

# easySpiral<sup>®</sup>

The world's fastest Spiral<sup>®</sup> 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 80 countries
- Made in France



interscience  
R&D center and manufacturing plant  
Mourjou FRANCE

## Spiral<sup>®</sup> method: 35 years experience

The Spiral<sup>®</sup> 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<sup>®</sup> automatic platers have been a reference for applications in food microbiology, medical bacteriology, research on food preservatives or cosmetological factors in compliance with the **AFNOR V08-100** and **ISO 7218 standards**.

interscience is proud to launch the 3<sup>rd</sup> generation of Spiral<sup>®</sup> platers with **easySpiral<sup>®</sup>** and **easySpiral<sup>®</sup> Pro**.



François Jalenques & Dr. Ed Campbell



**Spiral<sup>®</sup> DS**  
First Spiral Plater<sup>®</sup>  
1979



**Spiral<sup>®</sup> DS+**  
Automatic Spiral Plater<sup>®</sup>  
1996



**easySpiral<sup>®</sup>/easySpiral<sup>®</sup> Pro**  
World fastest Spiral<sup>®</sup> platers  
Worldwide patented  
2010

# What is Spiral<sup>®</sup> method?

With **easySpiral<sup>®</sup>** automatic plater, increase your lab's capacity with automatic standardized plating of 30 to 10 million countable CFU/mL on **one single Petri dish** without prior dilution.

**Manual plating method**

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

Diagram illustrating the manual plating method: four sequential steps showing dilution (1/10) and spreading (0.1 mL) onto Petri dishes. The resulting Petri dishes after 24h incubation show varying colony counts, with only the third dish being 'OK' and readable.

**Automatic Spiral<sup>®</sup> method**

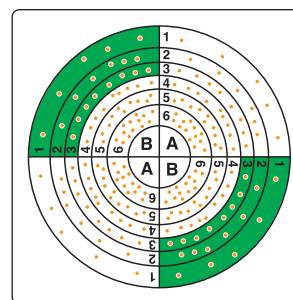
With this method, make your analyses on **1 single Petri dish!**

Diagram illustrating the automatic Spiral method: a hand operates the **Spiral** machine, which dispenses a spiral of sample onto a single Petri dish. The resulting Petri dish after 24h incubation shows a single, large, readable colony count.

- From 30 to 10 million CFU/mL on 1 single Petri dish
- Up to 75% less consumables
- Full plating cycle in 25 seconds!

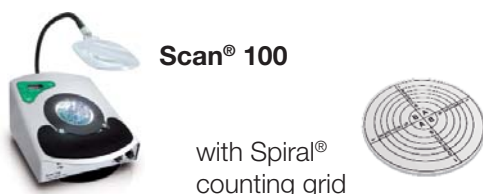
## How to count?

With the **Spiral<sup>®</sup>** 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



or

### Automatic colony counting



# easySpiral® revolutionary efficiency

The new **easySpiral®** 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 (sensitivity: from 30 to  $1 \times 10^7$  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.

**easySpiral®** 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

## Sampling area

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

## Stainless steel housing

Compact, 38 cm wide  
Can be used inside and outside a laminar flow





AFNOR V 08-100

ISO 7218

### Cleaning liquid sensor

Alarm when the bottle is empty

### Rotating arm architecture

Automatic full cycle: 25 seconds

### 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 mins. approx.)



easySpiral® ensures fast sample platings with 99.5% repeatability and reproducibility, and reliable analyses by harmonizing the work of the whole lab team.

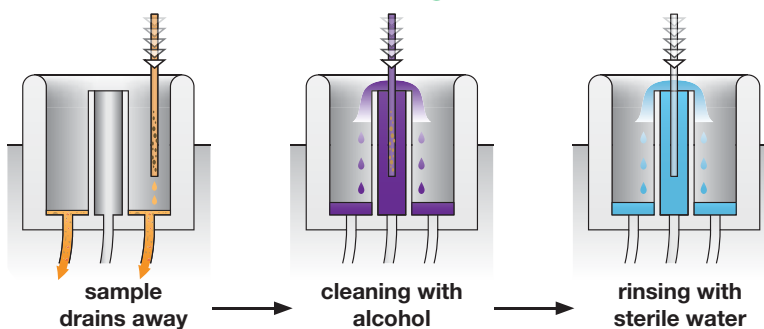
Delivering the fastest cycle time ever, **easySpiral®** has an impressive rotating arm architecture, new patented disinfection system avoiding risks of cross-contamination and full traceability of the operations with a sensitivity from 30 to 10 million CFU/mL on **one Petri dish**.



## 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 mins. (with the same sample)

## Overflow technology\*



- No cross-contamination
- Unique patented disinfection system by overflow
- 600 cleanings without changing bottles



## USB programmable volume & traceability\*\*

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



## Consumables reduced up to 75%!

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



\*Scientific study available upon request

\*\*On easySpiral® Pro

# Plate & Count System®



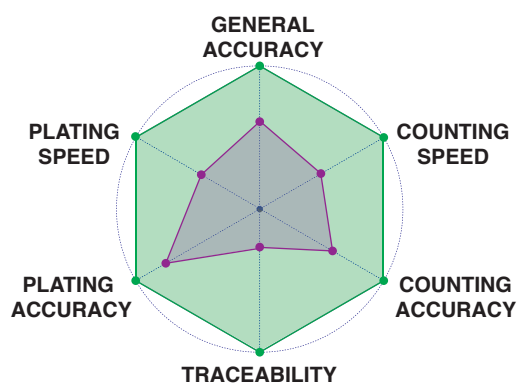
easySpiral® Pro and Scan® 1200

***Increase your lab capacity!***

The **Plate & Count System®** includes:

- easySpiral® / easySpiral® Pro automatic Spiral® platers
- Scan® 300 / Scan® 500 / Scan® 1200 automatic colony counters equipped with interScience's Scan® software

## Method comparison



■ Plate & Count System®  
■ Manual Method

## Benefits

### 1 Incredible savings:

Save up to 75% in time, consumables and bench space

### 2 Fast:

Full plating cycle in 25 seconds and counting in 1 click

### 3 Reliable:

98% repeatable and reproducible results

### 4 Full traceability:

Automatic data saving and reporting



DOWNLOAD  
SCAN® SOFTWARE

[www.interscience.fr](http://www.interscience.fr)



# Technical specifications

	easySpiral®	easySpiral® Pro
Reference	412 000	413 000
Syringe capacity	1000 µL	1000 µL
Preset Volume dispensed	50 or 100 µL	50, 100 or 200 µL
Counting range	300 to 1.3 x 10 <sup>5</sup> CFU/mL	30 to 1 x 10 <sup>7</sup> CFU/mL
Full cycle time	25 seconds	25 seconds
Overflow technology	8 bars pressure	8 bars pressure
Cleaning autonomy	600 cycles (2L bottles)	600 cycles (2L bottles)
Successive plating capacity with the same sample	20 Petri dishes (50 µL)	50 Petri dishes (50 µL)
Automatic monthly cleaning	✓	✓
90 mm Petri dish	✓	✓
150 mm Petri dish	-	✓
Exponential deposition mode	✓	✓
Circle deposition mode	✓	✓
Uniform deposition mode	-	✓
Excel™ export traceability	-	✓
USB programmable volume	-	from 10 to 1000 µL
Dimensions	38 x 42 x 29 cm	38 x 42 x 29 cm
Weight	15.6 Kg	15.6 Kg
Power supply	90V to 240V 50Hz to 60Hz	90V to 240V 50Hz to 60Hz

## APPLICATIONS

- Microbiological tests
- Food control
- Bacterial cinetics
- MIC control of antibiotics
- Challenge test: cosmetics control
- Pharmaceutical control

**Delivered with:** 1000 sterile beakers, 1 blue dye for testing, 1 liquid detergent, 4 sets of connectors for autoclavable GL45 bottles, spiral counting grids: 90 mm & 150 mm\*, container stand for testing, power cable, user manual, 150 mm Petri dish ring\*, software on a CD-ROM\*, USB cable\*.

\*Only for easySpiral® Pro

# Accessories



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



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



**Barcode reader**  
Barcode reader for traceability  
**Ref 522 000**



**2 L bottle**  
2 L GL45 glass bottle  
**Ref 413 002**

