

PRESERVING EVIDENCE, DELIVERING RESULTS: THE FORENSIC STANDARD

A Comprehensive Guide to Forensic Evidence Processing and Preservation. From cutting-edge collection devices to advanced storage and analysis systems as well as an end-to-end Forensic Laboratory Information Management System (LIMS), explore our essential solutions, that ensure the integrity, traceability, and security of forensic evidence throughout the entire investigative process.



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EVIDENCE COLLECTION AND PRESERVATION

4N6FLOQSwabs® Genetics

A high-performance device for collecting and transporting human DNA, ideal for forensic genetics, paternity testing, and human identification. Engineered with Copan's patented FLOQ® technology, it ensures superior sample collection and release.

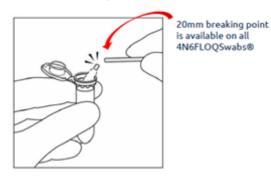
- 20 mm breaking point
- With or without Active Drying
- 12-month DNA stability at room temperature (20 25°C)
- Long-term DNA stability when stored at -80°C
- ISO 18385:2016 Compliant
- Sample types: buccal cells, saliva, semen, blood stains, skin, crime scene evidence (e.g., clothing)
- Applications: crime scene evidence, sexual assault, forensic genetics, paternity testing



Figure 1- 4504C - With Active Drying - Eliminates the requirement to dry before transportation

Figure 2 - 4520CS01 - without Active Drying in a peel-pouch- Requires proper passive drying before being sent to laboratory

Immediate Testing Peel pouch swabs



Direct snap of the tip into the reaction tube for DNA extraction

Evidence collection at crime scene In tube swabs













Sexual Assault Evidence Collection Kits

Designed to assist forensic professionals with secure and reliable evidence collection, these fully customisable kits meet country-specific requirements. Each kit ensures accurate, untampered sample collection while preserving chain of custody integrity.

Ahlstrom GenSwab™

Allows for long-term storage of oral / buccal samples at ambient temperatures to achieve high-quality genetic profiles and DNA recovery.

- Easy transfer from swab onto specimen card
- Environmentally friendly paper
- Compatible with automated DBS equipment
- Long-term buccal DNA storage using GenSaver™ 2.0 Color paper
- ISO 18385:2016 compliant
- Applications: Human Identification & Precision Medicine
- Sample types: saliva, buccal, urine





Figure 3 - Gensaver™ Blood



Figure 4 - Gensaver™ Color 2.0 - Colorless Sample (Urine, Saliva, Buccal Cells)

Ahlstrom GenSaver™ 2.0 & GenSaver™ Color 2.0

These cards enable long-term DNA storage at ambient temperatures for over 20 years, making them an ideal solution for forensic and human identification laboratories. The chemical treatment on the collection cards prevents environmentally induced degradation, ensuring sample integrity.

- Chemically treated fibre-based card
- ISO 18385:2016 compliant
- Applications: Forensics, Human Identification, Paternity Testing, Animal Genetic Screening, Biobanking, Genomics, Molecular Biology, Whole Genome Amplification, Plasmid Screening and Precision Medicine
- Sample type: blood









Mystaire® MY-PCR Prep Station

A compact, high-performance laminar flow workstation that minimises contamination risks during DNA and RNA preparation. Advanced airflow control, UV decontamination, and built-in safety features ensure a sterile environment for sensitive forensic applications.

- Class 100 Vertical Laminar Flow Air: Delivers HEPAfiltered air for contamination-free DNA/RNA preparation.
- Built-in UV Light with Timer: A 15-minute UV light timer decontaminates the work area between amplifications, reducing contamination risks.
- Polycarbonate and Polypropylene Construction: Clear polycarbonate walls and a chemically resistant polypropylene work surface ensure long-lasting durability.
- UV Shelf with Pipette Holder: Conveniently stores pipettes while optimising the workspace.
- Safety Interlocks: UV light automatically shuts off if the sash is open, preventing accidental exposure.
- Electrical Cord Port: Allows easy equipment setup without compromising the sterile environment.
- Suitable for forensic DNA analysis, PCR amplification and processing sensitive forensic evidence.





Minerva Biotech PCR Clean™ Spray & PCR Clean™ Wipe

Eliminate RNases, nucleic acids, and other contaminants from workspaces and instruments, ensuring a sterile environment for precise and reliable PCR results.









EVIDENCE DRYING AND HANDLING





SecureDry™ Evidence Drying Cabinets

Provide a secure, controlled environment for drying wet evidentiary items while preventing cross-contamination. Featuring advanced filtration and robust construction, these cabinets maintain forensic evidence integrity and enhance operator safety.

- Two Models: Comes in a 32-inch (±80cm) single chamber or a 64-inch (±160cm) dual-chamber for high-capacity drying
- Robust Design: Thermally fused polypropylene chamber with a blue epoxy-coated steel door for added structural
- Flexible Drying and Easy Cleaning: Durable stainlesssteel rod and removable shelves for flexible, secure drying and easy cleaning
- **Key-lock Doors:** Secure, tamper-resistant doors with keyed entry to protect evidence and maintain chain of
- Four-Stage Filtration: Includes dual pre-filtration, HEPA filtration, and gas-phase filtration to capture contaminants and odours.
- Enhanced Mobility: Locking casters for easy transport and repositioning.
- Efficient Airflow: Two-speed blower increases airflow when the door is open, ensuring drying efficiency.

Optional Features:

- Modular waste removal pump with timed shut-off.
- Optional UV light for chamber irradiation to further reduce cross-contamination risks.

Mystaire® Downflow Latent Print Dusting Station

A standalone, ductless workstation designed to protect technicians from the hazardous effects of latent print powders. Featuring advanced filtration and an ergonomic design, it ensures a clean, safe environment for developing latent fingerprints and dusting crime scene evidence.

- Downflow Airflow: Captures and contains fine particulate matter, directing contaminants downward through the stainless-steel work surface.
- Durable Construction: Features a lightweight, corrosion-resistant aluminium frame with a powder- coated exterior, ensuring longevity.
- Stainless Steel Work Surface: Offers a sturdy and easy-to-clean surface for handling evidence.
- Fluorescent Lighting: Internal lighting improves visibility for detailed inspection of latent prints.
- Automatic Filter Monitoring & Alarm: Keeps track of filter performance, notifying users when maintenance is required.
- Advanced Filtration: Equipped with HEPA or ULPA filters that remove fine powders and contaminants, releasing clean, filtered air back into the workspace.
- Ergonomic Design: The adjustable work surface height promotes user comfort and efficiency during long hours of work.











LASEC® FORENSICS





Mystaire® Cyanoacrylate Fuming Cabinet

A range of automated latent print development systems offering a safe and effective environment for developing latent prints on non-porous surfaces. Designed with advanced features, these cabinets ensure precise control over the fuming process for reliable results.

- Fully Automated System: User-programmable development system with a microprocessor controller for streamlined and precise operation.
- LCD Display: Provides clear access to fuming options and development parameters.
- Precise Humidity Control: Allows for accurate regulation of relative humidity between 30-80%, ensuring optimal conditions for cyanoacrylate fuming.
- Customisable Fuming Cycles: Enables user-defined fuming cycle lengths to accommodate various evidence types.
- Even Vapour Distribution: An internal circulation fan ensures uniform distribution of cyanoacrylate vapor throughout the chamber.
- **Durable Construction:** Crafted with powder-coated aluminium and an automatically locking safety glass viewing door for enhanced safety and durability.

Mystaire® Shortwave UV Lightbox

This high-performance sterilisation tool eliminates bacteria and viruses from various surfaces using powerful UV irradiation. Designed for forensic applications, it features an advanced microprocessor controller, built-in safety mechanisms, and durable construction, making it ideal for disinfecting forensic equipment, personal protective gear, and other critical items.

- Powerful UV Irradiation: Delivers high-energy UV light to kill bacteria and viruses on various surfaces.
- Microprocessor Controller: Monitors UV bulb operation and features a digital UV timer, allowing users to set irradiation time up to 59 minutes for precise sterilisation.
- Safety Features: UV light automatically switches off if the door is opened, preventing user exposure. The system ensures UV light is only operational when the door is securely closed.
- **Durable Construction:** The main chamber is made from thermally fused polypropylene, while the polycarbonate clear door reflects UV light, ensuring safe viewing and optimal sterilisation.











HISTOLOGY



Fixation

Convenient and safe formalin containers that integrate seamlessly into existing lab workflows.

- Leak-proof and Secure: Prevents exposure to hazardous formalin fumes.
- Ready-to-Use: Pre-filled containers eliminate manual preparation, simplifying workflows.
- Durable and Compliant: Constructed to meet standard laboratory protocols.
- Versatile Options: Available in 20 ml, 50 ml, and 100 ml sizes to suit different needs.

Tissue Embedding Center

Designed for precision, reliability, and ergonomic comfort — making every step of your workflow easier.

- Modular Design: Includes dispensing, cryocooling, and heating consoles for flexibility and efficiency.
- Consistent Performance: Precision temperature control ensures uniform embedding quality.
- User-Friendly: Heated moulds and ergonomic layouts simplify operation.



- Stainless steel base moulds in various sizes
- Paraffin wax blocks
- Heated forceps





Tissue Processing

Efficient and safe tissue preparation with advanced tissue processors designed for both high- and low-throughput labs, ensuring optimal processing for diverse specimen types

Automatic Vacuum Processor - 300 cassettes

- Programmable vacuum and pressure for enhanced infiltration
- Active carbon filters for odour control
- Touchscreen interface with optimised protocols

Benchtop Tissue Processor - 150 cassettes

- Compact design for low throughput labs
- Automatic and manual settings
- Customisable reagent stations

Basic Tissue Processor - 100 cassettes

- Manual operation for full control
- Customisable reagent sequence
- Simple, cost-effective design

Consumables and Accessories

- Processing cassettes (various colours and sizes)
- Reagent-grade alcohols and xylene alternatives
- Paraffin wax blocks









Sectioning

Achieve precision in tissue sectioning with our Histo-Line Laboratories' advanced Microtomes and Cryostats, designed for seamless forensic workflows.

Microtomes

Manual Microtome - 1 - 60 µm

- Selectable retraction and rapid roughing button for easy adjustments.
- Economical and high-quality manual sectioning.
- Suitable for paraffin sections and finer cuts for research.

Semi - Automatic Microtome - $1-60 \mu m$

- Motorised feed with manual cutting aid.
- Optional "rocking mode" for enhanced sectioning.

Fully Automatic Microtome - $1-60 \mu m$

- Touchscreen display and external control panel.
- Programmable with a "Memory" function for quick return to reference position.
- Automatic electronic brake for safety.

Consumables and Accessories

- Processing cassettes (various colours and sizes)
- Reagent-grade alcohols and xylene alternatives
- Paraffin wax blocks





Histo-Line Cryostats

Handle frozen tissue sectioning with ease using cryostats built for safety and efficiency.

- UVC disinfection minimises contamination risks, maintaining sample integrity.
- Maintains temperatures as low as -35°C.
- Ergonomic design with manual and automatic defrost options.

Consumables and Accessories

- Disposable blades (low- and high-profile options).
- Brush sets for cleaning.
- Specimen discs and clamps for secure placement.









Staining

Manual and automated staining solutions that simplify slide preparation, ensuring efficiency and reliable results.

Manual Staining

- Cost-effective and flexible solutions for low-throughput labs.
- Compact design includes 12 reservoirs with a 300 ml capacity, ideal for various staining protocols.

Automated Staining

- High and low throughput options designed for efficiency and consistency.
- High throughput process up to 200 slides per hour (ATS200) or 76 slides (ATS2010) simultaneously for efficient workflows.
- Flexible staining options, compatible with both universal reagents and Histo-Line's consumables for quality and reproducibility.
- Simultaneous processing of different staining protocols.
- Versatile applications for routine and special stains, with models catering to both medium- to high-volume labs

Consumables and Accessories

- Staining jars and racks for manual protocols
- Ready-to-use stain solutions
- Slide baskets compatible with automated system





Solvent Recycling

Our PathTrue™ laboratory solvent recyclers improve operational and laboratory processes through reduction of solvent waste and disposal costs, while enabling you to maintain an efficient and sustainable operation without compromising quality or safety.

- Recycle Xylene, Alcohol and Acetone with 90-95% recovery
- Recycle Formalin with 80% recovery
- Purity up to 99%
- Capacities available: 10, 20, 40l







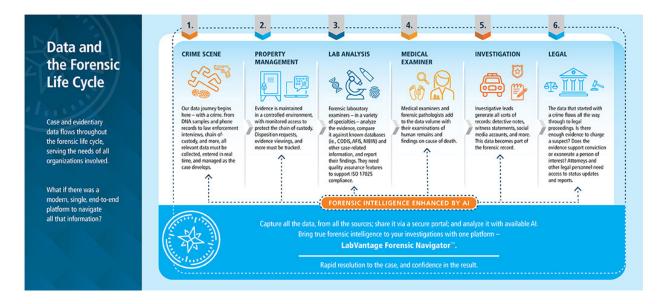


LabVantage® Forensic LIMS: A Comprehensive Solution for the Forensic Life Cycle



With over 40 years of expertise, LabVantage® provides the most reliable and adaptable forensic LIMS solution on the market. Designed to integrate all aspects of the forensic life cycle, LabVantage offers an end-to-end solution, allowing case management from crime scene to courtroom, all within one platform.

The Forensic Navigator Package goes beyond traditional LIMS, incorporating tools tailored for forensic analysis and case management. Combined with the LabVantage® MAP (Morgue, Autopsy, Pathology) module, this platform supports stakeholders throughout the forensic process.



How LabVantage® Forensic LIMS Supports Key Stakeholders:

- **Crime scene investigators:** Document the scene with images, videos, and reports, all through an online portal.
- Police Officers: Pre-log evidence, check case status, and retrieve released reports.
- Survivors: Receive updates on the submission and processing of sexual assault kits.
- Medical examiners: Document observations, track next-of-kin, and capture interview notes.
- Forensic supervisors and examiners: Manage analytical processes from assignment to final report review.
- Lab managers: Ensure SOP compliance and track turnaround times.
- Lab operations and equipment managers: Manage and calibrate instruments, ensuring compliance and proper maintenance.
- **Quality control managers:** Use SDMS functionality to securely store files with full traceability and search functions.

This unified platform facilitates every phase of the forensic investigation, streamlining processes and eliminating data silos while ensuring a fully traceable and unbroken chain-of-custody with strict compliance to regulatory standards (ISO 17025, CAPAs, CALEA, 21 CFR 11, EPA, GxP).

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