

# Media and Sample Preparation



# 01 | Our Credentials

*Don Whitley Scientific has been designing, manufacturing, selling and servicing equipment for microbiology laboratories for over 40 years. In order to maintain our one-stop-shop for lab automation, we also sell some complementary equipment from other, carefully selected manufacturers.*

Automated media and sample preparation devices have always been one of our staple areas and from the early 1980s we entered into a successful partnership with AES Laboratoire to sell and service their 'blue range'. 40 years later we begin a new chapter with Alliance Bio Expertise (ABE), a French company with a former AES Director and many ex-AES product specialists as part of the team. Their range of laboratory media and sample preparation equipment is designed to meet the rigorous demands of today's busy laboratory, being intuitive,

sturdy, reliable and providing full traceability. Not only did the quality of their products impress us but the organisational values and culture of ABE are very similar to those of Don Whitley Scientific. By listening to their customers' needs, ABE deliver quality equipment and customer service that builds lasting, long term relationships.

Today, DWS and ABE are working together to bring media and sample preparation devices to automate some of the tedious tasks that lab technicians have

to undertake on a daily basis. Our service support is second to none, with a team of ABE trained service engineers located throughout the UK. All our engineers carry a comprehensive range of spare parts in order to perform a first-time-fix if at all possible. We can also offer UKAS validation and calibration on a variety of heat sterilisation equipment, temperature controlled processes and temperature indicators.





ALLIANCE  
BIO EXPERTISE



Jacket Pressure  
Pression Enveloppe



Vessel Pressure  
Pression Cuve



ALLIANCE  
BIO EXPERTISE

MEDIAWEL 30

CYCLE

PROGRAM

STIRRER

SETTINGS

24/02/2017  
10:19:05

01: TEST1

- 1 : STERILISATION  
121.0°C - 015' - 7 - 7  
No alarm
- 2 : DISTRIBUTION  
42.0°C - 000' - 7 - 7  
Alarm 'DISTRIBUTION'



MEDIAWEL 30

# 03 | Media Preparation

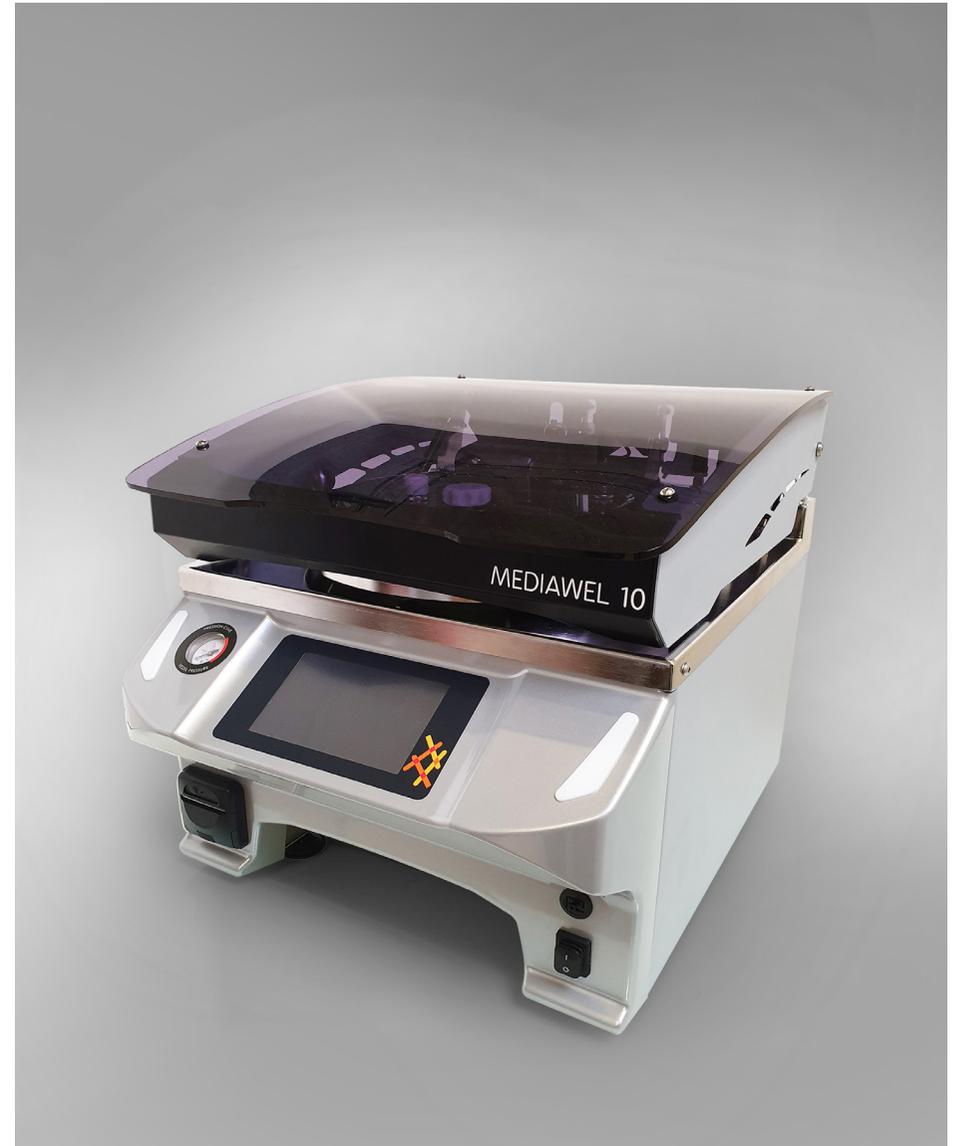
## MEDIAWEL® 10

MEDIAWEL 10 is an automatic media preparator with a capacity of between 1 to 10 litres. It has a high temperature accuracy and MEDIAWEL can increase productivity, quality, repeatability and traceability because you can make your media faster and be more flexible in terms of the type of media you can prepare. MEDIAWEL 10 can be bench mounted or there is an optional trolley with large wheels so you can easily slide it under the bench to save space.

A variety of safety features are standard, including a safety lid that locks when the temperature reaches 80°C. Full traceability and easy export of data via a USB interface, speeds up work processes and optimises workflow. A printer is also available. Real time data monitoring is available through the WiFi and Ethernet connection to your PC, Smartphone or tablet. Each cycle is recorded and stored locally and can be exported (PDF or CSV format) via the USB drive.

## FEATURES

- Capacity from 1 litre to 10 litres
- 7" colour touchscreen LCD display
- Continuous homogenisation
- Slow, smooth stirring: 9 adjustable speeds - 20 to 110 rpm - to avoid bubbling
- Sterilisation temperature: 95°C to 125°C
- Temperature precision: +/- 0.5°C after temperature stabilisation
- A 16 GB card is included, which can store up to 10,000 cycles
- One click connection/disconnection from the water supply



## MEDIAWEL® 30

MEDIAWEL 30 can prepare from 2.5 litres to 30 litres and has a high temperature accuracy, MEDIAWEL can increase productivity, quality, repeatability and traceability. You can make your media faster and be more flexible in terms of the type of media you can prepare.

The patented, large stirring rod ensures the entire batch has a high viscosity and the extra built-in pre-filter prevents contamination. In addition, this pre-filter protects the more expensive main filter from clogging and is thus a cost-effective feature.

Full traceability and easy export of data via a USB interface, speeds up work processes and optimises workflow.

Easy to clean, MEDIAWEL has a drain mechanism underneath to facilitate cleaning the internal vessel. A bucket can be placed underneath the device to drain off the water with ease.

## FEATURES

- Capacity from 2.5 litres to 30 litres
- 7" colour touchscreen LCD display
- Continuous homogenisation
- Slow stirring: 9 adjustable speeds - 20 to 110 rpm - to avoid bubbling
- Sterilisation temperature: 95°C to 125°C
- Temperature precision: +/- 0.5°C after temperature stabilisation
- A 16 GB card is included, which can store up to 10,000 cycles
- One click connection/disconnection from the water supply
- Large, medical wheels enable the device to be moved to where it is needed



# 05 | Media Preparation

## MEDIAWEL® 50

This automated media preparator is able to prepare between 5 and 50 litres of media. Using the MEDIAWEL 50 provides increased quality, repeatability and traceability - and so enhances productivity.

MEDIAWEL 50 makes media faster but also provides a greater degree of flexibility as to the type of media that can be made in-house.

Compatible with other ABE media and sample preparation devices such as DISTRIWEL and DILUWEL.

## FEATURES

- Sterilisation temperature of 95°C to 125°C and 9 speeds
- Same footprint as the MEDIAWEL 30 but with a larger inner vessel: more media from the same footprint
- Patented large stirring rod ensures high viscosity
- Pre-filter prevent contamination
- Colour touchscreen interface
- Comes complete with a range of accessories and consumables to get you up and running, including a 16GB SD card



## DISTRIWEL 440

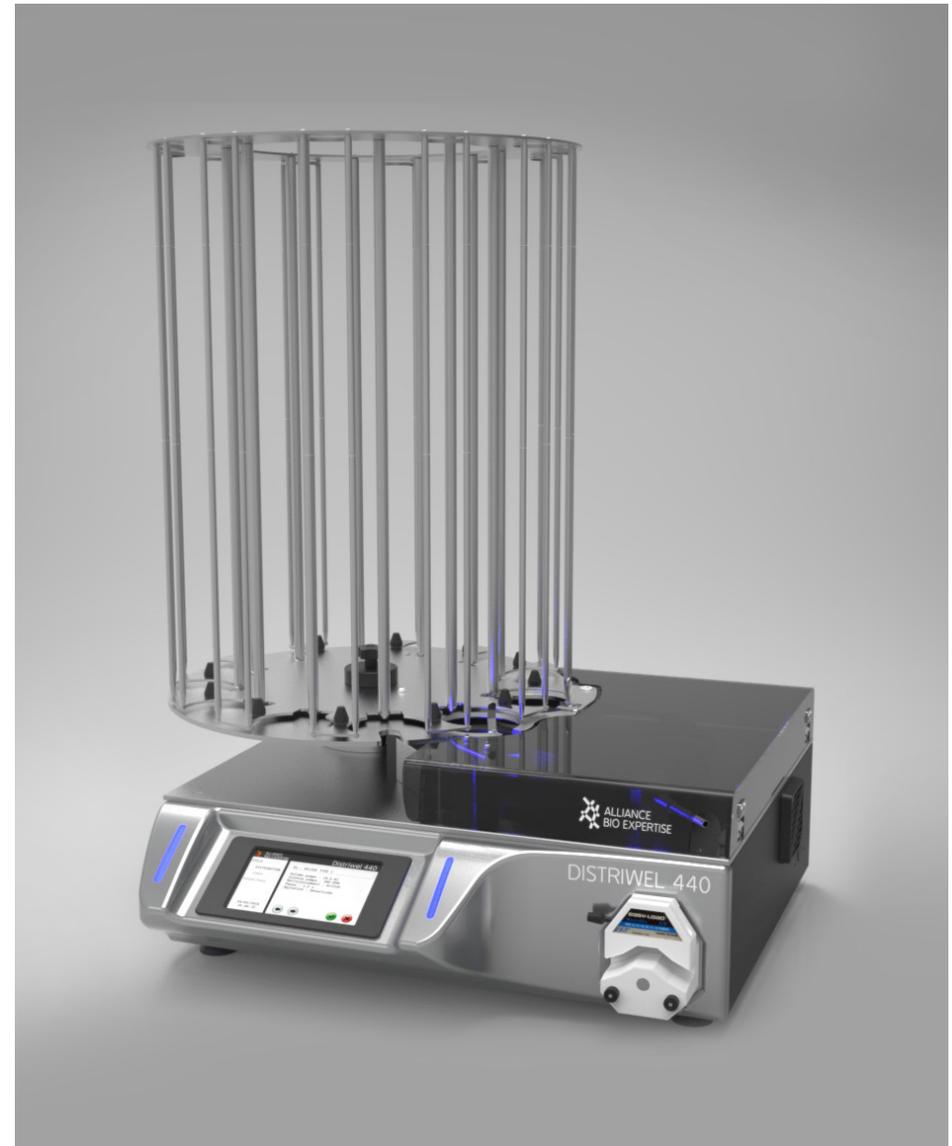
DISTRIWEL 440 is an automatic Petri dish filling and stacking machine that allows you to prepare up to 440 plates (15ml) within 30 minutes.

With the Masterflex™ Peristaltic Pump, the medium is poured precisely and evenly onto the plates. In addition, the built-in Peltier cooler prevents condensation and speeds up solidification time, thus ensuring a constant high quality of the media. DISTRIWEL 440 has a Plexiglas protective cover and a built-in UV lamp to help prevent contamination during the pouring process.

For enhanced traceability, connect DISTRIWEL to a printer so that up to 15 characters in 2 lines can be printed directly onto the Petri dish.

## FEATURES

- 7" colour touchscreen display for ease of use
- Multicoloured visual alarms
- Carousel capacity - 440 dishes
- Fill up to 880 x 90mm plates per hour
- 40 stored programmes
- Pouring range: 00.1 ml - 99.9 ml (plate pouring); 00.1 ml - 999.9 ml (pump mode)
- In-line blood addition option
- Built-in Peltier cooling system reduces condensation
- Ergonomic design
- Optional footswitch for manual dispensing



# 07 | Liquid Handling

## DOSYWEL UP!

DDOSYWEL UP! is a multi-functional, compact peristaltic pump that provides a quick and accurate way of filling vessels with liquids. This device can dispense 9 ml with an accuracy of +/- 0.6 ml.

The DOYSWE L UP! can be calibrated in a few simple steps. Programming is easy with the new touchscreen, offering reactive and intuitive access to programs. Programs can be customised according to your individual requirements.

Lightweight for easy transportation (3.1kg), the DOSYWEL UP! has the flexibility for additional pumps to be added.

## FEATURES

- Manual, automatic or with footswitch
- Adjustable volume: 0.1 to 9999.9 ml
- Adjustable speed: 5-100% / 10-450 rpm
- Calibration: At the beginning of a cycle and/or after a selected number of doses
- Dispensing modes: Dosing / Continuous / Flow rate
- Interval: 0.1 to 100 seconds
- Rotation: Clockwise or anticlockwise
- Ticket printer - USB key
- Flow rate: 2L / min maximum
- Internal tube diameter: 1.6mm / 3.2mm / 4.8mm / 6.4mm / 8mm
- Dimensions: (d x w x h): 253 x 160 x 205 mm
- Weight: 3.1kg
- Electricity supply: 100-250V / 50-60Hz / 120W



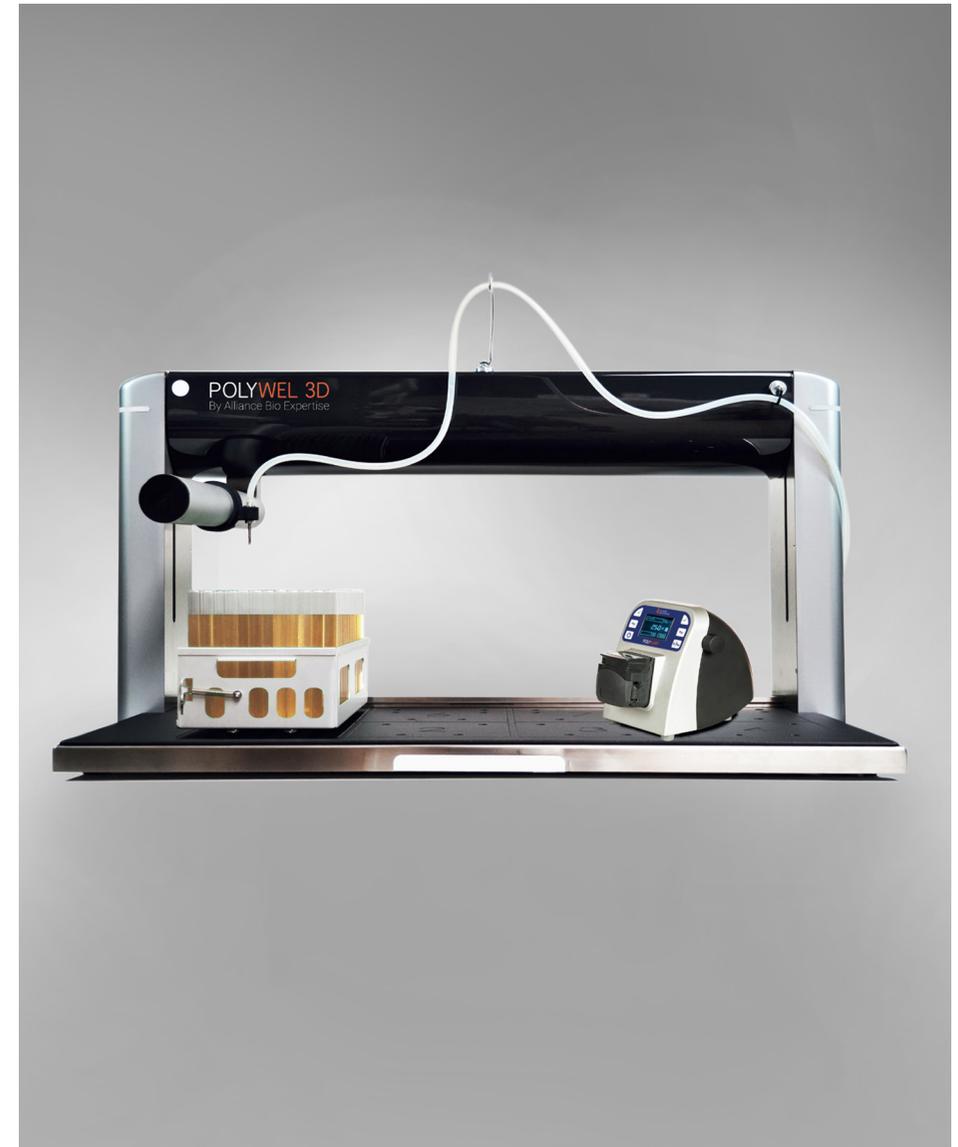
## POLYWEL

POLYWEL 3D is a walk-away dispensing system designed to increase throughput. This device eliminates time-consuming, laborious tasks that could be creating a bottleneck in media production. A throughput of 1,000 tubes per hour (9ml into 18mm tubes) with a true walk-away capability will free up staff to perform other tasks while the POLYWEL dispenses reliably and accurately. With full calibration at the start of any run and at user defined intervals, full traceability is available to satisfy all quality systems.

Racks designed so that tubes can be inserted directly from the packaging, saving time unpacking and loading into the device. Bottles and tubes of varying sizes and volumes can be filled, making the POLYWEL a truly versatile piece of equipment.

## FEATURES

- Maximum size of containers: Height between 115 and 250mm; Width up to 190mm; Depth up to 390mm
- Tubing diameters: 1.6mm, 3.2mm and 6.4mm
- Volume accuracy of +/- 0.1ml (>5ml)
- Simple to use, easy to program
- One POLYPUMP 3D supplied with the POLYWEL
- Programmable calibration check intervals
- Autoclavable racks and tubing



# 09 | Sample Preparation

## DILUWEL UP!

DILUWEL UP! is a fast, robust, accurate gravimetric diluter that combines solid samples with the correct amount of diluent, automating the laborious task of making sample dilutions. Simply place your sample in a blender bag and the DILUWEL UP! weighs the sample and adds the correct amount of diluent to achieve your preset dilution. DILUWEL UP! provides stable, precise, repeatable dilutions saving you time and providing full traceability.

At only 6.9 kg, the DILUWEL UP! is light enough to be moved around the lab. It is also very easy to keep clean with a durable, stainless-steel bag holder and removable pump heads. Additional pumps can be added if required (up to 4 pumps in total); pumps have the ability to change direction.

## FEATURES

- Intuitive 3.5" touchscreen
- Light indicators for sample weighing and final dilution tolerance
- Fingerstop™ nozzle to avoid cross contamination
- Dilution accuracy: >99%
- Fast and accurate dispensing: 12 seconds for 225ml (9 seconds in turbo mode)
- Digital bubble level
- Weighing range: 0.1g to 4000g
- Dilution factor: 1.00 to 99
- Dispensing modes: Dilution / Dosage / Concentrated Media
- Additional functions: Powder / Pre-weighing / Auto-start / Supplement
- Full traceability with tickets, USB key, Labpage or LIMS
- Up to 4 plug and play removable pumps
- Dimensions: (d x w x h) 275 x 250 x 400mm
- Weight: 6.9kg (over 1kg lighter than the previous DILUWEL)
- Electricity supply / Power: 100 - 240V / 50 - 60 Hz / 120W



## DILUWEL XL

The DILUWEL XL is a laboratory gravimetric diluter that blends speed, comfort and efficiency. Equipped with a separate pump to reduce vibration and an adjustable height tower, the DILUWEL XL has been created to not only accommodate larger dilutions but also do so in the fastest time possible. Setting a record dilution time of 36 seconds for 3750g of media, the DILUWEL XL, if combined with the MEDIAWEL, can also make the overall preparation time 30% quicker. To ensure accuracy, this gravimetric diluter also has a motorised arm to avoid cross-contamination and a precision balance from 8.00 g to 5000.00 g.

## FEATURES

- Height: Portrait (220x550x440mm) or landscape (420x400x440mm)
- Weight: 11kg (balance and distribution head)
- USB Connectivity
- LIMS compatible: mono and bidirectional
- 10-3750kg dilutions accommodated
- Waterproof control panel helps protect against spills
- Powder program available to dilute powders in a controlled way
- Ideal for use in biosafety cabinets



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## Sample Preparation

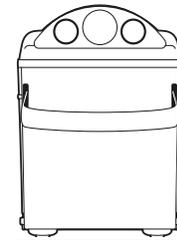
### MIXWEL UP!

MIXWEL UP! is a powerful yet easy to use laboratory blender that allows you to mix samples quickly and thoroughly. The patented pendulum mixing system provides incredible power and efficiency - a force of up to 70kg per paddle. Homogenization can be adjusted to the sample matrix. This device is stable and vibration-free and does not create a great deal of additional noise in the laboratory.

MIXWEL UP! is lightweight so is easy to move around. With curved paddles and progressive speed, it can adapt to all matrices. The paddles and doors are easy to remove to facilitate the cleaning process and, in addition, the door includes a waste tank to help catch any spillages.

### FEATURES

- Pendular blending power: Up to 70kg / paddle
- Integrated speed controller and timer
- Capacity: 50ml to 400ml
- Noise level: <48 db
- Adjustable speed
- Low vibrations
- Removable door and paddles for easy cleaning
- Stainless steel paddles
- Adjustable paddles: 3 positions
- Integrated waste tank to catch spillages
- Easy troubleshooting: Light indicators
- Dimensions (d x w x h): 220 x 410 x 340 mm
- Lightweight - 14kg - Easy to move around
- Electricity supply: 100-240V / 50-60 Hz / 120W



Size	Mixwel Up!	Competitor 1	Competitor 2
Weight	14kg	26kgs	20kgs



## Whitley Workstations

Whitley Anaerobic and Microaerobic Workstations provide the perfect conditions for processing, incubating and examining samples without exposure to atmospheric oxygen. Now you can manipulate samples in a sustainable environment where parameters can be altered to create the required conditions.

Models include those that run from 2 gases, 3 gases or the 4 gas 'M' range for ultimate flexibility.

### FEATURES

- A range of capacities to accommodate from 200 - 1080 x 90mm Petri dishes
- Patented oval, sleeved or Instant Access Porthole System
- Colour touch screen control and display of all parameters
- 6 sizes of airlock from a 6 litre to a 43 litres
- Data download in seconds and remote access as standard
- Models available with removable front, single sample entry systems, HEPA filtration, Anaerobic Conditions Monitor and a range of other useful features



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## Complementary Products

### WASP Touch

A robust, reliable spiral plater designed for the needs of the modern microbiology laboratory, WASP Touch performs the equivalent of three logarithmic serial dilutions across a 90mm plate and four logarithmic dilutions across a 150mm plate. Alternatively, WASP Touch can deliver a precise, reproducible linear sample deposition (without dilution across the plate).

### FEATURES

- There is no need for a separate vacuum source
- Automatically logs date, time, deposition, username, number of plates produced – a powerful diagnostic tool
- A wide range of logarithmic and linear deposition volumes are available to optimise your sample processing
- Precise quantities of sanitizing fluids are dispensed automatically to maintain optimum levels and ensure efficient sanitization
- Sample may be aspirated from beakers, bottles and tubes for maximum flexibility
- Easy serviceability



## Whitley AtmoGen

We have calculated\* that if you are processing 30 samples per day the annual running cost of AtmoGen is less than £720, whilst using gas packs costs £3,580. Based on this the cost of AtmoGen could be recouped in less than two and a half years.

\* Figures calculated using prices from BOC, DWS and Thermo Fisher.

### FEATURES

- Creates ideal conditions for growing anaerobes in less than 2 minutes and for microaerophiles in just 19 seconds - compared to a competitor product taking 6 minutes 50 seconds (anaerobic) and 2 minutes 35 seconds (microaerobic).
- A full colour touchscreen control panel allows intuitive selection of parameters.
- Easy to use, so no complicated operator training is required.
- Capnophilic option available.
- Anaerobic catalyst performance check available.
- Can gas three jars simultaneously (with the same atmosphere).
- Adaptor kit available to enable the use of existing jars, including a variety of gas jars from other manufacturers.



## ProtoCOL 3 Plus

ProtoCOL3 Plus is an automated colony counter and zone reading system with a high specification digital camera and LED lighting. The system comes complete with a colour, touchscreen PC that can be positioned on the bench or mounted on top of the unit if space is limited.

### FEATURES

- Use plates up to 150mm diameter
- High quality imaging allows clear distinction of different colours of colony on one plate
- Counts colonies as small as 43 microns and measures zones of inhibition as small as 0.1mm diameter
- Flexible, fast and accurate with the ability to transfer data electronically and avoid transcription errors
- Add optional software modules for spiral plates, OPKA, SBA, Multi-sector, Multi-well, SRD, AMES and statistical analysis



# 15

## Complementary Products

### Autoclaves

Tuttnauer autoclaves are specifically designed for laboratory sterilisation applications. They provide high quality, repeatable performance and documentation for quality assurance processes. Benchtop and freestanding models are available in a variety of capacities – from 28 – 160 litres. A range of options is available to tailor your autoclave to your specific needs, including fast cooling, super-fast cooling and a biohazard and waste system.

#### FEATURES

- Advanced multi-coloured control panel with quick access to a variety of information, including a built-in view of historical cycle data
- Safety is key: for example when the chamber is pressurised, the door cannot be opened
- Optional calibration and validation for UKAS
- Quality compliance standards include ISO9001:2008; ISO13485:2003. 21 CFR 820



### Cyclone

A fully automated instrument for pour plating, spiral plating and spreading liquid samples. The system is capable of automatically managing a high throughput of sample dilutions, when necessary, and it can handle multiple molten agars simultaneously. The CYCLONE™ is ideal for laboratories wanting to increase their accuracy, reproducibility and productivity, while also decreasing operational costs with labour savings and by moving away from expensive film-based agars.

#### FEATURES

- Full sample traceability
- LIMS compatible
- Automation of pour plates
- Adaptable – accepts different types of sample container
- Simple to use software and touch screen monitor



## Disposable Beakers

These beakers have been designed specifically for use with the WASP Touch. The use of the beaker increases the efficiency of the WASP. Solid, sturdy but disposable, these are the perfect sample container for spiral plating. Packed in boxes of 1000 units, the order code for these beakers is **B00039**. Their bacteriological specification is <math><1\text{ cfu}</math> per beaker.



## Autoclave Deodorant

Deodorant capsules improve the working environment by neutralising odours associated with the autoclaving of laboratory waste. The capsules are scientifically formulated to cancel out and modify gaseous malodours produced by organic and inorganic compounds in autoclaved waste. The compact capsule design releases its contents automatically as the autoclave heats up, keeping your laboratory smelling fresh and clean. Order code **D00001**.



## Labdet 100

Labdet 100 is a laboratory detergent available in 5 litre containers. Free-rinsing and biodegradable, Labdet is phosphate-free and may be mixed with hypochlorite solutions to make a steriliser/detergent for discard pots, etc. Order code **D00003**.





## MICROBIOLOGY LABORATORY

### *In-house laboratory services*

It's not every laboratory equipment manufacturer that has its own in-house laboratory with experience in food, water, environmental, pharmaceutical and clinical work. As well as having developed a great deal of experience in culturing anaerobic and microaerophilic bacteria, the team of DWS scientists have a key role in new product development.

They are also on hand to help customers with the best practical, productive ways of using products supplied by DWS.

*These complementary services support the design, manufacture and supply of Whitley Workstations.*



## SERVICE AND MAINTENANCE

### *Comprehensive service plans*

We offer UK customers comprehensive maintenance and repair contracts on a variety of laboratory equipment from many different manufacturers.

We ensure all our engineers receive ongoing training from the manufacturers of any equipment they service.

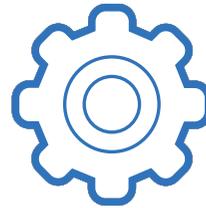
**Engineer coverage across the UK**

**Fast response time**

**Stocks of genuine spare parts carried to ensure a first time fix**

**Two levels of cover available**

**Multi-product discounts**



## UKAS CALIBRATION/ VALIDATION

### *100% confidence*

To provide you with 100% confidence in your processes and ensure your equipment and procedures will stand up to scrutiny,

DWS offers UKAS calibration and validation services for heat sterilisation equipment, temperature controlled processes and temperature indicators.

This flexible onsite and offsite service is undertaken by our team of experts who will take the time to explain the work they carry out.

If you are a service contract customer, we can schedule your UKAS calibration/validation work to take place at the same time as routine servicing to save you time and money.



## TEMPERATURE MAPPING

### *On-going compliance*

It is part of laboratory life that in today's increasingly regulated environment, there is the need to demonstrate on-going compliance with a range of quality and safety standards, eg for those working to ISO 15189:2012.

DWS is UKAS accredited to provide temperature mapping of Whitley Workstations, other anaerobic chambers, incubators, ovens, fridges or freezers using up to 12 thermocouples. This is useful if you need to identify whether or not any temperature gradients are present and need to be avoided when carrying out particularly sensitive incubation tasks.

Our on-site service means the work can be carried out at your convenience with the prompt supply of certification.



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culturing innovation