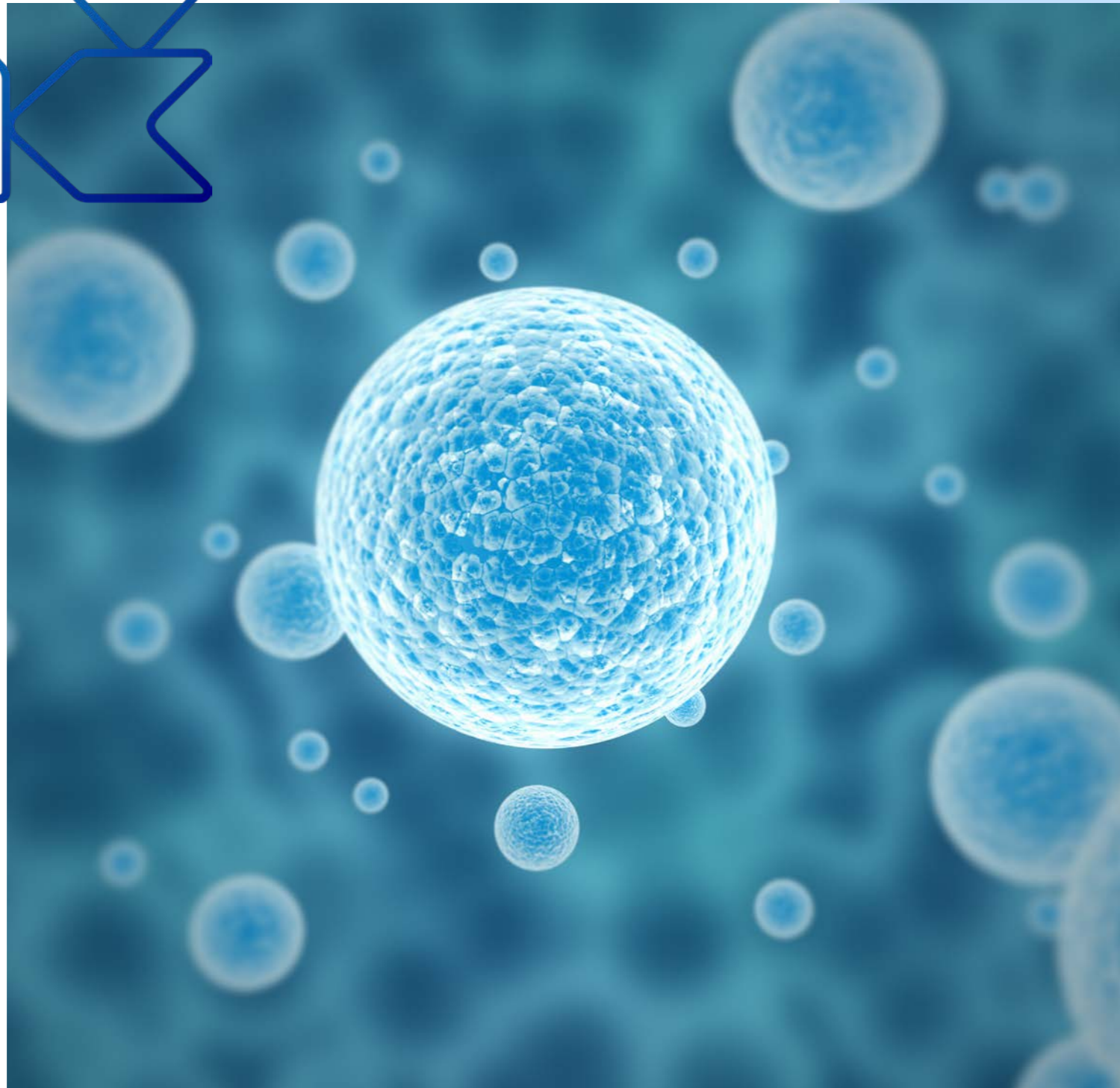




# Regenerative & Cellular Industry

CLEANROOM LAUNDRY SOLUTIONS





## INTRO

Scientists and engineers are collaborating to design and develop innovative therapies driven by regeneration, accelerating the rapid growth of the regenerative and cellular industry.

In addition to treating its symptoms, it can help treat damaged tissue or attempt to heal certain chronic diseases. It's not mass production—One batch saves one life, with each solution tailored specifically to the person. Every batch matters because every life matters!

We recognise the importance of the biomedical industry and are committed to supporting you in safeguarding the critical controlled environment to help save lives.

Wearing the correct garments in this industry is essential for ensuring patient safety by preventing contamination. Proper attire also enhances comfort, supports compliance, reliability, and high-quality production.

**ONE BATCH, ONE LIFE**  
**Supporting the Industry**  
**in the Mission to Save**  
**Every Life Possible!**

# Elis Cleanroom supports you in your compliance and offers you the right products for your needs.

The manufacturing of regenerative and cellular industry occurs in cleanroom environments that adhere to stringent regulatory standards to ensure the quality, safety, and sterility of the products. These facilities are highly controlled to prevent contamination and maintain the viability of sensitive biological materials.

Cleanrooms for biomanufacturing are categorised by the level of particulate and microbial contamination allowed, following standards such as ISO 14644, GMP and Annex 1.

Industry segment	Classification zone			
	Grade A	Grade B	Grade C	Grade D
<b>Stem Cell Therapy</b>	Aseptic handling of stem cells, such as cell isolation, culture, and final preparation before packaging.	Surrounding Grade A zones as background environment.	Upstream processes like initial preparation of cell culture media or cleaning and sterilisation of non-critical equipment.	Upstream processes like initial preparation of cell culture media or cleaning and sterilisation of non-critical equipment.
<b>Gene Therapy</b>	For critical steps like viral vector production, aseptic handling of nucleic acids, and cell transfection.	Surrounding Grade A zones as background environment.	For less critical preparation steps like mixing buffers or media.	For initial raw material handling and storage.
<b>Tissue Engineering</b>	For assembling final tissue-engineered products, combining cells and scaffolds, or sterilising finished constructs.	Surrounding Grade A zones as background environment.	For cell expansion and scaffold preparation processes.	For initial cleaning, raw material preparation, or non-critical processes.
<b>3D Bioprinting</b>	If the bioprinting process includes direct incorporation of living cells into the scaffold or for aseptic final product handling.	Surrounding Grade A zones as background environment.	For bioprinting processes involving only scaffold materials without cells, intended for future sterilisation.	For preparation of raw materials and non-sterile components.
<b>Immunomodulation (e.g., CAR-T Therapy)</b>	For critical steps such as aseptic handling of T cells, genetic modification, preparation of media, and final formulation and filling of the therapy.	Background for aseptic operations.	For closed processing steps such as cell enrichment, expansion, selection and washing, as well as supporting activities such as autoclaving materials	For personnel and material flow to and from higher grades.

Gowning recommendations according to GMP Annex 1

Classification zone	A/B	C	D
<b>Undergarments</b>	M	M	M
<b>Hairnet/ beard cover</b>	M	M	M
<b>Overshoes or disinfected shoes</b>		M	M
<b>Coat</b>		R	TS
<b>Coverall</b>	M	TS**	TS**
<b>Hood</b>	M	TS	TS
<b>Mouthmask</b>	M	TS	TS
<b>Boots</b>	M		
<b>Gloves</b>	M		
<b>Cleanroom goggles</b>	M		
<b>Cleanroom socks</b>	M	M	
<b>Sterilisation</b>	M*	TS	TS
<b>Minimal frequency of change</b>	Per entry	Per day	Per day/ 2x per week

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

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



By choosing Elis Cleanroom you're not investing in just more textile materials—you're choosing a rental solutions partner committed to advancing the future with sustainable, cost-effective, and innovative services.

**Together, let's drive the next generation of life-saving treatments.**



# STERILE ENVIRONMENT (GRADE A/B) OUTERWEAR

## during cleaning & operations

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've developed three unique categories with a comprehensive solution to help you select the option that best fits your needs and environment. Each category is designed to address specific requirements, ensuring optimal performance and compliance in your processes.



### Sterile Performance

**BESTSELLER**



**Alaska CTRL Sterile  
coverall with  
integrated hood**



We offer a comfortable and ergonomic clothing concept that protects your production against human and external contamination. It is our top-selling coverall in the sterile range. In addition to the closed hood and mesh mouth mask, you also need to wear appropriate boots, a disposable (sterile) mouth mask, goggles and 2 pairs of sterile gloves.

### Sterile Plus



**Alaska CTRL Sterile  
PLUS coverall with  
integrated hood**



With the publication of Annex 1 in 2023 and close collaboration with partners in the pharmaceutical and biomedical industries, we developed a Sterile Plus solution. In order to significantly reduce the formation of CFU\* on your garment during your life-saving mission, we can provide the critical areas with a garment with high-tech inserts customised for your particular environment. In addition to the closed hood and mesh mouth mask, you will also need to wear appropriate boots, a disposable (sterile) mouth mask, goggles and 2 pairs of sterile gloves. We also offer a solution for cleaning and disinfecting.

### Sterile Ultimate



**ElisAir solution with  
standard coverall**



By offering the Sterile Ultimate option, we're taking things a step further. 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 disposable (sterile) mouth mask (optional) and 2 pairs of sterile gloves.

The solutions can be combined with oversleeves to protect during desinfecting or cleaning.

## Alaska CTRL Sterile Performance coverall

The unique "apron" system of the Alaska ensures both ease of gowning and degowning and the zip fastening between the legs providing minimum dexterity. By being packed inside out you only touch the inside of the Alaska cleanroom coverall thereby maintaining sterility. Alaska CTRL Sterile Performance is available with integrated hood. A loop system on the hood ensures the frame and visor of the accompanying goggles are not touched, again providing sterility. Alaska CTRL Sterile Performance is our top-selling high performance coverall!



## Alaska CTRL Sterile PLUS coverall

Suitable for daily-use

The unique "apron" system of the Alaska ensures both ease of gowning and degowning and the zip fastening between the legs providing minimum dexterity. By being packed inside out you only touch the inside of the Alaska cleanroom coverall thereby maintaining sterility. Alaska CTRL Sterile Plus is available with integrated hood. A loop system on the hood ensures the frame and visor of the accompanying goggles are not touched, again providing sterility. Liquid proof, high performance inserted fabric pieces on high risk areas on the coverall (Lowering CFU\*). Perfect for daily use!



## Alaska CTRL Sterile Plus TripleShield coverall

Suitable for cleaning and disinfecting

Manufactured from high-quality, comfortable materials, this coverall offers full-body protection with a secure fit. Liquid proof, high performance inserted fabric pieces on high risk areas on the coverall (Lowering CFU\*). The coverall has a zip fastening between the legs providing minimum dexterity. Ideal for cleaning and disinfecting the controlled environment!



## 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 airflow mechanism, the air device extracts clean air from the controlled environment and evenly distributes it in front of the operator. The exhaled CO<sub>2</sub> 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.



# NON-STERILE ENVIRONMENT (GRADE C/D) OUTERWEAR

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



## STANDARD COVERALL

Our standard cleanroom coverall – the perfect solution for maintaining a pristine and contamination-free 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. This coverall can also be worn in a sterile environment (Grade A/B) with the appropriate essentials.



## STANDARD COAT

Keeping high filtration efficiency and comfort in mind, we've developed our standard cleanroom coat. Its snap-button or zip front closure and knitted cuffs allow for a secure and customised fit, enhancing overall wearer satisfaction. Engineered for professionals who prioritize precision and hygiene, our cleanroom coat is the perfect choice for uncompromising cleanliness in your critical workspaces.



## 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.

## 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 European customers. Our European stock garment set!



## < STANDARD T-SHIRT

Our lightweight and breathable standard t-shirt made from a soft, stretchy knit fabric is known for its smooth texture and comfortable feel, it offers excellent flexibility and drape. The t-shirt is short-sleeved with a round neck collar. Perfect for layering or wearing on its own, depending on the non-critical environment.

## COLDROOM JACKET >

This jacket is a heavy-duty insulated garment designed to provide warmth and protection in coldroom environments. Made from durable, low-linting, micropolyester textile with thick thermal padding, it ensures optimal insulation against cold temperatures. The jacket features an upstanding collar, adjustable cuffs, and secure a snap button closure to retain body heat. The design allows freedom of movement while maintaining comfort during extended wear.



## ESSENTIALS SUITABLE AS INNER AND/OR OUTERWEAR FOR CONTROLLED ENVIRONMENTS

In biomedical production, particularly in regenerative and cellular industry, maintaining strict cleanliness and safety is crucial to protect both personnel and the integrity of cell-based products. Whether in sterile or non-sterile environments, cleanroom essentials such as boots, oversleeves, ..., play a key role in preventing contamination and ensuring compliance with critical hygiene standards. These items are fundamental for safeguarding sensitive processes and maintaining a controlled, safe working environment.

### Footwear

#### OVERBOOTS >

Engineered with advanced materials, these boots provide a barrier against particulate contamination. With a focus on user comfort and safety, these boots offer a snug fit. The durable construction ensures long-lasting performance, making them a reliable and essential item for professionals working in cleanroom environments. Our boots are available with Combi P and SNDI sole.



#### < VERA SHOES

Vera shoes are designed for maximum safety and comfort, featuring a durable safety toe cap, antistatic properties, and an antislip sole. Lightweight and breathable, they ensure all-day comfort while meeting essential safety standards.

#### 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

According to the proposed update to Annex 1 "Appropriate... sterilised footwear should be worn". 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. Lateral soles ensure breathability and comfort for the wearer. Available in many colours they offer differentiation for zones of your facility.

#### LINT-FREE 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.



# Hair protection



## ◀ 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. Ideal for the biomedical industry or other sterile settings, it is reusable, making it both eco-friendly and cost-effective while meeting strict cleanliness requirements.

## HAIR CAP ▶

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 production, where contamination control is critical.

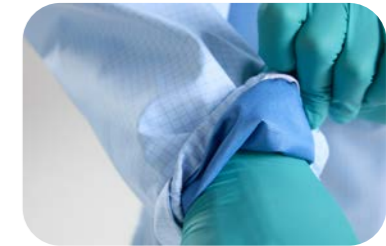


# Oversleeves

## 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 textiles, 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 goggle 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 from human contamination. The ClearCrown can transform your direct vent goggle to indirect without condensation issues, without increase of particle emission, and without compromising on comfort for the wearer.

# On top of the essentials, we have additional products that can help improving operational efficiency and compliance with industry standards.

## LONGOPAC AND LONGOPAC STAND >

The biomedical industry demands the highest standards of hygiene, efficiency, and safety in waste management. The Longopac® bagging system is the ideal solution, ensuring a sterile and contamination-free environment. Its unique design allows waste to be sealed from the outside, eliminating direct contact and reducing the risk of infection or cross-contamination. Made from durable, thin, and sustainable materials, Longopac minimises handling time, lowers material use, and cuts transportation costs, making it both economical and environmentally friendly.



## < 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.

## CLEANING SOLUTIONS > MICRONSWEP™

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 15m<sup>2</sup> and a 50cm mop can cover 20m<sup>2</sup> 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 bacteria 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 (GRADE A/B) OUTERWEAR



Alaska CTRL Sterile Performance coverall (p.8)



Alaska CTRL Sterile PLUS coverall (p.8)



Alaska CTRL Sterile Plus TripleShield coverall (p.8)



Standard coverall with ElisAir solution (p.9)

## NON-STERILE ENVIRONMENT (GRADE C/D) OUTERWEAR



Standard coverall (p.10)



Standard coat (p.10)



Labcoat (p.10)



ElisPure garment set (p.11)



Coldroom jacket (p.11)



Standard t-shirt (p.11)

## ESSENTIALS SUITABLE AS INNER AND/OR OUTERWEAR FOR CONTROLLED ENVIRONMENTS



Overboots (p.12)



Vera shoes (p.13)



Overshoes (p.13)



Clogs (p.13)



Lint-free socks (p.13)



Hijab (p.14)



Hair cap (p.14)



Oversleeves (p.15)



Elite goggles (p.15)



ClearCrown goggles (p.15)

## ADDITIONAL PRODUCTS



Cleaning solutions MicronSwep™ (p.17)



Flexi Mat (p.17)



ElisCovers (p.16)



Longopac and Longopac stand (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!



OVER  
**1600**  
EMPLOYEES



OVER  
**1.6 mio**  
CLEANROOM PIECES  
DELIVERED PER WEEK



**33**  
CLEANROOM  
LAUNDRIES

## ELISCONNECT: Your smart dashboard for garment tracking, stock monitoring, and cleanroom compliance!

The customer accessible web-based dashboard ElisConnect can be used in isolation to track your garments, monitor stock and ensure your operators are changing garments on every entry and exit. The data collected is translated into an overview that matches your KPIs. A transparent life-cycle for your cleanroom garment!



## 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

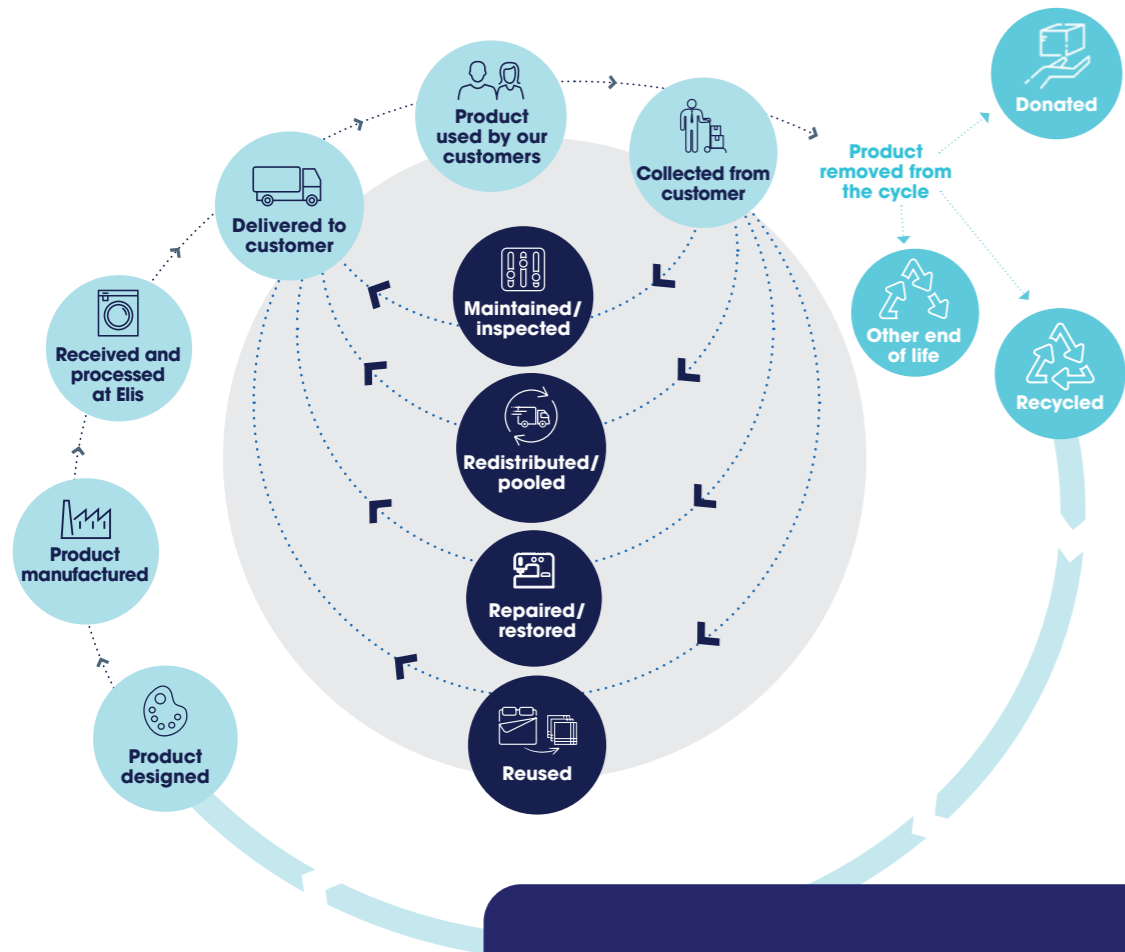
We hold and manage our own vehicle fleet with trained permanent drivers, a back-up plan in case of emergencies in our own laundry, including a contingency option in at least one of our 33 cleanroom decontamination units.



### 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 17655 (Sterilisation of medical devices), IEST RP-CC003.5 and ISO 14698 (Cleanrooms and associated conditioned areas; bio contamination control). NB: UK only has 9001 and 14065.

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.



**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.

**REACH OUT:**  
Your solution is just a call or click away!

[cleanroom@elis.com](mailto:cleanroom@elis.com)

[elis.com](http://elis.com)

follow us:  



