



BATTERY MANUFACTURING AUTOMATION



a coesia company



From conveyor components to turn-key solutions, Flex-Link delivers factory automation solutions that increase the efficiency of your production flow and processes. Our high levels of standardization enables us to respond quickly; keeping us competitive throughout the process from first response and proposals through project management, installation, commissioning, training, and after sales support. FlexLink solutions are geared for low cost of ownership and highly reusable, requiring a minimum of maintenance with low power consumption.

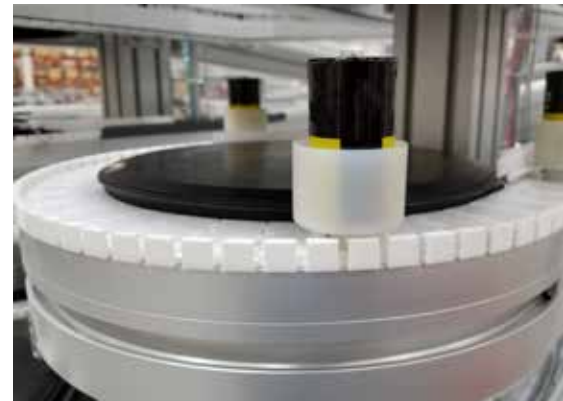
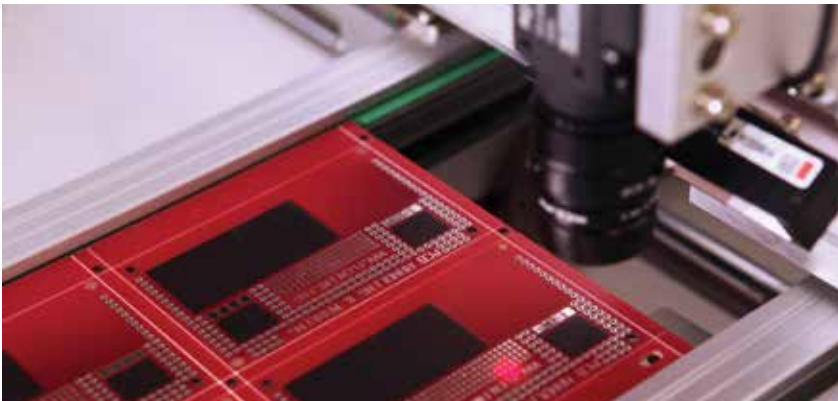
SOLUTIONS FOR TOMORROW

- Innovative conveyor systems and components.
- Line architecture, maximizing line OEE
- Controls and efficiency tools.
- Services and support that safeguard productivity.

A COMPLETE RANGE

FlexLink has a wide range of production flow solutions for electric vehicle components and battery manufacturing applications like battery cell manufacturing, battery module mounting and battery pack assembly.

This includes handling modules and pallet applications for manufacturing, assembly, test and laser marking. We make it easy to extend or modify your installations in accordance with changing production needs, keeping your investment low.



FlexLink serves a wide customer base, ranging from local producers to global corporations. Since 1980 FlexLink is a leading factory automation expert providing line architecture and smart conveyor solutions to manufacturers and machine builders, all over the world.

DESIGNING THE SMART PRODUCTION LINE

As System Architects, FlexLink supports you with the line design and continuous optimization through its entire lifecycle.

We start by applying a feasibility study and acquire data from existing lines to create a simulation and iteration analysis. With the results from the study and our extensive experience, we can define the optimal solution for your needs. Our pallet and puck conveyor systems, electrical functions and a wide range of standardized software provide the tools to create a smart production flow.

We take ownership of all interfaces between flow, machines and processes to ensure that the overall line effectiveness is taken into consideration. As a bonus you get a digital twin of the line for future process changes, expansion or introduction of new products.

Our project management team, advanced engineering and line monitoring tools enable a cost efficient and trouble free commissioning. We collect real time data from the line and electrical functions for diagnostics and optimization to reach your desired OEE.



Configuring the pallet or puck route is quick. Using track and trace we collect all data related to the flow, processes and products. The production is monitored in real time to identify deviations from the digital twin and optimum production setup. Our visualization and configuration tools are intuitive and don't require advanced programming.

Our smart production line architecture enables you to reduce downtime for line changes and for new processes, as trouble shooting and optimization can be done virtually in the simulation

and the digital twin. The new system also increases available production time by minimizing unplanned stops thanks to the unique predictive maintenance feature. The conveyor's functional design not only enables a single minute exchange of broken parts but also an uncomplicated de-commissioning when needed.



SMALL PRODUCT HANDLING

The X45 conveyor platform is compact, making integration and machine interface easy. Efficient line layouts give you the opportunity to optimize your production flow. X45 offers long term, trouble free operation, and the flexibility to adapt to changing production needs or market requirements.



A wide range of handling functions permits designing a smart and compact flow. The X45 conveyor system is fully electrical reducing energy consumption.



The X45 drive and puck handling units offer unique solutions for easy and efficient control of your single piece flow system. Using pre-engineered, high capacity, compact functions, the X45 modules use a simplified controls design that allows easy modification and customization. The motors come with a high number of network possibilities and adds intelligence to the motors by embedded controls which, enables local decisions directly down to the drive unit. It reduces the need for other complementary modules as well as programming in favor of easy configuration. Integrated RFID capability makes it easy to control both process and product QA. Through high efficiency motor technology, the system energy consumption is substantially lower than with conventional solutions.

TWIN TRACK PALLET SYSTEM FOR SMART PRODUCTION

This new system increases available production time thanks to reduced pallet exchange time in the dual conveyor speed sections. The system is designed for Single Digit Mean Time To Repair and low friction accumulation that reduces wear, downtime and TCO.

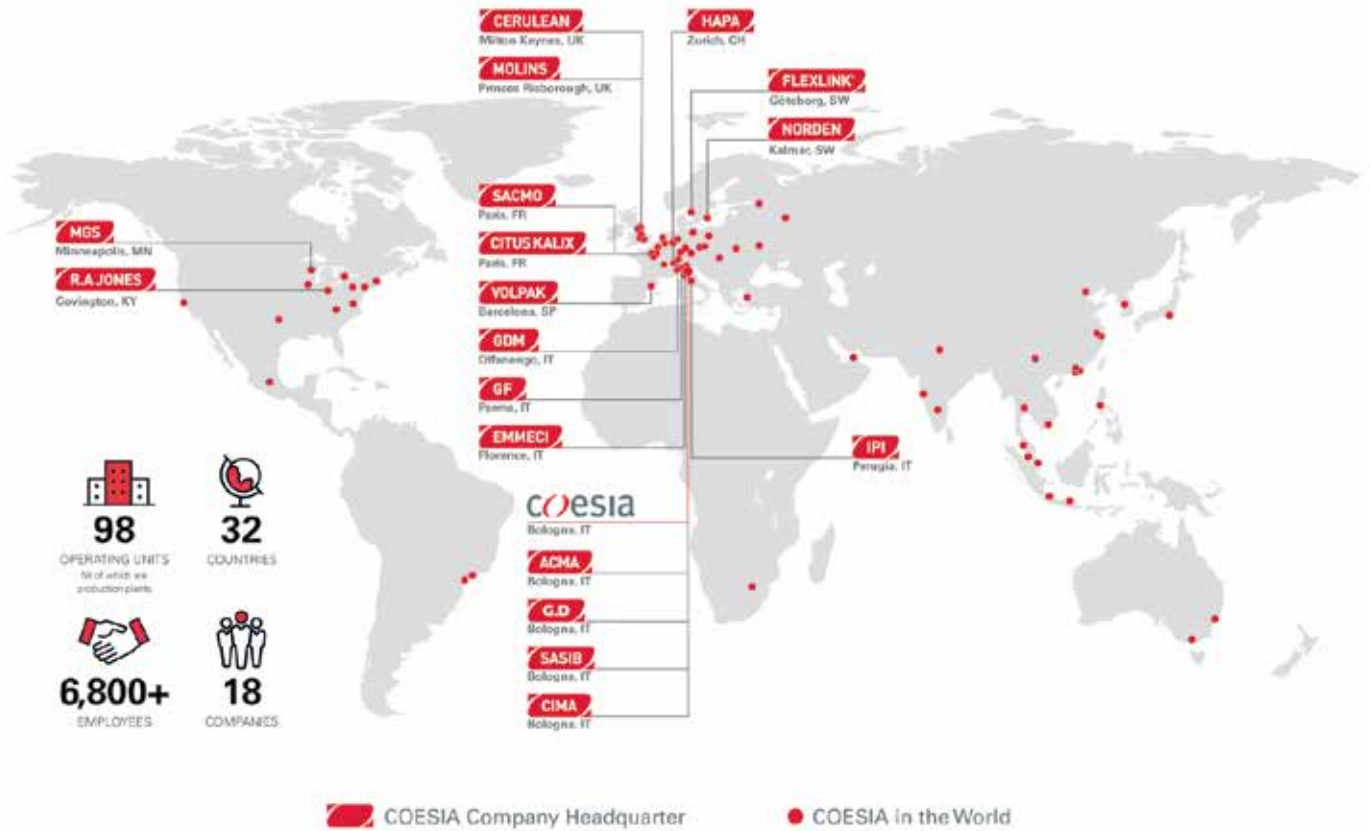
The new twin track conveyor for heavy loads is fully digitalized and prepared for IIoT and traceability requirements. The standardized modules with pre-defined control logics shorten design and installation time, reducing time-to-market.



YOUR PRODUCTION BENEFITS

- **Smart line architecture**
Simulated, monitored and digitalized system design with unique predictive maintenance
- **Increased production**
Gain up to 10% more production time at cycle times of one min.
- **Improved availability**
Long MTBF (>2 years), short MTTR on functions (<10 min)
- **Reduced energy consumption**
All functions electrical and excessive running time eliminated

COESIA GROUP IN THE WORLD



98
 OPERATING UNITS
56 of which are production plants

32
 COUNTRIES

6,800+
 EMPLOYEES

18
 COMPANIES

coesia

Coesia is a group of innovation-based industrial and packaging solutions companies operating globally, headquartered in Bologna Italy, owned by Isabella Seragnoli.

Coesia companies are leaders in the sectors of:

- Advanced automated machinery and packaging materials
- Industrial process solutions
- Precision gears

Coesia customers are leading players in a broad range of industries, including Aerospace, Consumer Goods, Electronics, Healthcare, Luxury Goods, Pharmaceutical, Racing & Automotive and Tobacco.

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