

**SAMPLE MANAGEMENT SYSTEM SMS®**

Optimise your production flow



**INTELLIGENT, SOFTWARE-DRIVEN  
TRANSPORTATION SYSTEM**

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Your flexible multi-reference equipment, combining manual and automatic operations all by guaranteeing the traceability of your production



**For parts requiring a lot of complex assembly operations, SMS technology is the ideal automation solution because it makes it possible to create flexible and multi-referenced equipment combining manual and automatic operations, while guaranteeing production traceability.**

|   |                                       |   |   |
|---|---------------------------------------|---|---|
| Intelligent transport system with 60mm or 100mm rails   | Standard shuttles 48x48mm and 80x80mm | RFID Technology   | Traceability guaranteed by OMS software |
| Mainly used in the fields of watchmaking, micro technology and medicine   | Multi-reference management            | One piece flow  | Optimization of production flows        |
| Flexible / Scalable   | Manual and automatic operations       | Supervision and interconnection of data using OMSviewer | Top and bottom access to pieces         |
| Assembly line for mechanical watch movements<br>Assembly line for micro motors<br>Transport and analysis line for blood samples |                                       |   |   |

The SMS product was first developed for medical analysis laboratories in order to reduce analysis costs. In order to ensure control of the process, each blood sample must be able to be identified and to be sent individually from one device or person to another quickly and follow an operating sequence that evolves according to the results.

This SMS technology was adapted and integrated into the micro technology and watchmaking sector at the beginning of 2000. Since then, SMS has constantly evolved with the integration of various devices designed to facilitate the processing of components.

## UNIT TRANSPORT

The Sample Management System SMS is an intelligent transport system available in two versions of different sizes, 60mm and 100mm, allowing the individual processing of each component. Depending on the operating range, the SMS feeds different manual, semi-automatic or automatic workstations. It ensures an optimal distribution of the workload and minimizes the current stock.

Each shuttle is uniquely identified using RFID technology, allowing complete traceability which is guaranteed by the Object Management Software OMS.

SMS technology is the ideal logistics system for conveying components for machining, assembly and inspection. It is possible to transport different types of components in variable quantities according to production orders. Several different products can be processed simultaneously, thus reducing work-in-progress while maintaining flexibility.

## FROM THE PRODUCTION ISLAND TO JUST-IN-TIME PRODUCTION

The SMS is composed of standard and modular elements that allow expandable configurations. It is also possible to implement independent production islands, supervised and logically linked by OMS software. These islands can, if necessary, be coupled later to form a single SMS line.



# SAMPLE MANAGEMENT SYSTEM SMS®

Flexible assembly line



## OBJECT MANAGEMENT SOFTWARE OMS TO STAY FLEXIBLE, SCALABLE AND CONNECTED

The OMS routing software allows a decisional management of operating ranges. Due to the individual identification of each part, the system is able to manage several types of parts simultaneously on the transport system, as well as to guarantee the tracking and the production history. The traceability of your production is ensured. In addition, the OMSviewer® allows you to collect production data as well as to check the status of the SMS system.

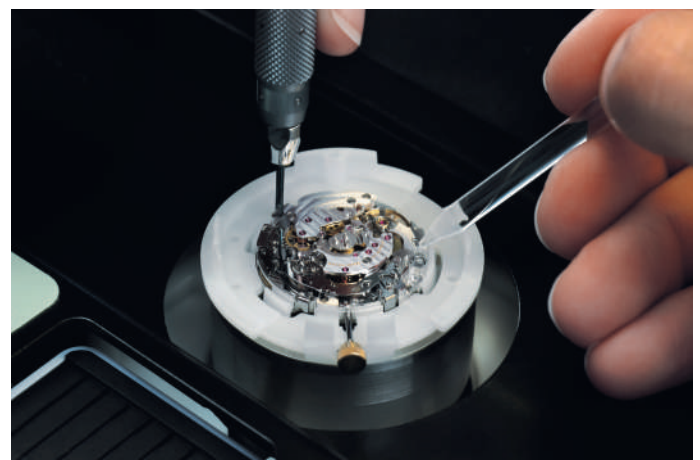
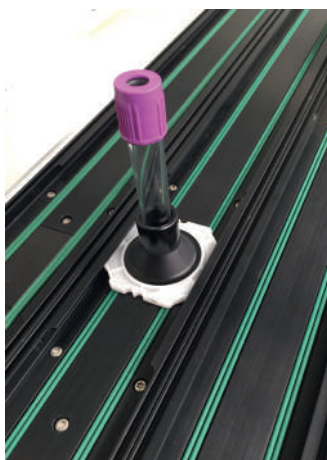
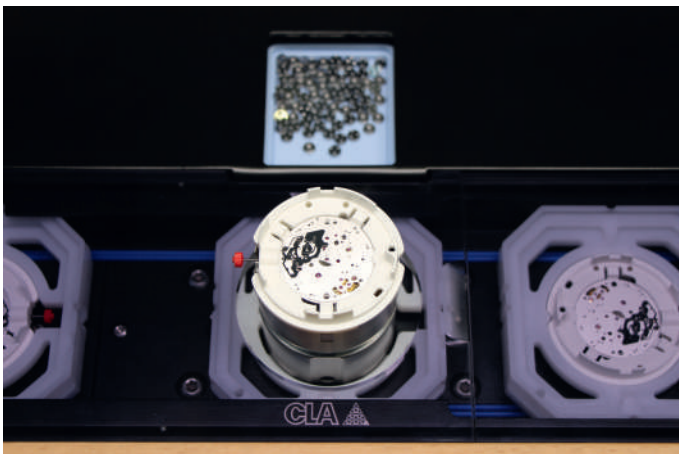
## FLOW STUDY

The implementation of automation solutions such as SMS involves a thorough study and simulation phase that allows the definition of the architecture and the return on investment of the equipment. CLA has the necessary know-how to accompany its customers in their industrial development. We optimize your production flows while complying to your manufacturing processes.

The SMS transport system has already proved its value in analysis laboratories and in the assembly of watch movements and watch casing. It is also perfectly suited for use in micro technology and machining. Due to its compact modular design, it can be installed in close proximity to other equipment.

## APPLICATION EXAMPLES

The SMS100mm Line has become a reference production tool in the assembly of watch movements. The SMS 60mm Line is particularly well suited for the transport of small micro technical and watchmaking parts such as, for example, spiral balances or barrels. The technology is similar to the SMS 100mm version.



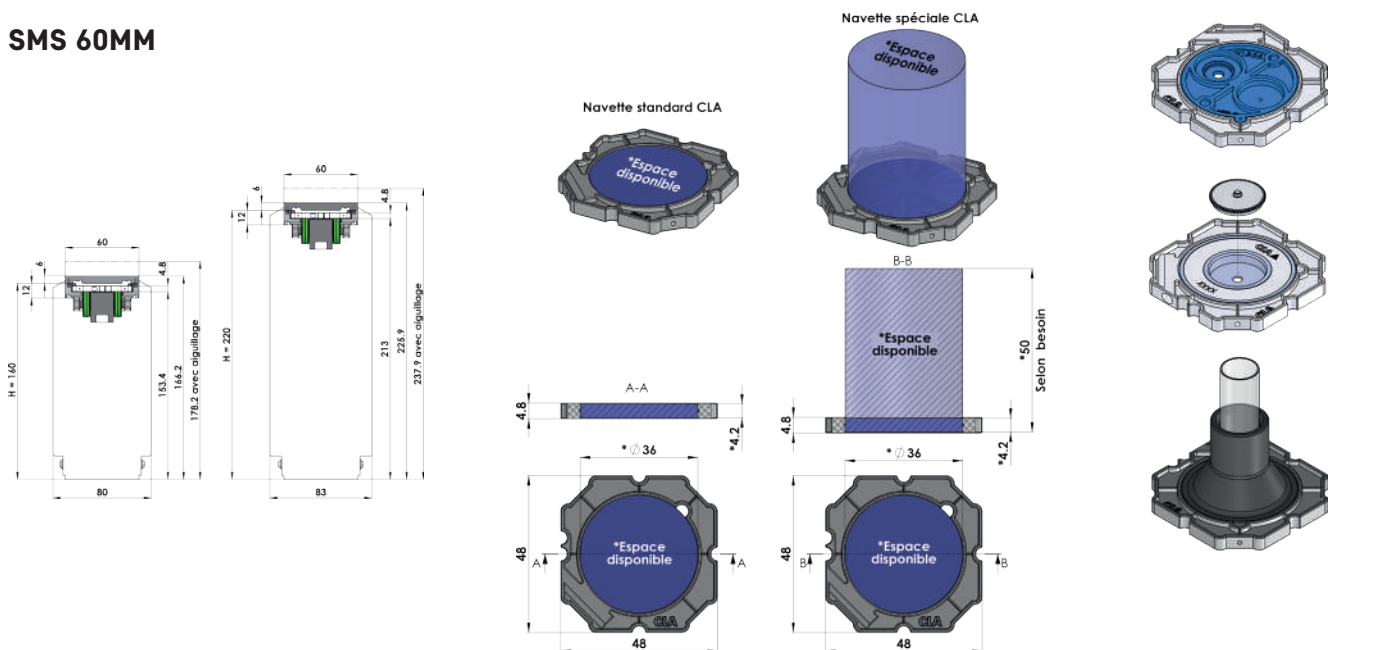


# SAMPLE MANAGEMENT SYSTEM SMS®

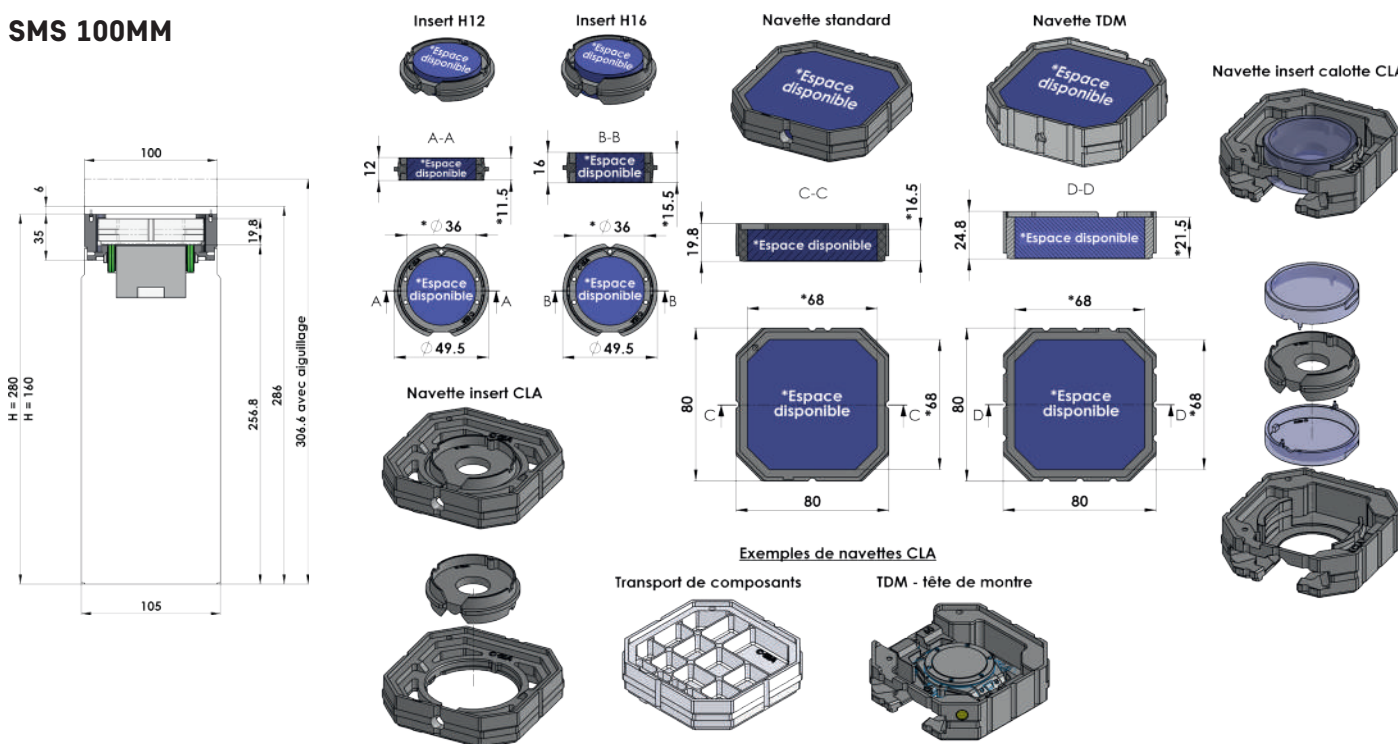
Flexible assembly line



## SMS 60MM



## SMS 100MM



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.

More info on our website [www.cla.ch](http://www.cla.ch)

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