



À LA POINTE DE L'AUTOMATION





**WE ADAPT WITH FLEXIBILITY TO THE REQUESTS AND REQUIREMENTS OF OUR CUSTOMERS**



For companies in the watchmaking, medical and micro engineering fields, CLA is a supplier of solutions for complex part assembly and advanced micro-couple measurement because it produces Swiss made, flexible, scalable and connected equipment that ensures complete traceability of production data.

# VISION – MISSION – VALUES

## OUR VISION

To be a reference in automation and high-tech measuring devices in order to enable our customers to manufacture Swiss made products at competitive prices.

## OUR MISSION

To develop innovative, reliable and high-performance solutions based on cutting-edge technologies. We build strong partnerships with our customers in order to accompany them in their industrial approach to ensure them an efficient and reactive service.

## OUR VALUES

### Customer satisfaction

It is thanks to the trust of our customers that we have the chance to carry out exciting technological projects. We are committed to doing everything we can to give them complete satisfaction.

### Customer service

Because we can always improve and do better, we listen to our partners in order to make our solutions evolve and ensure efficient and responsive support.

### Know-how

Because our know-how is built on the skills of our employees, we seek to learn, progress and make it a point of honour to guarantee the training of our teams.

### Innovation

We are constantly questioning ourselves and always want to progress through new and more innovative solutions.

### Flexibility

We adapt flexibly to the demands and requirements of our customers.

**TO DEVELOP INNOVATIVE, RELIABLE AND HIGH-PERFORMANCE SOLUTIONS BASED ON CUTTING-EDGE TECHNOLOGIES.**

# AUTOMATION AS A PASSION

CLA Clinical Laboratory Automation SA, known as «CLA», was founded at the end of 1996 in order to offer high-tech automation solutions for the needs of medical analysis laboratories.

Under the leadership of Dr. André von Froreich, owner of several analytical laboratories in Hamburg and Patrick Fleury, micro-technical engineer and current CEO, the company industrializes the Sample Management System SMS® transport system. Initially developed to reduce the costs of blood analysis for the needs of Dr. Froreich's laboratories, the SMS product is now applicable to various fields. In particular, CLA is an avant-garde partner for the assembly of watch movements and offers its services to the largest watchmaking groups in Switzerland.

A medium-sized Swiss public limited company located in Delémont, CLA is known for supplying technological products in the field of automation. It has a great know-how in the automation of watchmaking, medical and micro-technical processes.

Its experience in the realization of automated systems allows CLA to develop «turnkey» robotic applications that meet the latest market requirements. Moreover, it is a centre of competence in Switzerland for the Mitsubishi brand of robots.

In recent years, CLA has invested a great deal of energy in the field of measurement technology in order to offer high-performance equipment for the measurement of microcouples and microforces. In addition, CLA manufactures its own force and torque transducers, which it also offers as OEM (Original Equipment Manufacturer) components.

CLA offers a global project service (one-stop-shop) in the realization of special machines and ensures the design, assembly, software programming, documentation, conformity tests and maintenance of its installations.

Its equipment complies with the standards in force in the micro-technical and medical fields.



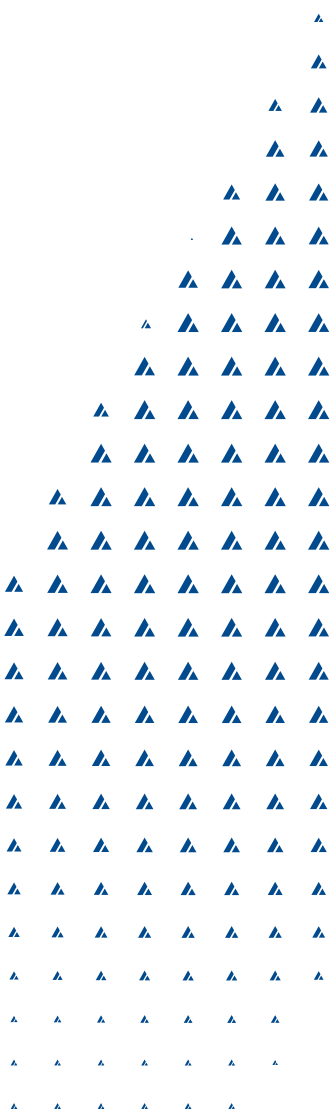
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We constantly question ourselves and always want to progress through new, ever more innovative solutions





# BUSINESS SECTORS

## MICRO-TECHNOLOGY

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Specialized in equipment for the production, assembly and measurement of small parts. CLA equipment is therefore perfectly adapted to the micro-technical industry.

### **Micro-technical applications:**

- Assembly line
- Industrial robotics
- Vision
- Micro-assembly
- Metrology

## WATCHMAKING

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Located in the heart of the watch industry, CLA is an avant-garde and local partner of renowned manufacturers, in particular for the assembly lines of mechanical movements and its quality control equipment.

### **Watchmaking applications:**

- Movement assembly and pre-assembly
- Chronometry control
- Ébauche (movement-blank) machining
- Casing
- Metrology
- and so on
- Medical

## MEDICAL

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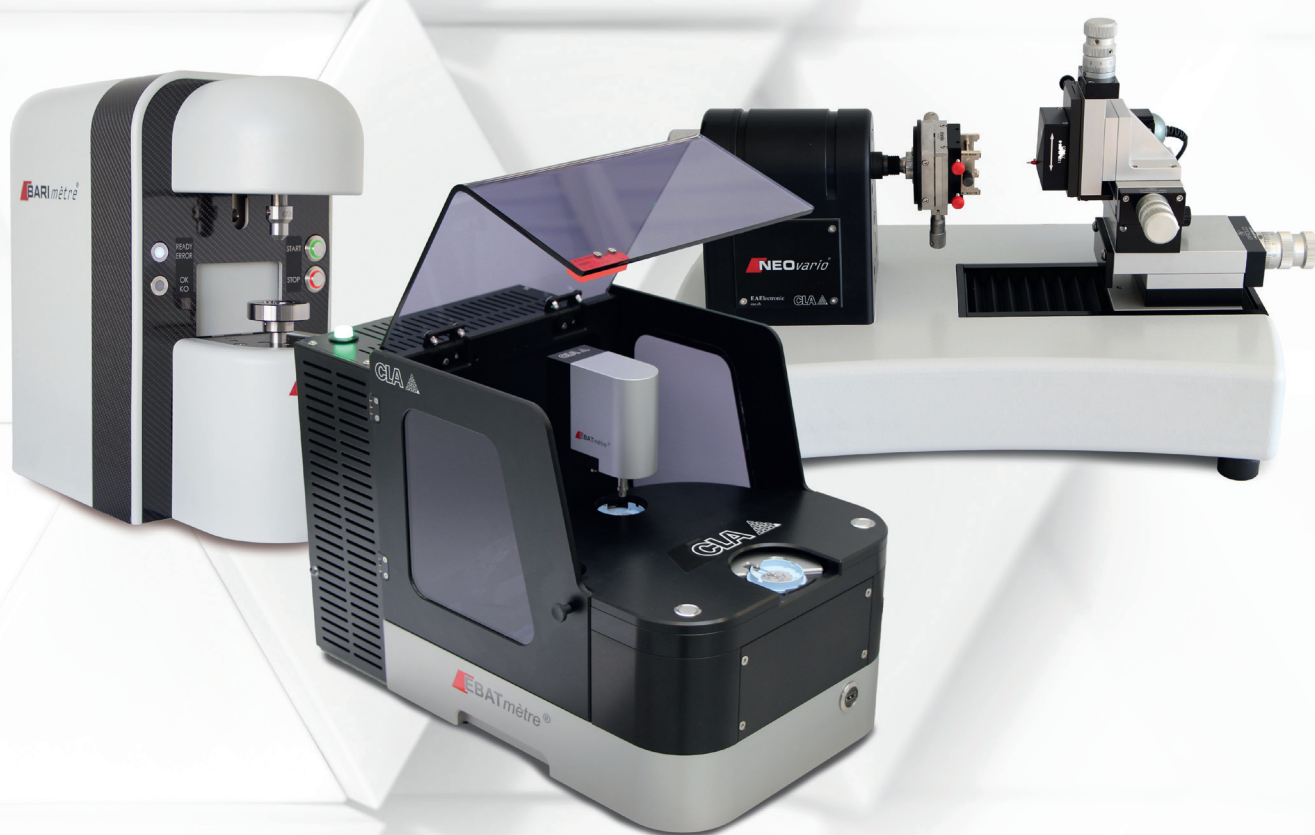
Traceability is always at the centre of our concerns. Our skills in software development allow us to develop tailor-made automation solutions adapted to the medical sector. An example of this is our transport system, based on technologies from the field of medical analysis laboratories.

### **Medical applications:**

- Automation of medical laboratories
- Robotics in medical environments
- Special machine adapted to the customer's needs.
- Electric micro-motor assembly



## MEASUREMENT TECHNOLOGY AT YOUR SERVICE



## THE TRANSPORTATION SYSTEM SMS

The main activity of CLA is the realization of assembly lines or production of microtechnical parts below 300gr based on the Sample Management System SMS technology. It is an intelligent and modular transport system (conveyor) allowing the individual treatment of each component. Depending on the operating range, the SMS feeds the different manual, semi-automatic or automatic workstations. It ensures an optimal distribution of the workload and minimizes the current stock. By the RFID identification of each part, you ensure a perfect traceability of your production thanks to the supervision software Object Management Software OMS. The software, the real brain of the system, ensures great flexibility and scalability of your equipment by giving you the possibility to configure operations and operating ranges. It is a tool perfectly in tune with Industry 4.0, allowing you to process and interconnect your production data.

### Your benefits:

- Optimization of production flows
- Integration of manual and automatic operations
- One piece flow
- Multi-reference management
- Flexible and scalable system
- Ensuring traceability through RFID technology
- Data management and interconnection
- Compliance with requirements Industry 4.0

### Application examples:

- Assembly line for mechanical watch movements
- Assembly line for micro-motors
- Transport and analysis line for blood samples





## ROBOT CELLS AND SPECIAL MACHINES

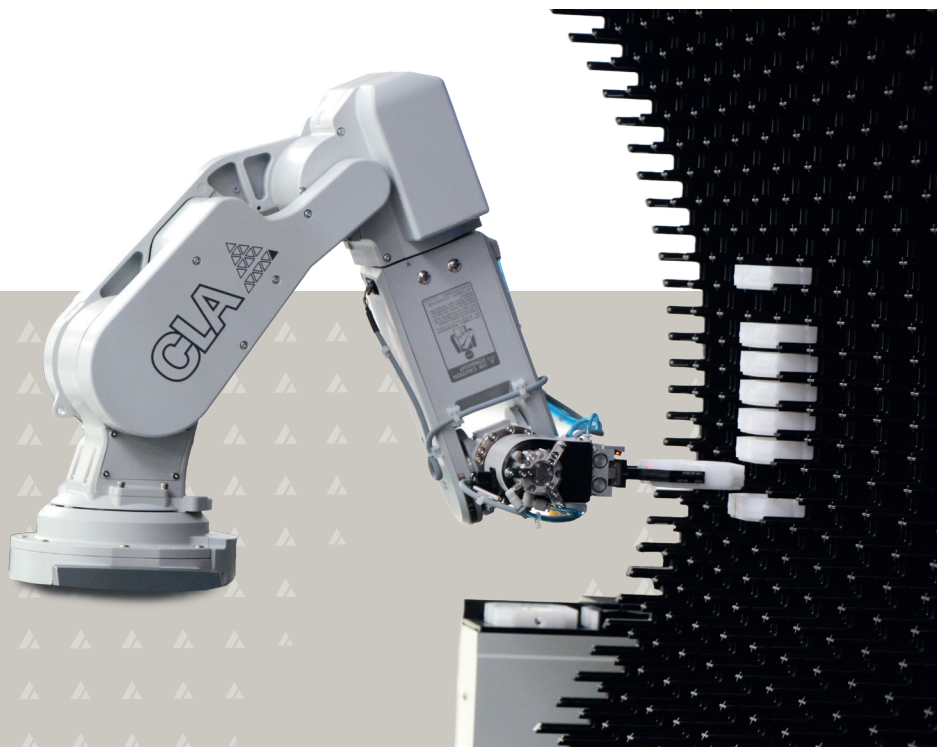
CLA has 20 years of experience in special machinery. We manufacture customised equipment based on standard platforms for micro-assemblies and quality control of micro-technical parts. Our advanced knowledge in industrial vision enables us to carry out targeted robotic applications in the handling of micro-technical, medical or watchmaking parts. We are a competence center for the Mitsubishi brand of robots. Are you looking for a customized turnkey solution to meet the new challenges of the 4.0 industry? You will find in CLA a flexible partner who listens to your needs.

### Your benefits:

- Project management (One stop shop)
- We work with quality components and regional partners
- Multi-reference management
- Flexible standard platform
- Traceability by RFID
- Data management and interconnection

### Application examples:

- Quality control cell for micro-technical or watchmaking components
- Loading cell for machines
- Screening cell
- Micro-assembly cell



# FIELDS OF ACTIVITY

## MEASUREMENT TECHNOLOGY

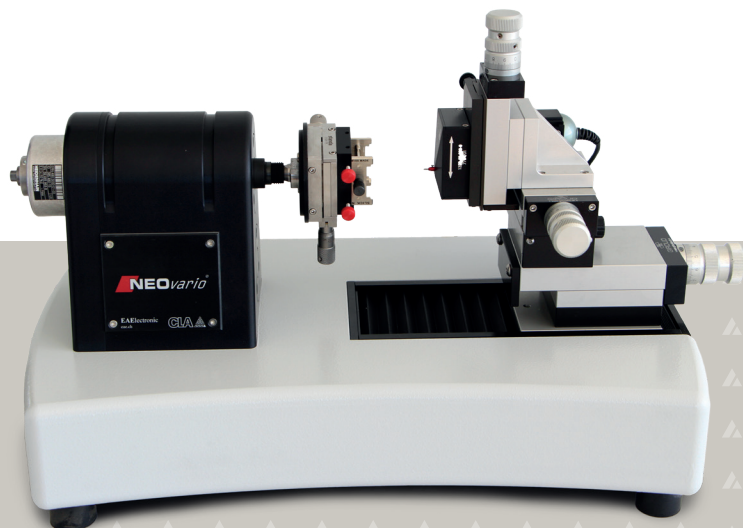
We specialise in the measurement of microcouples and microforces. Our range of sensors enables us to measure extremely low torques, which are very rare on the market, from  $1\mu\text{Nm}$  to  $1\text{Nm}$ . We supply torque measurement test benches for laboratories and production. They are equipped with software allowing to customize the measurement and to adapt to the most demanding needs. We guarantee the traceability of your measurements and allow you to generate meaningful measurement reports that can be interconnected with your quality management systems.

### Your benefits:

- High measuring accuracy in micro-couples
- Flexible and modular devices
- Measurement traceability
- Data management and interconnection
- Tool manufacturing for a turnkey measurement solution

### Equipment examples:

- Force and torque sensors
- BARImètre: measurement of micro-torques for production controls
- VARIOcouple and NEOvario: laboratory measurement benches for microcouples and microforces
- EBATmètre: measurement of height clearances
- CLAsight: inspection and measurement by vision tools



## MULTI-REFERENCE QUALITY CONTROL CELLS

The multi-reference quality control cell, such as our flagship product, the CLA multi-calibres chronometric Cell, is used to control and adjust the performance of a mechanical watch movement or watch. Integrated testing may depend on the type of product to be tested but generally consists of measurements for rate deviation, beat error and amplitude at 0h and 24h as well as a power reserve check. Additional tasks may be added such as: the reading of the next number, checking the indenting of the cannon pinion or the activation and control of the functions of the watch. The correction work-tables can be linked to the Cell for any Line adjustments depending on the production model chosen.

### Your benefits:

- Multi-reference management
- Flexible standard platform
- Traceability by RFID
- Data management and interconnection
- Can be integrated into an assembly line or final inspection
- Use of customer control processes or process development

### Application examples:

- Quality control cell for micro-technical or watchmaking components
- Screening cell
- The CLA multi-calibres chronometric Cell is used to monitor and tune the performance of a mechanical watch movement or a watch



