

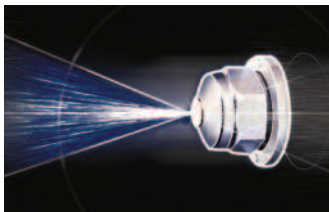
Introducing the new  
**Aerospray<sup>®</sup>Gram** | series 2

SLIDE STAINER / CYTOCENTRIFUGE



Delivering  
textbook quality staining with  
trouble-free operation

# Aerospray<sup>®</sup>Gram | series 2



## OPTIONAL CYTOCENTRIFUGE ROTOR



With the optional Cytopro<sup>®</sup> rotor, the Aerospray Stainer becomes a superb cytocentrifuge with eight-slide capacity and programmability, at a fraction of the cost of purchasing a stand-alone cytocentrifuge.

## AVAILABLE SAMPLE CHAMBERS

### Standard Chamber



Combines ease of use with superb cell recovery.

### Dual Chamber



Places two samples on the same slide for increased efficiency and economy.

### Cytopro Magnum<sup>®</sup>



Accepts sample sizes up to 6 mL.

## The New series 2 Fulfills Today's Needs for Laboratories

### UNMATCHED EASE OF USE:

Enjoy a friendly user interface with many innovative features at your disposal, such as large touch screen, language selection, help screens, nameable and recordable programs, and easy updates with the USB serial port.



### EVERYTHING UNDER CONTROL:

Would you like to secure your settings with an administrator password? Do you want to be reminded to perform preventative maintenance or stain a QC slide?

Just program the stainer as you like and the system will remind you.

And don't worry about reagents and waste—the stainer alerts you to expired shelf life, or critical reagent or waste levels.



### MORE TRACEABILITY:

Need to reinforce your QC management and ensure compliance with new lab requirements?

The Gram series 2 memory stores critical information including: reagent data, specimen ID, user ID, and cycle operation history—all exportable via a USB port.

The new barcode scanner streamlines data entry, while manual keyboard entry is still an option.

### ■ NO CROSS-CONTAMINATION

In all Aerospray<sup>®</sup> Stainers, fresh reagent is applied as an atomized spray on slides mounted in a rotating carousel. Specimens contact only fresh stain, precisely metered from separate spray nozzles. No cross-contamination occurs and accuracy is assured.

### ■ ECONOMICAL

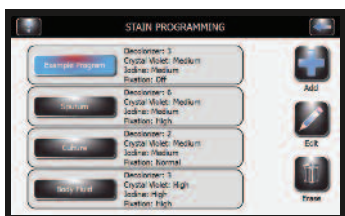
The Aerospray Gram Stainer is exceptionally sparing when it comes to reagent consumption. Programmability significantly reduces the volume of reagents required for staining partial loads and thereby significantly lowers reagent cost.

### ■ RAPID PERFORMANCE

With a cycle time as short as 5 minutes, the Aerospray Gram Stainer can process more than 144 slides per hour (up to 300 with the optional 30-slide carousel). No more waiting for slides to dry—they're ready to view when the staining cycle ends.

### ■ EASY TO USE

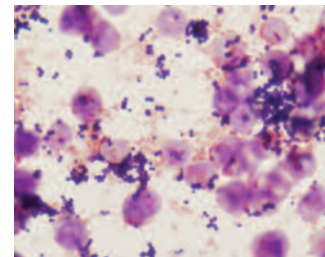
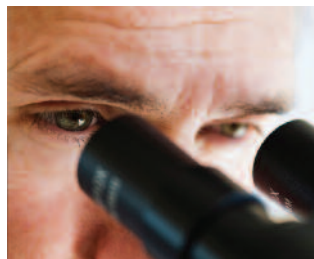
Simply select the user-defined program and start the stain cycle. The stainer takes over from there, precisely controlling all phases of the stain cycle with virtually perfect reproducibility. Automated nozzle clean and purge after each stain cycle ensures performance without user intervention.





# Ready for the Microscope in Minutes

Aerospray provides many advantages over hand staining or automated dip type stainers: speed, no cross contamination, consistent performance, economy, ease of use, and traceability.



## The Aerospray Process for Gram Staining

The Aerospray Gram Stainer stains microbial specimens that have been transferred onto microscope slides along with materials such as culture media, body fluids, or exudates. ELITech Gram Reagents are tailored to give superb results in the Aerospray Stainer.

Reagents are applied from atomizing spray nozzles onto the slides. Staining is rapid and precise. Only fresh stain contacts specimens avoiding cross-contamination or contact with used reagents.

### FIXATION

Specimens can be heat-fixed and stained directly, or the automatic fixation feature can be used to provide convenient and reproducible specimen fixation. The Aerospray Gram offers two selectable levels of fixation.

### PRIMARY STAIN

Once slides are fixed, they are sprayed with crystal violet, a positively charged (basic) dye which rapidly penetrates microbial cells and stains them dark blue-to-purple. The excess stain is then spun off and washed away with deionized water to prevent precipitate formation outside stained cells. The Aerospray Gram offers three selectable levels of Crystal Violet.

### IODINE

Iodine reagent is then sprayed onto the slide. The iodine penetrates the cells and forms a precipitate (mordant) with the crystal violet dye. Excess iodine is spun off and rinsed from the slide with deionized water. The Aerospray Gram offers three selectable levels of Iodine.

### DECOLORIZING AND COUNTERSTAIN

Decolorizer is then applied to remove the crystal violet-iodine complex until only the Gram-negative organisms are decolorized. Safranin or fuchsin (contained in the decolorizer) simultaneously counterstains the Gram-negative cells pink-to-red. Decolorization is the critical step in

proper Gram differentiation and, unless properly controlled, can lead to errors. The Aerospray Gram Stainer provides a choice of decolorizer cycles ranging from 1 to 9, allowing you to compensate for thick specimens, or other possible variables. **With the Aerospray system, you can reproducibly differentiate sensitive organisms in normal smears.**

### DRYING

The slides are spun at about 950 RPM for 45 seconds. This draws air through the stainer and dries the slides. Slides from the stainer are ready for the microscope.

**With its rapid staining cycle and high throughput capability, the Aerospray Stainer is a convenient, cost-effective way to stain Gram specimens.**

## Delivering Textbook Quality Staining with Trouble-Free Operation



Textbook Stain Quality



Trouble-Free Operations



Higher Value Solution

HD Morphology

Robust & reliable

Dual-purpose stainer/cytocentrifuge

Proven consistency & repeatability

State-of-the-art user interface with traceability

Laboratory technician safety through automation

Clean, readable slides

Simple, prompted maintenance

Automatic waste level detection

Virtually no chance for cross-contamination

Stained slides ready for the microscope in minutes

Labor-saving automation

Customizable & standardized to staining preference



## Specifications

### Aerospray<sup>®</sup> Gram Slide Stainer/Cytocentrifuge Model 7322

Slide Carousel Capacity	1 to 12 or 1 to 30 Slides, depending on carousel (carousel choice optional)
Cytocentrifuge Rotor Speed	100-2000 rpm ( $\pm 5\%$ ), user programmable
Dimensions (W x H x D)	57 cm x 25 cm x 54 cm (22" x 10" x 21")
Clearance Height (lid open)	58 cm (23")
Weight	15.8 kg (34.83 lb)
Electrical Requirements	100 to 240 VAC ( $\pm 10\%$ ), @ 50-60 Hz, 200 watts maximum
Drain Connection	Outlet on rear panel
Safety	Lid interlock: Lid must be closed for operation, and is locked down during carousel rotation.
Reagent Level Detect	Level detection on all reagent lines
Waste Level Detect	Level detection in waste bottle (optional)

### Aerospray Gram Stain Consumption Specifications

Medium Decolorizer Setting: #3 (no clean cycles)

Reagents	Description	Theoretical maximum number of slides per bottle	
		Full 12-Slide Carousel	Full 30-Slide Carousel
Decolorizer 500 mL	Isopropanol / Methanol with Safranin	1032	1710
	Isopropanol / Methanol with Fuchsin		
	Isopropanol / Acetone with Safranin		
	Isopropanol / Acetone with Fuchsin		
Mordant 500 mL	Iodine	996	1650
Primary Stain 500 mL	Crystal Violet	1032	1710

### Cytopro<sup>®</sup> Cytocentrifuge Rotor Model AC-I 60

Capacity	8 chambers and slides
Weight	1.1 kg (2.5 lb)
Dimensions (Dia. x H)	22.6 cm x 6.2 cm (8.9" x 2.4")



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