easy**Spiral**®

The world's fastest Spiral® plater

interscience

Our quality for your lab

- Designer and manufacturer for microbiology

- R&D leadership for innovative and reliable products

- Worldwide distribution network in more than 130 countries

- Made in France

interscience
R&D center and manufacturing plant
Mourjou FRANCE

Spiral® method:
35 years experience

The Spiral® method was designed in 1973 to automate the routine work of bacterial enumeration by Dr. Ed Campbell, researcher at the FDA (Food & Drug Administration). With François Jalenques, friend and founder of interscience, they patented an updated method in 1992.

Since then Spiral® automatic platers have been a reference for applications in food microbiology, medical bacteriology, research on food preservatives or cosmetological factors in compliance with the**,** ISO 7218, ISO 4833-2, FDA-BAM and AOAC 977.27.

interscience has proudly launched the 3rd generation of Spiral® platers with easy**Spiral**® and easy**Spiral Pro**®.

François Jalenques & Dr. Ed Campbell

Spiral® DS
First Spiral Plater®
1979

Spiral® DS+
Automatic Spiral Plater®
1996

easy**Spiral**®/easy**Spiral Pro**®
World fastest Spiral® platers
Worldwide patented
2010

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What is Spiral® method?

With easy**Spiral®** automatic plater, increase your lab capacity with a counting range from 100 to 1x10^7 CFU/mL on **one single Petri dish** without prior dilution.

Manual plating method

This method requires repetitive actions: at least **4 dilutions** and **4 successive platings** are necessary to obtain one good and readable Petri dish.

dilution 1/10   dilution 1/10   dilution 1/10   dilution 1/10

spread 0.1 mL   spread 0.1 mL   spread 0.1 mL   spread 0.1 mL

1st Petri dish   2nd Petri dish   3rd Petri dish   4th Petri dish

Incubation   *Incubation*   *Incubation*   *Incubation*

OK

Automatic Spiral® method

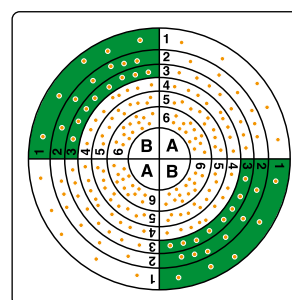With this method, make your analyses on **1 single Petri dish!**

+ sample
- sample

All dilutions on 1 Petri dish!

Incubation

OK

- • *From 100 to 1x10^7 CFU/mL on 1 single Petri dish*
- • *Up to 75% less consumables*
- • *Full plating cycle in 25 seconds!*

How to count?

With the **Spiral®** method, a **logarithmically decreasing** volume of sample is dispensed on the surface of a rotating Petri dish in an **Archimedes spiral**. The volume is calibrated and known at every point of the Petri dish. Bacterial concentration is determined by dividing the number of colonies found by the volume dispensed in the same sector of the dish.

For manual counting, count the colonies in the first A or B outer segment and **reach a minimum of 20 colonies.** Repeat the same operation on the opposite side of the Petri dish.

Manual colony counting

Scan® 100

with Spiral® counting grid

or

Automatic colony counting

Scan® 300
Scan® 500
Scan® 1200
Scan® 4000

easy**Spiral**® revolutionary efficiency

The new easy**Spiral**® patented technology, exclusively developed by interscience, allows the automatic plating of your sample on a Petri dish in only 25 seconds with a decreasing concentration (counting range: from 100 to 1×10^7 CFU/mL).

A completely new architecture with a **revolutionary rotating arm** allows a **full cycle in 25 seconds** (disinfection, sample-taking and plating). All the liquid flows are visible. No exterior maintenance is needed.

easy**Spiral**® is equipped with an innovative unique stylus cleaning device, which guarantees a perfect cleaning and disinfection of the stylus, with **no risk of cross-contamination**.

Autoclavable bottles
Secure and easy connection
by CPC Connectors

2 L bottles
600 cleaning cycles

Auto disinfection
The inside and outside of the stylus
are cleaned by overflow technology
No cross contamination

PATENTED

Sampling area
Fast and accurate filling in a sterile beaker
DB50, sterile and autoclavable

Stainless steel housing
Compact, 40 cm wide
Can be used inside and outside a laminar flow

Cleaning liquid sensor
Alarm when the bottle is empty

Rotating arm architecture
Automatic full cycle: 25 seconds
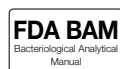
PATENTED

Modular Petri dish stand
Switch from 90 to 150 mm Petri dishes
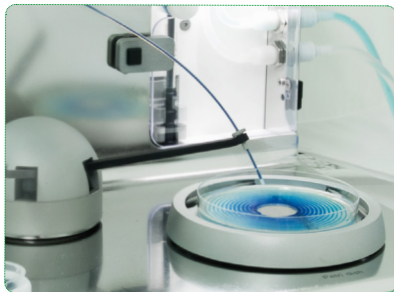
Intuitive control panel
Easy to use
No training needed

Monthly cleaning
1 button to access the intensive, periodic cleaning cycle (10 mn approx.)

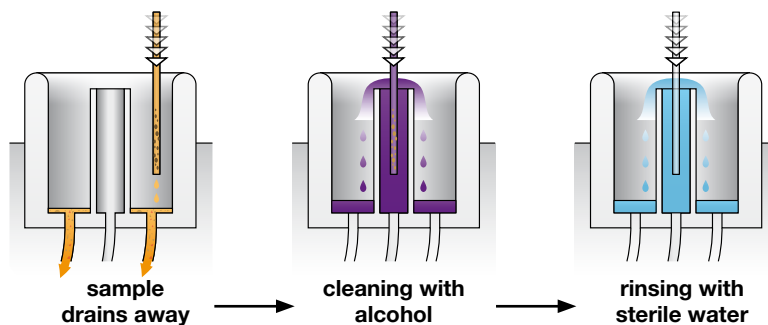| ISO 7218 | ISO 4833·2 | FDA BAM Bacteriological Analytical Manual | AOAC 977.27 | WEEE 2002/96/EC | RoHS 2002/95/EC | MADE IN FRANCE | CE | Product made for INTERSCIENCE by Interlab, an ISO 9001 certified company. |

easy**Spiral**® technology

Delivering the fastest cycle time ever, easy**Spiral**® has an impressive rotating arm architecture, new patented disinfection system avoiding risks of cross-contamination and full traceability of the operations with a counting range from 100 to 1×10^7 CFU/mL on **1 Petri dish**.
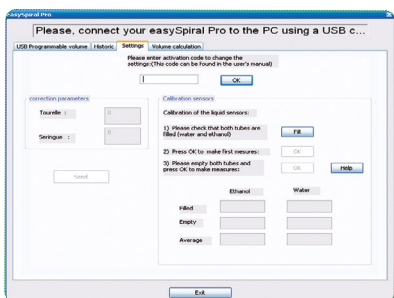
The fastest Spiral® plater:
only 25 seconds for a full cycle!

- 25 seconds for a full cycle (disinfection, sample-taking and plating)
- Rotating arm with high speed movement
- Patented electronic robot system
- 10 Petri dishes plated in less than 2 mn (with the same sample)

Overflow technology*

| **sample drains away** | **cleaning with alcohol** | **rinsing with sterile water** |

- No cross-contamination
- Unique patented disinfection system by overflow
- 600 cleanings without changing bottles (2L)

USB programmable volume & traceability**

- Easy PC connectivity via USB
- From 10 to 1000 microliters programmable volumes
- 3 preset plating modes
- Monitoring software with traceability

XLS Excel™   USB

Consumables
reduced up to 75%!

- Reduced budget for consumables
- No specific consumables needed
- More space in your laboratory

*Scientific study available upon request
On easy Spiral Pro**®

Plate & Count System® + dataLink™

Plate & Count System® + dataLink™ offer quick and reliable results from automatic plating to colony counting with total traceability.

- **GREAT SAVINGS**: Up to 75 % savings in time, consumables and space

- **QUICK**: Full plating cycle in 25 seconds and counting in 1 click. No need of manual data input as the Scan® colony counter retrieves it and adjusts automatically.

- **RELIABLE**: Repeatable and reproducible results up to 98 %

- **FULL TRACEABILITY WITH** dataLink™: Automatic saving of data and results

easy**Spiral Pro**®
and **Scan® 4000**
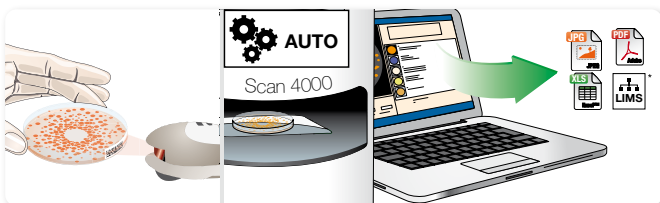
How does it work ?

STEP 1

Plate with easy**Spiral Pro®**.
easy**Spiral®** software collects the plating data.

STEP 2

Print the label with Datamatrix code. Stick the label on the plated Petri dish and place in the incubator.

... *24-72 h incubation*

STEP 3

Once the colonies have grown, scan the Datamatrix code. The **Scan®** colony counter automatically adjusts its settings thanks to the Datamatrix label's data. Click on "COUNT". Export the data.

* Please check LIMS compatibility

DOWNLOAD SCAN® SOFTWARE

FREE DEMO VERSION

www.interscience.com

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Technical specifications

		easy**Spiral®**	easy**Spiral Pro®**
	Reference	**412 000**	**413 000**
OVERVIEW	Controlled by a microprocessor	✓	✓
	All stainless steel	✓	✓
	Disinfection process	✓	✓
	Filling time and volume programmable via USB	-	✓
	Sampling from beakers (DB50)	✓	✓
SPECIFICATIONS	Syringe capacity	1 000 µL	1 000 µL
	Preset dispensed volumes	50 µL and 100 µL	50 µL, 100 µL and 200 µL
	Counting range	300 CFU/mL to 1.3×10^5 CFU/mL	100 CFU/mL to 1×10^7 CFU/mL
	Time for 1 sample intake + 1 disinfection + 1 plating	25 s	25 s
	Pressure in the stylus	Up to 8 bars	Up to 8 bars
	Autonomy in disinfection (in normal mode)	1000 cycles (2 L bottles)	1000 cycles (2 L bottles)
	Autonomy in distilled water (in normal mode)	600 cycles (2 L bottles)	600 cycles (2 L bottles)
	Successive plating capacity with the same sample	Up to 20 Petri dishes (50 µL)	Up to 20 Petri dishes (50 µL)
	Exponential plating mode (Spiral mode): Petri dish diameters Ø available	90 mm	90 mm and 150 mm
	Circle plating mode: Petri dish diameters Ø available	90 mm	90 mm and 150 mm
	Constant plating mode: Petri dish diameters Ø available	-	90 mm and 150 mm
	Programmable dispensed volume (via USB)	-	10 µL to 1000 µL
	Voltage - Frequencies	100-240 V~ 50-60 Hz	100-240 V~ 50-60 Hz
	Warranty	1 year	1 year
	Spare parts availability	10 years	10 years
	In compliance with	ISO 7218, ISO 4833-2, FDA BAM (Bacteriological Analytical Manual) and AOAC 977.27	ISO 7218, ISO 4833-2, FDA BAM (Bacteriological Analytical Manual) and AOAC 977.27
	Traceability	Excel™, LIMS, dataLink®	Excel™, LIMS, dataLink®

APPLICATIONS
- **Microbiological analyses**
- **Food quality control**
- **Bacterial cinetics**
- **MIC of antibiotics**
- **Challenge test: cosmetics control**
- **Pharmaceutical control**

easy**Spiral®:** 1 plateau pour boites de Petri Ø 90 mm (monté par défaut sur l'appareil), 1 flacon de colorant bleu, 1 seringue avec tube silicone, 1 grille de comptage Spiral pour boite de Petri de Ø 90 mm, 1 support récipient pour test, 1 lot de 2 filtres, 1 000 godets DB50, 1 pot de détergent EnzyClear, 4 kits de raccordement pour bouteille GL45, 1 kit de raccordement double sortie pour bouteille GL45, 1 stylet, 1 câble d'alimentation, 1 manuel d'utilisation, 1 notice simplifiée EnzyClear , 1 certificat de conformité/carte de garantie
easy**Spiral Pro®:** 1 plateau pour boites de Petri Ø 90 mm (monté par défaut sur l'appareil), 1 flacon de colorant bleu, 1 seringue avec tube silicone, 1 grille de comptage Spiral pour boite de Petri de Ø 90 mm, 1 support récipient pour test, 1 lot de 2 filtres, 1 logiciel de supervision, 1 câble USB A/B, 1 grille de comptage Spiral pour boite de Petri de Ø 150 mm, 1 000 godets DB50, 1 pot de détergent EnzyClear, 4 kits de raccordement pour bouteille GL45, 1 kit de raccordement double sortie pour bouteille GL45, 1 stylet, 1 plateau pour boites de Petri Ø 150 mm, 1 câble d'alimentation, 1 manuel d'utilisation, 1 notice simplifiée EnzyClear, 1 certificat de conformité/carte de garantie

Accessories

Housing protection for platers
Transparent housing for working outside laminar flow
Ref 413 001

dataLink™
Petri dish labeling solution
Ref 410 100

DB 50 beakers
1 000 sterile beakers for Spiral® platers
Ref 415 100

Bar-code reader
Barcode reader for traceability
Ref 522 000

Your local distributor

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