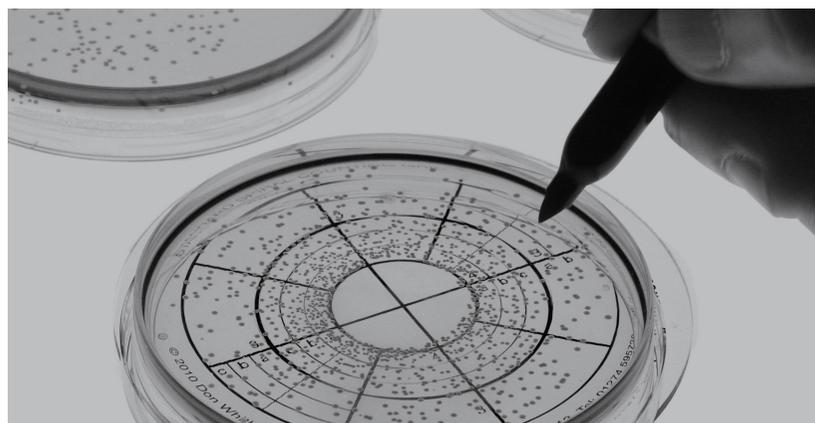


Whitley Automated Spiral Platers



01

An Introduction to Spiral Plating

Even though spiral plating was invented over 40 years ago, some microbiologists are yet to experience the advantages of spiral plating over manual methods. Manual plating requires the repetitive creation of a series of dilutions and plates to obtain one good plate for subsequent reading. All the plates produced then have to be incubated, then one plate is selected for counting and the rest are discarded.

The Whitley WASP Touch significantly reduces the need for costly, time consuming serial dilutions and produces high quality plates, which are easy to read and interpret. The system is simple to use and provides real cost savings and process improvements.

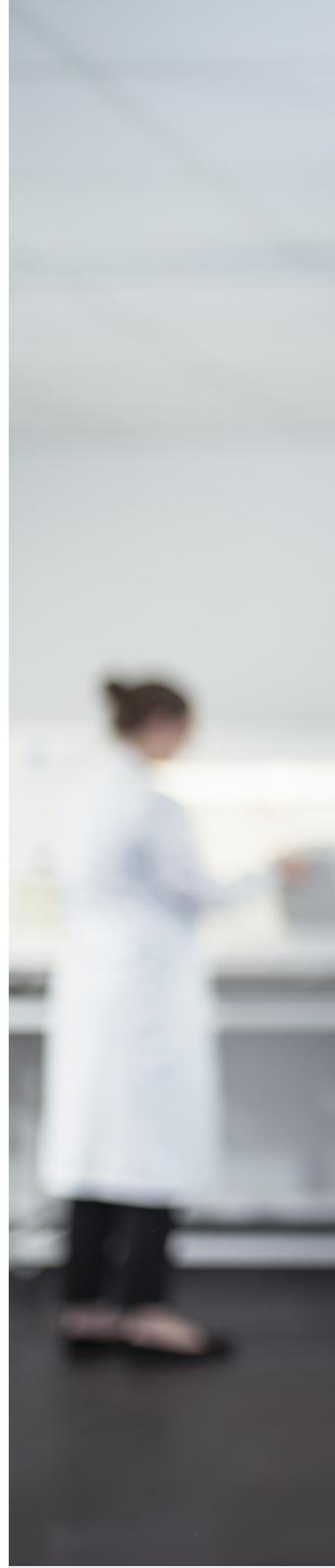
WASP Touch is a precision laboratory instrument designed to deposit accurate volumes of liquid sample in an Archimedes spiral onto the surface of a rotating agar plate. Spiral plating is well documented and validated as an effective method for the enumeration of microorganisms. Spiral plating techniques are recognised in ISO 4833-2 & 7218 as well as the AOAC 977.27 standard.

In logarithmic mode the dispensing stylus deposits decreasing amounts of sample as the stylus moves from the centre of the plate towards the outer edge. The volume of sample on any given segment of the plate is known, constant and repeatable. This level of precision permits rapid and accurate bacterial enumeration in liquid sample following suitable incubation of each plate. WASP Touch performs the equivalent of three logarithmic serial dilutions across a 90 mm plate and four logarithmic dilutions across a 150 mm plate. Alternatively, WASP Touch can deliver a precise, reproducible linear sample deposition (without dilution across the plate). A wide range of logarithmic and linear deposition volumes are available to optimise your sample processing.



Don Whitley
Founder & Chairman
(1929 - 2019)

"Because my early career had been as a 'working-at-the-bench' microbiologist, I set out to improve the microbiologist's working life by removing as much tedium as I could and by seeking to reduce the risk of tests being compromised by human error."



Our greatest assets are our satisfied customers...

“We purchased the WASP spiral plater to cope with a high number of samples containing unknown numbers of bacteria. Microbial enumeration from samples using direct plating is routine in the lab and the plater has proved invaluable cutting down on resources used for making wide ranges of serial dilutions and for agar plates, as well as making important time-savings. The WASP has now become a routinely used piece of equipment in the laboratory and I doubt anyone would want to go back to manual plating.”

*Dr Nicola Holden
James Hutton Institute, Dundee, Scotland*

03 | Whitley Automated Spiral Platers

WASP Touch

WASP Touch is a new spiral plater, designed for today's busy microbiology laboratories. This is a fundamentally different plater with no need for a separate vacuum source. The system is extremely simple to use and provides real cost savings and process improvements. WASP Touch provides Automated Intelligent Monitoring Software (AIMS) to guide you through set-up and daily check routines ensuring consistent trouble-free plating. With colour touchscreen operation, a patented automatic Sanitizing System and an illuminated working area, now really is the time to eliminate serial dilutions.

FEATURES

- Sample may be aspirated from beakers, bottles and tubes – providing maximum flexibility in use.
- Automatically logs date, time, deposition, user name, number of plates produced – a powerful diagnostic tool.
- Flowsense™ - detects the movement of liquid through the WASP Touch.
- Precise quantities of sanitizing fluids are dispensed automatically to maintain optimum levels. This ensures effective and efficient sanitization takes place.
- Sanitizing system is available with 1 litre or 2 litre autoclavable bottles. The 2 litre bottles contain sufficient fluid for hundreds of wash cycles – perfect for busy laboratories.
- Fully integrated vacuum waste system – occupies the smallest amount of bench width.
- The deposition profiles possible with WASP Touch allow bacterial and fungal colonies to be enumerated over a 100,000-fold ($5 \log^{10}$) range, from a minimum of 20 cfu/ml in 1000 μ l pour plate mode to a maximum of 2×10^6 cfu/ml in 10 μ l logarithmic mode.





Workstation WASP Touch

The workstation WASP Touch has been specially designed to be fitted and operated in any Whitley A Range Workstation. The connections on the side of the Workstation WASP Touch enable easy access. The unit is also more compact front to back to minimise space requirements – leaving you plenty of room to work. With colour touchscreen operation, a new automatic sanitizing system (patent granted) and an illuminated working area, now really is the time to eliminate serial dilutions.

FEATURES

- No need for a separate vacuum source
- Automated Intelligent Monitoring Software (AIMS) guides you through set up and daily check routines to ensure trouble free plating
- Turntable automatically adjusts for all types of 90mm plates
- Autoclavable stylus wash station
- Standard log depositions for 90mm Petri dishes: 50 and 100µl with optional Extended Volume Package to provide: 10 and 200µl Log and 50, 100, 200, 500 and 1000µl Lin
- Flowsense™ - detects the movement of liquid through the device.



Dilucup® WASP Touch

This adaptation of the WASP Touch provides the option of permitting sample aspiration direct from an individual Dilucup®. For customers using the Dilucup® who want to further reduce the labour involved in performing serial dilutions, this is the perfect spiral plater.

FEATURES

- The specially designed holder perfectly accommodates the Dilucup®
- Precise quantities of sanitizing fluids are dispensed automatically to maintain optimum levels. This ensures effective sanitization takes place.
- Flowsense™ detects the movement of liquid through the device
- Fully integrated vacuum waste system – occupies the smallest possible bench width
- Incorporates a patented Sanitization System available with 1 litre or 2 litre autoclavable bottles.
- Automatically collect samples from Eppendorf tubes and disposable beakers.

Dilucup is a registered trademark of LabRobot Products AB, Sweden



Additional Features | 06

Eliminating the possibility of cross contamination

The patented WASP Touch Sanitizing System maintains fluid levels automatically to ensure effective cleansing is achieved between each sample.

There is no continuous path between fluid reservoirs and the wash troughs so bacteria cannot track up the tubing and contaminate the reservoirs. All sanitizing system components may be autoclaved.

No consumables are required.



Automatic Colony Counting

WASP Touch is ideal for use with automatic colony counters and we recommend products manufactured by Synoptics Ltd.

DWS has collaborated with Synoptics to develop sophisticated software for the accurate enumeration of colonies on incubated spiral plates.

Spiral plates produced by WASP Touch are perfect for use with devices such as aCOLyte, Protos 3 and ProtoCOL 3 Plus.



55mm Plate Option

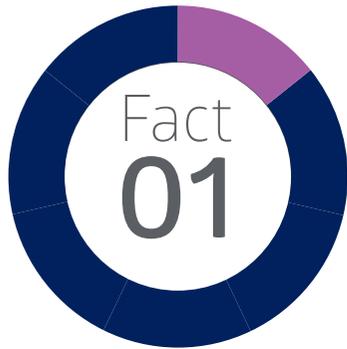
Some customers require the ability to deposit sample upon 55mm plates.

The 55mm option allows a 50 µl deposition of sample to be plated onto a 55mm Petri dish in a linear fashion. This option is especially interesting for media manufacturers' QC laboratories.

An adaptor plate(s) is also supplied to place on the turntable to centralise these smaller plates.



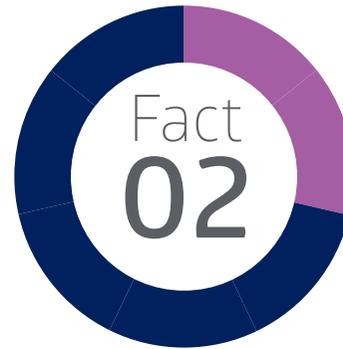
07 | Unique Innovations



Full Colour Touchscreen

Intuitive full colour touchscreen to enable users to process samples rapidly with accuracy and reproducibility.

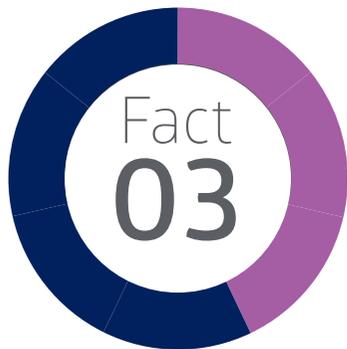
Easy to follow on screen prompts guide you through the routines.



Automated Intelligent Monitoring Software (AIMS)

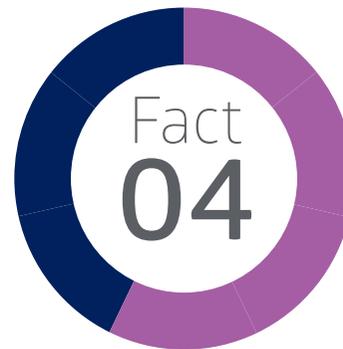
The Whitley Automated Intelligent Monitoring Software guides users through set up, daily check and close down routines to ensure consistent, trouble-free plating.

The software also automatically logs date, time, deposition volume, username and the number of plates produced.



One Touch Operation

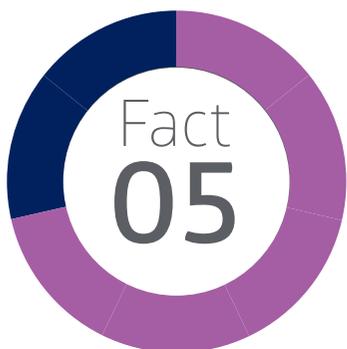
Touching the plate symbol will cause the stylus to move from the park position, automatically collect a sample from a disposable beaker, inoculate a plate, undergo an automatic cleaning cycle and return to the park position above the sanitizing fluid trough.



Flowsense

Flowsense is a unique feature that detects the movement of liquid through the WASP Touch. The system can distinguish between partial blockages and complete blockages and provides an early indication of any potential difficulty.

The design of the WASP Touch means blockages are rare.



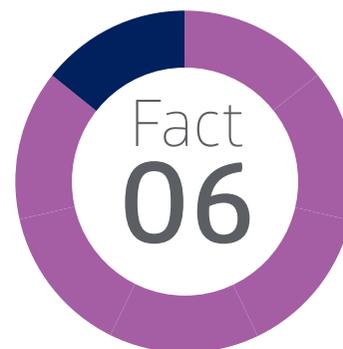
*Sanitizing System**

The WASP Touch Sanitizing System maintains sanitizing fluid and water levels automatically to ensure effective sanitizing is achieved during every wash cycle.

Narrow fluid troughs minimise evaporation. There is no continuous path between fluid reservoirs and troughs, preventing any bacteria tracking up the tubing and contaminating the fluid reservoirs.

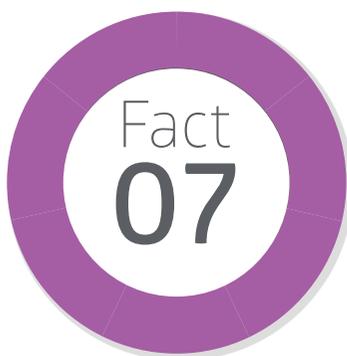
All sanitizing system components may be autoclaved except the waste bottle lid.

* Patent No. 2553745



Flexible Sample Collection

Sample can be drawn from a disposable beaker and from a wide range of tubes and bottles.



Vacuum Waste System

WASP Touch is equipped with a fully integrated vacuum waste system. Surplus sample and cleaning fluids are drawn through the instrument by vacuum.

An audible alarm, and a pop-up icon on the touchscreen, alert the user when the waste container is full.



09 | Optional Packages

S02607 Extended Volume Package

In addition to the standard deposition volumes of 50 and 100 µl Log, the Extended Volume Package allows for a greater number of replicate plates, linear deposition profile and a wider range of logarithmic deposition profiles:

10, 200µl log and 50, 100, 200, 500, 1000 µl linear.

For other deposition volumes, please contact us.

B00039 5ml Disposable Beaker

The beaker has been specially designed by DWS for use with spiral platers to hold liquid samples. It sits comfortably on the cup holder stage in the sample position on the WASP Touch. The user does not need to hold a tube or other receptacle whilst the sample is being drawn. It also ensures that there is no chance of the stylus being knocked or damaged during sample take up.

Sold in packs of 1000.

S02608 Data Handling and Traceability

Records date, time, user, plate id, volume, date and at which volumes, date of the last start and finish position check and the date the last dye plate was produced. Also provides multi-level PIN-code protection. Data can be downloaded via USB in a format that can be loaded directly into Excel. An Ethernet connection for data transfer/service support is also included. This option includes a wireless barcode reader that eliminates having to manually enter the plate ID. By scanning the barcode on the plate, the WASP Touch will then associate date, time, user, deposition volume and deposition type with that particular plate.

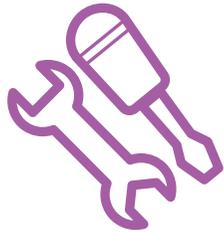
A02800 Combined IOQ Documentation

This package of documentation provides step-by-step procedures to follow to confirm that the installation has been performed correctly and that the equipment operates as intended by the manufacturer.

| Whitley WASP Touch | Whitley Workstation WASP Touch | Whitley Dilucup® WASP Touch | Features |
|---|---|---|---------------------------|
| 50, 100µl (Log) | 50, 100µl (Log) | 50, 100µl (Log) | Dispense Volume |
| 10, 200µl log and 50, 100, 200, 500, 1000µl linear | 10, 200µl log and 50, 100, 200, 500, 1000µl linear | - | Extended Volume Package |
| Patented automatic cleaning system with 1 or 2 litre sanitizing station bottles | Patented automatic cleaning system with 1 or 2 litre sanitizing station bottles | Patented automatic cleaning system with 1 or 2 litre sanitizing station bottles | Cleaning |
| 90mm + options for 55mm and 150mm | 90mm + options for 55mm and 150mm | 90mm + options for 55mm and 150mm | Petri Dishes |
| Colour touchscreen | Colour touchscreen | Colour touchscreen | User Interface |
| ● | ● | ● | Adjustable 90mm Turntable |
| 420 x 465 x 298mm | 420 x 410 x 298mm | 420 x 465 x 298mm | Dimensions (w x d x h) |
| 47/21.5 | 46/21 | 47/21.5 | Weight (lbs/kgs) |
| ● | ● | ● | Colour Touchscreen |
| ○ | ○ | - | Data Handling Package |
| ● | ● | ● | Lighting |
| 8 Seconds | 8 Seconds | 8 Seconds | Plating Time 50µl |
| 8 Seconds | 8 Seconds | 8 Seconds | Plating Time 100µl |
| Flowsense™ | Flowsense™ | Flowsense™ | Blockage Detection |
| ● | ● | ● | Calibration Procedure |
| Built-in | Built-in | Built-in | Vacuum Source |
| ● or ○ for compressed spiral | ● or ○ for compressed spiral | ● or ○ for compressed spiral | Counting Table/Grids |
| Key: ● Fitted as standard ○ Option available - Not applicable | | | |



To support the design, manufacture and supply of Whitley Automated Spiral Platers, we have a range of complementary services



SERVICE AND MAINTENANCE

Comprehensive service plans

With the support of our distributors around the world, we are able to offer comprehensive maintenance and repair contracts for equipment that we manufacture.

Our UK engineers, and those employed by our distribution partners, are able to take advantage of training from in-house colleagues who design and manufacture Whitley products – and of course, benefit from their day-to-day support.

In the UK we provide coverage across the country with a fast response time and extensive stocks of parts are carried to ensure we can achieve a first time fix.



QUALITY COUNTS SCHEME

On-going compliance

When you purchase a WASP Touch, you can join our Quality Counts Scheme. Free of charge for the first 12 months, this programme provides valuable assurance that your WASP is functioning correctly and that samples are being analysed accurately.

If you choose to continue your subscription after the first year, discounts are available for organisations wishing to include more than one WASP Touch within the scheme.

Please contact us for more information.

Please note:

This scheme is only available to customers in the UK and Europe.



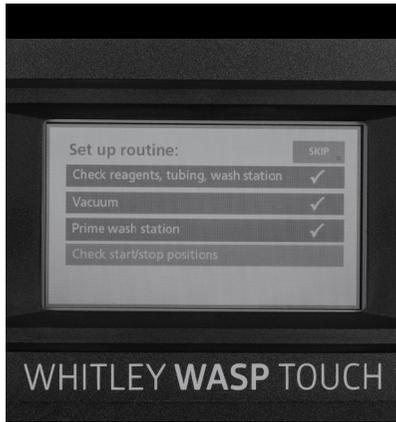
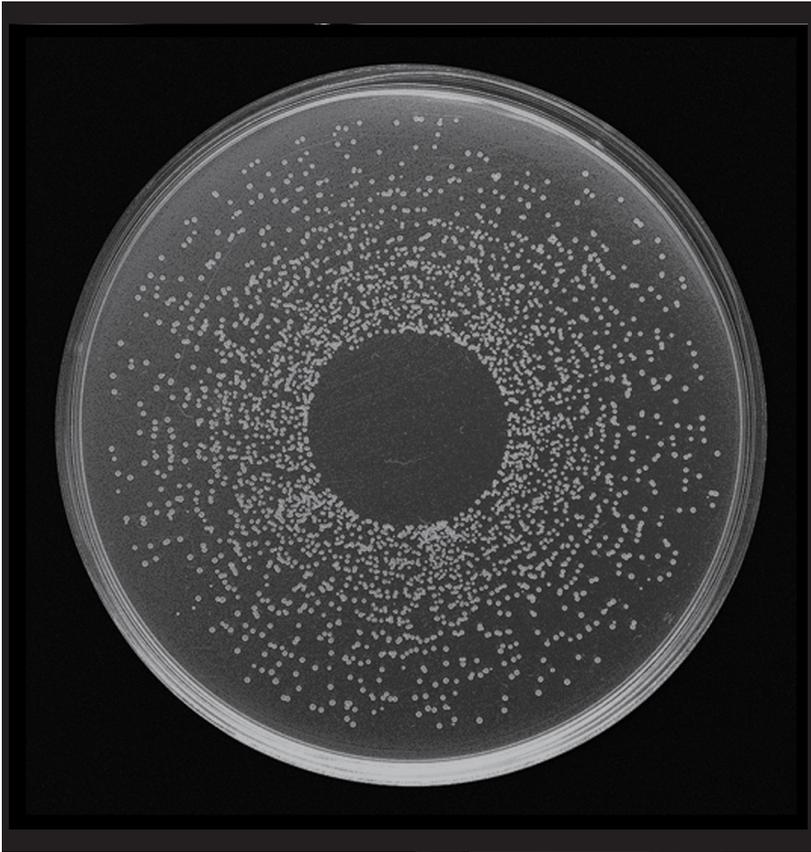
MICROBIOLOGY LABORATORY

In-house laboratory services

Not every laboratory equipment manufacturer has its own in-house laboratory with experience in food, water, environmental, pharmaceutical and clinical work.

We have considerable experience in culturing anaerobic and microaerophilic bacteria and the DWS scientists play a key role in new product development.

They are also available to help customers with the best practical, productive ways of using products manufactured and/or supplied by DWS.



WHITLEY WASP TOUCH



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Don Whitley Scientific Limited

Victoria Works, Victoria Street, Bingley, BD16 2NH, UK

t: +44 (0)1274 595728 e: sales@dwscientific.co.uk

www.dwscientific.com



don whitley
scientific