**BIOMEDICAL SYSTEMS** 



## Introducing the new Aerospray<sup>G</sup>ram series<sub>2</sub>





textbook quality staining with trouble-free operation

### SLIDE STAINER / CYTOCENTRIFUGE



## Ready for the Microscope in Minutes

# Aerospray<sup>®</sup>Gram series 2

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



#### NO CROSS-CONTAMINATION

In all Aerospray® 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

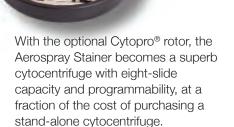
With a cycle time as short as 5 minutes, the Aerospray Gram Stainer can process more than 144 slides per hour (up to 300 with the optional 30slide carousel). No more waiting for slides to dry-they're ready to view when the staining cycle ends.

#### 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.



**OPTIONAL** CYTOCENTRIFUGE ROTOR



#### AVAILABLE **SAMPLE CHAMBERS**



Combines ease of use with superb cell recovery.



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



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.



## 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

lodine 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 lodine. **DECOLORIZING AND COUNTERSTAIN** Decolorizer is then applied to remove the crystal violet-iodine complex until only the Gram-negative organisms are decolorized. Safranine or fuchsin (contained in the decolorizer) simultaneously counterstains the Gramnegative cells pink-to-red.

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

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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		





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.

#### ining with Trouble-Free Operation Higher Value Solution Free Operations

## **Aerospray** Gram series 2

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

Slide Carousel Capacity	1 to 12 or 1 to 30 Slides, depending on carousel
Cytocentrifuge Rotor Speed	100-2000 rpm (± 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 (±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

#### Aerospray Gram Stain Consumption Specifications

Medium Decolorizer Setting: #3 (no clean cycles)

Theoretical maximum number of slides per bottle

Reagents	Description	Full 12-Slide Carousel	Full 30-Slide Carousel
Decolorizer 500 mL	Isopropanol / Methanol with Safranine	1032	1710
	Isopropanol / Methanol with Fuchsin		
	Acetone / Methanol with Safranine		
	Acetone / Methanol with Fuchsin		
Mordant 500 mL	lodine	996	1650
Primary Stain 500 mL	Crystal Violet	1032	1710

#### Cytopro® Cytocentrifuge Rotor Model AC-160

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")



Please contact your sales representative for product availability in your country.

T: +39 02 48 40 35 42

#### WORLDWIDE OFFICES

Headquarters	T: +33 1 41 45 07 13
Australia	T: +61 1800 815 098
Benelux	T: +31 313 430 574
Brazil	T: +55 27 3025 1415
France	T: +33 4 83 36 10 82
Italy	T: +39 02 48 40 35 42
Middle East & Africa	T: +971 4 375 2744

New Zealand Serbia Switzerland The Netherlands UK United States

T: +64 800 555 611 T: +381 11 2467119 T: +41 26 663 86 60 T: +31 313 430574 T: +44 1442 869320 T: +1 435 752 6011

#### ELITechGroup SOLUTIONS tailored to your needs www.elitechgroup.com info@elitechgroup.com



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