



CPAutomation SA supplies turnkey systems based on standard programs and platforms. Its customers have the benefit of a large range of competencies in the fields of micro-assembly/micromanipulation, laser machining and automatic visual inspection.

High accuracy micro-assembly and micromanipulation



1. Semi-automatic laser micro-welding machine (TLASE).

2. High-rate palletizing of clockwork micro-components.

3. Automatic inspection module (V30).

From sizing to lifting, from a dial to an applique, from a pacemaker to a microchip, CPAutomation offers its expertise in the micron for the benefit of industries requiring high competencies in micromechanics. CPAutomation offers equipment rich in varied robotic technology, extending from cartesian structures to anthropomorphic robots, so as to offer ultra-quick and ultra-accurate solutions. CPAutomation expertise in industrial vision offers the following high value-added functions, in order to ensure economical quality production: localization of parts, dimensional measurements, quality and conformity checking.

The intuitive human-machine interfaces are focused on the ultimate user, the operator is central to the design! No need for long hours of training.

CPAutomation guarantees a high-performance, reliable and robust result, to the greater satisfaction of its customers for several years.

A unique laser micro-welding solution for resolving the most complex challenges

The principal advantages of this semi-automatic laser micro-welding machine (TLASE) are its ease of use and its high accuracy. It is easy to effect welds on the level of a micron!

The intuitive operating interface offers high image resolution. It is very easy to master with faultless accuracy and welding minute parts becomes child's play. In order to ensure impeccable quality for the weld seam, real-time automatic aesthetic checking is possible.

A typical application is pinning up to the collet/stud in clockwork; the welding of rotating parts is possible by integrating an axis of rotation. Oxidation of the weld is avoided by adding shielding gas as well as by aspiration of the smoke.

The ergonomics of the machine have been designed to offer the operator only ideal conditions, such as a good working position, a perfect view of the screen, as well as optimal viewing of the welding zone.

Automatic inspection based on the entirely new «self-learning» technology

Industry is more and more demanding regarding the aesthetic criteria of its products. Certain materials and complex textures are still inspected by operators, causing a loss of economy and quality. CPAutomation has developed a unique solution, capable of assisting or replacing manual inspection. It offers automatic or semi-automatic checking stations (stand-alone).



«We satisfy the most diverse needs: laser micro welding, driving, screwing, gluing, palletizing, selective sorting and positioning.»

Marcel Dubey,
Sales & Marketing Director

How does it work?

1. Teach the system good and bad examples for reference (~30 min),
2. Let the system «self-learn» to create its reference models (~30 min),
3. Start up production; the system detects anomalies.

The unique V30 turnkey vision system is «self-learning». It is easily integrated into any machine or production line. The inspection and the classification of material and of textures, which has been very complicated to program up until now, become extremely easy; possibilities are unlimited.

The advantages of the integration of a «self-learning» vision system are multiple: it surpasses the best quality controller, it is rapidly configurable by any operator, the consistency of checking criteria is verified, the cycle time is reduced and the traceability of your products is ensured.

The visual inspection solutions supplied by CPAutomation are used, among others, in applications for checking clockwork components, welding/micro-welding, injection-moulded plastic parts, materials in continuous flow, food products and character recognition.

www.cpautomation.ch

