

Laboratory Solutions





WE CRAFT ASSURANCE. For Our Partners, For Their Customers.

Founded in 2015 and comprised of nine strong product brands, KPM Analytics is a global leader in analytical instrumentation, inspection systems, and machinery, that enable companies to effectively manage product quality and brand value. Through long partnerships with global blue-chip companies in the industry, we focus on serving craftspeople in the food, agriculture, and environmental sectors, offering a comprehensive range of products and services to analyze critical parameters in their processes and solve their unique challenges. As a partner, we provide key metrics and intelligence to reduce waste and costs, increase energy efficiency, improve quality, and help companies protect their brands.

OUR PURPOSE

We provide premium quality assurance equipment for food producers, environmental researchers, industrial manufacturers, and others through expert craftsmanship and intimate knowledge of their business needs.

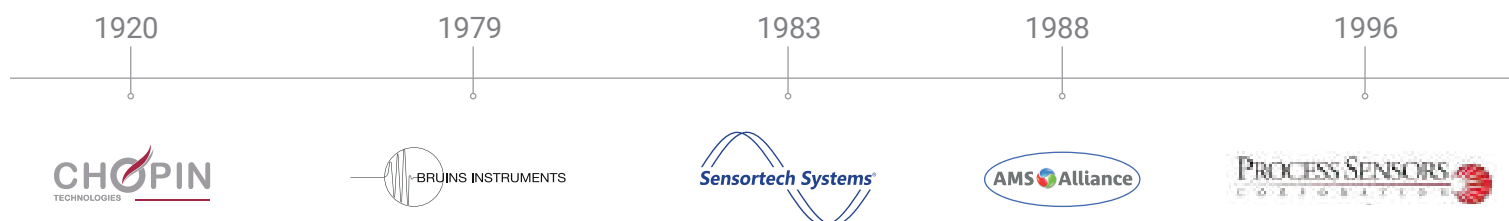
OUR VISION

Our partners all over the world will grow stronger from our driven, dedicated, and caring approach to solving their challenges, enabling KPM to become the global industry leader.

OUR MISSION

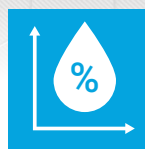
We provide the best solutions to help our partners control their product quality, scale capacity, and protect their brands.

NINE STRONG BRANDS SPANNING OVER 100 YEARS IN QUALITY ASSURANCE



CORE LABORATORY TECHNOLOGIES:

Our solutions empower both laboratories and producers to rapidly assess critical properties, ensure consistent quality, and address environmental requirements.



Moisture & Compositional Analyzers & Sensors



Flour, Dough & Grain Analyzers



Chemical Analyzers

KPM SUPPORTS THE FOOD INDUSTRY FROM FARM TO FINAL PRODUCT:



1999



2001



2009



2012

SMARTVISIONWORKS

2015



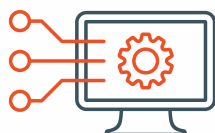
Tailor to Lab: Precision Solutions for Food, Water & Environment Analysis

DESIGNED FOR MODERN LABORATORIES

Modern labs demand precision, speed, and simplicity. Our solutions eliminate complexity to deliver accurate, real-time testing that integrates seamlessly into your workflow. Designed to empower your team, our instruments enable rapid, informed decisions that keep pace with today's fast-moving research and production environments.

Whether you need robust quality control, advanced research capabilities, or regulatory compliance, our portfolio of technologies delivers reliable results across a wide range of applications. From raw material assessment to final product verification, we help you maintain the highest standards of quality and safety.

In-Plant Testing



Optimized solutions for real-time production and quality control.

Commercial Labs: Food, Water & Environmental Analysis



Rigorous testing to ensure the quality of raw materials, product safety, water purity, and adherence to environmental standards.

Academic & Research Institutions



Advanced tools designed for innovative studies and effective training in food and environmental sciences.

OUR LEADING TECHNOLOGIES



Near-Infrared (NIR) Analysis

Fast, precise measurements for determining ingredient composition and quality.

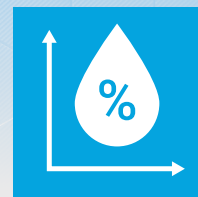
Rheology Solutions

Detailed analysis of texture and mechanical properties to optimize food production processes.

Wet Chemistry

Automated, traditional chemical testing methods to ensure safety, compliance, and minimal environmental impact.

Moisture & Compositional Analyzers for Food & Agriculture



NIR testing is essential for guaranteeing the quality of incoming ingredients and maintaining control during production. By ensuring wheat, flour, and other ingredients meet specified parameters, NIR technology minimizes the risk of disruption due to inferior supplies, thus reducing waste and reprocessing costs.



AGRICULTURE

- Our robust NIR calibration library provides valuable data for whole grain analysis and plant breeding programs.



MILLING

- NIR equipment supports millers throughout production, ensuring the product meets their customer expectations at every stage—from incoming grain, milling to the addition of improvers- thus ensuring final flour quality before shipping.



FEED, FORAGE, AND ANIMAL FOOD

- NIR instruments help feed mills and pet food manufacturers hold their suppliers accountable while verifying ration quality.

SpectraStar™ XT Series NIR Analyzer



HIGH-PERFORMANCE EXTENDED RANGE NIR ANALYZERS

Fast and High-Performance Extended Range NIR for All Laboratory and At-Line Applications

The SpectraStar™ XT Series NIR Analyzers series offer outstanding accuracy and reliability for rapid compositional analysis of solid, powdered, slurry or liquid samples. Typical constituents measured are moisture, protein, and fat, as well as more difficult parameters such as sugars, fibers, ash, lignin and fatty acids.

OUTSTANDING PERFORMANCE

SpectraStar™ XT Analyzers are based on a scanning monochromator platform that delivers a high signal-to-noise ratio and the best spectral quality available. By covering a broad spectral range (XT-R: 680–2600 nm; XT-F and XT-3/ 1400–2600 nm), these instruments accurately predict a wide variety of constituents in both simple and complex sample types.

READY TO USE CALIBRATIONS

The SpectraStar™ XT NIR Analyzers Series has many ready-to-use calibrations available for common applications and constituents. Calibrations are continuously updated for quick implementation and to ensure accurate results across broad sample ranges.

For processed foods, snack foods, dairy products, feed and feed ingredients, forages, and animal meals, Unity calibrations provide accurate and reliable results for your specific products and applications.

RELIABLE RESULTS

Each SpectraStar™ XT NIR Analyzer includes patented TRUE ALIGNMENT® Spectroscopy (TAS) technology which detects and corrects any instrument changes due to shock, temperature, or lamp changes. User-level monitoring and alignment of the instrument aligns the XT-R to calibrated standards for consistent results over time and across locations.



SPECTRASTAR™ FEATURES

- Dual detector design and patented data processing for extended wavelength range.
- Broad wavelength coverage supports calibrations for fibers, sugars, fatty acids, starch and other difficult constituents as well as moisture, protein and fat.
- Maximum spectral information is ideal for custom calibration development.
- Products include animal feeds and ingredients, pet foods, processed food, ingredients, snack foods, oilseeds, forage and confectionery.

SPECTRASTAR™ XT SERIES FEATURES

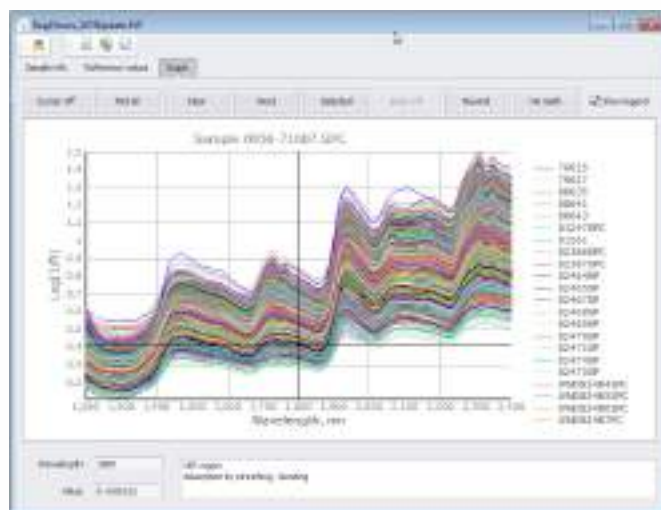
- Sealed Scanning Monochromator (680–2500 nm): Dust- and moisture-resistant optics ensure accurate readings across a broad spectral range.
- Touch screen interface.
- Intuitive graphical software.
- Single sample results, history or SPC Chart sample views.

PROVEN TECHNOLOGY

The SpectraStar™ XT NIR Analyzers uses proven near-infrared (NIR) technology to deliver highly accurate results to quality laboratories and production floors. NIR analyzers are used daily in thousands of locations to measure key parameters and contribute to quality control.

NIR technology offers many advantages over other techniques including:

- **Fast** - samples are analyzed in under a minute.
- **Simple** - little or no sample preparation is required.
- **Safe** - uses no dangerous chemicals to purchase or dispose.
- **Easy to implement** - minimal training is required.
- **Reliable** - offers accurate, operator-independent results.



ULTIMATE VERSATILITY

The SpectraStar™ XT NIR Analyzers have a stand-alone design and small form factor for easy placement almost anywhere. With a sealed case and touch-screen monitor, they are ready for both the laboratory for routine testing and research as well as the production floor for in-process testing or final product release. Results are presented in under a minute for fast turn-around and immediate feedback.

SpectraStar™ Analyzers are ideal solutions for every step of your production process including:

- Incoming raw material testing to verify ingredient quality and support claims.
- In-process testing ensuring proper batch or continuous processing conditions.
- Final product verification to ensure product quality and label or specification claims.



EASY TO USE SOFTWARE

The SpectraStar™ XT NIR Analyzers come complete with UScan software incorporating an intuitive graphical interface with multiple display options including an SPC chart for easy product monitoring. UScan was designed for easy operation and minimal training requirements for routine operators. A 17 in. touch screen makes sample analysis as easy as a couple finger touches.

UScan uses a reliable SQL database for secure storage and traceability of all settings and sample data, and LIMS options make real-time data transfer to external systems seamless.

TAILORED PERFORMANCE FOR EVERY REQUIREMENT



The SpectraStar™ XT series comprises three NIR (Near-Infrared) analyzers—XT-R, XT-3, and XT-F— designed to address a broad spectrum of analytical needs in the food, feed, milling, and dairy industries. Each model offers a compact, stand-alone format for easy integration into quality labs or at-line production environments. With extensive calibration libraries, the SpectraStar™ XT analyzers provide rapid, reliable results for confident decision-making.

Key Capabilities

- Verify ingredient quality to ensure compliance with specifications and labeling standards.
- Monitor and adjust manufacturing processes (batch or continuous) in real time.
- Measure key parameters quickly, including moisture, protein, and fat.
- Utilize advanced calibration libraries for diverse applications—snack foods, dairy, animal feed, grains, and more.
- Ensure final product compliance with regulatory and quality requirements.

	XT-R Wavelength range 680 - 2600 nm	• Extended wavelength range and advanced calibration capabilities for complex matrices. • Continuously updated calibrations covering processed foods, snacks, dairy, feed, forages, and animal meals. • Ideal for high-variability products where broad-spectrum performance is essential.
	XT-3 Wavelength range 1400 - 2600 nm	• Routine rapid measurement of moisture, protein, and fat. • Ready-to-use or customizable calibrations tailored for dairy powders, oilseeds, cereals, olives, etc.
	XT-F Wavelength range 1400 - 2600 nm	• Complete analyzer package optimized for millers and bakers with pre-loaded robust calibrations for efficient process control and quality assurance. • Enables measurement of key parameters on whole wheat kernels (moisture and protein), ground wheat by-products (midds and red dog: moisture, protein, and fiber), and finished flour (moisture, protein, ash).

CUSTOM CALIBRATION OPTIONS

With industry leading performance and extended wavelength range, the SpectraStar™ XT NIR analyzers are the ideal platform for custom calibration development for unique or proprietary products.

Calibration development assistance and training is available, and the optional UCal™ 4 makes NIR calibrations easy for any product including food, agricultural and industrial applications. UCal™ 4 offers advanced chemo-metric algorithms and development tools for the creation of robust and high performance calibrations. Intuitive design and graphical displays make UCal™ 4 suitable for novices and experts alike.

- Quantitative and qualitative model creation and validation.
- Calibration transfer tools to re-use calibration data from other instrument types.
- Population structuring toolbox to get the most from your reference chemistry budget.
- Enhanced graphical displays for quick and thorough evaluation of result.

ORDERING INFORMATION



The SpectraStar™ XT NIR analyzers are equipped with a monochromator (dual detector monochromator for the XT-R) rotating top window configuration, a built-in Windows 10 computer with a 17 in. touchscreen, UScan software, a WiFi dongle, a multi-cup adapter, a ring for ring cup/powder cup, a large open cup with a plunger and sample ring, as well as TAS standards.

Part Number	Description
US-SPSR-XTR	SpectraStar™ XT-R NIR Analyzer - Need to order calibrations.
US-SPSR-XT3	SpectraStar™ XT-3 NIR Analyzer - Need to order calibrations.
US-SPSR-XTF	SpectraStar™ XT-F NIR Analyzer - Calibrations included for whole wheat kernels, ground wheat and byproducts, and finished flours.

CALIBRATION OPTIONS

Part Number	Description
US-CALB-1000	Additional Unity calibration for single product types. (Contact sales@kpmanalytics.com for a complete calibrations list)

ACCESSORIES *A variety of sample and software accessories are available*

Part Number	Description
US-LGOP-0001	Large open cup with plunger
US-RTIR-0016	Large open cup sample ring
US-SRCP-0025A	Small round cup, 25 mm height
US-ISIH-0307	Ring cup
US-LIQK-0003	Kit for measuring liquid samples, 0.3 mm pathlength
US-UCAL-0401	UCal™ 4 Calibration software with 1 year calibration support
KPMLink-0001	One (1) year of KPMLink® User License and one Instrument License
KPMLink-0002	Additional KPMLink® User License
EM-10	Moisture Oven for Reference Measurement



SPECIFICATIONS

	XT-R	XT-3	XTF
Dimensions (W X D X H)	390 mm x 530 mm x 640 mm (15.5 in x 21 in x 25 in)		
Weight	22.0 kg (48 lbs)		
Input Power	Voltage: less than 120/240 VAC, 50-60 Hz - Power: 30 Watts		
Technology	Dual detector monochromator	Monochromator	
Light source	Tungsten halogen lamp with MTBF rating of 5,000 hours, user changeable		
Measurement mode	Reflectance or transmittance	Reflectance	
Detector	High Performance ultra-cooled InGaAs extended range detectors		
Optical bandwidth	10.0 ± 0.3 nm actual FWHM		
Absorbance range	Up to 3 AU		
Analysis time	10 – 60 sec.		
Wavelength accuracy	< 0.02 nm to traceable standard reference material		
Wavelength precision	< 0.005 nm		
Wavelength range	680 - 2600 nm	1400 - 2600 nm	
Number of data points	1920	1200	
Photometric noise full range	< 20 µAu		
Instrument case	Powder coated aluminum, completely sealed, no venting or fan		
ISO 12099 compliant	Animal feedstuffs, cereals and milled cereal products - Guidelines for the application of near infrared spectrometry		
Built-in computer	Windows 10 Professional, SSD		
Networking	LIMS compatible, HDMI port, 4 USB ports		
Ambient temperature	1 - 40°C		
Ambient humidity	< 95% RH, < 85% RH recommended		

CLOUD-BASED MANAGEMENT SOFTWARE FOR SPECTRASTAR™ XT SERIES NIR ANALYZERS

Amplify Productivity & Make Informed Management Decisions from Anywhere Worldwide

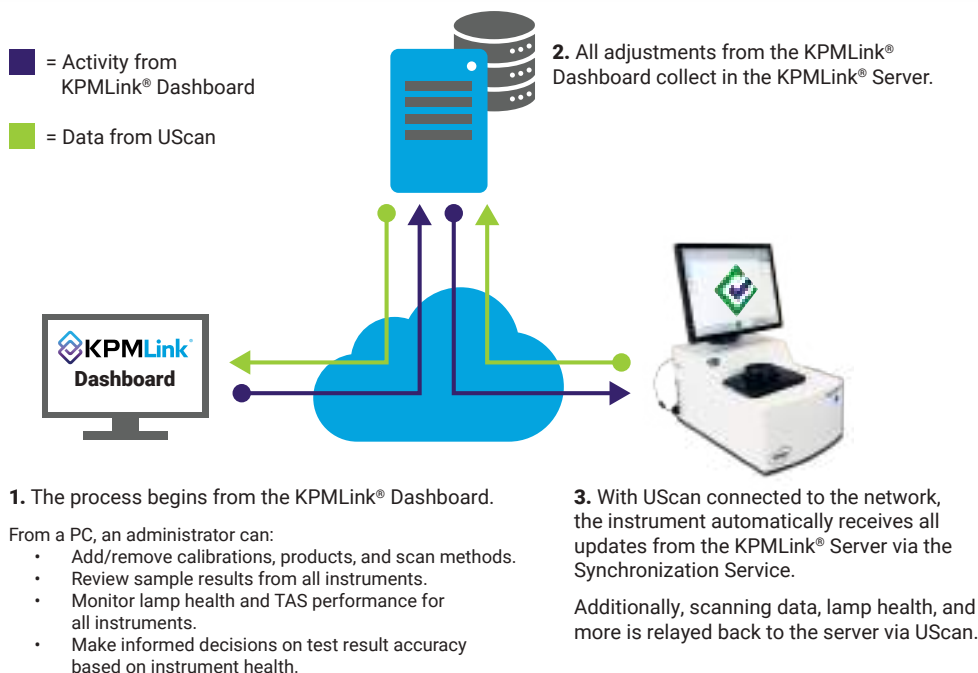
KPMLink® is an intuitive software suite designed for streamlined configuration of product settings, efficient management of calibrations, and synchronization of SpectraStar™ XT Series NIR analyzers globally. KPMLink® offers users and managers access to complete diagnostic history for each instrument, thereby providing detailed health information and instilling confidence needed for making decisions on collected measurement data.

KPMLink® makes it easy to ensure all SpectraStar™ analyzers within your organization are operating at exact standards and at consistent configurations, regardless of location or local expertise.

BENEFITS

If your company has multiple SpectraStar™ XT analyzers with UScan software:

- Multiplexing effect greatly increases efficiency and ensures all instruments are operating at exact standards.
- Networking ensures calibrations are current and implemented across all instruments.
- As you add more instruments to your organization, KPMLink® allows you to load existing calibrations with ease.
- Local configurations locked down.
- Central collection of sample data for reporting, calibration development, and validation.



KPMLink® FEATURES

From the KPMLink® browser-based dashboard – available only with a User License – users can:

- Load calibrations, products, scan methods.
- See sample results from all registered SpectraStar™ XT instruments in an organization.
- Access complete diagnostic history and make informed decisions on collected measurement data based on instrument health.

WORKING WITHIN THE INTUITIVE, USER-FRIENDLY KPMLINK® DASHBOARD



The KPMLink® Dashboard is a simple interface accessible only by members within an organization that have a User License. From the KPMLink® Dashboard, User Licensees can command the entire KPMLink® network – which are either assigned a User or Instrument License – with just a few clicks. User License capabilities include:

- Ensuring all User and Instrument Licensed instruments are in good operating condition.
- Instant distribution of current methods and calibrations to SpectraStar™ XT units with an Instrument License.
- The ability to review test results of all licensed instruments in real-time.

Setup a network of instruments in the organization

Designate unique usernames and email contacts for each instrument in the organization.

Configure scan methods, calibration methods, and products:

Automatically distribute scanning and calibration methods to any instrument in the KPMLink® network.

Publish changes to select SpectraStar™ instruments in the network:

DANGER TO ME (2024-01)						(2) ▼
10000000	10000	Cherry Rosewood	Product	Ready to Use	Download	
10000000	10000	Cherry Rosewood	User input fields	Configuration	Updated	
10000000	10000	Cherry Rosewood	Method category	Power	Uploaded	
10000000	10000	Cherry Rosewood	Calibration method	Calibration	Uploaded	
10000000	10000	Cherry Rosewood	Calibration method	Calibration	Uploaded	
10000000	10000	Cherry Rosewood	Instrument	Instrument	Uploaded	

Keep a log of all changes to reference or revert as needed.

Instantly see what products or calibrations are loaded to each instrument.

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Make informed decisions on analysis data results based on the health of the instrument.

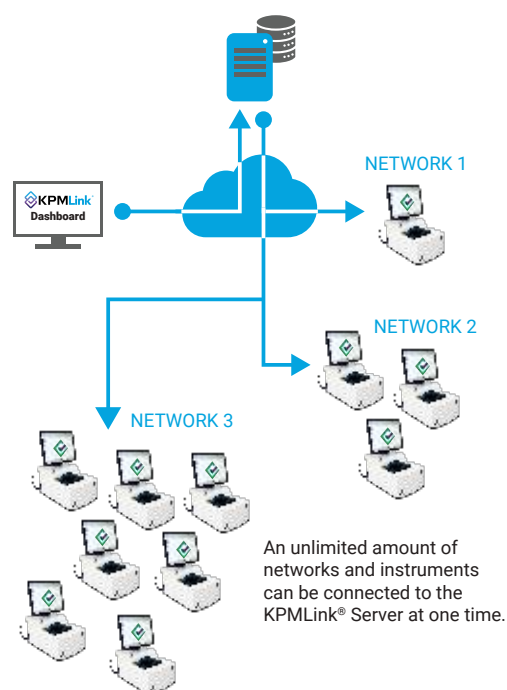
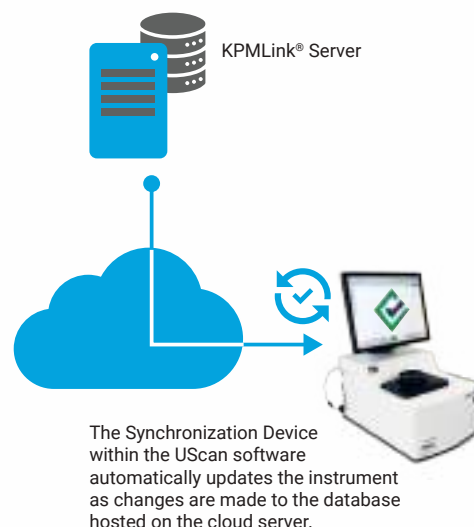
View performance diagnostics and lamp health results of all instruments:

Develop and implement protocols to ensure all instruments in the organization are in optimal operating condition.

ALL FEATURES SYNCHRONIZED WITHIN THE USCAN SOFTWARE

If the SpectraStar™ XT Series Analyzer is connected to the internet, networking between KPMLink® and the instrument's UScan software is possible.

- UScan receives product configuration settings from the KPMLink® server.
- UScan also automatically sends sample and diagnostic data to the server in the background.
- KPMLink® can support both local and network products.
- The operation is the same as UScan; no additional training necessary.



SUITABLE FOR SINGLE OR MULTIPLE INSTRUMENT INSTALLATIONS

- Products will be configured once per network and synchronized to clients.
- Users are assigned to Networks.
- Users accounts on KPMLink® Server.
- Can be given access to 1 or more KPMLink® networks.
- KPMLink® User Licenses are available in two access levels.
 - **Administrator:** Full access to the KPMLink® Dashboard. Add / manage KPM Instrument licenses for a network.
 - **Read-Only:** Relays testing data and receives all updates distributed by the KPMLink® Dashboard.

ORDERING INFORMATION

Part Number	Description
KPMLink-0001	One (1) year of KPMLink® User License and one Instrument License, access to training course via the KPM Academy for one user.
KPMLink-0002	Additional KPMLink® User License

UCal™ 4 Software

CUSTOM CALIBRATION & DATABASE MANAGEMENT FOR SPECTRASTAR™ XT SERIES ANALYZERS

The Complete Calibration Software Package for Food, Agricultural, and Industrial Applications

INTUITIVE PROGRAMS FOR FAST CALIBRATION DEVELOPMENT

Designed for novices and experts alike, UCal™ 4 simplifies calibration customization, helping users distill complex data and results through numerous graphical displays. The process starts with population structuring routines to select samples for optimal calibration libraries, minimizing reference laboratory expense, and maximizing robustness.

Calibration regressions programs with customizable defaults simplify model creation, and validation routines monitor and maintain calibrations for verifiable results.

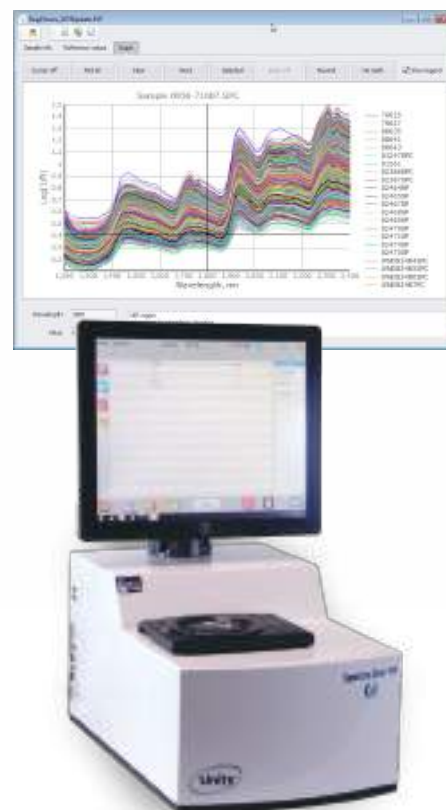
OUTSTANDING CALIBRATION PERFORMANCE

UCal™ 4 incorporates advanced chemometric tools for ultimate performance from your calibration data. A variety of multivariate regression algorithms, including PLS, variance scaled PLS and locally weighted regressions, ensures the most accurate custom quantitative calibrations for your product.

For conformity analysis and detection of bad products, UCal™ 4 includes a complete set of algorithms and tools to develop and validate qualitative models and optimize classifications. Both quantitative and qualitative models can be directly configured in the SpectraStar™ XT analyzers for immediate use in routine analysis.

EASY SAMPLE MANAGEMENT

The heart of UCal™ 4 is a comprehensive sample management system based on a logical data file structure that allows for sets of data to be reviewed and combined with ease. A new project manager organizes and keeps all relevant files together for easy project management and calibration management. The UCal software also contains a powerful file conversion section that converts spectral data from multiple vendor instruments into the UCal format. Data can be imported to and exported from UCal using Unity (.svf format), Jcamp (.dx, .jdx), Grams (.spc), WinISI (.nir and .cal), and other formats. Advanced standardization routines to match a network of instruments or transfer calibrations from different instrument types to the SpectraStar™ XT for ready to use calibrations.



UCal™ 4 FEATURES

- Quantitative and qualitative model development provide analytical and conformity results.
- Enhanced graphical displays for quick and thorough evaluation of results.
- New batch processing routine automates the evaluation of multiple calibration options.
- Multiple training options available.



EFFICIENT CALIBRATION DEVELOPMENT

UCal™ 4 contains all of the tools needed for quick and easy calibration development. From sample selection to data management and model creation, simplified routines with logical presets and graphical displays guide the model development process and provide meaningful insight into complex data. Behind the scenes, advanced algorithms and math treatments are extracting useful information and minimizing unwanted variation to create reliable and robust calibration models.

COMPREHENSIVE VALIDATION AND MAINTENANCE TOOLS

A key part of any NIR calibration protocol is validation of the model's performance. UCal™ 4 includes a complete suite of routines for the evaluation and validation of calibration models including statistical summaries and outlier identification. Calibrations can be easily monitored for accuracy during the development process as well as for on-going update and validation protocols. For operations with multiple analyzers, UCal™ 4 can evaluate results across the NIR network for a complete evaluation of an NIR quality program.

IN-PERSON UCal™4 TRAINING

KPM offers in-person training for UCal™ 4 in our Westborough, MA, USA headquarters, less than one hour from Boston. The class covers all aspects of NIR calibration development with UCal™ 4 and is 2 1/2 days.

Custom on-site training is also available.

Contact us at service@kpmanalytics.com to learn more.

ON-DEMAND ONLINE TRAINING

Each copy of UCal™ 4 includes access to the KPM Academy UCal™ 4 online training course for one year. The course is on-demand and includes over 17 videos and 15 exercises for thorough, hands-on instruction. A live Q&A session is also included. Tuition for additional students and extensions are available.



Scan here to learn more about
the UCal™ 4 KPM Academy
Training Course.



AgriCheck Series



RAPID WHOLE GRAIN ANALYZERS

High-Precision NIR Instruments Dedicated to Whole Grain Analysis

The Bruins Instruments' AgriCheck Series of near infrared spectroscopy (NIR) analyzers are cost-effective, high-performance instruments with specific calibration libraries dedicated to analyzing whole grains, from wheat and corn to soybeans, sorghum, rice, and others.

Every day, hundreds of AgriCheck analyzers are trusted to measure incoming grain, in-process samples, and final products for moisture, protein, and starch, as well as oil, fiber, gluten, zeleny, and other parameters depending on product type. The AgriCheck provides rapid, accurate, and reliable measurements of quality at an attractive price point for growers, millers, and processors.

APPLICATIONS

AgriCheck models are designed to analyze most types of whole grain and seeds, including:

- Wheat
- Soybeans
- Milled rice
- Rye
- Durum
- Rapeseed (Canola)
- Rough rice
- Triticale
- Barley
- Brown rice
- Oats
- Sorghum
- Corn



AGRICHECK FEATURES

- Highly precise patented linear monochromator design provides years of reliable measurements with minimal routine maintenance.
- Intuitive software and a large touchscreen make the analyzer easy to use with minimal required training.
- Optional Test Weight module determines the specific weight of the grain.

VERSATILITY TO MEASURE EVERY TYPE OF WHOLE GRAIN

Both the AgriCheck and AgriCheck Plus come standard with a simple funnel and automated sample wheel for the transmission analysis of most grain types. With the AgriCheck Plus, users can analyze small sample types or granular processed materials.

AgriCheck calibrations have been developed from years of samples collected from many geographical regions to ensure your quality specifications are being met for incoming and outgoing grain.

AgriCheck

- General purpose for the measurement of whole grains.
- Easy to use with quick and accurate results.
- Automatic feed with multiple sub-sample measurements.
- Measures moisture (up to 40%), protein, oil, starch, fiber, gluten, Zeleny, amylose, FFA and others depending on the product.

AgriCheck Plus

- Measures all kinds of whole grain, oil seeds, and flour.
- Includes dual optics to analyze samples with either transmission or reflectance methods.
- Reflectance cell allows you to measure ground products and pastes.
- Ideal for use in mills or processors to measure incoming grain and processed flours or meals.

MEASUREMENT OPTIONS FOR ALL STEPS OF GRAIN PROCESSING



The standard sampling method every AgriCheck employs to analyze whole grains is an automated sample feed and transmission analysis. In this mode, the user fills the sample funnel with grain, and the automated sample wheel feeds subsamples through a transmission cell, where an NIR signal penetrates the entire whole grain sample to acquire reproducible analysis of important constituents. This is the industry standard for whole-grain analysis and provides the most accurate and repeatable results for the majority of grain types.

Analyzing grains that are processed into a powder or paste? Or very small grains and seeds (like rapeseed)?



While the automated sample feed and transmission is best for the majority of grain testing, certain sample types or processed samples are better analyzed with reflectance measurement methods. The **AgriCheck Plus** includes an additional rotating reflectance dish on top of the instrument and a reflectance detector (spectral range of 1400-2500 nm) for optimal measurements of powdered, granular, and paste sample types. Incorporating both transmission and reflectance measurements makes AgriCheck Plus the ideal solution for mills and processing facilities for analyzing both incoming whole grains and ground processed products.

ROBUST CALIBRATIONS TAILORED FOR SPECIFIC USERS

Whether you will use your AgriCheck NIR analyzer solely for transmission analysis, or you have the AgriCheck Plus that includes reflectance measurement capabilities, KPM Analytics is pleased to offer calibrations packages based on your industry and application needs.

Calibration Package	AgriCheck Standard	AgriCheck Plus (2 Calibration Package Offerings)	
Measurement Method(s) Available	Transmission Only	Transmission & Reflectance	
Common Available Products for Each Calibration Package	• Barley • Barley malt • Corn • Green malt • Oats • Rice (including brown, milled, and rough) • Rye • Soybeans • Wheat • Wheat malt	Default Calibrations Package	Optional Calibrations for All Agricultural Products (AAP)
		<i>Transmission</i> • Barley & barley malt • Green malt • Oats • Rye • Wheat • Wheat malt <i>Reflectance</i> • Wheat flour • Wheat bran • Semolina	<i>Transmission</i> • Corn • Rice (brown, milled, rough) • Soybean <i>Reflectance</i> • Corn byproducts (bran, flour, germ, meal) • Peanut cake • Rapeseed • Soybean byproducts (cake and meal) • Sunflower and byproducts (cake and meal) • Toasted soya



Scan here for the complete list of Bruins AgriCheck calibrations and measurable parameters.

ORDERING INFORMATION



The AgriCheck series analyzers come with a unique path length for the standard transmission sample wheel for barley, oats, rye, wheat, durum, rice, soybeans, and corn.

MODELS

Part Number	Description
AC	AgriCheck Grain Analyzer. Includes funnel and spare lamp.
ACP	AgriCheck Plus Flour and Grain Analyzer. Includes funnel, 48 mm and 96 mm sample cups, sample cup adapter, sample cup cover, and spare lamp.

ACCESSORIES

Part Number	Description
HLW	Test Weight module – optional accessory to determine the specific weight of the grain.
BRU-02-90-11-00	Sample Cup for AgriCheck Plus: 96 mm Reflectance Measurements for Flour, Powders, and Pastes.
BRU-02-90-08-00	Sample Cup for AgriCheck Plus: 48 mm Reflectance Measurements for Flour, Powders, and Pastes.
BRU-22A-18-1	Spare Lamp for AgriCheck Series

SPECIFICATIONS

Dimensions (W X D X H)	420 mm x 320 mm x 402 mm (16.5 in x 12.6 in x 15.8 in)
Weight	AgriCheck: 21 kg (46 lbs); AgriCheck Plus: 22 kg (49 lbs)
Input Power	Voltage: 220 - 240 V AC, 50 / 60 Hz or 100 - 120 V AC, 50 / 60 Hz - Power: 130 Watts
Measurement Time	45 s.
Sample Size	650 ml
Analysis Principle	Scanning Monochromator; Transmission for Both AgriCheck Models; Reflectance Cell for the AgriCheck Plus
Sample Presentation	Automatic Feed with Multiple Sub-Sample Measurements
Pathlength	Fixed. 22 mm.
Wavelength Range	730-1100 nm for transmission for both AgriCheck and AgriCheck Plus. 1400-2400 nm for reflectance for the AgriCheck Plus.
Data Increment	0.5 nm
Interfaces	USB, Ethernet, Centronics
Protection	Dust and Humidity Protected

Flour, Dough & Grain Analyzers



KPM Analytics products have helped pioneer new methods for analyzing cereals, flours, and their derivatives. These methods and products are recognized by numerous international standards, including ISO, AACC, ICC, and numerous local standardization bodies, and serve as a reference in the industry for compositional and functional analysis.

KPM Analytics offers a comprehensive suite of products to help millers and bakers complete their quality control programs.



FLOUR ANALYSIS

- Comprehensive evaluation of flour composition and properties to ensure consistency, maintain quality and predict their performance.



DOUGH ANALYSIS

- In-depth analysis of dough properties at critical production stages provides valuable insights into its behavior and quality, optimizing mixing, proofing, and baking processes for consistent and superior results.



GRAIN MILLING & SAMPLE PREPARATION INSTRUMENTS

- Rapid preparation of all types of grain to produce flour in order to carry out tests.

Alveograph® Series

DOUGH RHEOLOGY ANALYZERS



The Alveograph® Series Dough Rheology Analyzers are the industry-standard tools used to measure rheological properties of dough. While the first concept was invented almost a century ago, the Alveograph® continues to evolve with new protocols and completely open testing conditions (speed, time, and temperatures), allowing it to adapt to modern challenges.

Rheological properties of dough indicate how it will perform in the production process, which includes:

- Machinability
- Stickiness
- Ability to keep its shape, whether it will spread or shrink
- How it will develop during fermentation

Measuring these dough properties and understanding the impact on the final quality of your product will ensure consistency in appearance, size, aroma, and structure.

Bakers and millers all over the world use the Alveograph® to serve as a reference measurement for grains and cereals, both for quality control and developing new products.

APPLICATIONS

The Alveograph® Series is used by millers to analyze and optimize blends of flour, adapting them as needed to meet customer specifications. It is used by bakers to validate incoming ingredients, for testing new recipes, and anticipating production performance of flour and dough mixtures. Product-specific applications include:

- Wheat selection for baked goods or pasta
- Wheat or flour blends
- Vital gluten
- Salt and sugar impacts
- Durum wheat
- Additives and ingredients (proteases, amylases, deactivated yeasts, etc.)
- Insect contaminated wheat

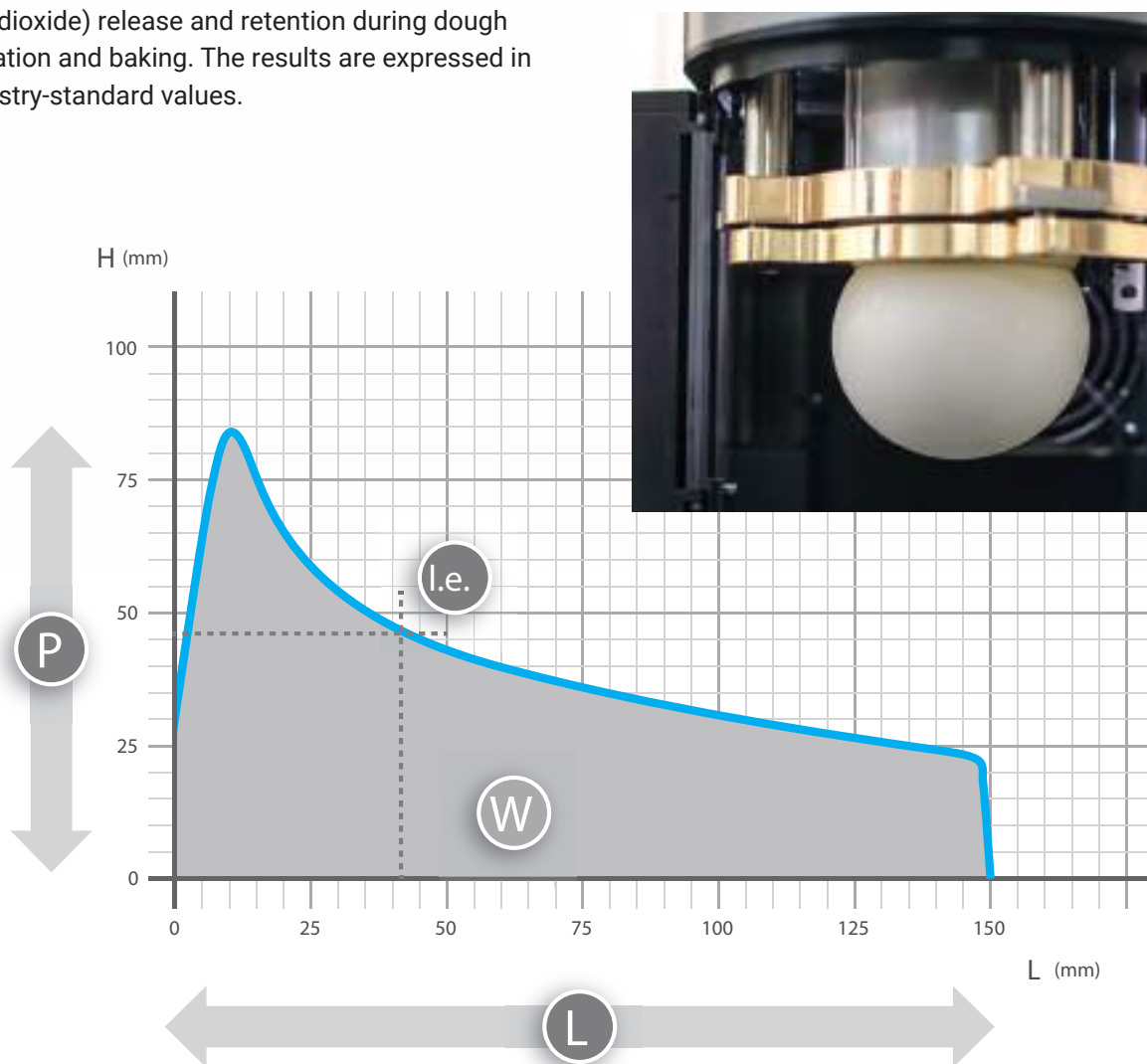


ALVEOGRAPH® FEATURES

- Provides universally recognized measurements for tenacity, extensibility, elasticity, and baking strength (P, L, W, and I.e. values).
- Two models available: Alveolab® and AlveoPC.
- Can be used for both soft and hard wheat.
- New whole wheat test protocol (Alveolab® only).
- Customizable protocols (Alveolab® only).
- Meets international reference standards for AACC and ISO.
- Control testing temperatures automatically with the Alveolab® or with an external chiller for the AlveoPC.
- Intuitive User Interface.
- Standardized data export for integration into a LIMS.

STANDARDIZED MEASUREMENTS

The Alveograph® test is conducted by injecting air into a thin patty of dough to form a bubble, simulating gas (carbon dioxide) release and retention during dough fermentation and baking. The results are expressed in five industry-standard values.



- **P: Tenacity** (capacity to resist deformation). At a given hydration, tenacity represents dough consistency (is the dough hard or soft, for example).
- **L: Extensibility** (maximum volume of air the bubble can contain) This value depends on protein quantity and quality and represents the dough's gas retention capacity.
- **Ie: Elasticity index** represents the capacity of dough to stretch and return to its initial position.
- **W: Dough baking strength** (area under the curve) or **Energy value** that depends on Protein quantity and quality, Starch damage, Enzymes, Interactions.
- **P/L: Curve configuration ratio of tenacity and extensibility.**

Stress/strain, first derivative and consistency recording during mixing: new parameters are available with the Alveolab® and improve the discriminating and predictive potential compared to other models.

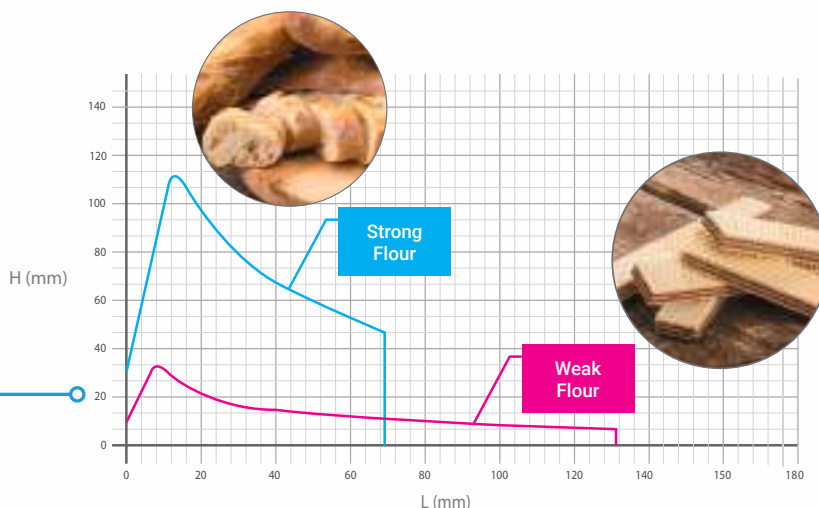
DETERMINE WHICH FLOUR IS SUITABLE FOR YOUR PRODUCTION



One flour is not “better” than the other, it depends on each industrial process and the product you are producing. You may prefer low tenacity for cookies, wafers, etc. or higher tenacity for sliced bread, panettone bread, etc.

The Alveograph® test will allow you to determine the main characteristics of dough suitable for your end-product.

Example: Bread Flour Vs. Biscuit Flour

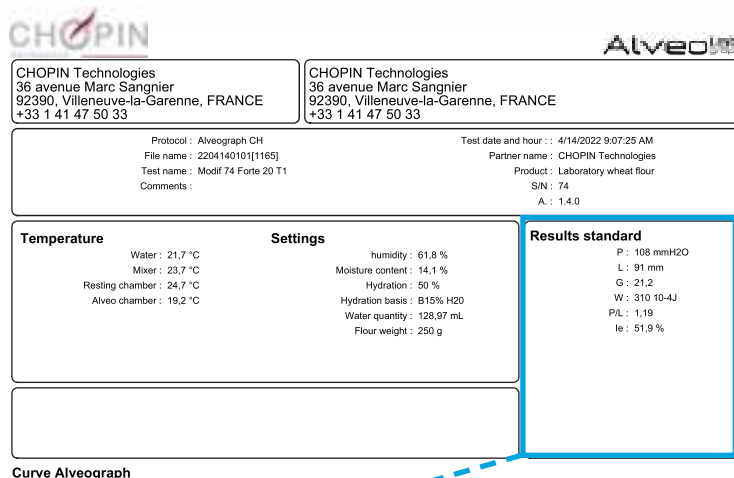


COMPREHENSIVE AND INTUITIVE DATA

The Alveograph® software provides comprehensive, and intuitive data about tenacity, extensibility, elasticity, baking strength and more. A standard analysis certificate is automatically generated for use in checking the test results.

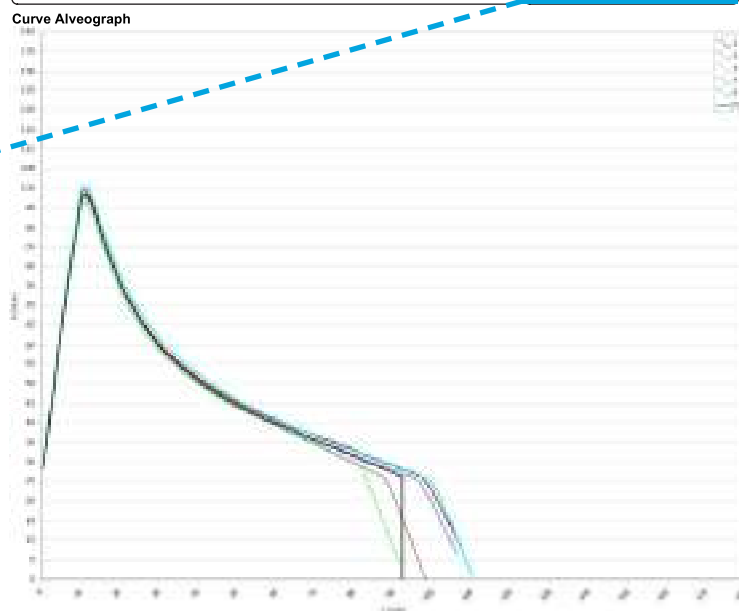
The software displays easy-to-understand test data live on your PC and a backup is generated for perfect traceability.

Results are provided in graphical and table format to quickly assess the dough behavior.



Results standard

P : 108 mmH2O
L : 91 mm
G : 21,2
W : 310 10-4J
P/L : 1,19
le : 51,9 %





SIMPLE TESTING PROCEDURE

The Alveograph® test involves four simple steps:

1. Mixing flour and salted water
2. Preparing five calibrated pieces of dough
3. Putting these pieces of dough to rest
4. Automatically inflating each piece of dough until the resulting bubble bursts



No need to wait until the end of the test to prepare a new one: as soon as the mixing bowl is free, you can start the next test.

ACCESSORIES TO STREAMLINE TESTING

The Alveograph® includes several helpful accessories to make testing easier and faster for users:

- Semi-automatic cutter for consistent patty size samples, and ease of processing.
- Teflon™ -coated resting plates to avoid sticky residue and easy cleaning.
- Reference flours to ensure accurate testing (optional).
- Dedicated CPU (MiniPC) running under Windows 10 IOT.



Reference flours



MiniPC



Semi-automatic cutter

TWO MODELS

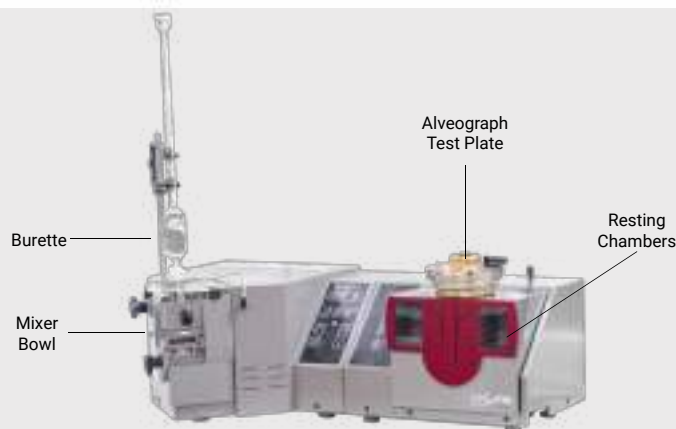
The Alveograph® devices are composed of two main elements: a kneading machine to create a dough sample for testing, and the Alveograph® itself, which measures the extension of a dough bubble formed by air pressure.



Alveolab® - For Quality Control, Research & Development, New Product Development

The Alveolab® is user-friendly, with constant or adapted hydration. It has a self-controlled cooling system, automatic water injection, and automatic positioning, crushing, and blowing of dough patties. Operators can adjust temperature, mixing speed, air flow, humidity, and test timing.

This flexibility allows testing of different formulations for new recipes and understanding dough performance in production. The data helps determine the best flour mixture and final production process.



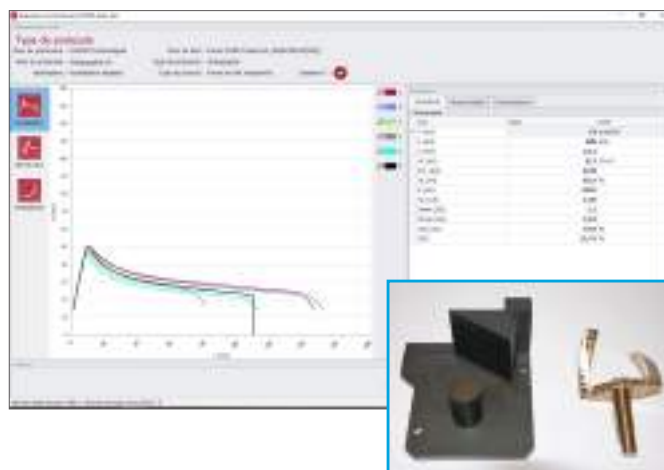
AlveoPC - For Quality Control

The AlveoPC is a benchtop analyzer for technicians that only conduct standard Alveograph® tests at constant hydration, and work in a laboratory where temperature and humidity are perfectly controlled.

The AlveoPC is a simplified version of the Alveolab® and meets international standards for use in analyzing key parameters of dough. It is easy to use with a simple, modern user interface and meets standardized testing procedures.

ADAPTED HYDRATION TEST (ALVEOLAB® EQUIPPED WITH THE ALVEO-AH KIT ONLY)

The Alveolab, equipped with its “Adapted Hydration Kit,” allows testing of flours based on their actual absorption capacities. The protocol requires an initial Consistograph test, which lasts only 5 minutes, to determine the flour's water absorption capacity. After the Consistograph test, the adapted hydration Alveograph® test proceeds as normal. This process provides users with a better understanding of their flour's functionality using a water level more consistent with production conditions, especially for hard wheat flour types.



WHOLE WHEAT TEST (ALVEOLAB® ONLY)

Whole wheat flour is challenging to test due to its high hydration capacity, longer development times, and fragility from large particles. A unique feature of the Alveolab® is its ability to analyze whole wheat flour with a new testing protocol, enabling bakeries to test all types of flour using a single instrument.



COMPARE AND CHOOSE THE ALVEOGRAPH THAT BEST SUITS YOUR NEEDS



PROTOCOL			AlveoPC	Alveolab®
	Compliant with standards AACC 54-30.02, ICC 121 and NF EN ISO 27971		●	●
	Compliant with standards ICC 188 (Adapted Hydration Kit) and UNI 10453		-	●
	Alveographic Analysis - standard protocol at constant hydration (50% b15)	Value P determination	●	●
		Value L and G determination	●	●
		Value P/L determination	●	●
		Value W determination	●	●
		Value I.e. determination	●	●
	Alveographic Analysis - calculation of new Stress/strain parameters	Stress/strain	-	●
		1 st derivative	-	●
	Alveographic Analysis	Degradation protocol	●	●
		Relaxation protocol	-	●
		Hybrid protocol	-	●*
		Whole Wheat protocol	-	●*
	Measure of consistency during mixing		-	●
	Consistograph Analysis		-	●
	Alveographic Analysis - protocol at adapted hydration		-	●
	Creation of new specialized protocols (mixing speed, duration, etc.)		-	●
	Sample types	White Flour - Soft or Hard Wheat	●	●
		Whole Wheat Flour - Soft or Hard Wheat	-	●
		Durum Semolina	-	●

*Alveo-AH optional kit

TEST	Cooling		Water (cryostat or tap)	Integrated Peltier effect
	Electric maximum consumption		1800W/h	2200W/h
	Calibration of the pump (92/60)		Manual	Automatic
	Mixing	Adding of water	Manual	Automatic
		Regulated water temperature	-	●
	Shaping of test dough pieces	Semi-automatic cutter	●	●
		Anti-adhesive resting plates	●	●
	Resting of test dough pieces	Resting chambers	2	3
	Positioning and squashing of test dough pieces		Manual	Automatic
	Blowing of test dough pieces	Type	Manual	Automatic
		Analysis zone with regulated temperature and humidity	-	●
		Bubble	From below	From above
	Average number of tests in 8 hours (1 operator)		12	20

SOFTWARE	Software	Multilingual	●	●
	Software - "Test"	Data acquisition in real time	-	●
		Automatic save and archive	●	●
		Comparison	●	●
		Automatic creation of certificate of analysis	●	●
	Software - "Tools"	Improver guide	-	●
		Help in managing blends	-	●
		Virtual store	-	●
		Record of past performance	-	●
		Control card for the equipment	-	●

ORDERING INFORMATION

The Alveograph® is delivered with a recording system miniPC (not furnished: keyboard, monitor, monitor connector cable, mouse) and it comes with two reference samples to calibrate the Alveograph®.



ACCESSORIES

FARINE-FAIBLE	Weak flour Ref. sample for performance checking
FARINE-FORTE	Strong flour Ref. sample for performance checking
PC0-10	Strong flour Ref. sample for Consistograph's performance checking (For Alveolab® Only)
PLB-1017	Adapted hydration kit



Flour Ref

SPECIFICATIONS

	AlveoPC	Alveolab®
Dimensions (W x D x H)	Without Burette: 820 mm x 550 mm x 500 mm (33 in x 22 in x 20 in) With Burette: 820 mm x 550 mm x 850mm (33 in x 22 in x 34 in)	1010 mm x 640 mm x 860 mm (40 in x 26 in x 34 in)
Weight	70 kg (155 lbs)	96 kg (212 lbs)
Input Power	Voltage: 220/240 VAC - 50/60 Hz - Power: 1.800 Watts	Voltage: 220/240 VAC - 50/60 Hz - Power: 2.200 Watts
Noise Level	< 70 dB	
Fuse	Mixer: 5x20 T 10 A 250 V	
	Alveograph®: 5x20 T 2 A 250 V	
Reagents needed per test (not supplied)	Salted Water 2.5%	
	Peanut or Mineral Oil as Described in the NF EN ISO 27971	
MiniPC specifications	Windows 10 IOT - AlveoPC software already installed	Windows 10 IOT - Alveolab® software already installed
Cooling System	Not integrated Chiller (recommended) or Water Supply System Cooling Circuit Water: Water Temperature 15°C to 20°C (59°F to 68°F) Recommended Capacity Flow Pressure: 3 Bars	Internal
Data Export to USB	Available	
Print Results	By Connecting an External Printer to the MiniPC	
Software Languages	Chinese, Czech, English, Spanish, French, Italian, Polish, Portuguese, Russian, Romanian, Turkish, Ukrainian, Hungarian, Greek, Bulgarian	
Environmental Considerations	Indoor Use	
	Storage Temperature: -25°C to +55°C (-13°F to +131°F)	
	Operating Temperature: 18°C to 22°C (64°F to 72°F)	
	Humidity: Usage RH between 50 and 80%	
	Power Voltage Variations: ± 10%	
Regulatory compliances	Degree of Pollution as per EN 61010: 2	
	Installation Category as per EN 61010: II (surge category)	



KPM ACADEMY

On-demand courses for the Alveograph® Series and many other KPM Analytics products can be found on our KPM Academy: www.kpmanalytics.com/kpm-academy

Mixolab Series



CHALLENGES & OPPORTUNITIES IN WHEAT-FLOUR-BREAD QUALITY CONTROL

Protein-Centric Flour Specifications Are Not Enough for Today's Baking Operations

Although proteins, particularly gluten, play a key role in the baking process, starch is the most available component in wheat flour, yet is often ignored in most quality specifications. Therefore, **many bakers still face process issues** despite using flours assessed and approved based on protein characteristics.

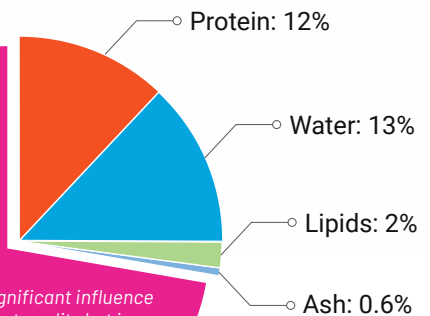


Example Flour Composition



Starch: 72%

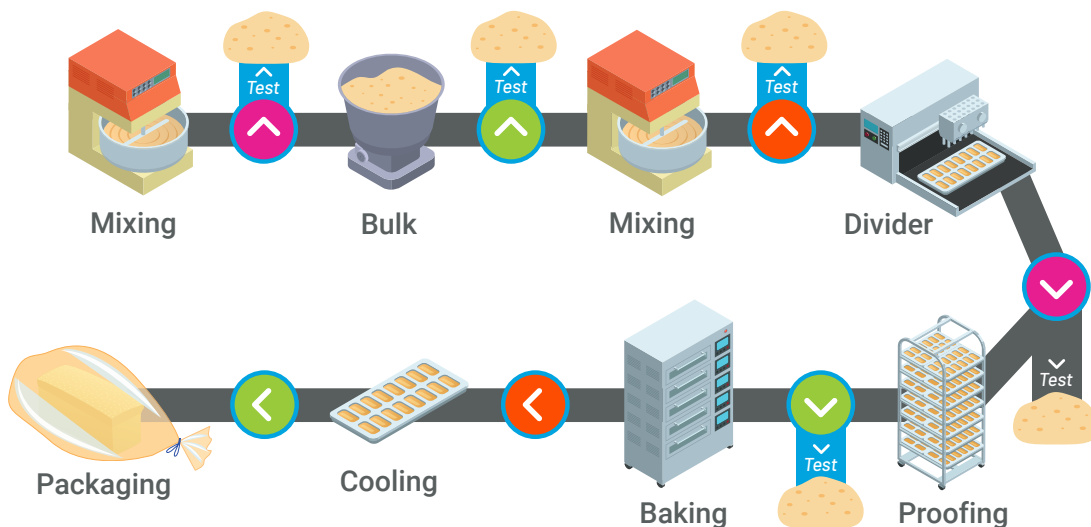
Starch has a significant influence on baked product quality but is rarely tested by most flour quality instruments.



At-Line Dough Quality Assessment Lacks Objectivity, Accuracy, and Repeatability

Dough behavior can change significantly throughout the baking process and needs to be monitored frequently at critical process steps. Most bakeries rely on visual or manual assessment of doughs, a subjective and imprecise method that is operator-dependent. This method is becoming more problematic as many baking experts are retiring or leaving the industry, and training new baking operators can take years.

Without a reliable way to quantify dough quality at key process steps, bakeries cannot make informed process control decisions.



Frequent objective testing of doughs throughout production provides a more accurate picture on both flour quality and process performance.

Key: Test sample dough from production

MIXOLAB SERIES: TWO POWERFUL TOOLS TO QUANTIFY FLOUR AND DOUGH BEHAVIOR



Mixolab 200:

Comprehensive flour and ingredient analysis for quality control and research applications.

Note: Upgrading the Mixolab 200 to Mixolab 300 is seamless with the Mixolab 300 Upgrade Kit.



Mixolab 300:

Combines flour and dough analysis into a single, simple solution for lab or at-line use.

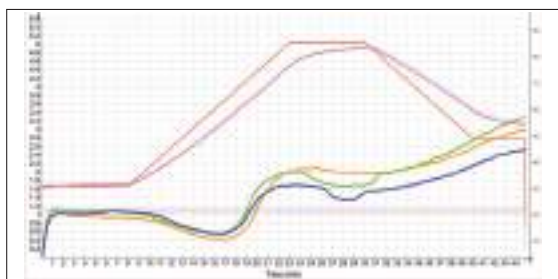
OVERVIEW

The Mixolab Series is the next generation in flour and dough quality analysis. Unlike other rheological instruments, the Mixolab Series is a fully automated tool that simulates the baking process – mixing, heating, and cooling – to assess the functional interactions of starch, proteins, enzymes, and other components.

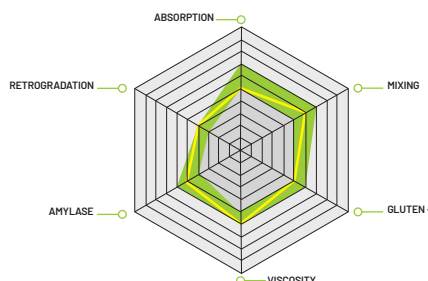
There is a Mixolab Series instrument for every need of all members of the baking and cereal/grains industry. It allows users to validate products, adapt recipes, and improve production processes.

MIXOLAB SERIES FEATURES

- Test all raw materials (wheat, rice, corn and more) and doughs (including batter and liquid doughs).
- Multiple built-in test protocols, with the capability to customize protocols for different flours and baking processes.
- Compliant with international standards: ISO 17718:2013, AACC 54-60.01, ICC 173-1, GOST R54498-2011 and GOST R ISO 17718-2015.



Simulate the entire baking process to accurately characterize flour and dough.



Use internationally-standardized protocols or build your specifications based on comprehensive data.



Simplified at-line dough analysis.

MIXOLAB SERIES BENEFITS

- **For Bakers:** Achieve total process control by evaluating incoming ingredients and dough quality.
- **For Millers:** Improve wheat selection and optimize flour blends to meet customer specifications.
- **For Ingredient Manufacturers:** Objectively assess the influence of enzymes, improvers, and other ingredients on your customer's products.
- **For Recipe Research & Development:** Chopin+ and Chopin+ D protocols simulate the baking process, helping facilitate the product development and research.

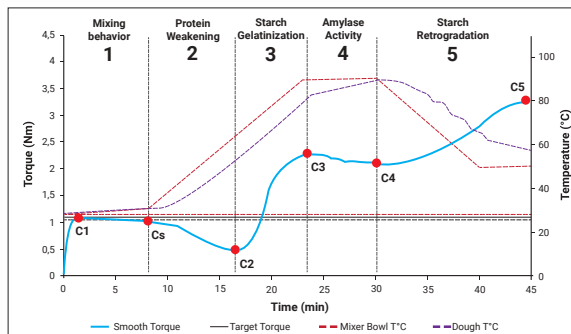
FLOUR ANALYSIS

Applicable to both Mixolab 200 and Mixolab 300

Standard & Customizable Flour Quality Analysis Protocols

Originally developed for analyzing white wheat flours, the Mixolab Series now offers the most variety of flour and ingredient testing protocols of any instrument of its kind.

Wheat Bug Protocol identifies flour contamination caused by insects.

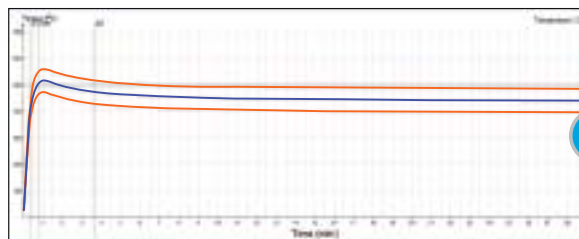


The Chopin+ protocol is the international standard for total flour quality analysis.

Wixo protocol simulates the Alveograph test.

Farinograph® Protocol (Chopin-S)

The Mixolab Series is equipped with a test protocol that provides equivalent Farinograph® data (values and units). The data are comparable with those from existing Farinograph® equipment with a much smaller sample size.



Farinograph® curve from a Mixolab

ABSORPTION	63.4%
DEVELOPMENT TIME	3.8 min
STABILITY	11.1 min
SOFTENING	45 FU
MTI (MIXING TOLERANCE INDEX)	51 FU

Mixolab Profiler for White Wheat Flours

The Mixolab Profiler allows products to be classified based on six quality criteria of the Chopin+ protocol: water absorption, mixing, gluten+, viscosity, amylase, and retrogradation.

Create specific target profiles to better screen and detect under-performing flours.



Example Mixolab Profile for a target flour specification.

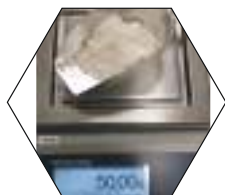
INDEX TYPE	DESCRIPTION (VALUES FROM 0-9)
ABSORPTION	Ability of flour to absorb water
MIXING	Stability of flour during kneading
GLUTEN+	Resistance of gluten to heat
VISCOSITY	Dough viscosity during heating
AMYLASE	Starch gel stability at high temperature, strongly impacted by amylase activity
RETROGRADATION	Cooked product shelf life

Simple Operating Procedure

Step 1: Configure the Test



Step 2: Weigh the flour sample



Step 3: Add flour to the mixing bowl



Step 4: Place the hydration nozzle



Test time:
45 minutes
Operator time:
5 minutes

Note: All flour tests utilize the easy-to-clean Standard Mixing Bowl



DOUGH ANALYSIS

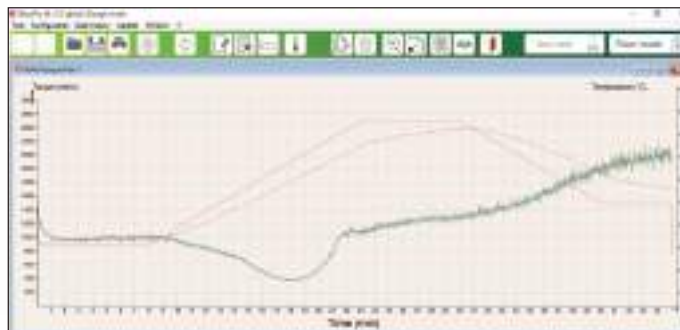
Applicable only to the Mixolab 300



Dough Analysis Modes

The Mixolab 300 is equipped with two different dough analysis modes:

- **Instant Consistency Mode:** Ideal for production monitoring, offering an objective reading of the consistency of the dough in as little as two minutes.
- **Full Test Mode:** Ideal for R&D and product development, providing a complete view of dough behavior during mixing, heating, and cooling phases.



Dough Introduction Kit

The Dough Introduction Kit makes it simple to administer doughs and batters of varying consistencies.



Liquid batters



Crumbly doughs
(with funnel)



Sticky doughs
(with dough pusher)

Simple Operating Procedure

Step 1: Configure the Test



Step 2: Weigh the dough sample



Step 3: Add dough to the mixing bowl



Step 4: Place dough pusher



Test time:
2-to-45 minutes
Operator time:
5 minutes



Note: All dough tests utilize the easy-to-clean Dough Mixing Bowl.

TESTING PROTOCOLS TAILORED FOR WHEAT SELECTION, FLOUR CORRECTION, AT-LINE ANALYSIS, AND MORE



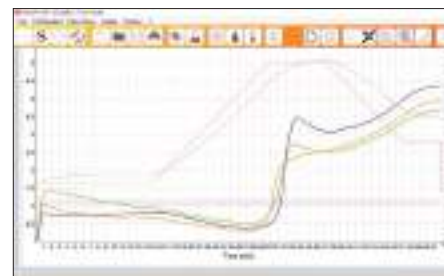
Ready-to-Use Mixolab Protocols

Protocol Name	Description	Tested Product	Applicable Mixolab
Chopin+	Standardized, full analysis (proteins and starch), associated with the Mixolab Profiler for white wheat flour.	White wheat flour	Mixolab 200 Mixolab 300
ChopinWheat+	Copy of the Chopin+, associated with a specific Mixolab Profiler for whole wheat flours.	Whole wheat flour	Mixolab 200 Mixolab 300
ChopinDurum+	Copy of the Chopin+, associated with a specific Mixolab Profiler for durum wheat flour.	Durum wheat flour	Mixolab 200 Mixolab 300
Chopin-S	Protocol associated with prediction algorithms allowing comparable results (values and units) to be obtained with the Farinograph®.	White wheat flour	Mixolab 200 Mixolab 300
WheatBug	Protocol for identifying batches of wheat infested with wheat bugs.	Ground wheat	Mixolab 200 Mixolab 300
Wixo	Protocol associated with mathematical algorithms and allowing an evaluation of the Alveo parameters (P, L, W, le), in 8 minutes from ground wheat.	Ground wheat	Mixolab 200 Mixolab 300
Start (with Instant Consistency Mode)	Short protocol to objectively assess the dough consistency and allows to monitor production.	Dough	Mixolab 300
Chopin+ D	Copy of the Chopin+ protocol, dedicated to the full analysis of dough.	Dough	Mixolab 300

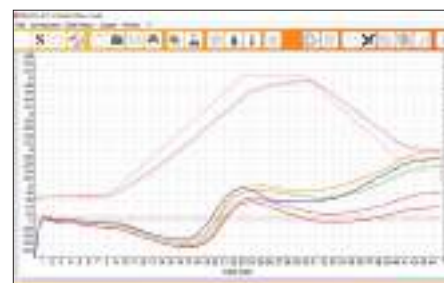
Protocol Customization Capabilities

In addition to the ready-to-use protocols, the Mixolab Series offers numerous possibilities for adapting and customizing protocols to respond to most of the new emerging challenges, such as:

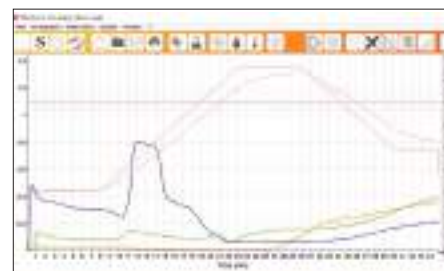
- Gluten-free flours
- Starches
- Enzymes
- Pulses
- Vital gluten
- Insect powders, and more



Pulse flour comparison curve



Bacterial amylase comparison curve



Various dough comparison curves (cake, brioche, etc.)



Adjustable Parameters	Range of Values
Mixing Speed	30 to 250 rpm
Sample Weight	45 to 100 g for Flour Mode 10 to 300 g for Dough Mode
Water Tank Temperature	10 to 60°C
Temperature	10 to 90°C
Step Duration	Up to 240 minutes
Temperature Gradient	- 12 to + 12°C/min



MixoPRO

The MixoPRO software with the Mixolab Series is a comprehensive package with advanced features to help users gain valuable insights on their flour and dough products, requiring little training or operator expertise.

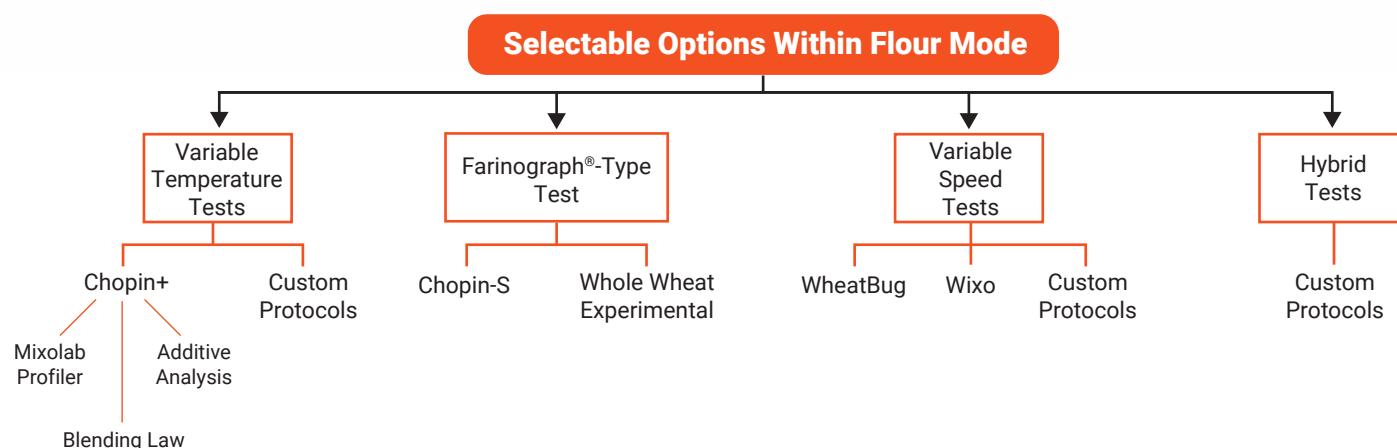
Universal Software Features (Both Flour & Dough Modes)

- Available in 17 languages.
- Instructional videos included for easy training and handling.
- Select from various test units (Nm / mNm / °C / °F).
- Compare multiple trials and adapt curve color and thickness for better visibility.
- Export tests in multiple file formats, making it easy to connect to LIMS (.xlsx, .csv, .wdz).



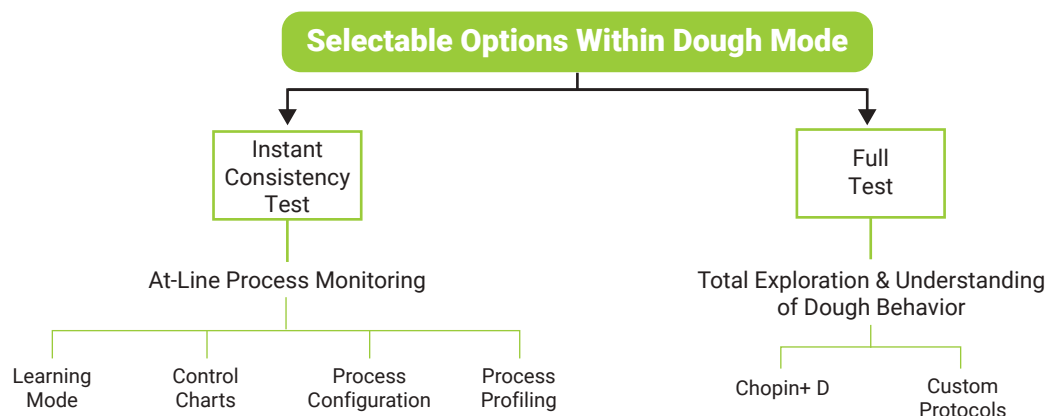
Flour Mode (Mixolab 200 & Mixolab 300)

The MixoPRO Flour Mode provides the complete range of flour analysis for various protocols and custom tests.



Dough Mode (Mixolab 300)

The MixoPRO Dough Mode revolutionizes at-line dough testing, allowing users to quantify dough attributes quickly and simply.





ORDERING INFORMATION

The Mixolab Series comes complete with a kneading machine with accurate temperature control, and an integrated water tank. The system also includes a MiniPC (not furnished: keyboard, monitor, monitor connector cable, mouse). Necessary hydraulic hoses to connect Mixolab to the cold water supply are included, as well as a cleaning brush, a filling hopper and additional spare parts. The cooling system is not furnished.

ACCESSORIES

Part Number	Description
MIX-432	Additional Flour Mixing Bowl*
MIX-431	Additional Dough Mixing Bowl**/**
MIX-191	Flour reference sample for Flour Mixing Bowl calibration
MIX-435	Flour reference sample for Dough Mixing Bowl calibration
MIX-1005	Mixolab 200 spare parts kit
MIX-1015	Mixolab 300 spare parts kit
CHILLER	250W recirculating chiller for Mixolab
CHILLER F500	500W recirculating chiller for Mixolab



*A maximum of two Flour Mixing Bowls (numbered 1 and 2) and two Dough Mixing Bowls (numbered 3 and 4) can help streamline testing.

**While the use of two Dough Mixing Bowls is fine for Instant Consistency tests, it is not recommended for full tests.

SPECIFICATIONS

	 Mixolab 200	 Mixolab 300
Analysis Possibilities	Flour	Flour & Dough
Dough Introduction Kit?	No	Yes
Mixing Bowls	Standard	Standard & Dough
Dimensions (W x D x H)	460 mm x 505 mm x 270 mm (18.11 in x 19.88 in x 10.63 in)	460 mm x 505 mm x 375 mm (18.11 in x 19.88 in x 14.76 in)
Weight	33 kg (72.75 lbs)	35 kg (77.16 lbs)
Input Power	220/240 V 50- 60 Hz 1000 W	
Noise Level	< 70 dB	
Fuse	5x20 T 10 A 250 V	
MiniPC Specifications	Windows 10 IOT, Fan-less – 8GB RAM; MixoPRO software pre-installed	
Cooling System	Chiller (recommended / not supplied) or water supply system	
Data Export to USB	Is available	
Printable Results	By connecting an external printer to the MiniPC (printer not supplied)	
Software Languages	Chinese, Croatian, Czech, English, French, German, Greek, Italian, Magyar, Polish, Portuguese, Russian, Romanian, Serbian, Spanish, Turkish, Ukrainian	
Environmental Considerations	Indoor use only; Storage temperature: -25°C to + 55°C (-135°F to +131°F); Operating temperature: 10°C to 30°C (50°F to 86°F); Humidity: Usage RH <= 85%; Cooling circuit water: Water temperature 15°C and 20°C (59°F to 68°F); Power voltage variations: <+/- 10%	
Regulatory Compliances	Degree of pollution as per EN 61010:2; Installation category as per EN 61010: II (surge category)	

Note: Upgrading the Mixolab 200 to Mixolab 300 is seamless with the Mixolab 300 Upgrade Kit.

SDmatic 2

AUTOMATED DAMAGED STARCH ANALYZER



Control Flour Quality by Analyzing Damaged Starch

Damaged starch affects flour properties and functionality. The SDmatic 2, the newest analyzer for measuring damaged starch, helps millers meet customer specs and ensures bakers get the right flour mix for quality products. It is the only globally recognized instrument that meets industry standards for assessing damaged starch.

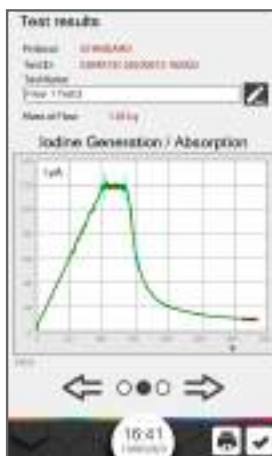
SIMPLE AND FAST

The SDmatic 2 utilizes the enzyme-free, amperometric Medcalf & Gilles method to measure iodine absorption in diluted flour samples. It delivers reliable results in under 10 minutes using just 1 gram of flour. Users can easily follow test prompts on the touchscreen, accessing new data such as complete iodine absorption curves and graphical results that display optimal flour composition—including damaged starch and protein content—tailored to different finished products.

VERSATILE, ACCURATE DATA

The SDmatic 2 software features various settings including a learning mode, customizable units, and a countdown timer, along with new analysis options like adjustable protocols for flour mass, iodine generation, and measurement time. This flexibility allows for protocol development for non-wheat flours.

Results are displayed on a touchscreen in Chopin Dubois units, AI% (iodine absorption), and Vabs, and can be correlated with enzymatic method units. Test data is stored on the device and can be accessed or exported as needed.



EASY TO MAINTAIN, LOWER COST OF OWNERSHIP

The SDmatic 2 offers low maintenance and ownership costs. Its redesigned probe is user-friendly, allowing easy and safe installation or removal without needing an on-site technician, which reduces costs. The spoon, made of more durable, high-quality metal, helps users identify when cleaning is required to prevent cross-contamination or inaccurate sample size. Additionally, maintenance is simplified with the ability to use Teamviewer for remote problem diagnosis.



SDMATIC 2 FEATURES

- Simple to use - follow test prompts.
- Fully automated and enzyme-free testing.
- Guarantees reproducibility and repeatability of the results.
- Provides exceptional accuracy compared to other methods.
- Standard and Calibration protocol already installed.
- Customized protocols possible.
- Export data to LIMS (using a script), either on a USB or via network (using Wi-Fi, or Ethernet cable).
- Only device compliant with international standards: NF EN ISO 17715:2015, ICC 172, AACC 76-33.01.

ORDERING INFORMATION

The SDmatic 2 comes complete with a plug and play measurement probe, a stirrer, a heater resistor, 2 reaction bowls, 2 metallic spoons, and a cleaning container. It is equipped with a 7 in. color touch screen and a heating compartment for a flask with a solution. A dropper is furnished for thiosulfate. The unit is equipped with 4 USB ports (for USB sticks, barcode scanner, printer - not supplied).

MODEL AVAILABLE

Part Number	Description
SDMATIC 2	Automated and precise analyzer to measure damaged starch

ACCESSORIES

Part Number	Description
SD-100/A	Strong flour Ref. sample for performance checking
SD-100/B	Weak flour Ref. sample for performance checking
SDC-1000	SDmatic 2 spare part kit



References Samples

SPECIFICATIONS

Dimensions (W x D x H)	450 mm x 370 mm x 265 mm (17.7 in x 14.6 in x 10.4 in)	
Weight	8 kg (18 lbs)	
Input Power	External power supply 24 VDC Voltage : 110/230 V 50/60 Hz - Power: 88 W (1,3 W on standby)	
Noise Level	< 50 dB	
Reagents Needed per Test (Not Supplied)	Citric acid (C6H8O7): 1.5 +/- 0.5 g Potassium iodide (KI): 3.0 +/- 0.5 g Sodium thiosulfate (Na2O3S2) at 0.1 mol./l. : 1 drop	
Measurement Reading	Damaged starch content	Iodine Absorption rate
	- Ai% - UCD and UCDC (Chopin Units) - Equivalents AACC 76-31, Farrand (alternative enzymatic methods)	- Vabs
Environmental Considerations	Indoor use	
	Storage temperature: -25°C to +55°C (-13°F to +131°F)	
	Operating temperature: 10°C to 30°C (50°F to 86°F)	
	Hygrometry: HR ≤ 85 % at 40°C (104°F)	
	Power voltage variations: < ± 10%	
Regulatory Compliances	NF EN ISO 17715:2015, ICC 172, AACC 76-33.01.	
	Degree of pollution as per EN 61010:2	
	Installation category as per EN 61010: II (overvoltage category)	
Software Languages	Bulgarian, Chinese, English, French, German, Greek, Hungarian, Polish, Portuguese, Romanian, Russian, Spanish, Turkish and Ukrainian	
Connectivity	4 USB ports, 1 network port and Wi-Fi	

Rheo F4

DOUGH PROOFING ANALYZER



Understand Dough Behavior During Proofing

Proofing is a critical baking stage that influences shaping, flavor, volume and crumb characteristics. During fermentation, yeast consumes sugars, producing carbon dioxide to leaven the dough. This process depends on flour quality, yeast characteristics, and other ingredients. The final product volume relies on gas production and gas retention: both must be controlled to reach the “expected volume” or “a correct volume”.

UNIQUE ASSESSMENT OF GAS PRODUCTION AND RETENTION DYNAMICS

The Rheo F4 is a one-of-a-kind instrument, uniquely capable of assessing both gas production and retention dynamics in a single test. This comprehensive analysis not only offers a complete measurement of dough development but also provides a profound understanding of how the combined influence of gas production and gas retention affects dough development and stability during proofing. These insights empower bakers to optimize recipes, adjust fermentation durations, and enhance baked goods.

CUSTOMIZED TESTING PROTOCOL

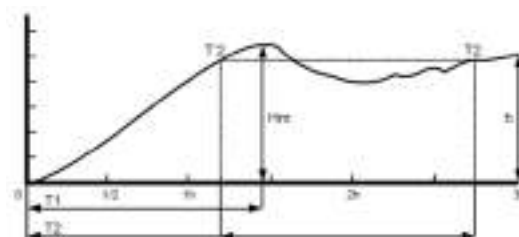
The testing protocol can be tailored to a wide spectrum of leavened dough: simple flour and yeast-based doughs, to more complex ones with additives or ingredients. It accommodates various scenarios:

- Temperature, time, and weight adjustments.
- Assessment of yeast quality and freshness for all types of yeast (dry, fresh, cream).
- Gluten-free dough.
- Short and long proofing simulations.
- Yeast reactivation post-freezing.
- Characterization of dough from production lines, including rich formulations.
- And more.

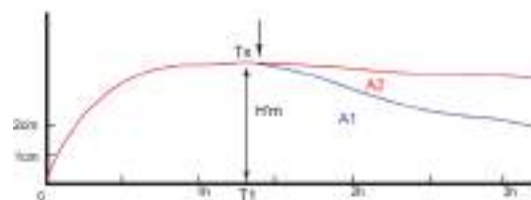


RHEO F4 FEATURES

- Automated testing for all types of yeast dough.
- Measures gas production and gas retention and the resulting dough development in a single test.
- Flexibility for customized testing protocols.
- Automated testing and real-time monitoring via PC software.
- Space-efficient design.
- Low maintenance, single consumable (soda lime).
- Compliance with AACC 89-01.01 Yeasts Methods.



Dough Development Curve



Gas Production Curve

AUTOMATED TESTING AND REDUCED OPERATOR TIME

The test setup is easy: simply place the dough into the proofing bowl, and the system conducts the full analysis automatically. The Rheo F4 is monitored during the testing via PC Software. Data from several samples can be compared to determine product conformity and precisely evaluate the effect of an ingredient on the dough.



SIMPLE AND LOW MAINTENANCE

The Rheo F4 is designed for user-friendliness and easy installation. Its lightweight, compact design seamlessly integrates into your laboratory setup. The device has minimal maintenance requirements and relies on a single consumable – soda lime.

ORDERING INFORMATION

The Rheo F4 comes complete with a proofing bowl, a dough development sensor with its cable, a piston, four 500g weights, bowl tightening nuts, a laboratory bulb (for leak testing), a temperature control support, a pump, and a cartridge (to feed with soda-lime - not included).

MODEL AVAILABLE

Part Number	Description
RHEOF4	Dough proofing analyzer

ACCESSORIES

Part Number	Description
FARINE-RHEO	Flour Ref. sample for performance checking
RF4-1001	Rheo F4 spare part kit



Flour Reference

SPECIFICATIONS

Dimensions (W x D x H)	415 mm x 265 mm x 545 mm (16.3 in x 10.4 in x 21.5 in)
Weight	12 kg (26.5 lbs)
Input Power	Voltage: 220/240 VAC, 50/60 Hz - Power: 150 Watts
Fuse	5x20 T 1.6A 250 V
Consummable (Not Included)	Soda Lime
Software Languages	Chinese, English, French, German, Italian, Polish, Portuguese, Russian, Spanish
Regulatory Compliances	AACC 89-01.01
Protocol adjustments	- Temperature adjustable within the range from room temperature to 50°C - Time freely customizable

CD1 Mill

STANDARD LABORATORY MILL



Consistent Test Flour Production Across Laboratories (Hard or Soft Wheat)

The CD1 Mill stands out as the optimal tool for producing flours tailored for analytical testing. It is the industry's only mill that strictly adheres to the NF EN ISO 27971 standard for Alveograph testing on wheat.

Utilizing a fixed and optimized milling diagram, the CD1 Mill ensures the production of consistent and reproducible flour samples, from lab to lab and user to user, essential for reliable analyses such as Alveograph, Farinograph, Extensograph, Mixolab, and more.

These analyses play a crucial role in supporting commercial wheat transactions, emphasizing the importance of results being solely influenced by the tested wheats, and not by the milling tool employed in their transformation.

EASE OF USE AND HIGH THROUGHPUT

The CD1 Mill features a short milling diagram and fixed milling settings, making it a user-friendly tool that streamlines operations. The CD1 Mill can mill 1 kg of wheat in approximately 20 minutes.

The CD1 Mill's independent breaking and reduction parts enable simultaneous grinding of two wheat samples, significantly increasing machine productivity.

LOWER COST OF OWNERSHIP

The CD1 Mill is equipped with exceptionally durable and nearly indestructible cylinders, providing two key advantages:

- The distance between the cylinders remains constant throughout the instrument's lifespan, ensuring consistency in results.
- Unlike competitor instruments, there is no requirement to replace cylinders every 4 or 5 years, leading to a significant reduction in maintenance costs and constraints.

Ultimately, the CD1's robust design ensures minimal and straightforward maintenance.



CD1 MILL FEATURES

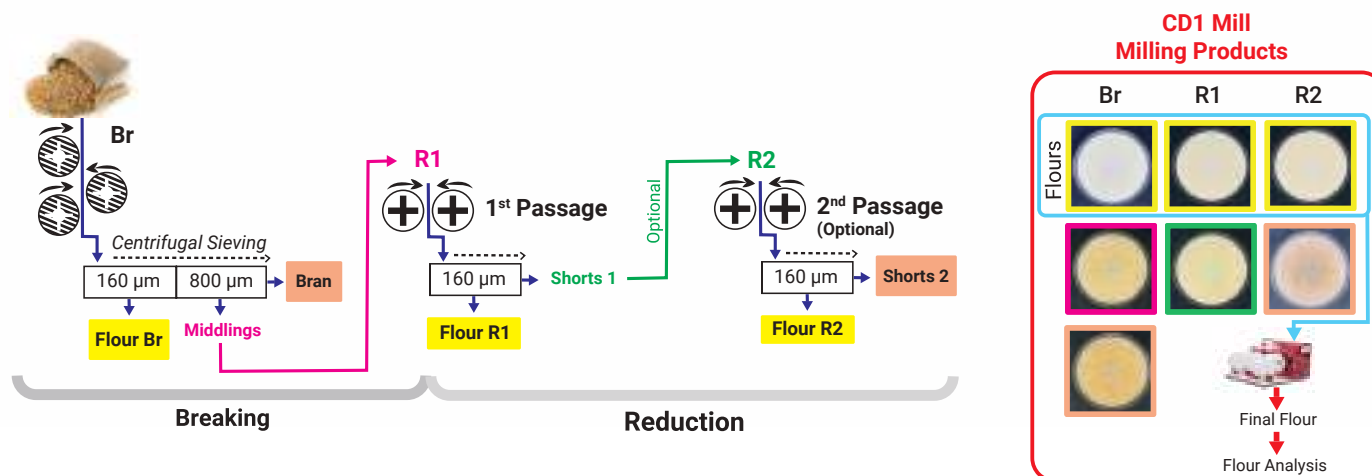
- Fixed milling settings adhere strictly to the NF EN ISO 27971 standard for Alveograph testing on wheat.
- Complies with industry standards- AACC 26-70.01 & NF EN. ISO 27971.
- High throughput: simultaneous operation of two processes (breaking and reduction).
- Extraction rate 55 to 65 %*.
- Capacity of up to 1 kg (2.2 lbs) of wheat.
- Robust design, and low maintenance.
- User-friendly and easy to clean.

** Indicative value (variable according to wheat type, conditioning, and applied milling procedure)*

MORE REPRESENTATIVE FLOUR SAMPLES



Functioning as a scaled-down simulation of an industrial mill, the CD1 Mill undergoes a series of grain size steps. First, the grain passes between cylinders, followed by sieving to sort particles, and finishing with the option to redirect particles to other cylinder devices. The milling diagram combines grooved rolls (breaking part) and smooth rolls (reduction part), resembling industrial mills and thereby enhancing the representativeness of the produced flours. Users can obtain two distinct flours (breaking and reducing), typically combined and homogenized before undergoing testing.



Ordering Information

MODEL AVAILABLE

Part Number	Description
CD1 MILL	CD1 Laboratory Mill - delivered assembled and equipped. It includes a set of Allen keys, a brush, four additional weights, a spout and two plastic boxes to contain milled product

ACCESSORIES

Part Number	Description
MO-1022	CD1 Mill spare part kit
EM10	Moisture oven for reference measurement
MR2L	Mixer for tempering and homogenizing grains and powders products

SPECIFICATIONS

Dimensions (W x D x H)	1100 mm x 450 mm x 900 mm (43.3 in x 18 in x 35.4 in)
Weight	110 kg (243 lbs)
Input Power	Three-Phase Current - Voltage 230/400V 50Hz or 60Hz - Power:1300 W
Milling diagram	1 breaking part (2 superimposed passages between 3 grooved cylinders), 1 reduction part (1 passage between 2 smooth cylinders), each associated with a centrifugal sieve
Milling Capacity	Up to 1 kg (2.2 lbs)
Flour Quality*	Extraction rate: 55 to 65% Ash content: 0.45 – 0.60%
Milling Time*	Test time: Approx. 20 minutes for 1 kg (2.2 lbs)
Environmental considerations	Indoor use / Operating temperature: 10°C to 45°C (50°F to 113°F) - humidity value
Regulatory compliances	AACC 26-70.01, ISO 27971 (for Alveograph from wheat grain)

* Indicative values (variable according to the wheat, the conditioning, the applied milling procedure, etc.)

Labmill

PILOT PRODUCTION MILL



Production of Flour for Breadmaking Tests and other Analyses

The Labmill is a pilot production mill that transforms wheat (hard or soft) into refined flours (also called purified/white flours). It automatically separates the flours wheat kernel (or endosperm) from the wheat skin.

FLOUR REPRESENTATIVE OF THE INDUSTRIAL MILL

The Labmill simulates the operation of an industrial mill on a reduced scale. It achieves high extraction rates (typically between 65% and 75%) to produce a flour that is highly representative of those from an industrial mill.

The Labmill recovers the proteins and enzymes from the most peripheral layers of the grain, such as the aleurone layer. This precision makes Labmill the ideal tool for producing flours intended for more comprehensive tests, such as bread-making or the evaluation of the addition of exogenous enzymes, etc in which the enzymatic component plays a major role.

WHEAT MILLING PERFORMANCE AND BEHAVIOR OF GRAINS DURING MILLING

Labmill users have access to all milling products including flour stream, fine middlings, coarse middlings, and bran. The quantitative and qualitative distribution of the different fractions provide valuable information about the future milling behavior (or milling value) of the wheat at the industrial mill. This milling value information allows millers to select the wheat most adapted to their needs, not only in terms of flour quality produced, but also in terms of adaptability to their milling process.

APPLICATIONS

Millers, wheat breeders, ingredients specialists, control labs, and other baking industry professionals: Labmill is used for various baking analyses, including testing when enzymatic component plays a significant role in qualifying its technological aptitude (example: bread making) or evaluating the effects of enzymes and other bread-making improvers.

Universities and schools: Labmill is an excellent educational tool for training future millers.



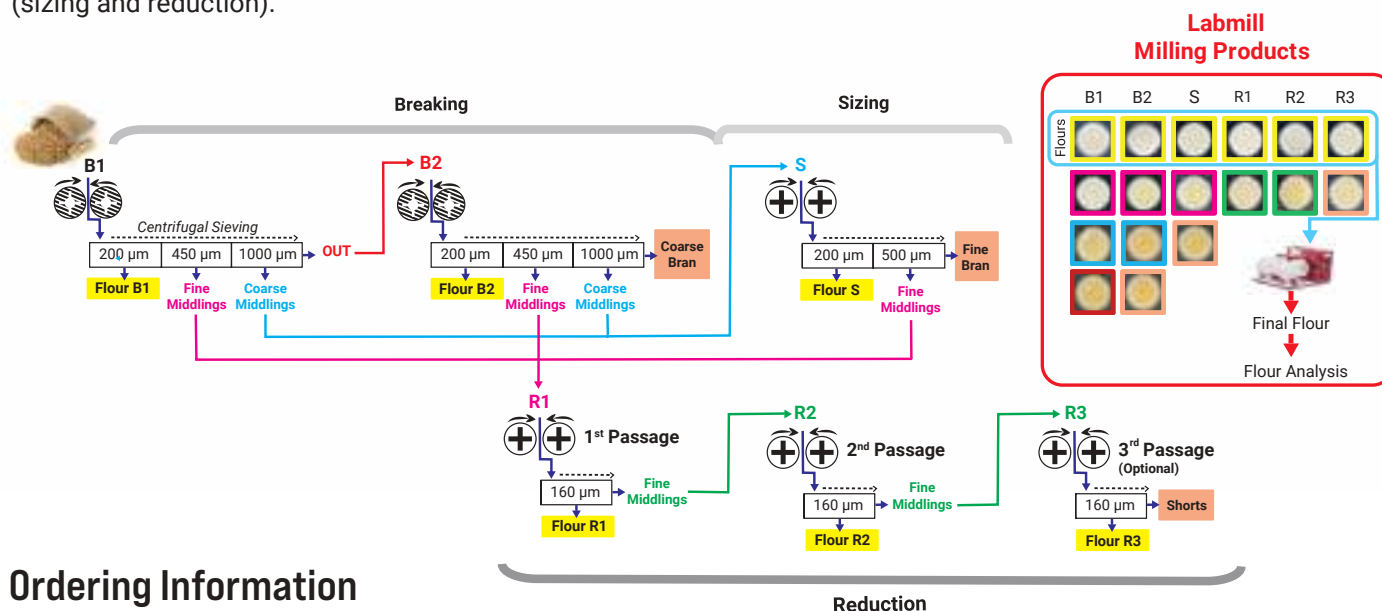
FEATURES

- A patented milling procedure: two breaking stages, one sizing stage, and three reduction stages.
- Adaptable long milling diagram with the ability to delete or double certain passages.
- Run two milling samples simultaneously breaking and sizing/reduction parts operate separately.
- Additional adjustment capabilities (feed rate, sieving efficiency, roller spacing*, etc.).
- Extraction rate 65 to 75%.
- Capacity of up to 3 kg (6.6 lbs) of wheat.
- Robust design, and low maintenance.

** The adjustment of the roll gap requires specific mechanical knowledge and prior training by KPM Analytics*

A PATENTED LONG MILLING DIAGRAM

The Labmill refines grain size through a sequence of processes: passing the material between rolls for reduction, sieving to separate particles by size, and directing them to additional rollers as needed. The process includes a long milling diagram with two breaking stages, one sizing stage, and three reduction stages, which combines corrugated rolls (breaking) and smooth rolls (sizing and reduction).



Ordering Information

MODEL AVAILABLE

Part Number	Description
LABMILL	Laboratory mill - delivered assembled and equipped. It includes a set of Allen keys, a reference weight of 100 g, a key to lock/unlock the flour reel compartments and a USB drive containing instructions for use and other files.

ACCESSORIES

Part Number	Description
MIL-1008	Labmill spare part kit
EM10	Moisture oven for reference measurement
MR2L	Mixer for tempering and homogenizing grains and powders products

SPECIFICATIONS

Dimensions (W x D x H)	900 mm x 1200 mm x 1500 mm (35.4 in x 47.2 in x 59.1 in)
Weight	200 kg (440 lbs)
Power	220/240 VAC 50 or 60 Hz
Milling diagram	2 breaking part (grooved cylinders), 1 sizing part (smooth cylinders) 3 reduction part (smooth cylinders), each associated with a centrifugal sieve
Milling Capacity	Up to 3 kg (6.6 lbs)
Flour Quality*	Extraction rate: 65 to 75% Ash content: 0.50 – 0.65%
Milling Time*	Test time: 40 minutes for 1 kg (2.2 lbs)
Environmental considerations	Indoor use / Operating temperature: 10°C to 45°C (50°F to 113°F)

* Indicative values (variable according to the wheat, the conditioning, the applied milling procedure, etc.)

Chemical Analyzers



The KPM Analytics family of high throughput automatic wet chemistry analyzers has helped environmental research labs, municipalities, food and beverage producers, and many others improve operational efficiencies. Thousands of organizations worldwide use KPM Analytics' discrete and continuous flow analyzers, reagents, and in-line pH, temperature, and redox potential systems.



PLANT, SOIL, AND FERTILIZER ANALYSIS

- Optimize agricultural practices, ensure proper nutrient management, enhance crop productivity, and protect the environment.



WATER AND BEVERAGE ANALYSIS

- Assess pH, dissolved oxygen, impurities, acid, sugars, alcohol content, and several other parameters to ensure quality control and compliance.



FOOD EXTRACT ANALYSIS

- Help ensure the safety and integrity of food products, protect consumer health, and support accurate product labeling.



ACIDIFICATION TESTING

- Used by ferment and starter culture manufacturers for product quality and the development of new cultures for the dairy and fermented foods industries.

SmartChem[®] Series

AUTOMATED, HIGH-CAPACITY WET
CHEMISTRY PLATFORMS



Optimize Your Everyday Laboratory Operations

Wet chemistry is a proven method for analysis of samples in environmental, industrial, research, and quality control applications. The SmartChem[®] Series is a wet chemistry platform for automated photometric and electrochemical analysis.

ALL IN ONE PLATFORM

Using a single platform to run samples, manage calibrations, standards, maintenance, and operator training, the SmartChem[®] platform offers a reliable and convenient walk-away solution to increase your laboratory's productivity.

Laboratory scientists can concentrate on added-value activities and tasks, while SmartChem[®] automates repeatable, traceable and regulatory compliant testing.

FULLY AUTOMATED & EFFICIENT

SmartChem[®] operates using small sample reactions (μl). This reduces reagent usage, and less waste is produced, improving your efficiency and environmental footprint while reducing costs.

Our tabletop and stand-alone SmartChem[®] analyzers offer complete analytical solutions with our ready to-use reagents.

REUSABLE CUVETTES

Thanks to its integrated cuvette wash module and optical integrity monitoring system (Water Blank Level) SmartChem[®] platforms use technical polymer (and optical glass available on SmartChem[®]450) reusable cuvettes. This way cuvettes do not become a consumable in your laboratory allowing you to reduce single-use plastic waste and be more environmentally friendly.

APPLICATIONS

SmartChem[®] applications include:

- Water and environmental
- Soil, plants and fertilizers
- Food and feed
- Beverages, wine and beer
- Chemical



SMARTCHEM[®] SERIES FEATURES

- Automated start-up for instrument readiness.
- IF THEN driven test sequences.
- Samples are kept in discrete cells to reduce error.
- Automated, out-of-range retesting decision making.
- Integrated wash and control station before and after every analysis.
- Optimization of time-consuming techniques such as pH, Cond, ORP.
- Full LIMS integration available.

OPTIONS THAT FIT YOUR LABORATORY

SmartChem® analyzers are available in different configurations, running up to 600 tests per hour. Their versatile sample and method loading capacities, together with their optional analytical modules, allow a complete walkaway solution for your wet chemistry testing.



SmartChem® 210

- Up to 300 tests/hour
- Benchtop analyzer
- Up to 60 sample positions
- Up to 32 reagent positions

SmartChem® 450

- Up to 450 tests/hour
- Benchtop analyzer
- Up to 100 sample positions
- Up to 72 on-board reagents

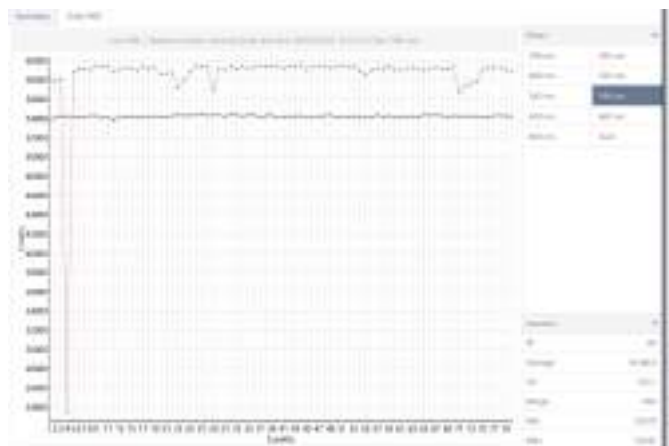
SmartChem® 600

- Up to 600 tests/hour
- Floor-standing analyzer
- Up to 200 sample positions
- Up to 100 on-board reagents

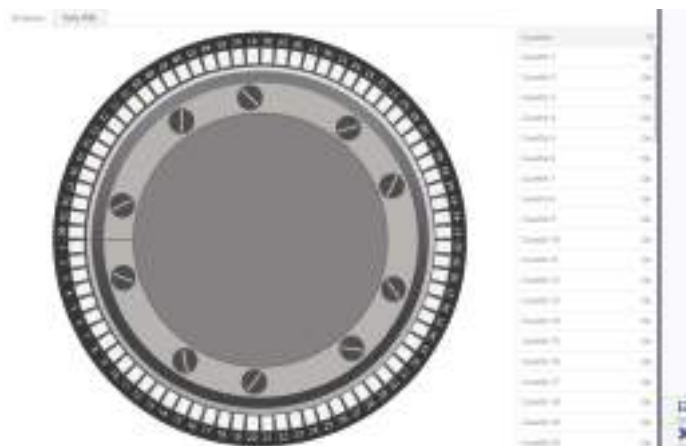
TRUE WALKAWAY SOLUTION

SmartChem® analyzers use reusable cuvettes via their built-in wash module, allowing a true walkaway experience for operators because there is no cuvette or similar consumable reloading required during the programmed analytical series. With the SmartChem® Series, you receive up to 200 samples of loading capacity, which means there is no limit to the number of tests you can run on each sample. There is always an optically checked and ready to use cuvette available after each wash cycle.

The SmartChem® wash module and cuvette analytical performance are tested in-house and in many locations where our analyzers operate daily, ensuring no cross-contamination. Additionally, special wash rules can be programmed for specific methods.



WBL optical check per wavelength



WBL optical readiness overview

EASY-TO-USE SOFTWARE

SmartChem® Series software makes operating your analyzer simple. The user interface fully replicates the instrument for the operator, making it easy to setup and run tests. After loading all required reagents, controls, calibrators and samples, the operator sets up the work plan, including any required IF-THEN testing and reflex testing iterations as per method or laboratory requirements. Once the test routine is finished, all results are presented in a report that can be exported to LIMS.



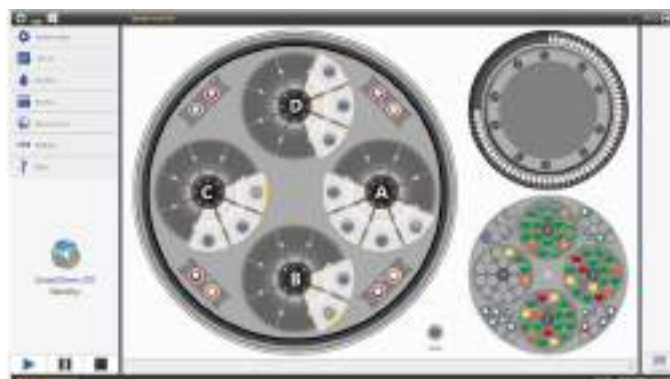
Calibration Curve



Workplan Setup

SmartChem® intuitive User Interface provides the operator a complete control and visualization of the instrument's operation and performance. SmartChem® 210, 450 and 600 platforms share the same software operation structure, meaning operators can exchange instruments without the need to learn new working modes. The SmartChem® Software suite allows a complete configuration to its different operators: from basic setup and operation to advance users and method configuration / development.

The latest versions of our SmartChem® 210, 450 and 600 are now equipped with an enhanced version of the software: the SmartChem® Pro. The software significantly improves the user experience in several ways, including a new simplified operator interface, improved operation flow, support of multiple test plans in one run, and most notably, a context-based troubleshooting guide with a library of videos and support documents to help users quickly identify the root cause of a problem.



SmartChem® 210 and SmartChem® 450 System Monitor



SmartChem® 600 System Monitor

COMPANION PRODUCTS



We offer a full range of enzymatic and colorimetric reagents dedicated to our SmartChem® series of discrete analyzers. Developed, tested and validated by our application laboratory, they will guarantee perfect stability and reproducibility of your analyses.

Very easy to use, they are liquid, supplied in specific bottles made for SmartChem®. This ready-to-go solution greatly simplifies the preparation of your analysis and facilitates the use and storage of reagents. It also secures your analyses with reagents adapted to your application and your instrument.



MODELS AND OPTIONS AVAILABLE

	EC Module	NO ₃ Reduction Module	Barcode Readers	Cuvettes
SmartChem®210		✓	<i>Optional:</i> Reagents and Samples	Technical polymer
SmartChem®450	✓		<i>Optional:</i> Reagents and Samples	Technical polymer / Optical Glass
SmartChem®450		✓		
SmartChem®600	✓		<i>Included:</i> Reagents and Sample	Technical polymer
SmartChem®600		✓		
SmartChem®600	✓	✓		

SPECIFICATIONS

	SmartChem® 210	SmartChem® 450	SmartChem® 600
Dimensions (W x D x H)	1050 mm x 700 mm x 500 mm (41.3 in x 27.6 in x 19.7 in)	1050 mm x 700 mm x 500 mm (41.3 in x 27.6 in x 19.7 in)	1200 mm x 700 mm x 960 mm (47.2 in x 27.6 in x 37.8 in)
Weight	48 kg (106 lbs)	48 kg (106 lbs)	115 kg (254 lbs)
Input Power	Voltage: 100-230VAC, 47-63Hz - Power: 350 Watts	Voltage: 100-230VAC, 47-63Hz - Power: 350 Watts	Voltage: 100-230VAC, 47-63Hz - Power: 430 Watts
Assay Type	End Point, Kinetic, Differential, Bi Chromatic Assays, Fully Programmable (pH, Conductivity, and ORP also available for 450 and 600 models)		
Reagents Capacity	32 positions	72 positions	100 positions
Sample Capacity	60 positions	100 positions	200 positions
Urgent Analysis	Allowed at any time		
Throughput	Up to 300 tests/hour	Up to 450 tests/hour	Up to 600 tests/hour
Optical System	UV-Vis Photometry with 9 wavelengths filter wheel.		UV-Vis Photometry with diode filter array (12 wavelengths)
Minimum Reaction Volume	300 µl	300 µl*	180 µl
Sampling System	One mechanical arm	One mechanical arm	3 mechanical arms (1 for samples and 2 for reagents)
Reaction Plate	60 cuvettes positions	80 cuvettes positions	85 cuvettes positions
Software	SmartChem® Pro	SmartChem® Pro	SmartChem® Pro

* cuvette type dependent

SmartChem[®] 200

AUTOMATED DISCRETE ANALYZER



Maximize Productivity for Routine and Special Chemistries

Wet chemistry is a proven method for analysis of samples in environmental, industrial, research, and quality control applications. The SmartChem[®] 200 Discrete Analyzer is a fully automated wet chemistry direct read platform for photometric and electrochemical analysis. The analyzer consolidates testing procedures into one platform and a simple process, removing tedious and repetitive tasks for the user. It also operates on less amounts of reagents, which benefits the lab and the environment. The SmartChem[®] 200 platform saves laboratory operators time and costs, and they receive accurate results from consistent, reproducible testing procedures.

SIMPLE, EFFICIENT & WORRY-FREE

Having to operate multiple analyzers for testing is a burden for lab operators, and most labs are moving away from time-consuming manual methods and opting for automated solutions. The SmartChem[®] 200 discrete analyzers are compact and easy to use, saving operators several hours of time per day and allowing them to complete other tasks. With the SmartChem[®] platform, all of the essential analysis steps are automated and the operator can walk away while testing procedures run. Workflows are easy to learn and once they are set-up and running, testing can proceed unattended. This improves throughput, optimizes uptime and improves staff productivity.

The SmartChem[®] 200 operates with a reusable, high purity synthetic optical cuvette system, eliminating compromised sample measurement. The system simplifies laboratory procedures in a short series of steps: load samples and reagents – set up the test – load the work program in the software – launch the routine – collect the results. SmartChem[®] cuvettes are washed after each use, making them available for the next reaction/measurement and reducing operator dependence on consumables and their availability.

APPLICATIONS

- Water and environmental
- Soil, plants and fertilizers
- Food and feed
- Beverages, wine and beer
- Chemical

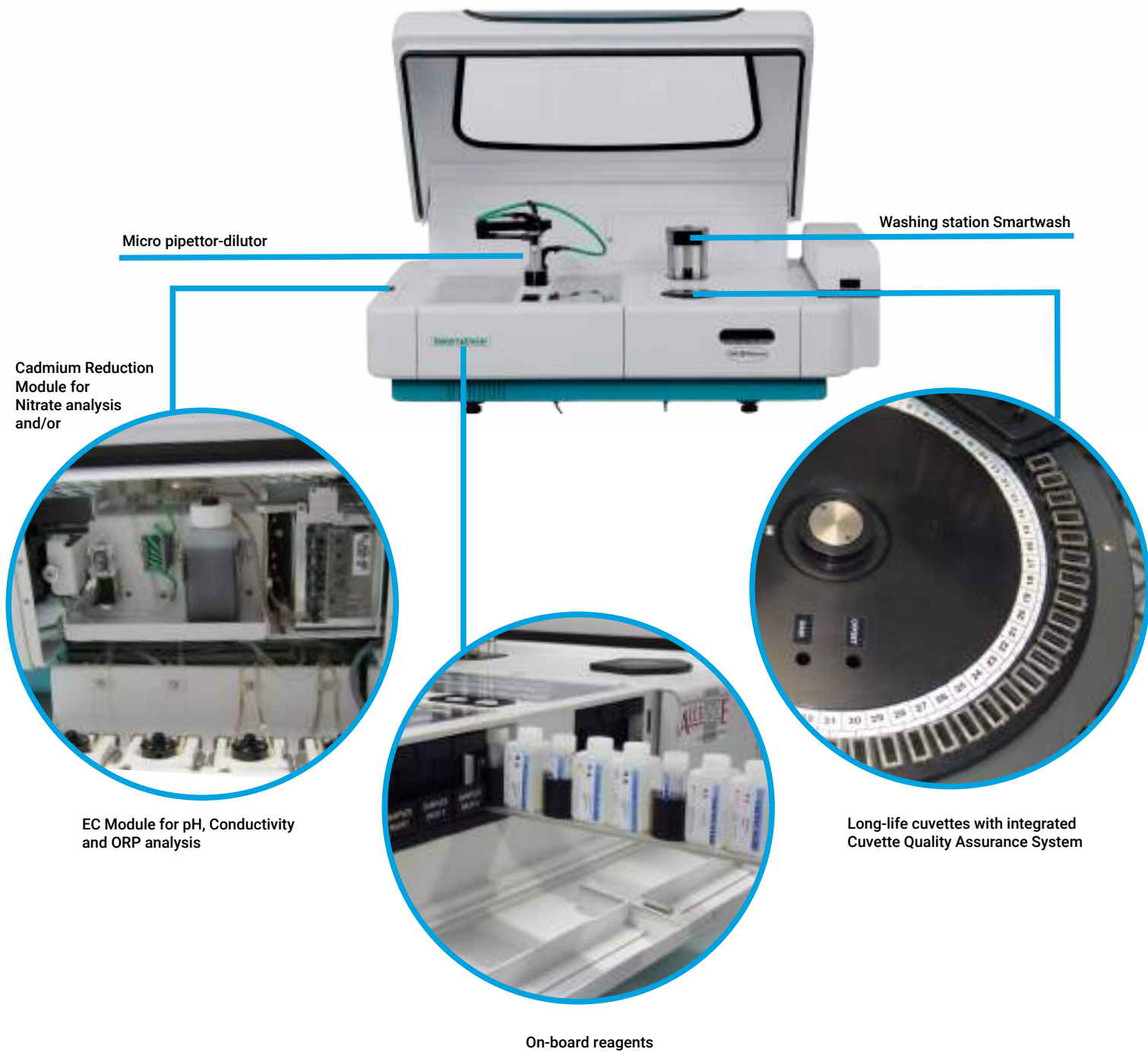


SMARTCHEM[®] 200 FEATURES

- Extensive physical chemical analysis.
- Multi-parametric, automated platform.
- Guaranteed stability, reproducibility and traceability with our ready-to-use dedicated reagents.
- Improved automation level – full LIMS integration.
- Programmable and monitored cuvette wash module.
- Reagent inventory system and liquid level sensing.

PERFORMANCE, FLEXIBILITY & PRECISION

The SmartChem® 200 is modular – configure the analyzer to suit your needs.



SmartChem® 200 software guides the user through the operating functions. Once the workplan is loaded into the software, the operator launches the routine and can walk away to focus on other tasks during the testing period. The graphical interface fully replicates the instrument as seen by the operator and makes all procedures easy.

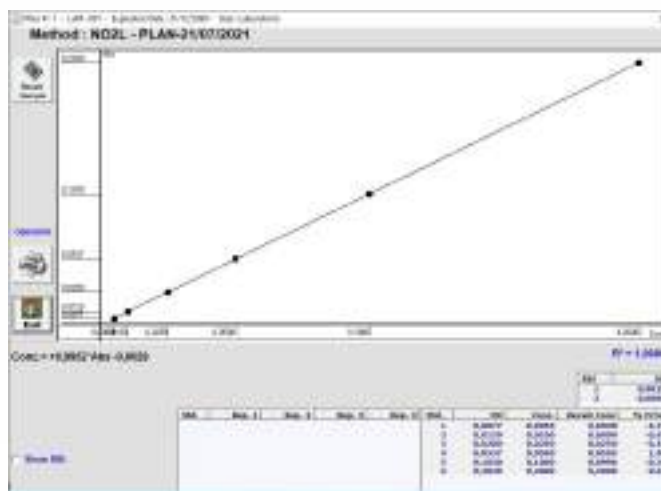


Loading samples, reagents, controls and calibrators is done using an exact digital replica of the instrument's panel and this allows the operator to immediately recognize all required steps.

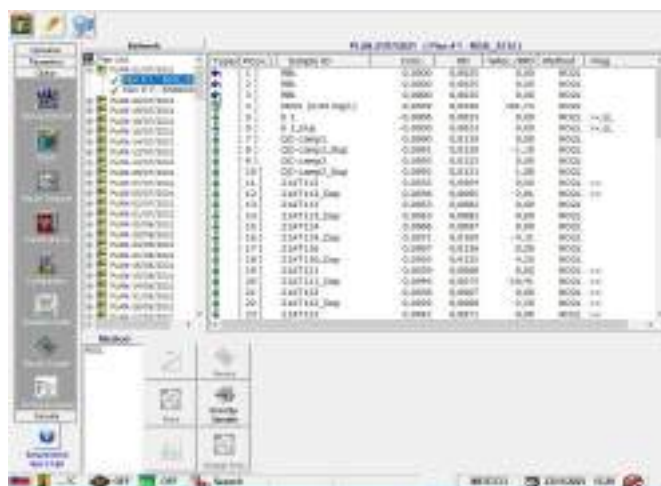
The screenshot shows the 'Basic Layout II' window in AutoCAD. The window contains a table with the following columns: Date, Time, Location, Status, Type, Value, Unit, and Total. The table data is as follows:

Date	Time	Location	Status	Type	Value	Unit	Total
11-10	00	1000			1.0		
11-10	00	1001			1.0		
11-10	00	1002			1.0		
11-10	00	1003			1.0		
11-10	00	1004			1.0		
11-10	00	1005			1.0		
11-10	00	1006			1.0		
11-10	00	1007			1.0		
11-10	00	1008			1.0		
11-10	00	1009			1.0		
11-10	00	1010			1.0		
11-10	00	1011			1.0		
11-10	00	1012			1.0		
11-10	00	1013			1.0		
11-10	00	1014			1.0		
11-10	00	1015			1.0		
11-10	00	1016			1.0		
11-10	00	1017			1.0		
11-10	00	1018			1.0		
11-10	00	1019			1.0		
11-10	00	1020			1.0		
11-10	00	1021			1.0		
11-10	00	1022			1.0		
11-10	00	1023			1.0		
11-10	00	1024			1.0		
11-10	00	1025			1.0		
11-10	00	1026			1.0		
11-10	00	1027			1.0		
11-10	00	1028			1.0		
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11-10	00	1030			1.0		
11-10	00	1031			1.0		
11-10	00	1032			1.0		
11-10	00	1033			1.0		
11-10	00	1034			1.0		
11-10	00	1035			1.0		
11-10	00	1036			1.0		
11-10	00	1037			1.0		
11-10	00	1038			1.0		
11-10	00	1039			1.0		
11-10	00	1040			1.0		
11-10	00	1041			1.0		
11-10	00	1042			1.0		
11-10	00	1043			1.0		
11-10	00	1044			1.0		
11-10	00	1045			1.0		
11-10	00	1046			1.0		
11-10	00	1047			1.0		
11-10	00	1048			1.0		
11-10	00	1049			1.0		
11-10	00	1050			1.0		
11-10	00	1051			1.0		
11-10	00	1052			1.0		
11-10	00	1053			1.0		
11-10	00	1054			1.0		
11-10	00	1055			1.0		
11-10	00	1056			1.0		
11-10	00	1057			1.0		
11-10	00	1058			1.0		
11-10	00	1059			1.0		

After having loaded all required reagents, controls, calibrators and samples, the operator is prompted to set-up the work plan, including any required IF-THEN testing as per method or laboratory requirements.



Calibration can be run automatically from the SmartChem® 200 software and it uses only a concentrated standard, because the analyzer will make the relevant dilutions as defined by the standard points in the calibration.



Once the test routine is finished, all results are presented in a report that can be exported to LIMS.

COMPANION PRODUCTS



We offer a full range of enzymatic and colorimetric reagents dedicated to our SmartChem® series of discrete analyzers. Developed, tested and validated by our application laboratory, they will guarantee perfect stability and reproducibility of your analyses.

Very easy to use, they are liquid, supplied in specific bottles made for SmartChem®. This ready-to-go solution greatly simplifies the preparation of your analysis and facilitates the use and storage of reagents. It also secures your analyses with reagents adapted to your application and your instrument.

MODEL AND OPTIONS AVAILABLE

	Analytical Module	Barcode Readers	Cuvette
SmartChem® 200	NO3 Reduction Module and/or EC Module	Optional: Samples	Technical Polymer

SPECIFICATIONS

Dimensions (W x D x H)	1000 mm x 650 mm x 420 mm (39.4 in x 25.6 in x 16.5 in)
Weight	65 kg (144 lbs)
Input Power	Voltage: 100-230VAC, 47-63Hz - Power: 350 Watts
Assay Type	End Point, Kinetic, Differential, Bi Chromatic Assays, Electrochemical Testing (Optional), Fully Programmable
Reagents Capacity	16 positions
Sample Capacity	126 positions
Urgent Analysis	Allowed at Any Time
Throughput	Up to 200 Tests/Hour
Optical System	UV-Vis Photometry with 9 wavelengths filter wheel.
Minimum Reaction Volume	300 µl
Sampling System	One mechanical arm
Dilutor	Automatic Dilution in Pre- and Post-Dilution
Reaction Plate	60 cuvettes positions
Software	SmartChem® 200 software



NexaFlo™ Series

SMART SEGMENTED FLOW ANALYSIS PLATFORM



Next Generation Segmented Flow Analyzer Technology

Leveraging our decades of experience in wet chemistry analysis, the NexaFlo™ Series is the next-generation Segmented Flow Analyzer based on the popular AMS FUTURA platform. NexaFlo™ addresses the health and safety needs of today's modern laboratory with advanced capabilities developed from our decades of experience working with labs and understanding their daily challenges.

NexaFlo™ intelligent console features more sensors, a real-time LED instrument health status indicator, diagnostic tools, and improved hardware for better serviceability, giving users more confidence in their results and system performance.

FULL AUTOMATION AND MODULARITY

NexaFlo™ can be integrated with our full automation module, allowing start-up and shutdown to be completed autonomously from a designated PC. This enables unattended testing without compromising reagent overuse.

NexaFlo™ configurations can be built with up to 14 consoles (independent analytical channels), allowing for all levels of complexity to be managed for your laboratory.

NexaFlo™ has been designed to operate with high productivity and efficiency for all chemistries – from simple to the most complex analysis.

APPLICATIONS

Laboratories use NexaFlo™ to perform tests on important parameters in water and soils (drinking, waste, surface, sea and ground water), tobacco, and beverages such as:

Drinking Water	Waste Water	Sea Water	Soil /Fertilizer	Tobacco	Wine	Dairy
Ammonia					Enzymatic sugars	Nitrate
Nitrates/Nitrite, TKN				Nitrite	Free Total SO ₂	Nitrite
Phosphate, TP, TN				Cyanide	Volatile acidity	Formaldehyde
MBAS	Silicates	Cr	Starch	Reducing sugars		
Phenol	Chloride	K	Sorbic Acid			



NEXAFLO™ FEATURES

- Includes a unique reagent containment solution that prevents solvent vapor accumulation and reagent spillage.
- LED instrument health status indicator improves usability and simplifies maintenance.
- Method-dedicated analytical console approach.
- Up to 14 consoles can be run simultaneously.
- Integrated color touchscreen display to monitor and adjust your method and chemistries (available with the NexaFlo™ 450).
- Three-speed, high-precision pump.
- Choice of macro and micro flow manifolds.
- Optional dual probe on all autosamplers.
- Physical and software driven debubbling.
- Wide range of samplers and accessories.
- Compliance with reference methods.



EFFICIENCY AND PRODUCTIVITY

Full automation of all chemistries is handled by in-line pre-treatment and 100% automation: dialysis, distillation, UV digestion, injection, dilution, mixing, incubation and liquid/liquid extraction.

The automation of complex chemistries is facilitated by the «full auto» module (optional), which automatically handles the external modules and accessories. This operation is easy to run using NexaFlo™ software.

The fully automated process includes programmable start-up and shutdown, preparation of standard solutions, pre- and post-dilution of off-range samples, and automatic rinsing. NexaFlo™ combines automation and modularity for superior performance.



- New compact design. Improved accessibility for servicing.
- Bubbles rate sensor and management.
- Touchscreen LED 7 in. display (NexaFlo™ 450 only).
- Manifold leak detector.
- Multiple path length flow cells 10 to 50 mm (longer path lengths can be defined) for a wide variety of analytical ranges, which guarantees the best accuracy (according to the parameter).
- Digestion or in-line distillation modules for automatic sample preparation.
- 3 detectors available:
 - UV/Vis colorimeter (in standard)
 - Flame photometer for Potassium and Sodium analysis
 - Fluorimeter

NexaFLO



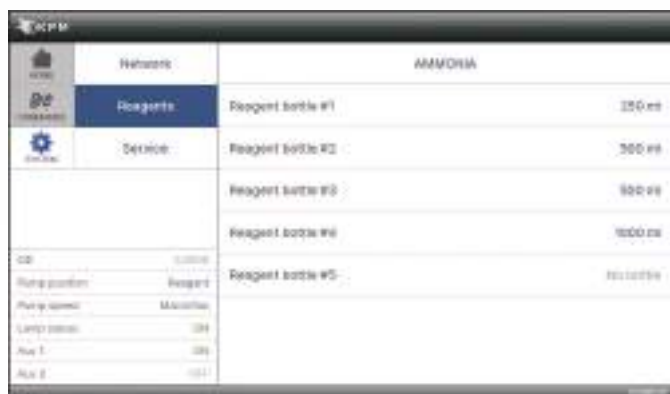
NEXAFLO™ SOFTWARE



The NexaFlo™ analytical software is dedicated to Segmented Flow Analysis, a subsegment of Continuous Flow Analysis (CFA) technology. It prepares calibration standards, runs samples and quality controls, dilutes any out-of-range samples, prints reports and QC charts, exports data to LIMS, washes out the manifold and manages shutdown operations.

The software is user-friendly, efficient and powerful, designed to simplify your day-to-day operations. It runs the analysis of all parameters on each channel (up to 14 channels) and drives auto-samplers and accessories for automatic sample preparation. A simplified version of the NexaFlo™ software is run on NexaFlo™ 450 with a color display for easier diagnostics, maintenance, device setup, significantly improving the user experience.

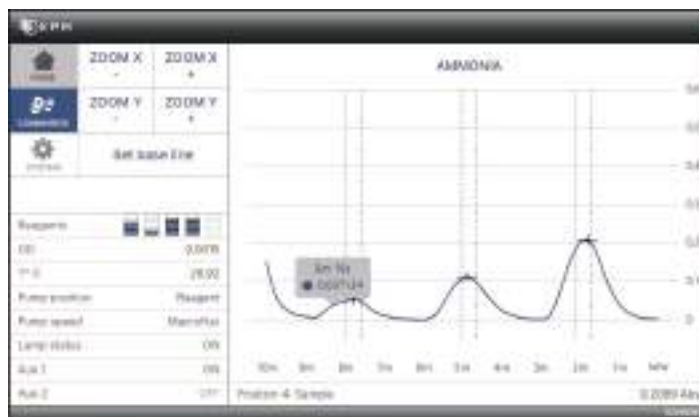
During analysis, the software monitors all performance details (heating bath temperature, voltages, detector outputs) and alerts the user of any problems.



Reagent Configuration



Reagent Levels



Workplan Results

AUTOSAMPLERS

	Number of positions	Dual probes	Dilutor	Ultrasonic processor
104	104	Optional ¹	Optional	Optional
XYZ	240/360 for 10mL tubes	Optional ²	Optional	-

¹ Up to 4 probes ² Up to 3 probes

ACCESSORIES



In-line digestion by Temperature or UV

Distillation module with integrated temperature regulation, for single and double in-line distillation. For use in applications such as cyanides, phenols index, volatile acidity and SO₂.

DETECTORS

UV - Vis Colorimeter	Standard	
Flame Photometer	Optional	Na and K analysis
Fluorimeter	Optional	

MEASUREMENT

Analytical Manifold	Injection, Dilution, Mixing, Incubation, Distillation, Dialysis, UV Digestion, Liquid/Liquid Extraction
Colorimeter	Standard Range: 340 - 1100 nm Type: Monochromatic or dichromatic Analog/Digital Converter Resolution: 24 bits (16.8 Million Points) Optical Path: From 10 to 50 mm (longer path lengths can be defined) Linearity: From 0 to 2.5 Absorbance Units Debubbling: Mechanical or electronic control; built-in bubble detector

SPECIFICATIONS

	NexaFlo™ 400	NexaFlo™ 450
Dimensions (W x D x H) (console)	220 mm x 600 mm x 350 mm (8.66 in x 23.6 in x 13.8 in)	
Weight	15 kg (33 lbs)	
Input Power	Voltage: 100-230VAC, 47-63Hz - Power: 120 Watts	
Local display	None	7 in. color touchscreen
Software	NexaFlo™ Software (PC)	NexaFlo™ Software (PC and Console)
LED system health	Yes	
Leakage detectors	Yes	
Bubble detectors	Yes	
PC Operating system	Windows 11	
Reagent drawer	Up to 5 reagents with integrated reagent level sensing	
Main pump	3-Speed	
Integrated heating bath	Optional	
Detector type	UV/VIS colorimeter (default), flame photometer, fluorimeter	
Flow cell	10 mm to 50 mm path length (longer path lengths can be defined)	
Networking	LIMS compatible, Ethernet	
Temperature	0 - 35 °C (32 - 95 °F)	
Humidity	0 - 95% non-condensing	

iCinac Series

ACIDIFICATION ANALYZERS



Analysis of Lactic Acid Bacteria (LAB) Associated with Cultures and Fermented Foods

The iCinac analyzer is the only solution designed specifically to monitor and analyze the acidification activity of lactic ferments in starter, functional, bio-protective, and probiotic cultures. It has the ability to test multiple samples simultaneously and provide the insight needed for precise development, test, and process control of fermentation ingredients. The appropriate inocula can be defined and controlled by characterizing the acid formation of a specific phylum and knowing the specific test parameters' influence. Additionally, the iCinac meets ISO 26323|IDF 213, the industry standard for determining dairy cultures' acidification activity by continuous pH measurement.

FLEXIBLE AND SCALABLE

The iCinac is modular and scalable in multiple ways. Both wired and wireless versions are portable and can be configured with one to many digital electrodes. As experiments change, electrodes can be added or removed from the system with ease. The wired version of iCinac can also be optioned with up to 32 analog and digital outputs, which allow control for external equipment such as water baths.

SIMULTANEOUS PARAMETER MONITORING

The iCinac digital electrodes enable unique simultaneous monitoring of pH, temperature, and Oxidation Reduction Potential (ORP). Each electrode or channel is independently monitored while providing full control and insight into each experiment.

COMPLETE DESCRIPTION OF STUDIED STRAINS

In addition to simultaneous monitoring of pH, temperature, and ORP for each sensor, the iCinac calculates the rate of pH change. Complex multivariate data analyses are integrated and performed automatically with the unique 'feature points' menu. The iCinac software calculates feature points of the studied strain in real-time. This allows users to define the feature points to match the specific application. Examples include pH4H, pH6H, time required to obtain pH5, maximum speed, and time during which the speed exceeded 50% of the maximum speed.



ANALYZE CULTURES ASSOCIATED WITH:

- Dairy
- Sourdough
- Meat
- Fish
- Fruit
- Vegetables

ICINAC FEATURES

- Only solution designed for acidification activity of lactic ferments.
- For process studies, development, and control.
- Test multiple samples simultaneously.
- Scalable - Up to 32 channels with wired version, and 16 channels with wireless version.
- Easy to use software.
- Meets ISO 26323 | IDF 213.



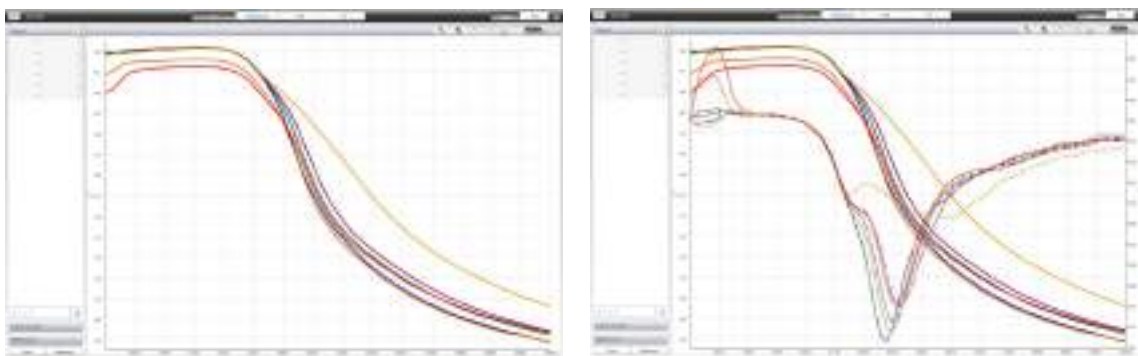
- Manage the temperature compensation.
- Monitor and track trial set points.
- Drive your water baths.
- Calculate all your feature points.
- Save all data in real time.
- Draw a variety of curves.
- Monitor the calibration history of the pH electrodes.
- Create and manage your libraries (average curves, standard deviation, etc.).



By programming a thermal cycle, users can reproduce or simulate the changes in process conditions (e.g., variations in temperature or pH) and use the graphs or descriptors to compare the potential effects on the phylum studied.

FEATURE POINTS EXPLANATION

The iCinac software can perform complex multivariate analyses of the trial curves in order to extract key characteristics of the curve associated with the kinetics of the fermentation. Feature points are useful in comparing the effects of variations in standard conditions on the overall acidification kinetics. Most common feature points for the determination of acidification activity are automatically programmed within the software, but a variety of feature points are user-customizable in order to automatically extract the most useful data from the specific fermentation curves being analyzed.



Real time graphical presentation of data and integrated preprogrammed data analysis capabilities display the key characteristics of the studied strain without additional user input. Users can create average curves to build a reference database to overlay and compare with new trials. And, personalized profiles can be created for ultimate characterization of the trial activity.

Tabular display of feature acidification characteristics for each curve can be automatically extracted from the raw data for simplified data analysis.

Category		Item	Unit	Price	Quantity	Total
Food	Meat & Poultry	1. Chicken	kg	12.50	2.00	25.00
		2. Beef	kg	15.00	1.50	22.50
		3. Pork	kg	10.00	3.00	30.00
		4. Fish	kg	8.00	2.50	20.00
		5. Eggs	doz	5.00	4.00	20.00
		6. Milk	l	1.50	10.00	15.00
		7. Bread	kg	2.00	5.00	10.00
		8. Rice	kg	3.00	3.00	9.00
		9. Sugar	kg	4.00	2.00	8.00
		10. Oil	l	6.00	1.00	6.00
Food	Vegetables & Fruits	11. Fruit	kg	7.00	1.00	7.00
		12. Vegetable	kg	4.00	1.00	4.00
		13. Nuts	kg	10.00	0.50	5.00
		14. Seeds	kg	5.00	0.50	2.50
		15. Spices	kg	12.00	0.50	6.00
		16. Herbs	kg	8.00	0.50	4.00
		17. Mushrooms	kg	6.00	0.50	3.00
		18. Onions	kg	3.00	1.00	3.00
		19. Potatoes	kg	2.00	1.00	2.00
		20. Carrots	kg	1.50	1.00	1.50
Food	Grains & Legumes	21. Cucumbers	kg	1.00	1.00	1.00
		22. Tomatoes	kg	1.50	1.00	1.50
		23. Peppers	kg	2.00	1.00	2.00
		24. Beans	kg	1.00	1.00	1.00
		25. Lentils	kg	1.00	1.00	1.00
		26. Chickpeas	kg	1.00	1.00	1.00
		27. Corn	kg	1.00	1.00	1.00
		28. Quinoa	kg	1.00	1.00	1.00
		29. Buckwheat	kg	1.00	1.00	1.00
		30. Amaranth	kg	1.00	1.00	1.00
Food	Dairy & Eggs	31. Teff	kg	1.00	1.00	1.00
		32. Sorghum	kg	1.00	1.00	1.00
		33. Millet	kg	1.00	1.00	1.00
		34. Oats	kg	1.00	1.00	1.00
		35. Barley	kg	1.00	1.00	1.00
		36. Rye	kg	1.00	1.00	1.00
		37. Wheat	kg	1.00	1.00	1.00
		38. Speltz	kg	1.00	1.00	1.00
		39. Emmer	kg	1.00	1.00	1.00
		40. Farro	kg	1.00	1.00	1.00
Food	Bakery & Confectionery	41. Bulgur	kg	1.00	1.00	1.00
		42. Dalia	kg	1.00	1.00	1.00
		43. Semolina	kg	1.00	1.00	1.00
		44. Couscous	kg	1.00	1.00	1.00
		45. Orzo	kg	1.00	1.00	1.00
		46. Farfalle	kg	1.00	1.00	1.00
		47. Penne	kg	1.00	1.00	1.00
		48. Fusilli	kg	1.00	1.00	1.00
		49. Tortellini	kg	1.00	1.00	1.00
		50. Ravioli	kg	1.00	1.00	1.00
Food	Desserts & Snacks	51. Cannelloni	kg	1.00	1.00	1.00
		52. Lasagna	kg	1.00	1.00	1.00
		53. Spaghetti	kg	1.00	1.00	1.00
		54. Macaroni	kg	1.00	1.00	1.00
		55. Shell	kg	1.00	1.00	1.00
		56. Farfalle	kg	1.00	1.00	1.00
		57. Bowtie	kg	1.00	1.00	1.00
		58. Triangles	kg	1.00	1.00	1.00
		59. Butter	kg	1.00	1.00	1.00
		60. Margarine	kg	1.00	1.00	1.00
Food	Beverages & Alcoholic	61. Shortening	kg	1.00	1.00	1.00
		62. Lard	kg	1.00	1.00	1.00
		63. Tallow	kg	1.00	1.00	1.00
		64. Ghee	kg	1.00	1.00	1.00
		65. Clarified Butter	kg	1.00	1.00	1.00
		66. Vinegar	l	1.00	1.00	1.00
		67. Soy Sauce	l	1.00	1.00	1.00
		68. Ketchup	l	1.00	1.00	1.00
		69. Mustard	l	1.00	1.00	1.00
		70. Mayonnaise	l	1.00	1.00	1.00
Food	Miscellaneous	71. Jam	kg	1.00	1.00	1.00
		72. Jelly	kg	1.00	1.00	1.00
		73. Syrup	l	1.00	1.00	1.00
		74. Honey	l	1.00	1.00	1.00
		75. Maple Syrup	l	1.00	1.00	1.00
		76. Cocoa Powder	kg	1.00	1.00	1.00
		77. Baking Soda	kg	1.00	1.00	1.00
		78. Baking Powder	kg	1.00	1.00	1.00
		79. Vanilla Extract	l	1.00	1.00	1.00
		80. Food Coloring	l	1.00	1.00	1.00

UP TO 32 MEASUREMENT CHANNELS & OUTPUTS

The wired iCinac system comes in either 16 or 32 channel versions scaling to your needs. All or a subset of the measurement electrode inputs can be used during a test. The optional control outputs provide flexibility to match your lab equipment by coming in three forms: 4 - 20mA analog, 0-10VDC analog, and digital in any combination.



Wired Advantages

- Integrated touchscreen industrial panel PC.
- 16 or 32 channel capacity.
- Optional output assembly and accessories to control external equipment or conditions.



CONVENIENCE AND FREEDOM OF WIRELESS

The iCinac Wireless uses the same digital electrode as the standard iCinac, but with the added convenience of a wireless transmitter with coverage up to 60 meters (indoors). Potential interference is avoided, and distance is maximized with a wide range of automatically selected 2.4GHz channels. The receiver is a USB device that operates with your PC and the installed software. To keep you informed during testing, data is transmitted and analyzed in real-time. On a single PC, up to two receivers can be connected, allowing up to 32 wireless transmitters to be managed by a single PC. And the rechargeable batteries along with the optional multi-transmitter charger ensures your system stays operational.

Wireless Advantages

- Lithium-ion rechargeable batteries.
- Optional multi-transmitter charger.
- USB receiver and software used with your PC.
- Up to 16 transmitters and electrodes.
- Transmitters can be used with the wired unit (standard probes connected by cables).





Ordering Information

MODELS AVAILABLE

Part Number	Description
16-03342-00	iCinac 16 Channel System
16-03342-01	iCinac 32 Channel System

OPTIONS AND ACCESSORIES FOR ICINAC WIRED VERSION

Part Number	Description
05-03360-00	Base required to house individual analog and digital input and/or output modules
05-03357-00	Optional iCinac digital output module. 4 outputs (green).
05-03358-00	Optional iCinac analog output module. 2 outputs (blue). 4-20 mA.
05-03359-00	Optional iCinac analog output module. 2 outputs (red). 0-10VDC.
FA17604	Input temperature module for PT100
FC12679	PT100 temperature electrode

SYSTEM COMPONENTS – WIRELESS VERSION

Part Number	Description
05-05457-00	iCinac Wireless transmitter with rechargeable Li-ion battery. 1 to 16 transmitters per receiver and license.
05-05489-00	iCinac Wireless receiver, software, and license
10-05475-00	Optional iCinac wireless charger for up to five transmitters

SYSTEM ELECTRODES – FOR BOTH ICINAC SYSTEMS

Part Number	Description
30027775	InLab® Smart Pro-ISM electrode for iCinac (pH/ORP/temp)
30429195	InLab® Smart Basic ISM electrode for iCinac (pH/temp)

SPECIFICATIONS

iCinac Wired Version	
Dimensions W x D x H	510 mm x 450 mm x 300 mm (20 in x 17.7 in x 11.8 in)
Weight	11 to 13 kg depending on layout (24.25 lbs to 28.7 lbs)
Input Power	Voltage: 12VDC - Power: 96 Watts
iCinac Wireless Version	
Transmitter Dimensions	52mm diameter x 133mm length (2" x 5.2")
Transmitter Battery	25-watt-hour rechargeable Li-ion
Time Between Charges	Typically 25 days under normal operation
Battery Charge Time	Approximately 5 hours (2 hours to 60%) with optional charger
Wireless Range	up to 60 meters (indoors)
Minimum PC Requirements	Windows® 10 OS, Intel® Core™ i5, 8GB RAM, 2 USB ports
Compliance	EMC EN 61326-1 and FCC Part 15; Safety EN 61010-1

*maximum transmission distance is dependent on installation site

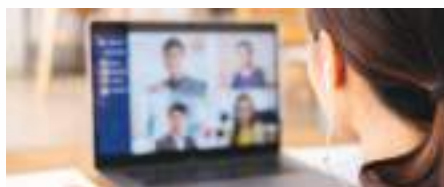
Committed to Keeping Your Operation Seamless, from Start to Finish

At KPM Analytics, our focus is to provide your organization with end-to-end support through our highly skilled customer service teams and worldwide network of distributor partners. Each instrument and application are matched with specific support offerings to get the most out of your investment, including:



Field Service Commissioning & Training

KPM's team of qualified service engineers offer professional guidance and expertise to ensure a seamless process.



Remote Commissioning

For some instruments, remote commissioning provides a simpler, cost-effective method to ready your KPM technology for use.



Remote Support & Troubleshooting

To minimize downtime, remote support from KPM is available to help companies quickly correct issues and save costs.



Annual Calibration & Preventive Maintenance

KPM offers various annual services (in field & depot) to ensure equipment is running at factory standards.



Depot Repair at Global Service Centers

For issues that cannot be addressed on-site or remotely, our worldwide Depot network is available to quickly inspect, repair, and return your equipment in a timely manner.



Training Collateral

From "Best Practice" recommendations to quick startup and maintenance guides, KPM provides customers with the tools they need to succeed.



KPM ACADEMY

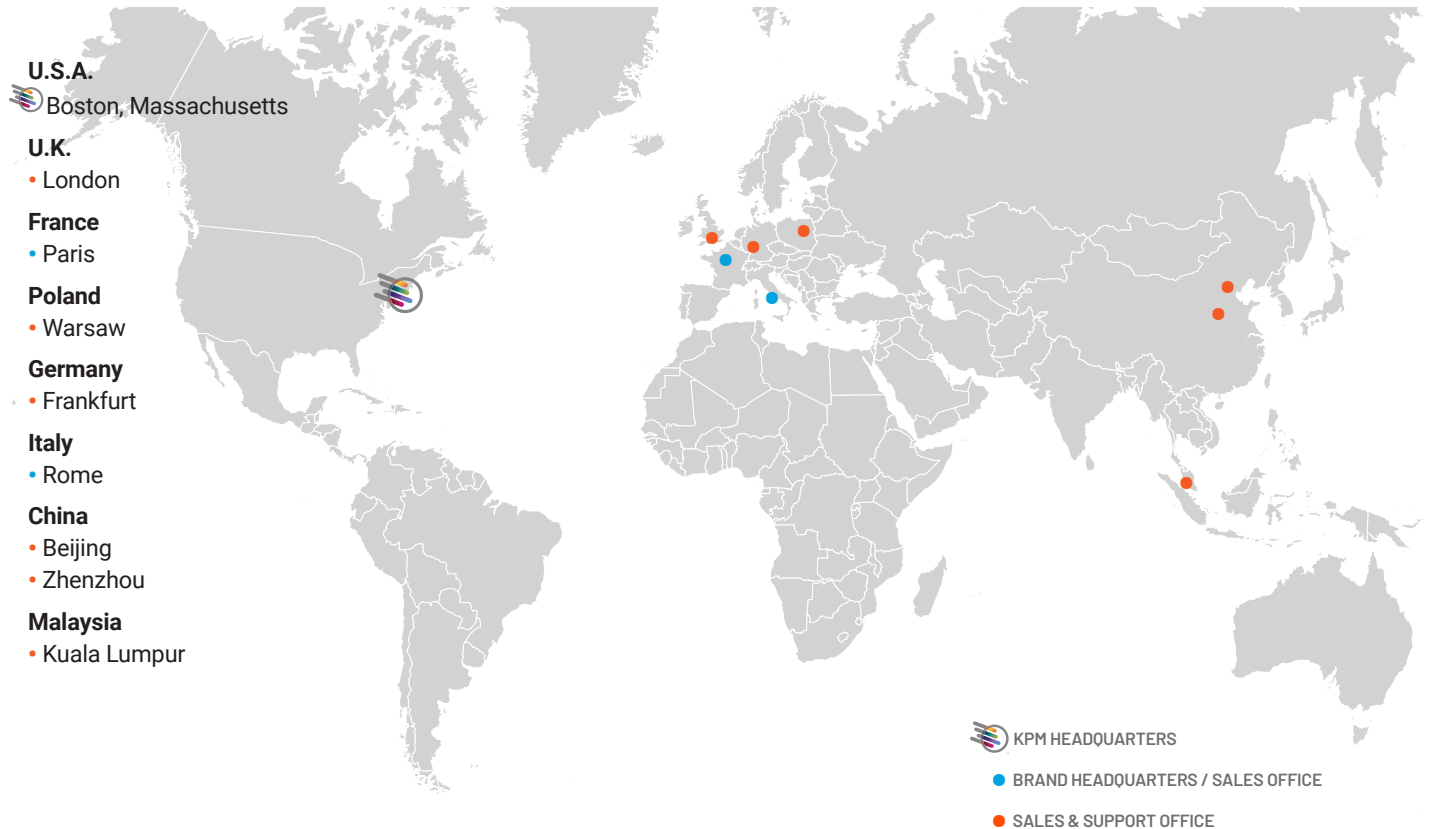


ON-DEMAND COURSES FOR KPM PRODUCT BRANDS

The KPM Academy is an online education platform that provides product training and maintenance support for our broad range of analysis solutions. Your KPM Academy license includes:

- Product training from the experts.
- Staff training for new-hires or cross-training employees.
- Refresher training.
- Procedure updates, including preventive maintenance.
- Courses on-demand.

KPM LAB SOLUTIONS - SERVICE & SUPPORT NETWORK



Working with KPM means you have a partner for the life of your equipment and beyond.
Let's discuss how we can help you solve production challenges and protect your brand value.

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