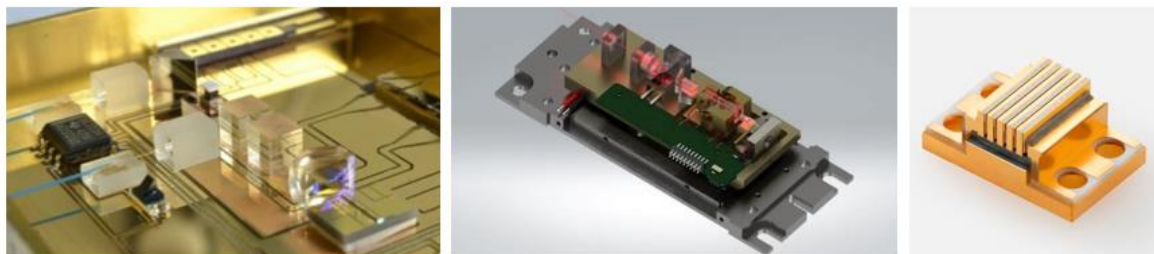


Flexible Precise and Productive Automation Platform

PHOTOMATIQ is a customizable assembly platform which aim at fully- and semi-automated ultra-precise micro assembly based on high-precision alignment. The platform especially suits the requirements of demanding photonics systems

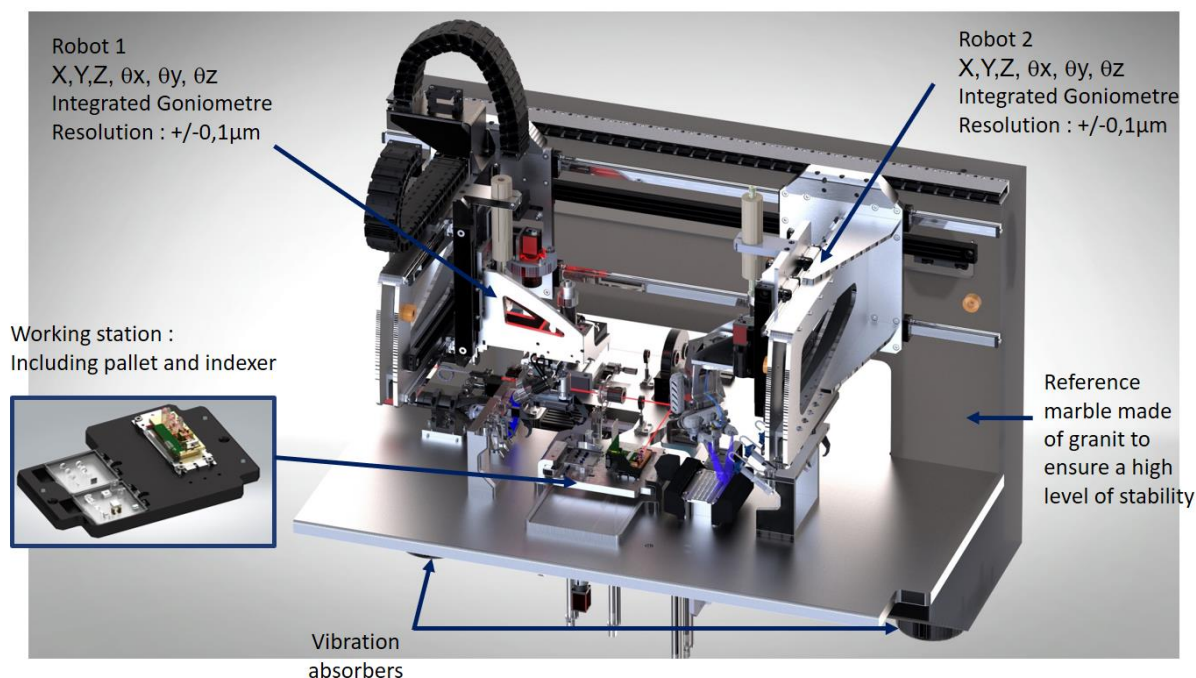
1 – Field of Application

From product development to mass manufacturing

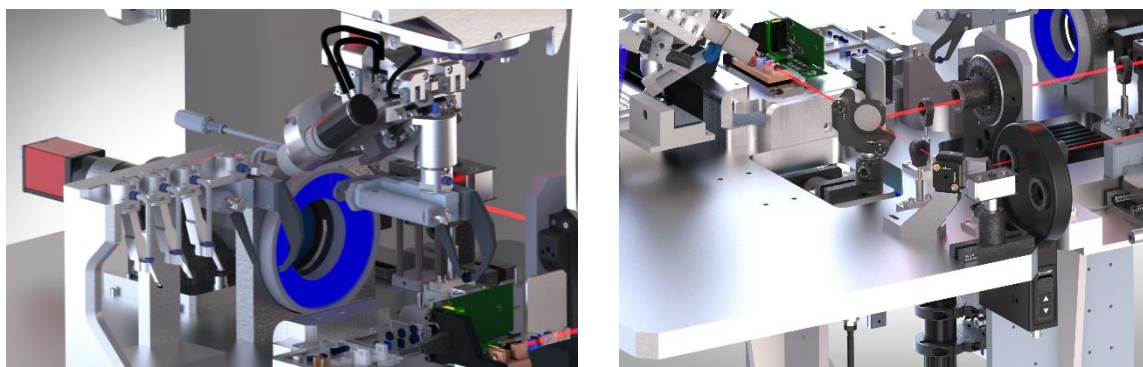


Our Flexible Automation Platforms support high-mix production of optical systems in a fully automated way. Flexibility is achieved through automatic tool changer as well as a modular software architecture. PHOTOMATIQ is also well suited for product development. The flexibility and openness of our platforms enable the customer to carry out prototyping in an efficient and cost-effective way.

2 – Accuracy: 2 High precision robots working simultaneously



3 – Active and passive alignment capabilities



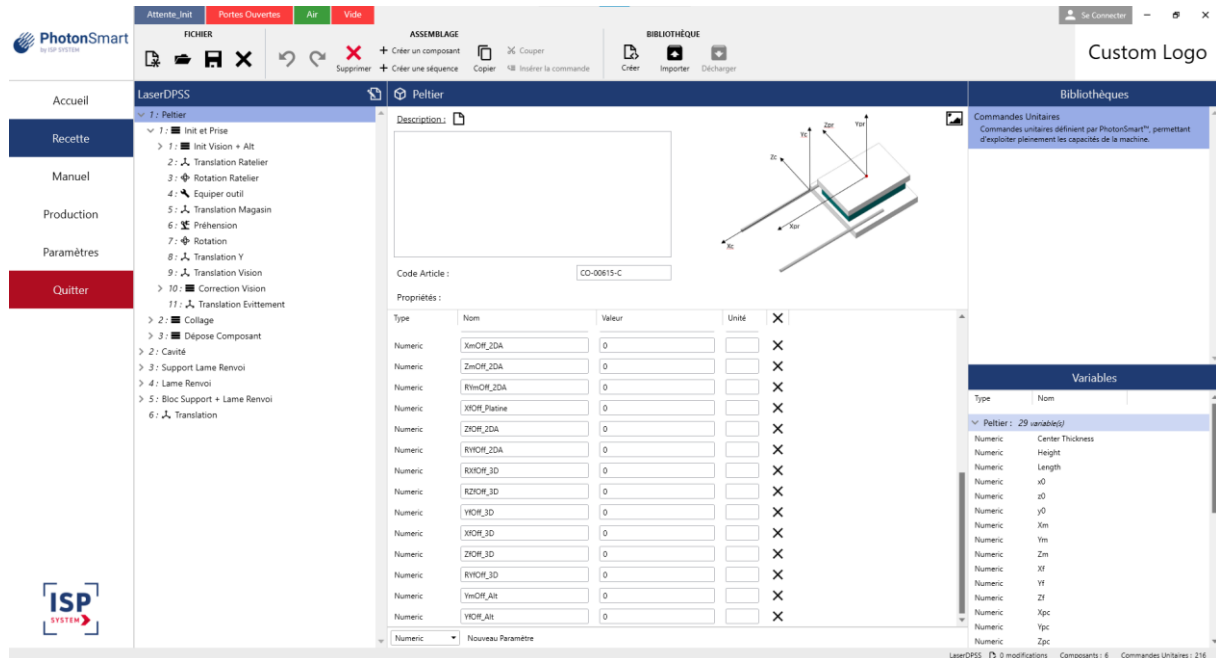
The combination of embedded cameras together with a 3D vision station ensures automatic picking and placement of optical components following a passive alignment algorithm.

Once the passive alignment has been processed, the active alignment is performed by the machine according to the analysers feedback. Whatever you need colimation, power measurement, polarization, cavity alignment, or beam profile characterisation, the machine can be customized with the required measurements devices and analysers.

New analysers can easily be set up to meet the need of a large range of current and futures applications.

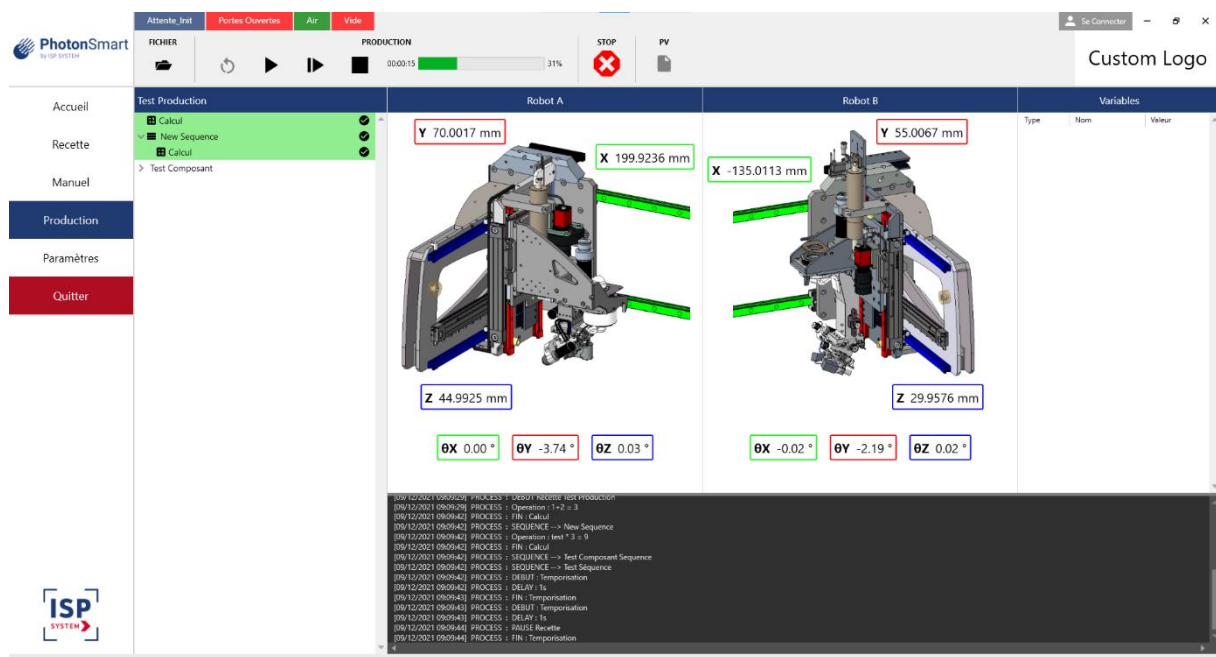
4 – Process control with PHOTONSMART

The open control PhotonSmart software allows non-automation experts to operate the machine, edit new recipes, and supervise the production.



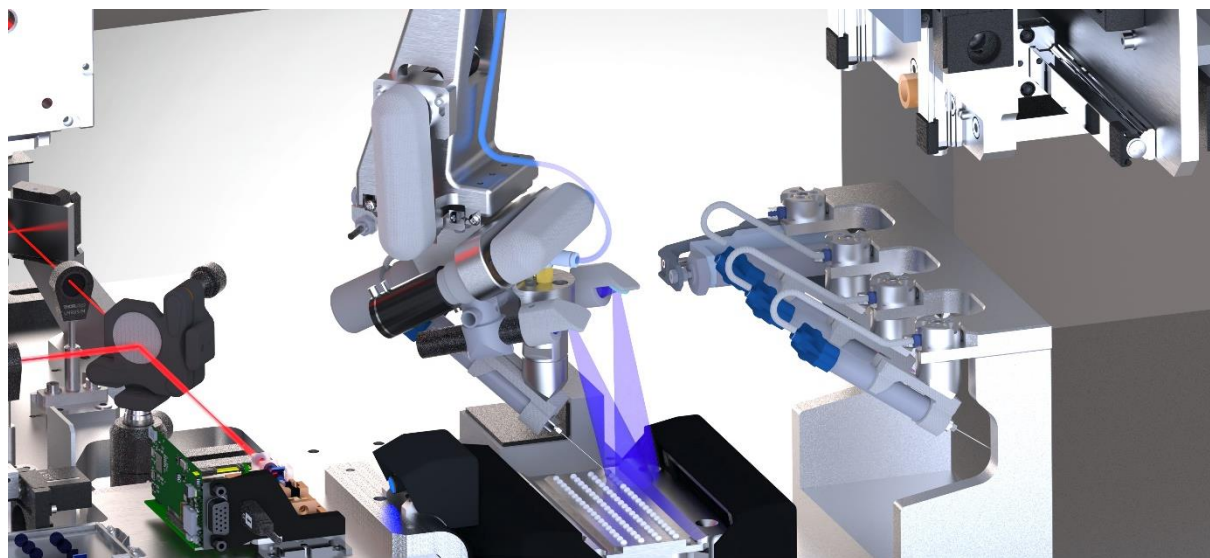
The software offers a library of unit commands customized to the application from which it is possible to create automatic assembly sequences.

These sequences can be sequential or conditional and integrate commands such as translations, rotations, automatic tool pick-up or removal, dispensing of glue, initialization, calibration, measurements, etc.



5 – Gluing with in situ UV curing

The time pressure dispenser is able to dispense different kind of glue patterns.
UV curing during the active alignment process limit the shrinkage effect to achieve an even more precise component positioning.

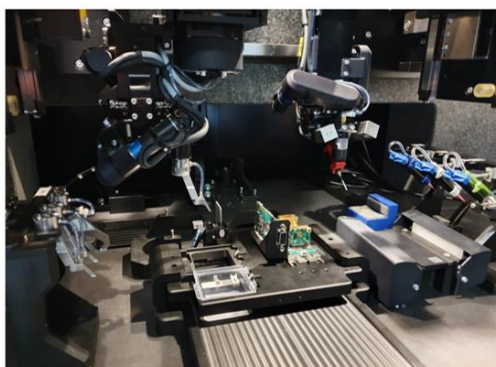


6 – Proof of concept testing session on the demo machine

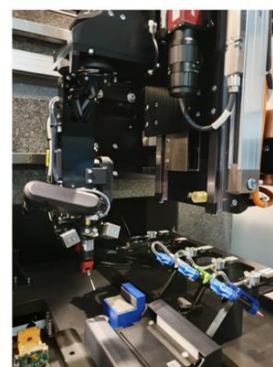
The PHOTOMATIQ demo machine is available in our headquarters (Hautes Pyrénées, France), where you're more than welcome for a full demo as well as a proof of concept testing session. Please feel free to contact us and we'll be happy to help you there: contact@isp-system.fr



*6 axis robot
Precision positioning*



Working area



*6 axis robot
Precision dispensing*