

lap Company Profile

ELAP, electronics for automation spanning more than half a century



With one of the widest and most differentiated offerings of electronic instrumentation for process measurement and control, ELAP has been a partner for companies in the industrial automation sector since 1968, proposing innovative solutions and a complete range of services, from consulting in the choice of the most suitable components for each application, through the development of customised solutions, to an efficient and punctual assistance service.

ELAP's large and modern facilities in Corsico allow it to

maintain control over all phases of the realisation of its solutions, from research and development to design, from prototyping to testing: the instruments leave the factory rigorously tested according to the most stringent industry standards.

Rooted in the territory but appreciated on international markets, ELAP is also present in numerous European and non-European countries through [qualified resellers](#).

Over half a century of experience and the specialised skills of its technicians enable ELAP to provide highly flexible solutions enabling customers to meet all application requirements.

We talked about ELAP, its history and future plans with Valeria Vigentini, the company's Communications Manager.

How did ELAP come into being and how did it become the organisation we know today?

ELAP was founded in 1968 as a manufacturer of metering and control systems for industrial automation.

The company immediately stood out for its ability to respond flexibly to the rapidly changing requirements of customers in the emerging automation sector, and for its willingness to develop tailor-made products and customised solutions on request in partnership with customers.

Within a short period of time, ELAP's listening skills and its ability to quickly satisfy all customers' requests have consolidated its position as a reference partner for industrial automation. The company has always

invested in research and development, acquiring state-of-the-art instrumentation and supporting growth with adequate development of production capacity.

ELAP is now a solid, well-structured industrial concern; the Corsico site has a surface area of over 2000 square metres and houses the sales offices, technical design departments, construction and test laboratories and, of course, the components warehouse, which allows production to be managed rapidly according to customer requirements to guarantee on-time deliveries.



What are the main characteristics of ELAP's production?

Our products are primarily intended to meet the requirements of measurement and control in automated industrial processes. Today, the focus of our production is on position transducers. The catalogue includes a wide selection of these, from [incremental](#) and [absolute rotary encoders](#) to [potentiometers](#), right up to magnetic and [wire transducers](#).

Accuracy and reliability are essential; in addition to guaranteeing these characteristics through careful control of all stages of the production process, we are able to offer considerable flexibility in our range so that every customer requirement can be met. This is because our technicians have an in-depth knowledge of the application sectors in which our customers operate. Through our pre-sales consulting service, we identify the most suitable component for the use our customers have in mind, and if the optimal solution is not present in our catalogue, we evaluate the possibility of developing tailor-made versions to suit customer requirements.



We also offer a selection of instruments from other manufacturers, complementary to our range, to ensure that every requirement is met.

These are proposals offered by international companies chosen among the best in their segment for manufacturing excellence and, of course, service reliability.

We currently offer:

- [rotary potentiometers](#) and [industrial joysticks](#) from the Dutch company Althen,
- US-made [vibration sensors](#) from Wilcoxon,
- Japanese [Shinkawa monitoring systems](#)
- and [inclinometers](#) from Vigor Technology, manufactured in Shanghai.

Which industrial sectors are most interested in your offering?

The rapid development of automated processes has affected many sectors, resulting in a growing need for control, measuring and counting equipment and devices. Our solutions therefore find application in most segments of the manufacturing industry, particularly for machinery intended for processing materials such as sheet metal, wood, paper, glass, plastics, textiles, food and beverage, as well as in the packaging and industrial handling sectors.

In all segments of automation, absolute encoders with fieldbus systems represent our flagship product

today. Designed to meet the growing demand for 'smart' sensors from industrial machine builders, MEM-Bus encoders offer a wide choice of communication protocols, from [Ethernet/IP](#), [Ethercat](#) and [Profinet](#) to [Profibus](#) and [Canopen](#) fieldbus systems; encoders with IO-Link protocol will also be available soon.



Our absolute encoders with fieldbus are an advanced product highly appreciated by the market; this increasingly requires 'smart' sensors enabling the transmission of

information for plant management and which can be integrated into the remote supervision systems of production processes typical of Industry 4.0.

In what way do ELAP products stand out with respect to their competitors?

We have always invested in research and development to keep our offering at the highest level in terms of technological innovation. We believe that the high number of customers who have reconfirmed their trust in our products for years is due not only to the range of technically excellent products, but also to our ability to propose solutions suited to the requirements of the production process without being oversized, with a certified reliability enabling customers to sell and export their machines without worrying about maintenance needs.

What advantages do customers obtain by turning to ELAP?

In a nutshell I would say: the range which allows you to definitely find what you need, the consulting service which allows you to quickly identify the best solution within this range, the guarantee of reliability and long service life. But surely what brings customers back to us is a relationship we experience as a true partnership, being able to propose efficient solutions or develop customised systems upon request.

What strategies have you put in place in recent years to overcome the difficulties encountered in almost every industry, such as supply bottlenecks and longer delivery times?

A far-sighted policy in component stock management has ensured that deliveries have continued to be made within timeframes compatible with the requirements of customers' production processes; in this sector, investing has proved successful, even in inventory management.

For the future, what goals have you set out and how do you intend to pursue them?

We intend to continue along the road which has proved successful: investing in research and development, in training our staff and in improving management efficiency, to guarantee customers the service they deserve.

There will be many opportunities to meet with our partners, the first being SPS Italia, where we will be present at the stand of the Profibus and Profinet Italia Consortium (Hall 5, Stand B 013) and will present to the varied automation sector some of our solutions using different communication protocols: Profinet network protocols, Profibus field bus systems and innovative encoders with IO-Link protocol.

Visitors will be able to discover the details of our Encoders 4.0: smart sensors for the IoT capable of transmitting data with high speed, precision, security and flexibility: specifically, the [WPS](#) and [WDS](#) absolute encoders, which combine the functionality offered by wire systems with the interconnectivity advantages required in IoT applications.

The transducers consist of the wire movement mechanism combined with the MEM-Bus multi-turn absolute encoder.

The encoder offers high resolution (28/29 bits) and supports EtherNet/IP, EtherCAT and of course PROFINET communication protocols. It has all the features typical of 4.0 sensors, such as diagnostics, which reports any errors in parameterisation, position and temperature, and the possibility of setting operating parameters – the number of revolutions, steps per revolution, direction of rotation and a preset. The encoders are supplied with certificates of conformity from the respective reference consortia ODVA, EtherCAT and PNI, as well as the UL Listed safety mark.

The transducer is available in different sizes: the WPS type, with 5000 mm travel, is equipped with a compact fibreglass-filled polyamide housing, while the WDS series, with strokes from 3 to 15 metres, comes with a robust aluminium housing. For both types the wire is made of durable stainless steel with a polyamide cover. The sturdy internal return spring keeps the wire in tension, ensuring accurate measurements



Not all of the solutions in the ELAP catalogue will be on display at the trade show, but ELAP technicians at the stand will be ready to show visitors the full range of our automation products.

We look forward to welcoming you!

Since 1968, ELAP has been a partner for companies in the industrial automation sector, offering electronic instrumentation for process control and measurement. The wide range of innovative solutions and multiple services, from consulting in the selection of ideal components to the development of customised solutions, allow ELAP to provide efficient and reliable solutions, appreciated by the most important companies in every segment of the manufacturing industry.

For information and advice, the company's technicians can be reached on +39 02 45 19 56 01 or via email at vendite@elap.it; detailed information on ELAP solutions is also available on the elap.it website.

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