

YOUR TRUSTED PARTNER

PROVIDING WINNING SCIENCE, TECHNOLOGY, HEALTH AND EDUCATION **SOLUTIONS ACROSS AFRICA.**



THE VALUES WE LIVE BY



INTEGRITY

Integrity means that our actions are consistent with what we know is right. We make ethical decisions in spite of the cost.



OPTIMISM

Optimism means that there is good in every situation and we never give up.

Our values underpin everything we do. They are our foundation. United by our common values, we all pull in the same direction, we share the same code. They drive our vibrant culture, guide us and hold us accountable.



PASSION

Passion is the love we have for the work we do. It's what drives us and inspires us to give of our best each day. It provides the inspiration we need to accomplish our goals.



EXCELLENCE

Excellence means we pursue continuous improvement in everything we do.



ENTREPRENEURSHIP

Entrepreneurship is the empowerment to identify, create and action innovative opportunities that we believe in.

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CONTENTS

WHO WE ARE	02
INSTRUMENTS	03
FURNITURE	17
OUR RANGE	18
GLASSWARE	19
PLASTICS	24
FILTRATION	27
HARDWARE	28
SERVICING	31
PRODUCT PORTFOLIO	32

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LASEC® - WHO WE ARE

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

With more than 80 scientifically trained and qualified personnel, we bring years of practical laboratory, engineering and teaching experience to your aid. One of the first laboratory suppliers to expand beyond South Africa's borders, we have been meeting our customers' needs throughout Africa for over 20 years.

OUR CUSTOMER COMMITMENT

PRODUCT RANGE:

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

With warehousing facilities in Cape Town, Johannesburg and Durban we have a broad range of products, including consumables and instruments which we hold in stock. These extensive stock-holding facilities reduce 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. Our extensive stock-holding facilitates reduced delivery times of key products.

TRAINING

On-site installations are accompanied by customer training on correct usage and maintenance of equipment. Our scientists are up-to-date on technology and trends in the industry, allowing us to offer informative and practical training courses, many of which are CPD-accredited.

QUALITY ACCREDITATION

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

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ASEC® **INSTRUMENTS**

Lasec® can provide assistance with IQ, OQ and PQ protocol completion after installation of a new device, after moving, after repairs, or after any other activity, in order to meet regulatory requirements.

Our portfolio includes a wide range of instrumentation, backed by technical expertise, to ensure optimal performance and accuracy to international standards.

Lasec® offers CPD accredited training and workshops across a broad range of topics, including but not limited to hazardous material storage, correct use of pipettes and water saving solutions.

Our instrument range includes solutions for the following:

- Temperature: From cryotanks and ultralow freezers to ovens, incubators and furnaces
- Safety Products: Biosafety cabinets, fume hoods and safety storage cabinets
- Liquid and Mass Metrology: Balances and scales, pipettes and automated liquid handling systems
- **Electrochemistry:** From water purification systems to measurement of pH, conductivity and titrator solutions
- **Sample Preparation:** Everything needed for a standard laboratory including hotplate stirrers, sample concentrators and homogenisers
- **Biotechnology:** A specialised portfolio covering standard PCR techniques to highly sophisticated microfluidics and gel documentation
- Manufacturing and production: A comprehensive range of online, in production weighing and weight control equipment including checkweighers, platform and ramp scales. Industrial chillers used for controlled cooling of products, mechanisms and factory machinery across a wide range of industries.
- **Application specific equipment:** For environmental analysis and physiology research

IQOQPQ SERVICES PROVIDED INCLUDE:

- Installation Qualification (IQ): Documented verification that equipment is installed to manufacturers' recommendations.
- Operation Qualification (OQ): Documented verification that equipment (as installed) is operating as intended to manufacturers' specifications.
- Performance Qualification (PQ): Documented verification that equipment can perform effectively and reproducibly, based on approved manufacturers' specifications.
- Re-Qualification (OQ or OQ/PQ): Documented verification that equipment continues to operate as specified by the manufacturer. Performed 1 year after an initial IQ, OQ, PQ has been completed, or according to SOP requirements.

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CLIMATE CHAMBERS

Climate chambers, compliant to ICH, GMP and FDA provide the environmental control and flexibility to meet the evolving needs of testing.



FLOOR-STANDING CLIMATE CHAMBERS

- Wide variety of chambers available

 stability chambers, stress testing chambers and models complying to the ICH quidelines
- Day night simulation and photo stability testing possible with optional light modules
- Complies with the strict requirements of DIN 12880:2007-05
- Each unit is safety-tested and bears the CE mark



WALK-IN STABILITY CHAMBERS

- ICH, GMP, WHO, FDA compliant
- Modular customisable designs per project specifications available from 5000lt to more than 40 000lt
- Uniformity: ± 1°C and ± 2%RH
- Password protected digital controller with 21 CFR Part 11 compliant backup data recording
- Ethernet connection to BMS and EMS
 systems
- Locally based, factory trained service engineers capable of installing and servicing systems
- Preventative maintenance options included
- IQOQPQ validation on chambers and software included
- SANAS and ISO calibration certificates included



REACH-IN STABILITY AND PHOTOSTABILITY TESTING CHAMBERS

- Developed to simulate and automatically reproduce the conditions required by the ICH Q1B Option 2 guideline for photostability testing
- Both UV and Visible lights are independently controlled and can be programmed by % or intensity
- Compliant and recognised by ICH, FDA, GMP and other leading industry standards
- FDA 21 CFR Part 11 compliant software
- Ready to use, with no assembly needed. The design is future-proof with configurable interior for the most efficient use of available storage space and content dimensions
- Configurable high/low temperature and humidity alarms, as well as email notifications ensure content protection.

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SAFETY STORAGE CABINETS

There are many dangers involved when storing and handling flammable and hazardous liquids in the workplace. When these dangers are underestimated fatal incidences can occur. Compliant to international (EN14470-1) as well as local (SANS54470-1) standards, high quality safety storage cabinets ensure maximum safety with respect to storage of hazardous liquids.

FIRE SAFETY STORAGE CABINETS

- Fire resistant for 90 minutes in accordance with EN14470-1 and SANS5440-1 safety requirements
- Immediate automatic closing of doors and drawers by integral thermal release system in the event of a fire
- Flexible interior equipment provides customised storage solution
- Underbench, upright, single or double door cabinet size options available, to fit any new or existing laboratory layout

ACID AND ALKALI SAFETY STORAGE **CABINETS**

- Safe storage of acids, alkalis and aggressive hazardous materials
- Flexible interior equipment options available
- Underbench, upright, single or double door cabinet size options available, to fit any new or existing laboratory layout
- Not suitable for flammable liquid storage

COMBINED FLAMMABLE AND **CORROSIVE LIQUID STORAGE**

- Approved 2-in-1 storage of hazardous materials in accordance with EN14470-1 (Type 90) and SANS5440-1 and other chemicals (acids and alkalis)
- Left-hand side of the cabinet is fire resistant for 90 minutes in accordance with EN14470-1 and SANS5440-1 safety
- Right-hand side of the cabinet safely stores acids and alkalis and aggressive hazardous materials
- Flexible interior equipment provides customised storage solution





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FRIDGES AND FREEZERS

Quality fridges and freezers can lower the risks involved in production, that cannot be eliminated through testing. A variety of models, with excellent performance in temperature stability and uniformity, heighten product consistency and ensure safety for human consumption.



FRIDGES

- Temperature range: -2/20°C, 2/20°C
- Digital display
- Acoustic and visual temperature alarms on selected models
- Solid or glass door
- Internally and externally spark free
- Extra sensor "E Sensor" for temperature reference in the storage compartment
- Optional data logger

FREEZERS

- Temperature ranges: -25/-5°C, -35/-5°C, -40/-5°C, -86/-60°C
- Digital display
- Acoustic and visual temperature alarms on selected models
- Internally and externally spark free
- Extra sensor "E Sensor" for temperature reference in the storage compartment
- Optional data logger

ULTRALOW TEMPERATURE FREEZERS (-86°C)

- Large capacity 668lt
- Easy-In/Easy-Out door latch for one-handed operation, positive seal against gasket
- Dual compressors run high and low stage CFC Free refrigerants to maintain temperature uniformity
- Energy Saver Cascade Cooling System
- Universal keyed door lock offers added security
- CO₂ back-up systems available

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BALANCES AND SCALES

Specialised weighing systems suitable for Research and Development; Quality Control and Production (including formulation; filling and packaging)

CHECKWEIGHERS

- Weigh products quickly and accurately for precise control of packaged products in accordance with valid industry regulations
- Modular design enables customisation and a flexible configuration to meet specific product requirements
- Compliant to NIH software enables setting of parameters to precisely meet appropriate regulations on control of packaged goods
- Monitor the production process on-line, save the weighing data, generate reports inclusive of weighing statistics, quantitative statistics as well as production line failures and stoppages



ULTRA-MICRO, MICRO & SEMI MICRO **BALANCES**

- Weighing accuracy and repeatability compliant to USP regulations with $sd \le 1d$ combined with USP regulations conformity (Section 41 and 1251)
- Designed for the most demanding applications including formulation functions
- Fully automatic formulation control guided mathematically by the balance, and full traceability in data storage and printout of data
- SQC tablet control functions for batch verification processes
- Programmable reference sample control functions
- Windows embedded operating systems
- Data safety ensured with ALIBI memory designed to provide protection and automatic recording of measurements
- WiFi module offers wireless transfer of data

PRECISION BALANCES

- ${\sf MonoBLOCK^{\sf TM}}\ technology\ enables\ precision\ weighing\ of\ heavy\ loads\ with$ readability of 0.01g at capacity of 15kg and readability of 0.1g at capacity of 50kg
- Housing made of ABS thermoplastic polymer and stainless steel weighing pan effectively protecting the weighing sensor and electronics against chemicals, water, dust and damage.
- Compliant to 21 CFR Part 11 guaranteeing data safety and limiting access by unauthorised users
- Wireless communication between the balance and the terminal ensures safe operation of the instrument in a fume cupboard, isolator or compounding hood when weighing toxic substances





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PIPETTES



AIR DISPLACEMENT PIPETTES - ELECTRONIC

- Aspirate at a push of a button with four pipetting modes: Pipette, Reverse, Repetitive and Mix
- Fill a 96-well plate in a single pipetting cycle using repetitive mode
- Single and Multichannel models available
- Volume ranges from 0.1 to 1 200 μl



AIR DISPLACEMENT PIPETTES - MANUAL

- FULLY AUTOCLAVABLE with lockable volume setting and adjustable tip ejector button
- Ergonomic design for reduced pipetting strain
- Single and Multichannel Models available
- Volume ranges from 0.1µl to 10ml



POSITIVE DISPLACEMENT PIPETTES

- Avoid cross-contamination while easily pipetting samples that are viscous, corrosive or have low vapour pressures
- Minimal maintenance with no recalibration required
- Available from 1µl to 12.5ml



96- AND 384-WELL PLATE FILLERS

- Fast Microplate Pipetting System
- Fill an entire 96-well plate in less than 10 seconds, or a 384-well plate in less than one minute.
- Ideal for high-throughput and time sensitive analysis (e.g. Drug screening, enzymatic assays, NGS etc)



PIPETTE FILLERS

- Motorised pipette filler
- For all plastic and glass pipettes from 1 to 100ml
- Continuously adjustable speed: 25ml in 4 seconds
- Environmentally friendly NiMH battery for 8 hours operation
- Precise and smooth dosing button control



SAFE ASPIRATION STATION

- Quiet, Compact and Flexible closed aspiration system
- Adjustable Aspiration Speeds
- Aspiration Handle accommodates many types of pipettes
- In-line hydrophobic filter to trap hazardous aerosols
- Parts in contact with liquid are autoclavable

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OVENS

- Compliant to the strict requirements of DIN 12880:2007-05
- Each unit is safety-tested and bears the CE mark

VACUUM OVENS

- Temperature range ambient +5°C to +200°C
- State-of-the-art control technology
- Short heating up times, high precision temperature control and turbo drying
- Noise-insulated vacuum pump module for installation in a chamber below the oven
- 3 model sizes (29lt, 49lt and 101lt)



UNIVERSAL OVENS

- Temperature range ambient +5°C to +300°C
- Natural convection or forced air circulation by quiet air turbine, adjustable in 10% steps



MUFFLE FURNACES

- Lift or flap doors
- Temperature ranges up to 1100°C, 1200°C or 1300°C maximum temperatures
- All insulation materials on all models are classified as non-carcinogenic and completely abide by the TRGS 619 requirements
- Variety of volumes available, ranging from 1lt to 40lt
- Variety of controllers available to meet specific application requirements
- Optional software includes features to protect process information security



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INCUBATORS

- Compliant to the strict requirements of DIN 12880:2007-05
- Each unit is safety-tested and bears the CE mark
- Optimum view of sensitive loads through wide-area interior glass doors
- Various sizes available

STANDARD INCUBATORS

- Temperature range ambient to +80°C
- Natural convection or forced air circulation

COMPRESSOR-COOLED INCUBATORS

- Temperature range -12°C to 60°C (size dependent)
- Due to the finely adjusted control technology, temperatures exactly reach the set point values without energy-intensive bursts of power

PELTIER-COOLED INCUBATORS

- Temperature range from 0°C to 70°C
- Peltier technology not only contributes to climate protection, but it also achieves an additional decrease in operating costs of up to 90% compared to compressor technology.
- Optional lights available for day / night simulation





VACUUM PUMPS

- Options available for corrosive and non-corrosive gases and vapours
- Contamination-free pumping and evacuation
- High flow-rate even approaching ultimate vacuum
- Whisper quiet and low vibration
- Exceptionally long diaphragm life and maintenance-free drive system for low lifetime costs



MELTING POINT APPARATUS

- Analogue and digital versions available
- Measure up to 3 samples simultaneously
- Accessory printer to print results directly from the unit
- 8GB storage capable of storing up to 300 melts files with video
- Data easily transferred to computer via USB stick



PLATE READERS (MULTIMODE)

- Full spectrum of light absorbance and fluorescence in 1nm increments
- Rugged plate shaker for PRION assay
- Market-leading Patented LVF Monochromator Technology
- Industry-benchmark in Neurodegenerative disease research

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GLASSWARE WASHERS

- Compact and robust stainless steel design
- Digital touch screen display
- Micro-processor controlled wash cycles
- A variety of sizes, models and accessories available to suit any laboratory's needs



HEATING AND COOLING THERMOSTATS

- Available for internal and external circulation applications
- Wide temperature range available from various models allowing for temperatures of -100°C up to 320°C
- Variety of accessories and heat transfer liquids available



FREEZE DRYERS

- Laboratory, Pilot and Production Scale Freeze dryers available
- Innovative, reliable sensor technology to avoid unwanted thawing / collapse
- Automatic determination of the freezing point for secure process control
- Wireless sample temperature measurement for easy handling with improved sensor technology
- Online imaging provides greater transparency in freeze drying and can be linked to the process documentation
- Possible to precisely determine drying rate and end of drying via online-weighing of product
- Option for simultaneous and uniform freezing of vials at a push of a button



MICROSCOPES

- Compound and Stereo Microscope options
- Available with Binocular or Trinocular heads
- Infinite Plan Objectives and LED Illumination
- Fluorescence, Darkfield and Phase Contrast options available
- Choice of Cameras for Image Analysis

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BIOSAFETY CABINETS

- EN 12469 & CE certified
- Supply and exhaust H14 HEPA filters are 99.995% efficient
- HEPEX Zero Leak Airflow System
- Energy Saver (ES) DC/ECM Motor
- Superior construction Monolithic 16/18 Gauge, Type 304 Stainless Steel Welded



LAMINAR FLOW BENCHES

- Achieve clean airflow required per ISO 14644-1 suitable for the preparation of injectable drugs, IV solutions and tissue culture
- HEPEX™ Zero Leak Air Flow System
- True laminar airflow with a unique blower system which extends HEPA filter life
- Smooth white formica or stainlesssteel work surfaces available



COMPOUNDING HOODS

- Powdersafe[™] Ductless Enclosure
- Safe and effective weighing environment for toxic compounds and/or liquid chemicals
- Operator protection by capture of particulate in HEPA filtration without sacrificing balance stability
- Constructed from materials that offer exceptional durability as well as ease of cleaning.
- Factory leak tested, certified and shipped fully assembled, ready for simple installation on any countertop
- Sizes range from balance enclosures to full-scale, large batch sampling enclosures

ROTATIONAL VACUUM CONCENTRATORS

- Efficient concentration of DNA/RNA-samples, proteins etc.
- No sample foaming, minimal sample loss
- Simultaneous, multiple sample drying
- Safe and simple solvent recovery
- RVC-series is used in combination with different cooling traps and vacuum pumps



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AUTOCLAVES

- 85l or 105l models are SANS 347:2012 compliant
- · Rapid cooling systems shorten cycle time
- Optional vacuum drying versions available
- RS-232 or Printer options available



ORBITAL SHAKERS

- Speed range of 30-300rpm
- Cradle system to secure flasks is available for selected models
- Various sizes of orbital shakers available
- Able to accommodate various flask sizes



HOTPLATE STIRRERS

- Available with either a coated aluminium or chemically resistant ceramic plate
- Stirring capacity of up to 20l
- Heating of samples up to a maximum temperature of 500°C
- Options of single or multiple-place models with up to 15 positions
- 10 year warranty offered on selected items



OVERHEAD STIRRERS

- Wide range available suitable for both lab and industry applications
- Adjustable speeds of up to 2000rpm
- Capable of processing samples of up to 2001
- Can be used with low, medium or high viscosity samples
- Overload and overheating protection



MAGNETIC STIRRERS

- Available with aluminium alloy, robust stainless steel, or chemically resistant ceramic top
- Adjustable stirring speed range between 50-2000rpm
- Maximum stirring capacity of 30l
- Options of single or multiple-place models with up to 15 positions
- 10 year warranty offered on selected items

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PH METERS

- Ideal for quality control and GLP applications
- Up to 3 decimal place resolution
- 1, 2 or 3 point pH calibration
- Automatic or manual buffer recognition
- Datalogger

VORTEX MIXER

- Powerful motor for INSTANT vortexing
- Continuous or "touch" operation
- Q-Drive™ dynamic balancing system
- Variable speed from 200 to 3200 rpm
- Wide variety of accessories

ROTARY EVAPORATORS

- Simple, counterbalanced lift mechanism
- Equipped with a vacuum release and a continuous feed system to facilitate non-stop operation
- With cold finger, vertical or diagonal condensers (Peltier)
- Plastic-coated glassware is available to reduce the risk of injury should the glassware break during use
- Water or oil bath, vacuum pump and recirculating coolers available separately







REFRACTOMETERS

- Measurement range: 1.26 1.70 refractive index; 0 - 95 % BRIX
- Dual electronic peltier temperature control from 10°C to 120°C
- Ethernet port for network connection therefore possible to securely save measurements directly to your network/server
- 21 CFR Part 11 compliant

DENSITY METERS

- Capable of 2, 3, 4 or more multiple measurements with standard deviation, mean, min and max reading for true cGLP/GMP compliance
- Full 21 CFR Part 11 instrument level compliance
- Intuitive Windows® based navigation architecture
- Ethernet port for network connection therefore possible to securely save measurements directly to your network/server

POLARIMETERS

- Six Standard Wavelengths
- TempTrol electronic heating and cooling
- Intuitive Windows® based navigation architecture
- Ethernet port for network connection therefore possible to securely save measurements directly to your network/server
- 21 CFR Part 11 compliant

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MILLS

- Speed range of 50 6000rpm
- Integrated speed control with LED display for speed indication and status messages
- Integrated heating, overload and blockage protection
- Hardened stainless steel grinding attachments for either brittle or fibrous samples
- Blade and hammer attachments
- Sieves in different mesh sizes from 0.2mm - 6mm





BOTTLETOP BURETTES AND DISPENSERS

- Bottletop dispensers are autoclavable
- Recirculation valve reduces reagent loss
- Genius2 and Simplex2 models dispense variable volumes between 0.2 - 100ml
- Piccolo dispensers dispense fixed volumes of liquids from 0.1 - 2ml
- Digital burettes available in 25ml and 50ml versions





HOMOGENISERS HEATING MANTLES

- Lab scale to industrial scale
- Capable of processing sample volumes between 0.05ml - 40 000ml
- Suitable for wet milling and dispersing of solids, fibres, stringy materials, tissues and cells into fluids and polymers
- Dispersing probes are easily interchangeable
- Rotational speed stability option to protect against viscosity changes
- Specific probe designed to homogenise tablets is available
- Software available

- Controlled and non-controlled models available
- With powder-coated aluminium or chemically resistant polypropylene outer casing
- Available in various sizes to accommodate flasks from 10ml to 5000ml
- Available in single or multi-version with three or six places
- Stirring function is optional



VISCOMETERS AND RHEOMETERS

- Modular and easy to use with intelligent user guide.
- Applications range from simple viscosity determination to complex rheological investigations on samples ranging from low viscous liquids to stiff pastes and semi-solids.
- Used as a standalone or as fully software controlled unit.
- 21 CFR Part 11 compliant option available

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WATER PURIFICATION SYSTEMS

- Utilises a range of technologies including reverse osmosis, filtration, irradiation and ion exchange to achieve desired levels of purity
- Various models available to meet the needs of specific applications and volume requirements
- Easy to use and simple to maintain



WATERBATHS

- Digital
- Temperature range from ambient up to +95°C
- Optional peltier cooling unit available to achieve temperatures as low as 10°C
- Optional shaking device available



ULTRASONIC BATHS

- Deep-cleaning activity removes stubborn contaminants from almost any surface
- Volumes range from 1.9 201
- With mechanical or digital timer
- With or without heater
- Accessories available include wire mesh basket, solid stainless steel tray, perforated tray, support racks and beaker covers



CENTRIFUGES

- Refrigerated or non-refrigerated
- Large easy-to-view control panel with digital display
- Control knobs for selecting speed/RCF, running time and temperature
- Selectable acceleration and deceleration rates
- Automatic rotor recognition
- Imbalance sensor with safety shutdown mechanism



SPECTROCOLORIMETERS

- Automated colour analysis
- Quantify the colour of solutions precisely and objectively according to internationally recognised standards: EP, USP and CP Colour Series
- Remote Calibration Service available
- ISO Certified with GLP features



SPECTROPHOTOMETERS

- Ideal for quality control applications
- Double beam spectrophotometer with highly stable optics
- Variable spectral bandwidth 0.5, 1, 2,
 4. 5nm
- PC software includes preloaded methods for DNA/RNA and protein analysis, extensive post-measurement tools, unlimited results saving and easy export of data
- Conforms to European Pharmacopeia requirements

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LABORATORY FURNITURE

Lasec[®] is able to assist in the design and installation of laboratory furniture in facilities throughout Africa. We prefer to work in collaboration with end-users and/or in partnership with architects to develop a fully functional laboratory environment that is dedicated to your particular application and/or field of study. We have different options available and can partner with a leading international manufacturer, Waldner, to provide your solution. Alternatively, we offer a range of laboratory solutions from our own local manufacturing facility. We have access to a wide range of assembly/surface materials to ensure full chemical- and/or microbiological-compatibility. Options to personalise your laboratory are also available.

An important aspect of our design philosophy is the recommended incorporation of equipment to ensure that your new laboratory provides a safe working environment meeting all necessary safety standards. Some considerations are detailed below:

AIR PROTECTION CABINETS

Incorporate the correct type of air protection solutions (ducted and/or ductless) into the design. These can include fume cupboards, laminar flow or biological safety cabinets that meet the most stringent local and international standards (NRCS approved, TUV EN12469 and NSF/ANSI49). Our service team are factory trained, NSF accredited, and have highly specialised equipment to validate cabinets to these standards.

SAFETY STORAGE CABINETS

The use of quality fire-retardant cabinets directly within the workspace (compliant to the EN14470-1 and SANS54470-1 standards) drastically reduces the transportation of hazardous materials, and ensures that the facility meets all fire and other safety legislation.

VACUUM LOCAL AREA NETWORKS

VACUU-LAN® vacuum networks make it possible to supply several different applications with just one centralised pump. Solutions are designed to allow for versatility and chemical resistance and include built-in check valves to protect against contamination or interference from adjacent applications.

LABORATORY BALANCE TABLES

Ensure that the design includes stable surfaces for specific laboratory balances. We can supply dedicated solutions for balances that can measure down to 10^{-6} q.

SAFETY EQUIPMENT

The provision of safety showers and/or eye-wash stations should form an integral part of any laboratory design.

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EDUCATION

Lasec® believes in enabling and empowering our future scientists and leaders to reach their full potential. We proudly partner with corporates and non-profit organisations to make discovery possible for all school children. Our kits are curriculum aligned including CAPS and with up to 65% of our kit range manufactured locally in our ISO certified KZN factory, we provide the highest quality products optimised for classrooms across Africa.

DIAGNOSTICS

Through our collaboration with global diagnostics companies, health ministries and international nongovernmental organisations, we have developed solutions to meet the growing need for standardised collection and easy transportation of biological samples from remote and resource-limited areas to testing facilities.

CONSUMABLES

Extensive stock-holding ensures availability of essential consumables for everyday applications. We offer a wide selection of laboratory consumables, from affordable disposable pipettes, beakers, funnels and petri dishes to glassware suited for calibrated volumetric measures. Regardless of your budget and application we have the right basket to serve your needs.

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VOLUMETRIC GLASSWARE

All volumetric glassware requires precise and accurate production and calibration conditions. Lasec® showcases products which adhere to production standards in accordance with ISO, DIN, ASTM and USP.

Our supplier **Glassco** recently launched QR coded volumetric flasks, meeting both ASTM and ISO standards. This is available for individual and batch certified volumetric flasks. All you have to do is scan the **QR CODE** from your mobile phone with a QR code scanner (such as NeoReader). Not only will it give you the certificate of calibration, individual or batch, but also the certificate of compliance and the product user manual.



QR-CODED SCAN YOUR CALIBRATED GLASS

SCAN YOUR VOLUMETRIC FLASK
Please download NEO READER SCANNER
and scan your Volumetric Flask with your

smart phone

SELECT CERTIFICATE INDIVIDUAL/BATCH CONFORMITY OR USER MANUAL
Website will open with choice of batch or individual certificate and please type
Serial No. from Flask

PRINT OR SAVE YOUR CERTIFICATE
Your certificate is now ready to be saved or printed at the time of your audit, before audit or after audit

AVAILABLE AT YOUR FINGERTIPS!



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BOTTLES

DROPPING

- Class A Borosilicate 3:3 glass
- Amber or clear
- With rubber teat or glass stopper

MCCARTNEY

- Soda Lime glass
- Narrow or wide neck
- Autoclavable
- Aluminium screw cap

MEDIA

- Class A Borosilicate 3:3 glass
- Graduated
- Amber or clear
- Autoclavable
- Round or square
- Blue polypropylene GL 45 screw cap and pouring ring

REAGENT

- Class A Borosilicate 3:3 glass
- Amber or clear
- Narrow or wide neck
- With glass or plastic stopper

SPECIFIC GRAVITY • BOTTLES / • PYCNOMETERS •

- Class A Borosilicate 3:3 glass
- Adjusted or unadjusted
- With or without ground joint thermometer

WEIGHING

- Class A Borosilicate 3:3 glass
- With ground in stopper







VIALS

PILL

With stoppers

VACCINE

- Clear or amber
- Rubber stoppers or aluminium seals available
- Crimpers available





DISHES

CRYSTALLISING

With or without spout

PETRI

Soda Lime glass

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MICROSCOPE

SLIDES

- Single or twin frosted
- Ground, cut or bevelled edges available

COVERSLIPS

- Chemically resistant Borosilicate 3:3 glass
- Colourless and clear, suitable for fluorescence microscopy



BEAKERS

- Class A Borosilicate 3:3 glass
- Low or tall form
- Spouted
- Graduated



CRUCIBLES

- Silica, Soda-lime or Class A Borosilicate 3:3 glass
- Low or tall form
- Glazed options available
- Lids available



DESICCATORS

- Class A Borosilicate 3:3 glass
- Plastic knobbed or vacuum stopcock
- Complete with porcelain plate



WEIGHING SCOOPS

Available sizes: 3ml; 6ml, 10ml



OINTMENT JARS

With or without cap



MORTARS AND PESTLES

- Porcelain or Class A Borosilicate 3:3
- Porcelain completely glazed, or glazed on outside only

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



CYLINDERS Class A Borosilicate 3:3 glass

MEASURING

- Spouted or stoppered
- Graduated
- Hexagonal or round base
- Batch or Individual Certification available

NESSLER

- Graduated
- Batch or Individual Certification

BURETTES

DR. SCHILLING

- Calibrated "Ex" (to deliver)
- Automatic zero adjustment
- Complete with plastic bottle and stable plastic base

STRAIGHT BORE

- Class A Borosilicate 3:3 glass
- Calibrated "Ex" (to deliver)
- Graduated
- Batch or Individual Certification
- Glass, teflon (PTFE) or rotaflo stopcock





FUNNELS Class A Borosilicate 3:3 glass

FILTER	With long or short stem
BUCHNER	Porcelain options availableGlass - with sintered discVarious porosities available
SEPARATING	 Glass, teflon (PTFE) or rotaflo stopcock options Pear or conical shapes available With polypropylene stopper

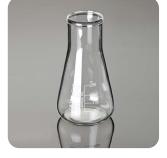
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FLASKS Class A Borosilicate 3:3 glass

BOILING	Round or flat bottomNarrow or wide neck
DISTILLATION	With side arm inclined at 75° to vertical axis
ERLENMEYER	Wide or narrow neckPlain, ground neck or screw cap
FILTER	Plain or ground neckWith side arm
IODINE	With ground neck and stopper
KJELDAHL	With plain or ground neck
VOLUMETRIC	 Amber or clear With plastic or glass stopper Batch or Individual Certification available













PIPETTES

PASTEUR

- Soda Lime glass
- With or without cotton plug
- Various sizes available: 150mm or 230mm

SEROLOGICAL • Graduated

- Batch or Individual Certification
- Calibrated "Ex" (to deliver)

- VOLUMETRIC Batch or Individual Certification
 - Calibrated "Ex" (to deliver)



TUBES

MELTING POINT

- Determination of melting point
- May be used for sample storage

CAPILLARY

- Heparinised options available
- Sigillum wax available

TEST

- Soda-lime or Class A Borosilicate 3:3 glass
- Round bottom
- With or without rim
- Graduated or ungraduated



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LABORATORY PLASTICS







MEASURING CYLINDERS

- Spouted
- Graduated
- Hexagonal base
- Polypropylene or $TPX^{\mathbb{R}}$ (Polymethylpentene)

MEASURING JUGS

- Graduated
- Clear or white options available
- Polypropylene or TPX® (Polymethylpentene)

FUNNELS

- Filter or powder funnels available
- Long or short stem
- Polyethylene or polypropylene

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BOTTLES

SAMPLE

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

STORAGE

- With or without stopcock
- Ideal for bulk storage or transport of liquids
- Polyethylene



- Non-Labelled and Labelled bottles available
- Labelled for easy identification of contents e.g. Acetone, Methanol, Distilled water, Isopropanol
- Polyethylene





PIPETTES

PASTEUR

- Graduated or non-graduated
- Sterile or non-sterile
- Bulk or individually wrapped

SEROLOGICAL

- Graduated
- Sterile
- Bulk or individually wrapped









PIPETTE TIPS

- Filter, non-filter or specialised
- Aerosol barrier tips
- Bulk or racked
- Sterile¹ or non-sterile
 ¹Fully traceable Quality certificates
 and Certificates of Sterilisation
 available

BEAKERS

- Spouted
- Graduated
- Autoclavable
- Polypropylene or TPX® (Polymethylpentene)

CUVETTES

- Macro or micro volumes
- Characterised by minimal light scatter with high transmission
- Glass quartz or crystal-clear polystyrene

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TUBES

CENTRIFUGE

- Graduated
- Sterile
- Bulk, racked or individually wrapped
- Free-standing tubes available

CRYO

- Suitable for storage at -20°C, -80°C and in the vapour phase of LN2
- Ultra-pure medical grade, USP class VI certified polypropylene w/o leachables
- Certified free of RNase, DNase & DNA and PCR inhibitors
- Barcoding service available

MICROCENTRIFUGE •

- Graduated
- Safe temperature range of -90 to 121°C
- Certified free of RNase, DNase & DNA and PCR inhibitors
- Coloured options available

SCREWCAP MICRO

- Temperature range of -196 to 121°C
- Skirted or conical bases
- Numerous cap and tube combinations available for specific applications
- Medical grade polypropylene

TEST

- Graduated or non-graduated
- Round or conical based
- Stoppered, screw caps or snap cap options available
- Polystyrene or polypropylene







PETRI DISHES

- Vented or standard
- Half plate available
- Tissue culture options available

SYRINGES

- Smooth flow
- Sterile in peel pack
- Latex free
- Medical grade polypropylene

MICROPLATES

- 24, 96, 384 wells
- Black, white or Ultraclear
- UV star or glass bottom plates
- Polypropylene or polystyrene

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FILTRATION SYSTEM – GLASS

- 3 piece, all glass system
- 47mm diameter
- 300ml filter holder volume
- 1000ml filter flask volume



LENS CLEANING TISSUE

- Non-fibrous, lint-free
- Made from 100% manila fibres



BENCH PROTECTION

- Two layer surface protection
- Highly absorbent cellulose
- Impermeable polyethylene



GLASS FIBRES

- For suspended solids test and clarification
- With or without binder
- Various pore sizes available including 1.6µm
- Various diameters available



WEIGHING PAPER

- Smooth
- Semi-transparent



FILTER PAPER

- Quantitative or qualitative
- Various grades and pore sizes available
- Various diameters available
- Hardened versions available



SYRINGE FILTERS

- Cellulose acetate, nylon, PTFE or PVDF
- Sterile or non-sterile
- Pore sizes of 0.45μm or 0.2μm available
- ID 25mm OD 33mm
- Individually wrapped or bulk packaged



ANTIBIOTIC TESTING PAPER

- Thick and absorbent
- Available in 6mm, 9mm or 13mm diameters



MEMBRANE FILTERS

- Cellulose nitrate and cellulose acetate available
- PTFE available for corrosive substances
- Nylon available for HPLC
- Sterile or non-sterile

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HARDWARE



LABORATORY HARDWARE



SWABS

DRY

- Cotton or rayon tip
- Plastic or wooden shaft
- Round bottom tube for easy transport of samples
- Certificate of Analysis available on request

ENVIRONMENTAL •

- Used to assess microbial presence on surfaces and equipment
- Ideal for sampling uneven or irregular surfaces and difficult to reach sites
- Kits include a rayon or flocked swab + transport media
- Choice of buffered peptone water or neutralising solution
- Kits require no preparation
- Certificate of Analysis available on request

WEIGHING BOATS

- Available sizes: 7ml, 30ml and 100ml
- Square or diamond shaped

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PAPER WIPES & STAND

- 1 or 2 ply
- White
- Various sizes available
- Roll form
- Stand made of metal



PARAFILM

- 50mm, 100mm and 500mm widths available
- Various lengths available
- Parafilm dispensers available



INOCULATING LOOPS, **NEEDLES & SPREADERS**

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



STANDARD FORCEPS

- Available with sharp or blunt ends
- Various lengths available



TEST SIEVES

200mm diameter



SPATULAS

- Wooden or stainless steel
- Aylesbury Type
- Chattaway
- Micro
- Spoon Type



GLOVES

- Latex and nitrile available
- High quality and durable
- Various sizes available



LAB COATS

- Reusable or disposable
- Various sizes available



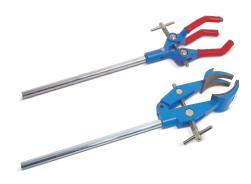
SAFETY GLASSES

A range of safety glasses is available

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DIGITAL TIMERS

- Up/down
- Jumbo
- 3 or 4 channel

BRUSHES

- Bottle Nylon or fibre
- Burette Nylon or bristle
- Flask Bristle

CLAMPS

- Burette Double or single
- Retort 2, 3 or 4 prong
- Retort Rings with Bossheads
- Various sizes available







AUTOCLAVE BAGS

- Made from LDPE granules extruded to 65µm film thickness
- Standard, double and heavy duty
- Autoclave Tape available in 12mm and 24mm

EYEWASH STATIONS

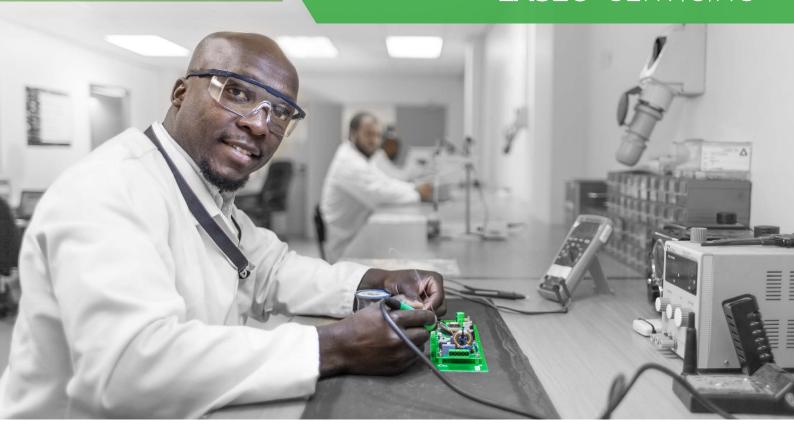
- Eye wash bottle made of polyethylene
- Head has an airvent valve to ensure air refill of free space in bottle preventing draw back of contaminated wash into bottle
- A perforated spray plate in the cup centre breaks up the stream to give the eye a gentle wash

MAGNETIC STIRRER BARS

- Guaranteed inert and leak-free
- Isostatically molded in pure, FDA approved, PTFE
- Individually polished to stay cleaner for longer
- Retriever also available

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LASEC® SERVICING



LASEC® **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 all laboratory and scientific equipment in your facility is a possibility using the Lasec® expertise.



VALUE ADDED SOLUTIONS INCLUDE:

- ISO17025 SANAS Accredited calibrations for volume and mass metrology
- Assistance with Good Lab Practice (GLP) and standard operating procedures in line with ISO recommendations
- Biosafety consulting service facilitated by NSF accredited engineers
- Tailor-made service contracts and preventative maintenance plans
- End-user training on correct usage and maintenance of equipment
- Facilitation of informative and practical CPD accredited training courses
- Assistance with IQ, OQ and PQ protocol completion

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PRODUCT **PORTFOLIO**

A

Adapters

Alcoholmeters

Applicators

• Haemolysis, Silver Nitrate, Wooden

Assay Discs

Autoclaves

Automated Liquid Handlers

B

Bags

• Stomacher, Autoclave

Balances and Scales

Baskets

• Autoclave, Glassware Washer, Ultrasonic

Baths

• Circulating, Oil, Ultrasonic, Water

Beakers

Bench Protection

Biological Oxygen Demand Systems

Biological Safety Cabinets

Blood Collection Systems

Bottles

 Aspirator, Dropping, Gas Washing, McCartney, Media, Reagent, Specific Gravity, Weighing

Bottletop Dispensers

Boxes

• Cryo, Slide

Brushes

• Bottle, Burette, Cervical, Flask, Test Tube

Buckets

Burettes

Burners

• Bunsen, Safety, Meker, Spirit, Teclu

C

Caps and Closures

• Labocap, Metal, Urea

Cell Scrapers

Centrifuges

Chlorophyll Content Meters

Clamps

Burette, Reaction, Retort, Vacuum
Hose

Climatic Chambers

CO₂ Incubators

CO₂ Monitors (Environmental)

Colony Counters

Colorimeters

Condensers

 Air, Allihn, Coil, Cold Finger, Jacketed, Liebig

Conductivity Meters

Cones

- Drip End, Long Tip, Plain End Connectors
- T-shape, Y-shape

Containers

• Ointment, Sample, Sharps, Specimen, Urine, Waste

Counters

• Colony, Blood Cell, Tally

Counting Chambers

Coverslips

Crucibles

Cryogenics

 Shipping Containers, Storage Containers

Cuvettes

Cylinders

• Measuring, Mixing, Nessler

D

Data Acquisition Systems

• Education, Research, Pharma

Dean and Stark Receivers

Density Meters

Desiccators

Dishes

• Crystallising, Petri, Staining

Dissolved Oxygen Meters

Droppers

F

Electrodes

Electrophoresis Equipment

ELISA Equipment

 Microplate Readers, Microplate Washers

Embedding Cassettes

Entomological Pins

Evaporating Basins

Evidence Drying Cabinets

Extraction Thimbles

Extractors

Fume, Soxhlet

F

Films

• Parafilm, Sealing

Filter

• Holders, Paper, Systems

Flasks

Boiling, Distillation, Erlenmeyer,
 Filter, Iodine, Kjeldahl, Tissue-culture,
 Volumetric

Fluorometers

Forceps

Freeze Dryers

Freezers

Fridges

Fume Hoods

Funnels

Furnaces

G

Gauzes

Gel Documentation Systems

Gelation Timers

Glass Beads

Glass Fibres

Glassware

Glassware Washers and Dryers

Glove Boxes

Aseptic Isolators

Gloves

• Latex, Nitrile

Н

Haemoglobinometers

Heating Mantles

Homogenisers

Hotplates

Hydrometers

ı

Ice Flakers

Incubators

Jars

 Anaerobic, Coplin, Honey, Museum, Specimen, Ointment, Pipette, Preserving, Staining

Jugs

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K

Kits

• Blood Collection, Diagnostic Test, Dissection

L

Laboratory Animal Housing Laboratory Jacks Laboratory Markers Laboratory Mills Laboratory Trolleys Laminar Flow Benches

Lancets

Leaf Area Meters

Lens Cleaning Tissue

Liquid Chromatography

 Fraction Collectors, GPC Clean-up Systems, HPLC

Loops

• Inoculating, Needle, Wire

M

Magnetic Stirrers

Mats

 Deep Well Plate, ELISA, Microplate, PCR Sealing, PCR Volume Reducing, Storage Sealing

Measures

• Balers, Calipers, Conical, Tilt Melting Point Apparatus

Membrane Filters

Microscope Slides

Microscopes

Mixers

Moisture Balances
Mortar and Pestles

N

Needles

• Dissecting, Hypodermic, Syringe

0

Ovens

• Hybridisation, Universal, Vacuum

P

PCR

- Consumables, Equipment, Reagents Pencils
- Diamond, Grease Petri Dish Fillers

pH Indicator Paper

pH Meters

Photosynthesis Systems

Pipette Fillers

Pipettes

 Pasteur, Serological, Volumetric, Air Displacement, Positive Displacement

Plates

 Deep Well, Elisa, Microplate, Microtitre, Multiwell, PCR

Polarimeters and Saccharimeters Protective Clothing

 Aprons, Dust Coats, Face Shields, Goggles, Lab Coats, Dust Masks, Respiratory Masks, Surgical Masks, Mop Caps, Over Shoes, Safety Spectacles, Scrub Wear Suits, Surgical Visors

Pumps

• Peristaltic, Vacuum, Water Jet

R

Racks

• Test Tube, Staining

Refractometers

Reservoirs

Rheometers

Rotary Evaporators

Rotational Vacuum Concentrators

S

Safety Storage Cabinets Sample Concentrators Sample Cups

Scalpel

- Blades
- Handles

Scissors

Scoops

Shakers

Slide

• Drying Benches, Folders

Sockets

Soil CO₂ Exchange Systems

Soil Respiration Systems

Solid Phase Extraction (SPE)

Spatulas

 Aylesbury, Chattaway, Micro, Spoontype

Spectrophotometers

Spreaders

Stands

• Paper Wipe, Retort, Tripod

Stirring Rods

Stopcocks / Keys

Stoppers

Swabs

Syringe Filter Holders

T

Tape

• Autoclave, Time

Teats

• Pasteur Pipette, Rubber

Test Tube Holders

Thermal Cyclers

Thermometers

Timers

Tips

• Filter, Non-filter, Robotic

Tissue Grinders

Titrators

Tongs

Transilluminators

Trays

Tubes

 Blood Gas, Capillary, Centrifuge, Culture, Durham, Leucosep, Microcentrifuge, PCR, Reaction, Test, Tissue Culture

Tubing

Turbidity Meters

U

Ultrasonic

• Baths, Homogenisers

V

Vials

• Cryovial, Pill, Sample, Scintillation, Serum, Vaccine

Viscometers

W

Watch Glasses

Water Baths

Water Purification Systems

Weighing

• Boats, Paper

Wipes

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