

SIDECAR

FIRST AUTOMATED STREAKING SYSTEM INTEGRATED WITH THE RAPID BACTERIA CULTURE

Alifax presents the first instrument in the world totally automated for rapid bacterial growth integrated to a streaking system.



The system is composed of two units: **Alfred60 AST** and **Sidecar**.

Thanks to the Light Scattering technology, Alfred60 AST detects the **presence of bacteria** and their **resistance to drugs** in a few hours with high sensitivity and specificity.

Alfred60 AST monitors the growth phases of bacteria from the inoculum step into specific culture broths providing **real time growth curves** and **quantitative bacterial results** in CFU/ml.

Broth turbidity level is detected by the **Mc Farland Monitor** and as the sample reaches the 0.5 Mc Farland it is buffered into the refrigerated area where it is ready to be tested with a **customized antibiotic panel**.

Sidecar is the automated streaking system able to stock **240 Petri dishes** chosen among a maximum of **12 different media**.

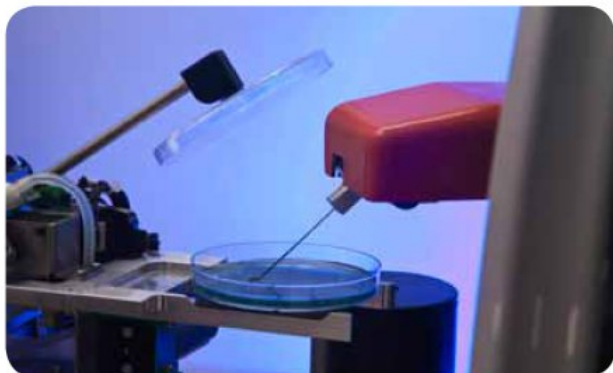
The **streaked dishes** are incubated at **37°C** for the requested analysis time in a incubator included in the system.

In the main operating method **only the positive samples** are **streaked automatically**.

The advantages are the following:

- **Negative samples are reported in one day**
- **Drastic reduction of streaked samples**
- **Material saving**
- **Reading time saving**
- **Reduction of the use of broad-spectrum antibiotics**
- **Decrease of the spread of bacterial resistance.**

In addition, all the applications currently offered by Light Scattering technology are kept unchanged thus **bacterial culture of Biological Fluids** and **MRSA screening** can run **simultaneously** in 6 hours and the **Susceptibility testing** in 3 hours.



THE FIRST REAL WALK-AWAY SYSTEM!



Windows™ operative System

TESTS AND APPLICATIONS

Urine culture	3 hours cutoff 30.000 CFU/ml
Residual Antimicrobial Activity (RAA) test	Simultaneously to the culture test
Human Biological Liquid Bacteria Culture*	6 hours cutoff <50 CFU/ml
Bacteria Culture on special sample*	6 hours cutoff <50 CFU/ml
Automated Mc Farland Monitor	
Susceptibility testing with customized antibiotic panel for:	3 hours
<ul style="list-style-type: none"> • Urine • Human Biological Liquids • Positive Blood Culture • Isolated Colonies 	



CUSTOMIZABLE PROTOCOLS WITH DIFFERENT INCUBATION TIMES AND CUT-OFFS

INCUBATION TIME (min)	FAST PROTOCOL (URINE ONLY) THRESHOLD (CFU/ml)	STANDARD PROTOCOL (URINE or HBL) THRESHOLD (CFU/ml)
70	1.000.000	20.000.000
80	500.000	12.000.000
110	100.000	2.000.000
120	DEFAULT 50.000	1.000.000
140	15.000	300.000
145	10.000	200.000
160	-	100.000
180	-	DEFAULT for URINE 30.000
190	-	15.000
235	-	1000
275		100
290		50
290-360		DEFAULT for HBL <50

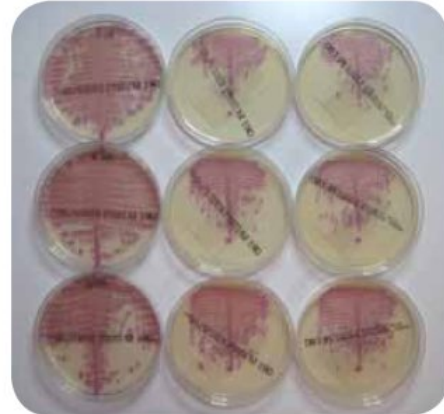
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* Manual loading

FEATURES

- Light Scattering Technology
- Quantitative results expressed in CFU/ml
- Automated susceptibility testing with customized antibiotic panels
- Real time detection of bacteria growing curves
- Automatic reagents and samples dispensing
- Continuous loading of primary closed tube
- Automatic results reading and reporting
- Built-in **barcode reader** for automatic sample identification
- **LIS bidirectional interface** and **Query Host** application
- Connection to **HB&L**
- Refrigerated area at + 4°C for the storage of primary samples, antibiotics and 0.5 Mc Farland positive samples
- Refrigerated stocking area for 240 petri dishes
- Incubator at 37°C for 240 petri dishes
- Automated labelling system for single plate
- Calibrated Loop automated sterilization with heat before and after each streaking procedure
- Two different streaking procedures
- Single sample management with customized analysis profile settings: sample type, incubation time, analytical protocol, cut-off and solid media in dishes
- Batch and expiring date managing software
- Servos system to help the operator in each loading and downloading step
- User friendly software with touch screen

Example of streaking with a 5 µl calibrated loop



WORKING PROCEDURES

1. Rapid Bacterial Culture (Alfred60 AST)
2. Positive primary sample streaking on Petri dishes
3. Positive eugonic broth streaking (HBL, MRSA, GBS)
4. Selected primary sample streaking (i.e. urine, swab, special sample in primary tube as Pen Ok swab)
5. Primary sample streaking and inoculum in vials

SIDECAR & HB&L CONNECTION

Following the inoculation into the vial through Alfred 60, the samples can be transferred to HB&L along with the growth curves data thus continuing the analysis cycle.

