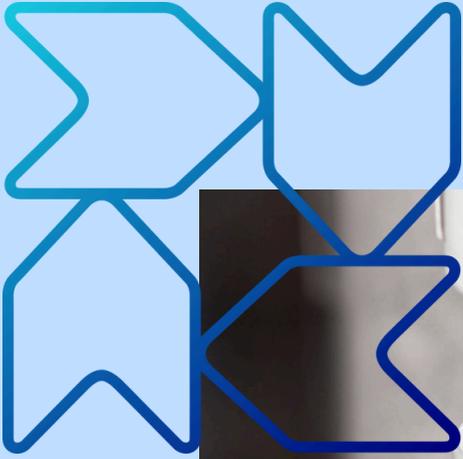




PHARMACEUTICAL INDUSTRY

CLEANROOM LAUNDRY SOLUTIONS





INTRO

The pharmaceutical industry develops, manufactures, and distributes a wide range of medical products to prevent, treat, and cure diseases. This includes prescription and over-the-counter drugs, vaccines, allergy treatments, skincare medications, and medical devices such as inhalers and injectors.

It plays a key role in global health, addressing conditions like infections, chronic illnesses, cancer, mental health, and autoimmune disorders.

Cleanroom garments are essential in pharmaceutical manufacturing to prevent contamination from particles, microorganisms, and human skin cells.

This is especially important in aseptic processing, where maintaining a sterile environment is critical.

Aseptic gowning involves carefully donning sterilised garments in a controlled sequence to avoid introducing contaminants.

Guidelines for cleanroom clothing and gowning procedures are outlined in GMP Annex 1, which sets strict standards for manufacturing sterile medicinal products. Compliance with Annex 1 helps ensure product quality, patient safety, and regulatory approval.

WE UNDERSTAND PHARMA'S CRITICAL NEEDS, AND SUPPORT STERILITY THROUGH EXPERT LAUNDRY SOLUTIONS.



CLEANROOM COMPLIANCE IS ESSENTIAL IN THE PHARMACEUTICAL INDUSTRY TO ENSURE PRODUCT STERILITY AND PATIENT SAFETY.

Adhering to strict guidelines, such as those outlined in GMP Annex 1 and IEST-RP-CC003.5, helps control contamination risks in different cleanroom environments. Proper selection and use of cleanroom garments play a critical role in maintaining these recommendations by minimising the introduction of particles and microorganisms. The chart below provides clear guidance on the appropriate garments to wear in various controlled environments, supporting full compliance and optimal contamination control.

Classification zone	Gowning recommendations according to GMP Annex 1			IEST-RP-CC003.5 Institute of Environmental Sciences and Technology: Garment System Considerations for Cleanroom and Other Controlled Environments.			
	A/B	C	D	ISO 5	ISO 6	ISO 7	ISO 8
Undergarments	M	M	M	R	TS	TS	TS
Hairnet/ beard cover	M	M	M	R	R	R	R
Overshoes or disinfected shoes		M	M	TS	TS	R	R
Coat		R	TS	TS	TS	R	R
Coverall	M	TS**	TS**	R	R	TS	TS
Hood	M	TS	TS	R	TS	TS	TS
Mouthmask	M	TS	TS	R	TS	TS	TS
Boots	M			R	R	TS	TS
Gloves	M			TS	TS	TS	TS
Cleanroom goggles	M			R***	TS***	TS***	TS***
Cleanroom socks	M	M		TS	TS	TS	TS
Sterilisation	M*	TS	TS	TS	TS	TS	TS
Minimal frequency of change	Per entry	Per day	Per day/ 2x per week	Per day	3x per week	2x per week	2x per week

M: Mandatory - TS: Task specific - R: Recommended

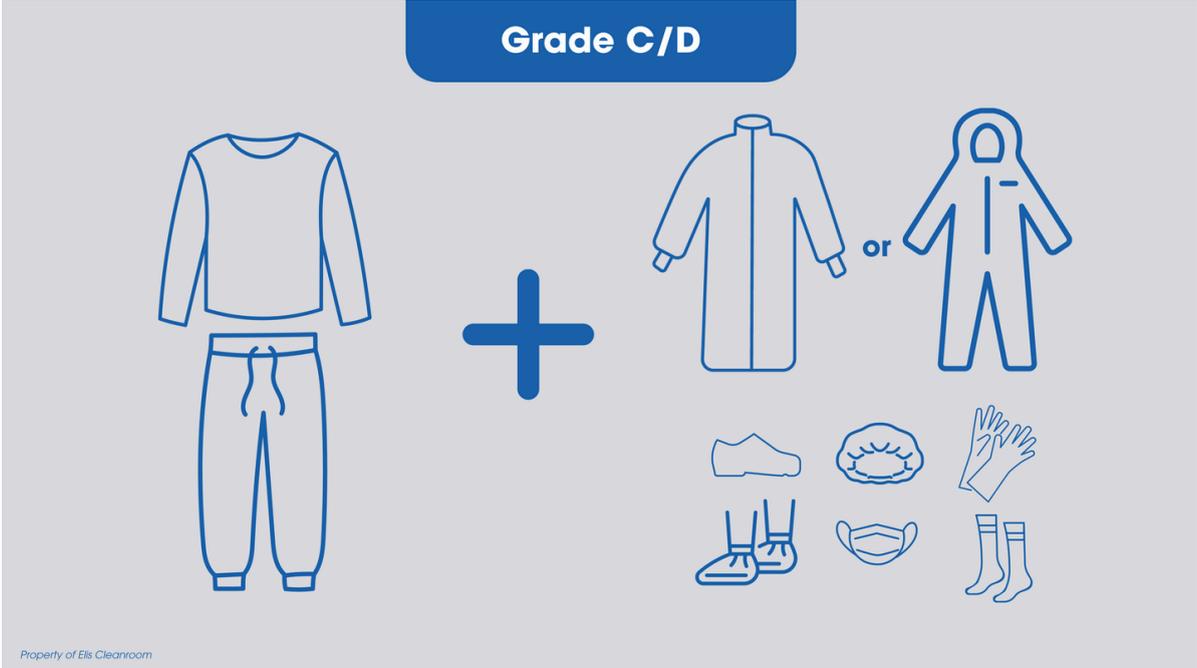
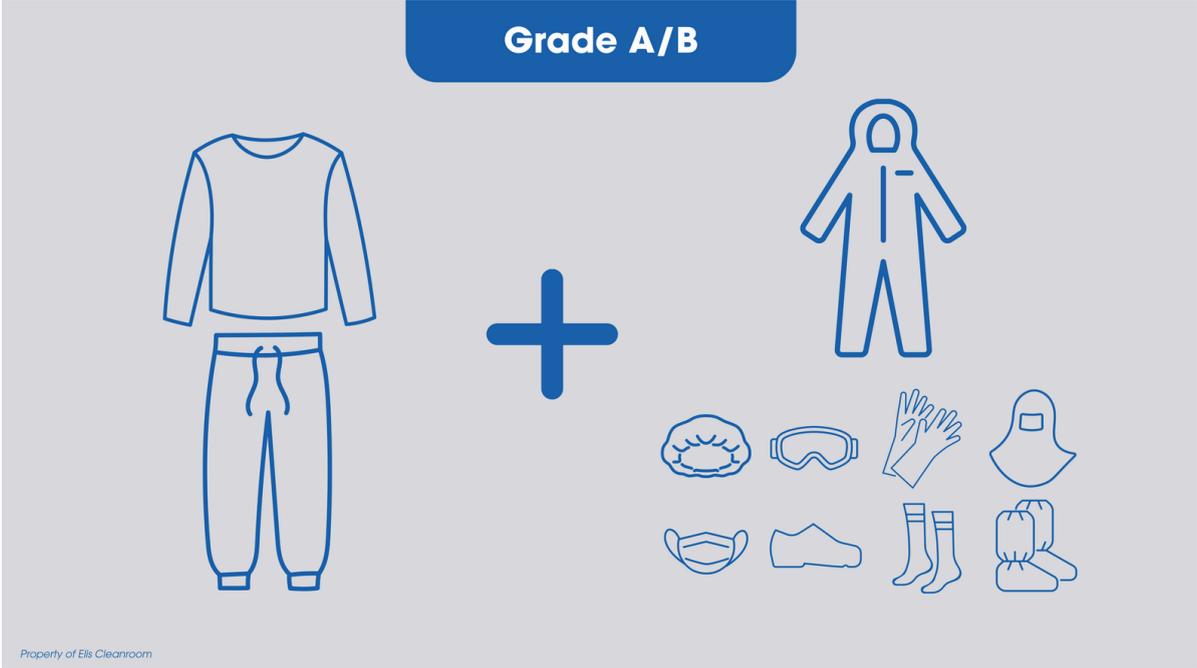
We perform Helmke Drum testing for measuring the number of particles remaining based on IEST RP CC 003.5

*only as upper garment

**only when a general protective suit (one-piece) is chosen as undergarment.

***only if goggles are meant as face-covering

RECOMMENDED GARMENT COMBINATIONS



The use of a coat, coverall, face mask and/or gloves in Grade C/D is determined by your specific environment and the applicable Standard Operating Procedures (SOPs).

STERILE ENVIRONMENT OUTERWEAR

GRADE

A, B

ISO

4, 5, 6

Through close collaboration with industry leaders, we've developed cutting-edge solutions that align with the stringent requirements of this innovative and future-focused industry.

We have listed three unique categories with a comprehensive solution to help you select the option that best fits your needs and environment(s).

Each category is designed to address specific needs, ensuring optimal performance and compliance in your processes.



OUR TOP SOLUTIONS

Dropdown solutions

BESTSELLER



We offer a comfortable and ergonomic garment concept that protects your production against human and external contamination.

It is our top-selling type of coverall in the sterile range.

We have integrated hood models and without hood, depending on the type of coverall your choice you will need to wear a separate hood, appropriate boots, a single-use (sterile) mouth mask, goggles and 2 pairs of sterile gloves.

PA solution

TRUSTED CLASSIC



The PA coverall is suitable for a Grade A/B environment and has a breathable fabric.

This solution maintains effective particle filtration and contamination control. Specially designed for aseptic gowning,

In addition to the closed hood and mesh mouth mask, you also need to wear appropriate cleanroom boots, a single-use (sterile) mouth mask, goggles and 2 pairs of sterile gloves.

ElisAir solution

ULTIMATE PROTECTION



The ElisAir cleanroom hood and device provides an all-in-one cleanroom garment solution with ventilation system supporting a controlled airflow while also providing ultimate protection against contamination in your sterile environment.

This garment solution is worn in combination with a cleanroom coverall, appropriate boots, a single-use (sterile) mouth mask (optional) and 2 pairs of sterile gloves.

ALASKA CTRL® DROPDOWN COVERALLS >

Unlike traditional coveralls, this Dropdown coverall, Alaska CTRL®, is the type of coverall that is pulled on over the head and features a strategically placed open-end zipper between the legs, allowing the user to step in and seal the garment without touching the outer surface. This ensures clean-to-clean contact at all times, supporting compliance.

By being packed inside out you only touch the inside of the Alaska CTRL® coverall thereby maintaining sterility. Alaska CTRL® is available in Sterile (integrated mouthmask) and Clean (open hood or without integrated hood) model.

A loop system on the hood ensures the frame and visor of the accompanying goggles are not touched, again providing sterility.



BEMICRON® < DROPDOWN COVERALLS

This aseptic Dropdown coverall, is available in different models: BeMicron® Original (integrated open hood) , GMP Comfort+ (integrated closed hood with mesh mouth mask) or 4all (without hood).

The eye-opening on the integrated models are designed to fit all protective goggles according to the GMP Annex 1.

Our BeMicron® coveralls have a fixed-end zipper between the legs.

Thanks to the innovative dropdown folding system and donning procedure, the coverall can be put on seamlessly. The operator's movements naturally flow in sequence, eliminating the need to touch the exterior and minimising the risk of contamination during the gowning process.

PA COVERALL >

This solution is especially designed for aseptic gowning, maintaining effective particle filtration and contamination control. The PA coverall has a rear closing zip to minimise contact with the front of the coverall.

The PA coverall is available with a variety of hood combinations. A loop system on the hood ensures a secure fit for accompanying goggles, again providing sterility.



ELISAIR SOLUTION



ElisAir is an all-in-one air ventilated garment system. It enhances air quality, visibility, and comfort, ensuring smoother operations in the cleanroom. Utilising a controlled laminar airflow mechanism, the air device extracts clean air from the controlled environment and evenly distributes it in front of the operator.

The exhaled CO₂ accumulates and is pushed downward, preventing the operator from inhaling it again. The airflow within the garment is carefully directed through the fabric barrier in a controlled manner. All verified through technical testing.

STANDARD COVERALL >

Our standard cleanroom coverall is the perfect solution for maintaining a pristine and contamination control environment. Manufactured from high-quality, comfortable materials, this coverall offers full-body protection with a secure fit.

The coverall has a hidden zip closure in the front, upstanding collar and knitted cuffs at the sleeves. For sterile environments (Grade A/B) you will have to combine this coverall with a separate hood, appropriate boots, a single-use (sterile) mouth mask, goggles and 2 pairs of sterile gloves.



^ OPEN/CLOSED HOOD

Our hood is available with or without integrated mesh mouth mask and has the perfect fusion of protection and comfort. The hood provides a reliable barrier against contamination. It offers a secure fit, thanks to the adjustable buckle or stud buttons in the back. We have the option to integrate a hidden zipper in the front for easy gowning.



^ OVERBOOTS

Engineered with advanced materials, these boots provide a barrier against particulate contamination and ensure a sterile working environment. The durable construction ensures long-lasting performance, making them a reliable choice for professionals working in cleanroom environments. Available with or without zipper in the front. Straps with buckle over the foot for optimal snug fit. Our soles have a secure anti-slip performance and are sterilisation resistant.

Our coveralls without hood can also be worn in Grade C/D environment as outer garment.

OVERSLEEVES



Available in TripleShield or MicronShield version. An essential item for the biomedical industry are protective oversleeves, designed to cover the arms, preventing contamination and maintaining sterile conditions in critical environments. Made from durable, high protective and liquid resistant textile they provide a barrier against particulates, biological contaminants, and chemicals. We offer two different options: multiple layered textile TripleShield and MicronShield version.



EYE PROTECTION

The Annex 1 recommendation states that in Grade A/B cleanrooms “sterile eye coverings should be worn to cover all facial skin and prevent the shedding of droplets and particles”.



< ELITE GOGGLES

With the option of direct or indirect vents our validated cleanroom Elite goggles offers both comfort and clear vision for the wearer. To minimise the risk of contamination, we have developed a cleaning process, which guarantees each goggles is consistently cleaned, disinfected and sterilised.



< CLEARCROWN GOGGLES

Particulate contamination can go both ways. Therefore, it is important to protect both the operator from harmful substances used in production and to protect the product being produced from human contamination. The ClearCrown can transform your direct vent goggles to indirect without condensation issues, without increase of particle emission, and without compromising on comfort for the wearer.

02

NON-STERILE ENVIRONMENT OUTERWEAR AND INNERWEAR

GRADE

C, D

ISO

7, 8

We recommend to wear Grade C/D garments with beard cover, hairnet, gloves, disinfected shoes or overshoes and socks.



STANDARD COAT

Keeping high filtration efficiency and comfort in mind, we've developed our cleanroom coat. Its zip front closure and knitted cuffs allow for a secure fit, enhancing overall wearer satisfaction. This coat is fully validated for use in non-sterile cleanroom environments. Engineered for professionals who prioritise precision and hygiene, our cleanroom coat is the perfect choice for uncompromising cleanliness in your critical workspaces, the optimal solution to avoid cross-contamination between different areas.



LABCOAT

Our lab coat is a knee-length, long-sleeved and made of lightweight, durable, and easy-to-clean PES/CO fabric. The coat serves both functional and protective purposes and has snap button front closure for easy gowning and degowning.



HAIRCAP

Made from durable, lightweight, and breathable materials, our reusable hair cap ensures that hair is securely contained, preventing contamination from falling into sensitive areas or products. It provides a comfortable fit while meeting the strict cleanliness requirements of industries like Biomedical and Pharmaceutical production, where contamination control is critical.

HIJAB >

A reusable hijab for use in Grade C/D cleanrooms is designed to provide both modesty and protection in controlled environments. The hijab acts as a barrier to prevent contamination, with a design that fits securely to prevent particles from escaping or entering. It is reusable, making it both eco-friendly and cost-effective while meeting strict cleanliness requirements.



^ OVERSHOES

Reusable overshoes are a durable and sustainable solution for protecting Grade C/D environments from contamination. Made from reusable, long-lasting textiles, they provide reliable slip resistance and a secure fit over regular footwear. Ideal for controlled environments, they help maintain hygiene while reducing waste compared to disposable alternatives.



^ CLOGS

Made from antistatic, non-slip material our footwear is available with or without reinforced toe-cap. During the laundering and disinfection process micro-organisms are eradicated, ensuring cleanroom footwear are not contaminated. The soles ensure excellent breathability and comfort for the wearer. Available in many colours they offer differentiation for zones of your facility.



^ CLEANROOM SOCKS

The proposed update to Annex 1 states "It is recommended that... dedicated socks be worn before entry to change rooms for Grade C and B." The one item currently rarely changed when entering the cleanroom is socks. They may harbour bacteria, pet hair, carpet fibres and are then placed in cleanroom clogs or shoes and pose a risk to contamination control. With various styles of cleanroom compatible socks available, both comfort and cleanliness are assured.

INNERWEAR GARMENT SETS

Our garment sets can be worn as innerwear in Grade A/B (ISO 4, 5, 6) cleanroom environments or as outerwear in Grade C/D (ISO 7, 8) areas.
May be combined with a cleanroom coat or coverall if required by your facility's protocol.

ELISPURE GARMENT SET >

Following GMP Annex 1 section 7.13i: appropriate garments that are dedicated for use under a sterilised suit should be worn before gowning. These requirements are met by ElisPure, a straightforward, high-quality product. Our competitive prices and fast delivery time allow us to meet the diverse needs and requirements of our customers. Our European stock garment set!



< SELF-PACKED GARMENT SET

Our Self-packed garment set, featuring an integrated textile pouch, helps reduce plastic packaging while offering an additional barrier for your critical environment. It is lightweight and comfortable. By integrating this garment set into your operations you can save up to 4 kilograms of plastic waste per operator annually!





SUPPORTING PRODUCTS FOR OPERATIONAL EXCELLENCE AND REGULATORY COMPLIANCE



< ELISCOVERS

Reusable covers offer a cost-effective and eco-friendly alternative to disposable materials. Easy to implement and tested in multiple countries, these covers provide a proven solution for maintaining cleanliness and sustainability. Our customised covers are designed for various operations, including equipment protection and internal sterilisation of tools and machinery. Additionally, we offer cleanroom laundry services depending on your needs.

MICRONSWEP® CLEANING SOLUTION >

The time and cost-saving lightweight MicronSweep™ cleaning system removes the need for water, wringers and trolleys in cleanrooms as the mops are pre-dosed outside the cleanroom. The system accumulates particles, cleans and dries – all at the same time. Special microfibres on the mop surface ensure that particles are not only removed from the surface being cleaned but are captured within the mop. A single 35cm mop can cover 15m² and a 50cm mop can cover 20m² surface.



< FLEXI MAT

The Flexi Mat high-performance cleanroom mat system prevents up to 99% of foot and airborne contaminants from entering or exiting critical control points. Without losing any contamination control properties due to overstrike, the high surface energy attracts, collects and retains dirt, dust and microorganisms between daily cleaning. There is a significant reduction in environmental waste as it stays in place for 6 months before being replaced by a new Flexi Mat.



PRODUCT OVERVIEW

STERILE ENVIRONMENT OUTERWEAR

GRADE

A, B

ISO

4, 5, 6

ALASKA CTRL® DROPDOWN COVERALLS (p. 8)



Alaska CTRL® Sterile
with integrated
closed hood



Alaska CTRL® Clean
with integrated
open hood



Alaska CTRL® Clean
without integrated
hood

BEMICRON® DROPDOWN COVERALLS (p. 8)



BeMicron® Original



BeMicron®
GMP Comfort+



BeMicron® 4all

OTHER COVERALLS (p. 9-10)



PA coverall



Standard coverall
(possible to combine
with ElisAir solution)

HOODS (p. 10)



Open hood



Closed hood



**ElisAir hood
and helmet system**

OVERSLEEVES (p. 11)



Customisable
and available
in multiple fabrics.

GOGGLES (p. 11)



Elite goggles



Clearcrown goggles

NON-STERILE ENVIRONMENT OUTERWEAR AND INNERWEAR

GRADE

C, D

ISO

7, 8

COATS (p. 12)



Standard cleanroom coat



Lab coat



Haircap



Hijab

HAIR PROTECTION (p. 12-13)

FOOTWEAR (p. 13)



Overshoes



Clogs



Cleanroom socks

INNER GARMENT SETS (p. 14)



ElisPure garment set



Self-packed garment set

SUPPORTING PRODUCTS



ElisCovers
(p. 16)



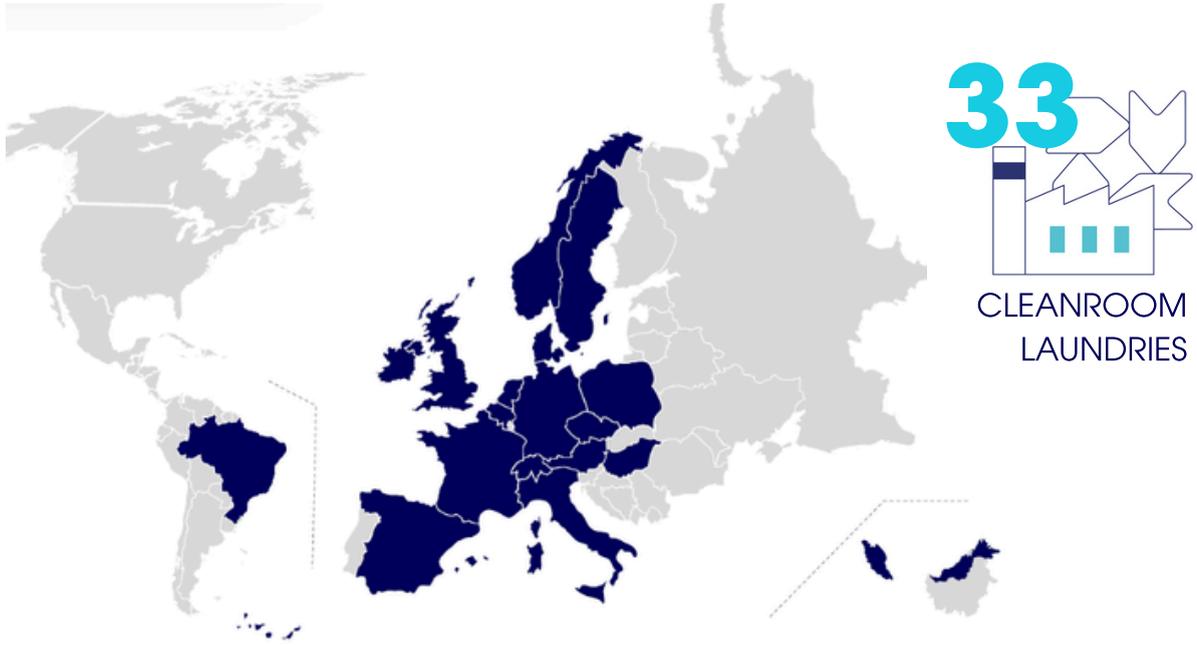
Micronsweep®
cleaning solutions
(p. 16)



Flexi Mat
(p. 16)

ELIS CLEANROOM, YOUR **CONTAMINATION** **CONTROL PARTNER**

An optimal cleanroom contamination control solution is essential for every company operating in a cleanroom environment. We provide 360° cleanroom contamination control solutions for our customers. With decades of experience within the cleanroom industry we are the optimal partner for you!



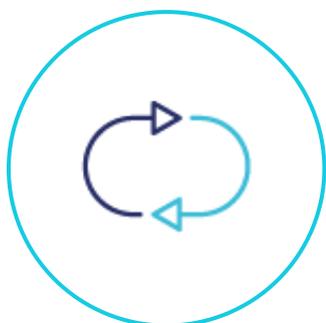
YOUR BENEFITS

CHOOSING ELIS CLEANROOM



GUARANTEED QUALITY

In our specialised cleanroom laundries, the risk of cross-contamination is eliminated not only through continuous monitoring, but also by performing predefined testing and controls and internal and external audits. In our laundries, we have one or more certified cleanrooms: ISO Class 4 (at rest) (Grade A/B), ISO Class 7 (at rest) (Grade C/D).



FULL SERVICE

We offer you flexibility and advice, not only on the type of garments but also on how to use them. Through the online management portal [Elis Connect](#), you can see and follow the cycle and usage of your clothing and textiles.



SECURITY OF DELIVERY

We hold and manage our own vehicle fleet with trained permanent drivers, a back-up plan in case of emergencies in our own laundry, including a contingency option in at least one of our 33 cleanroom decontamination units.



QUALIFIED DOCUMENTATION

We work according to GMP, documenting everything we do and acting in accordance with ISO 9001:2008 (Quality Management System), ISO 14001 (Environment), ISO 14644-5 (Low-dust and low-germ rooms and environments), ISO 17665 (Sterilisation of medical devices), IEST RPC003.5 and ISO 14698 (Cleanrooms and associated conditioned areas; bio contamination control). NB: UK only has 9001 and 14065.

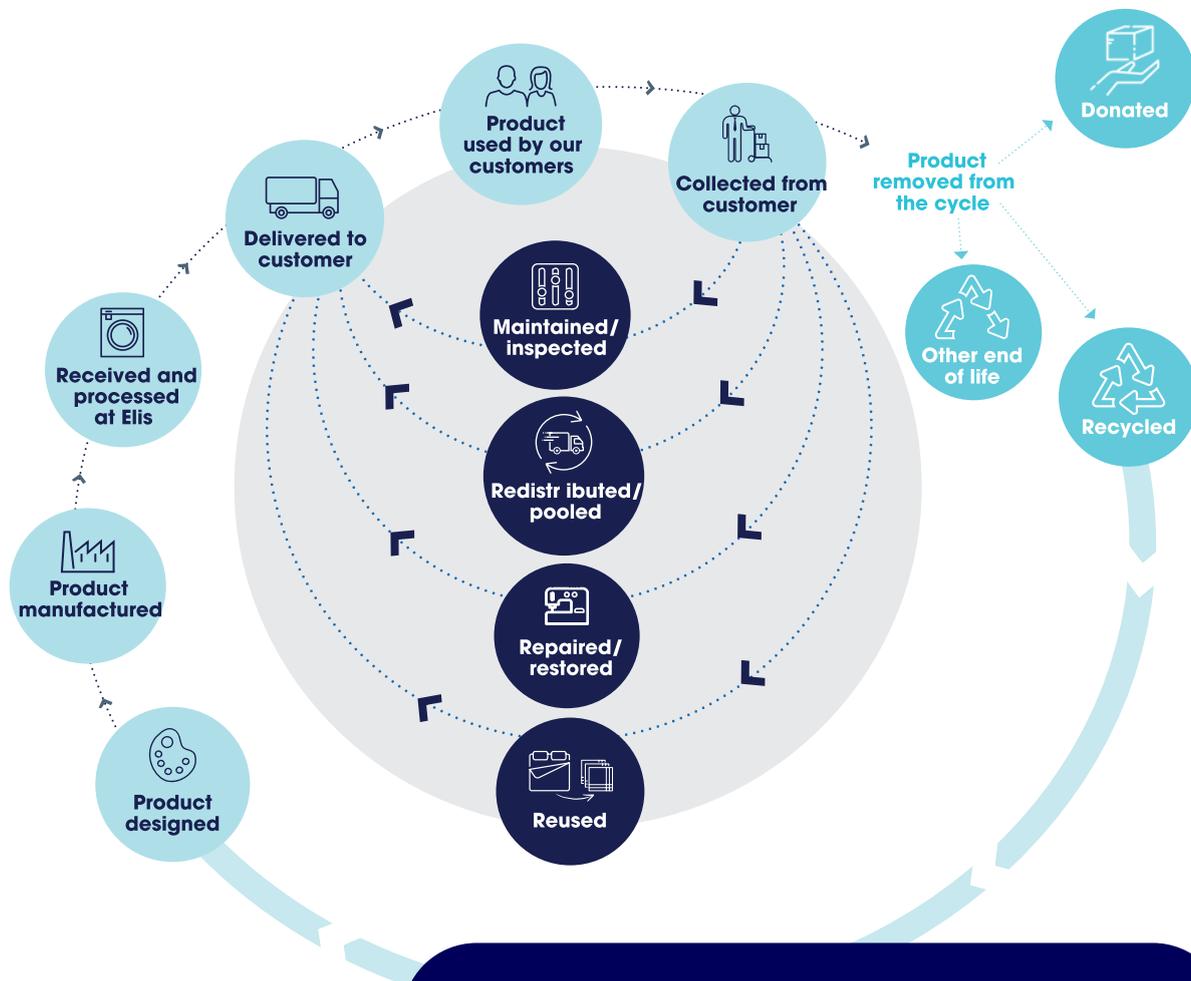


**TRUST STARTS
WITH QUALITY
WE DELIVER
BOTH!**

At Elis Cleanroom, our cleanroom laundries are equipped with a Helmke drum for particle counting and we conduct thorough visual inspections to ensure Annex 1 compliance.

Our validated processes include a set number of washes per garment and in-house sterilisation with our own autoclaves. All operations are handled by trained and validated operators.

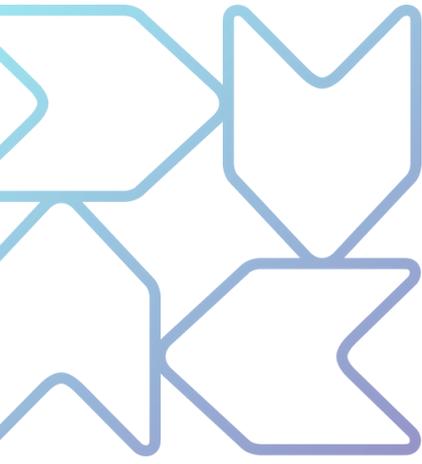
Entrust your controlled environment into our care, let us handle everything regarding purchase, stock, decontamination, replacement, maintenance and delivery of our cleanroom solution, so you can concentrate on what you do best – your core business.



OUR CIRCULAR SERVICES MODEL

Our business model is based on a circular product as service model and emphasises services over products and rentals over purchases. The service model works in “loops” ensuring our reusable cleanroom garments and accessories stay in circulation for as long as possible. This is enabled by maintaining, pooling, repairing and reusing garments along the way.

Finally, end-of-life cleanroom textiles are given a new life by reuse or recycling.



YOUR TRUSTED CONTAMINATION CONTROL PARTNER IN SOUTHEAST ASIA



We're always close to you!

As a leading One-Stop Cleanroom Total Solution Provider, we support critical industries with reliability and expertise. Our operations serve businesses throughout **Malaysia and Singapore**, ensuring consistent, high-quality service essential for maintaining controlled environments. In Malaysia, we have strategically located cleanroom laundry facilities in **Penang, Kuala Lumpur, and Melaka**, operating in ISO 4 and ISO 7 for semiconductor industry and a dedicated pharma GMP ISO 5 line.

Our **Fulfillment Solutions Hub** in Singapore reinforces our strategic presence in the region and reflects our commitment to staying close to our customers and their needs. Shipments are scanned out at our Malaysian plants and received by our team in Singapore. Upon arrival, the goods are scanned again and stored. Using our own trucks and in-house personnel, we ensure full control over distribution. We prioritise security, maintain contingency plans, and offer both storage and distribution services.

With this location, we provide end-to-end handling, warehousing, and last-mile delivery.



+250
EMPLOYEES

4
SERVICE
LOCATIONS

+100
CUSTOMERS IN
APAC REGION

Our state-of-the-art facility in Malaysia operates under Good Manufacturing Practice (GMP) standards, serving pharmaceutical, biotech, medical device, microelectronics, and other high-tech industries. Equipped with advanced contamination control technologies and staffed by cleanroom specialists.

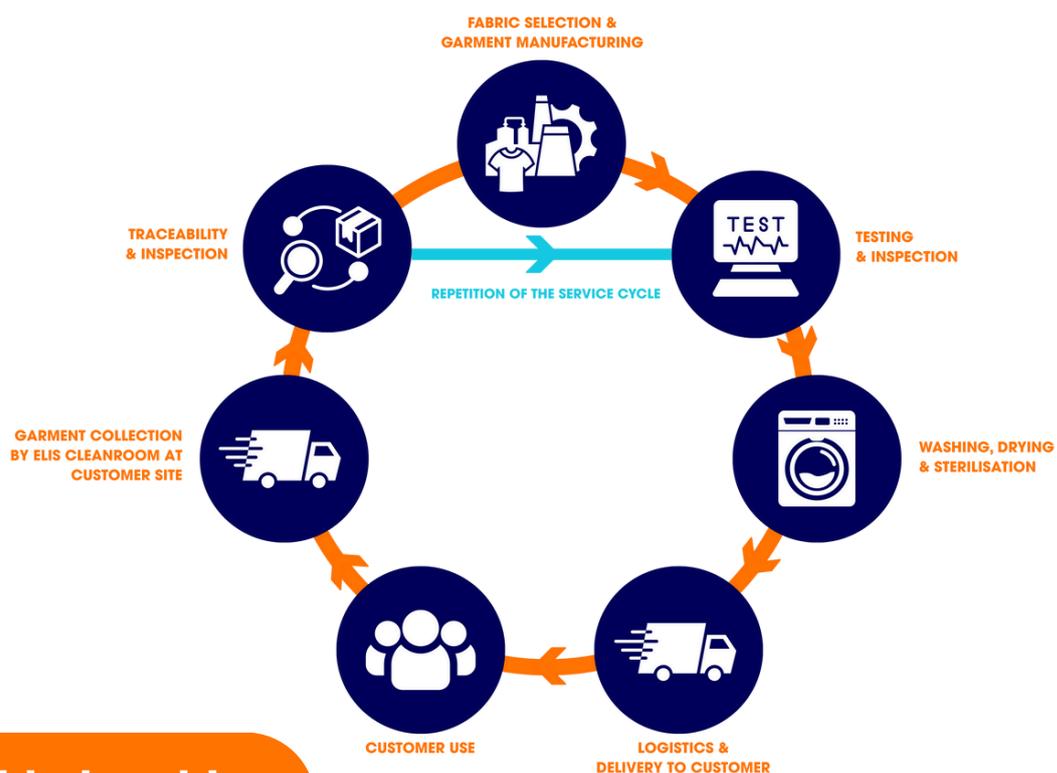
Our operations are all compliant with ISO 14644, EU GMP Annex 1 and other essential cleanroom standards.

Additionally, our manufacturing facility produces laser-cut garments using a wide range of cleanroom and ESD fabrics, all designed to meet IEST-RP-CC003.5 guidelines.

We offer a truly holistic and fully integrated approach, which is unique within the cleanroom laundry segment!

From fabric selection and garment manufacturing to pooling, testing, washing, sterilisation, and even footwear handling, every step is managed in-house with the highest standards of quality and compliance. Our well-established reputation for excellence in Europe is now also available in Asia, delivering the same high-quality service you know and trust. Closer to your operations.

With built-in contingency plans and fully backed-up facilities, we ensure uninterrupted service and total peace of mind.



Get in touch!
cleanroom@elis.com



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elis.com

follow us:

