



Getinge Life Science

Biomedical Research Solutions

This document is intended to provide information to a North American audience.

GETINGE 



Getinge Life Science

– with passion for the future

Getinge provides solutions for your unique challenges, guaranteeing the integrity of scientific data and ensuring the safety of your personnel.

Getinge is a world leader in Life Science cleaning and sterilization technologies with solutions to meet both common and highly specialized process needs.

Whether you are producing the cures of today or discovering the cures of the future, preventing contamination from occurring is the common challenge. We are there to support you in ensuring a productive and contamination-free research or production environment.

Getinge brings together a comprehensive offering of equipment, application engineered solutions, technical expertise, project management, architectural planning, consultative services, and service support.

Together, our solutions meet both common and highly specialized process needs for contamination prevention in biomedical research, biopharmaceutical production, medical device manufacturing, and laboratory applications.

Our Biomedical Research Solutions

– protecting research and personnel



The integrity of scientific data produced in biomedical research facilities is of paramount importance to humanity. Safe and contamination free research facilities are therefore essential. This ever-present need dictates that research facilities are clean and contamination-free, securing the research result as such, and that researchers and technicians are protected from allergens and pathogens. Proper facility design, equipment and process work flow guarantees the integrity of the scientific data produced.

A safe vivarium environment

The vivarium is a controlled environment designed to protect both research and personnel. Getinge systems and solutions meet the needs of the vivarium, providing washing and sterilization resources, as well as automated solutions for cage reprocessing and bedding handling.

Biocontainment

Preventing biohazardous material from contaminating the research environment as well as the external environment is a challenge of utmost importance, especially in BSL-3 and BSL-4 conditions. In addition to assuring research integrity, a good waste handling system will mean personal safety for researchers and technicians.

Getinge solutions support you to safely and efficiently handle waste according to classification and bio-safety level. We also provides consultation services, support and guidance regarding your facility layout and material handling to minimize the risk of (cross-)contamination in your working environment.

Architectural Planning



Whether you are planning a brand new site or need to renovate an old facility, Getinge provides the highest level of planning support to your architects, planners, engineers and general contractors.

We can assist with CAD layouts and design support, producing complete AIA specifications along with equipment drawings and technical specifications, detailed utility analysis, capacity planning and full plan drawings ensuring code compliance while maintaining all proper service clearances. Our main focus is to

always provide the most cost effective and reliable solution to fulfill your specific needs.

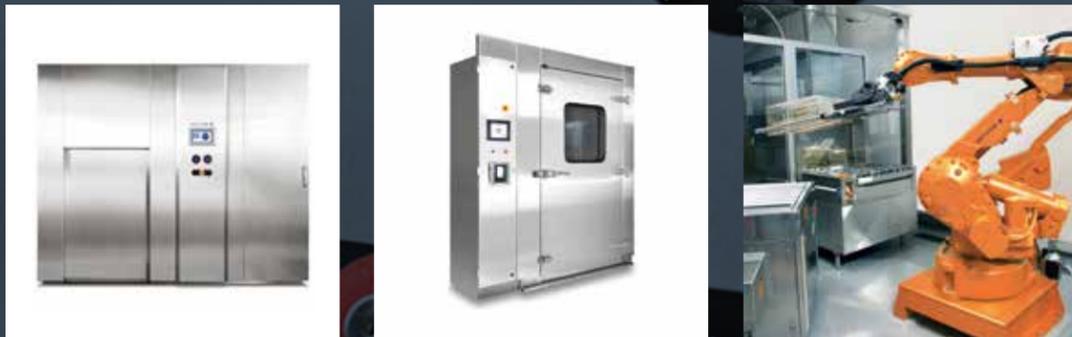
Each facility's specific requirements and layout present challenges. Thanks to decades of presence within Biomedical Research and our extensive installed base, we have gained a vast experience of project management and project execution. Our knowledge will significantly contribute to optimizing your facility planning to retrieve maximum throughput with the best possible and cost effective solution.

Products

– quality without compromise



With more than 100 years of experience we deliver the optimum equipment for your needs.



GSS R Steam Sterilizers

The GSS R is engineered with high-quality components chosen to enhance contamination control, encourage a sanitary process, promote best practices and deliver dependable outcomes critical to research, personnel and environmental protection in a biomedical research facility.

Construction and design details, from highly polished stainless steel surfaces to enhanced ergonomic machine interfaces, are carefully integrated into a highly functional system critical to quality assurance.

The GSS R can swiftly be put into operation thanks to the refined Quality Process

Management System that secures ease of validation and compliance to the intent of the Good Automation System and ensures compliance to global and regional regulations.

The result is an improved process and solution, designed for easy use and integrated in a controlled biomedical research environment.

It is also engineered to reduce your eco-footprint, with several factors that optimize energy and water use, including efficient insulation and minimal mass of pressure vessel.



GEB Steam Sterilizers

Like all research facilities, bio-containment suites need sterilizers for sterilization and decontamination. The pathogenic nature of the waste material from such facilities, coupled with the use of the sterilizer as a barrier between the facility and the outside environment places special requirements on the sterilizer design and processes used that standard sterilizers cannot fulfill.

The Getinge GEB series is a standardized range of dedicated biocontainment sterilizers and are specially designed for use in BSL-3 and BSL-4 facilities. They come in several chamber sizes and are available with one or two doors.

The GEB sterilizer is a part of the barrier between the different zones within the

biocontainment facility. A biological seal prevents any crosscontamination due to a hermetically sealed design. The design is independently validated and certified.

In addition, features like the Slideloc™ passive door locking system further secures that the integrity is kept in place. The Slideloc™ system does not rely on utilities to maintain the seal between chamber and door. This ensures that the barrier between the different zones is not compromised.

Air from the process within the sterilizer will be either filtered through sterile membrane filters or through an incineration system to eliminate release of harmful pathogens being exposed to the surrounding environment.

Biomed Washers

Getinge Vivus washer systems reduce the risk of contamination on animal care equipment, ensuring the accuracy of your data. Working in cooperation with users, engineers, architects and facility planners, our equipment has been developed to satisfy the unique demands and stringent regulations of the industry.

Getinge Vivus Cage and Rack, Cage and Bottle and Tunnel Washers are built to exacting standards to provide high efficiency and throughput within any facility.

Our systems are based on compatible modular units that can be quickly integrated and installed to form complete customized solutions based solely on your needs.

Enhanced product features guarantee operator safety and improve ergonomics during the loading and unloading process.

The robust design of the washer minimizes downtime and increases reliability, maintaining a continuous throughput.



Robotic Cage Processing and Bedding Systems

Regular cage cleaning, sterilization, and animal bedding replacement is vital for animal welfare and contamination control in biomedical research facilities.

The Getinge Automated Cage and Bedding Handling System is an automated bedding transportation solution facilitating bedding handling for laboratory animal caging systems. The system combines industrial robots for bedding disposal and dispensing with vacuum transportation systems. One or more industrial robots empty the cages into the dump station and place them in a tunnel washer. After cleaning and decontamination, the robots refill the cages with bedding and the cages are staged for the sterilization process. After sterilization the cages are placed in the designated location for collection. The robotic automation combined with the bedding handling ensures minimized operator exposure to potentially harmful airborne dust and allergens, improves ergonomics and maximizes the throughput.



Laboratory Equipment

Accuracy in laboratory research results is of critical importance to any lab. Equipment used for reprocessing of labware must deliver reliable and repeatable results for a wide variety of lab applications, space and workflow settings. Availability of lab utensils and glassware free from residual chemicals and micro-biological soils are therefore essential.

Labware need be clean, dry and sterile in order to eliminate risk of transfer of living organisms or endotoxins.

With each lab's unique settings and challenges in mind, Getinge supports your lab operations with laboratory washers, sterilizers, chemicals and loading accessories to efficiently ensure contamination free research.



Consumables

Getinge offers a wide range of consumable products providing consistent and repeatable results.

The portfolio includes a complete line of cleaning, decontamination and biological indicator products specially formulated to enhance the effectiveness of your washing and sterilization equipment.

Several of the consumable products are an integrated part of Getinge's customer solutions, helping to provide better outcomes at a lower cost.

Consumables include:

- Biological indicators
- Sterilizer monitors
- Record-keeping systems
- Detergents
- Disinfectants
- Personnel monitoring
- Equipment maintenance



**Service
Wherever, Whenever**
– you can count on our commitment

The Getinge service network provides expert preventive, predictive and reactive maintenance to give you control, ensure reliability and allow you to focus on your research. Our Risk Management Services are designed to support the work of your team, to help you reducing the incidence of errors and maintaining a high output.

A good relationship is built on trust and we are committed to serving your needs wherever you are in the world. You'll have every possibility to design a flexible service plan that's just right for you.

Our factory-trained service technicians have an unmatched understanding of your equipment to help identify potential problems before they happen, and quickly resolve them if they occur.

As the world's largest supplier of decontamination and sterilization equipment, there is virtually no situation Getinge service professionals haven't had the opportunity to address. That's also why we are routinely called upon to service and maintain equipment produced by other suppliers based on our industry-leading response time, process knowledge and hands-on familiarity with a wide range of Life Science equipment.

In addition, your Getinge technician is just a text or phone call away from an entire support team that stands ready to provide additional assistance when necessary to quickly resolve even the most troublesome issues.

Our Services include:

- Consultative service
- Spare parts packages
- Calibration services
- Upgrade packages
- Operator and maintenance training
- Process verification
- Validation services



Getinge is a global provider of innovative solutions for Life Science companies and institutions, operating rooms, intensive care units and sterilization departments. Based on our firsthand experience and close partnerships with Life Science companies, clinical experts, healthcare professionals and medtech specialists, we are improving everyday life for people – today and tomorrow.

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