

TECHNOPATH

FOOD & BEVERAGE SOLUTIONS

**Indicator
Organism
Testing**



**Sample Handling
& Hygiene
Monitoring**



**Sampling
Competency**



**Rapid
Microbial
Testing**



**Allergen
Screening
& Detection**



**Molecular
Methods
(Pathogen
Detection)**



**Milk Quality
& Residue
Screening**



**Bench NIR
Analysers**



**Wet Chemistry
Analysis**



DIPLOMA PLC
VALUE-ADD SOLUTIONS

Diploma PLC are a international, dynamic, value-add distribution Group organised across three sectors: Controls, Seals and Life Sciences. Our agile and decentralised businesses operate across North America, UK, Europe and Australia to deliver value-add solutions.

As part of Diploma Life Sciences, the **Technopath** and **Accuscience** businesses deliver the technical expertise, specialist knowledge, and close relationships to deliver the value-add solutions our customers need. Technopath and Accuscience’s product offerings are supported by their combined applications, service and customer support teams.



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Co Kildare, W91 XF79, Ireland
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Fort Henry Business Park, Ballina,
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part of **DIPLOMA** LIFE SCIENCES

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BROUGHT TO YOU BY: TECHNOPATH



OUR PURPOSE

TECHNOPATH Distribution Ltd is a specialised value adding distributor, supplying essential products and services to the IVD, Medical and Scientific (Pharma, Life Sciences & Research and Food/Beverage) Sectors across Ireland and the UK.

Our headquarters is nestled in the scenic location of Ballina Co. Tipperary, from here we are able to locally support our customers all over the UK and Ireland to provide timely delivery, temperature controlled shipping and technical support in all areas of our business.

Our purpose is to deliver exceptional product and service solutions helping our customers achieve outstanding results.



OUR PEOPLE

Superior Customer Service & Support

The customer is at the forefront of everything we do and that is why we source the highest quality products, while providing technical expertise and superior support and service.

We believe that the core strength of our company lies in the level of expertise and technical knowledge evident in our workforce.

TECHNOPATH offers full technical support, applications specialist and field service engineering for each of our product lines.

Our people are all experts in their field and will be able to answer any technical questions you may have.

OUR FACILITIES

Temperature Controlled Storage & Shipping

Our purpose built 7000 sq ft warehouse offers solutions that are fully integrated and meets world class service levels.

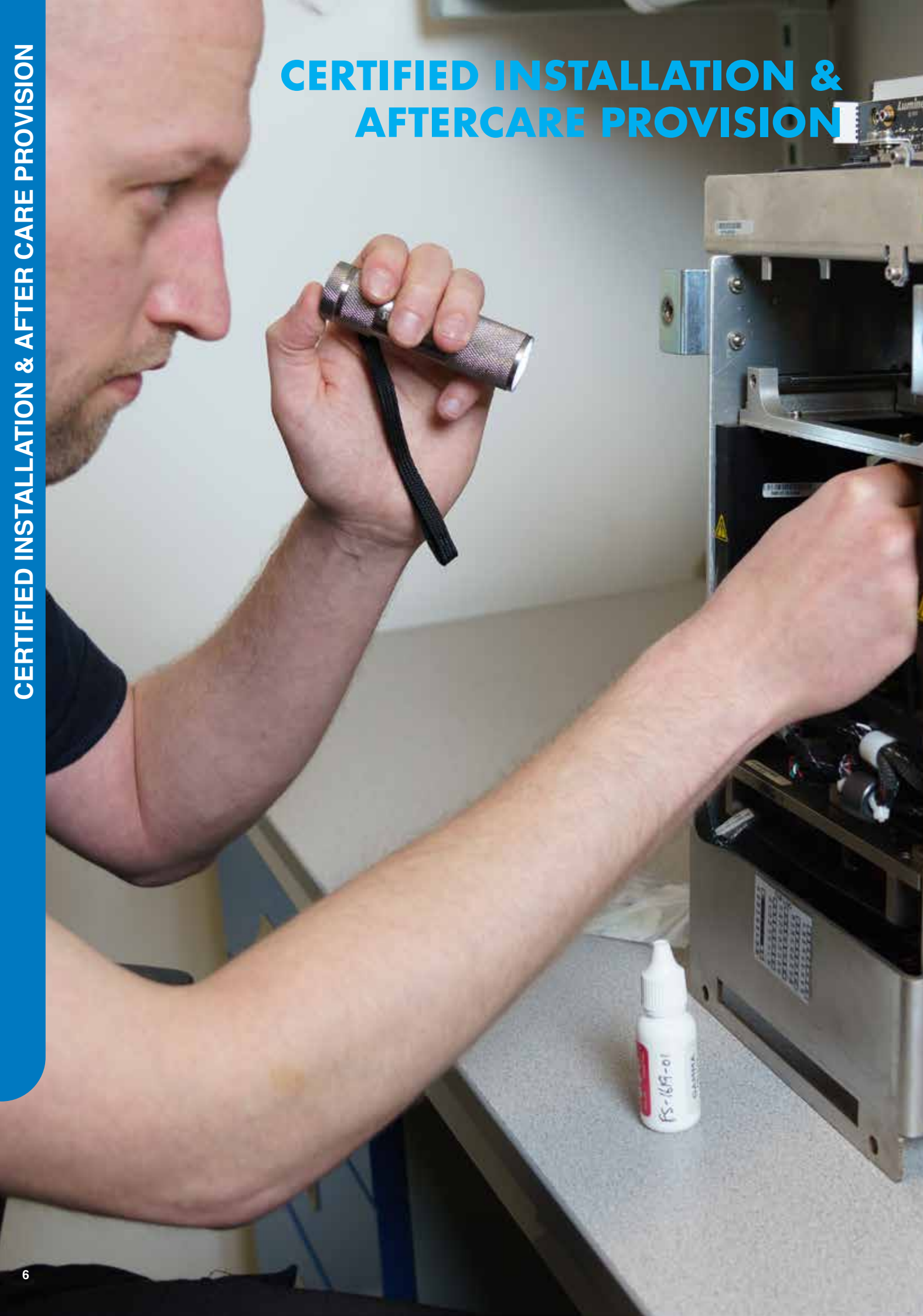
Our temperature controlled storage rooms can achieve multiple temperature requirements needed for protecting the integrity of the temperature sensitive industry products.

- ✓ 2°C to 8°C temperature controlled room
- ✓ 15°C to 25°C temperature controlled room
- ✓ -20°C, -30°C, -80°C freezers

Our operations are GTIN (GS1) compatible and certified to ISO 13485, ISO 9001 and GDP certified by the HPRA (IRE) to meet the exacting needs of all the Healthcare, Pharmaceutical, Food, Dairy and Life Science customers that we serve.



CERTIFIED INSTALLATION & AFTERCARE PROVISION

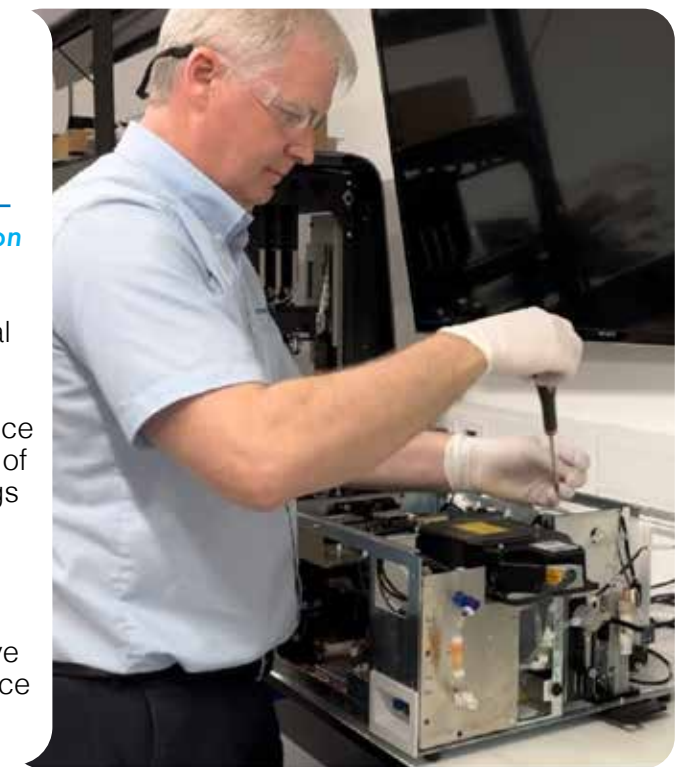


Servicing & Technical Support

Certified installation and after sales service provision for all instrumentation

Effective installation and efficient after sales technical support of instrumentation is a key element of the Accuscience and Technopath's combined service offering. We have a dedicated engineering and service management team providing a comprehensive suite of preventative maintenance and repair service offerings covering our complete instrumentation portfolio.

Our team of highly trained engineers is supported by a team of dedicated Service Co-Ordinators who liaise directly with customers to schedule preventative maintenance and repair visits and manage any service related enquires.



Our Services:

- ✓ Site Surveys and installation planning
- ✓ IQ/OQ
- ✓ Suite of preventative maintenance programs
- ✓ Calibration services
- ✓ Breakdown and repair services
- ✓ Technical support and training
- ✓ Nationwide coverage
- ✓ Certified engineers
- ✓ Certified reports, documentation and certification
- ✓ Telephone, in-House and on-site support



Sample Handling



Better testing begins with better samples — and better samples are obtained when you use better collection tools. With a full line of quality products, Neogen® makes environmental testing and product sampling easy and convenient. The tools and processes you choose when creating a prevention-based monitoring program matter. Subpar solutions can put your customers, reputation and business at risk.

Give your program the advantage of sponges, swabs, bags and preparation tools from Neogen for consistent and efficient testing.

Sample & Collection Devices

Neogen sample collection products are designed for simple, effective sampling. The Neogen Environmental Scrub Sampler features wide-spectrum neutraliser for common sanitisers.

Transport

Choose from a wide variety of durable and easy-to-open bags for use during transport to testing lab.

Prepare

Standardise testing results with a wide variety of prepared media, in convenient flip-top vials, pouches or bottles.



Surface Sampling Competency



Data collected from environmental sampling of surfaces is highly dependent on the operator. Understanding and quantitatively characterising the percent recovery and consistency of sample collection by an operator drives improved detection and prevention of pathogens. Performance verification involves determining the percent recovery and consistency of an operator who collects samples in an environmental sampling program.

Enverify™ Performance Verification Kit

Introducing Enverify™ from Stratix Labs, a quantitative positive control for environmental sampling programs and comprises a flat substrate with a specific quantity of viable microorganisms coated on the surface. The microbes are safe-to-handle and are coated across a 10 cm x 10 cm area.

Enverify™ provides a standardised tool for hands-on training and performance verification of operators that collect samples in environmental sampling programs. Enverify™ is compatible with contact plates, swab sampling devices, and sponge sample devices.

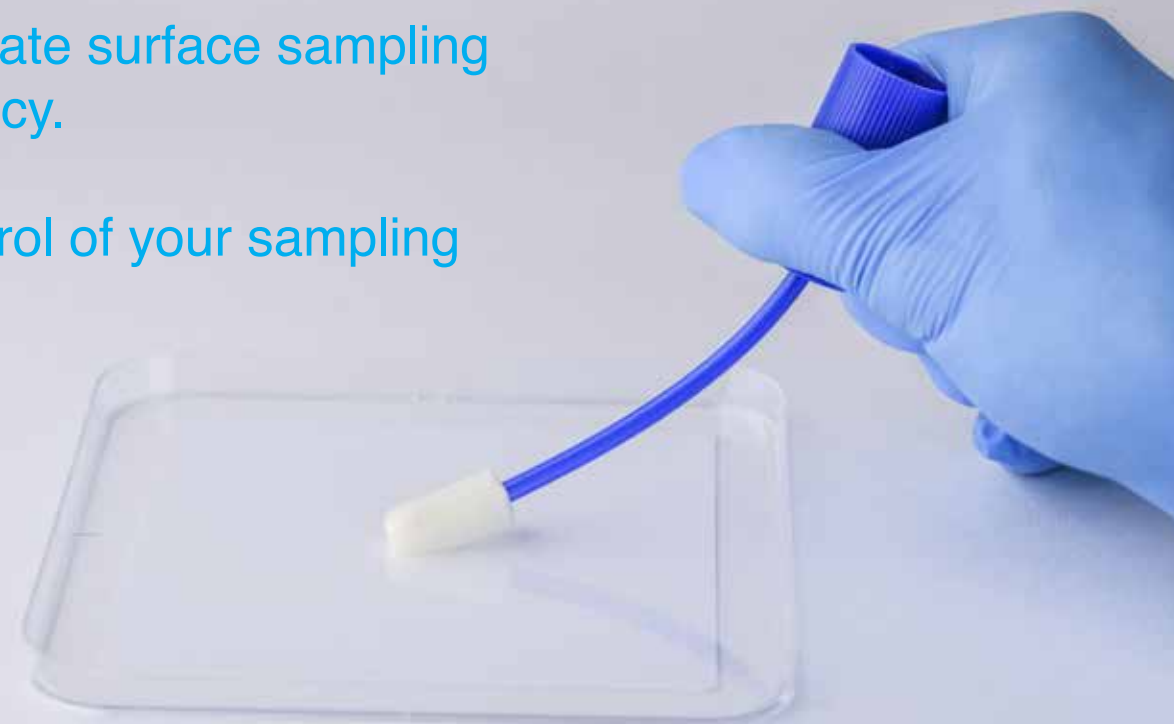


Activities involving environmental sampling:

- ▶ Environmental monitoring for pathogens or indicator organisms
- ▶ Sanitation verification using ATP or indicator organisms
- ▶ Verification of hygienic restoration following adverse events
- ▶ Verification of containment during construction activities

Demonstrate surface sampling competency.

Take control of your sampling program.



How it works

Performance Verification Program

1. Perform Sampling
Each operator performs sampling on five Enverify™ devices for each sampling device used at your facility.
2. Send for Analysis
The resulting samples are packaged per your standard procedure and sent to our lab for analysis.
3. Receive Report and Action Items
We perform the analysis & deliver a report that details the operator's results, including percent recovery for each sample and sampling device, as well as characterisation of the operator's sampling consistency.

Benefits

Verify and document operator training

Including evaluation of aseptic technique, sample collection technique, pressure, and duration

Determine percent recovery & consistency

Understanding percent recovery and consistency of recovery in sample collection is crucial to understanding your sampling data and trends

Set acceptance criteria

Quantitatively determining an acceptable percent recovery improves training, employee performance, and compliance with proper technique

Gain confidence in your data

Understand percent recovery, document employee training, identify opportunities for improvement, prevent issues, gain support for audits

Rapid Hygiene Monitoring



Neogen® Clean-Trace® Hygiene Monitoring & Management System

Help Optimise Your Environmental Monitoring Program to Work More Efficiently

Cleaning is one of the most critical actions you can take to ensure hygienic conditions to produce high quality products. Hygiene monitoring, which is a component of environmental monitoring, can help verify that you are cleaning effectively. It assists in identifying problematic areas to address and can help improve the cleanliness of your operation.

Clean-Trace® Hygiene Monitoring and Management system provide the tools to efficiently manage your cleaning and sanitation process. These innovative solutions provide results that are accurate and trusted to quickly, and confidently, make the high-risk decision to verify cleaning and begin production.

Why Use the Clean-Trace Hygiene Monitoring and Management System?

Consistent and Stable Results

- ▶ Accurately monitor hygiene.
- ▶ Provides data to make the high-risk decision to start food production.

Real-Time Results

- ▶ Easy to use and easy to read.
- ▶ Quickly verify if a surface has been cleaned.
- ▶ Allows immediate action to be taken.

Data That Puts You One Step Ahead

- ▶ User-friendly software.
- ▶ Analyse and trend data over time.
- ▶ Quickly turn data into actionable information.



Peace of mind
before production



Rapid Hygiene Monitoring contd. . .

Certification and Recognitions:

The Clean-Trace Hygiene Monitoring and Management System has been created and is supported by a team of scientists and engineers and it has been granted AOAC® Performance Tested Methods certification.

Recipient of the 2017 GOOD DESIGN™ Award. Presented by the Chicago Athenaeum Museum of Architecture and Design in cooperation with the European Centre for Architecture, Art, Design and Urban Studies
 2017 Gold Stevie® Award in the Best New Product or Service of the Year – Health & Pharmaceuticals category

Make Data Work for You

Clean-Trace ATP Tests

You don't have time for inefficient testing — you need to get in, get your sample and get out. Clean-Trace ATP Tests feature an intuitive design that's easy to use and implement, with a long, flexible shape, allowing you to swab even difficult-to-reach areas. And the sleek, portable swabs are easy to activate with one hand.

Clean-Trace Luminometer

The Clean-Trace Luminometer features improved ease of use, faster time to result and simple, one-handed operation when compared to the previous generation of Clean-Trace technology. Its ergonomic design makes testing simple and improves user experience. When compared to nine ATP systems, the Clean-Trace Luminometer displayed a higher degree of stability and consistency, you'll get accurate results you can count on.¹

Clean-Trace Hygiene Management Software

Don't waste time searching for reports. The software features a responsive dashboard allowing users a quick and easy way to create, store and retrieve reports. The CleanTrace Hygiene Management Software turns data into information, helping you identify root causes and take action quickly. The software system supports multi-location functionality, making it easy to view data for specific facilities across various time zones. Put your data to work; identify workplace trends and add value to your environmental monitoring processes.



Technopath's technical support team are here to help, both remotely and on site as required:

- ▶ Designing your sampling plan
- ▶ Optimise your reports for internal meeting and audits.
- ▶ We can assist in setting up valuable reports as well as on-site support.



Learn more : www.techno-path.com

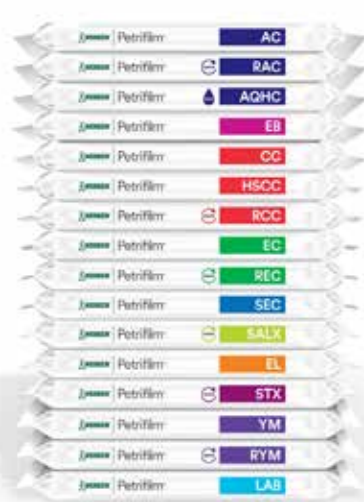
Indicator Organism Testing



Neogen® Petrifilm® Plates and Plate Reader

Celebrating 40 years of Innovation for the Modern Lab

Petrifilm Plates have revolutionised the world of food safety. These easy-to-use microbiology plate tests have been designed by scientists to help labs be more efficient while delivering reliable and accurate test results. As we celebrate the history and innovative advancements of Petrifilm Plates over the past 40 years, we are already planning for even more industry-revolutionising advancements to come.



Industry-experienced Technopath experts will work with you to develop customised Cost-Benefit Analysis studies that demonstrate how you can achieve cost savings and efficiency improvements in your laboratory

↓ **85%**
less space
than agar

↓ **45%**
reduced
labour costs

↑ **80%**
increased
technician
efficiency

↓ data in
1/2
the time

↓ **80%**
less water

↓ **75%**
less energy

↓ **66%**
less waste

↓ **75%**
less
greenhouse
gas emissions



Indicator Organism Testing contd. . .

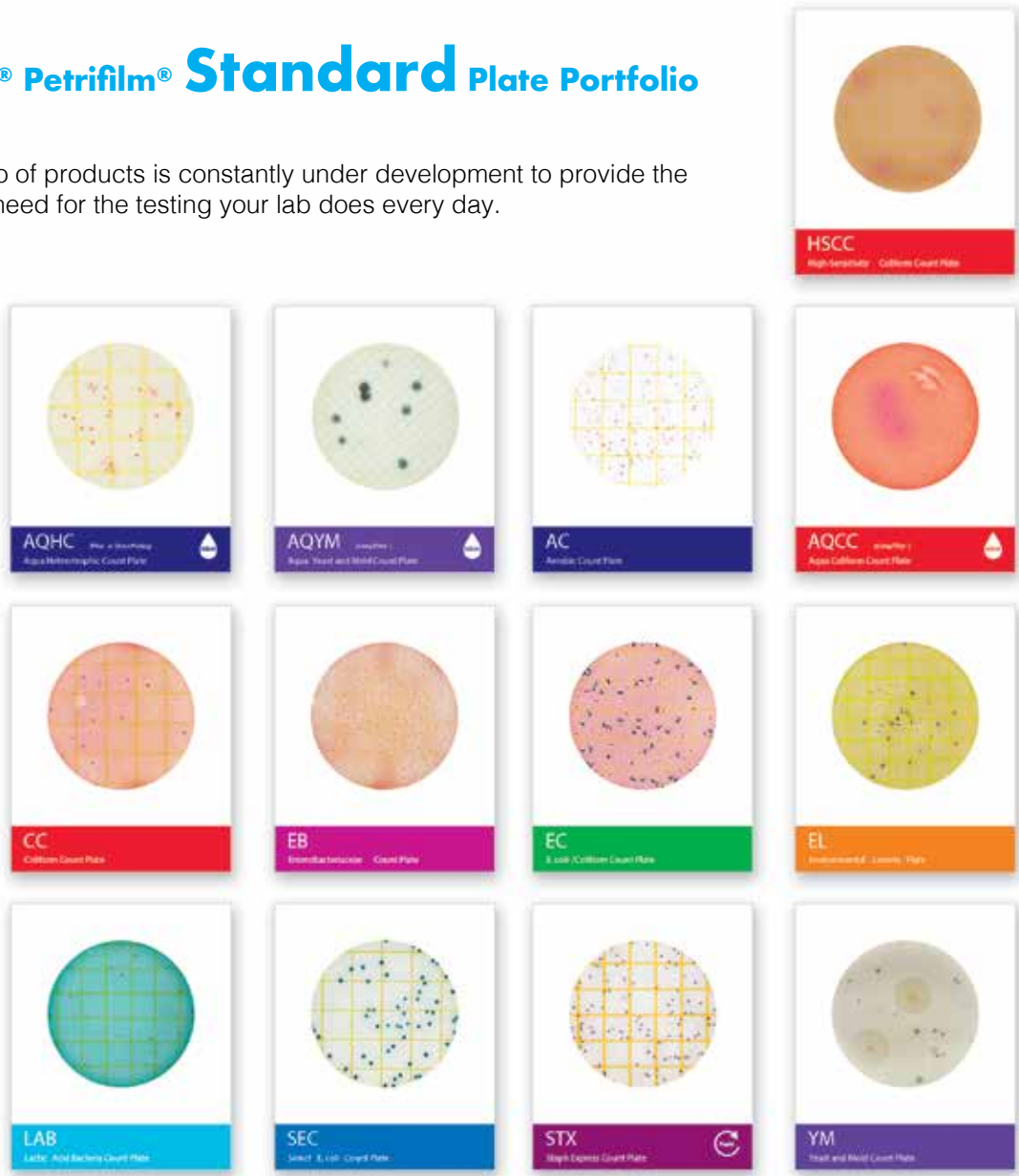
Neogen® Petrifilm® Rapid Plate Portfolio

These easy-to-use plates with enhanced features can produce results faster than traditional methods, so you can confidently make time-sensitive decisions.



Neogen® Petrifilm® Standard Plate Portfolio

Our portfolio of products is constantly under development to provide the plates you need for the testing your lab does every day.



Indicator Organism Testing contd. . .

Neogen® Petrifilm® Plate Reader Advanced

Introducing the new efficiency of food safety. There's no slowing down with automated plate enumeration and advanced reporting capabilities of the Neogen® Petrifilm® Plate Reader Advanced. It can help you save time, improve productivity and capacity, and maintain accuracy.

Automate the imaging, interpretation and storage of results of Neogen® Petrifilm® Plate tests.



- Productive**
Improve laboratory efficiency and maintain accuracy in a space saving design.
Plate Enumeration in 6 seconds or less— up to 900 plates per hour.
- Proficient**
Standardised technology for accuracy and easy to use software.
Accurate colony counting.
- Proactive**
Software simplifies results storage and data analytics capabilities.
Automated Reports and Data Trending for Actionable Insights.

Rapid Microbial Testing

CertaBlue introduces a new-generation microbial detection system. The range covers a comprehensive package of tests for a variety of market segments, including food, dairy, beverages..

Achieve your objectives of enhancing profitability and product quality through CertaBlue rapid microbial testing.

Test results obtained within hours compared to days with traditional methods

Principal of the Test

CertaBlue is based on rapid detection of several metabolic processes that take place within the growing organism.

The system can detect color changes through highly sensitive optical sensors. All vials are ready to use, prefilled with media and equipped with CertaBlue sensors. In most cases, the test vials can be inoculated with a non-diluted high volume sample.

Sensor Technology

The CertaBlue vials contain an optical sensor, which can detect carbon dioxide as the universal indicator for microbial growth.

The sensor is placed in the bottom of the vial, where it directly detects carbon dioxide changes. CertaBlue sensors are only permeable for gases. Liquids, dyed/ heavily colored products and other particles can't falsify results.

CertaBlue™ Tests

- ▶ TOTAL VIABLE COUNT (TVC)
- ▶ COLIFORM
- ▶ ENTEROBACTERIACEAE
- ▶ STAPHYLOCOCCI
- ▶ YEAST & MOLD
- ▶ TOTAL VIABLE COUNT DIRECT (Only For Personal Care/Home Care Products)
- ▶ LACTOBACILLI
- ▶ YEAST & MOLD PH ADJ (Fermented Dairy Products Only)
- ▶ CUSTOM



Rapid Microbial Testing contd. . .

CertaBlue™ AutoScanner

The AutoScanner System is especially developed to meet current and future demands in Microbiology.

- ▶ State-of-the-art rapid microbial detection system
- ▶ Low investment to get started
- ▶ Modular system for 40 samples (expandable up to 10 modules)
- ▶ Dual integrated incubators with adjustable temperature from 25 to 65°C
- ▶ Real-time monitoring of all samples
- ▶ Early warning of presumptive positive samples
- ▶ Results in hours instead of days
- ▶ Compact, reliable design with no moving parts
- ▶ No expensive maintenance necessary
- ▶ Including CertaSoft HACCP Track & Trace software



Automated Microbiology is now available for every Laboratory



CertaBlue™ CertaSoft

HACCP Track and Trace Software

By connecting CertaSoft to your Laboratory Information Management System (LIMS), you can transform your business, facilitate better collaboration and information sharing, and reduce costs.

- ▶ CertaSoft is a professional adaptable windows based package for controlling the CertaBlue Autoscaner(s)
- ▶ Real-time monitoring up to 400 samples
- ▶ Automated data archiving
- ▶ LIMS compatible
- ▶ Automatically generates reports and statistical trend analysis
- ▶ User friendly, minimal training required and barcode compatible
- ▶ Windows 10 compatible



Allergen Screening & Detection

Allergen Testing for food, liquid and environmental samples

Lateral Flow Tests

Neogen's newly expanded allergen testing range provides testing solutions for many key allergens including milk, egg and gluten. Neogen's Allergen Protein Rapid lateral flow tests are simple, easy-to-use lateral flow tests, used to screen for the presence of low levels of allergens on environmental swabs, clean-in-place rinses and validated food matrices.

Why Use Our Lateral Flow Tests?

- ▶ **Detects low levels** - Have confidence that our tests can detect low allergen levels to help prevent an unlabelled – and potentially dangerous – allergen making its way into food products
- ▶ **Qualitative** – Simply determine the presence or absence of target allergens in your samples, ensuring compliance with regulations and avoiding costly recalls
- ▶ **Provides Fast, Actionable Results** - Quick results on the presence of unwanted food allergens to allow products to be released faster and avoid production line stoppages for longer than necessary

Almond	Coconut	Fish	Milk	Pecan	Soy
Casein	Crustacea	Gluten	Mustard	Pistachio	Treenut
Cashew	Egg	Hazelnut	Peanut	Sesame	Walnut

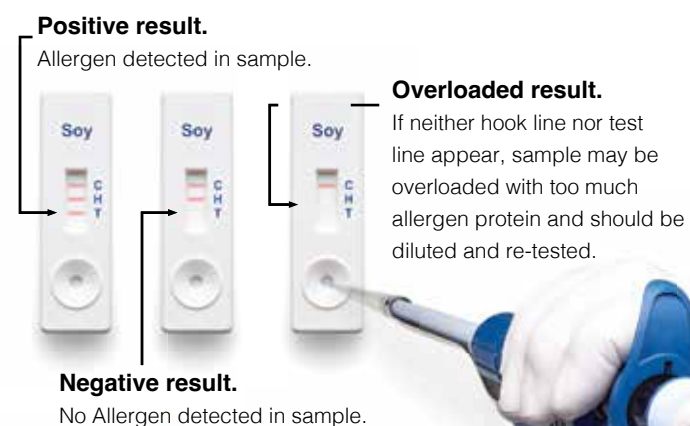
ELISA Tests

Neogen's Rapid Protein microwell assays are assays that are perfect for those with laboratories, from food manufacturers to commercial and government laboratories, and provide accurate, quantitative results within 30 minutes following extraction.

Why Use Our ELISA Tests?

- ▶ **Quantitative & Precise Results** - From processing through to production and end product testing, quantitative results can ensure the product is free from cross-contamination and avoid any unnecessary delays
- ▶ **Efficient Workflow** – With only minimal training and equipment required, the simple process means less wasted time or resource within your lab
- ▶ **Technical Support** - Neogen's dedicated support team has technical expertise to help you with training and technical queries so that you can be confident in your testing

Gliadin	Cashew
Total Milk	Brazil Nut
Egg	Walnut
Peanut	Fish
Soy	Mollusk
Coconut	
Hazelnut	
Almond	
Mustard	
Crustacea	
Sesame	
Macadamia	
Pecan	
Pine Nut	
Pistachio	



Learn more : www.techno-path.com

Molecular Methods for Pathogen Detection

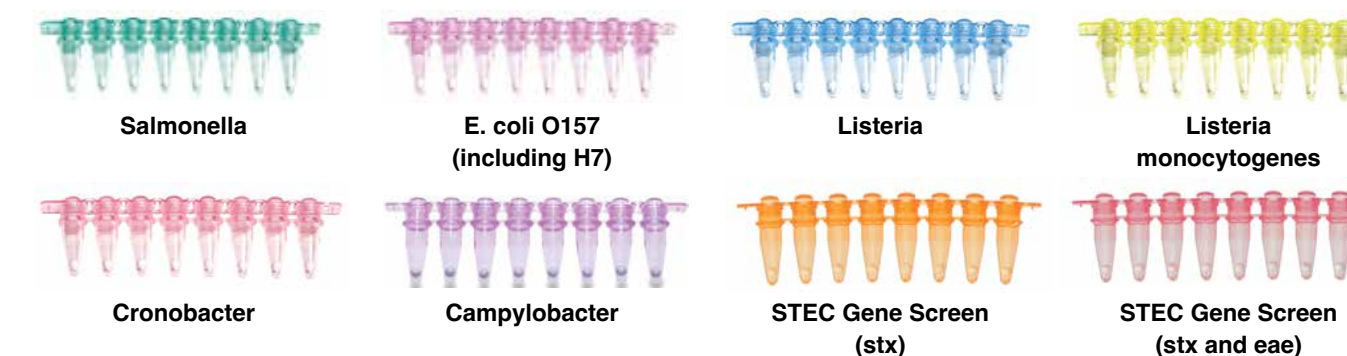
Neogen Molecular Detection System

With the Neogen Molecular Detection System you can be confident that your pathogen testing is accurate and reliable. Save time and labor costs with ready-to-use reagents, a single protocol for all pathogens and same or next-day results. Plus, with its space-saving design and ability to test for multiple types of pathogens simultaneously, it helps you increase productivity and release products quickly, so you can protect consumers, your business and your bottom line.

Neogen Molecular Detection Assays

Assay Reagent Tubes

- ▶ Colour-coded by organism for easy identification
- ▶ Six primers and robust Bst DNA polymerase for high sensitivity and specificity
- ▶ Detects 1-5 CFU of target pathogen per sample
- ▶ Single assay protocol improves productivity



- ▶ Simplify your Pathogen Testing.
- ▶ ISO16140 approved.
- ▶ Onsite expertise and install support.

1. Set it Up

Power up the system, launch the software and enter your data. Transfer enriched samples to the pre-filled lysis tubes.

2. Run the test

Heat and cool the lysis tubes. Add the sample lysate to the reagent tubes.

3. Get results

Press start, load the instrument and walk away. Monitor real-time presumptive results as pathogen DNA is detected.



Molecular Methods for Pathogen Detection contd. .

Neogen Molecular Detection Instrument



A small device can have a big impact on your lab's performance. Featuring a compact footprint that fits in any lab, a solid design with no moving parts and automatic diagnostics at start-up, this affordable instrument requires minimal maintenance. And with a high capacity of 96 samples and the flexibility to run all assays simultaneously, you can maximise your output.

- ▶ Compact design fits in any lab
- ▶ Test up to 96 samples per run for high throughput
- ▶ Run all assays simultaneously for increased productivity

Small and powerful.

Lysis Solution Tubes

- ▶ Advanced chemistry based on 3M nanotechnology
- ▶ Color-change process control for increased confidence in process reaction
- ▶ No reagent preparation required

Get cutting-edge technology that evolves to meet your needs with the next generation of Neogen Molecular Detection Assays. Our portfolio of products is constantly growing — so when the market changes, we're there with the latest technology.

Using isothermal DNA amplification and bioluminescence detection to overcome the limitations of older systems, these assays detect as low as 1 CFU of target pathogen per sample even in the most challenging sample matrices. Ready-to-use reagents minimise the chance for error, a color-change process control gives you increased confidence and a streamlined workflow reduces technician time by 30%. It's easy to learn, easy to use and easy to implement.

Neogen Molecular Detection Software



When you're making important choices that could impact businesses and public health, you need software that's intuitive and powerful.

The Neogen Molecular Detection Software gets you results when you need them — along with a user-friendly interface for quick setup and real-time results for faster decisions.

- ▶ Simple data entry increases efficiency
- ▶ Presumptive positive samples identified in as little as 15 minutes
- ▶ Custom reports and LIMS compatibility for enhanced information management
- ▶ Operate up to four instruments simultaneously
- ▶ Easy-access online software updates

Make critical decisions faster.



Molecular Methods High-Level Detection(PCR)

Real-Time PCR Kits

The foodproof® brand from Hygiena brings a suite of all of the core pathogen targets with a wide variety of multiplexing (combination of multiple targets into one PCR tests) assays with combinations of pathogens, serotypes, and even indicator organisms like Enterobacteriaceae. We can't forget the novel screening and identification assay where we can identify up to 8 serotypes in a single PCR test.

Kits for Extraction and Detection

foodproof® Detection and Quantification Kits

The foodproof® detection and quantification kits allow fast, simple and reliable detection of pathogens, spoilage organisms, allergens, genetically modified plants and viruses in a variety of samples, such as fruit juices, beer, chocolate, baby food, spices or meat.

Analyses are based on real-time PCR, a simple and proven solution for the reliable detection of genetic information (nucleic acids).

The high quality of our foodproof® products has repeatedly been validated and confirmed by independent institutes such as AOAC, NordVal and MicroVal.

For nucleic acid extraction, we offer optimized and validated foodproof® Sample Preparation Kits compatible with every foodproof® real-time PCR kit.

- ▶ Fast – Detection by real-time PCR in a few hours
- ▶ Easy – Simple implementation and user-friendly handling
- ▶ Specific – Accurate results for target organisms
- ▶ Sensitive – Safe detection of even the smallest quantities
- ▶ Safe – Validated systems, confirmation of results with included controls

foodproof®



BACTERIAL & VIRAL PATHOGENS

(Bacillus Cereus, Listeria, Salmonella, Cronobacter, Legionella, Campylobacter, Viruses)



SPOILAGE ORGANISMS

(Dekkera, Beer spoiling microorganisms, Y&M)



ANIMAL ID

(Porcine, Bovine, Sheep, Horse, Chicken, Goat, Donkey)



GMO

(Screening, Identification and Quantification)



ALLERGENS

(Detection and quantification)



Antibiotic Residue Screening

Complete Detection. Pure Confidence.

IDEXX's SNAP platform is one of the more robust and accurate antibiotic residue tests in the market. No incubation is required for the test platform!

The importance of testing with a robust test as close as possible to the EU MRL provides assurance of having the lowest false positives and less false negative rate available globally! All evidence of this is further supported by ISO accreditation, ILVO accreditation and other independent certifications.

Along with support from IDEXX, or technical support personnel are happy to discuss your antibiotic testing needs at any part of the milk supply chain.

IDEXX

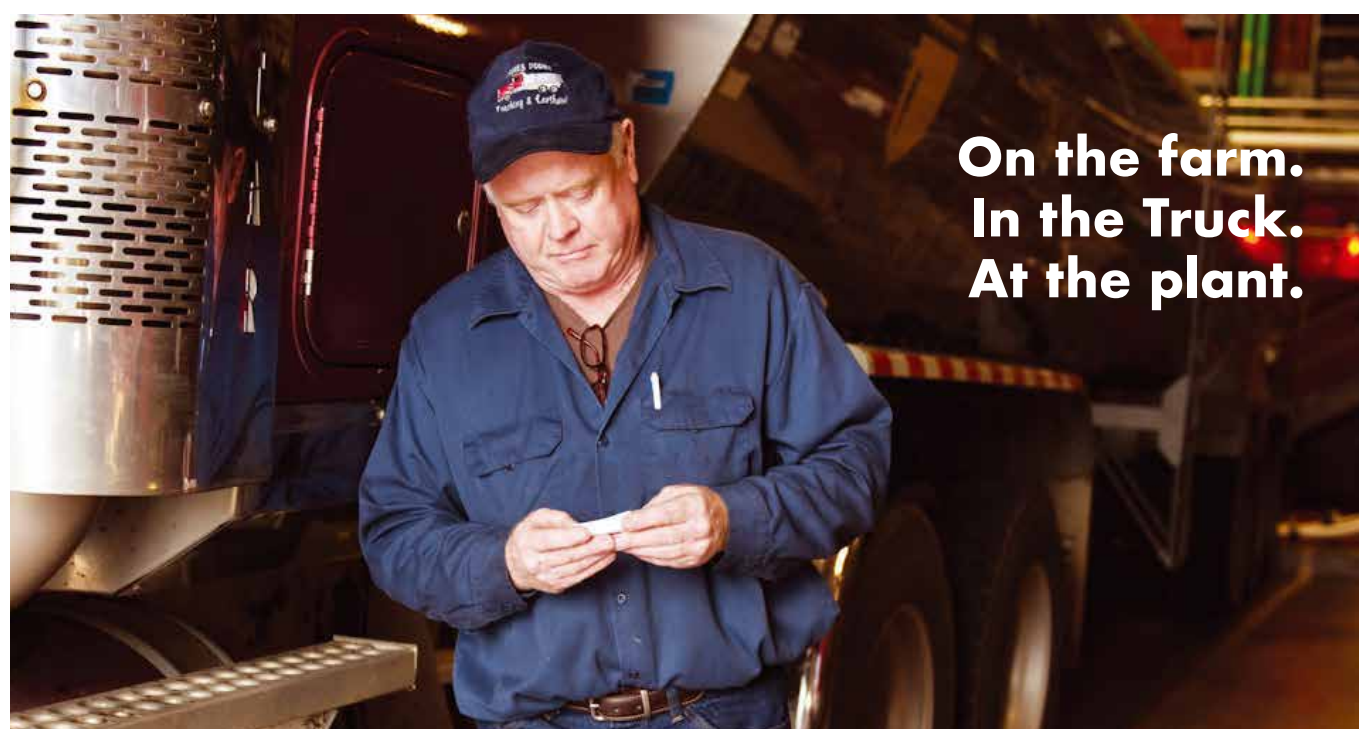


IDEXX SNAP Tests

Available SNAP Tests include:

- **Beta-Lactam**
- **Tetracycline**
- **Beta-Tetra**
- **Aflatoxin M1**
- **Gentamicin**
- **Sulfamethazine**
- **Melamine**

The IDEXX SNAP Test platform is the only test in the world that tests **EVERY Beta Lactam** at or below the EU MRL (Minimum Residue Level)



**On the farm.
In the Truck.
At the plant.**



Learn more : www.techno-path.com

Milk Quality Analysis

Innovative Analytical & Solutions for the Dairy Industry from Bentley Instruments



TECHNOPATH partners with Bentley Instruments, who have specialised in the design and development of analytical solutions for the profit optimisation of milk and dairy products (cream, serum, retentate, yoghurt, ice cream, and many more) for more than 35 years. Their solutions allow you to ensure optimal and rapid quality control in order to perfect your manufacturing process or herds management.

The Bentley Instruments product line includes a wide range of instrumentation for the dairy industry. Every model is designed for maximum productivity, accuracy and reliability. The instruments are in use in over 45 countries around the world and are backed by global service teams that are available 24-7.

Bentley Instruments

The Bentley Instruments are used world-wide for the continuous improvement of milk safety and value throughout the dairy chain.

Component Analysis

Bacteria Counting

Somatic Cell Counting

Combination "Combi" Systems



SERVICE EXCELLENCE

TECHNOPATH provides full support and servicing with all Bentley Instrumentation. Our team of engineers are fully trained by Bentley Instruments to provide local support for your instrument and provide any technical expertise you need.

Spare parts can also be ordered through TECHNOPATH.

Milk Quality Analysis contd. . .

Bentley Instruments: Low Throughput Analysers



DairySpec FT Series: Infrared Analysers



For laboratory, milk intake & process testing

Rapid and accurate determination of milk products chemical composition

Semi-automatic and automatic versions from 100 up to 300 samples/hour

The DairySpec FT uses FTIR spectroscopy for extremely accurate and reliable milk and dairy products chemical composition determination. Analysing up to 64 parameters simultaneously, the DairySpec FT is the optimal solution for the quality control of raw and processed materials.

It gives access to the very fine analysis of milk and dairy products chemical composition (fat, proteins, casein, lactose, solids, urea, citric acid, fatty acids profil, FPD). Highly reliable and accurate for milk (raw, UHT, and many more) and dairy products (cream, whey, permeate, retentate, etc) analysis.

Adaptable to measure other products and parameters upon request.

BactoCount IBCm 3.0 Series: Bacteria & Somatic Cells Counter



For quality control at milk intake.
ISO 16140-2:2016 certified

Real-Time enumeration of individual Bacteria & Somatic Cells in raw milk

Semi-Automatic version up to 50 analysis/hour

The new BactoCount IBCm 3.0 is a semi-automated instrument that uses a proprietary process based on next-generation flow cytometry for the rapid, highly accurate, reliable and multiplex enumeration of individual bacteria and somatic cells in raw milk. The rapid test for bacteria and somatic cells makes it the ideal solution for any processing plant or laboratory involved in the quality assessment of milk.

The instrument offers multiplex applications thanks to its unique dedicated platform. Up to two applications can be run simultaneously on a given sample. The overall design of the instrument has also been designed to allow ease of access and maintenance. With this in mind, IBCm 3.0 embeds a new kinetic, self aligned flow cell mounting system.

Milk Quality Analysis contd. . .

Bentley Instruments: Large Through-put Systems



Combi FTS Series: Infrared Analyser & Somatic Cells Counter



FTIR Analyser & FLOW Cytometer

Rapid & accurate determination of Somatic Cells and Chemical Composition in raw milk

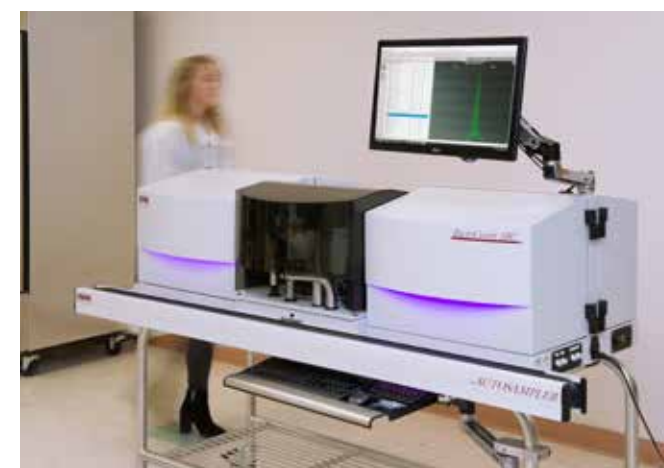
Automatic milk analysis at 600 samples/hour

Engineered in accordance with Bentley Instruments' rigorous design principles, the FTS combi provides precise and accurate measurements.

The FTS combi comprises two separate modules — the Bentley Flow Cytometer (FCM), and the Bentley Fourier Transform Spectrometer (FTS). The FCM measures the somatic cell count of the milk samples while the FTS simultaneously measures the milk composition up to 64 parameters (fat, protein, lactose, casein, fatty acids profil, minerals, blood BHB, and many more).

After first being stirred, the milk is drawn from a sample vial and delivered to both measurement modules.

BactoCount IBC 3.0 Series: Bacteria & Somatic Cells Counter



Measures: total bacteria count.
Powerful to enhance milk value.

Real-Time enumeration of individual Bacteria & Somatic Cells in raw milk

Automatic milk analysis at 200 samples/hour

The BactoCount series (50, 100, 150, 200) uses flow cytometry for the real-time determination of total flora and somatic cells in raw milk up to a maximum speed of 200 analysis/hour.

The high speed of this model makes it the ideal solution for mid to large size laboratories that need an easy to maintain, exceptionally fast bacteria counting system.

The BactoCount IBC Series uses a proprietary process based on flow cytometry for the rapid, highly accurate, reliable and multiplex enumeration of individual bacteria and somatic cells in raw milk.



Bench Near-infrared Analysers

Quickly and easily measure samples for moisture and vital compositional results

Our bench Near-infrared (NIR) analysers, from KPM, are designed for laboratory or at-line use and employ several robust technologies to rapidly measure moisture, protein, and fat/oil and a wide variety of other parameters such as fibers, sugar, starch, coat weight, etc.



SpectraStar™ XT NIR Analyser Series



Make Data-Driven Decisions with Highly Accurate Results

The Unity® Scientific SpectraStar™ XT NIR Analyser Series is a comprehensive line of plug & play solutions for laboratory and at-line compositional analysis of solids, powders, forages, seeds, liquids, slurries, and other products. From analyzing moisture, protein, fat, sugar, and fibers, to more complex parameters such as ash, fatty acids, and lignin, the SpectraStar™ XT NIR Analyser Series is trusted by thousands of quality laboratories and production facilities to enhance their processes and make data-driven decisions with highly accurate results.

Vital Quality Data in As Little As 30 Seconds

Features:

- ▶ Access an extensive library of robust calibrations developed from hundreds-to-thousands of samples to validate incoming ingredients or grab-samples for important quality parameters
- ▶ Designed for ease-of-use; only minimal training required for routine operators
- ▶ Advanced sample management and reporting features makes the analyzer lab-ready
- ▶ Windows®10 Professional computer with SSD provides easy integration into computer networks
- ▶ Available with KPMLink, a cloud-based software suite to support the real-time remote configuration of product settings, calibrations, and review of test results from any instrument worldwide

Applications

Food Ingredients

- ▶ Wheat, cereals, and grains (rice, canola, mustard, soybean, corn, oats, peas, etc.)
- ▶ Flour & whole wheat flour
- ▶ Spices & seasonings
- ▶ Corn meal
- ▶ Corn starch
- ▶ Oilseeds

Food Products

- ▶ Baked goods (bread, buns, rolls, muffins, bagels)
- ▶ Chocolate/Confectionery
- ▶ Snack foods (chips, crackers, cookies, pita chips)
- ▶ Olives and olive oils
- ▶ Meat & poultry
- ▶ Dairy products (cheese, butter, milk powder, yogurt)

Bench Near-infrared Analysers contd. . .

AgriCheck Whole Grain Analyser Series



High-Precision NIR Instruments Dedicated to Grain Analysis

The Bruins Instruments AgriCheck Series of near-infrared spectroscopy (NIR) analysers are cost-effective, high-performance instruments with specific calibration libraries dedicated to analysing whole grains, from wheat and corn to soybeans, sorghum, rice, and others. An optional reflectance mode analyses ground materials and byproducts for composition and quality.

The AgriCheck Series accurately measures major components like moisture, protein, and starch, as well as oil, fiber, gluten, zeleny, amylose, FFA, 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.

Fully understand the quality and suitability for use, and to predict performance in recipes

Features:

- ▶ High precision, linear monochromator provides reliable measurements
- ▶ Intuitive software and a large touchscreen makes the analyser easy to use
- ▶ Optional Test Weight module determines the specific weight of the grain

Benefits:

- ▶ High accuracy and trusted results allow for quick adoption of the instrument
- ▶ Intuitive and easy to use means less time training staff to use the analyser
- ▶ Global calibrations for major quality parameters allow plug & play operation for a wide variety of grains

Applications

Whether you will use your AgriCheck NIR Analyser 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.

Common products include:

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



Wet Chemistry Analysis



TECHNOPATH partner with Opsis LiquidLINE - experts in Protein, Fat and Fibre Analysis.

Protein Determination - Kjeldahl

The Kjeldahl method is used worldwide as the standard for analysing protein content in food, feed, feed ingredients, and beverages.

Kjeldahl Digestion

In the Kjeldahl method, the sample is boiled in sulfuric acid together with salt and catalyst. This very reactive and corrosive mixture puts high demands on the materials used. Also a well designed fume removal system is necessary to avoid damages on the laboratory inventories. An exhaust together with a Scrubber is often the solution for this.

Kjeldahl Analysis

Analyses where it is important to perform the titration simultaneously with the distillation e.g. Kjeldahl, put high demands on the titration system. The colorimetric detection of the end point is often the only possibility. Even tougher it becomes if the Nitrogen level varies a lot from sample to sample, then the unique Predictive Titration System improves the function.



Fat Determination - Soxhlet

Because of commercial regulations, it is important for food producers to be able to report fat/lipids content in their products and to closely monitor the fat content since it affects the quality or value of the product.

Hot Solvent Extraction

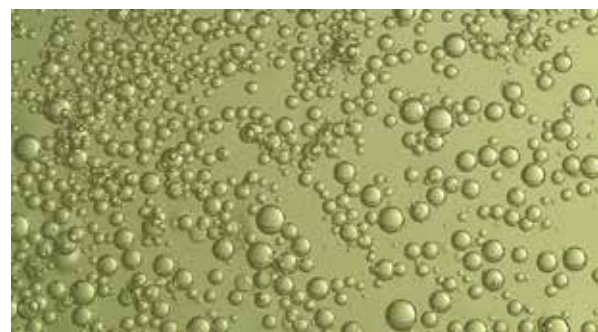
Soxhlet extraction is one of the most commonly used methods for determination of total fat. OPSIS LiquidLINE has developed the SoxROC Extraction unit to increase the effectiveness of this process. The SoxROC is up to 5 times faster than the classical Soxhlet method with no loss in precision or accuracy, due to an effective sealed hot extraction process. The SoxROC unit will automatically perform the different extraction steps in the method.



Fibre Analysis - Weende/Van Soest

Boiling a sample in Acid, Acid Hydrolysis, is a preparation step for many analyses. The Weende method is used worldwide as the standard for determining Crude Fiber in food and feed.

Detergent Fiber analysis, according to Van Soest, provides a better estimate of the total fiber content in a feed sample than crude fiber, which only measures cellulose, lignin, and some hemicellulose. This information is important when formulating diets for livestock and when analyzing the nutritional value of food and feed.



KjelROC Distillation



KjelROC Autosampler



KjelROC Scrubbers



HydROC Hydrolysis



LabConnect Software



KjelROC Analyser



KjelROC Digestors



SoxROC Extraction



FiberROC Units



Consumables & Accessories



CONTACT US

For further information on any of the food & beverage solutions from TECHNOPATH
please contact us on the below details or check out our website:
www.techno-path.com



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TP00000193.4.v4