



## **WATER TESTING** SOLUTIONS

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A RANGE OF **QUALITY PRODUCTS** AND  
**SERVICES** SUITED FOR YOUR REQUIREMENTS





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# POTABLE AND WASTE WATER TESTING


## DRINKING-WATER TESTING

Drinking water, commonly referred to as potable water, is treated in accordance with standards set by local authorities to remove potentially harmful physical, chemical, and bacterial contaminants from water sources. Compliance with these standards is key to ensuring that drinking water is safe for consumption.

## WASTEWATER TESTING

Wastewater treatment is crucial to prevent the contamination of water bodies by effluent. As a result, many countries have put in place regulatory standards that govern the quality of wastewater originating from domestic, commercial, industrial, or agricultural processes to minimise the risk of contamination of environmental water sources. These regulations often include the removal of physical and chemical pollutants from effluent.

It is important to regularly test the quality of both potable water and wastewater to verify the efficiency of these treatment processes. **Lasec®** has partnered with a number of **reputable manufacturers** to provide high-quality equipment, reagents and consumables that are essential for any water lab.

 Be sure to look out for our “**Blue Drop**” and “**Green Drop**” icons to find the best solutions for each of these applications.





## BIOLOGICAL OXYGEN DEMAND (BOD)



### BOD SYSTEM

- 6-place system with individual control for each sample
- User-selectable measurement period between 1-28 days
- Automatic storage of BOD values
- Can be used inside BOD incubators



### BOD INCUBATOR

- Adjustable temperature range of 2-40°C
- Ideal for temperature-controlled storage of samples
- Power sockets located inside the incubator for BOD system
- Solid door and glass door models available

## ELECTROCHEMISTRY



### POCKET TESTERS

- Single and multiparameter models available
- For pH, Conductivity, ORP/redox, Salinity, TDS and Temperature measurements
- Waterproof (IP67)
- Supplied in test kit with calibration solutions



### pH METERS

- Determination of pH, ORP (mV) and temperature
- GLP models available
- Storage of up to 1000 data sets
- Data transfer to a PC available for select models
- Portable and Benchtop models available



### CONDUCTIVITY METERS

- Measurement of Conductivity/ TDS/Salinity/Resistivity and temperature
- GLP models available
- Storage of up to 1000 data sets
- Data transfer to a PC available for select models
- Portable and Benchtop models available

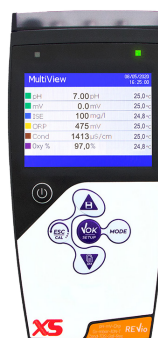
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## DISSOLVED OXYGEN METERS

- Optical luminescence technology allows for high accuracy of readings, and low maintenance of electrode
- Large LCD
- Waterproof sensor (IP67)
- Supplied in a convenient carry case



## MULTIMETERS

- Single instrument for the measurement of multiple parameters
- Measurement modes include: pH, Conductivity, Dissolved Oxygen, ORP/redox, Salinity, TDS, Resistivity and Temperature measurements
- GLP compliant with datalogger
- Portable and Benchtop models available



# ELEMENTAL ANALYSIS

## COMPARATORS

- Portable Comparator for quick and easy water testing in the field.
- Easily interchangeable plastic and glass discs available for a wide range of key tests for both drinking and wastewater.



## PORTABLE PHOTOMETERS

- Single and Multiparameter options are available
- Large LCD with backlight
- Over 100 water testing methods available
- Supplied in a robust carry case with accessories



## SPECTROPHOTOMETERS

- Programmed with over 150 methods for water testing with the option to program user-defined methods.
- Automatic method selection via a barcode scanner.
- Automatic selection of cuvette path length.
- Transmission and absorption, spectral scan, and kinetics measurement modes available.



## THERMOREACTOR

- 24mm x 16mm diameter tube capacity
- Adjustable time and heat settings
- Overheating protection
- Required for COD, TOC, Phosphate, Chromium and Nitrogen analyses



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## REAGENTS

Lasec® offers a wide range of high-quality water testing reagents and standard solutions from our trusted **ISO-accredited manufacturers** that are the perfect addition to any water testing lab. These pre-dispensed reagents provide fast, accurate and repeatable results each time. With various reagent types available, our range offers solutions to meet the needs of all labs.

### LIQUID REAGENTS



Liquid reagents consist of several carefully measured components that need to be added to a sample to produce the desired result. Featured reagent:

- Phenol Red

### TABLET REAGENTS



Tablet Reagents provide the most consistent and reliable results compared to other methods of testing. Each tablet is individually sealed in aluminium blister packs, ensuring a maximum shelf life of up to 5 years for these reagents.

Featured reagents:

- DPD no. 1
- DPD no. 3

### TUBE TESTS



Perform highly sensitive and precise water testing with the Lovibond® tube test. Each optical glass tube contains a specific volume of reagent, thereby eliminating the need for additional chemicals and promoting test safety.

Featured reagent:

- COD Vials

### POWDER PACKS



These reagents are fast-reacting and easy to use, making them a popular choice for water testing. Powder packs are produced to the same high quality as that of the tablet reagents. Their chemical composition makes them compatible with other water testing brands.

Featured reagents:

- Free Chlorine
- Total Chlorine

### STANDARD SOLUTIONS



Lasec® provides a wide range of standard solutions for your calibration needs.

Featured reagents:

- pH Buffer Solutions
- Conductivity Standard Solutions

### SAFETY STORAGE CABINETS

- For the safe storage of hazardous solvent
- Cabinet types: Acid and Alkali, Flammable (EN14470-1 and SANS54470-1 compliant), Toxic, Environmental and Poison cabinets
- Cabinet sizes: Upright or under bench and single or double door options
- Various interior configurations available



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## FLOCCULATION AND TURBIDITY



### FLOCCULATORS

- 4 or 6 stirring positions with adjustable height for stirrer blades
- Illuminated back panel
- Digital display of stirring RPM
- Accommodates 1ℓ – 1.5ℓ beakers
- Benchtop and portable models available



### TURBIDITY METERS

- Measurements comply with EN ISO 7027 and EPA Standards.
- Infrared and white light models available
- Waterproof sample chamber
- Portable and benchtop models available

## TOTAL DISSOLVED AND SUSPENDED SOLIDS



### ANALYTICAL BALANCES

- Capacity/Readability: 220g/ 0.1mg
- Accuracy and measurement reliability are ensured by an automatic internal adjustment/calibration system
- Large weighing chamber with sliding top and side glass doors
- Equipped with 2 x RS232, USB-A, USB-B, wireless connection communication interfaces
- 5" capacitive colour touch screen



### DESICCATORS

- Used for preserving moisture-sensitive items
- Made of 3.3 Borosilicate Glass
- Outer diameter: 300mm
- Plain and vacuum desiccators available



### GLASS FIBRE FILTERS

- With or without a binder
- Various pore sizes available including 1.6µm
- Various grades and diameters available

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## TEST KITS



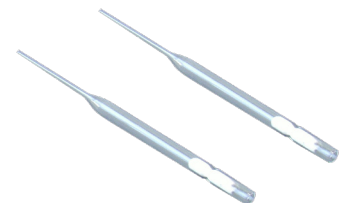
### WATER SAFETY TEST KITS: CHEMICAL ANALYSIS



- Mobile laboratory for the analysis of key chemical parameters of potable water.
- Easy-to-use and robust - ideal for field testing.
- Complete with essential reagents

## CONSUMABLES

- Beakers
- Media Bottles
- Measuring Cylinders
- Pasteur Pipettes
- Water Sampling Bottles



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## FILTRATION MANIFOLD

- 1, 3 or 6-place filtration manifolds available with a variety of columns
- Available with required tubing, stoppers, pump filter and funnels



## BOTTLE TOP VACUUM FILTRATION SYSTEM

- Use with a filtration pump
- Convenient, quick and simple to use
- Various filters available (CA, PES, PVDF, MCE and Nylon)
- Various capacity and working volumes available
- 3 membrane pore sizes - 0.10µm, 0.22µm and 0.45µm



## GLASS FILTRATION SYSTEMS

- For bacteriological analysis of water and analysis of suspended solids in water
- For use with 47mm filter discs
- Comes complete with a 1lt vacuum filter flask or 1lt ground joint flask
- Also available for 90mm filter discs



## VACUUM PUMPS

- Use with filtration system
- Convenient, quick and simple to use
- Whisper quiet and very low vibration
- Requires minimal bench space
- High chemical resistance



## FILTER PAPER

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



## SYRINGE FILTERS

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



## MEMBRANE FILTERS

- Cellulose nitrate, cellulose acetate and mixed cellulose ester
- PTFE available for corrosive applications
- Nylon available for HPLC applications
- Sterile or non-sterile

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## TESTING AND MONITORING



### OVENS

- Natural convection or forced air circulation available
- SingleDISPLAY and TwinDISPLAY models available
- Temperature range up to 300°C
- Various model sizes available (32L to 749L)



### INCUBATORS

- Natural convection or forced air circulation available
- SingleDISPLAY and TwinDISPLAY models available
- Temperature range up to 80°C
- Various model sizes available (32L to 749L)



### COLONY COUNTERS

- Pressure-sensitive counting with audible count confirmation
- Average count facility
- Bright white energy-saving LED lighting
- Connectivity to printer or computer



### AUTOCLAVES

- Multiple sterilisation cycles
- Graphic display with indication of the cycle process
- Rapid cooling system to shorten cycle time
- Optional features include a printer, RS 232 port, object temperature sensor
- SANS 347 compliant models available



### WATERBATHS

- Simple and reliable heating solution to provide optimal growth temperatures for cultures
- Used for media preparation
- Range of sizes from 5-45L to suit all demands and benchtop space
- Temperature range of ambient +5 to boiling point
- Program setting for hands-free experiments



### FRIDGES

- Growth and storage of DNA, eukaryotic and bacterial cells within a controlled temperature environment
- Temperature range 2 to 8°C
- Wide range of sizes from under bench 68L to double door cabinet 1378L
- Alarms: temperature, power loss, door ajar, sensor fault
- Port hole for external temperature data loggers

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## GLASSWARE WASHERS

- Prevent microbial contamination - clean and sanitize your glassware
- Personalized solutions for your requirements
- Wide range of simple under bench to full-size upright cabinets to suit all demands
- Optional injection cleaning for difficult-to-remove residues and shapes
- Optional complete drying
- Range of trolleys and holders for all glassware types and sizes



## PIPETTES

- Used to accurately measure precise and small quantities of liquid
- Different volume range options
- Manual and electronic options
- Single channel and multichannel options



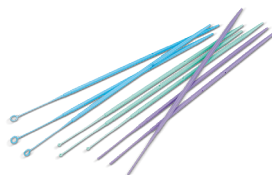
## DEHYDRATED CULTURE MEDIA

- High-quality culture media used for testing all water types
- Internationally accredited with ISO, AOAC and APHA
- Common test organisms include total coliforms, E. coli, streptococcus, yeast & moulds and more
- 500g, 5kg, 10kg and 25kg options
- Long shelf-life



## PERISTALTIC PUMP

- Accurate dispensing or transfer of liquid samples
- Microflow to high flow rate options
- Variable speed drives
- Application-specific certified tubing available



## INOCULATING LOOPS, NEEDLES AND SPREADERS

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



## PETRI DISHES

- Polystyrene
- 90 x 15mm (Also available in 65 x 15mm)
- EO sterilised
- Sleeves of 10, a box of 500



## ANALYTICAL BALANCES

- Capacity/Readability: 220g /0.1mg
- Accuracy and measurement reliability is ensured by an automatic internal adjustment/calibration system
- Large weighing chamber with sliding top and side glass doors
- Equipped with 2 x RS232, USB-A, USB-B, wireless connection communication interfaces
- 5" capacitive colour touch screen



## LAMINAR FLOW CABINET

- Horizontal and vertical airflow options available
- Adjustable fan speed
- Stainless steel work surface
- Hepa filter with 99.999% efficiency at 0.3µm
- Various sizes available

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## MICROSCOPY



### MICROSCOPE SLIDES AND COVERSLIPS

- Slides are single or twin frosted
- Ground, cut or bevelled edges available
- Coverslips are chemically resistant, Borosilicate 3:3 glass



### IMMERSION OIL

- Improve fine resolution and brightness of image through use of high-quality, certified immersion oils
- For use with microscopes



### LENS CLEANING TISSUE

- Made from 100% manila fibres
- Lint-free



### MICROSCOPES

- Compound or Stereo
- Available with Binocular or Trinocular heads
- Infinite Plan Objectives and LED Illumination
- Choice of cameras for image analysis
- Fluorescence, Darkfield and Phase Contrast options available

## TEST KITS

### E.COLI AND TOTAL COLIFORM KIT

- Used for the early detection of bacterial contamination
- Detects 1 cfu/100ml (high sensitivity)
- Complete kit includes reagents and battery-operated UV light



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