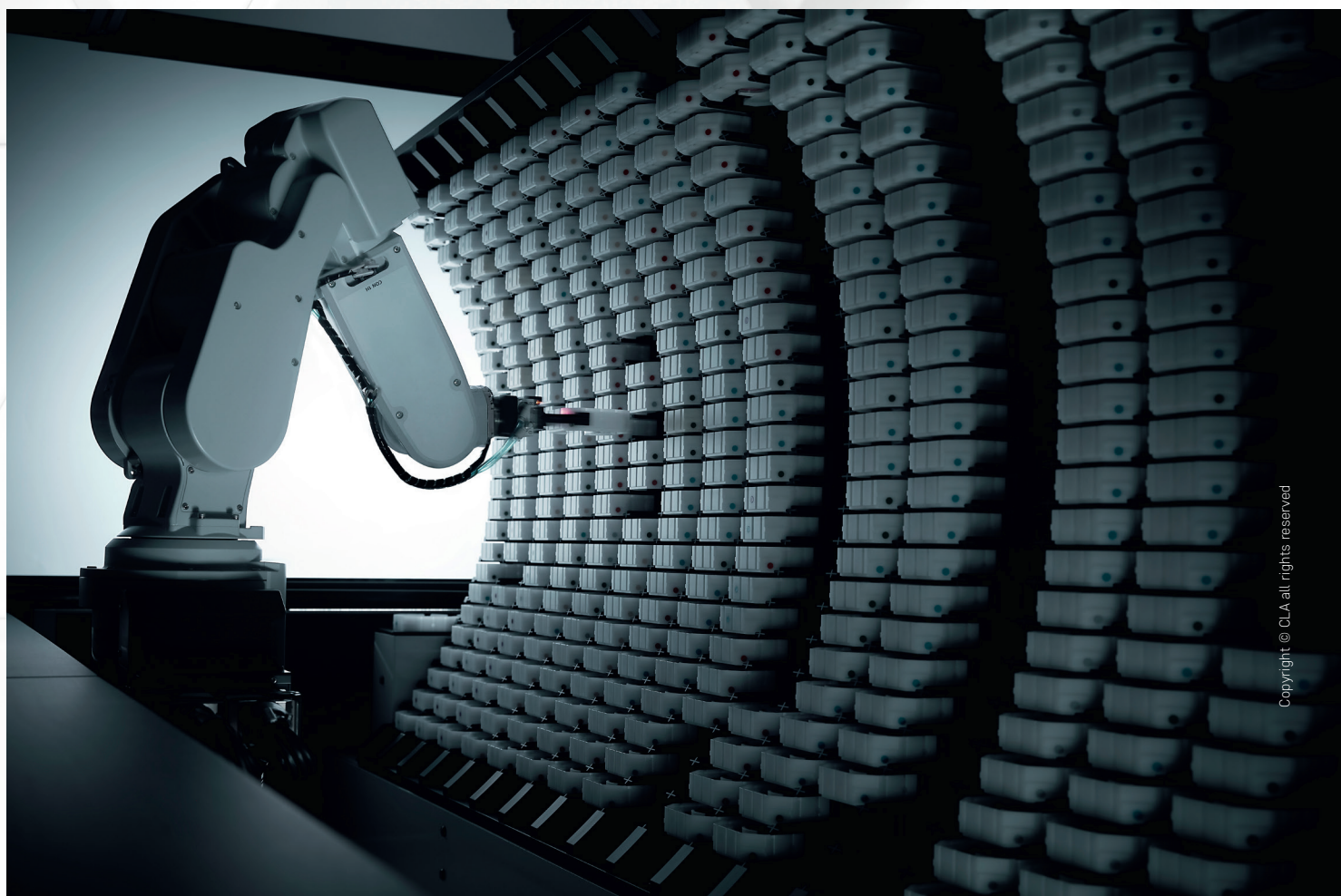


CLA*chronométrie*[®]

Multi-calibres chronometric Cell



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Control and adjustment of chronometric performance



For chronometric measurements of mechanical movements or watches, CLAchronométrie guarantees the delivery of a quality product because it ensures the automatic control of the product's performance and maintains its traceability

Available as a stand-alone control cell or integrated into a production line	Storage flat or in position	Indenting control	Integrated or non-integrated correction workbenches
RFID Technology	Supervision and interconnection of data using OMSviewer	Daily rate control by vision	Generate measurement certificates
Step simulation	Activation and control of functions	Water resistance control	Generate measurement certificates
0h-24h and power reserve control	Time setting	Chronograph synchronization control	

The CLA multi-calibres chronometric Cell is used to monitor and tune the performance of a mechanical watch movement or a 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.

PRINCIPLE OF OPERATION

The Cell consists of a robotic unit that allows the handling of parts between the different automatic processes. The parts to be worked on are loaded into the chronometric Cell in the stores. Therefore, the parts are worked on individually using RFID technology.

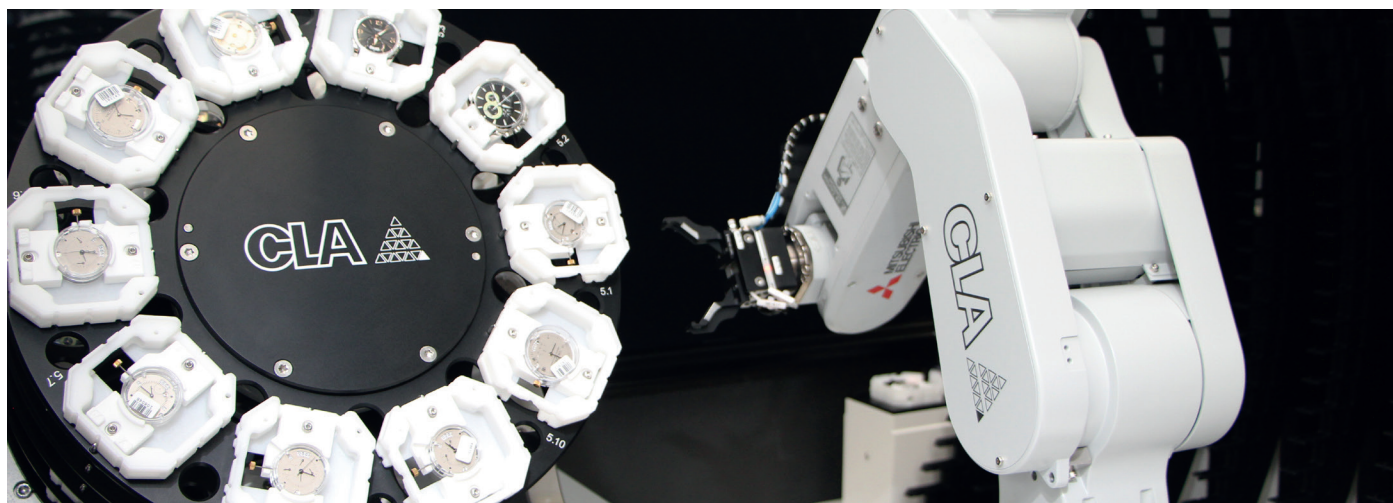
The robotic unit picks up the parts to be checked and then prepares them for the first operation in the range which is generally the winding. This can be done by the rod or the mass with the CLAarmage or the CLAremonage respectively. As the parts are individually identified, their winding time may be different.

Once the parts have been wound, the robotic unit will place the parts on the unit that measures for rate deviation, beat error and amplitude at 0h.

24h storage is done in the equipment in a library provided for this purpose. Once the time has elapsed, the robot places the parts again on the control unit so that it can do the 24h control.

The out-of-tolerance parts may be isolated in the sorting stores provided for this purpose or sent to the correction work-tables connected by the SMS transport system. On the correction work-table, the correction information is displayed automatically.

Once the parts have been corrected, they are once again checked by the chronometric Cell. The power reserve can also be checked in the same way.

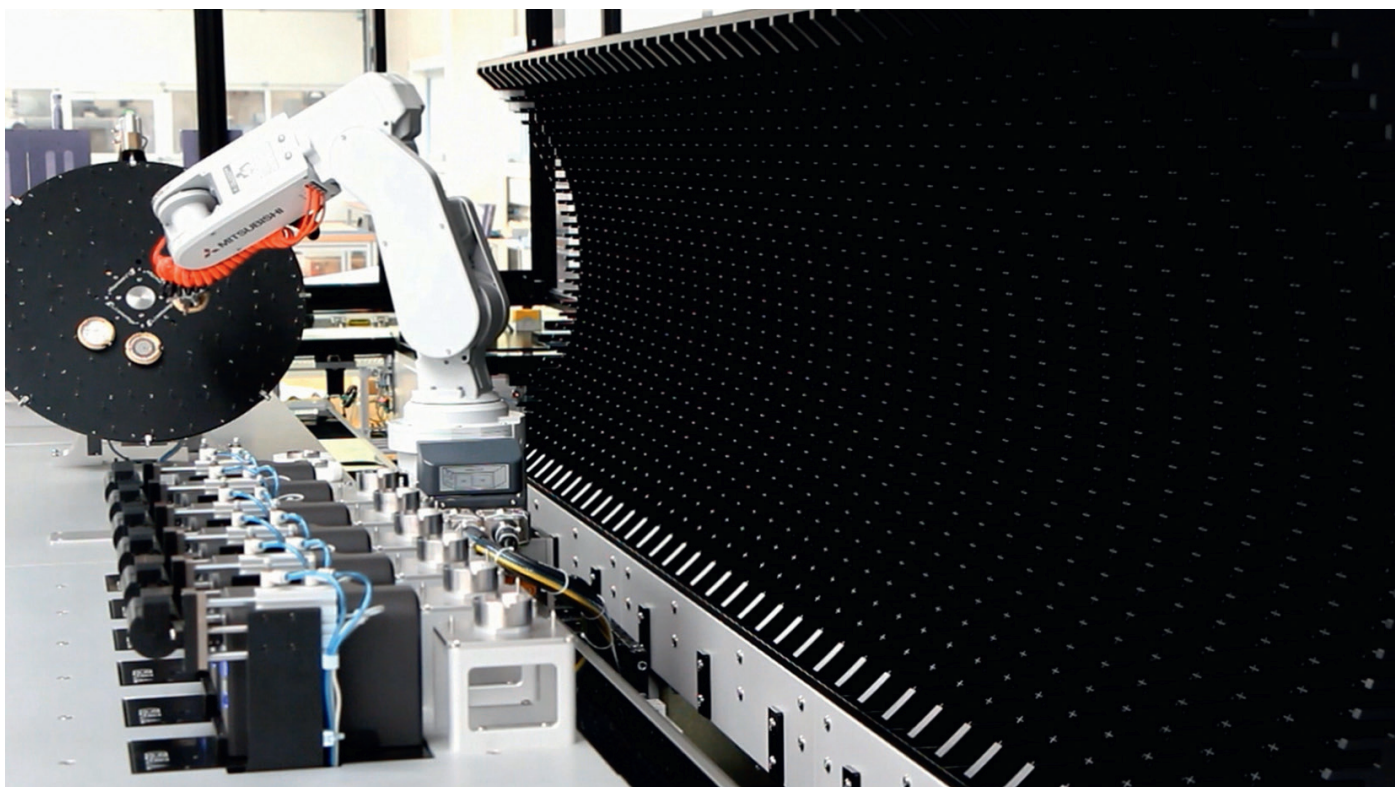
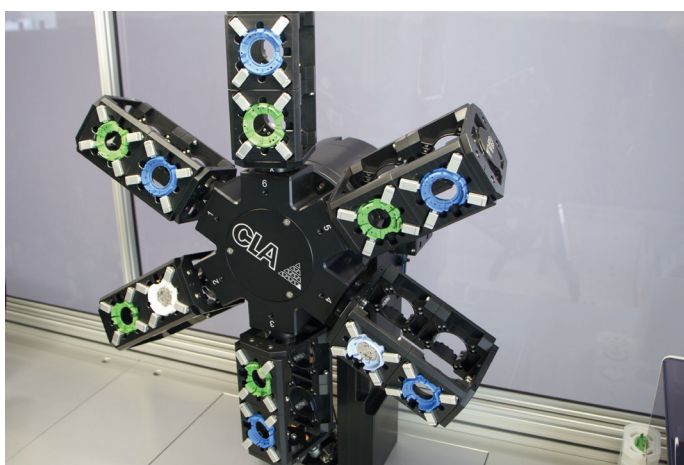


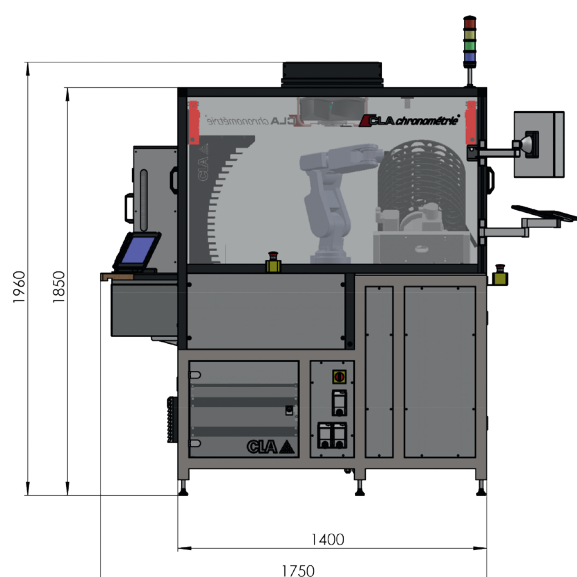
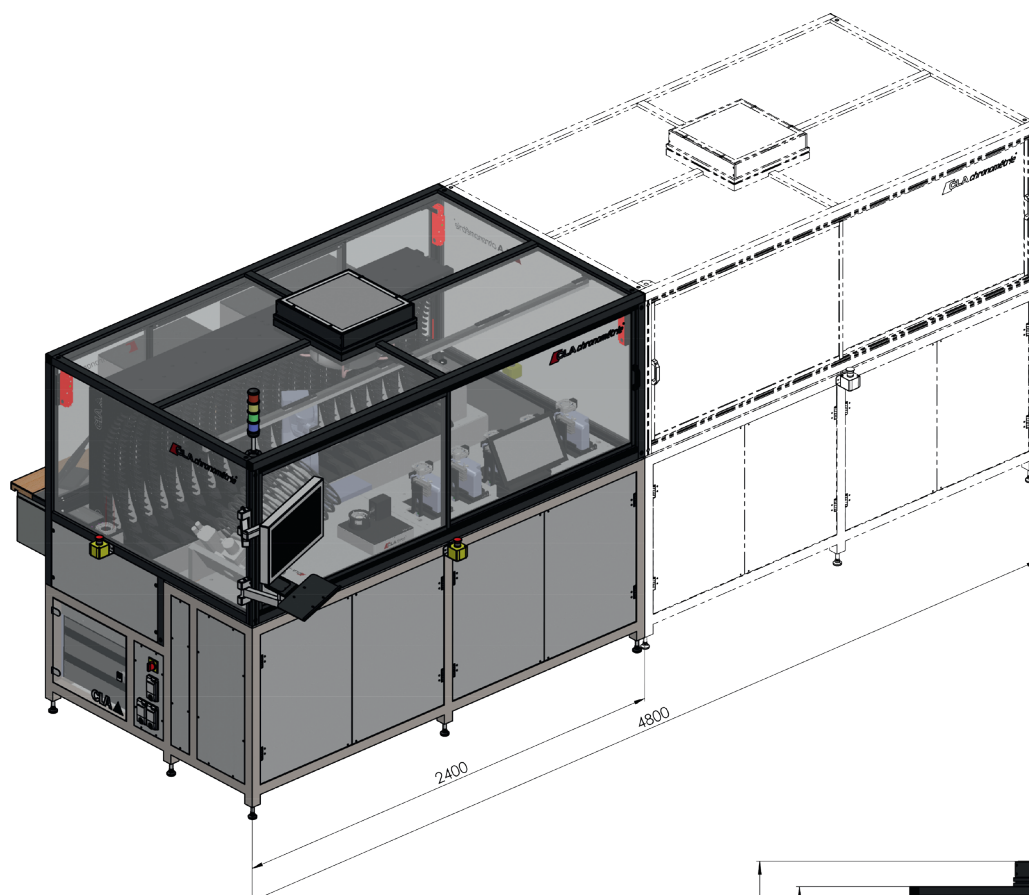
INTEGRATION INTO THE PRODUCTION LINE

The SMS™ transport system provided by CLA consists of standard and modular components allowing scalable configurations. It is also possible to install independent process islands which are supervised and logically linked by the OMS software. If necessary, these islands can be subsequently coupled to form a single SMS™ Line. The chronometric Cell can be integrated directly into the assembly flow for control and adjustment purposes.

OBJECT MANAGEMENT SOFTWARE OMS®

The chronometric Cell is managed by the OMS software that allows the management of operational ranges. As each part is individually identified, the system is able to manage several types of parts simultaneously and ensure the monitoring and production log. Traceability of your production is guaranteed. In addition, the OMSviewer allows you to collect production data and check the status of the chronometric Cell.





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.

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