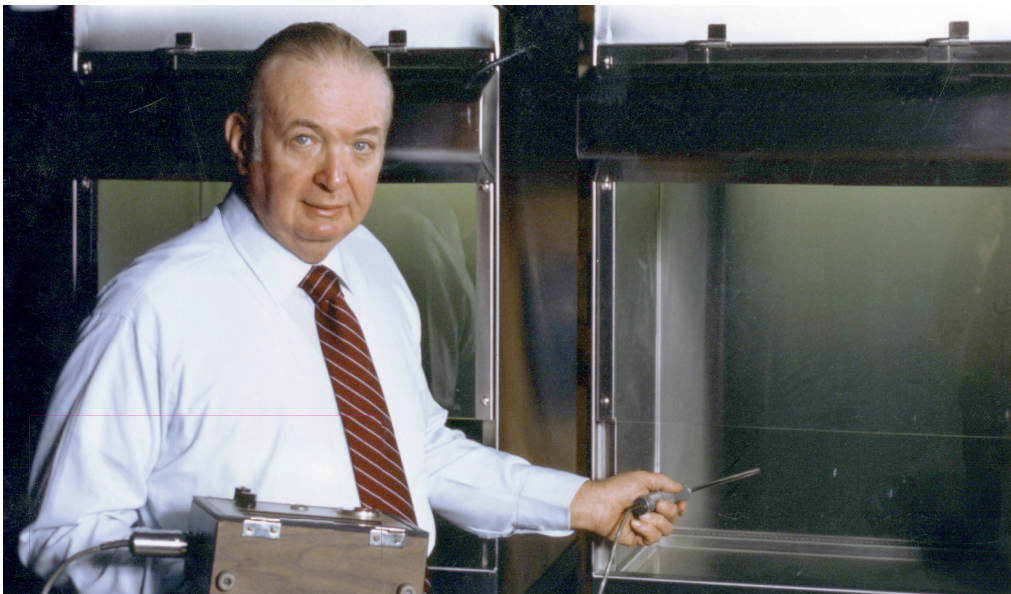


Laminar flow workstations  
Biological safety cabinets  
CAI/CACI  
Powder hoods  
Cleanroom pass through boxes  
Mobile pharmacies  
Podular pharmacies

## Pharmacy









## Creating Environments that Serve Life Science Innovation and Advance Global Health

Germfree has created innovative, compliant pharmacy equipment and facility solutions for six decades to serve experts in compounding pharmacies, research institutions, and public health. Quality, craftsmanship, and superior design has been a staple since Germfree's founding in gnotobiotic research.

From cutting-edge institutions to resource-challenged countries, Germfree established itself as the worldwide partner of choice in advancing global health with pharmacy solutions that enhance compounding operations and enable advanced research capabilities.





## Pharmacy solutions: Robust, American-Made facilities and equipment

Today, Germfree is the standard for compounding pharmacy solutions worldwide. Germfree's past has enabled the groundbreaking innovations that form the foundation for Germfree's quality and fabrication today. At Germfree's state of the art manufacturing facility located in Ormond Beach, FL, USA, all Germfree equipment and facilities are built to the highest quality standards and undergo rigorous testing to ensure unmatched operator safety.



SIX DECADES OF  
PHARMACY  
EXPERIENCE



175,000 FT<sup>2</sup> (16,000 M<sup>2</sup>)  
OF AIR CONDITIONED  
MANUFACTURING SPACE



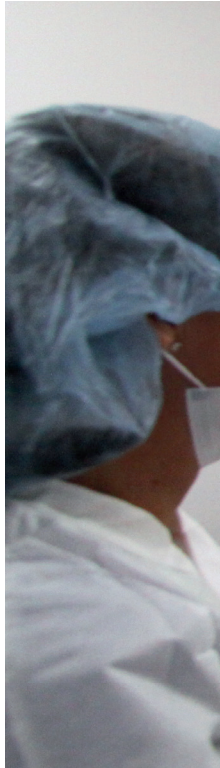
INSTALLATIONS  
ON 6 CONTINENTS



1000s OF COMPLEX  
EQUIPMENT INSTALLATIONS



100s OF GLOBAL  
FACILITIES DELIVERED









Providing  
superior  
product  
protection

From laminar flow hoods to mobile and  
podular compounding facilities, Germfree  
provides complete solutions  
for superior product safety.

## Vertical laminar flow workstations

Germfree's line of laminar flow hoods are the global standard in product protection and ergonomics. Built with the knowledge gained from more than six decades of pharmacy product manufacturing, Germfree's Vertical Laminar Flow Workstation utilizes a bottom intake which pulls room air down, below the work zone, enhancing the efficiency of airflow within the hood and the surrounding room.

Germfree's hoods are ergonomic, and designed with the operator in mind. Adjustable work-heights and work area lighting deliver a comfortable yet effective workspace.

### Vertical Laminar Flow

Available in 3', 4', 6' and 8' models





## Horizontal laminar flow workstations

The Horizontal Laminar Flow Cabinet is constructed of quality, all-welded stainless steel with a pharmaceutical grade finish. The fluorescent light housing is externally mounted to provide optimum lighting into the work area. The acrylic top and side panels allow for additional ambient light and visibility. Our SpillGuard™ feature is utilized on the sides and back of the full-width work area. The CurveFlex™ forearm support feature provides superior operator comfort.

### Features & options:

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SpillGuard™

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CurveFlex™ Forearm

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Electrical Stand Height Adjustment

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Duplex Electrical Outlet

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### Why Stainless Steel?

Germfree fabricates all of our standard pharmacy equipment from stainless steel. Equipment within a biocontainment facility needs to be fabricated from robust materials that can withstand harsh cleaning processes. Additionally, "Some metallic surfaces can corrode, and the powdery oxide particles that are produced can spread throughout the cleanroom. Therefore, untreated steel and untreated aluminum should be avoided in most facilities. The use of stainless...minimizes these problems."

*Whyte, William. Cleanroom Technology: Fundamentals of Design, Testing and Operation. John Wiley & Sons, 2011*



### Horizontal Laminar Flow

Available in 3', 4', 6' and 8' models

## Biological safety cabinets

Germfree's Biological Safety Cabinets (BSC) provide protection for the user, product and the environment from particulate and aerosol hazards, featuring a positive pressure ISO 5, HEPA-filtered environment. Made with stainless steel and height-adjustable, Germfree's BSCs are both cleanable and ergonomic.

These BSCs are designed for the safe handling of cytotoxic agents and other hazardous drugs in Pharmacy and Oncology settings and eliminate cross-contamination and accidental release of carcinogenic aerosols and drugs to the outside environment.

### Available options:

Class II, Type A2 – Approximately 70% of the air from each cycle is recirculated through the supply HEPA filter while the remaining air is discharged from the biosafety cabinet through the exhaust HEPA filter

Class II, Type B2 – 100% of the air entering the cabinet is exhausted out of the building

### American Made

Proudly engineered and manufactured in Florida, USA for six decades.

### Class II Biosafety Cabinets

Available in 2', 3', 4', and 6' models





## Compounding aseptic isolators

Germfree's Compounding Aseptic Isolators (CAI) are configured to provide either positive or negative pressure ISO Class 5 HEPA filtered unidirectional (laminar) airflow for patient, personnel, and product protection.

Units are factory configured for use with non-hazardous or hazardous preparations to satisfy USP <797> / <800> and NIOSH requirements. The operator is provided a complete barrier from materials being manipulated in the work area through the use of a highly ergonomic 2, 3, or 4 glove system.

### Laminar Flow Glovebox Isolator (LFGI)

The LFGI series can be configured as either a CACI for hazardous drug compounding or as a CAI for sterile non-hazardous compounding. A HEPA-purge airlock filters all air entering or exiting the unit to ISO Class 5.

### Versaflow™

Germfree's VersaFlow™ is a Laminar Flow Compounding Aseptic Isolator. The VersaFlow™ provides the most practical and versatile solution for I.V. compounding in the hospital pharmacy and cleanroom.

### VersaFlow™

Available in 3', 4', and 6' models



### Laminar Flow Glovebox Isolator

Available in 3', 4', and 6' models

## Powder hoods

Germfree's Compounding Safety Enclosures (CSE) provide maximum user protection. These Powder Containment & Powder Weighing Hoods protect the operator while weighing and transferring non-sterile powders and compounds. Germfree CSE units provide a large work area with hinged windows for the easy ingress and egress of large equipment.

Germfree CSEs are constructed from high quality stainless steel and acrylic. The stainless steel surfaces inside the hood are impervious to most chemicals and are easily cleaned. The CSE is a reliable, low maintenance and cost effective solution for safely working with powders.

### American Made

Proudly engineered and manufactured in Florida, USA for six decades.

### Powder Weigh Hoods

Available in 3', 4', and 6' models

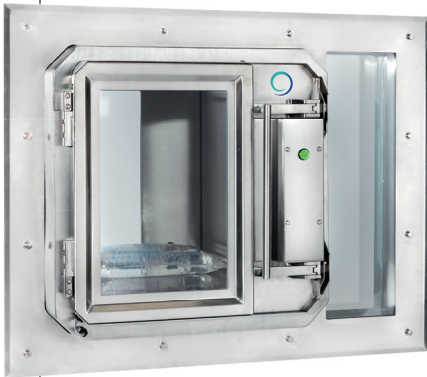




## Cleanroom pass through airlock

Germfree has leveraged decades of facility design experience to develop a pass-through airlock uniquely engineered to meet the demands of a modern pharmacy cleanroom. All stainless steel construction with coved interior and exterior corners and a pharmaceutical grade finish make these pass-through boxes the most cleanable and robust on the market. When materials are placed

within the pass-through a HEPA-purge cycle is initiated, which rapidly exhausts and filters the interior air until it has reached ISO Class 7. Interlocks assure that both doors cannot be opened simultaneously and that the receiving side door remains locked until the HEPA-purge is complete. These units are available in a variety of sizes and are designed to fit seamlessly into your new or existing cleanroom facility.



### Pass Through Boxes

Available in 16" x 16", 24" x 16", and 24" x 24" models



## Mobile compounding pharmacies

USP <797> / <800> Compliant, Germfree's mobile pharmacies are turnkey facilities, integrated into a trailer platform that seamlessly integrates into your pharmacy.

Germfree's bioGO Mobile Pharmacies are the ideal solution for seamlessly maintaining pharmacy services during facility renovation. Germfree's Compounding Pharmacy Rental/Lease Program allows for a smooth and quick transition during your renovation.

Germfree's mobile pharmacies may also play a critical role in continuing USP 797/800 operations during emergencies or after a natural disaster. Our units can be equipped with emergency generators to be sustainable when regular facility power is interrupted. Germfree's rental pharmacies are also capable of providing surge capacity for adding compounding resources to your existing operations.

### Features:

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ISO 7 Buffer Rooms (Haz/Non)

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Seamless Arcoplast walls

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Ample equipment space

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Durable cleanroom flooring

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## Podular compounding pharmacies

### The fast and reliable solution for new compounding capacity.

Germfree offers USP <797> & <800> compliant pods and podular cleanroom facilities for sterile and hazardous drug compounding. Configurations are available for free-standing pharmacies, integration within or adjacent to existing buildings, and full 503B compounding centers. This single-source solution provides a complete pharmacy solution with all standard equipment. Open ballrooms and high-ceilings available.

Germfree's Compounding Pods are structural and can be configured in multi-building, multi-level layouts with placement of the MEP/HVAC on top, inside, or adjacent to the pods, maximizing usable cleanroom space. Our Pods can be single-building structural facilities or ISO containers with integrated MEP/HVAC. These facilities can be installed as a freestanding outdoor building or within a shell building (box-in-box).

### Features & options:

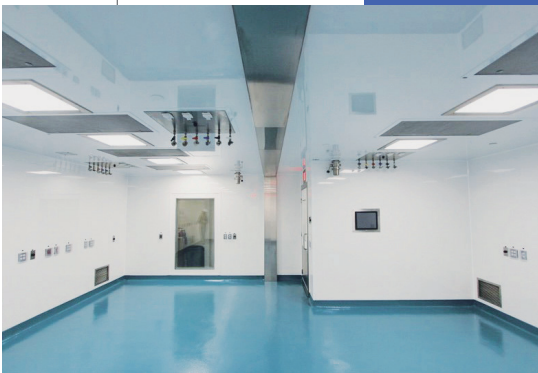
Proven solution — operational in an expedited timeline

Manufactured in our controlled environment to control cost, scheduling, and risk

Free-standing Hazardous Drug Suites may eliminate the need for complex ducting in multi-story buildings

Larger configurations ideal for Compounding Centers / 503B Pharmacies

Exterior designs to match your existing facility



Germfree's bioGO® Podular Pharmacies are available in standard configurations to meet a wide variety of applications and are engineered and constructed to meet or exceed the quality of brick and mortar construction while reducing risk and accelerating time to market.



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