

# Scan®

Automatic colony counters & inhibition zone readers



ambifood®



# interscience

## Our quality for your lab

- Designer and manufacturer for microbiological analyses
- Made in France
- R&D leadership with innovative & reliable products
- Worldwide distribution network, immediate delivery

## High quality analyses, full traceability

### **Scan® 300, Scan® 500 & Scan® 1200**

High technology automatic colony counters

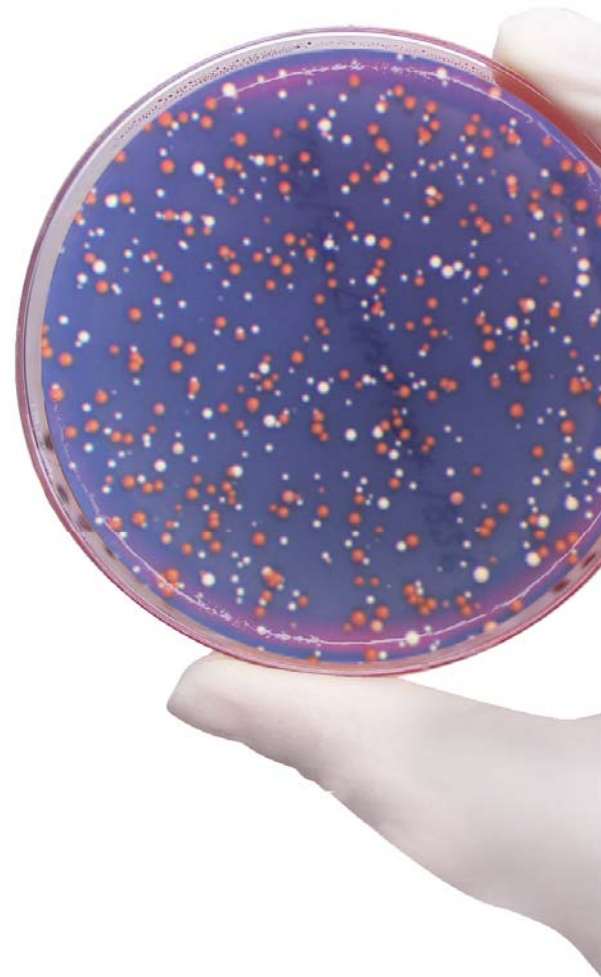
With a digital camera and high technology software, they can be linked to a PC via a USB connection. They count all colonies on a Petri dish in less than 1 second and provide a complete, fast, accurate and traceable reading of the result.

## ■ Bacterial enumeration

- Food analyses
- Total flora analyses
- Aerobic & anaerobic bacterial enumeration, yeasts, lactobacillus...
- Pathogenic bacteria research
- Environmental research
- Pharmaceutical analyses
- Medical analyses
- Cosmetics analyses

## ■ Inhibition zones

- **Pharmaceutical industry, medical research & hospitals**  
(antibiograms, resistance tests to pathogenic microbes, medical diagnoses...)
- **Food industry**  
(Tests on lactic ferments & for dairy ingredients industry...)



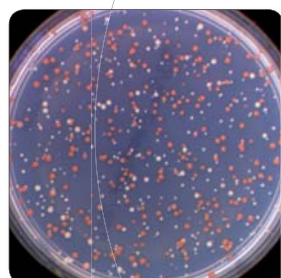
# Scan®

- Automatic colony counters: No settings
- Inhibition zone readers\*
- Data traceability and full report



## High performance

- > Count colonies of numerous media
- > Read chromogenic Petri dishes\*: Colored differentiation of colonies (up to 7 different colors on the same dish)
- > Inhibition zone measurement



## Live image

- > Fits any type of dish: automatic adjustment of contrast and lighting
- > High-definition color image
- > Each colony is marked with a cross
- > Powerful zoom: up to x28

Sample N°	Count	Dilution
E COLI	174	1 2
E COLI	353	1 5
SPIRAL	47	1/1000 9
PETRIFILM	89	1 8
RIDA COUNT	179	1 1
Filteking Membrane	111	1 1

## Instant results

- > Up to 1000 colonies detected in 1 second
- > Counts 30 dishes in 5 minutes (in real condition with presetting)
- > Reproducible and standardized results
- > **Scan®** results: instant and automatic



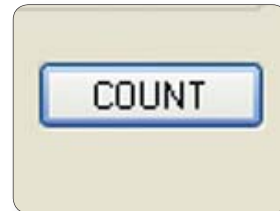
\* on Scan® 500 & Scan® 1200





## Easy-to-use

- Counting in 1 click <
- All functions in 1 single window <
- Custom parameters: day, users, project... <



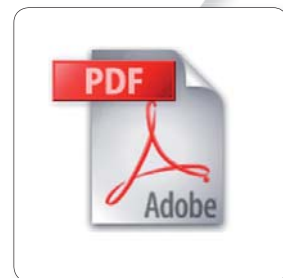
## Dark Field technology

- Display of every colony <
- Optimized lighting & contrast <
- Long lasting LED lighting <
- 6 lighting combinations <



## Traceability & reporting

- Automatic archiving and printing of data: < pictures, comments & results
- Export to EXCEL™, PDF, JPEG, BMP <
- Barcode reader <
- Connection to LIMS network <



**DOWNLOAD  
SCAN® SOFTWARE**

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

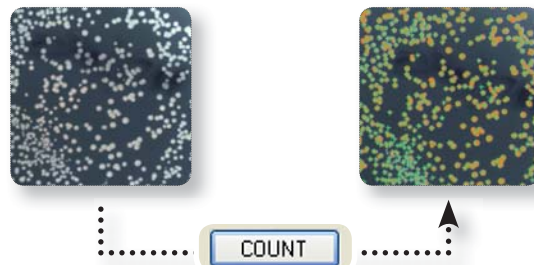


\*\* Free update of the software during warranty period

# Efficiency & time saving

## Instant results

Thanks to the live image display of the Petri dish on your computer, count more than **1000 CFU/s** on all media. Each counted colony is marked with a cross and the result is automatically saved.



## No settings

Choose your pre-set parameters for Petri dishes:

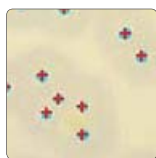


Also available on **Scan® 1200**:

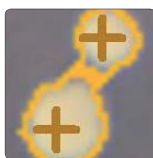
- NeoFilm™/Sanita-kun™: AC, CC, EC/CC, SA
- Petrifilm™: AC, ETB, CC, EC/CC, EC
- Compact Dry™: TC, CF, EC, ETB

## High-performance colony counters

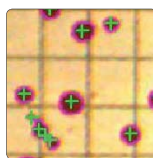
**Scan®** works for every kind of colony. The minimum size is **0.05 mm for Scan® 1200** and **0.1 mm for Scan® 300** and **Scan® 500**. **Scan®** colony counter automatically separates confluent colonies, allows you to create polygonal exclusion areas and ignores agar flaws and air bubbles. You can also add or remove colonies manually. Every change is automatically saved in your report.



Scan® read all the colonies, even the smallest



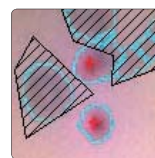
Automatic separation of confluent colonies



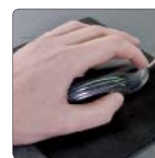
Automatic elimination of counting grids



Cross on each counted colony



Polygonal exclusion areas



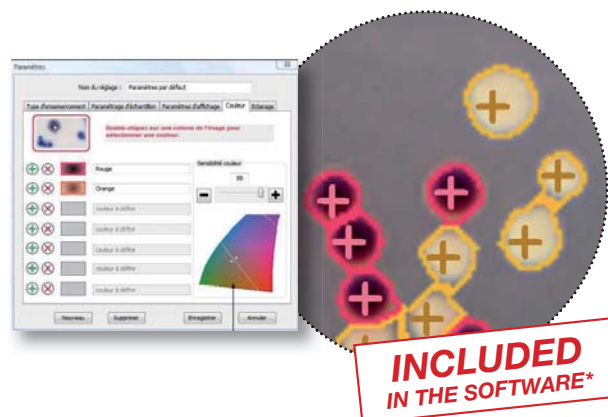
Automated software with manual control

## Color detection & chromogenic media

**Scan® 500** and **Scan® 1200** can read chromogenic agar and differentiate colonies by color: **up to 7 different colors on the same Petri dish**. Color selection can be made directly from the color of the bacteria and a cursor allows you to set the sensitivity.

Chromogenic media reading allows the detection of Salmonella on XLD media and E.Coli on TBX media, for example.

\* on Scan® 500 & Scan® 1200



# Scan<sup>®</sup> : 3 models adapted to your needs



## Scan<sup>®</sup> 300 Essential

Ref 436 300

- 6 combinations of lighting and backgrounds
- Motorized background color
- Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- CMOS color camera, zoom x28, M12 lens
- Minimum size of detected colony: 0.1 mm

### Count these supports



Surface/pour Spiral<sup>®</sup> plating  
plating



## Scan<sup>®</sup> 500 Efficient

Ref 436 000

- 6 combinations of lighting and backgrounds
- Motorized background color
- Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- CMOS color camera, zoom x28, M12 lens
- Minimum size of detected colony: 0.1 mm
- Detects and counts up to 7 colors on the same dish
- Inhibition zone reading with EUCAST, CA-SFM, CLSI and editable database

### Count these supports



Surface/pour Spiral<sup>®</sup> plating  
plating



Chromogenic Antibiogramm  
Petri dishes



## Scan<sup>®</sup> 1200 High-Resolution

Ref 437 000

- 6 combinations of lighting and backgrounds
- Motorized background color
- Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- HD color CCD camera, zoom x28, HD japanese lens
- Minimum size of detected colony: 0.05 mm
- Detects and counts up to 7 colors on the same dish
- Inhibition zone reading with EUCAST, CA-SFM, CLSI and editable database
- Petrifilm<sup>™</sup>, Compact Dry<sup>™</sup>, NeoFilm<sup>™</sup>/ Sanita-kun<sup>™</sup> and filtration membrane reading

### Count these supports



Surface/pour Spiral<sup>®</sup> plating  
plating



Chromogenic Antibiogramm  
Petri dishes



Petrifilm<sup>™</sup>



Compact  
Dry<sup>™</sup>



NeoFilm<sup>™</sup>/  
Sanita-kun<sup>™</sup>



Filtration  
membrane

# Inhibition zone from paper discs, agar wells & peni cylinders

## Performance and flexibility

**Scan® 500** and **Scan® 1200** allow efficient work flow because you can create and edit a list of antibiotics, useful for routine analysis.

Measured by **Scan®**, inhibition zones guarantee repeatability and reproducibility of analysis and diagnosis reliability.

- Rapid detection: up to 8 antibiotic sensitivities in 1 click.
- Paper discs, agar wells and peni cylinders may be manually added or deleted. Inhibition zones may be manually resized.

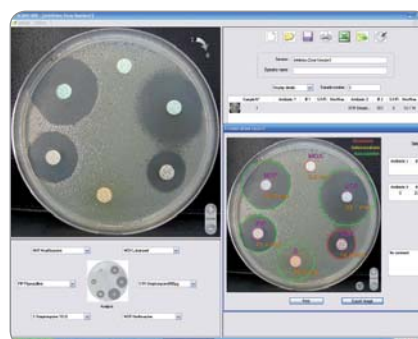


The result of sensitivity in contact with the antibiotic is fast and visualization of results is clear:

- > Red (resistant)
- > Yellow (intermediate)
- > Green (susceptible)

## Medical analysis

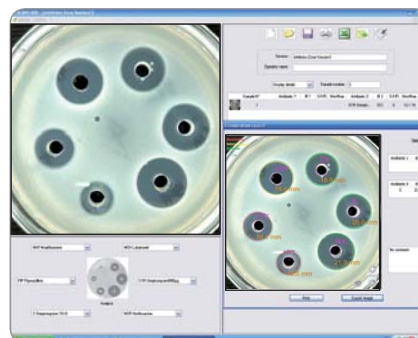
Inhibition zone measurement allows you to test the efficiency of antibiotics on micro-organisms to accelerate the diagnosis in order to choose precisely an appropriate antibiotic treatment for a patient. **Scan®** has a built-in antibiotic database from the **French Society of Microbiology (CA-SFM)**, the **European Committee on Antimicrobial Susceptibility Testing (EUCAST)** and the **Clinical and Laboratory Standards Institute (CLSI)** which determines the sensitivity of the bacteria to the antibiotic. This database is fully editable.



Precision of inhibition zone radius measurement from paper discs : 0.3 mm

## Pharmaceutical analysis

In the pharmaceutical industry, **Scan®** allows you to test the quality of an antibiotic during its manufacturing process by measuring the inhibition zones. To evaluate the action of an antibiotic, antibiotic diffusion from paper disc, agar well or peni cylinder is supported.



Precision of inhibition zone radius measurement from agar wells : 0.3 mm



\* on Scan® 500 & Scan® 1200



# Comfort of use

## > High definition live image

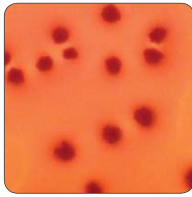
This feature enables total control of colony counting.

## Optimum visualization

Enjoy comfortable viewing of the colonies with the unequalled **Dark Field technology**, high definition live image and with the automatic optimization of the image (lighting, contrast and sensitivity). You can also check key areas thanks to the digital zoom.



Dark Field: LED are disposed in a circle for optimal contrast



Scan® automatically optimizes contrast, luminosity and sensitivity



Digital zoom with the mouse wheel (up to x28)

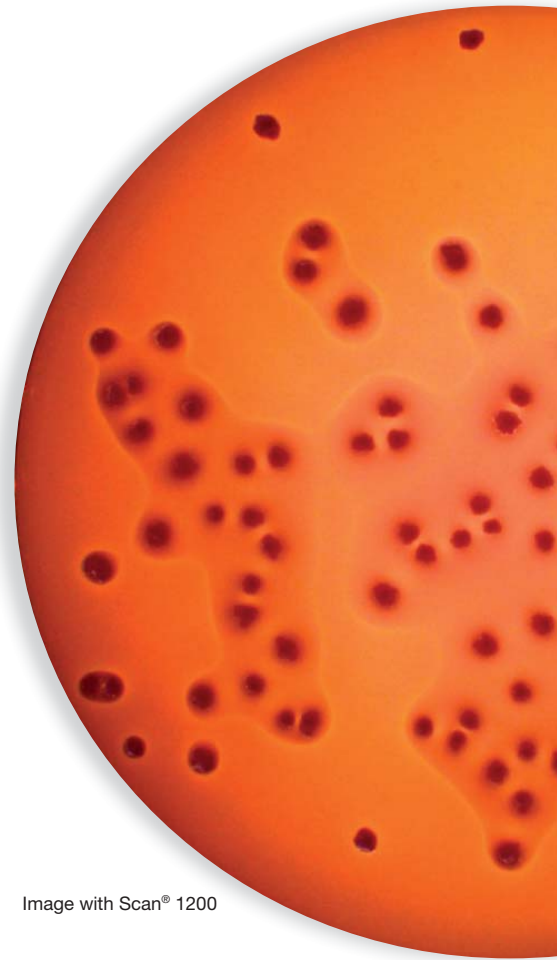


Image with Scan® 1200

## Easy-to-use

All **Scan®** functions are in **one single window** and colonies are counted in one click.

The **Scan®** easy commands (visualization, settings and results) allow quick access to both ongoing and archived work sessions.

**Scan®** software is available in **7 languages** (English, French, Chinese, Russian, Japanese, Spanish and German) and is updated regularly. The intuitive use of **Scan®** **does not require any special training**.



# Fast communication, total traceability

## Results harmonization

Using the **Scan®** allows more reliable analyses and harmonizes the results within a team.

You can save as many settings as you wish and customize the settings according to the type of dishes and agar you use.

The automatic archiving of data, photos, comments and results ensures total traceability.

## Print your results

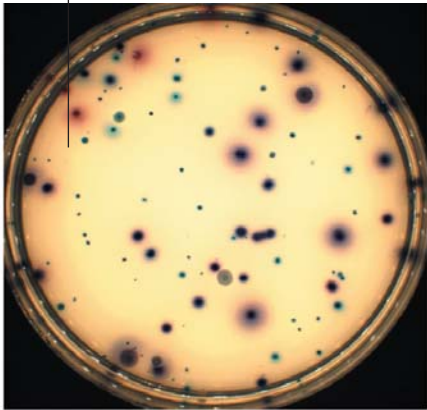
You can export your results to your PC, archive it in Excel™, PDF, SCA or BIO format. You can also export pictures from the camera in JPEG, PNG and BMP format.



Add your own logo  
in the reports

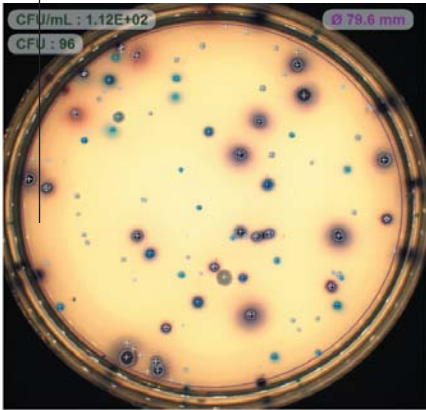
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Petri dish before counting



Sample

Petri dish after counting



Sample analysed with SCAN 1200®, version 7.0.2.0

Sample information

Operator name :	be	Sample N° :	2	CFU/mL :	1.12E+02
Parameters :	Coli-Coliforms	Count :	96	Dilution :	1
Date Time :	12/10/2014 9:52:13	Area (%) :	86 %		

Comments

Comment :		E. Coli :	23 CFU	2.68E+01
OK		Coliform :	73 CFU	8.51E+01

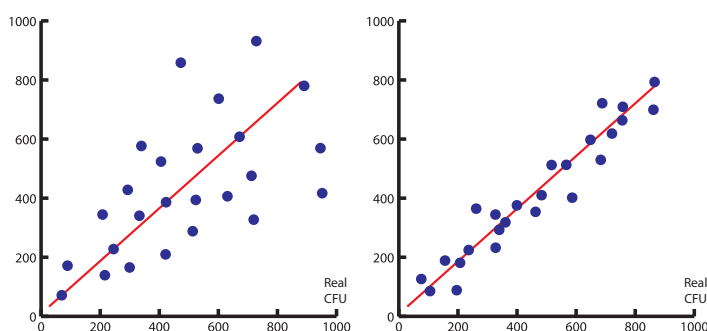
Analysis result

Printed report example

## Reproducibility of results

Automatic counting is a guarantee of **regularity** and **standardization** of analyses, which is the key to ensure accurate and reliable results. **Reproducibility** of results is guaranteed whatever the day, conditions and user.

A scientific study has proved up to 98% precision for **Scan®** colony counters.



### Manual counting:

Random results over time and different users by manual counting of colonies

### Automatic counting:

Standardized and reproducible results by automatic counting

Study made on Bacillus cereus, Escherichia coli and Lactobacillus casei

## Internal traceability

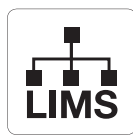
Thanks to the **LIMS** connection and the barcode reader, photos of counted plates are **saved and traceable**. The images are accessible and recountable at any time.



Barcode



Archiving



LIMS connection



dataLink™  
(see p. 12)

## Secure your sessions

Sessions are secured with a **security code** (one per operator) and the impossibility to alter each saved counting. **Scan®** use allows the compliance with **CFR 21 part 11**: system securization, operational controls and documentation management.



## > External traceability

Scan® software provides numerous possibilities to easily and quickly export your results.



Work sessions saving



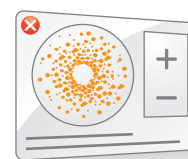
PDF export



JPEG, PNG & BMP  
formats export



Export results to  
Excel™ to ensure  
traceability



Print report from Scan®

# Plate & Count System<sup>®</sup> with dataLink<sup>™</sup>

**INCREASE**  
your lab capacity with  
**easySpiral<sup>®</sup> & Scan<sup>®</sup>!**



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More info on  
[www.interscience.com](http://www.interscience.com)

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**Plate & Count System<sup>®</sup> with dataLink<sup>™</sup>** enables automatic plating and colony counting with full traceability!

- **INCREDIBLE SAVINGS:** Save up to 75% in time, consumables and bench space
- **FAST:** Full plating cycle in 25 seconds and counting in 1 click. No manual data input.
- **RELIABLE:** 98% repeatable and reproducible results
- **TOTAL TRACEABILITY WITH dataLink<sup>™</sup>:** Automatic data saving and reporting



**Plate & Count System®** with dataLink™ includes:

- **easySpiral®**: Automatic Spiral® platers
- **Scan®**: Automatic colony counters
- dataLink™: Traceability system

## HOW DOES IT WORK?

### STEP 1



Plate with **easySpiral Pro®** or **easySpiral Dilute®**. **easySpiral®** 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.

### STEP 3



... Incubation 24-72 h

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

## PLATE AND COUNT YOUR PETRI DISHES

### ■ From 30 to $1 \times 10^{12}$ cfu/mL on one single petri dish

**easySpiral®** automatically plates a sample in **8 seconds**: from 30 to  $1 \times 10^{12}$  CFU/mL on a **single Petri dish** without prior sample dilution. Once the sample is plated and incubated, it is ready to be counted by **Scan®** automatic colony counters. Results are immediately displayed and saved.

### ■ Up to 75% savings

**easySpiral®** and **Scan®** guarantee the regularity and standardization of the analyses, save time, consumables and bench space of up to 75 %.



ISO  
7218

ISO  
4833-2

ISO  
15189

XP  
V08-034

NF  
V08-050

NF  
V08-100

AOAC  
977.27

FDA BAM  
Bacteriological Analytical  
Manual

CFR 21  
Part 11

# Technical specifications

		Scan® 300	Scan® 500	Scan® 1200
	Reference	436 300	436 000	437 000
Image	Camera	CMOS color camera		HD CCD color camera
	Lens	M12 lens		HD japanese lens
	Digital zoom	x 28		
	Resolution	1 megapixel		1.2 megapixels
	Counting time	1000 colonies per second		
	Minimum size of colonies	0.1 mm		0.05 mm
	Lighting technology	Long-life white LEDs / Dark Field		
	Lighting system	Automatic 6 combinations, top and/or bottom light white or black background		
Counting	Counting	Automatic, with manual control		
	Results / data export	Scan® recountable file, PDF report, JPEG, PNG, BMP, Excel™		
	LIMS connection	✓	✓	✓
	USB connection	✓	✓	✓
	Petri dishes	✓ (55-90 mm)	✓ (55-90 mm)	✓ (55-90 mm)
	Spiral® plating	✓	✓	✓
	Color detection	-	7 colors on the same Petri dish + 1 color to exclude	
	Chromogenic medium	-	✓	✓
	Inhibition zones	-	✓	✓
	Petrifilm™	-	-	✓
	NeoFilm™	-	-	✓
	Compact Dry™	-	-	✓
	Filtration membrane	-	-	✓
	Languages	English, French, Japanese, Chinese, Russian, Spanish, German		
Hardware	Dimensions (w x d x h)	28.5 x 26.5 x 29 cm		28.5 x 26.5 x 37.5 cm
	Weight	8.4 kg		9.4 kg
	Body	Stainless steel		
	Computer connection	USB		
	Power	100-240 V~ 50/60 Hz		
PC requirements	Operating systems	Windows™: Seven™, 8, 10		
	Processor	Intel (recommended) AMD Phenom or better, 2 GHz		
	RAM	3 Go or better		
	Graphic card	AMD or NVIDIA (chipsets are not recommended)		
	Equipment	USB 2.0 slot / CD ROM drive		
	Screen	1280 X 1024 pixels and more		

Delivered with : Scan® software CD-ROM, power cord, 3 validation plates, user guide, quick user guide



## Warranty

3 years Warranty / 3 years free Software update (after registration of the warranty form)

PC requirements are subject to change. Please check our website [www.interscience.com](http://www.interscience.com) for current updates and additional informations.

# Scan<sup>®</sup> accessories



dataLink™  
Ref. : 410 100



Barcode reader  
Ref. : 522 000



Adaptor for Petrifilm™\*  
Ref. : 437 002



Adaptor for NeoFilm™/  
Sanita-kun™\*  
Ref. : 437 001



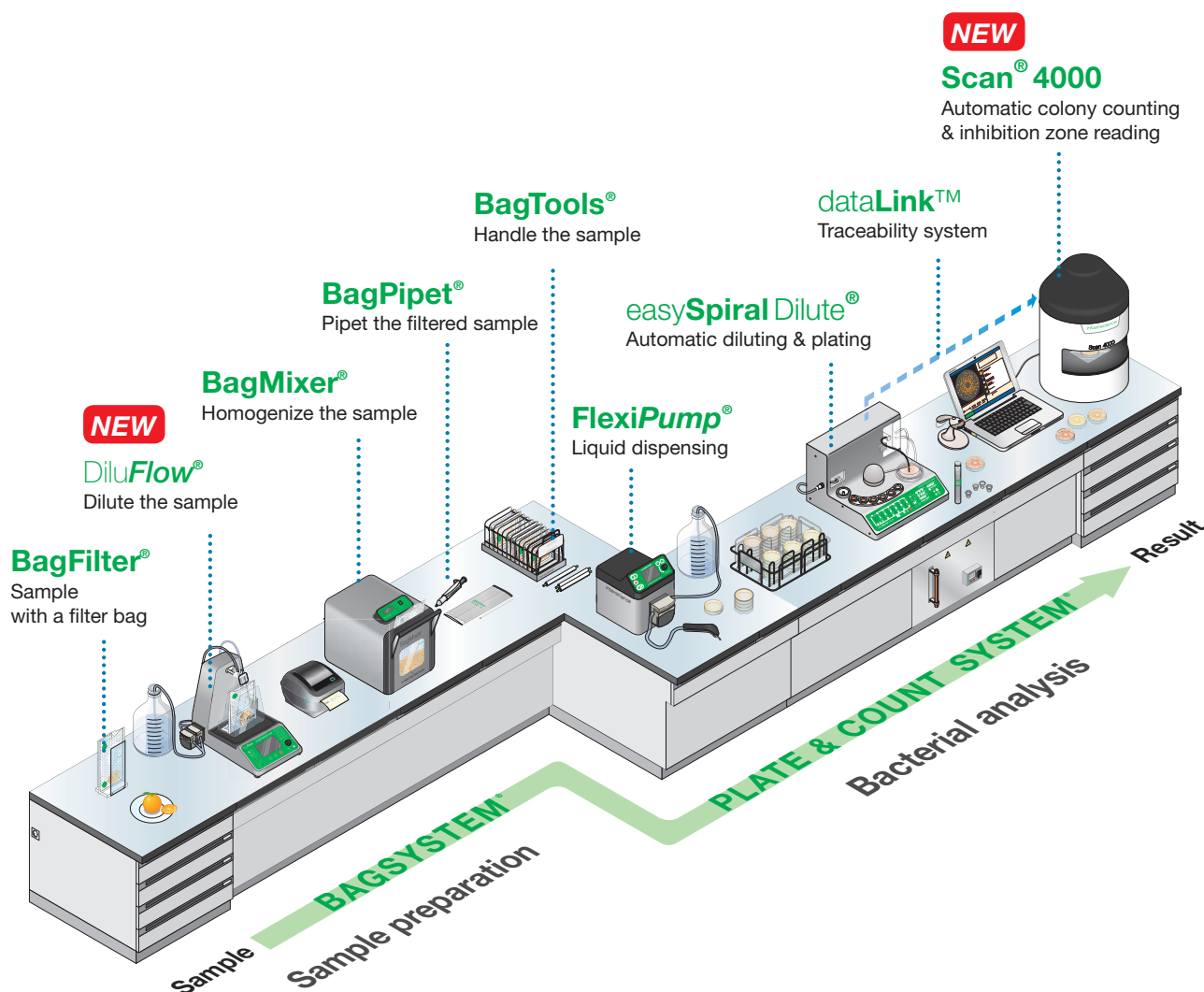
Adaptor for Compact  
Dry™\*  
Ref. : 437 004



Adaptor for Petri dish  
(55 mm)  
Ref. : 436 005

\* Only on Scan<sup>®</sup> 1200

## Discover our complete range for microbiology



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SCAN<sup>®</sup> SOFTWARE

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On our website, find and download:

- Latest information on our products
- Demonstration photos and videos



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