solutions, syrups, fruit juices, and foods and beverages containing pulp.

- → Continuously tracks the progress and determines the endpoint of fermentation
- → Maintenance-free
- → Optional HMI and various fieldbus interfaces
- → EHEDG-certified

- → Highest accuracy for standard carbonated soft drinks of ±0.02 °Brix and diets of ±1 %
- → Optical or volume expansion method for dissolved CO_2 measurement with accuracy of ±0.05 g/L
- → Standard housing with signal lamp and 8.4" touch panel
- → Bypass or inline version
- → Various fieldbus interfaces

- → Multiparameter measurement for a wide variety of beers and wines
- → Highest accuracy for alcohol of ±0.02 % w/w and real extract of ±0.02 °Plato
- → Optical or volume expansion method for dissolved CO_2 measurement with accuracy of ±0.05 g/L
- → Evaluation unit with 8.4" touch panel
- → Various fieldbus interfaces

Fermentation Monitor 5100

The Fermentation Monitor 5100 covers the full range of fermentation parameters, such as apparent extract density, alcohol and real degree of fermentation. It continuously monitors alcoholic fermentation during the production of beer, wine, or spirits based on an inline refractive index measurement.

Inline Beverage Analyzers: Cobrix 5500, Cobrix 5600

Cobrix 5500 and Cobrix 5600 analyzers are ideal for the beverage analysis of soft drinks, beer, wine, cider, FABs, juice, diet drinks, tea, and other beverages. Users can count on the continuous, accurate, and safe measurement of essential quality parameters, such as °Brix, %Diet concentration, CO_2, alcohol, sugar inversion, and extract, throughout their production process.

Beer Monitor 5500, Beer Monitor 5600 and Wine Monitor 5500, Wine Monitor 5600

Beer Monitor 5500 and Beer Monitor 5600 continuously monitor alcohol content, apparent and real extract, original extract, degree of fermentation, density, CO_2, and temperature. The system accommodates a wide range of beer styles, as well as non-alcoholic beers, hard seltzers, FMBs/FABs, ciders, and shandies. Wine Monitor 5500 and WineMonitor 5600 determine the alcohol, extract, and CO_2 content of wine.

- → Measuring range from 0 g/L to 20 g/L (0 vol to 10 vol)
- → Volume expansion method with accuracy of ±0.05 g/L
- → CIP/SIP up to 121 °C for 30 minutes
- → Measuring interval of 15 seconds
- → Self-diagnosis according to NAMUR NE 10
- → Optional HMI and various fieldbus interfaces

- → Measuring range from 0 g/L to 12 g/L (0 vol to 6 vol)
- → Maintenance-free
- → Optical absorption method with accuracy of ±0.05 g/L
- → CIP/SIP up to 95 °C for four hours or 121 °C for 30 minutes
- → Measuring interval of four seconds
- → Optional HMI and various fieldbus interfaces
- → EHEDG-certified

- → Hassle-free, predictable cap exchange
- → Sensor caps ready for harsh process solutions
- → Quick return to operational status after hot CIP/SIP
- → Self-diagnosis according to NAMUR NE 10
- → Optional HMI and various fieldbus interfaces
- → EHEDG-certified

Process CO_2 Sensor: Carbo 5100

Carbo 5100 provides a good balance between high accuracy, speed, and price. With a single volume expansion and a measurement cycle of 15 seconds, Carbo 5100 is fast enough to be used for a closed-loop control of carbonators. Carbo 5100 can also be used as a stand-alone solution with or without HMI or with a mPDS 5 evaluation unit. Supported communication via analog, PROFIBUS DP, PROFINET, Ethernet/IP, Modbus TCP, and DeviceNet.

Optical Inline Dissolved CO_2 Sensors: Carbo 6100, Carbo 6300

An optical measurement system that provides drift-free results. The basis of this breakthrough is a cutting-edge optical measuring principle called ATR (attenuated total reflection), an Anton Paar-patented technology (AT512291B1, AT512375B1).

Inline Oxygen Sensors: Oxy 4100, Oxy 5100

The Oxy 4100 and Oxy 5100 inline oxygen sensors measure dissolved oxygen (DO) in real-time, directly at the production line. They provide accurate, drift-free measurements throughout the entire production process. Oxy 5100 can easily be combined with additional process sensors from Anton Paar to meet all future production- and quality-control requirements. The Oxy 4100 transmitter comes ready with analog outputs and a touchscreen interface. The CO_2 Purity Monitor features a compact system for monitoring the O_2 content in pressurized CO_2 recuperation pipes.

- → Inline color measurement for all kinds of beverages
- → Broad measuring range from 0 AU to 3 AU
- → Tailor-made wavelength configurations with up to three channels
- → High-resolution optical measurement with a resolution of 0.001 AU
- → EBC/MEBAK®/ASCB-compliant
- → Seamless integration with beverage analyzers

- → Configurable 8.4” color touchscreen
- → Out-of-spec production alert
- → Flexibly configurable graphic and numeric display fields
- → Preinstalled user programs
- → Data logging
- → Customer-specific polynomials and special programs
- → Flexible connectivity with USB, Ethernet (LAN), analog, and fieldbus outputs

- → Straightforward calibration
- → Records up to 50 different measurements
- → Automated calibration and adjustment
- → Remote control and remote diagnosis
- → SQL database technology
- → Out-of-spec production notification
- → Automated reports
- → Third-party system data interface

Color Sensor for Beverages: L-Col 6100

L-Col 6100 offers MEBAK®-compliant inline color measurement with optional turbidity compensation. The L-Col 6100 inline color sensor can be integrated into all Anton Paar beverage analyzers based on mPDS 5.

Evaluation Unit: mPDS 5

The mPDS 5 evaluation unit continuously converts the raw values from the process sensors into application-specific concentration results. Numerous user programs are preconfigured, and creating new concentration polynomials and special programs is simple. Available fieldbus interfaces include PROFIBUS DP, PROFINET IO, EtherNet/IP, Modbus TCP, and DeviceNet.

PC Software: Davis 5

Davis 5 is a comprehensive data acquisition and visualization software. It can be connected via Ethernet to any personal computer throughout an organization to analyze the key performance indicators of the production in real-time. As Davis 5 connects lab analyzing systems directly to Anton Paar’s inline beverage analyzers, calibration and adjustments are automated. It calculates mean values, standard deviations, production times and stops, and Cp and Cpk values.

- → Skid-mounted blending module for beverages and liquid food
- → Broad mixing ratio range according to your requirements
- → Maintenance-free sensors with easily accessible valves and pumps
- → Reliable quality for the whole production process
- → Low maintenance, low operating costs

Industrial Beverage Production: Flex-Blend 7000 Series

The Flex-Blend series is a modular, inline blending, carbonating, and dosing solution that consists of autonomous, skid-mounted process modules. Based on user requirements, these modules can be integrated into production lines.

- → Top price-performance ratio
- → Tried-and-tested specific solutions and quick commissioning
- → Small volumes, compact footprints
- → Simple, powerful multiproduct management
- → Quality assurance and tracking

Tailored for Craft Producers: Flex-Blend 3000 Series

The Flex-Blend 3000 series delivers fast and precise alcohol, OE, and CO_2 control in an all-in-one package. It offers recipe-specific calibration for optimized management of an unlimited number of product types, which reduces product loss and ensures minimum changeover time. Combined with unique predelivery testing of the entire specifications range, it covers all future product and dosing requirements.

- → Monitoring of whichever quality parameter
- → Drift-free results even during filler stops
- → Maintenance-free sensors
- → Additional sensor integration available
- → In-skid construction or pipe assembly
- → mPDS 5 evaluation unit

Modular Beer Measuring System: Animo 5100

Animo 5100 is a modular measuring system that delivers all critical quality control parameters from the beer filling line. Integrating the high-quality online sensors, analyzers, and mechanical components needed for precise and safe operation, it measures alcohol, real extract, original extract, dissolved CO_2 and O_2, conductivity, and (optionally) color.

- → Ready-to-go quality control system
- → Compact, modular and portable
- → High-quality, inline sensors
- → Drift-free results
- → Maintenance-free sensors

Animo 3100 Mobile

Animo 3100 is a mobile and modular measuring system designed for craft brewers. Integrating high-quality online sensors, it delivers all critical quality control parameters, e.g., for alcohol, real/original extract, original extract, and dissolved CO_2 and O_2.

Compliance with Industry Standards

Find out more

Our instruments comply with a range of international industry standards. For a full list, scan the QR code to the right.

Reliable. Compliant. **Qualified.**

Find out more

Our well-trained and certified technicians are ready to keep your instrument running smoothly.

Maximum uptime
Regardless of how intensively you use your instrument, we help you keep your device in perfect shape and safeguard your investment. For at least 10 years after the discontinuation of a device, we'll provide you with any service and spare part that you might need.

Warranty program
We're confident in the high quality of our instruments. That's why we provide a full 3-year warranty. Just make sure to follow the relevant maintenance schedule. You can also extend your instrument's warranty beyond its expiration date.

Short response times
We know that sometimes it's urgent. That's why we provide a response to your inquiry within 24 hours. We give you straightforward help from great people, not from bots.

A global service network
Our large service network for customers spans 86 locations with more than 600 certified service technicians. Wherever you're located, there's always an Anton Paar service technician nearby.

Wide Range
of Industries

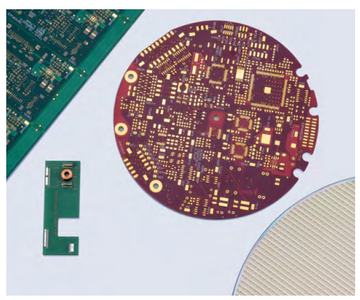
Find out more

Anton Paar's solutions are successfully employed in a wide range of industries worldwide. Navigate our portfolio according to your industry's needs – or contact us directly! Our experts are happy to find or develop a solution tailored to your needs.

Beverages: Beer and FABs | Soft Drinks, Juices and Bottled Water | Spirits and Liqueurs | Wines and Sparkling Wines

Chemical Industry: Adhesives and Glues | Agrochemicals | Colloids | Detergents and Surfactants | Emulsions | Explosives | Hard Coatings | Inks and Toners | Inorganic Chemicals | Organic Chemicals | Paints | Polymers and Elastomers | Solvents

Education/Research: Academic Research | Customs and Excise Authorities | Standardisation and Testing Institutes

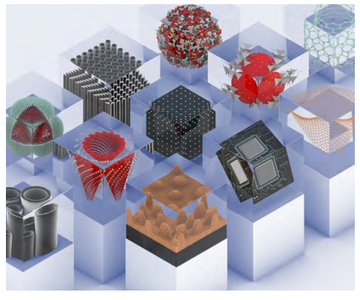


Electronics: Microelectronics | RoHS-Analysis | Semiconductors | Smart Fluids

Energy: Fuel Cells | Lead-Acid Batteries | Lithium-Ion Batteries | Power Generation and Transportation | Sustainable Fuels

Environmental: Sediments | Sludges | Soils | Water and Waste Water | Woods

Food Industry: Chocolate | Dairy Products | Grain and Starch | Plant-Based Food | Sugar and Invert Sugar



Materials Science/ Nanotechnology: Catalysts | Liquid Crystals | Nanomaterials in Final Products | Nanomaterials Research

Minerals/Mining/Raw Materials: Additives and Antifreezing Agents | Building Materials | Cements | Ceramics | Coal Mining | Glasses | Metals | Non-Metals

Paper/Textiles: Paper Coatings | Pulp | Textiles

Petroleum Industry: Asphalt | Bitumen | Crude Oil | Fuels | Lubricants | Plastics | Polymers

Pharmaceuticals & Cosmetics: Biotechnological Samples | Cosmetics and Body Care Products | Flavors and Fragrances | Medical Samples, Biomaterials and Membranes | Pharmaceuticals | Vaccine Analysis

XPAIP002EN-O

www.anton-paar.com