



QUALITY CONTROL TESTING

EFFECTIVE **QUALITY MANAGEMENT SYSTEMS** ARE INDISPENSABLE IN THE FOOD AND BEVERAGE INDUSTRY TO ENSURE **SAFE, QUALITY PRODUCTS** FOR THE CONSUMER.



LASEC® WHO WE ARE

For over 70 years Lasec® has been supplying quality, dependable solutions and services to the laboratory and scientific community.

Our 410 strong staff complement includes more than 80 scientifically trained and qualified personnel who bring years of practical laboratory, engineering and teaching experience to your aid.

One of the first laboratory product suppliers to expand beyond South Africa's borders, we have been meeting customers' needs throughout Africa for over 20 years.

OUR CUSTOMER COMMITMENT

PRODUCT RANGE

Our extensive sourcing capabilities and strong partnerships with leading international manufacturers, coupled with our ability to provide customised solutions through our own local manufacturing facility makes Lasec® the one-stop shop to meet your requirements. Our buying power means you can get the highest quality product at the most competitive price.

With warehousing facilities in Cape Town, Johannesburg and Durban, we hold stock of a broad range of products, including instruments, consumables and reagents. This extensive stock-holding reduces delivery times of key products across our markets.

LOGISTICS

Supported by a state-of-the-art supply chain management system and partnering with reliable logistics service providers, we can ensure efficient in-bound and out-bound shipments across Africa.

TRAINING

On-site installations are accompanied by customer training on the correct use and maintenance of equipment. Our scientists keep abreast of the latest technologies and trends, allowing us to offer informative and practical training courses, many of which are CPD-accredited.

QUALITY ACCREDITATION

Our Lasec® quality promises are backed by international accreditation: ISO9001 for good business practice, ISO13485 for our diagnostic kit facility and ISO17025 for volume and mass metrology.



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SUGAR / BRIX ANALYSIS

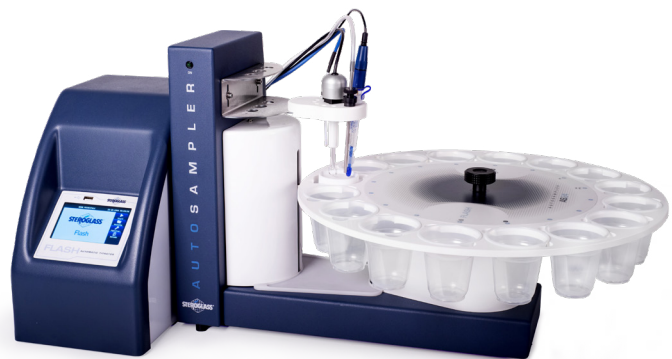


REFRACTOMETERS

Automatic refractometers specifically designed for food and beverage industry production and quality control environments, perfect for 24/7 food industry applications where fast, automatic, and accurate Brix readings are required.

- Simple operation with full colour touchscreen
- Digital temperature-controlled measurements
- Flat prism for easy cleaning

TITRATION



TITRATORS

Titration systems ideal for a wide range of standard applications in the food and beverage industry. Their compact and modular design ensures that these titrators have a small footprint and can be easily upgraded and configured to suit the ever-changing needs in the lab. The capability of adding a 16 or 35 place autosampler coupled with full GLP compliance makes these titrators a simple solution for routine analyses in the quality control laboratory.

- pH
- Acidity – Total, Acetic, Citric etc.
- Salt or Chloride
- SO₂ – Free, Total or Double

pH



pH METERS

For the determination of pH, ORP and temperature with storage of up to 1000 data sets. A wide range of electrodes specifically suited to food and beverage products are available.

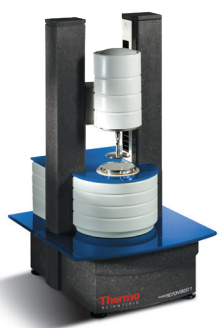
COLOUR



AUTOMATIC COLORIMETERS

The PFXi range from Lovibond automatically measures colour and displays results according to widely accepted industry standards or internationally recognised CIE values and spectral data.

VISCOSITY



RHEOMETERS AND VISCOMETERS

Measure and analyse the viscosity and rheological properties of a wide range of liquid, paste and semi-solid samples.

FREEZE DRYING



FREEZE DRYERS / LYOPHILISERS

Wide range available from 2.5 to 24lt ice condenser capacities with temperatures ranging from -55 to -105°C.

LABWARE



PLASTIC LABORATORY CONSUMABLES

High quality graduated laboratory plasticware.

CHEMICAL STORAGE



SAFETY STORAGE CABINETS

Range of cabinets for safe storage of hazardous materials.

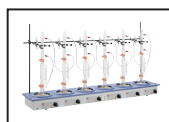
MOISTURE TESTING



MOISTURE ANALYSER

Intended for quick determination of relative moisture content, dry mass content and other parameters in various substances.

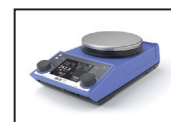
RELATED PRODUCTS



Soxhlet / Twisselmann fat extraction system



Heating mantles with or without stirring



Hotplates with or without magnetic stirrers



INCUBATORS

Natural convection incubators prevent sample dehydration while maintaining temperature uniformity as heating elements surround the inner chamber from four sides ensuring optimal heat distribution.

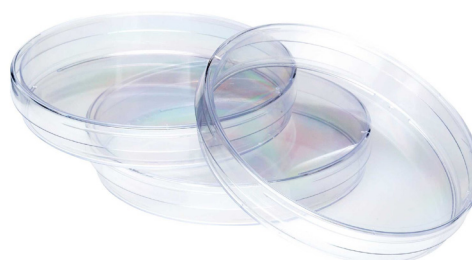
MEDIA PREPARATOR AND PETRI DISH FILLING SYSTEMS

MEDIA PREPARATOR

Automatic media preparators optimised for the preparation, sterilisation and sterile filling of liquids, such as agar culture media, peptone water and buffer solutions or any other sterile liquid media. They are equipped with an intuitive touch screen display for ease of use.

PETRI DISHES FILLING SYSTEM

Our range of Petri dish filling systems extends from small semi-automatic bench top units which have unique carousel solutions with safety Petri-Racks, up to fully automatic linear high throughput dish filling solutions.



PETRI DISHES

Quality Petri dishes for common microbiology applications in standard 90mm and 65mm diameter. Options for additional sizes, vented, sterile and tissue culture treated available.



MEDIA

The Harlequin™ range of chromogenic media from Neogen includes products for the isolation of *Listeria* species, *Salmonella*, *Escherichia coli* and *Cronobacter SPP* (formerly *Enterobacter Sakazakii*).



PETRI FILM

Food safety controllers, food processors and contract laboratories worldwide trust 3M™ Petrifilm™ Plates to yield consistently accurate results. Plates are ready to use and contain all the microbial growth nutrients and other components required for culture.

RELATED PRODUCTS



AUTOMATED LIQUID HANDLING

Compact Automated Liquid Handler designed to replace mundane and repetitive pipetting tasks, offering improved reproducibility for sample preparations.



MANUAL LIQUID HANDLING

High-throughput 96- and 384-well microplate filler, offering improved speed and accuracy.



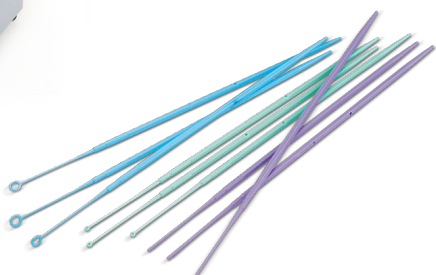
AUTOCLAVES

A range of SANS 347 approved autoclaves to meet your sterilisation requirements.



LAB BLENDERS (STOMACHERS)

Laboratory bag blender for easy and effective processing of multiple food samples, without the risk of cross-contamination.



INOCULATING LOOPS, NEEDLES & SPREADERS

- Sterile
- 1µl or 10µl
- Plastic
- Flexible



LISTERIA TESTING

3M™ SPONGE STICK WITH 10ML NEUTRALIZING BUFFER

Disinfectants containing chlorine or quaternary ammonium compounds cause interference when testing for the presence of bacteria on work surfaces or equipment. It is therefore of vital importance to deactivate the bactericidal and bacteriostatic effects of these compounds. The 3M™ Sponge-Stick with neutralising buffer allows for a sample to be collected whilst maintaining sample integrity which facilitates the detection of potentially harmful microbes.



SAMPLING

Effective sample collection is required for accurate detection and confirmation of listeria. We provide a vast array of sampling products to meet your needs.

ENVIRONMENTAL SURFACE SAMPLING

Pre-moistened swabs improve sample uptake, particularly on dry surfaces. Our **Copan SRK™ Solution** acts as a neutralizing agent as well as a transport medium for the detection & enumeration of bacteria.



POST CLEANING SAMPLING & ANALYSIS

We offer all required instrumentation and consumables to assist in your post cleaning sampling procedure including filtration manifolds, sample bottles and pumps.



The product images shown are for illustration purposes only and may not be an exact representation of the product.

E&OE

INOCULATION & ISOLATION

Sample-ready **3M™ Petrifilm™** and **Harlequin™** microbiological media and supplements from **Neogen**, allow *Listeria* to be cultured from environmental samples and are used with confidence in laboratories around the world. 3M™ is AOAC / AFNOR validated.

ENRICHMENT

We propose the optimisation of your culture method using either a Neogen Half Fraser or UVM broth for primary enrichment and / or their full-strength Fraser broth as a secondary enrichment option.

DETECTION / ENUMERATION

Listeria Petrifilm™ from 3M™ will detect the presence of most environmental *Listeria* species. We also offer a variety of selective differential media from Neogen, including Harlequin™ *Listeria* Chromogenic Agar and PALCAM agar.



IDENTIFICATION & CONFIRMATION OF POSITIVES

PHENOTYPE

Visual Examination

GENOTYPE

DNA/RNA Analysis

Lasec® is a proud supplier of the 3M™ Molecular Detection System - It's pathogen testing made pure and simple. A compact system engineered for superior testing for pathogen including unique assays and powerful software to provide a solution that is fast, accurate, easy-to-use and affordable.



RELATED PRODUCTS



BIOSAFETY CABINETS

Certified Class II type A2 biological safety cabinets providing user, product and environment protection.



COOLED INCUBATORS

Peltier cooled incubators are ideal for incubation at 0 to 70°C. The Peltier technology uses up to 90% less energy than standard compressor models in the market.



LAMINAR FLOW CABINETS

Provide a sterile work environment to protect your sample from contamination.



CLIMATE CHAMBERS

Climate chambers offer excellent temperature and humidity accuracy and distribution for long term stability testing or accelerated product / shelf life testing. With the intuitive touch screen controller, testing conditions can be selected by a simple touch and go. Graphical data is available on the controller and an Ethernet connection is included as standard for easy long-term monitoring purposes.

- Cost effective climate control with Peltier technology – up to 90% reduction in energy consumption
- Standard with TwinDisplay controller and Atmocontrol software



WALK IN CLIMATE CHAMBERS

For accelerated testing or long-term storage of retention samples requiring carefully controlled temperature and humidity conditions, consider a modular onsite storage facility from Lasec®. Walk-in climate chambers custom-designed for available space, installed and serviced by Lasec® service engineers.



RELATED PRODUCTS



VACUUM OVENS

Ideal for simulation of transport and storage conditions.



BLUE DROP TEST KIT

This portable test kit for drinking water analysis is ideal for SANS 0241 compliance testing. The kit comprises handheld instruments required to complete basic tests to determine the quality of drinking water in accordance with the Blue Drop certification program.

REAGENTS INCLUDED:

Chlorine (free and total), pH buffers, Conductivity solutions

TEST KIT INCLUDES:

CHLORINE METER

- Determination of Free and Total Chlorine
- Large LCD screen with backlight
- IP68 waterproof rating

TURBIDITY METER

- Compact, lightweight design with waterproof sample chamber
- Infrared technology facilitates fast, precise, on-site testing
- Data storage for up to 16 data sets

HANDHELD MULTIMETER

- Measures pH, Conductivity, TDS, Dissolved Oxygen
- Real time data logger with storage of up to 16 000 data sets
- Protective casing



GREEN DROP TEST KIT

This portable test kit for waste water analysis consists of easy-to-use handheld instruments required for the analysis of waste water in accordance with the Green Drop certification program.

REAGENTS INCLUDED:

Alkalinity, Ammonia, Chlorine (free and total), Iron, Hardness, Nitrate, Nitrite, pH buffers, Conductivity solutions

TEST KIT INCLUDES:

HANDHELD MULTIMETER

- Determines pH/Conductivity/TDS
- Real time data logger with storage for up to 16 000 data sets
- Protective casing

MULTI-PARAMETER COLORIMETER

- Lightweight, handheld instrument
- For determination of turbidity, chlorine, and various other parameters (over 120 preprogrammed methods)
- Storage of up to 1000 data sets

DISSOLVED OXYGEN METER

- Large LCD display
- Waterproof sensor (IP67)
- Luminescence technology

* E. coli and Coliform test kit available separately.

CHEMICAL OXYGEN DEMAND (COD) TESTING

COD testing is used to quantify the amount of organic matter present in water. Lasec® offers the complete solution for COD testing. This includes a wide selection of both handheld photometers and benchtop spectrophotometers ideal for COD analysis, an easy-to-use thermoreactor for the chemical digestion of samples before analysis, as well as a range of COD vials.

- 0-150mg / L O₂ (LR)
- 0-1500mg / L O₂ (MR)
- 0-15000mg / L O₂ (HR)



RELATED PRODUCTS



VACUUM PUMPS

Chemically resistant diaphragm pumps for single or multiple filtration and evaporation applications.



BOD ANALYSIS

Bioassay procedure that determines the level of organic pollution in a water sample through the analysis of the amount of dissolved oxygen required by aerobic organisms present in a water sample.

* BOD Incubators also available.



FILTRATION

A full line of high-quality laboratory filtration consumables, including qualitative and quantitative filter papers, glass and quartz filters, membrane and syringe filters for microfiltration applications.



E.COLI AND TOTAL COLIFORM KIT

This indicator test detects the presence of just 1cfu / 100ml, making it ideal for the early detection of bacterial contamination of water samples.



SAMPLE BOTTLES

- Wide or narrow neck
- Round or square
- With or without cap
- Polyethylene or polypropylene

TRAINING COURSES AVAILABLE



BLUE DROP / GREEN DROP WORKSHOPS

Application-based workshops to assist end-users with correct use of equipment and techniques to perform tests associated with Blue Drop and Green Drop requirements.

SAMPLE COLLECTION TIPS AND TOOLS TO MAINTAIN SAMPLE INTEGRITY

Recommendation on correct equipment and consumables to ensure uncompromised samples.



CHECKWEIGHERS



Checkweighers are designed and engineered to control and optimize production processes, reduce product losses and meet the highest user requirements with advanced functionality and precision measurements. Checkweighers ensure that the products produced can be monitored and controlled, weighed and verified with precision.

- Simple database management
- Modular construction – expandable and tailored to suit the client's needs
- Sophisticated reporting and software allows generation of records for production per shift / user / timeframe as well as product loss
- HACCP, PGC, GMP, FDA / CFR21 certified and tested

QUALITY CONTROL APPARATUS

Simple, easy to use equipment to address essential aspects of quality control of packaging, particularly where relevant to food and beverage production facilities. Equipment is aimed at integrating previously manual measurements into semi-automated systems to avoid human influence on key physical tests employed in quality control.



KEY ASPECTS:

ANALYSIS OF CANS AND PREFORMS

Double seam quality is one of the key factors to maintaining product quality. An effective double seam helps to secure the seal of canned products, and to keep the products away from outer contamination. This test uses a camera system together with gauges to measure the double seam parameters as listed: Seam length, body hook length, end hook length, overlap, seam gap, overlap rate, body hook lapping rate, end hook lapping rate, seam thickness and Countersink.



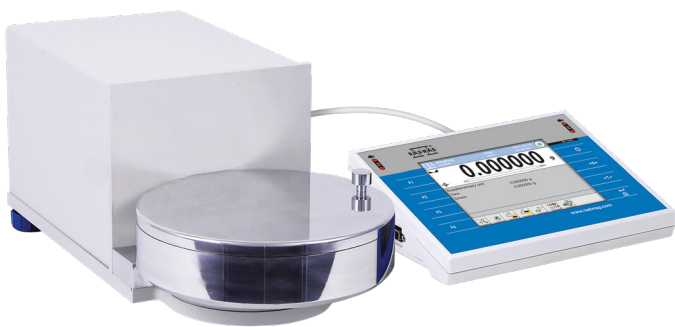
TORQUE MEASUREMENTS

The capping torque of the bottle may affect the product quality. If too small, it may result in secure seal failure, while too large may reduce the consuming experience. This test is to measure the torque of the bottle closure. Available in various configurations to cover manual or automatic measurement of torque.



APPARATUS AVAILABLE FOR ADDITIONAL ASPECTS OF QUALITY CONTROL

- Leak test
- Resistance to compression or stretching (push/pull test)
- Packaging resistance testing
- Measurement of pressure, internal vacuum and CO₂
- Dimensional measurements and perpendicularity of preforms
- Analysis of cans and preforms



BALANCES FOR FILTER WEIGHING

Dedicated filter balances offer high accuracy measurements for various filter sizes. Ultra-micro, micro- and analytical filter balances from Radwag incorporate the latest technology in mass measurement ensuring unparalleled performance, quality control and data integrity.

- 2-Point internal adjustment system
- Complete data integrity with Alibi Memory and full CFR 21 compliance
- Built-in statistical quality control (SQC) module
- Fully customisable reports and printouts



SWABS

Specifically suited to environmental surface sampling. Pre-moistened swabs boost sample uptake, particularly on dry surfaces. Copan SRK™ Solution acts as a neutralising agent as well as a transport medium for the detection & enumeration of bacteria.

- Each SRK™ swab includes a labelled screw-cap tube filled with specified volume of special SRK™ solution
- The swab is attached to the cap of the tube

FILTER PAPER

- Quantitative or qualitative
- Various grades with different pore sizes & diameters available





SERVICING

Boasting a large team of qualified engineers, located throughout South Africa and travelling weekly into the rest of Africa, Lasec® ensures a full-service package, including preventative maintenance, repairs and service level agreements. Worry-free use of laboratory and scientific equipment in your facility is a possibility using the Lasec® expertise.

VALUE ADDED SERVICING SOLUTIONS INCLUDE:

- ISO17025 SANAS Accredited calibrations for volume and mass metrology
- Biosafety consulting service facilitated by NSF accredited engineers
- Tailor-made service contracts and preventative maintenance plans
- Repairs conducted with genuine manufacturer supplied spare parts
- Assistance with IQ, OQ and PQ protocol completion

TRAINING

With more than 80 scientifically trained and qualified personnel, we bring years of practical laboratory experience and application expertise to your aid.

GOOD LAB PRACTICE GUIDELINES

Accredited training programmes covering topics relevant to Good Lab Practice.

CPD accredited training topics include, but are not limited to:

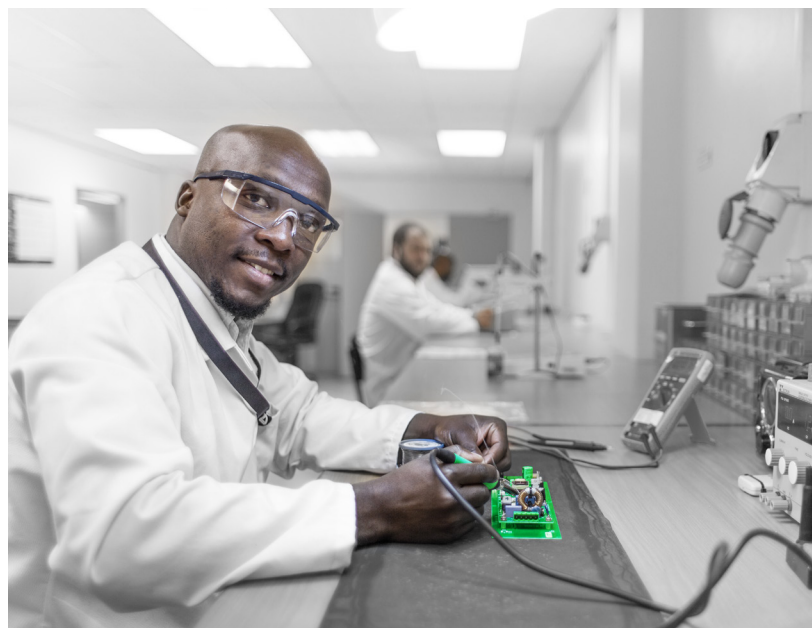
- Safe handling and storage of flammable liquids
- Manual liquid handling techniques
- Biosafety protection

STANDARD OPERATING PROCEDURE (SOP) DEVELOPMENT

Assistance with the development of straight-forward instructions to ensure the testing process is followed consistently to achieve reliable results.

ON-SITE INSTALLATION AND TRAINING

Product managers, application specialists or service engineers undertake installation and training of end-users on the correct use and maintenance of laboratory equipment supplied.





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