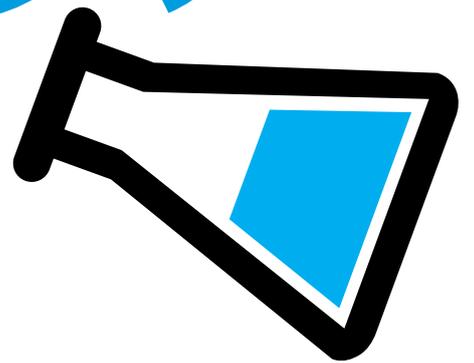




# gem SCIENTIFIC



01924 444 577



[gemscientific.co.uk](http://gemscientific.co.uk)



[hello@gemscientific.co.uk](mailto:hello@gemscientific.co.uk)



# DIAMOND SERVICE

GEMSCIENTIFIC.CO.UK/DIAMOND

## DO YOU NEED NEW INSTRUMENTS BUT DONT HAVE THE CAPITAL TO INVEST? OUR DIAMOND SERVICE CAN HELP

Keeping up with technological advancements in the face of budgetary concerns is a challenge many of our customers face, which is where our Diamond Service helps provide a tailored solution.

The Diamond Service enables us to provide the testing equipment you need, in exchange for a commitment to purchase the relevant consumables.

It allows us to be flexible to your testing volumes, commitment period and budget.

### How does the Diamond Service work?

- We supply you with the system you need.
- You commit to purchase an agreed volume of consumables over a set period.

### Benefits of the Diamond Service include:

- Acquire the latest technology and purchase without having to go through CAPEX budgets
- Contract based on an agreed cost per test
- Equipment can be easily upgraded at the end of the contract
- Technology can be updated more frequently as there is no capital cost involved

**A FLEXIBLE SOLUTION FOR SUPPLYING EQUIPMENT WITH NO UPFRONT CAPITAL EXPENDITURE, WHILE NEVER COMPROMISING ON QUALITY.**

## POPULAR DIAMOND EQUIPMENT



**ATP  
Luminometers**  
*(page 4-5)*



**3M Petrifilm Plate  
Reader**  
*(page 9)*



**Allergen  
Test Kits**  
*(page 11)*



**IDEXX  
DSR Reader**  
*(page 13)*



**Sartorius Membrane  
Dispenser**  
*(page 22)*



**Ready to get started with your own Diamond?**

Our team are ready to help: 01924 444 577 or [hello@gemscientific.co.uk](mailto:hello@gemscientific.co.uk)

LOOK FOR THE DIAMOND ICON TO SEE WHICH PRODUCTS ARE ACCESSIBLE ON THIS SERVICE 



Dear Customer,

Thank you for picking up the latest version of the Gem Scientific brochure which showcases some of the core products from our portfolio.

Established in 1997, Gem Scientific has been supplying laboratory equipment and consumables for over 22 years. When I was appointed Managing Director in 2014, my aim was to build on the strong foundations laid by the previous owners. Through re-branding the company and putting a clear focus on our core values, we have enjoyed sustained growth.

Our mission is to continually develop our staff, products and services we offer to exceed our customer and employee expectations. We endeavour to add real value to our clients by delivering the highest quality products and services supported with our professional, flexible and personal approach. We aim to differentiate ourselves from the competition and be the best at what we do.

Our extensive product portfolio includes scientific consumables, laboratory and specialist equipment, hygiene systems and chemicals for supply into a whole range of different industries.

We're continuing our commitment to providing you with high-quality and innovative products. As our portfolio expands, our close manufacturer collaborations allow us to bring you the latest technology.

Our team is the secret to our success as they have a wealth of knowledge and experience. Combined with their passion for delivering a first-class personal service, the team will always go above and beyond to help our clients.

Whatever you are looking for, our team will provide a personal service that's tailored entirely around you and your business.

We are always happy to help and are on hand to discuss your specific requirements, so please get in touch.

Justin

Justin Welton  
Managing Director

P.S. You can find us social media by searching 'Gem Scientific'



## MANUFACTURERS



# 3M™ CLEAN-TRACE™ HYGIENE MONITORING AND MANAGEMENT SYSTEM



Production plants across the UK are achieving the highest levels of product quality, safety and environmental hygiene with the help of 3M's hygiene monitoring and management system.

The 3M Clean-Trace hygiene monitoring and management system is a complete system of products consisting of a handheld luminometer, compatible test swabs and a powerful new software platform.

- Audit ready system for BRC or retailer inspections with seamless reporting
- All Your HACCP results in one place using the 3M™ Clean-Trace™ management software
- Colour touch screen works seamlessly even when you're wearing gloves
- Wireless data transfer through Bluetooth or Wi-Fi
- Unique user IDs allow for tracking of individual operative results
- Watch lists pin point problems at a glance to enforce corrective action steps
- Easy-to-use dashboard immediately turns data into actionable information
- Upload photos of test points to your sample plans
- Ergonomically Designed for one handed operation
- 23 Languages for multilingual production teams



## HOW ATP TESTS WORK

ATP monitoring is a rapid testing method used to quickly assess the cleanliness of surfaces or liquid samples from such places as clean-in-place (CIP) systems.

Adenosine Triphosphate (ATP) is present in all organic material and is the universal unit of energy used in all living cells. ATP is produced and broken down in metabolic processes in all living systems.

Processes such as photosynthesis in plants, muscle contraction in humans, respiration in fungi, and fermentation in yeast are all driven by ATP. Therefore, most foods and microbial cells will contain some level of naturally occurring ATP.



## 3M™ Clean-Trace™ ATP Tests

3M 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.

The sleek, portable swabs are easy to activate with one hand.



## 3M Clean-Trace Hygiene Monitoring Software

The 3M Clean-Trace hygiene monitoring software turns data into information, helping you identify root causes and take action quickly.

Now even easier to use and more intuitive with convenient wireless and networking capabilities. Put your data to work identifying workplace trends, optimising productivity and adding value to the process.

**3M**  
Authorized Distributor  
Food Safety Products

Today's food safety professionals face significant challenges: complex supply chains, increased audit and inspection scrutiny, and the ever-present risk of contamination and recall.

Hygiene EnSURE Touch is the next-generation quality monitoring system. It provides rapid and accurate sanitation verification to support your HACCP program.

- Run a quick test from any plan or location in as few as two touches
- Create testing points with customised fields and pass/fail limits on the go
- Easily group testing locations into plans and randomise test locations
- Manage user access to differentiate personnel from managers.
- Easily view testing results and trend analysis
- Factory-calibrated and preset checks to stay GMP/ISO-compliant
- Test and show results for organisms like Coliform, E. coli, Enterobacteriaceae, and total viable count (page 7) and for enzymes like Alkaline Phosphatase and Acid Phosphatase (page 12).
- Customise settings for language, custom fields, test types, and simulate competitor RLU limits



Luminometers use bioluminescence to detect residual ATP as an indicator of surface cleanliness. The presence of ATP on a surface indicates improper cleaning and the presence of contamination, including food residue and bacteria. This implies a potential for the surface to harbour and support bacterial growth.

Used by businesses across many industries, ATP monitoring is utilised to confirm that ATP presence is eliminated or minimised by effective hygiene procedures. ATP monitoring prevents cross-contamination, ensures product integrity, potentially improves product shelf life, protects brand reputation, and complies with GMP standards and HACCP requirements.

## Hygiene ATP Test Swabs

Hygiene's ATP Snap devices are made of fewer components than any other device. Hygiene's patented Snap-Valve™ technology eliminates the need for additional compartments that require foil seals.

By keeping the test design simple, Hygiene can reduce costs and limit variability.



## Hygiene SureTrend™ Cloud Analysis Software

SureTrend™ Cloud is an easy-to-use data analysis software that comes with every EnSURE Touch.

Available in both cloud-based and desktop formats, SureTrend Cloud enables users to monitor, track, and trend testing results across multiple facilities, and schedule automatic reports making risk management more accessible than ever.



# HYGIENE MONITORING SOLUTIONS: RAPID TESTS

Keeping all areas of your facility clean is an essential daily task. Residues remaining on surfaces provide nutrients for spoilage or pathogenic bacteria to thrive, which could lead to product contamination. Prove your cleaning methods are working effectively using a rapid hygiene test. Integral to many HACCP systems, using a rapid hygiene test can give cleaning validation results rapidly, allowing you to take corrective action immediately.

## 3M™ Clean-Trace™ Surface Protein Plus Swabs

Ideal for small businesses including cafés, restaurants, pubs, hotels, healthcare facilities, leisure centres, spas and caterers, the 3M Clean-Trace Surface Protein Plus swabs are a rapid hygiene test which detects whether a surface has been cleaned effectively.

- Semi-quantitative protein test with swab-click-read simplicity
- Colour change results in 10 minutes or less if surface contamination is high
- Real-time results allow immediate corrective action
- Self-contained test, no instrument required
- Detects as little as 50µg of protein



## Hygiena PRO-Clean™ Rapid Protein Residue Tests

Hygiena PRO-Clean Rapid Protein Residue Tests are an easy and accurate way to verify the cleanliness of food equipment surfaces. Simply swab a surface and release the reagent.

If protein residue is present, the reagent will turn purple - the more contamination, the quicker the colour changes, and the darker it becomes. PRO-Clean instantly validates surface hygiene, allowing immediate corrective action to be taken when necessary.

- Results in 1-10 minutes
- Easy-to-interpret colour change
- Pre-moistened swab provides reliable collection
- Low carbon footprint devices
- Detects 80 µg protein after 1 minute
- Detects 50 µg protein after 5 minutes
- Detects 20 µg protein after 10 minutes
- Disregard any colour change after 10 minutes



## 3M™ Clean-Trace™ Surface Protein (Allergen) Swabs

3M Clean-Trace Surface Protein (Allergen) swabs monitor allergens on surfaces and in hard to reach areas. A visual colour change indicates the level of cleanliness by detecting as little as 3µg of protein on surfaces.

- Highly sensitive protein detection technology monitors for the presence of allergens on surfaces by detecting protein residues left behind after cleaning
- Fast results mean the user can react quickly to minimise the risk of contamination
- Sensitive results make this a reliable tool to include in your allergen management plan
- Results in 15 minutes with the use of a Digital Heating Block Incubator (page 30)



## Hygiena AllerSnap™ Rapid Protein Residue Test

Hygiena AllerSnap is a quick and easy way to verify the cleanliness of surfaces by detecting protein residues left behind after cleaning. By simply swabbing the area and activating the device, you release a reagent that turns colour, providing a qualitative and semi-quantitative result of the protein levels on the surface.

- Results in 15-30 minutes after incubating in a dry heater block incubator (page 30)
- Detects 3µg protein after 30 minutes at 37°C or 15 minutes at 55°C
- Easy-to-interpret colour results
- Broad-range, non-specific protein detection offers speed over specific allergen tests
- Pre-moistened swab provides reliable collection, recovery, and detection to ensure consistent results
- Low carbon footprint devices are 100% recyclable



# HYGIENA INDICATOR TESTS

## Hygiena MicroSnap™ Indicator Organism Tests



Hygiena's MicroSnap Indicator Organism Tests bridge the time gap between ATP and bacterial culture results with convenient, same-shift tests for:

- E. coli
- Coliform
- Enterobacteriaceae
- Total viable count (TVC)

MicroSnap is a rapid bioluminescent test method for the detection and enumeration of bacteria, giving actionable same-day test results.

The MicroSnap test platform consists of an Enrichment Device containing a specific growth medium and a Detection Device containing a bioluminescent (light-producing) substrate.

When MicroSnap detects the specific microorganism, light is emitted and measured with Hygiena's EnSURE luminometer (page 5). Results are stored and tracked with Hygiena's SureTrend Cloud software for further data analysis and trending.

## Hygiena InSite™ Listeria Tests

Hygiena InSite Listeria is an easy-to-use, self-contained, environmental tests for the detection of Listeria species in food processing environments.

The test contains a liquid media formulated with growth enhancers, antibiotics and chromogenic compounds specific to the growth of Listeria species. A colour change from yellow to light brown/black is presumptive positive.

- Easy-to-use with no preparation steps
- Large sponge tip maximizes sample collection
- Easy to interpret – brown/black indicates the presence of Listeria species
- Self-contained tube eliminates the risk of contamination
- Eliminates costly outside laboratory fees
- Positive results in as little as 24 hours and confirmed negative results in 48 hours using a Dry Block Incubator (page 30)
- 12-month shelf life at refrigerated temperatures (2 – 8°C)



## Hygiena InSite L. mono Glo Tests

Hygiena InSite L. mono Glo is a screening test for Listeria species and Listeria monocytogenes, intended to be used for environmental monitoring in food processing environments after cleaning. InSITE L. mono Glo provides qualitative results for low and high levels of Listeria in 24 to 48 hours.

A colour change of the media from yellow/amber to grey/black is considered presumptive positive for Listeria species. Presumptive positive samples for Listeria species which exhibit green fluorescence under ultraviolet light indicate that the sample is presumptive positive for Listeria monocytogenes.



## Hygiena InSite Salmonella Tests

Hygiena InSite Salmonella is an easy-to-use, self-contained, environmental Salmonella spp. test. Each device contains a liquid medium formulated with growth enhancers and chromogenic compounds selective for Salmonella species.

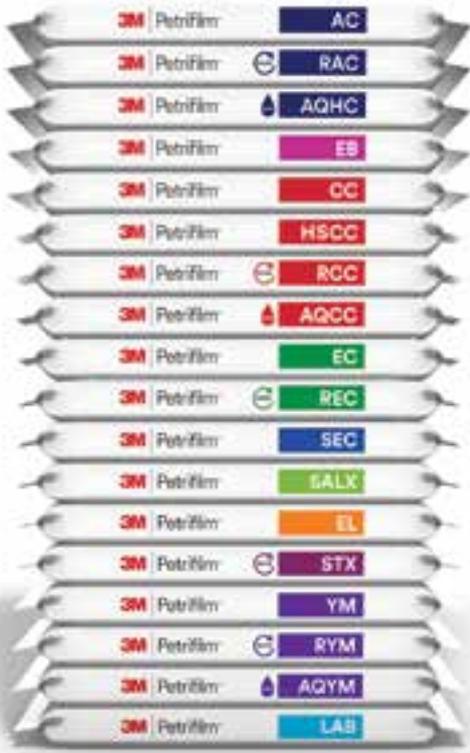
Simply swab the test area and incubate. A change in colour after 24-48 hours of incubation is considered presumptive positive for Salmonella species. This all-in-one test utilises a large foam sampler for maximum sample collection, the only equipment you'll need is a heater block (page 30)

- Large 2.5-inch foam swab for maximum sample pickup
- Write-on swab label for easy sample identification
- Presumptive positive results are available in as little as 24 hours
- Sensitive to 1-10 CFU
- Delivers results in 24 - 48 hours
- Cost-effective environmental monitoring solution
- Colour-changing device is easy to interpret



# 3M™ PETRIFILM™ PLATES

The food safety landscape is constantly evolving, say goodbye to agar testing and stay ahead of the curve using 3M Petrifilm Plates. In the modern laboratory, space is at a premium, 3M Petrifilm Plates eliminate the need to store bulky agar dishes or instruments as each slim pack is less than an inch thick.



Each pack offers consistent, uniform testing media. Just open it up and get right to work. Find new freedom with time to focus on what's really important: quality and efficiency.

It's the convenient, efficient, space-saving way to test in the modern food system.

## Benefits for your business:

With significant productivity and performance advantages over traditional agar plates, 3M Petrifilm Plates have become the standard in microbial indicator testing for food production companies all over the world.

Using Petrifilm plates can have considerable time and cost advantages for your business. A study\* of food processing plants showed:

- Converting from agar to Petrifilm count plates can cut laboratory costs by an average of 45%
- An average increase of 80.5% in QA personnel efficiency
- Petrifilm count plates can provide data in about half the time of traditional agar methods
- Shelf-stable and nearly as thin as paper, Petrifilm count plates take up to 85% less counter and storage space



## Modern Food Testing in Three Simple Steps

1. Inoculate: No media preparation as plates are ready to inoculate
2. Incubate: A compact incubator is all you need
3. Interpret: Indicator dyes facilitate colony counting

## Sustainable Science for the Modern Laboratory

If you are still using agar dishes for microbial indicator testing you're missing a big opportunity to not only boost your laboratory's productivity and accuracy but also help meet your company's sustainability goals.

Ready to use, reliable and compact, 3M Petrifilm Plates have streamlined, standardised and simplified microbial indicator testing for the food industry and can reduce your environmental impact compared to agar plates.

When comparing\*\*, raw materials, manufacturing, packaging, use and waste of agar methods versus Petrifilm count plates, Petrifilm was found to use:

- 76% less energy
- 79% less water
- 75% less greenhouse gas emitted
- 66% less waste produced

This sustainable alternative to traditional agar methods can help you to reduce water and energy consumption, waste and greenhouse gas emissions.



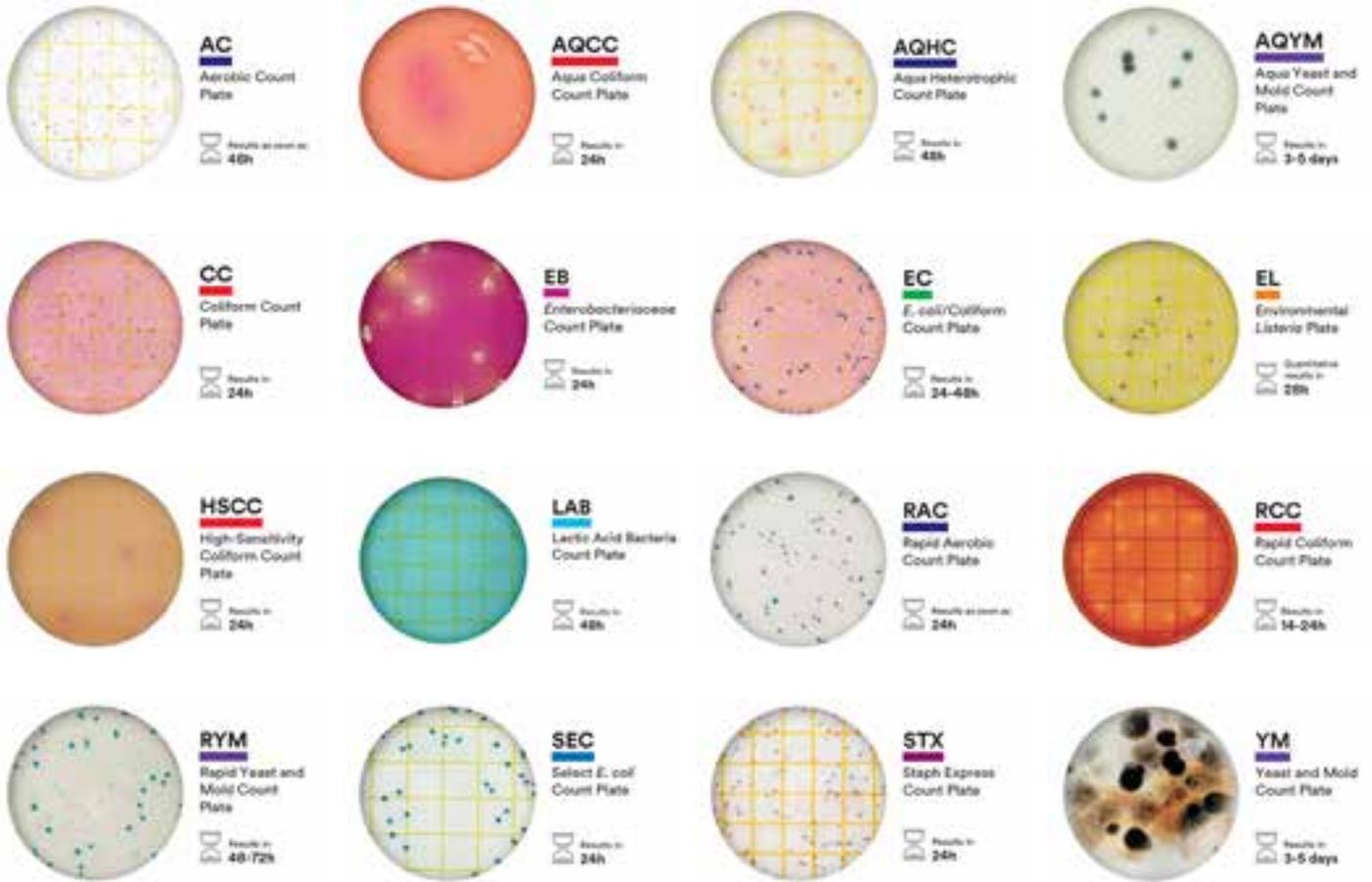
\*3M Petrifilm count plate impact summary (274 plants; 1994–1998). 3M internal.

\*\*Reduction in Primary Energy Demand, Blue Water Consumption and Greenhouse Gas Emissions from 3M Petrifilm Plates Compared to Traditional Microbiological Analysis Method; Jason Howland, 3M Environmental Laboratory and Hannah Bakken, 3M Food Safety



## 3M™ Petrifilm™ 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.



## 3M™ Petrifilm™ Plate Reader

By automatically reading and counting six widely used Petrifilm plates, this compact instrument can help you improve plate count accuracy, consistency and speed, while raising your laboratory's productivity and reducing costs.

- Fast results (4 seconds/plate)
- Reduces the chance of human error
- Software automatically calculates, counts and manages data
- Works with Aerobic, Rapid Aerobic, Coliform, E. coli/Coliform, Enterobacteriaceae and Select E. coli 3M Petrifilm Plates.

Automates logging of 128 symbology barcode labels and allows details related to the technician, food type, food lot and dilution schemes to be electronically stored.

Data can also be easily exported to LIMS, Excel and other reporting tools.

 **TECNIC AUTOMATED**

Are you working with thousands of petrifilm plates annually? You may benefit from using a Tecnic System.

Tecnic TAPR (Tecnic Automated Petrifilm Reader) and InoBot are a range of automated systems specially designed for processing 3M Petrifilm™ plates. These systems help reduce the handling process, the margin of error and waste produced.



# 3M™ MOLECULAR DETECTION SYSTEM

**W**ith its space-saving design and ability to test for multiple types of pathogens simultaneously, the 3M™ Molecular Detection System helps you work efficiently and release products quickly with ready-to-use reagents, a single protocol for all pathogens and same or next-day results.

The 3M Molecular Detection System is powered by an innovative combination of unique technologies, Isothermal DNA Amplification and Bioluminescence Detection, to provide a solution that is fast, accurate, easy-to-use and affordable.

The 3M Molecular Detection System makes testing easy, increasing technician productivity and efficiency. All you need is an enriched sample, a computer and the 3M Molecular Detection Instrument.

Using a DNA polymerase that is tolerant to low-quality DNA samples allows for a simple assay set-up with fewer steps. Your laboratory can even test and display results for multiple organisms in a single run.



## 3M™ Molecular Detection Instrument

Featuring a compact footprint that fits in any laboratory, a solid design with no moving parts and automatic diagnostics at start-up, this affordable instrument requires minimal maintenance. With a high capacity of 94 tests (plus two control tests) and the flexibility to run all assays simultaneously, you can maximise your output.



## 3M™ Molecular Detection Software

The 3M™ 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. Custom reports and LIMS compatibility for enhanced information management. Simple data entry increases efficiency and presumptive positive samples identified in as little as 15 minutes.

## Colour-Coded Assays

Using isothermal DNA amplification and bioluminescence detection to overcome the limitations of older systems, these assays detect as low as 1-5 CFU of target per original sample even in the most challenging sample matrices.

The ready to use reagents minimise the chance for error, a colour-change process control gives you increased confidence and a streamlined workflow reduces technician time by 30%\*.



3M™ Molecular Detection Assay 2 — Salmonella



3M™ Molecular Detection Assay 2 — E. coli O157 (including H7)



3M™ Molecular Detection Assay 2 — Listeria



3M™ Molecular Detection Assay 2 — Listeria monocytogenes



3M™ Molecular Detection Assay 2 — Cronobacter



3M™ Molecular Detection Assay 2 — Campylobacter

Colour-coded assay tubes with matching software screens deliver a simple, easy-to-use process. Testing different pathogens using the same process, reducing repetitive tasks for less chance of human error. The low-maintenance system alerts the operator if it self-detects a malfunction or failure.

# ALLERGEN TESTING

Allergen awareness is an increasing concern, with an estimated 2 million people in the UK living with food allergies\*. Across the UK, more food and drink businesses are looking for reliable products to show due diligence in preventing cross-contamination in production facilities and preparation areas. Gem Scientific supply a range of allergen-specific tests in both rapid lateral flow and ELISA formats.

## Rapid Lateral Flow Allergen Tests

Single-use, lateral flow devices work rapidly to show the presence of the specific allergen you are testing for. Single allergen tests are available for the following parameters:

- Almond
- Brazil Nut
- Casein
- Cashew
- Coconut
- Crustacea
- Crustacean
- Egg
- Fish
- Gliadin
- Gluten
- Hazelnut
- Macadamia
- Multi-Treenut
- Mustard
- Peanut
- Pecan
- Pistachio
- Sesame
- Soy
- β-Lactoglobulin
- Total Milk
- Walnut



3M™ Allergen Protein Rapid Tests



Hygiena™ AllerTox® Sticks



Neogen® 3-D Reveal® Allergen Tests



r-Biopharm® Lateral Flow Allergen Tests



## 14 KEY ALLERGENS

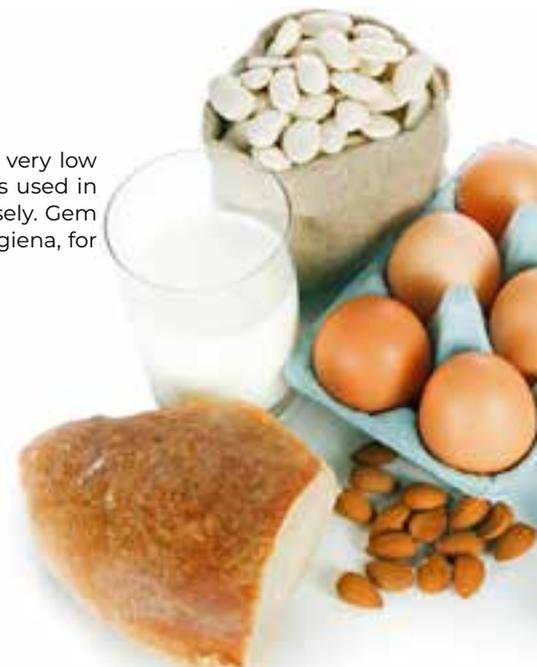
Since December 2014, all food businesses have needed to provide information about the allergenic ingredients used in food sold or provided by them. The EU Food Information for Consumers Regulation (No.1169/2011) outlines the requirements for businesses which are providing food sold pre-packed and non-prepacked such as food sold in a restaurant or takeaway. There are 14 major allergens which need to be declared:

- Celery
- Eggs
- Gluten
- Milk
- Mustard
- Peanuts
- Soy beans
- Crustaceans
- Fish
- Lupin
- Mollusc
- Nuts
- Sesame
- Sulphites

## Enzyme-Linked Immunosorbent Assay (ELISA) Allergen Tests

The ELISA Sandwich is a technique usually used for the analysis of substances found at very low concentrations. This, combined with the high specificity and sensitivity of the antibodies used in these tests, allows this method to quantify allergens in all types of food and drinks precisely. Gem Scientific can supply food allergen ELISA tests, from manufacturers including 3M and Hygiena, for the following parameters:

- Almond
- Beta-Lactoglobulin
- Bovine Casein
- Bovine Total Milk
- Brazil Nut
- Casein
- Cashew
- Coconut
- Crustacean
- Egg
- Egg White
- Fish
- Hazelnut
- Lupine
- Lysozyme
- Macadamia
- Milk
- Mollusc
- Mustard
- Peanut
- Pecan
- Pine Nut
- Pistachio
- Sesame
- Soy
- Walnut



\*Source: <https://www.food.gov.uk/sites/default/files/media/document/dfa170306.pdf>

# DAIRY TESTING AND ANALYSIS

Dairy farms and processors across the country trust Gem Scientific to provide them with the very best analysis and testing instruments. We have been working with the dairy industry for over 20 years, our knowledgeable staff are on hand to help and advise you on the right equipment for your business.

## Funke Gerber CryoStar Cryoscope



Funke Gerber CryoStar Cryoscope

Funke Gerber CryoStar is a highly accurate and reliable Cryoscope for high accuracy freezing point determination (FPD).

The CryoStar uses FPD to find the plateau as prescribed in the ISO/IDF/DIN 5764 standard for measuring added water in milk.

The 4 decimal place accuracy of the CryoStar gives excellent repeatability and ultimately confidence in the instruments results.

## Funke Gerber LactoStar Dairy Analyser



Funke Gerber LactoStar Dairy Analyser

Funke Gerber LactoStar is used in dairies for the routine analysis of milk. It measures Fat, S.N.F. (Solid Non Fat), Protein, Density, Lactose and Freezing Point of milk.

This chemical milk analysis device uses both thermal measurement and turbidity sensor technology for milk analysis.

It features fully automatic cleaning and rinsing system and zero point calibration for fast and accurate testing.

## Hygiena™ ZymoSnap Alkaline Phosphatase (ALP) Tests

Hygiena™ ZymoSnap ALP measures alkaline phosphatase activity in milk products to verify pasteurisation efficiency, delivering results in just 5 minutes. The ZymoSnap ALP Positive Control Kit must be run to establish Pass and Fail RLU limits for each specific milk type.

- 100% recyclable test device
- For use with EnSURE Touch monitoring system (page 5)
- Detects down to .001% raw milk
- Detects below regulatory limits (<350 mU/L)
- Clear, reliable results even at low levels (25-100mU/L)
- SureTrend™ software tracks and trends tests results for data storage and analysis



## Fluorophos Alkaline Phosphatase (ALP) Test System

The Alkaline Phosphatase (ALP) Test System is the industry standard and is extensively used by regulatory authorities. ALP testing provides an invaluable end product test.

- Closely monitor your production processes and anticipate quality control problems
- Detect pinholes and cracked seals in your high-temperature short-time (HTST) system
- Test results in approximately 3 minutes
- Test both cheese and other dairy products made from fluid milk on one system
- Detects ultra-low levels of raw milk contamination and offers
- Official reference method for ALP testing in the EU published standards ISO 11816-1/IDF 155-1 for milk products and ISO 11816-2/IDF 155-2 for cheese products



Fluorophos Alkaline Phosphatase (ALP) Test System

## DeLaval Cell Counter DCC for Somatic Cell Counts

Take control of the mastitis levels by conducting an accurate, instant, on farm somatic cell count test on any cow or quarter with the DeLaval Cell Counter DCC.

The direct somatic cell count pinpoints the need for bacteriological tests, which helps avoid unnecessary testing and associated costs. This instrument counts the somatic cells optically and automatically using a digital camera to take a picture of the somatic cells' nuclei, which is stained in the cassette with a DNA specific fluorescent reagent and counts the nuclei one by one.

- Portable instrument and does not require external power
- Sample result shows as cells/ml milk
- Early detection of mastitis
- Treatment at an early stage
- Quick recovery and less production loss
- Efficient control of mastitis
- Less risk of penalties or loss of bonus payment
- Dry cow management



DeLaval Cell Counter DCC for Somatic Cell Counts

# IDEXX SNAP® ANTIBIOTIC RESIDUE TESTS



*Idexx SNAP ST Plus Test*

**IDEXX SNAP® Beta-Lactam ST Plus Tests have unmatched antibiotic residue detection. They detect more beta-lactam residues, including cephalixin, than any rapid dairy test.**

If you are concerned about antibiotic residue, these tests will reassure you of product quality with the most thorough rapid test available. Two types of test are available, SNAP ST Plus for Beta-Lactams and SNAPduo™ Plus ST for both Beta Lactams and Tetracyclines.

## Why Choose IDEXX SNAP tests:

- Results in just 6 minutes
- No heat or incubation required
- No cross-reaction with residual chemicals or cleaning detergents
- Use with raw, UHT, sterilised, thawed, skimmed milk, and reconstituted milk powder
- Test means greater protection from operator contamination
- Approved and accepted method by A.O.A.C. & I.L.V.O.
- Can be used on milk from cows, ewes, goats, mares, buffaloes and camels

With millions of SNAP tests sold, IDEXX SNAP tests are known worldwide for fast, reliable antibiotic residue detection.

IDEXX products are manufactured in ISO-certified facilities to ensure conformance to international standards of consistency, quality and reliability. Gem Scientific is the sole UK distributor for IDEXX dairy tests.



## IDEXX SNAP Residue Limits

The table below shows the European Maximum Residue Limit (MRL) for antibiotic residue in milk compared to the detection level of the IDEXX SNAP Beta-Lactam ST and SNAPDuo tests in parts per billion (ppb).

	ANTIBIOTIC	EUROPEAN MRL	SNAP BETA LACTAM ST PLUS	SNAPDUO ST PLUS
PENICILLINS	Benzylpenicillin	4 ppb	2 ppb	2 ppb
	Ampicillin	4 ppb	4 ppb	4 ppb
	Amoxicillin	4 ppb	2 ppb	3 ppb
	Oxacillin	30 ppb	3 ppb	3 ppb
	Cloxacillin	30 ppb	3 ppb	4 ppb
	Dicloxacillin	30 ppb	4 ppb	4 ppb
	Nafcillin	30 ppb	4 ppb	3 ppb
CEFALOSPORINS	Cephapirin	60 ppb	25 ppb	30 ppb
	Ceftiofur	100 ppb	9 ppb	8 ppb
	Desfuroylceftiofur	100 ppb	30 ppb	25 ppb
	Cefquinome	20 ppb	12 ppb	16 ppb
	Cefalonium	20 ppb	18 ppb	14 ppb
	Cefazolin	50 ppb	18 ppb	20 ppb
	Cefacetrile	125 ppb	90 ppb	50 ppb
	Cephalexin	100 ppb	40 ppb	30 ppb
	Cefoperazone	50 ppb	20 ppb	35 ppb
	Cefuroxime	-	8 ppb	8 ppb
TETRACYCLINES	Tetracycline	100 ppb	-	16 ppb
	Oxytetracycline	100 ppb	-	18 ppb
	Chlortetracycline	100 ppb	-	40 ppb
	Doxycycline	-	-	25 ppb

*Detection levels accurate at time of printing*

## IDEXX SNAPshot® DSR Reader



*IDEXX SNAPshot® DSR Reader*

IDEXX SNAPshot® DSR Reader provides an easy-to-use method of reading and recording SNAP® test results.

Using a touch-screen interface, the SNAPshot DSR Reader offers easy data entry and navigation. Its leading-edge imaging technology provides quick, accurate test results. Just insert the snapped device and read the test results.

- Run the SNAPshot DSR Reader from a PC in the quality control laboratory
- Quickly download, store and analyse test results
- Use a PC keyboard to input data and customise reports
- Read, store and share results when performing tracebacks
- Print directly to your PC printer when you need a paper trail

The touch-screen display allows you to enter data quickly with numeric data entry, or full alphanumeric data entry with SNAPconnect® software or an attached keyboard.

Get a more precise picture with an upgraded vision system and display to make the results easy to read.

# BUCHI PROXIMATE™ NIR INSTRUMENT



Buchi ProxiMate™ NIR Instrument

**B**uchi ProxiMate™ is a robust, compact and easy to use at-line NIR instrument for the food and feed industry. It reduces downtime in production and provides fast quality control of batch samples.

The intuitive user interface allows easy operation and a wide selection of pre-calibration packages make it suitable for all applications. ProxiMate is designed to work effectively in the most adverse conditions, with measurements unaffected by temperature or humidity fluctuations.

The instrument can be placed where results matter, right next to the production line. With IP66 ingress protection ProxiMate can be pressure-hosed down to meet even the most stringent hygiene standards.

Thanks to the intuitive, modern touchscreen interface, ProxiMate operation has been optimised to make it logical, easy and straight forward. The touchscreen follows the proven interface logic of other Buchi products, making it easy for users to set up applications, test samples or set preferences.



PRODUCT

## Key Features

**Down and Up View:** Sample type variety can require different analytical approaches for optimum performance or practicality by allowing measurement from the top (down view) or the bottom (up view)

**Magnetic Drive:** Samples are rotated using a magnetically coupled drive unit. When the analysis is complete, this is removed to facilitate easy cleaning

**Glass Free Environment:** ProxiMate offers the option of using plastic Petri-dishes in down view mode. Using this mode, the type of plastic of the sample container will not affect the measurement.

**Sample Type Flexibility:** Larger sample volumes are needed when samples are inhomogeneous to reduce sampling errors. Smaller specimens are preferred when samples are valuable. ProxiMate offers options to cover all preferences.

**Visible Detector Option:** ProxiMate allows users to maximise measurement, improve performance and evaluate samples fully by capitalising on NIR only, visible only or by combining both visible and NIR signals.



## Popular ProxiMate Ready-To-Use Pre-Calibrations

	 DAIRY	 MEAT	 GRAIN	 EDIBLE OIL	 ANIMAL FEED
COMMON SAMPLE TYPES	<ul style="list-style-type: none"> <li>Yogurt</li> <li>Cheese</li> <li>Butter</li> <li>Milk Powders</li> </ul>	<ul style="list-style-type: none"> <li>Beef</li> <li>Pork</li> <li>Chicken</li> <li>Fish</li> <li>Sausage</li> </ul>	<ul style="list-style-type: none"> <li>Wheat</li> <li>Barley</li> <li>Maize (Corn)</li> <li>Ground Cereals</li> <li>Wheat Flour</li> <li>Semolina</li> </ul>	<ul style="list-style-type: none"> <li>Crude and Refined Palm Oil</li> <li>Crude and Refined Olive Oil</li> <li>Press Cake and meals</li> <li>Vegetable Oils</li> <li>Animal Fats</li> </ul>	<ul style="list-style-type: none"> <li>Mixed and Finished Feed (Ruminant, swine, poultry plus concentrates)</li> <li>Ingredients such as Oil Seed Meals, Cereals, Hulls and Bran</li> </ul>
TYPICAL PARAMETERS	<ul style="list-style-type: none"> <li>Moisture</li> <li>Dry Matter</li> <li>Fat</li> <li>Protein</li> <li>Lactose</li> </ul>	<ul style="list-style-type: none"> <li>Moisture</li> <li>Protein</li> <li>Fat</li> <li>Connective Tissue</li> </ul>	<ul style="list-style-type: none"> <li>Moisture</li> <li>Protein</li> <li>Fat</li> <li>Ash</li> <li>Starch</li> <li>Gluten</li> </ul>	<ul style="list-style-type: none"> <li>Moisture</li> <li>Peroxide Value</li> <li>Free Fatty Acids (FFA)</li> <li>Residual Fat</li> </ul>	<ul style="list-style-type: none"> <li>Moisture</li> <li>Total Fat</li> <li>Protein</li> <li>Fiber</li> <li>Ash</li> </ul>
BENEFITS	<ul style="list-style-type: none"> <li>Measure finished products and intermediates</li> <li>Optimise your process</li> <li>Control the quality of your finished product</li> </ul>	<ul style="list-style-type: none"> <li>Rapid decisions in the slaughterhouse</li> <li>Optimise formulation during production</li> <li>Inspect goods at the packaging stage</li> </ul>	<ul style="list-style-type: none"> <li>Decide which flours should be blended</li> <li>Control relevant ingredients in the finished product</li> </ul>	<ul style="list-style-type: none"> <li>Check oil seeds before crushing</li> <li>Monitor your production process</li> <li>Check relevant parameters in the final product</li> </ul>	<ul style="list-style-type: none"> <li>Check your raw materials to get the finished mix right</li> <li>Conveniently, ProxiMate can be placed right at the incoming goods weighbridge</li> </ul>

# IDEXX WATER TESTING

IDEXX Laboratories is the global market leader in diagnostics and information technology solutions for water microbiology. IDEXX testing solutions are developed and supported by a team of experts so that you can be confident with your results. They offer easy, rapid, accurate tests, equipment and accessories for all of your water microbiology needs.



## Colilert: Coliforms And e.Coli

- Detects coliforms and e.Coli simultaneously in 24 hours or less
- Eliminates the subjective interpretation found in traditional methods
- No confirmations needed
- Unit-dosed packaging eliminates media preparation
- Can be used for presence/absence (P/A) or quantification testing with Quanti-Tray and Quanti-Tray/2000



## Enterolert: Enterococci

- Sensitive to 1 enterococci/100 mL
- Less than 1 minute of hands-on time and results in 24 hours rather than 48 to 72 hours
- No colony counting, no media preparation, no autoclaving
- 50% fewer false positives and 95% fewer false negatives than the standard membrane filtration (MF) method
- Up to 12-month shelf life minimises waste



## Pseudalert: Pseudomonas Aeruginosa

- Blue fluorescence of wells or vessel indicates a positive result.
- Ready-to-use reagents, no media preparation with definitive results in 24 hours.
- No toxic compounds
- Specifically detects Pseudomonas Aeruginosa, reducing the risk of false positives from organisms
- Simple blue fluorescent change minimises subjective result interpretation

## IDEXX Quanti-Tray System

IDEXX Quanti-Tray System is an innovative advance in the bacterial enumeration. Quanti-Tray eliminates subjective colony interpretation and time-consuming confirmation.

It delivers semi-automated quantification methods based on the Most Probable Number (MPN) model to provide easy, rapid, and accurate bacterial counts.

**Quanti-Tray** uses a 100 mL sample divided into 51 wells. MPN is used to determine the number of bacteria in the original sample. Automation minimises hands-on time and maximises throughput (up to 4 samples per minute)

**Quanti-Tray/2000** is based on the same statistical model as the traditional 15-tube serial dilution. By automatically distributing the sample into 97 wells of 2 different sizes, Quanti-Tray/2000 yields a counting range of 1–2,419

Quanti-Tray and Quanti-Tray/2000 are used when quantifying coliforms, e.Coli, enterococci and Pseudomonas aeruginosa

**Quanti-Tray Sealer PLUS** makes quantification with Quanti-Tray and Quanti-Tray/2000 possible while saving time and improving laboratory efficiency. Features include a 2–3 minute warm-up time, faster sealing of trays, energy efficiency, and an access panel that makes cleaning easy.



Quanti-Tray Sealer PLUS



Quanti-Tray and Quanti-Tray/2000

# AGC INSTRUMENTS MAP-PAK ANALYSERS

**D**esigned specifically for the Food Industry, the AGC Instruments Modified Atmosphere Packaging (Map-Pak) food gas analysers measure the content of gas flushed food packaging. The Map-Pak range was developed as a quality control device with a variety of features and can be used with minimal training.

The Map-Pak range of gas analysers was designed specifically to validate Modified Atmosphere Packaging (MAP) or Controlled Atmosphere Packaging (CAP) quality control processes.

These lightweight, portable analysers are easy to use in quality control functions and designed to provide hassle-free, accurate and consistent measurements. They are ideally suited to a wide variety of gas flushed packaging applications.

- **Map-Pak O2** which measures the Oxygen (O<sub>2</sub>) content in gas flushed food packages.
- **Map-Pak Combi** which measures the Oxygen (O<sub>2</sub>), Carbon Dioxide(CO<sub>2</sub>) and Nitrogen(N) content in gas flushed food packages (the latter being the balance gas).

The Map-Pak analyser uses sophisticated measurement systems for fast and accurate readings with in-depth reporting of data for today's stringent food packaging regulations.

Sample measurements and results are achieved within 10 seconds, and the operator can modify the various features of the analyser to best suit their requirements. A minimal gas sample is required, and three sample volume options are available to suit all packaging types. Long battery life also ensures continuous operations in busy production schedules. Both versions provide a key analytical solution to cover your quality control requirements.

- Touchscreen display with an intuitive user interface
- One keypad button for sampling
- Measurement range of 0.1% – 100%
- Unique 'Product Profiles' with linked and editable parameters: Customer Name, Product Name, Weight, O<sub>2</sub> and CO<sub>2</sub> Alarms (High & Low), Gas Volume Setting, CO<sub>2</sub> Response Setting for improved accuracy
- Refined sample handling for improved accuracy
- In-depth Reporting
- Lithium-Ion Battery with programmable Auto-Shutdown function
- Standard USB cable for charging
- Bluetooth Connectivity to Printer which also comes with USB charger with mains connector
- Large Memory with results easily transferred to a PC
- Easy to replace tubing and fittings along with an upgraded filter

Typical applications for the Modified Atmosphere Packaging (Map-Pak) Analysers include:

- Meat and Poultry
- Convenience Foods
- Baked Goods
- Dairy Produce
- Seafood
- Salads
- Pasta
- Fruits & Vegetables
- Precooked Meats
- Coffee
- Pharmaceuticals
- Glove Box Analysis



AGC Instruments Map-Pak Analyser

# GEOTECH CARBON DIOXIDE ANALYSERS

Geotech's 'G' series of portable carbon dioxide (CO<sub>2</sub>) analysers are at the forefront of CO<sub>2</sub> monitoring and are used to monitor CO<sub>2</sub> in areas such as IVF medical research, pharmaceutical production, food processing, brewing, composting, indoor air quality and international border control.

## G100 0-20% Carbon Dioxide Analyser



G100 0-20% Carbon Dioxide Analyser

Geotech G100 0-20% CO<sub>2</sub> Incubator Analysers are fast, simple to use and accurate portable monitors designed to monitor CO<sub>2</sub> levels in incubators.

Laboratory incubators must run at a consistent temperature, humidity and CO<sub>2</sub> level to maintain optimum cell growth in embryo cultures and IVF. While incubators themselves have a built-in system for monitoring CO<sub>2</sub>, even the highest quality of on-board instruments can sometimes drift out of calibration

G100 Analysers are used to quickly and accurately confirm the CO<sub>2</sub>, O<sub>2</sub>, humidity and temperature levels and distinguish whether a local calibration is required on the incubator.

- Four models available with optional extras: measures O<sub>2</sub> (0-100%); dual temperature probe (0-50°C); humidity sensor (0-100%)
- Accurate onboard readings and quick verification of CO<sub>2</sub> incubator levels
- First in Industry to Receive UKAS ISO 17025 Certification
- Easy to read menu and large, well-lit display
- Built-in gas moisture removal protects the G100 from water ingress
- Dual temperature probes help you to adjust the temperature to stabilise conditions within your incubator and helps you analyse temperature variation



CASE STUDY

## G110 0-100% Carbon Dioxide Analyser



CASE STUDY

The Geotech G110 portable CO<sub>2</sub> analyser is popular with breweries, food processing, medical and research applications.

The analyser measures CO<sub>2</sub> 0-100% and O<sub>2</sub> 0-100% and have been developed to incorporate the latest technology that provides customers with a fast, easy to use analyser, providing simple verification of CO<sub>2</sub> levels.

- Monitors CO<sub>2</sub> in food processing, breweries, research and medical applications
- Four models available with optional extras: measures O<sub>2</sub> (0-100%); dual temperature probe (0-50°C); humidity sensor (0-100%)
- User has a fast, simple and portable digital analyser
- Built in gas moisture removal
- Data download and storage



G110 0-100% Carbon Dioxide Analyser

## G150 0-10,000PPM Carbon Dioxide Analyser



G150 0-10,000PPM Carbon Dioxide Analyser

The Geotech G150 0-10000ppm Indoor Air Quality CO<sub>2</sub> Analyser is specifically designed to monitor CO<sub>2</sub> in all indoor spaces.

The G150 portable CO<sub>2</sub> analyser is commonly used for indoor air quality applications, environmental site audits, interiors of vehicles crossing borders and CO<sub>2</sub> levels in poultry barns. It is designed to be a fast, easy to use and accurate piece of environmental field kit.

- Measure CO<sub>2</sub> 0-10000ppm
- Five models available with optional extras: measures O<sub>2</sub> (0-100%); dual temperature probe (0-50°C); humidity sensor (0-100%), 1m stowseek probe to measure inside vehicles
- Measure and monitor the air in office buildings to ensure conditions are optimal for your staff
- Quick verification of CO<sub>2</sub> levels for site audits
- Built-in gas moisture removal



ARTICLE



## GEOTECH SERVICE AND CALIBRATION

Geotech 'G' series analysers are state of the art carbon dioxide (CO<sub>2</sub>) analysers. Having your analyser serviced and calibrated regularly gives you peace of mind that readings are accurate and reliable. The analysers are checked and calibrated using ISO17025 audited automated calibration rigs which confirm accuracy back to a recognised worldwide standard. **To book a service of your analyser email: [service@gemscientific.co.uk](mailto:service@gemscientific.co.uk)**

# ANALOX SENSOR TECHNOLOGY GAS MONITORING

**A**nalox Sensor Technology design and manufacture safety monitors and alarms for gas detection. An acknowledged authority on monitoring gases. Analox's fixed and portable gas monitors are used in several industries including laboratory and medical research facilities, universities, food processing and packaging and breathing air systems.

## AX60+ Wall Mountable Multi Gas Monitor

The Ax60+ is a fixed multi-gas monitor for detecting carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) depletion and enrichment. The Ax60+ Central Unit should be installed away from the risk area in a managers or operations office and can be connected to up to 4 sensors, of any combination of CO<sub>2</sub> and O<sub>2</sub> and up to 8 alarms.



ARTICLE

Suitable for protecting employees and customers where CO<sub>2</sub> or inert gases are being stored or piped. These facilities include breweries, wineries, bars, pub cellars, restaurants, fast food kiosks, stadiums, shopping malls and theatres or anywhere gas is being used for beverage carbonation or transporting drinks from keg to draft towers and dispensers.



AX60+ Wall Mountable Multi Gas Monitor

Now available with a signal output module using 4-20mA and MODBUS RTU communications, the Data Output Module transmits real-time updates of sensor activity and status to a central control system or Building Management System (BMS).

- Multi-point, multi-gas (CO<sub>2</sub> with an option for O<sub>2</sub>), distributed monitoring system
- 4-channel flexibility allowing any sensor combination - both now and in the future
- Central display unit for remote operation and control
- User-configurable alarms, setpoints and relay outputs
- Meets TUV, DIN OSHA and EH40 requirements
- Approved by the McDonald's Corporation's 'Restaurant Solutions Group' and is installed in their restaurants worldwide
- Data Output Module available
- Up to five year sensor and electronics warranty

## CO2BUDDY Personal Carbon Dioxide Safety Alarm



CO2BUDDY Personal Carbon Dioxide Safety Alarm

The CO2BUDDY personal alarm is designed to detect carbon dioxide (CO<sub>2</sub>) and warn of any dangerous levels in confined spaces, providing continuous protection for those working in an environment where CO<sub>2</sub> is present.

The CO2BUDDY is suitable for a wide variety of applications where CO<sub>2</sub> is used including pub and bar cellars, walk-in coolers, fast food outlets, agricultural grow houses, medical laboratories and food packaging plants.

- Lightweight - Max weight 70g
- Rechargeable battery
- Single-button operation
- Fresh air calibration
- Low maintenance
- Alarm configurations supported include 1.5% and 3%, 0.5% and 1.5%, 1.5% and 4%, 1% and 2%

## Aspida Portable Carbon Dioxide Safety Monitor



Aspida Portable Carbon Dioxide Safety Monitor

The Aspida is a robust, high specification personal CO<sub>2</sub>/O<sub>2</sub> monitor which can be worn on a belt or all mounted as a backup to a primary safety system.

Offering audio/visual alarms, data logging and a man-down alarm for lone workers, it is an ideal solution to protect staff from the dangers of a leak of carbon dioxide or nitrogen.

The Aspida is available as a stand-alone CO<sub>2</sub> or O<sub>2</sub> monitor, or as a dual CO<sub>2</sub>/O<sub>2</sub> monitor, ideal where a combination of CO<sub>2</sub>/O<sub>2</sub> and inert gases are used.

- Available as a stand-alone CO<sub>2</sub> or O<sub>2</sub> monitor or as a dual CO<sub>2</sub>/O<sub>2</sub> monitor
- Data logging capability
- Man down alarm
- Time Weighted Average (TWA) monitoring
- Battery flexibility
- Intelligent software - 2 users registered to one unit



## O2NE+ Oxygen Depletion Monitor



The O2NE+ monitor is a simple to use oxygen depletion monitor and sensor for use in laboratories which use inert gases. Inert gases displace the oxygen (O<sub>2</sub>) in the atmosphere, making it essential to monitor the remaining levels of O<sub>2</sub>.

**ARTICLE** Any laboratory or medical research facilities using inert gases such as argon, xenon, nitrogen, krypton, radon or helium need to consider the O2NE+ oxygen depletion monitor. Inert gases are also odourless, colourless and tasteless, making them undetectable without an oxygen monitor.



O2NE+ Oxygen Depletion Monitor

The O2NE+ oxygen depletion monitor is usually situated in laboratories that are using multiple gases to ensure that oxygen levels do not deteriorate to an unsafe level. The unit is also used in gas storage areas where there is potential for a leak of helium or nitrogen. This life-saving monitor will help you comply with applicable legislation for workplace safety within your laboratory.

- Ranged from 0 to 25% and has 2 low audio/visual alarms
- Suitable for use with helium
- Comes complete a repeater which is to be placed at the entrance to provide an early warning before entering the room
- Sensor has a very long life and calibration is only required every 12 months and can be achieved using certified air
- Easily wall-mounted and basic installation does not require a qualified electrician

## SAFE-OX+ Oxygen Enrichment and Depletion Monitor



Safe-Ox+ Oxygen Enrichment and Depletion Monitor

The Safe-Ox+ is an ambient oxygen enrichment and depletion monitor which is simple to use and maintain. The Safe-Ox+ provides a high level O<sub>2</sub> alarm ideal if you are using pure O<sub>2</sub>, to protect you from fire risks caused by O<sub>2</sub> enrichment. If there is a leak, or build-up of inert gasses such as nitrogen, argon or helium the Safe-Ox+ can also warn of oxygen depletion.



**CASE STUDY**

The Safe-Ox+ consists of a wall-mounted main sensor unit and a repeater. It is ranged from 0 to 25% O<sub>2</sub> and has one low and one high audio/visual alarm. The sensor has a long life and we would recommend a calibration adjustment on installation, with further calibrations every 12 months. This can simply be achieved using certified air.

- Safe-Ox+ can be calibrated on certified air
- Long-life O<sub>2</sub> sensor
- No risk of accidental calibration as it can't be calibrated using ambient air
- Recommended calibration only every 12 months
- Easily wall-mounted "plug and play" design
- Repeater Included
- Suitable for use with helium



## KNOW YOUR GASSES

### Carbon Dioxide (CO<sub>2</sub>)

Carbon dioxide naturally occurs in the atmosphere at about 400 parts per million. It contains one molecule of carbon and two molecules of oxygen. CO<sub>2</sub> detectors use infrared sensors to detect levels of gas in the atmosphere. Just a small increase of approximately 1.5% of CO<sub>2</sub> can start to affect the human body.

### Oxygen (O<sub>2</sub>)

Oxygen is the only gas we breathe that supports life. In the air a normal concentration of O<sub>2</sub> is 21%, while the rest of the atmosphere is made up of 78% nitrogen and trace gases. An increase in the concentration of any other gases that are not O<sub>2</sub> can lead to a situation where individuals are at risk of asphyxiation which can cause serious injury or even death.

### Nitrogen (N)

Nitrogen is an inert gas which is colourless, odourless and tasteless. As an inert gas Nitrogen displaces oxygen in the atmosphere, quickly acting as an asphyxiant to anyone in that area, especially in confined spaces. Used predominantly to prevent oxidation which can affect the taste and quality of beverages.



# SAMPLE HANDLING

**T**horough handling of both product and environmental samples is essential to ensure integrity and to prevent deterioration and cross-contamination.

Gem Scientific provides a variety of sample handling products and solutions which will allow you to take and handle specimens confidently.



3M™ Monitor Badges



Breakable Shaft Swabs



Carcass Sampling



Diagnostic Swabs



Dipslides



Dry Sampling Swabs



Hygiene Sampling Sponges



Infection Control Kits



Inoculating Loops



Inoculating Needles



L Shaped Spreaders



Meat and Poultry Sampling



Mini Tip Swabs



Neutralising Buffer Sampling Kits



Pipettes



Sample Containers



Test Strips



Transport Swabs

## Seward Stomacher® 400 EVO



Seward Stomacher® 400 EVO

The all-new design of the Seward Stomacher® 400 EVO combines the gold standard attributes of the original Stomacher 400 with improved, easy-to-use features. It provides maximum performance while minimising noise and consumable waste.

Stomacher® 400 EVO's unique 'one-touch' bag loading system minimises sample bag handling, saving time and reducing the risk of sample contamination. The simple programmable screen display enables complete control of processing, for consistent results with minimum effort.

- Unique one-touch bag loading system
- Quiet and efficient blending
- Double aperture seal, isolated chassis, and fully enclosed casing result in silent operation
- Rubber base with anti-vibrational technology eliminates bench movements and reduces noise
- Easy clean interior with removable paddles, drip tray and access to paddle chamber
- Quick and straightforward ECO paddle conversion can save up to 25% in consumable cost and significantly reduce plastic waste
- Designed to work with Seward Eco bag range for extra savings

## Sartorius Proline® Plus Mechanical Pipettes

The Sartorius Proline® Plus mechanical pipette family is designed to offer comfort and quality for your everyday manual pipetting. It combines durable construction with ease and lightness of use and is the perfect choice for liquid-handling professionals and students alike.

Proline® Plus has low pipetting forces, a comfortable handle and ergonomic finger support for effortless pipetting. The ergonomic handle design minimises the grip force needed to hold the pipette, thereby reducing the risk of a strain injury. Adjustable single and multi-channel models and fixed single-channel models available

- Optiload mechanism in multi-channel models for easy and light tip loading with perfect tip sealing
- Volume range from 3µl (5µl for fixed) to 10ml
- Colour-coding of different volumes
- Safe-Cone Filters available for models >10µl
- Fully autoclavable without disassembly
- Simple to clean and maintain with only three parts to disassemble
- High chemical and UV-resistance to secure long life-time of the pipette



Sartorius Proline® Plus Mechanical Pipettes

## Sartorius Tacta® Mechanical Pipettes



Sartorius Tacta® Mechanical Pipettes

Sartorius Tacta® Mechanical Pipettes are a range of premium mechanical pipette featuring superb comfort and reliability. Available in volume ranges from 0.1 to 10 000µl in single-channel models, and from 0.5 µl to 300 µl in multichannel models.

- Ergonomic design
- Optiject soft tip ejection feature
- Optilock dual-function volume locking
- Easy-to-read, four-digit volume display
- Colour-coding of volumes
- Fully autoclavable without disassembling
- Simple to clean and maintain with only three parts to disassemble
- Safe-Cone Filters available for models above 10 µl with a convenient built-in filter ejection mechanism
- Easy calibration adjustment with adjustment scale ensures accurate results
- High chemical and UV-resistance to ensure a long life span for the pipette

## Integra DOSE IT Peristaltic Pump

Integra DOSE IT has been specially designed for laboratories looking for an easy-to-use, compact and portable peristaltic pump. With its lightweight and compact design, DOSE IT fits everywhere in the laboratory and can be easily moved. The intuitive user interface with straightforward instructions makes it very easy to operate.

- Ideal for dispensing media, buffer or filling Petri-dishes
- Large display allows for intuitive programming and operation
- Dose-volume 0.1 ml – 9999 ml
- Store up to 20 application protocols
- Fliptop pump head allows for an easy and quick tubing exchange
- Compatible with tubing from 1 to 8 mm
- Small footprint and lightweight



Integra DOSE IT Peristaltic Pump

# SARTORIUS MEMBRANE FILTRATION

Sartorius' Laboratory Filtration portfolio, whether it is simple filter papers to ultrafiltration units, demonstrates their commitment to using the best in science and engineering design to provide a product range that not only satisfies everyday needs but does so with the ease, performance, quality and consistency that scientists demand.

## Sartorius Microsart® e.motion Membrane Filters



Sartorius Microsart® e.motion Membrane Filters

The Sartorius Microsart® e.motion membrane filters are suitable for the use with the Microsart® e.motion dispenser. The filters are individually sterile-sealed on a band without any protective paper. The special pleating, as well as the shape of the sealing of the band of membrane filters, ensures a perfectly flat and uniform dispensing of the individual membrane filters.

For complete traceability, the membrane filter type, diameter, lot number and a sequential number (from 250 to 1) are printed on the paper of every membrane cell. The membrane filter quality and compliance with current standards and regulations, such as ISO 7704 for all 0.45 µm membrane filters, are confirmed by the certificate supplied inside each box of membrane filters.

- High recovery rates for microorganisms
- Extremely fast filtration rate
- Unique grid lines make counting easy
- Multi-fit: Fits into other dispensers
- Protective paper-free
- High flow membranes
- Gamma irradiated, 25 kGray

## Sartorius Microsart® e.motion Dispenser

The Sartorius Microsart e.motion Dispenser offers an easy and flexible way of membrane filter dispensing. Thanks to the small footprint, the Microsart e.motion Dispenser saves precious space under the laminar airflow which can be used for samples, media and funnels instead.

Choose between three different operation modes: push-button, foot-switch or sensor mode. The dispenser's low weight and the convenient handle makes it easy to remove or transport.

- Reliable and fast membrane filter dispensing
- Ideal for high throughput applications
- Filters are released from their sterile packaging automatically
- Window field for membrane information visibility (lot number, filter type etc)
- Dispenser filters can be conveniently and quickly changed



Sartorius Microsart® e.motion Dispenser

## Sartorius Microsart® Manifolds

Facilitate your daily microbiological testing procedures with the new Sartorius Microsart® Manifold. Depending on the number of daily tests, you can choose between different sizes of manifolds, from a single branch to multi-branch. The different Manifold sizes are connectible with each other by quick connection to enable the manifold to adapt to your daily workload.

The easy to clean, compact design of the manifold allows quick and easy cleaning using standard disinfectants. Microsart® Manifolds are made from 100% stainless steel with no disassembly needed. Simply put the complete manifold, including the filter adapters, into your autoclave for reliable sterilisation.

Depending on your application and product to be tested, choose between different funnels and filtration units, from complete reusable to single sterile solutions. Connect the filter onto the manifold by using the correct adaptor. This new and fast way to connect the respective filter adaptor (base support) to the manifold eliminates the need for additional tools.



Sartorius Microsart® Manifolds

# THERMO SCIENTIFIC™ GENESYS™ SPECTROPHOTOMETERS

**B**uilt on the foundation of 60 years of spectroscopy experience, the next-generation Thermo Scientific GENESYS™ family of Vis/UV-Vis spectrophotometers provides exceptional performance with a contemporary design.

## Genesys 40 Vis/50 UV-Vis Spectrophotometers



Genesys 50 Vis Spectrophotometer shown with test tube holder (sold separately)

Perform routine measurements for quality control or teaching in the chemistry classroom with rugged GENESYS 50 UV-Vis and GENESYS 40-Vis Spectrophotometers.

Offered in a single cell configuration, these instruments are designed with a sloping surface to shed spills and a washable sampling compartment for easy clean up.

- Dual Beam
- Onboard control increases speed and reliability for routine analysis
- 7-inch, high-resolution touchscreen interface
- Large sample compartment with front access simplifies sample handling
- Wi-Fi USB adaptor, available—save data and methods, print results from onboard control

## Genesys 140 Vis/150 UV-Vis Spectrophotometers



Genesys 140 Vis Spectrophotometer

Perform quantitative measurements in routine industrial QA/QC or university chemistry laboratories with the automated and network-capable GENESYS 150 UV-Vis and GENESYS 140-Vis Spectrophotometers.

They are designed for advanced teaching laboratories, R&D departments and applications that require high throughput or temperature control.

- Dual Beam
- Onboard methods, reporting and data export
- 7-inch high-resolution touchscreen user interface
- Room light resistance for “open-lid” operation
- Networking capable (Wi-Fi)
- Removable, washable sample compartment liner with magnetic placement and hold-down
- Compatible with automated cell changers, Peltier, sipper and fibre optic probe accessories

## Genesys 180 UV-Vis Spectrophotometers



Genesys 180 UV-Vis Spectrophotometer

Perform high throughput quantitative UV-Vis measurements where a double beam is required as a reference cell position with the GENESYS 180 UV-Vis Spectrophotometer

An 8-cell carousel comes standard for high-throughput applications. The spectrophotometer includes room-light resistance, allowing lid-open operation for improved speed and convenience.

- Double Beam/Reference Cell
- 7-inch high-resolution touchscreen user interface
- Room light resistance for ‘open-lid’ operation
- Onboard methods, reporting and data export
- Accommodates cells up to 100 mm pathlength

## BeerCraft™ Software for the Genesys Spectrophotometer

Analysing your beer quality with a spectrophotometer is a simple, quick and affordable option to assure consistency from bottle to bottle, batch to batch.

Analyse over 20 attributes of beer, such as colour, bitterness, and Vicinal Diketones (VDKs) with the BeerCraft™ Software for the Genesys Spectrophotometer.

Methods are pre-programmed for quick sample analysis, simply scroll through the list of methods, choose your method, and go.

BeerCraft software is only available for the Genesys 50 and the Genesys 150 UV-Vis Spectrophotometers.



## Monmouth Scientific Guardian® Class II Biological Safety Cabinets



Monmouth Scientific Guardian® Class II Biological Safety Cabinets

- Low Energy < 120watts of power
- Visionaire® 4.3" full-colour touch screen control system
- UV Lighting Strip ensures VHP & Formalin Sterilisation
- Electric Sash Adjustment & Closure
- Audible and Visual alarms for maintenance requirements

The Monmouth Guardian MSC1200 is an evolution in Class II cabinets. It was designed and built in the UK by Monmouth Scientific. It incorporates the latest in features and design that have never been seen before in a Class II cabinet.

The Class II Biological Safety Cabinet utilises a specially ventilated enclosure, developed for sterile material handling. The unit guarantees the operator and the working materials protection from potential biohazard infections.

The system is fitted with a unique Infra-Red Intelligent Sash Safety (IRISS) system which projects an infra-red beam across the base of the opening. Should the beam be broken by inadvertently positioned apparatus or an operator's hand, the door closure will be automatically aborted instantly. This prevents potential injuries, instrument damage or sash damage.

The Guardian Micro-Biological Safety Cabinet has been independently type tested and approved to BSEN 12469:2000 by the UK's leading authority on Biological Safety Cabinets, the Health Protection Agency at Porton Down.



ARTICLE

- Air Diffuser and Sloped Intake for efficient and smooth airflow
- H14 HEPA Filters that help create an ISO Class 4 Clean Environment
- Removable Polished Stainless Steel Work Surface

## Waysafe® Large General Purpose Enclosures

Waysafe® GP Large General Purpose Enclosures were initially designed for media powder mixing and weighing, but have since found numerous uses in laboratories and production environments.

Side entry doors and a removable front panel afford easy access for media or equipment loading and cleaning. Operator access is through the front panel opening, which can be modified to suit your application at no extra cost using the latest laser cutting technology.

A quiet, variable speed, EC Waysafe® '600' series HEPA filter/fan units provide background airflow that ensures operator protection without affecting sensitive instruments or operations.

- Ductless – Air is filtered, and clean air circulated back into the workplace
- H14 HEPA filtration (99.999% efficient)
- Easy benchtop installation
- Low maintenance



Waysafe Large General Purpose Enclosure

- 2-speed fans
- Ideally suited for media weighing and laboratory preparation
- Made to order in the UK
- Available in 1200mm and 1600mm wide

## Genlab Energy Efficient E3 Drying Cabinets

Are you concerned with reducing your running costs or looking to invest in equipment that is greener and smarter? The Energy Efficient E3 Drying Cabinets will provide you with that solution.

The E3 Drying Cabinets have state of the art design and are safe, energy-efficient and sustainable.

The E3 fan units can remove approximately double the moisture of a convection unit, which means the time it takes for the load to dry, will be halved.

- Low energy consumption – 50% lower than traditional cabinets
- Fully insulated with an adjustable vent cover
- Digital controller with fixed over-temperature safety cut-out
- Integral 7 day timer with a display
- Adjustable shelf runners with removable chrome shelves
- Integral programmable 7-day timer (on/off option to suit your needs)



Energy Efficient E3 Drying Cabinet

**P**riorclave laboratory and research-grade autoclaves are designed and built in their own dedicated UK manufacturing plant. This gives Priorclave total control over every aspect of product design, development and stringent QA procedures. The result is a range of robust autoclaves renowned for their superb sterilising performance and designed to offer unrivalled reliability for many years.



Priorclave Autoclave Range

There are more than 60 model configurations in the standard Priorclave range of laboratory autoclaves with chamber capacities up to 700 litres. If a standard autoclave does not match your requirements, Priorclave's in-house engineering team has the expertise to design a bespoke unit, tailoring the autoclave to meet your unique needs. Standard Priorclave autoclaves include:

- Benchtop – up to 60 litres
- Compact Top Loading – up to 85 litres
- Top Loading – up to 150 litres
- Front Loading (cylindrical chamber) – up to 400 litres
- Front Loading (large rectangular chamber) – up to 700 litres
- Pass-through – up to 700 litres
- Power Door – up to 700 litres
- Stackable units



The diversity of the range and their capabilities, coupled with excellent energy efficiency, appeals to laboratory managers who want a robust and sustainable solution. Priorclave autoclaves are used in industrial sectors such as food, drink, dairy, pharmaceutical, agricultural, education, healthcare, as well as numerous research and educational institutes within the public sector.

## Priorclave Tactrol Programmable Controller



The entire Priorclave range incorporates the latest version of the highly successful Tactrol programmable controller, TACTROL@3.

This new controller, with its crystal clear user interface LCD, provides a more straightforward and easier function setting. A quick-view menu shows all the functions that have been set on any select program.

Additionally, you can add BEE LIVE to your system. BEE LIVE brings Wi-Fi connectivity to all of Priorclave laboratory autoclaves and research sterilisers.

It provides immediate connectivity to a variety of Wi-Fi enabled devices such as smartphones, tablets, iPads and laptops, enabling laboratory staff to monitor sterilising parameters remotely.

## ENBIO Microjet Autoclaves

The ENBIO Microjet Autoclaves feature Microjet Direct Energy Transfer technology which makes media preparation very quick, completing sterilisation in just 12 minutes.

Compact design, small footprint and low weight make MICROJET very easy to install virtually anywhere in your laboratory. Its plug and play design means all you need is an electric outlet to start using it.

Liquid media can be sterilised in standard laboratory vessels of 100 to 500ml capacity and temperature resistant up to 135°C (glass or plastic – PMP, PP, PTFE, FEP).

Each sterilisation operation is automatically stored on a memory card in a GLP compatible format.



ENBIO Microjet Autoclave

# WEIGHING AND INSPECTION INSTRUMENTS

**W**ith so many options available, finding the right weighing equipment for your needs can be an overwhelming task. From weighing in micrograms through to tonnes, we work with our customers to understand what they need from their weighing instruments and offer impartial advice on the right scales for the job.



**Ultra Micro & Micro Balances**

Used for measuring weight in sub-milligram range, ultra-micro and microbalances are high specification laboratory balances, with a resolution of up to 7 decimal places.



**Semi-Micro Balances**

Semi-micro balances measure down to 5 decimal places and are ideal for precise laboratory weighing applications.



**Analytical Balances**

Analytical balances are designed for accurate weighing in laboratory environments with readability range typically between 0.1mg – 0.01mg.



**Precision Balances**

Precision scales have a higher capacity than analytical balances but lower readability. They are more precise than a bench or compact scale, but not as precise as analytical balance.



**Moisture Analysers**

Used for analysing moisture content in samples, moisture analysers (also known as moisture balances) are suitable for use in laboratories, food production facilities, wastewater treatment plants.



**Mobile Weighing**

Whether it's crane, forklift or pallet scales, Gem Scientific supply a range of mobile weighing solutions from manufacturers such as Straightpoint, Adam and Dini Argeo.



**Counting Scales**

By counting large volumes of identical parts, units or items precisely and efficiently, counting balances can save you time and money by eliminating laborious hand counting.



**Bench Scales**

Versatile and used across a broad range of industrial and commercial environments, bench scales are designed to fit on tables and work stations.



**Platform Scales**

Large and robust, floor or platform scales are used for weighing big, heavy objects. Frequently paired up with an indicator, platforms come with feet, fitted with ramps or installed directly into the floor depending on the application.



**Checkweighers**

From benchtop models through to bespoke in-line equipment, checkweighers are used across many industries for monitoring weight, especially in food processing and pharmaceutical production applications.



**Detection & Inspection**

Metal detectors and X-ray inspection systems are used in production and packaging lines for detecting products that contain metal or other foreign bodies and remove these reliably from the line.



**Calibration Weights**

We supply a full range of calibration weights for checking weighing equipment. Test weights are supplied in different OIML classes appropriate for the testing of balances and scales with different resolutions.

# FREEZERS AND REFRIGERATION

## Haier Biomedical TwinCool -86°C ULT Freezer



Haier Biomedical DW-86L578ST  
TwinCool -86°C ULT Freezer

Haier Biomedical's TwinCool -86°C ULT ultra-low temperature freezers are designed with two independent refrigeration systems. TwinCool technology provides optimal cabinet reliability, longevity, efficiency and sample protection.

Depending on the load demands and ambient conditions, one or both refrigeration systems will operate on demand, ensuring the samples are fully protected under the worst possible condition.

- 50% more energy efficient than standard ULT refrigeration systems
- High-efficiency cooling fans and compressors combined with hydrocarbon refrigerants ensure energy savings and long term sample security
- Triple layer of gaskets split between main and inner doors decreases heat loss
- Heated port with a spring-assisted mechanism to prevent icing on the vent
- USB Interface to download historical temperature data for compliance/auditing purposes
- Multi-Level Alarms including high and low temperature, sensor error, power failure, high ambient, clean filter and door ajar

## Haier Biomedical Biobank Large Capacity Liquid Nitrogen Storage System

Haier Biomedical Biobank Large Capacity Liquid Nitrogen (LN<sub>2</sub>) Storage Systems ensure safety and temperature uniformity while reducing the consumption of liquid nitrogen. Temperature variation does not exceed 10°C even in vapour phase storage with temperatures near to top as low as -190°C.

At the vapour phase storage, samples are kept away from the liquid nitrogen while stored at a uniform temperature, close to that of liquid nitrogen. Vapour storage prevents cross-contamination.

- Designed for both liquid and vapour LN<sub>2</sub>
- Racks are stored in a rotating tray, LN<sub>2</sub> or LN<sub>2</sub> vapour fills the space between the storage system and the tank wall to maintain temperature uniformity.
- For vapour phase storage, samples are kept away from the LN<sub>2</sub> while stored at a uniform temperature
- Cryosmart Intelligent Control System monitors and provides complete control of the LN<sub>2</sub> storage system
- High precision temperature and liquid level sensors ensure accuracy
- A secure access control system protects data and samples



Haier Biomedical YDD-1800-610 Biobank

## Labcold Advanced Laboratory Refrigerators



Labcold RAFG44043 Advanced  
Laboratory Refrigerator

The Labcold Advanced ranges of refrigerators represent the highest levels of performance, constructional quality, robustness, and appearance available in the market place.

Featuring heavy-duty all-metal construction, with standard stainless steel interior, provides strength and durability with ease of cleaning or sanitisation. Labcold Advanced Refrigerators are microprocessor controlled, together with ducted airflow and advanced auto defrost system to provide class-leading temperature stability and uniformity.

- Heavy-duty all-metal construction
- Standard stainless steel interior
- Ducted airflow and advanced auto defrost system
- Class-leading temperature stability and uniformity
- Microprocessor control
- Double lockable doors and adjustable shelves
- Advanced models may also be customised for specific applications
- 2-year parts and labour warranty (UK only)

## Labcold Sparkfree Refrigeration and Freezers

The Labcold Sparkfree range is engineered to store flammable materials safely with no sources of ignition inside the chambers. Anything that could cause a spark is located outside the chamber.

For extra security, all spark-free models are fitted with a built-in lock and digital temperature display. The display features high and low audio and visual temperature alarms as standard in addition to a door open alarm.

- Sparkfree safety interior
- Operating temperature: 0°C to +10°C (refrigeration) and -18°C to -25°C (freezers)
- 6 adjustable shelves
- High/Low temperature alarm and display
- Door open alarm
- Access port
- 2 year parts and laboratory warranty (UK only)



Labcold Sparkfree RLPRI517 Refrigerator

# LABORATORY WATER

## Miele Laboratory Glasswashers

Miele Professional washer-disinfectors glasswashers offer a comprehensive solution for the analytically pure reprocessing of different laboratory glassware, achieving outstanding reprocessing results with the minimum consumption of water, energy and chemical agents

Reproducible results even in challenging applications such as organic, inorganic and physical chemistry, biology, microbiology, hospital laboratories and the pharmaceutical, food and cosmetics industries.



Miele Laboratory Glasswashers

- High-performance wash technology guarantees that complex hollow instruments and laboratory glassware can be safely reprocessed at a high wash pressure
- Equipped with one or more integrated dispenser pumps allows cleaning or neutralisation agents to dispense automatically
- Ultrasonic dispenser guarantees high precision regardless of the viscosity and temperature, giving the user perfect control of media dosing
- Conductivity monitoring the wash water facilitates the detection of chemical agent residues and their reduction to a defined level through further rinsing
- EcoDry patented AutoOpen function opens automatically as soon as the temperature falls below 70°C, allowing residual moisture to escape easily and the washed items to dry more quickly
- For hollow-body instruments, the DryPlus upstream H13 HEPA filter ensures optimum particle separation from the drying air

## Suez Select Water Purification Systems



Suez Select Fusion

Suez Select range of water purification systems are compact, robust, simple to use and easy to maintain and available in five standard models: Analyst, HP, Purewater 300, Fusion and Neptune Ultimate.

- Space-saving, dependable, benchtop or wall-mounted systems
- Reverse Osmosis (RO) Removes > 98% minerals and > 99% bacteria
- Choice of production rates up to 48 l/hr
- RO Boost pump fitted as standard
- Installation kit and all consumables included for first year's operation
- LCD colour touch screen panel
- Utilises carbon pre-treatment, RO and deionisation
- USB port to download event data and upload software updates
- Integral 20-litre storage as standard (excludes Neptune Ultimate) and optional external storage tanks up to 100 litres
- Semi-automatic clean cycle

## Suez Labwater Small Deionisation Cartridges

A simple, cost-effective method of producing 10-1µS.cm purified water at low volumes.

The Laboratory water units incorporate an easily replaceable cartridge, containing specifically designed resin, which changes colour through absorption of ionic contaminants, facilitating a low level of maintenance. On the complete colour change from blue to brown, replace the cartridge.

The units are typically wall-mounted and are easily connected via a dedicated hose (supplied separately) to a tap or a stopcock and operate direct from water pressure thus requiring no external electrical supply.



Suez Labwater Small Deionisation Cartridges

## Distilled Water



Distilled Water

Gem Scientific supply a range of high-quality distilled water for a wide range of applications and industries, including industrial applications, laboratory applications, cleaning, rinsing, testing, automotive batteries and laser cutting. Distilled water is suitable for the following applications:

- Autoclaves
- Chemical Dilution
- Colorimetric Testing
- DNA Sequencing
- Food Grade Applications
- Gas Chromatography
- Heating Baths
- Hydrogen Generators
- Media Preparation
- pH Buffer Preparation
- Pharmaceutical Applications
- Reagent Manufacture
- RNA/DNA Free Applications

# WATER BATHS

## Nickel Electro NE1 Unstirred Thermostatic Water Baths



Nickel Electro NE1-4 Unstirred Water Bath

Nickel Electro NE1 Unstirred Thermostatic Water Baths are designed for general use and economically priced without compromising quality.

Comprising of a high-quality corrosion-resistant stainless steel tank, with a bright, clean finish housed in a durable paint finished outer case, the NE1 Baths feature anti-bacterial finish with good chemical resistance.

- Easy to use analog dial pointer for setting temperature
- Illuminated on/off switch and heater indication lamp
- Side lifting handles for ease of transportation
- Concealed heaters and temperature
- Easy-to-clean, clutter-free working area
- Removable sturdy low height stainless steel perforated shelf
- 2.5l, 4l, 8l, 14l, 22l, 28l and 56l models available

## Grant LT ecocool Refrigerated Circulating Baths

Innovative, eco-friendly, refrigerated heating circulating baths offering significant running cost savings whilst delivering powerful cooling.

The LT ecocool range consists of two models which are supplied assembled as ready to use kits, complete with accessory hosing, clips and connectors as standard.

- Temperature range -25°C to 150°C (model dependent)
- Active cooling through the whole temperature range
- Energy savings of up to 80% against standard compressor units
- Thermostat and chiller work in harmony, neither will operate alone, eliminating any danger of overheating or freezing
- Single front switch for user convenience
- Comes with 4-year warranty
- Built in Britain to the highest specifications



Grant LT ecocool 150 Refrigerated Circulating Bath

## Grant Heated Circulating Baths



Grant TC120 Heated Circulating Bath

Grant Heated Circulating Baths are a cost-effective range of multi-purpose systems combining quality and reliability. Precise temperature control for a wide range of laboratory applications.

Grant Heated Circulating Baths can be used in combination with any Grant stainless steel or plastic tank or with a T-CLAMP for independent use of virtually any vertical sided tank.

- Accurate and safe temperature control for samples and users
- Tank sizes from 5-38 litres with custom sizes also available
- A complete range of 32 models are available
- Intuitive programming and thoughtful design features
- Robust, durable construction for longevity, reliability and long-term low cost of ownership

## Grant XUB Digital Ultrasonic Bath Range

The Grant XUB Digital Ultrasonic Bath range of digitally controlled benchtop ultrasonic baths offer consistent and reliable performance in a variety of environments.

Incorporating Frequency LEAP technology to ensure uniform levels of ultrasonic activity throughout the fluid, these baths offer high performance giving an accurate and precise ultrasonic process.

- Temperature range ambient +5°C to 70°C
- 5l, 10l, 12l, 18l, and 25l models available
- Accurate process control of time, temperature, ultrasonic activity, degas and power
- Adjustable power that can be reduced from 100 to 50% in 5% increments
- Analog ultrasonic models available
- Modern, sleek design with stainless steel basket, ABS plastic lid, M2 ultrasonic cleaning solution, SD card and drain tap included as standard
- Degassing function to remove small bubbles from liquid, reducing the overall time needed for ultrasonic operation



Grant XUB Digital Ultrasonic Bath Range

# INCUBATORS

## Grant QB Series Dry Block Incubators

Grant QB Dry Block Incubator Systems are a versatile general-purpose heater block with two interchangeable blocks and a comprehensive specification to suit most dry block heating applications in the laboratory.

- Temperature range ambient +5°C to 130°C, with rapid heat-up time
- Digital temperature control for optimal precision
- External probe available for accurate in-sample or in-block temperature control
- Clear digital display
- Models available for one, two or four blocks
- Wide range of interchangeable blocks enables you to mix and match sample tubes as desired
- Overtemperature cut-out protects your samples and your workplace
- Compact footprint to optimise the use of bench space



Grant QB2 Series Dry Block Incubators

## Challenger MX25 Mini Incubator



Challenger MX25 Mini Incubator

The Challenger MX25 Mini Incubator is the first choice for quick and easy analysis of dip-slides, reagent tests or small-scale laboratory or field applications.

It is supplied ready to use with universal worldwide power supply & plugs and can be upgraded to use in a vehicle with optional cigar lighter lead.

Together with temperature control technology the MX25 incubator feature a heat reservoir chassis – this holds latent heat during operation adding thermal inertia to keep the temperature stable even when larger, cold liquid loads are introduced.

- Typical load capacity of up to 25 dip-slides or 30 Petri-dishes (95mm)
- Robustly designed to work in the most hostile working environments
- +5 to 45°C +/- 0.5°C ambient temperature range
- Chamber Size: 18cm x 18cm x 15cm
- Supplied full universal plug options for the UK, Europe, America & Australia
- Optional in-vehicle power adapter available
- 37°C Quickset point for easy initial set up

## Genlab Incubators



Genlab manufactures a comprehensive range of Laboratory Ovens, Laboratory Incubators and Drying Cabinets ranging from 6 litres to 1250 litres. All Genlab products are hand-built in the United Kingdom, CE marked and manufactured with an easy clean powder coated body.

- **Benchtop Incubators:** available in a variety of sizes and designed with both side or base mounted displays to suit your exact needs. Capacities of 6 to 200 litres
- **Large Capacity Multi-purpose Incubators:** suitable for larger applications of incubation, research and general laboratory applications. Capacities of 250 to 1250 litres
- **Prime Incubators:** offer a mirror-polished stainless steel interior, increased accuracies and an extended temperature range of 100.0°C. Capacities of 30 to 200 litres
- **Prime XL Incubators:** built around a heavy-duty panelled framework, which offers increased load capability in this range and multiple reinforced shelves. Capacities of 250 to 1250 litres



Genlab Benchtop Incubator

## GS Biotech CO<sub>2</sub> Incubators



GS Biotech 14L CO<sub>2</sub> Incubator

GS Biotech are specialists in the design and manufacture of CO<sub>2</sub> incubators. The architecture across the whole range is scalable with standard units coming in 14-litre, 48-litre and 170-litre capacities.

All GS Biotech CO<sub>2</sub> Incubators feature infrared CO<sub>2</sub> detectors with direct heating technology eliminating the need for an internal fan.

Standard features also include a drywall seamless chamber design for easy cleaning and have industry-proven reliable components backed by a 3-year warranty (degradable O<sub>2</sub> sensor has a 1-year warranty).

- Optimum chamber environment, profiled heating creates gentle circulation – no fan or HEPA filter
- Seamless chamber, with rounded interior corners, makes cleaning easy
- HEPA filtration for all incoming gasses
- Sealed inner glass door allows chamber viewing
- Infrared CO<sub>2</sub> Sensor, with auto self-referencing function.
- CO<sub>2</sub> range is programmable from 0.2 to 20%.
- Large, easy to read LCD with LED backlight
- Temperature range programmable from 4°C above ambient to 50°C
- Removable, seamless, stainless steel humidity reservoir

# WATER ACTIVITY METERS

## Decagon Pawkit HandHeld Water Activity Meter

Decagon Pawkit HandHeld Water Activity Meter is a sturdy and reliable, handheld water activity instrument for use on-the-go.

To make a measurement, flip back the sensor cover and fit the Pawkit over a standard sample cup. A push of a button brings an accurate reading within five minutes.

- Accurate to  $\pm 0.02$  Aw
- Readings within five minutes
- Lightweight - just 4 ounces
- Pocket-sized - 3.5 x 4 inches
- Easy two-point calibration
- Self-contained - low maintenance sensor and readout in a single unit



Decagon Pawkit HandHeld Water Activity Meter

## Decagon AQUALAB Series 4TE Water Activity Meter



Decagon AQUALAB Series 4TE Water Activity Meter

The Decagon AQUALAB 4TE Water Activity Meter gives laboratory-quality measurements anywhere you need to test and verify the safety and quality of your products and ingredients - at the line, receiving dock, processing plant or storage facility.

The 4TE's speed and accuracy are due to its unique chilled mirror dew point sensor. Unlike other water activity sensors, the dew point sensor measures water activity, not some secondary parameter merely correlated with water activity.

- Fast readings in 5 minutes or less
- Accurate to  $\pm 0.003$  Aw
- Verifiable with independent salt standards
- Easy to use - precise measurements with minimal training
- Portable design weighs just 3kg (7lbs)
- Secure administrative control over calibration and sample data
- Internal temperature control
- Used by 80 of the top 100 food companies

## Rotronic HC2-AW-USB Water Activity Probe

The Rotronic HC2-AW-USB Probe offers new possibilities for water activity analysis and measures the humidity and the temperature of hygroscopic products.

This digital probe enables quick and easy measurement of water activity. The USB probe can be directly connected to a PC and is the perfect device for a multi-station application, as multiple probes can be attached to a single PC.

- Complete set of probe and HW4 including Aw Quick function available
- Measurement range: 0.00 - 1.00 Aw, -40°C-85°C temperature
- Wire mesh filter with 20 - 25  $\mu$ m pore size
- USB interface for direct connection to a PC
- Lightweight design



Rotronic HC2-AW-USB Water Activity Probe

## Rotronic HygroPalm HP23-AW-A Water Activity Analyser



Rotronic HygroPalm HP23-AW-A Water Activity Analyser

As a mobile laboratory unit, the Rotronic HygroPalm HP23-AW-A is perfect for on-site water activity measurements to determine the stability and preservability of the sample being analysed.

It is ideal for measuring water activity in production processes such as random checks of cheese, meat, tobacco, building materials, animal feeds, bakery products, paper, medicines, horticulture, agriculture, and more.

- 1s, 10s, 1 min, 10 min measurement intervals
- Aw Quick function for fast measurement results (typically 4-5 minutes)
- Aw Equilibrium method available
- Audible alarm to indicate completed measurement
- Portable and lightweight design
- Saves up to 10,000 measured values with %rh, °C, date and time
- Battery charging function via a USB mains adapter cable

# METERS

## Mettler Toledo Densito Handheld Density Meter

Made for use in the laboratory and on-the-go, the Densito is perfect for all applications: from quality control of incoming goods and final products to at-line quality assurance of intermediate or final products.

With three decimal place accuracy, results are precise and can be stored on the instrument or exported to EasyDirect PC software for simple data management.

- Ergonomic and lightweight design
- Three decimal place accuracy
- Built-in guided workflow
- Measurement scales: API, Baumé, Brix, Density, Ethanol (Alcohol), H<sub>2</sub>SO<sub>4</sub>, Proof (US and IP), Plato, Specific gravity and User-defined concentration
- Bright 2.4" Colour Touchscreen
- Easily spot bubbles and inconsistencies with the backlit measuring cell
- Saves up to 1,100 results, including sample ID, measurement unit, temperature correction coefficient, instrument ID, date and time



Mettler Toledo Densito Handheld Density Meter

## Lovibond® Comparator System 2000 for Visual Colour Grading



Lovibond Comparator System 2000+ with AF330 EBC Colour Scale for beer

The Lovibond Comparator 2000 is an easy-to-use, entry-level colour measurement system that compares the colour of the sample directly against the colour of glass in a disc. All you need to do is rotate the disc to get the closest result to the scale.

Available as single or multi-parameter kits, and using the guaranteed quality of Lovibond Tablet Reagents, the Comparator 2000 System is extremely versatile yet uncompromising in terms of precision and reproducibility of results.

Applications in beer, food, chemicals, coatings, edible oils and fats, medical and clinical products, petroleum oils and waxes, pharmaceuticals and cosmetics.

- Prism enables colour matching in a single field of view
- Diffuser plate allows for measuring turbid samples
- Each disc contains fade-free, chemical resistant glass colour standards Longer path length cells can be used for lower concentration analysis

## Hanna HI-98703 Precision Turbidity Portable Meter

The HI-98703 Precision Turbidity Portable Meter is specially designed for water quality measurements, providing reliable and accurate readings in the low turbidity range

The HI-98703 incorporates complete GLP (Good Laboratory Practice) functions that allow traceability of the calibration conditions. The last calibration points, time and date can be checked at the touch of a button.

- High accuracy at low ranges (below 0.05 NTU)
- Two, three or four-point calibration
- USB and RS232 PC connectivity
- Log up to 200 records
- Current time on display continuously
- Equipped with Fast Tracker™ Tag Identification System



Hanna HI-98703 Precision Turbidity Portable Meter

## IKA ROTAVISC Viscometers



IKA Rotavisc hi-vi I Complete

IKA ROTAVISC Viscometers determine the viscosity of liquids in all areas of application ranging from the laboratory to quality control.

The generous 4.3" TFT display allows for intuitive menu guidance and the digital spirit level also supports the correct set-up of the start-up condition.

The measurement accuracy of the ROTAVISC rotational viscometer for both Newtonian and non-Newtonian fluids is +/- 1% of the measuring range. The reproducibility is +/- 0.2%.

Each ROTAVISC includes a standard spindle set, a protective bracket, temperature sensor, quick connector, hook connector and ROTASTAND stand.

- IKA Rotavisc lo-vi Complete range: 1 - 6,000,000 mPas
- IKA Rotavisc me-vi Complete range: 100 - 40,000,000 mPas
- IKA Rotavisc hi-vi I Complete range: 200 - 80,000,000 mPas
- IKA Rotavisc hi-vi II Complete range: 800 - 320,000,000 mPas

## Mettler Toledo Seven2Go™ Advanced Single-Channel Portable pH Meter

Mettler Toledo Seven2Go™ Portable pH Meter combines great durability and one-handed operation with an intuitive menu. The Seven2Go™ provides an easy-to-use pH testing system that can be quickly implemented into your operations.

With a weatherproof design, drop test resistance and included rubber holster, the Seven2Go™ is robust and durable, appropriately designed for on-the-go measurements. The IP67 rating protects against dust and immersion in water in depths down to 1m. This makes for a durable portable meter that can withstand harsh and demanding environments.

- -2 – 20 pH measuring range
- 0.002± pH accuracy
- Sunlight-proof screen
- Comfortable One-Handed Operation
- IP67 protection and drop test resistance
- Smart button arrangement for faster navigation
- Supports 12 languages



Mettler Toledo Seven2Go™ Portable pH Meter

## Hanna HI-2202 edge®blu pH Bluetooth® Meter



Hanna HI-2202 edge®blu pH Bluetooth® Meter

The versatile design of Hanna HI-2202 edge®blu pH Bluetooth® Meter allows it to be used as a portable, wall-mount or benchtop meter. Clearing the clutter, edge®blu sees the end of trailing cables by wirelessly connecting to the pH electrodes with Bluetooth® Smart technology.

The edge®blu kit includes a HALO™ HI-11102 gel-filled Bluetooth® electrode, a high quality, double junction, glass pH probe with a built-in temperature sensor that can be used virtually anywhere: in the field, laboratory or classroom.

- Two USB ports
- Store up to 1000 log records of data.
- GLP Data of the last calibration you perform is stored
- Capacitive touch keypad
- Easy to read 14cm LCD with wide 150° viewing angle
- CAL Check™ technology to warn you if the electrode bulb is not clean or if the buffers are contaminated during calibration

## Jenway 3540 Combined pH and Conductivity Meter

The Jenway 3540 Combined pH and Conductivity Meter is ideal for use in all laboratories where pH and conductivity analysis is required. The setup menu gives quick and easy access to the whole range of instrument, pH and conductivity measurement options.

- Simultaneous display of pH and conductivity
- Two independent channels to prevent interference between probes
- Data logger with autosave/print options
- Additional modes for resistivity, salinity, TDS and mV
- Storage of up to 500 readings (250 for each mode)



Jenway 3540 Combined pH and Conductivity Meter

## Hanna HI-5421 Research Grade Dissolved Oxygen & Biological Oxygen Demand Bench Meter



Hanna HI-5421 Research Grade Dissolved Oxygen & Biological Oxygen Demand Bench Meter

Hanna HI-5421 is a research-grade benchtop meter with extensive capabilities in measuring Dissolved Oxygen (DO) as well as Biological Oxygen Demand (BOD), Oxygen Uptake Rate (OUR), Specific Oxygen Uptake Rate (SOUR) and atmospheric pressure and temperature.

Hanna HI-5421 Bench Meter is a highly advanced instrument featuring an intuitive menu system to streamline the workflow process and provide accurate measurements quickly and efficiently. Ideal for university research, pharmaceutical research & development, food and drink including wine analysis and water pollution control.

- Extended DO range up to 90ppm (mg/L) and 600%
- Three salinity scales: practical salinity, natural seawater, percent
- Measures DO, atmospheric pressure & temperature
- Manual salinity compensation
- Temperature and atmospheric pressure automatic compensation
- Large log memory with different logging methods
- Polarographic probe with built-in temperature sensor

# METERS

## Hanna HI-98198 opdo™ Optical Dissolved Oxygen Meter

The Hanna HI-98198 opdo™ meter is a rugged, portable dedicated dissolved oxygen (DO) meter designed for fresh and saltwater measurements of dissolved oxygen. This professional, waterproof meter complies with IP67 standards and measures DO, barometric pressure, and temperature.

The HI-98198 opdo is only compatible with the Hanna digital dissolved oxygen probe HI-764113. Concentration measurements are automatically compensated for barometric pressure, temperature and salinity. The meter also has a built-in application to measure and calculate BOD (biological Oxygen Demand), OUR (oxygen uptake rate), and SOUR (Specific Oxygen Update Rate).

- Supplied with HI-764113 Optical DO probe with a built-in temperature sensor, protective shield and 4m cable
- Text messages on the graphic LCD to warn and guide the user
- Single point manual calibration in mg/L or % saturation using a reference method for calibration value
- A dedicated GLP key that includes the last five calibrations with time, date, calibration points, as well as barometric pressure, temperature and salinity setting
- Log on demand with 4000 records capability
- USB-C port for data transfer to a memory stick, PC or other compatible devices



Hanna HI-98198 opdo™ Optical Dissolved Oxygen Meter

## Lovibond® MD200 Photometer



Lovibond MD200 Photometer

The Lovibond MD200 Photometer is designed to meet the latest technical requirements and can be used in every area of water analysis.

The high-precision optics and top-quality interference filters use long-term stable LEDs as a light source. As there are no moving parts, the entire measurement device requires absolutely no maintenance.

It gives precise and reproducible analysis results in a short time. The MD200 features a user-friendly, ergonomic design with compact dimensions and easy handling.

- LEDs, interference filters (IF) and photo sensor optics in a transparent sample chamber. Depending on the version, up to 3 different interference filters are used
- ± 1 nm wavelength accuracy
- -2600 - 2600 mAbs photometric range
- IP68 Protection
- Suitable for 24mm round cuvettes
- Used with Lovibond® tablet reagents (with long-term stability and a guaranteed minimum of 5) or liquid reagents

## Zahm & Nagel Series 6000 Carbon Dioxide Tester for Cans and Bottles

The Zahm & Nagel carbon dioxide (CO<sub>2</sub>) Tester is a piercing device used to test carbonated beverages for volumes of CO<sub>2</sub> gas in glass/PET bottles and cans.

The Series 6000 Piercing Device will provide a rapid and accurate determination of gas volumes in alcoholic and non-alcoholic beverages when used with the two pressure/temperature charts furnished with the instrument.

- Fast measurement of CO<sub>2</sub> in sealed bottles and cans
- Dual scale pressure gauge (0-60 psi and 0-4.2kg/cm<sup>2</sup>)
- Available in one and three-litre sizes
- Adjustable 2" dial thermometer (25/125°F and -5/55°C)
- Works with both alcoholic and non-alcoholic beverages



Zahm & Nagel Series 6000 Carbon Dioxide Tester for Cans and Bottles

## Atago Digital Handheld Salt Meter



Atago Digital Handheld Salt Meter

Atago Digital Handheld Salt Meters are ideal for use in various food production and industrial environments. Atago Salt Meters are suitable for use in food manufacturing for both monitoring salt levels and to ensure the salt is added correctly during production.

- Range: 0.00 to 10.0% (g/100g)
- Resolution: 0.01% for salt concentration of 0.00 to 2.99% or 0.1% for salt concentration of 3.0 to 10.0%
- 5 to 100°C sample temperature
- Displayed value ±0.05%
- Approx. 3 seconds measurement time
- IP65 Dust-tight and Protected against water jets

# EQUIPMENT

## Stuart Premium Stirring Hot Plates

Ideal for day-to-day use by scientific professionals and students, Stuart Premium Stirring Hot Plates offer precise temperature control and stirring speed of your samples.

When plate temperature rises above 50°C, a hot warning light flashes even if the unit is turned off or unplugged. All units feature an integral fixing point for a retort rod and are BioCote™ antimicrobial protected.

- Hot surface warning light flashes when plate temperature is above 50°C
- Durable front panel resists spills and chemicals
- Available in various interface, plate surface, and body-colour configurations
- Full-colour TFT screen displays set and actual temperature and speed simultaneously
- Temperature probe provides sample temperature control
- Ceramic-coated aluminium surface offers a robust top plate with excellent heat transmission
- Includes Two 25-mm PTFE-coated stir bars, PTFE-coated temperature probe, and power cord with plug.



Stuart Premium Stirring Hot Plate

## MSE Hawk Compact Centrifuge



MSE Hawk Compact Centrifuge

The MSE Hawk is a compact centrifuge with an intuitive user interface. Designed with the needs of the clinical or research environment at its core, this compact benchtop centrifuge will meet the tough demands of your laboratory consistently and reliably.

Built with the user in mind, this ergonomic and straightforward machine will suit any workflow. Hawk Centrifuges are ideal for any application that requires high throughput, reliable and consistent results.

- Brushless induction motor
- Large LCD with intuitive user interface
- 25 Rotor options
- Imbalance sensor
- Quiet <60dB
- Maximum speed 18000rpm
- Maximum RCF 24270xg
- Maximum Volume 400ml

## Eppendorf Innova S44i Biological Shaker

The Eppendorf Innova S44i is a large capacity, temperature-controlled (refrigerated) stackable shaker allowing the use of high-volume flasks in large numbers in a compact footprint.

The Eppendorf X-Drive allows for shaking high loads at high speeds – even when stacked. When there is an instance of an unbalanced load, the X-Drive's counterbalance adjustment allows for smooth shaking.

- Highest flask capacity in a smaller footprint
- The new proprietary Eppendorf X-Drive with semi-automatic counterbalance technology provides smooth and uniform agitation
- High-temperature uniformity across chamber for reproducible results
- New touchscreen user interface provides easy operation
- Create multi-step programs for automated control of the shaker
- Photosynthetic LED light bank for plant and algae growth



Eppendorf Innova S44i Biological Shaker

## Techne® Prime Thermal Cyclers



Techne Prime Thermal Cycler

Techne® has developed a comprehensive new range of thermal cyclers around its belief that all users deserve PCR without compromise.

The Prime range has been designed to enhance the user experience with a touch interface and identical software for all models. The Prime range provides high performance, exceptional value and reliability backed by a four-year warranty.

Prime thermal cyclers are controlled by a completely redesigned thermal block algorithm to improve temperature profiles and provide a consistently high level of performance run after run.

- Personal, mid-sized and full-size block models available
- Touchscreen interface on all models
- Fast ramp rate of up to 3.4°C/sec
- Gradient calculator automatically sets values across block
- A wide range of blocks available including 0.2ml, 0.5ml, 384-well and Combi-Block options
- A USB port enables the transfer of programs between instruments and temperature logs to your PC

# TEMPERATURE MONITORING

## ETI SuperFast Thermapen Professional Thermometers

The SuperFast Thermapen Professional Thermometer from ETI is used by thousands of people across the UK due to its speed, accuracy and ergonomic design.

As well as being waterproof to IP66/67, the casing is washable and includes Biomaster additive that reduces bacterial growth, and the ergonomic rubber seal minimises the risk of the ingress of water, dust or food.



ETI SuperFast Thermapen Professional Thermometer

- Patented, automatic 360° rotational display
- Readable display in the left or right hand
- Temperature range of -49.9°C to 299.9°C
- Waterproof to IP66/67
- Reaches temperature in just 3 seconds
- Auto intelligent backlight and motion-sensing sleep mode
- Meets the European Standard EN 13485
- Easily configured display in °C or °F
- Ten colours to choose from – Black, Blue, Green, Grey, Orange, Pink, Purple, Red, White and Yellow

## ETI ThermaData® TD1F WiFi Data Loggers

ETI's ThermaData TD1F is a two-channel thermistor WiFi logger. Utilising the latest WiFi wireless technology, the loggers are a battery-powered, cost-effective, temperature monitoring system that remotely records the temperature of appliances and buildings.

The loggers have a range limited to the specification of the user's WiFi router. Each logger has an intuitive LCD displaying temperature, WiFi connection status, max/min recorded temperatures, alarm status and battery life.



ETI ThermaData® TD1F WiFi Data Logger

- Maximum of 18000 readings (9000 from each sensor)
- One remote probe & one internal sensor
- Resolution of 0.1 °C/°F
- Email alerts when alarm limits exceeded
- Perfect for HACCP analysis
- Logger transmits the recorded data to a WiFi router which can be accessed from a PC, laptop or tablet

## ETI Stainless Steel ThermaData® Data Loggers

ETI Stainless Steel ThermaData® Data Loggers are ideal for food, pharmaceutical and other applications where a high-temperature data-logger is required.

The stainless steel ThermaData® logger is housed in a waterproof, food-grade 316 stainless steel case to protect the logger from corrosion, impact and moisture (IP66/67).

The ThermaData® logger software allows the user to programme the logging sample/interval rate (1 to 255 minutes), the real-time clock, °C/°F, delayed start (maximum 23 hours, 59 minutes) and a 12-character user ID.

- Waterproof, food-grade 316 stainless steel case (IP66/67)
- Temperature range -20 to 105°C
- Integral USB interface for setup and download
- Sample rate 1 to 255 minutes
- Five models available each supplied with a two-metre USB lead and ThermaData® Studio software
- Available with UKAS 3 point certificate



ETI Stainless Steel ThermaData® Data Loggers

## 3M™ MonitorMark™ Time/Temperature Indicators

3M MonitorMark Time/Temperature Indicators monitor product temperature exposure through the entire supply chain. They provide a non-reversible record of temperature exposure that is accurate and easy to interpret.



3M™ MonitorMark Time/Temperature Indicators

- Rectangular, flat laminate with layers of paper, film, adhesive and other components
- Available in a variety of time and temperature ranges
- Monitor the cold chain for perishable food products, vaccines, blood and many other applications.
- Blue compound run-out to estimate how long your product was above the threshold temperature
- Removable film activation strip
- Pressure-sensitive adhesive allows attachment to almost all clean, dry surfaces

**3M**  
Authorized Distributor  
Food Safety Products

## Hanna HI-98501 Checktemp® Digital Thermometer

The Hanna HI-98501 Checktemp® Digital Thermometer delivers high accuracy temperature measurements over a wide range without concern for breakage or condensation.

The sharp-tip probe of the Checktemp easily penetrates semi-solid products making routine temperature checks quick and straightforward for both incoming and outgoing goods.

The Checktemp offers no breakage, no waste, and no difficulty in reading. The digital display prevents a parallax error (observing the wrong measurement due to the angle of view) and is optimised for a wide range of environmental temperatures.

- Large display features a wide temperature range and optimal viewing angle
- IP65 water-resistant protection
- AISI 316 Stainless steel penetration probe
- CAL Check™ automatically verifies calibration at start-up
- Protective probe sleeve included



Hanna HI-98501 Checktemp® Digital Thermometer

## Hanna HI-935001P Foodcare K-Type Thermocouple Thermometer



Hanna HI-935001P Foodcare K-Type Thermocouple Thermometer

The Hanna HI-935001P Foodcare K-Type Thermocouple Thermometer is a waterproof thermometer designed with user functionality and performance in mind. It measures temperature from -50.0 to 300°C. Perfect for use in industrial kitchens for wash-downs and cleaning of food processing equipment, as well as food packaging

- K-type thermocouple probe w/1 m white cable & white handle
- FC766PW rugged penetration probe designed for general use
- AAA batteries provide 3500 hours of continuous use
- IP65 Rating
- Made to fit comfortably in your hand for on-the-go testing
- Supplied complete with temperature probe, batteries (3), quick reference guide, and instruction manual

## Hanna HI-98539 Checktemp Dip® Pocket Thermometer

HI-98539 Checktemp Dip® is a high-accuracy thermometer connected to a weighted, stainless steel probe by a 3m flexible, silicone cable. The probe incorporates an NTC thermistor sensor, providing an extremely accurate temperature measurement that can satisfy your HACCP requirements.

Checktemp Dip® is ideal for checking the temperature inside wine casks and milk tanks as well as fish farms, water reservoirs and pools where the operator can stand on the edge of the water and throw the probe over.

- Range -20.0 to 80.0°C
- Weighted stainless steel probe with 3 m silicone cable
- Ideal for spot checks
- Instant measurement to HACCP requirements
- Small, lightweight, easy to clean
- CAL Check™ automatically verifies calibration at start-up



Hanna HI-98539 Checktemp Dip® Pocket Thermometer

## Comark C20 Food Thermometer Kit



Comark C20 Food Thermometer Kit

The C20 Food Thermometer Kit comprises a C20 Thermometer as well as a PX22L Thermistor (PST) Food Penetration Probe

The Comark C20 Professional Food Thermometer is used for checking safe cooking temperatures in catering and foodservice environments. It has a simple, single-button operation for ease of use.

Housed in a robust case with built-in protective rubber boot, the C20 uses BioCote Antimicrobial Protection. It's the only antimicrobial solution to be awarded HACCP International Certification, to provide an important, extra level of defence against cross-contamination.

- Measurement range -40°C to +125°C
- Strong and secure 6-pin Lumberg connector with locking screw, to provide better prevention of liquid ingress
- IP67 rated tough poly-carbonate case to deal with the demanding environments
- Contains BioCote® silver technology to reduce the presence of microbes such as e-Coli
- Over 1,000 hrs of continuous use from two AA batteries

# REFRACTOMETERS AND TITRATION

## Hanna Portable Refractometers

Hanna's range of Portable Refractometers cover the measurement of sugar in food and beverages, seawater analysis, Glycol analysis and Sodium Chloride in food. Digital refractometers are rugged, portable and water-resistant for measurements in the laboratory or field.

All Hanna Portable Refractometers have Automatic Temperature Compensation, BEPS (Battery Error Prevention System), IP65 rated water protection, single-point calibration, small sample size, stainless steel sample well, ABS Thermoplastic casing, start-up and unit selection.

Hanna Portable Refractometers are available for the following parameters:

- General Purpose Sugars
- Refractive Index and Brix
- Propylene Glycol
- Ethylene Glycol Analysis
- Seawater Measurements
- Food Industry Salt Measurements
- Wine with Potential Alcohol
- Wine with Oechsle, Babo and Brix scales
- Wine with Potential Alcohol & Brix scale
- Wine 0 to 28% Baumé scale
- Wine 0 to 50% Brix range
- Inverted sugar 0 to 85% scale
- Glucose 0 to 85% scale
- Fructose 0 to 85% scale
- Brewing - °Plato measurement



Hanna HI-96821 Refractometer for Food Industry Salt Measurements

## Bellingham + Stanley Benchtop RFM-T Digital Refractometers



Bellingham + Stanley RFM330-T Digital Refractometer

Featuring wide beam optics and a new 7" touch-screen user interface, the Bellingham + Stanley RFM300-T Series refractometers are ideally suited for use in demanding applications within the food, beverage, chemical and industrial industries.

RFM300-T Series refractometers incorporate wide beam optics and are capable of measuring non-homogenous samples such as fruit juice with pulp, opaque chemical compounds and emulsions that are usually difficult to read with optical refractometers.

- Peltier temperature control system
- High definition touchscreen display
- Flat prism surface for easy cleaning
- Wide beam scan for non-homogenous samples
- 3 or 6 decimal place models available

## SI Analytics Titrator TitroLine® 7500 KF

The TitroLine® 7500 KF is designed for the volumetric Karl Fischer titration method with a wide operating range of a few ppm - 100% water content.

- Volumetric KF titrations
- High visibility, full-colour display that can be easily viewed from a distance and at extreme angles.
- Reagent data is securely stored in the intelligent and interchangeable modules
- Polarisable electrode input for set endpoint titrations
- Standard methods for various applications such as titer determination, sample titration with 1- or 2-component reagent, etc.
- Suitable for dosing tasks and sample preparation
- Formula editor for individual calculations
- Includes up to three USB, one LAN and two RS232 ports



SI Analytics Titrator TitroLine® 7500 KF

## Hanna HI-932-C2-02 Automatic Potentiometric Titration Systems



Hanna HI-932-C2-02 Automatic Potentiometric Titration Systems

The Hanna HI-932 automatic titrator is designed to perform a wide variety of potentiometric titrations with high accuracy and flexibility, allowing the user to obtain both accurate results and high-speed analysis.

The titrator can perform fixed endpoint or equivalence point titrations and direct measurements by measuring the pH/mV and temperature of the sample.

- Flexible electrode holder supports up to three electrodes, four dispensing tubes, one temperature sensor and removable stirrer
- Electrode holder positions electrodes in the centre of the beaker, allowing for smaller sample sizes
- Integrated Peristaltic Pump available for reagent addition
- Support for 100 titration methods and 30 autosampler sequences
- User-customisable reports
- Small footprint requires minimal bench space
- Casing made with a durable, chemically resistant plastic
- Integrated research-grade pH/mV/ISE meter

# MICROSCOPES

## Ceti Steddy Trinocular Stereo Microscopes



Ceti Steddy Trinocular Stereo Microscope

Ceti's Steddy Trinocular Stereo Microscopes provide high quality, wide field of view images, a wide zoom range and are highly robust and exceptionally well built, suitable for the most demanding uses.

Each microscope features a convenient 0.65x - 4.5x zoom ratio and a pair of 10X super wide-field (FN22) eyepieces, giving a total magnification range of 6.5 to 45x. The optical quality is outstanding, giving a bright, crisp 3D image of the specimen.

- Broad or "diamond" base depending on the model
- Super wide-field 10X, FN22 eyepieces for maximum field of view
- Wide magnification zoom range of 3.35x to 180x
- Dual LED illumination
- All models feature a trinocular head with photo port or a built-in 3 Mpx. digital camera
- Coaxial coarse with safety stop and tension adjustment
- Supplied with two rubber eyecups, dust cover, instruction manual, and blue filter

## Ceti Magnum Trinocular Compound Microscopes

Ceti's Magnum Trinocular Compound Microscopes provide excellent quality images via the wide-field FN20mm eyepieces. These microscopes include four Plan Achromatic objectives in their reversed quintuple nosepieces.

They feature a robust, T-shaped base, designed to offer maximum stability. Modern, ergonomic features such as a 30° inclined eyepiece tube, ensure a comfortable viewing position over a prolonged period.

These trinocular microscopes feature different contrasting techniques - Phase Contrast, Polarisation, and Epi-Fluorescence. Bright, white LED transmitted lighting, with intensity control, is featured in all models.

- Sturdy base for comfortable viewing over long periods
- Wide-field 10X, FN20 eyepieces with dioptic adjustment
- Bright, white LED illumination with intensity control
- Quintuple reversed nosepiece with four Infinity Corrected Plan Achromatic objectives
- Trinocular eyepiece tube as standard to accept digital microscope cameras
- Full Köhler illumination



Ceti Magnum Trinocular Compound Microscope

## Olympus CX43 Biological Microscope



Olympus CX43 Biological Microscope

The Olympus CX43 Biological Microscope enables users to remain comfortable during long periods of routine microscopy observations. The microscope frame conforms to the user's hands, and the location of the control knobs maximise ergonomics to improve work efficiency.

The microscope employs Plan Achromatic objectives, which provide clear images with high image flatness over a wide field of view. This helps you view specimens clearly and evenly during routine microscope observations.

- Uniform illumination with consistent colour temperature
- Excellent optical performance for flat images
- Contrast enhancement with simple aperture stop operation
- Simple fluorescence observation
- Single-handed sample placement
- Smooth magnification change
- Use up to five objectives
- Ergonomically-positioned focus knob, stage and eyepiece position
- Specimen holders that match your observation style



## MICROSCOPE ACCESSORIES

To complement our range of microscopes, Gem Scientific supply a wide range of accessories to help you get the most out of your microscope including:

- Trinocular Head
- Eye Pieces
- Monitors
- Wi-Fi Output
- Objectives
- Dust Cover
- C Mounts
- Cameras
- Slides

# OHAUS LABORATORY EQUIPMENT

OHAUS' line of laboratory equipment caters to numerous life science applications such as ELISA assays, drug extractions, hybridisations, genotyping, and more – extending their expertise to every corner of the laboratory.

While streamlining laboratory work, OHAUS is committed to ensuring operator safety and their products are designed and developed in accordance with ISO9001 Quality System—a Failure Mode & Effects Design (FMEA) process for design and process control and computer modelling for design provides advanced simulation and analysis.



OHAUS Frontier FC5707 Centrifuge

## Spin It with OHAUS Centrifuges

The OHAUS Frontier™ Centrifuges includes Multi Pro, Micro, Multi, and Mini Centrifuges that have been carefully designed to provide liquid separation for various life science applications.

With four available styles that can accommodate tubes of many different sizes, there is a Frontier centrifuge that will meet all different needs.

OHAUS centrifuges models can reach up to 18,000 rpm generating over 24,000 g. An extensive rotor and adapter selection can accommodate just about any laboratory setup with volume ranging from 0.2 – 250 mL. Aerosol tight sealable rotors are available in some of the most common sizes.



OHAUS SHRK07AL2 Rocking and Waving Shaker

## Shake It with OHAUS Shakers

OHAUS Shakers are perfectly designed to help you in the laboratory with a wide variety of options including open-air, extreme environment and incubating cooling shakers.

Models include orbital, rocking, waving and reciprocating shakers along with incubating/cooling models.

With analog and digital versions available, OHAUS shakers are perfect for life science applications such as ELISA assays, cell cultures, protein studies, solubility studies and more.



OHAUS HSMNAS4CAL Mini Hotplate and Stirrer

## Stir It with OHAUS Mini Hotplates and Stirrers

OHAUS Mini Hotplates and Stirrers are perfect for life science applications such as dissolving buffers and reagents, preparing media, concentrating samples, and more.

Designed for safety, the unique housing material is heat-resistant, making it not only cool to the touch but also chemical-resistant. The spill-resistant design ensures long-term reliable use.

These units are ideal for educational and other laboratory environments that require simple, everyday heating and stirring. All models feature a built-in support rod holder with a locking knob, which accepts the optional support rod kit.



OHAUS HB4DG 4 Block Dry Block Heater

## Heat It with OHAUS Dry Block Heaters

OHAUS' versatile Dry Block Heaters are ideal for applications that require temperature stability. One, two, four and six block models available with a choice of over forty interchangeable modular blocks.

Blocks are easy to use, no tools required, and close tube-to-block contact enables maximum heat retention for efficient heating.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.





OHAUS Lysing Bead Mill Laboratory Homogeniser

## Beat It with OHAUS Lysing Bead Mill Laboratory Homogenisers

OHAUS High-Throughput Lysing Bead Mill Laboratory Homogenisers offer efficient solutions for all of your grinding, lysing, pulverising, mixing and homogenising needs. It is ideal sample preparation applications such as DNA, RNA and protein analysis.

Easy-to-load tray securely locks microplates, deep-well plates or tubes in place. High-speed linear motion processes samples quickly. Maximise sample preparation, no matter how difficult the task.

High-throughput processing is ideal for multiple samples, plate, and tube configurations and the high-speed linear motion processes samples quickly.



OHAUS VXHDAL Heavy-Duty Vortex Mixer

## Mix It with OHAUS Vortex Mixers

Designed for life science applications such as re-suspending liquids, mixing reagents, genotyping, cell disruptions, and more, OHAUS Vortex Mixers are perfectly designed to help you in the laboratory.

Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of samples.

Four models available: Mini Vortex Mixers, Heavy-Duty Vortex Mixers, Microplate Vortex Mixers and Multi-Tube Vortex Mixers.



OHAUS PX85M Semi Micro Balance

## Weigh It with OHAUS Balances

OHAUS offers a wide selection of balances and weighing instruments crafted to ensure the high accuracy and repeatability essential to laboratory and science professionals. Their wide variety of products ranges from portable scales to semi-micro, analytical and precision balances and moisture analysers.

Selected OHAUS balances come with built-in calibration systems assuring accurate measurement at all times. They also feature an easy-to-use interface, including a colour touchscreen and an intuitive interface.



OHAUS Multipurpose LabJaws Clamp

## Hold It with OHAUS LabJaws Clamps

Perfect for life science applications OHAUS Laboratory LabJaws Clamps are perfectly designed to help you in the laboratory.

They are designed to grip and position laboratory apparatus securely. Extension arm clamps with 360° rotation allow placement of equipment at various distances from laboratory-frames and are easily secured with optional holders.



# ASECOS SAFETY CABINETS

Asecos is the worldwide leading manufacturer of safety storage cabinets according to the European standard EN 14470 Part 1 and Part 2. The Asecos product portfolio includes hazardous material work stations, pharmaceutical exhausts, air circulation filters, extraction units and ventilators, hazardous material containers and handling systems, safety containers, and air purifiers.

## K-Line Combination Safety Storage Cabinets

Asecos K-Line cabinets are GS-tested combi safety storage cabinets for unrestricted storage of flammable and aggressive materials in work areas in accordance with EN 14470-1 and TRGS 510 with a fire resistance of 90 (Type 90) or 30 (Type 30) minutes.

- Upright and under bench versions available
- Up to 3 safe and separated storage compartments to store acids, alkalis and flammable hazardous materials all in one cabinet
- Hermetically separated compartments have fire-resistant dividing walls
- All doors are lockable with either a cylinder lock or a profile cylinder lock
- Integrated corrosion-proof, metal-free air ducts ready for connection to a technical exhaust system
- Scratch and impact resistant
- Height-adjustable shelves made of stainless steel, sheet steel or corrosion-free PP
- Pull-out shelves including sump made of plastic



K-Line Combination Safety Storage Cabinets

## ION-LINE Lithium-ion Battery Safety Storage Cabinets



ION-LINE Lithium-ion Battery Safety Storage Cabinet

ION-LINE Lithium-ion Battery Safety Storage Cabinets are for passive or active storage of lithium-ion batteries according to EN 14470-1 and EN 1363-1 with a fire resistance of 90 minutes (type 90) – fire protection from the outside-in. All models of the ION-LINE offer fire resistance for more than 90 minutes when exposed to fire from the inside-out.

- High-quality fire suppression system in the cabinet interior is automatically triggered in case of fire when the temperature sensor registers an internal temperature higher than 70°C
- Each storage level is equipped with a high-quality power strip, including metal housing and ten protective charging sockets. The power strips are pre-mounted on the cabinet rear panel ready for use
- The floor supports for the heavy-duty mesh grid shelves (load capacity 180 kg) are convenient and easily height adjustable
- Mesh grid shelves as storage/loading level, made of powder-coated sheet steel ensure optimal ventilation in the cabinet interior, avoiding heat build-up during battery charging

## V-Line Safety Storage Cabinets

V-Line Safety Storage Cabinets have vertical drawers for unrestricted storage of flammable hazardous materials in working areas according to EN 14470-1 with a type-tested fire resistance of 90 minutes (Type 90). Innovative vertical drawer technology allows access to all stored containers on both sides. A standard automatic closing system, as well as electronic safety elements, ensure safety even in the event of a power failure.

- Available with one (45 cm) or two (81 cm) electromotor controlled vertical drawers
- Fully automatic, low noise electromotor opening and closing without additional effort
- Integrated ventilation system for connection (NW 75) to technical exhaust air
- Additional anti-tip protection with a guard rail system for stored containers (optional)
- All doors automatically close after 60 seconds with an optical and acoustic warning if the cabinet is not in use
- Intelligent stop function detects resistances during opening/closing and eliminates tripping hazards (deactivates automatic door closing)



V-Line Safety Storage Cabinets



## CUSTOMISING YOUR SAFETY CABINET

With 14 base models to choose from, configuring your Asecos safety cabinets to meet your specific requirements has never been easier. Our team will work with you to customise your new fire-resistant hazardous material cabinet to make sure that it is right for the job. Units can also be combined with extraction and handling systems to give you a complete solution for working with hazardous materials.

# CHEMICALS, CULTURE MEDIA AND REAGENTS

Gem Scientific is a leading UK supplier of laboratory chemicals, culture media and reagents. All the media we sell is fully traceable, with Certificates of Analysis and Material Safety Data Sheets readily available.



Our chemicals, culture media and reagents are available in varying sizes and a choice of grades (where applicable). A full catalogue of products is available which includes (but isn't limited to):

- Acetone
- Acids
- Agars
- Albumin Bovine Serum
- Amyl Alcohol
- Bacillus Cereus Selective
- Broths
- Carbonate Buffer
- Charcoal Powder
- Chloroform
- Cloramine
- Clostridium Difficile
- Cyclohexane
- Deionised Water
- Dichloran-Glycerol
- Diethyl Ether
- Di-Sodium 4-nitrophenyl
- Egg Yolk Emulsion
- Electrode Solutions
- Glycerol
- Horse Blood
- Hydrochloric Acid
- Iodine Indicator Powder
- Lactic Acid
- Letheen Broth
- Maximum Recovery Diluent
- Methanol
- Methylated Spirits
- Methylene Blue
- Nitrates
- Oxalic Acid
- Pepsin
- Peptone Water
- Phenolphthalein
- Phosphate Buffered Saline
- Potassium Iodide
- Pre-poured Plates
- Rapid Diagnostic Kits
- Rapid ID Kits
- Sand Acid Washed
- Sheep Blood
- Silver Nitrate
- Sodium Hydroxide
- Sodium Thiosulphate
- Soluble Starch
- Standards
- Sterile Water
- Sulphuric Acid
- Supplements
- Trichloroacetic Acid
- Zinc Sulphate

## Electrode Solutions and Buffers

Gem Scientific supply a wide range of convenient solutions and buffers. Available in a wide variety of sizes from 20ml individually sealed foil sachets to 5-litre bottles.

Keep your electrodes in excellent condition by using a storage solution. Storage solutions stop the sensor tip and the reference junction from drying out and minimise any bacterial growth while not in use.

Regular cleaning and correctly maintaining your electrodes ensures performance to achieve accurate readings, fast response times, and repeatability. By always cleaning your electrode after testing eliminates impurities and residue.



## Hazardous Waste Collection



At Gem Scientific we offer collection services for:

- Waste chemicals
- Unwanted/out of date chemicals
- Microbiological waste,
- Sharps (needles, scalpels, glass etc.)
- Redundant or broken laboratory equipment including incubators, ovens, water baths, fridges, freezers and autoclaves

Regular or one-off collections are all available, please contact us for more information on this service.

# SCIENTIFIC GLASSWARE AND PLASTICS

**G**em Scientific is one of the largest suppliers and stockists of laboratory glassware, plasticware and accessories in the UK. All our products are manufactured by recognised quality companies and are delivered directly from our central warehouse.

Glassware and plasticware supplied by Gem Scientific come in a variety of sizes, materials, grades and from brands including Corning Gosselin, Pyrex, Azlon, MBL and Quickfit. Traceability on plastic and glass include lot numbers and expiration dates.



Aspirators & Carboys



Bags



Beakers



Bottles



Buckets



Burettes



Containers



Cylinders



Dippers, Scoops and Spatulas



Dishes, Trays and Baskets



Flasks



Funnels



Jugs



Petri Dishes



Pipette and Tips



Pouring Rings



Slides



Syringes



Test Tubes



Vials

# SCIENTIFIC GLASS BLOWING AND REPAIR

**A**t Gem Scientific we don't just supply laboratory technology and equipment, we also offer a bespoke glassblowing and glassware repair service. Our in-house glassblower has over 35 years of scientific glass blowing experience and will work with you from the initial sketch up until the finished item to make the best piece of equipment possible for your needs.

As well as designing and making custom glassware we can also repair glass too. Expensive and more sophisticated glassware, when broken, can often be cheaper to repair than replace with new.

By sending your items to us for repair, you could save up to two thirds the cost of when compared to replacing the broken item with a new one.

Repairable items such as small scale industrial specialist glassware and environmental and stack emission glassware including:

- Allihn Condensers
- Buchi Manifold
- Burettes
- Chromatography Columns
- Condensers
- Connectors
- Dreschel Bottle
- Dreschel Head
- Filter Case
- Flanged Filter Cases
- Gasometric Burettes
- Impinger Bottles
- Impinger Heads
- Multineck Flasks
- Pyrex Probes
- Quartz Probe
- Resin Traps
- Separating Funnels
- Soxhlet Apparatus
- Siphon Heads



## LABORATORY CONSUMABLES

Gem Scientific is a leading supplier of a complete range of laboratory consumables and accessories. All our products are optimised for industries including food and beverage manufacture, environmental testing, healthcare, agriculture, academia and pharmaceutical manufacturing laboratories.

The line of quality testing consumables complies with international safety standards, and where applicable come in a wide range of sizes, grades, colours and many items can be provided with traceability.



Autoclave Accessories

Bottle Top Dispensers

Disinfectants

Filtration Supplies

Gloves

Needles

Personal Protection Equipment

Racks

Stirring Rods

Test Caps

Tongs

Whirlpak Bags

# LABORATORY EQUIPMENT

From incubators to spectrophotometers, autoclaves to gas analysers, Gem Scientific supplies companies across the UK with a comprehensive range scientific technology.

Our range of laboratory instruments include items from companies such as Sartorius, OHAUS, Hanna Instruments, Thermo Scientific, Priorclave, ETI, Lovibond, Bellingham & Stanley, Labcold, Metler Toledo, and Grant Instruments.



Anemometers



Autoclaves



Balances



Blenders



Centrifuges



Colony Counters



Conductivity Meters



Consistometers



Dataloggers



Density Meters



Dissolved Oxygen Meters



Drying Cabinets



Freezers and Refrigeration



Gas Detectors



Glass Washers



Heater Blocks



Homogenisers



Incubators



Magnifiers



Microbiological Air Samplers



Microscopes



Mixers and Shakers



Ovens



pH Meters



Pipettors



Refractometers



Safety Cabinets



Sieves



Spectrophotometers



Thermometers



Titration



Turbidity Meters



Viscometers



Water Activity Meters



Water Baths

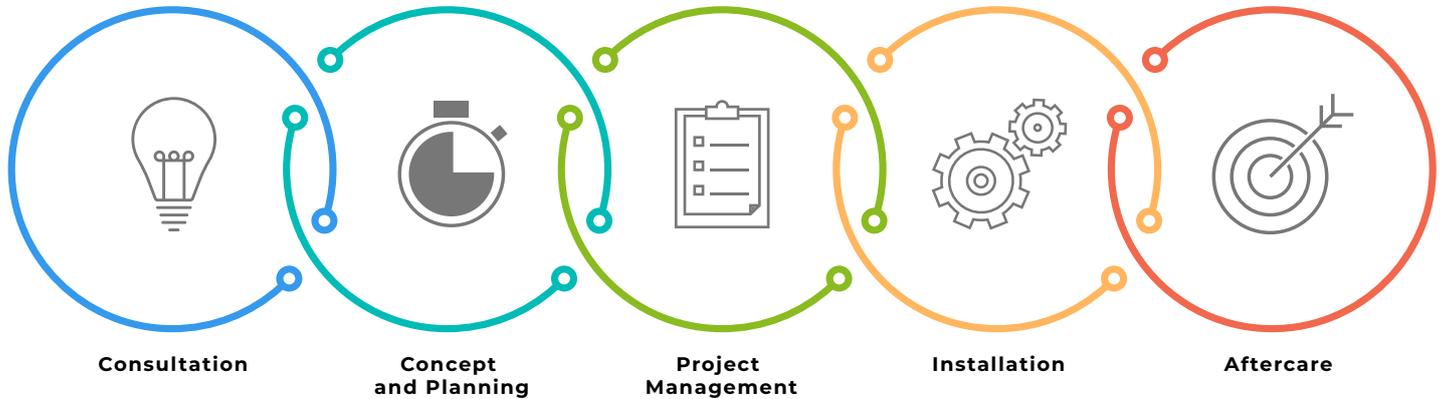


Water Purification

# LABORATORY DESIGN AND INSTALLATION

**G**em Scientific work with leading laboratory furniture manufacturers to provide practical solutions that meet your specifications as well as comply with regulations.

Whether you are refurbishing an existing laboratory or looking to plan a new build, we're with you each step of the way. Our team of experts are on hand to guide you through each stage of the design and build process.



## Consultation

We understand that each customer will have their own needs and requirements when it comes to laboratory design. Our specialists will spend time understanding your requirements while taking into account ergonomics and current health and safety legislation. By understanding your current challenges and concerns we can advise how best to plan your environment.

## Concept and Planning

Following an initial consultation meeting, we will be to provide you with a set of proposals outlining our initial thoughts and ideas.

We can also present you with CAD images to illustrate the room layout and a detailed cost proposal. Our specialist will also advise on fittings, material types and finishes.



## Project Management

Running a project can be very stressful and time-consuming. Liaising with all the different trades and working to tight deadlines, our specialists have a wealth of knowledge in providing turnkey solutions that incorporate full project management.

## Installation

Your project manager will coordinate operations and oversee the installation team. Once the work is complete, the project manager will carry out a full inspection to ensure it has been completed to the highest standards.



## Aftercare

Post-project, your designated account manager will be on hand to provide a central point of contact for any further issues or requirements.

For further information or to book a consultation, please contact our team on 01924 444 577 or email [hello@gemscientific.co.uk](mailto:hello@gemscientific.co.uk)

# SERVICE AND CALIBRATION

At Gem Scientific we don't just supply instruments, we also work with you to make sure your instruments are serviced regularly, so they are always running optimally. Examples include equipment such as:



ATP Luminometers



Geotech 'G' Series Analysers



Autoclaves



Balances



Centrifuges



Dairy Analysers



Fume Cupboards



Glass Washers



Incubators



MAP-PAK Analysers



Ovens



Spectrophotometers



Thermometers



Viscometers



Water Activity Meters



Weights

Servicing is carried out both on and off site (instrument dependant) and to UKAS standard where required. The service team will always aim to provide the quickest response and turn round possible to minimise any inconvenience. To book a service for your equipment email: [service@gemscientific.co.uk](mailto:service@gemscientific.co.uk)

# northern BALANCE



**As one of the UK's leading weighing and inspection equipment specialists, Northern Balance has built an excellent reputation for providing impartial advice, quality products, first-class support and service.**

They have been supplying, servicing, calibrating and repairing weighing equipment since 1971, with clients ranging from multi-national companies to sole traders that all receive the same high level of personal service regardless of size. In November 2016 Northern Balance was acquired by Gem Scientific and became part of the Gem Group.

Northern Balance is a UKAS Accredited Calibration Laboratory No. 0370 and their accreditation has been maintained since the initial UKAS audit in 1992. They are one of the few companies to attain this high standard for on-site calibration of non-automatic weighing machines.



## UKAS Calibration

Northern Balance is a UKAS accredited calibration laboratory (number 0370). We are accredited to ISO/IEC 17025:2005 as assessed by UKAS and have maintained this standard since 1992.



## Quality Assurance

Our QA procedure is fully-implemented and covers each aspect of our organisation. Additionally, we are a certified member of the Safe Contractor\* scheme and a member of the UK Weighing Federation\*\*



## Expert Service Team

Our team of skilled engineers cover the whole of the UK and attend regular training to update their product knowledge and technical abilities.



## Online Certificate Portal

Our balance calibration service meets the requirements of all quality assurance standards. Our online certification portal allows clients to manage their equipment and download calibration certificates at any time.



## Maintenance

Preventative maintenance of balances can save your business thousands of pounds. Our service procedure includes machine clean down and preventative maintenance as standard.



## Service Contracts

Our service and calibration contracts are available with flexible options to suit your requirements. Our coordinators will work with you to create an optimal service schedule.



## Workshop

Wherever possible, we will try to repair your balances on-site. If necessary, they can be returned to our fully equipped service workshop for further investigation.



## Impartial Advice

We're proud to offer impartial advice to you on repair or replacement options should you need it. Our team are on hand to find practical solutions to your weighing problems.

In addition to their UKAS Accreditation status, Northern Balance is ISO9001:2015 certified, authorised to perform Legal Verifications in accordance with Directive 2014/31/EU on NAWI: Module D, a certified member of the Safe Contractor Scheme and a member of the UK Weighing Federation.



WEBSITE

Northern Balance believes in honesty, integrity and in solving technical problems with enthusiasm. Their mission is to continually develop their staff, products and services to exceed customer and employee expectations.

\*Safe Contractor: [safecontractor.com](http://safecontractor.com)  
\*\*UK Weighing Federation: <http://www.ukwf.org.uk>

# FINANCE OPTIONS

Unlock the Potential in Your Business  
with Gem Scientific



CALL US:  
01924 444 577



## MAKE THINGS SIMPLE

Financing is a great solution for purchasing capital assets that releases the pressure from the day to day working capital.



## BEST QUALITY

No need to compromise on the quality of equipment you use due to financial constraints.



## FLEXIBLE REPAYMENTS

Benefit from having the equipment on site from day one while spreading the cost over a fixed period.

**Are you looking at buying new equipment but don't want to drain your cash reserves?**

**Do you need a flexible solution for getting the instruments you need?**

Gem Scientific offers **Financing Options** to give you flexible and cost-effective ways of getting the equipment you need in your business.

**For more information on how it can work for your business and to find out if you are eligible call 01924 444 577 and speak to a member of our team.**



 LOOK FOR THE CALCULATOR ICON TO SEE WHICH PRODUCTS ARE AVAILABLE THROUGH OUR FINANCE OPTIONS

Business users only. Credit subject to status. Terms and conditions apply. Indicative funding proposal for Hire Purchase. All payments quoted are taken monthly in advance unless otherwise stated and are payable by Direct Debit. (Other funding options are available on request.) Funding options provided by Genesis Business Finance Limited, 60 Surrey Street, Glossop, Derbyshire. SK13 7AJ. Errors and Omissions Excepted.



WEBSITE



01924 444 577

gemscientific.co.uk

hello@gemscientific.co.uk

**northern**  
**BALANCE**

0344 477 1966

northernbalance.co.uk

hello@northernbalance.co.uk

