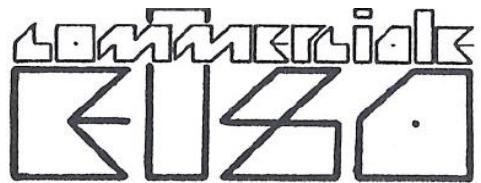




Corporate Presentation

January 2025

Our journey



Active in the Motion Control sector since the 1970s, Enzo Dal Pozzo and his wife Deanna founded **COMMERCIALE ELSA SRL** in 1982.

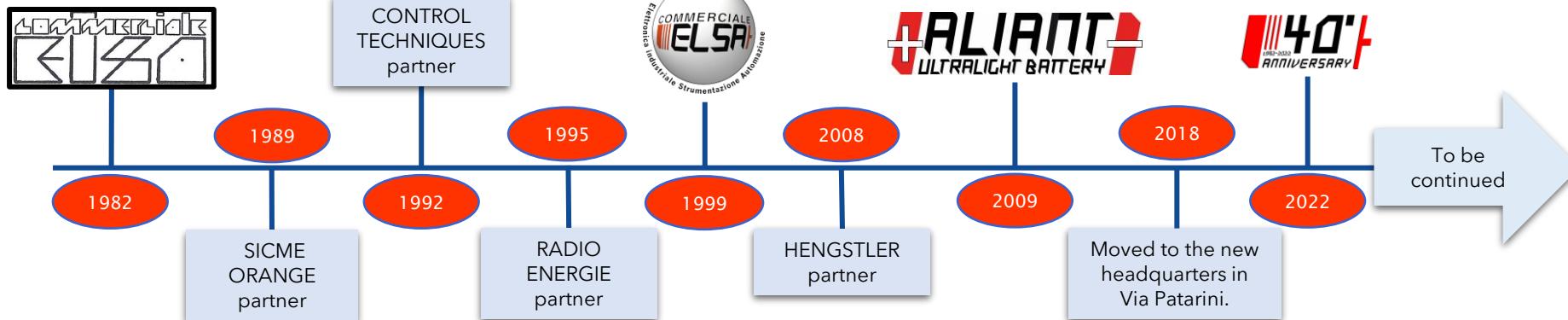


The company develops the proposal of solutions for industrial automation with a particular **FOCUS IN MOTION CONTROL**.

The main sectors in which significant experience and skills have matured are plastic, rubber, iron, steel, wire drawing and test benches.



The company is structured with a staff of over 40 collaborators to guarantee a pre and post-sales technical support service. From the sizing of the drives, to commissioning, assistance and repairs.



Company



IN BRIEF

Founded in 1982 out of a cellar. Moved to new facility in 1989, then moved again to current headquarters in 2018.
A solid growth over last 7 years.



HEADQUARTER

3500 sqm FACILITY IN IMOLA (ITALY)
2000mq NEW FACILITY EXPANSION completed in 2024.



CURRENT TRENDS

Technology currently under development related to new products and new markets



AMONG TOP GROWING COMPANIES

Among top 500 growing companies in Italy

Leader della Crescita 2025

Il Sole 24 Ore & STATISTA



STOCK EXCHANGE

Publicly Listed Company at EURONEXT GROWTH MILAN since Sept 28th 2023



Key people



Enzo Dal Pozzo

President



Founder of ELSA Solutions, 40+ years of entrepreneurial experience



Davide Dal Pozzo

Chief Executive Officer



Advanced Study Program at the Massachusetts Institute of Technology, Bachelor of Science in Mechanical Engineering at Bologna



Daniela Dal Pozzo

Finance Director



Master's degree from SDA Bocconi, Bachelor's degree in Business at Bologna



Other experiences:



Other experiences:



Other experiences:



CONFINDUSTRIA

At a Glance | ELSA Solutions

- ELSA Solutions is a company active in the motion control industry and is one of the Italian first movers in the special purpose batteries for industrial and mission critical applications (lithium ones and in hydrogen systems).

Activities

- The Company operates through two lines of business:



carries out activities as a **system integrator** of industrial automation systems, offering solutions and components management and motion control of mechanical systems



operates as an OEM and ODM in the field of **special purpose batteries**, especially **lithium** and **hydrogen**.



Clienti

- ELSA Solutions targets the B2B channel through 4 types of customers:



Manufacturer
manufacturers of OEM components or industrial goods



End user
users of industrial goods developed by manufacturers

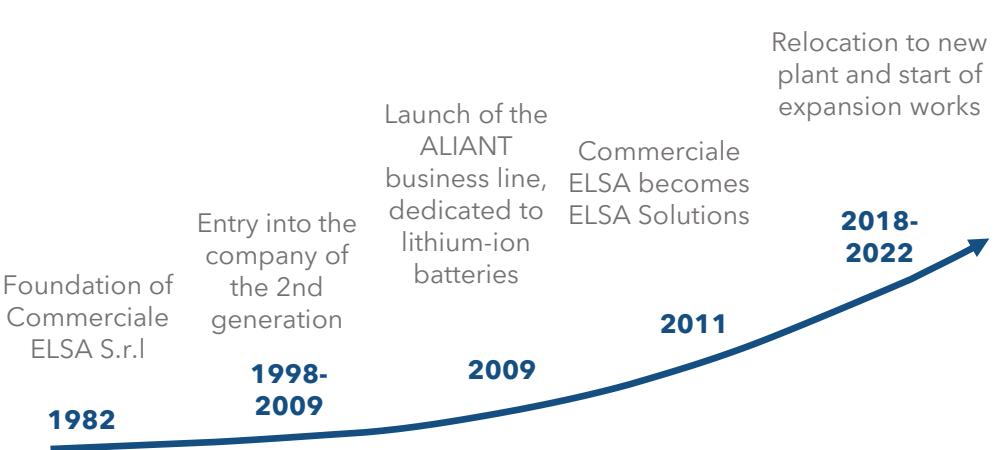


Distributors
Resellers/distributors of motion control components or storage systems



Service Provider
Aftermarket operators, active on spare parts and maintenance

Milestones



Company Highlights



Historic *double-digit* growth and good future prospects



Fast product and project development



Offering specialized solutions thanks to the proprietary know-how



Business lines



- ELSA Solutions operates as a **system integrator** of industrial **automation systems** (Motion Control), dealing with the distribution of electronic and electromechanical components.
- With **expertise** in the field of **mechatronics**, E-MOTION **designs, assembles and configures** (on premise and remotely) **complete medium and large power systems** (between 15 kW to 1,000 kW).
- In addition, E-MOTION offers **technical consulting for the integration of systems within business processes.**

Activities

- E-MOTION targets plant and machinery manufacturers in **heavy industry** and end users in the process industry.

EMOTION Markets

- PAPER / CARDBOARD
- AUTOMATION
- STEEL/METALWORKING
- GLASS/MARBLE/POTTERY
- PLASTIC/RUBBER
- OTHER*

End markets

- ELSA Solutions operates as an original equipment manufacturer (**OEM**) and original design manufacturer (**ODM**).
- The line is active in the field of **special purpose systems and batteries for industrial use and mission critical applications** (heavy duty, continuity, emergency, off-grid stationary).
- ELSA Solutions is one of the **first movers in Italy in the field of lithium-ion batteries and hydrogen systems.**

- ALIANT mainly targets the following areas:



Start & Light Injection -> cars and motorcycles in motorsport;



Industrial / Motive -> GSE, automated guided vehicle (AGV), telehandlers, forklifts;



Industrial / Stationary -> UPS, ESS, Telecom.

- AGRICULTURE
- CONSTRUCTION MACHINERY
- AGV / LGV FORKLIFT
- STREET CLEANING
- STORAGE
- MARINE
- OTHER*

Offering specialized solutions...



End markets

Steel/Metallurgical



Plastic/Rubber



Waste recycle



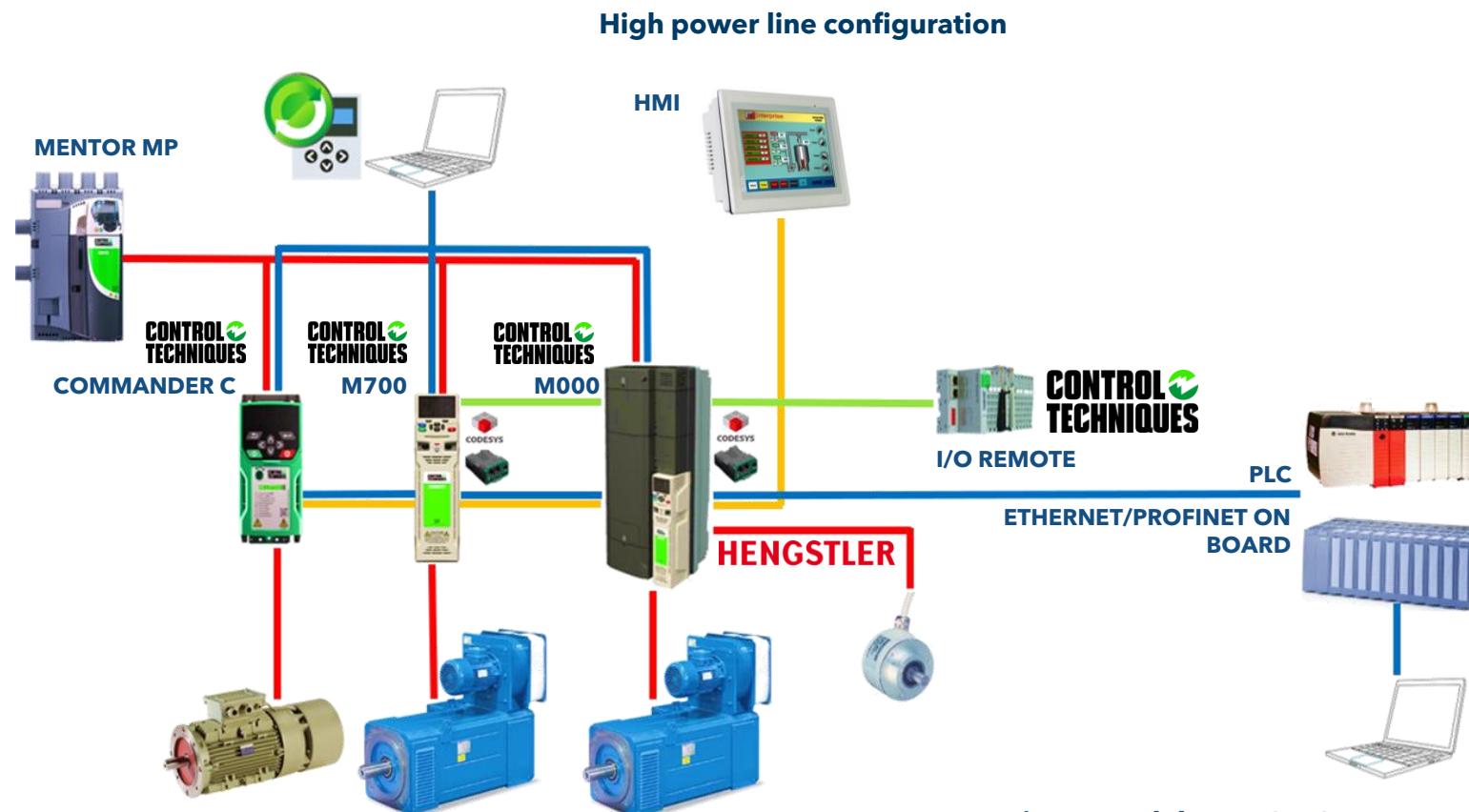
Glass/Ceramics



Paper/Cardboard



Wood



Business model - E-MOTION

- 1 Technical sales meeting
- 2 Application study
- 3 Sizing and component selection
- 4 Commissioning and testing

DC Drives & Motors

Electrical machinery that converts electrical energy into mechanical energy for industrial applications in the process industry



Inverter

Wide range of industrial AC inverters



Accessories

Converters, gearboxes, battery chargers, soft start, SDM



AC motors

Asynchronous and vector motors



Brushless & special motors



Transducers

Encoder

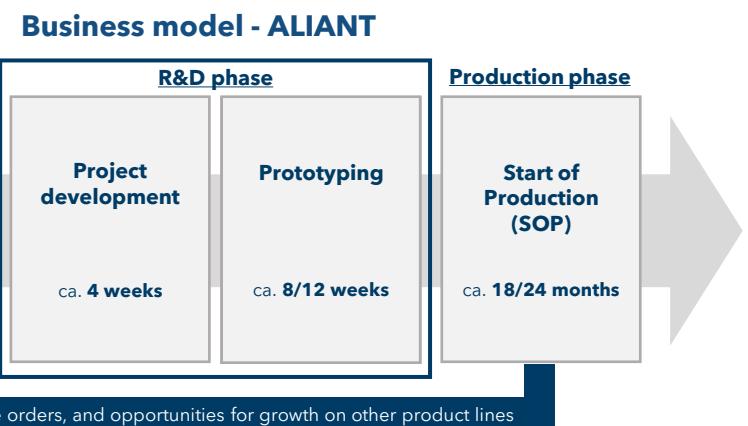
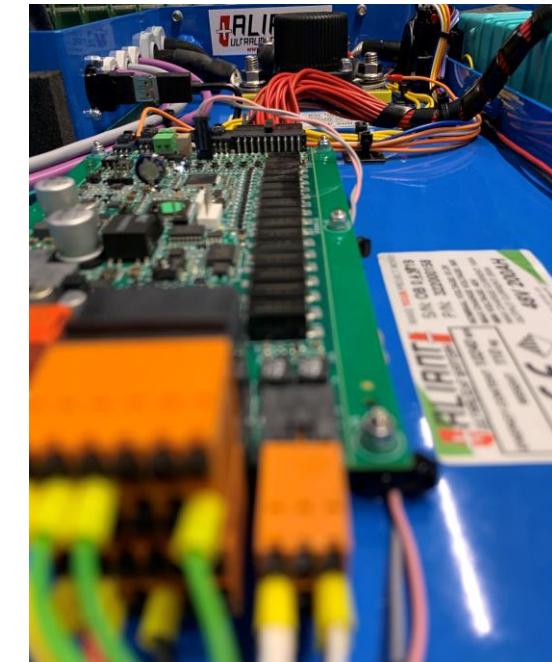
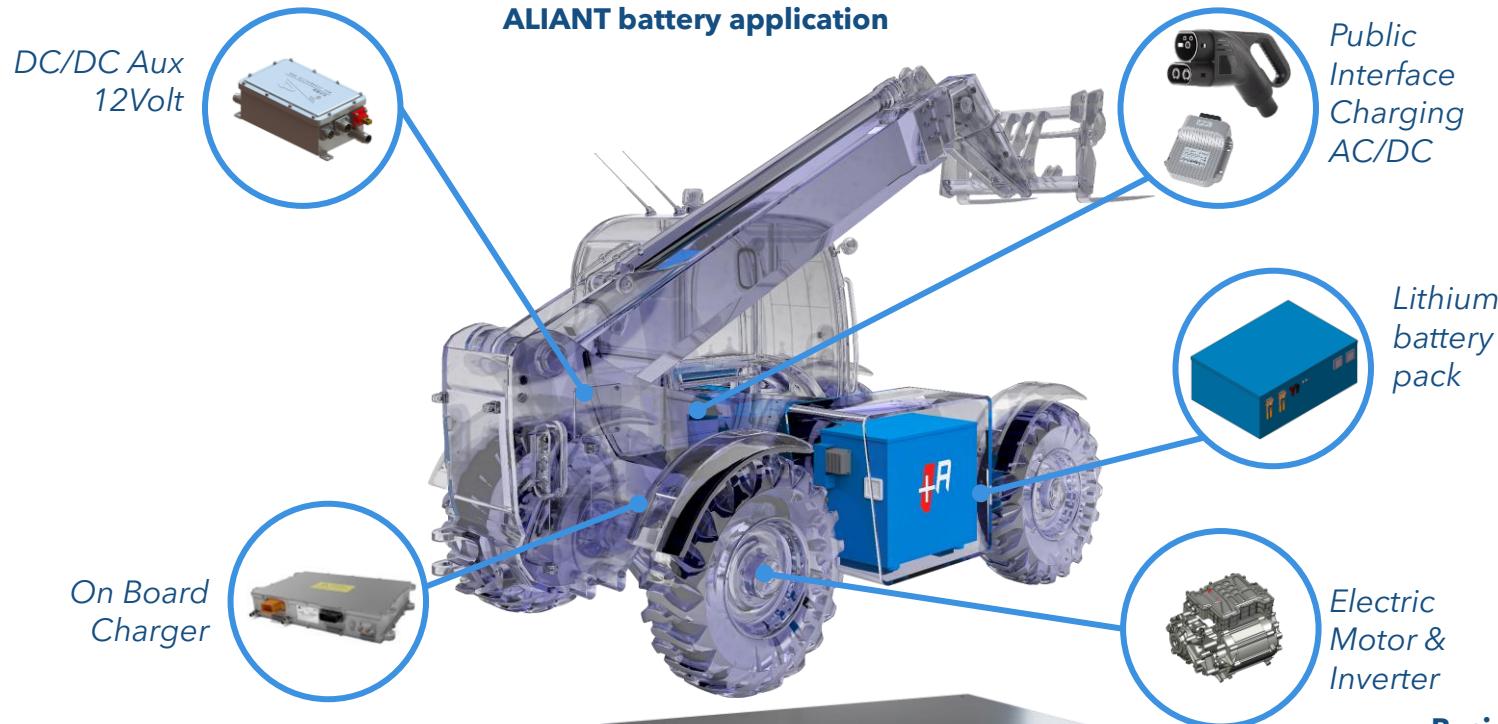


Tachogenerators



Offering specialized solutions...

- ALIANT products are **specialized solutions** co-engineered with OEM clients according to end-market application, in the process of electrification.



Lithium batteries

EK Series	E Series	EA/EY Series	NEK Series	YLP/XR Series
Automation batteries	Power Supply batteries	Stationary batteries	Batteries for marine services and propulsion	Starter batteries
Traction batteries designed for: aerial platforms, road sweepers, electric buses, telehandlers, AGVs/LGVs, earthmovers, mini cranes and mini excavators	Ultralight batteries designed for scooters, toys, bikes, UPS and telecom	Ultralight batteries designed for portable devices, small storage systems, industrial cleaners, AGV shuttles, alarm units	Low and high voltage batteries for marine storage systems (sail & motor yachts and commercial ships)	Batteries used in motorbike racing (SBK and MOTOGP), quads, ATR and snowmobiles



Hydrogen systems

- **H2FCB (Hydrogen fuel cell battery systems)** with power between 30 kW and 250 kW - System integrating **hydrogen fuel cells** and **lithium batteries** for an energy storage solution without any CO2 emissions (**100% carbon-free**).
- Systems designed for E-mobility for industrial applications and stationary power generation (standard solution incorporated in containers)





*Development
Goals*

INDUSTRIAL AUTOMATION SOLUTIONS

STEEL MACHINERY



Complete Systems & Equipments



Steel/Metallurgical



PLASTIC & RUBBER



Plastic/Rubber



WASTE RECYCLE



DC Motion Systems



Waste recycle



GLASS / CERAMICS



Glass/Ceramics



PAPER & CARDBOARD



AC Vector & Brushless Motors, Drives, Feedback



Paper/Cardboard



LITHIUM BATTERIES

CONSTRUCTION MACHINERY	HEAVY DUTY MACHINERY	AGRICULTURE MACHINERY	STREET CLEANING MACHINES	MARINE
 CONSTRUCTION MACHINERY Specialized Taylor Made solutions for construction machinery and heavy duty systems  Low Voltage Series 24/96V	 HEAVY DUTY MACHINERY High-Power Lithium Batteries for Heavy-Duty applications  High Voltage Series 350/650V	 AGRICULTURE MACHINERY High performance batteries for agriculture machines  Complete 48/650V Series for Full Electric & Hybrid solutions	 STREET CLEANING MACHINES Custom batteries and charging infrastructures for operating machines  Complete 48/650V Series compatible with recharge from public infrastructure	 MARINE BESS systems for propulsion and auxiliary service of marine vessels  Modular solutions to allow max development flexibility
				

Ecosystem

eMOBILITY STRATEGIC SUPPLIERS

Lithium cells



Battery chargers



ENGINEERING CHAINS

Research Centers / Labs



Mobile products



CURTIS

INDUSTRIAL STRATEGIC PARTNERS

Power Electronics & E-Motors



Sensors



BUSINESS PARTNERS

Marine systems

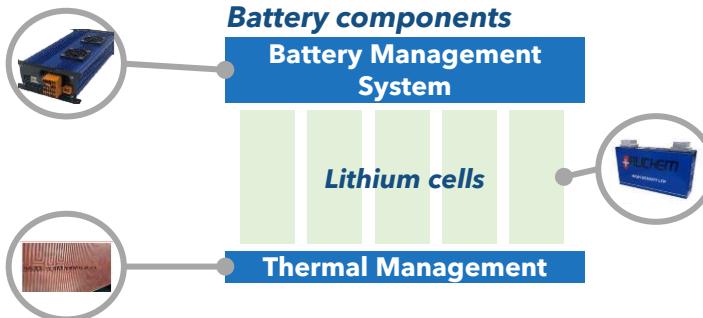


Market Developers and Distributors



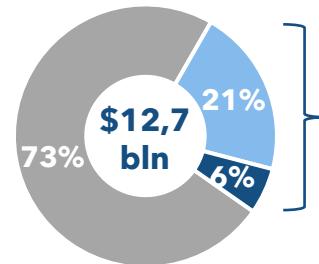
Market outlook

- ALIANT business line is specialized in **LiFePO4 batteries** production (Lithium-Iron-Phosphate, LFP), which represent approx. The **28-29%** of the whole **Lithium-Ion** market (lithium-ion batteries).



- The Lithium-Ion market is mainly composed (approx. 60%) by Nickel - Manganese - Cobalt (**NMC**) batteries, mainly high nickel content, followed by **LFP ones** (27%).
- The global LFP market is estimated to be worth approx. **\$ 12,7 bln** and growth is expected at **CAGR 2023-30 of +16,5%**.

LFP market Breakdown for each application



■ Automotive ■ Energy Storage ■ Industrial Applications

- According to estimates, the market share of LFP batteries is continuing to grow rapidly, which is to the detriment of NMC batteries, due to the following market factors:

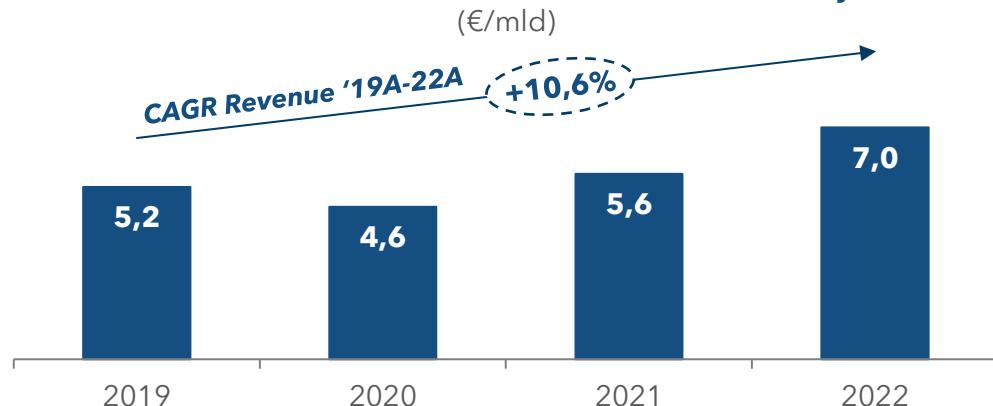


Price instability - Electric Vehicles - Industrial Automation - Clean Energy



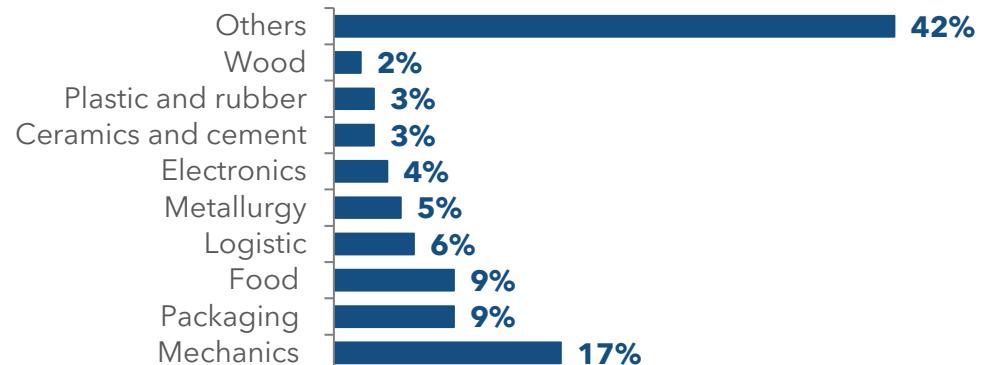
- E-MOTION business line operates in the **italian market of industrial automation systems**.
- In the 2022, the market has recorded a total value of ca. € 7 billion and an expected growth to a CAGR 2023-2028 of +7.0%

Value of the Italian market for industrial automation systems



- Industrial automation systems have various applications, for different industrial sectors: mechanics, packaging, food, logistics, etc.

Breakdown of the Italian market of industrial automation systems by application sector



Skills

- Major skills are oriented to System Integration and System Design
- Current developments areas: Product Design and Power Electronics Design
- Service and After Sales assistance
- 2 Lab Testing Area dedicated to Emotion and Aliant business lines



Product Design

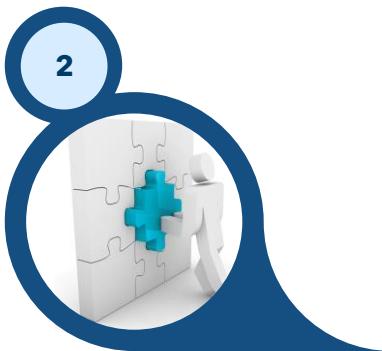
Electrical and
Mechanical integrated
3D Design

 **SOLIDWORKS**



Advanced Software
Simulation Tools

 **Ansys**

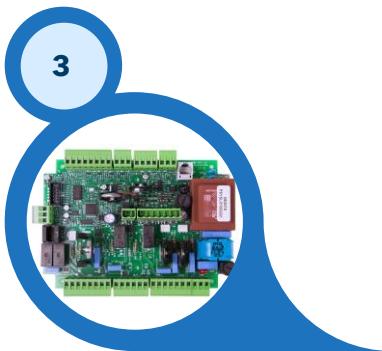


System Integration

Complete integration of devices,
servo, power applications



Development of PLC / PMS /
EMS integration software



Power Electronics

Design of Power Electronics
boards and components



Manufacturing



Service

After Sales Service and
Installation



Maintenance



Lab Testing

Testing and Validation
Type Approval
Regulatory Compliance \ Audit

 **RINA**



 **IEC**

 **BUREAU
VERITAS**

- More than **50% of the raw materials** used in the production process are **renewable** or **recycled** and **more than 50% of the products marketed** are **recyclable**.
- The company has a proprietary **photovoltaic system** that in 2022 covered approx. **37%** of the energy used. The Company aims to become **self-sufficient** before the time set by the Green Deal.



- ELSA Solutions has commissioned **Bureau Veritas** to audit its direct CO2 emissions and obtained a product certification on the **Carbon Footprint**. The company has set itself the goal of achieving net zero by 2030.
- Thanks to the ISO 14067:2018 certification, every battery produced by ELSA Solutions can be accompanied by a **CO2 emission** certification.



(1) Fonte: Warrant Hub S.p.A., Report My Garden 2023.

Focus on Sustainability: ELSA Solutions and Treedom

ELSA Solutions proves its commitment to a sustainable future by collaborating with Treedom, an innovative platform that allows to **plant trees** and track their growth online.



Green mission:

- 1350 trees planted in Latin America and Africa, actively **contributing to CO2 offsetting**.
- Support to **reforestation** projects that generate environmental, economic and social benefits for local communities.

Integrated sustainability:

This initiative integrates with other sustainable practices of the company, including:

- Use of **renewable energies**.
- Adopting advanced IoT technologies to optimize resources and **reduce waste**.

Goal:

Promote a responsible business model, which is sensitive to the environment and people.



With Treedom, ELSA Solutions reinforces its mission to leave a **positive footprint** on the planet, making **sustainability** a concrete and tangible value.

ELSA SOLUTIONS S.p.A.

Elsa Solutions S.p.A. è una storica azienda Emiliano-Romagnola fondata negli anni '70, che opera nel mercato dell'automazione industriale per la gestione e il controllo, tramite inverter, dei motori elettrici. Sp... [Leggi di più](#)

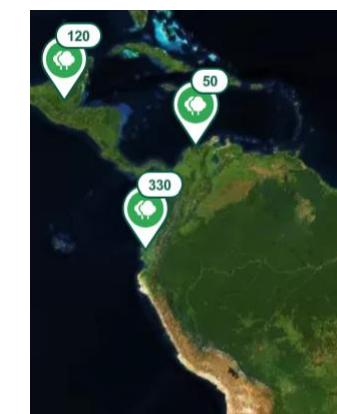
elsaweb.it

1.350 Alberi piantati

346,70 t* CO₂ assorbita

1 Foreste

8 Paesi



(1) Fonte: Warrant Hub S.p.A., Report My Garden 2023.



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