

Sustainable lithium-ion battery production

With reusable garment solutions from Elis Cleanroom



Years of experience in safe and functional garment solutions

Together with the European goal of introducing a zero-emission mobility system based on lithium-ion battery power, come great challenges:

- **How to safely and sustainably produce lithium-ion batteries?**
- **How to ensure their maximum lifetime and reduce the risk of malfunction?**

We at Elis know that complex manufacturing processes require customised workwear solutions for both cleanroom and non-controlled areas and are ready to help with years of expertise and market knowledge.





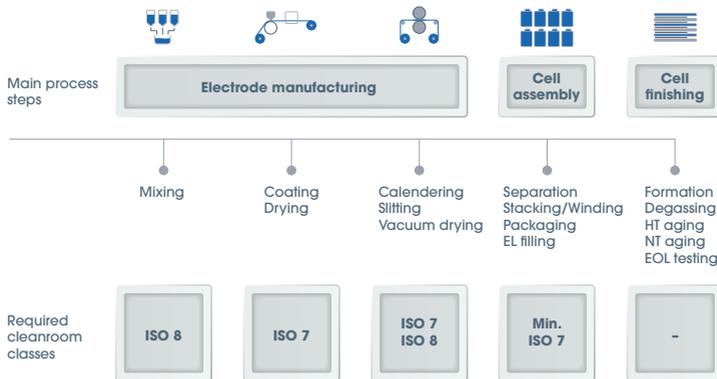
Why cleanroom ?

Optimal Lithium-ion battery production require that critical production processes are done in a cleanroom environment.

What are the benefits of producing in a cleanroom environment?

Contamination control – air-borne particles pose a great risk of contaminating the batteries during the critical production processes. Cleanroom environment eliminates the threat of particulate contamination. This leads to reduced risk of product failure ensuring your finished batteries the promised lifetime.

Required cleanroom classes



We specialize in identifying specific challenges in every step of your production and customising an optimal garment solution.



We don't
follow in the
footsteps of
others...

...we lead the way on CSR

At Elis Cleanroom our CSR strategy encompasses continuously reducing the carbon footprint, as we recognise our responsibilities to the environment and the communities in which we operate.

- Promoting sustainable decision-making by reducing; reusing; repurposing or recycling materials and products
- Increasing the value of our products by improving their resource-efficient design, life-span and end-of-life use
- Improving our direct and indirect environmental impact and lowering our greenhouse gas emissions caused by our activities

Commitment through action

Elis Cleanroom service includes decontamination and delivery of reusable cleanroom garments and accessories. Choosing reusable garments significantly reduces your CO² footprint and allows you to save up to 99% of your disposable garment waste.

Furthermore, we at Elis continuously invest into various textile recycling initiatives aiming for an integrated circular solution.

Our modern cleanroom processing plants are constantly working on reducing water and chemical consumption.

One by one our local cleanroom organisations are moving towards CO² neutral vehicles fleets.



ESD Cleanroom garment solution - uncompromising performance

Optimal ESD Cleanroom garments are essential for the critical processes in Lithium-ion battery production. They can help minimise particulate contamination and dissipate the negative effects of static electricity which will in turn reduce the risk of product failure and ensure the battery's promised lifetime.

We at Elis Cleanroom have over many years together with our customers developed effective ESD Cleanroom garments.



Extra protection from particulate contamination with cleanroom goggles solution.

Minimised particulate contamination and optimal dissipation of static electricity that can be damaging to Lithium-ion battery production with an exclusive 100% metal-free ESD Cleanroom coverall validated for ISO class 5.

Extra protection from damaging effect static electricity can have on batteries with cleanroom ESD boots or shoes solution.

Cleaning is critical in cleanrooms

The time and cost-saving lightweight MicronSweep™ system removes the need for water, wringers and trolleys in cleanrooms as the mops are pre-dosed outside the cleanroom.

The MicronSweep™ 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. This is especially important in Lithium-ion battery production where small metal particles can be damaging for the final product.



Complete contamination control with Flexi Mat



Our high-performance Cleanroom Flexi Mat system prevents up to 99.9% of foot and airborne contaminants from entering or exiting your critical control points. The high surface energy attracts, collects and retains contaminants, including metal particles between daily cleaning. This ensures that contamination from feet to your cleanroom or controlled environment is minimised.



Elis Cleanroom is part of the Elis Group

