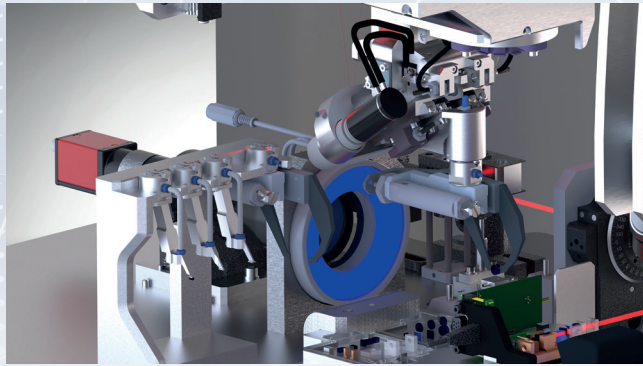
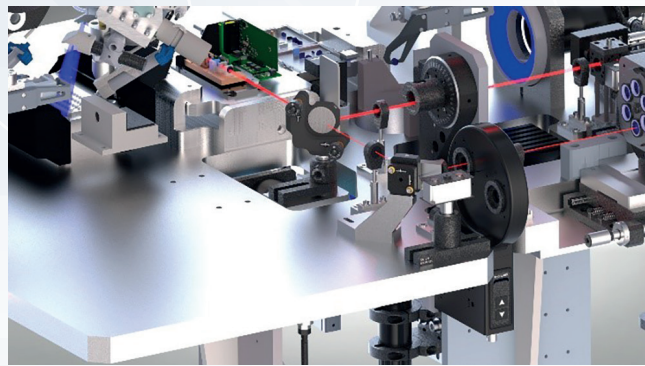


ACTIVE AND PASSIVE ALIGNMENT CAPABILITIES



Passive alignment

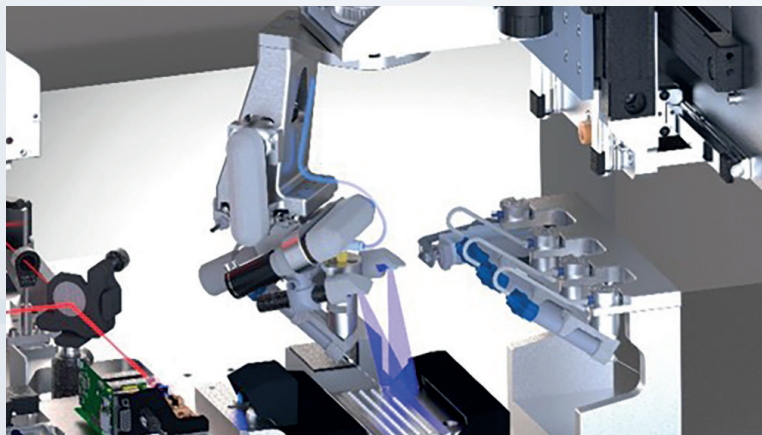
In a passive alignment process, the relative position and orientation between two components is evaluated and adjusted based on the camera measurements.



Active alignment

The major advantage of active alignment is achieving very high product performance, while individual components do not need to be extremely geometrically accurate

GLUING WITH IN SITU UV CURING



- Integrated **time/pressure dispenser**
- Customized **pattern**
- **Autocalibration**
- **Repeatable** dispensing
- <300µm cordon width
- **45° needle** orientation to dispense under the components
- Alternative technologies such as **jetting** and **dipping** are also available as an option

PROOF OF CONCEPT

Please feel free to contact us using the following form to know more about Photomatiq.

ISP can propose proof of concept as well as testing session to make sure of the compatibility with your assembly process.



<https://www.isp-system.fr/en/contact>



OUR REFERENCES

ACTEMIUM • AIRBUS • AIRBUS HELICOPTER • ALSTOM TRANSPORT • ALSYOM • AMPLITUDE LASER
ARIANE GROUP • ARQUUS • ASML • BARCO NV • B BRAUN MEDICAL • BERTIN TECHNOLOGIES • CEGELEC
CEA • CEA-DAM • CIAE • CNES • CNIM • CNRS • CSTB • DASSAULT AVIATION
DGA • DSO • ECA ROBOTICS • ELI • ESA • ESRF • ETIENNE LACROIX • FIVES MACHINING
GE MEDICAL SYSTEM • GSI • HORIBA SCIENTIFIC • HZDR • IMV TECHNOLOGIES • IXBLUE
JOHNSON CONTROLS • LABORATORY FOR LASER ENERGETICS • LECTRA • LIEBHERR AEROSPACE
LMU • MBDA • NATIONAL ENERGETICS • NAVAL GROUP • NEW TL • NEXANS • NEXTER
ONCOPOLE TOULOUSE • ONERA • OPTSYS • OXXIUS • PEKING UNIVERSITY • RATP • REOSC
RUAG • SAFRAN • SAFT • SAINT-GOBAIN • SAVOYE • SIEMENS HEALTHCARE • SODERN
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TIFR • TRESICAL • TRIXELL • UNIV. OF NEBRASKA-LINCOLN • UNIV. OF TEXAS • VALEO



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PRECISION ENGINEERING

Your partner in success R&D, Design, Manufacturing

PHOTOMATIQ®

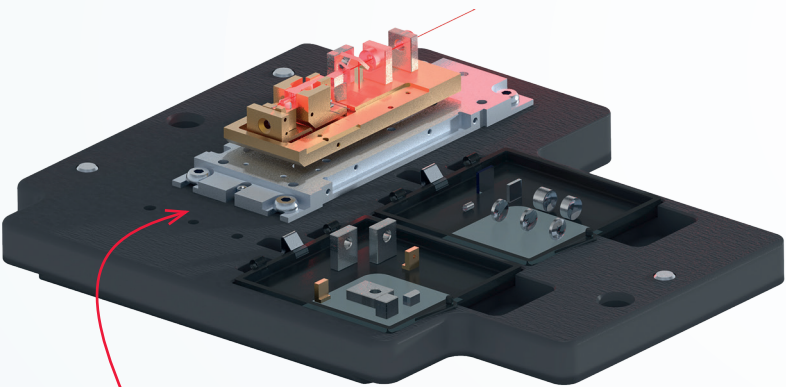
PHOTONICS PACKAGING EQUIPMENT



FLEXIBLE PRECISE AND PRODUCTIVE AUTOMATION PLATFORM

FIELD OF APPLICATION

From process development to mass manufacturing



YOUR PRODUCT HERE
Please feel free to contact us for a pre-feasibility study

Photomatiq® is ideally suited for the **automated micro-assembly** of the following products:

- Laser DPSS
- Laser diode
- Lidar
- Laser bar stacking
- Fiber optical connector
- Fiber to PIC coupling
- Fast Axis Colimator
- ...

ACCURACY: 2 HIGH PRECISION ROBOTS WORKING SIMULTANEOUSLY

Robot 1
X, Y, Z, $\Theta_x, \Theta_y, \Theta_z$
Integrated Goniometre
Resolution : +/- 0,1 μ m

Robot 2
X, Y, Z, $\Theta_x, \Theta_y, \Theta_z$
Integrated Goniometre
Resolution : +/- 0,1 μ m

Large **working area** 300X200mm
Magazine as well as **automatic parts loading/unloading** are available as an option.

Vibration absorbers

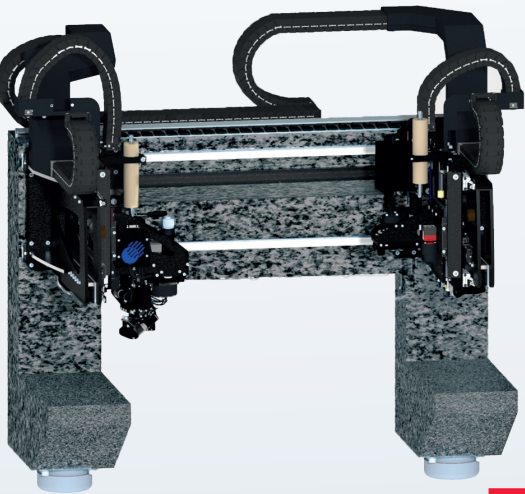
Reference marble made of granite to ensure a high level of stability

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

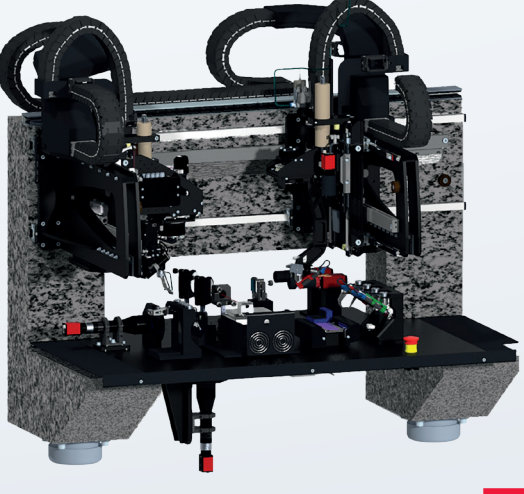


- Scale up your **production**
- Improve your **time to market**
- Increase your **ROI**
- Improve the **quality** of your products
- **Proof of concept** testing session in ISP's HQ
- **Limit** the risk

MODULAR MACHINE ARCHITECTURE



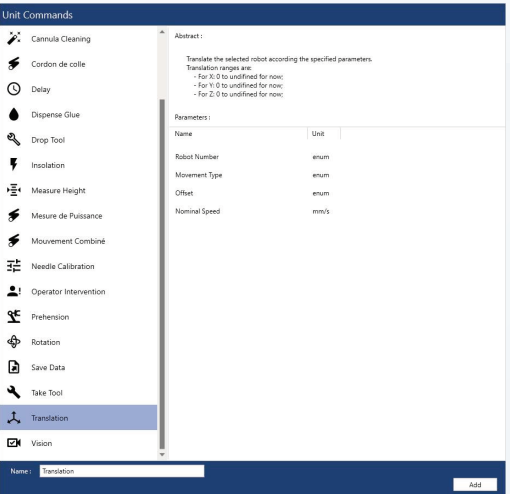
Common base



Customization to fit your application

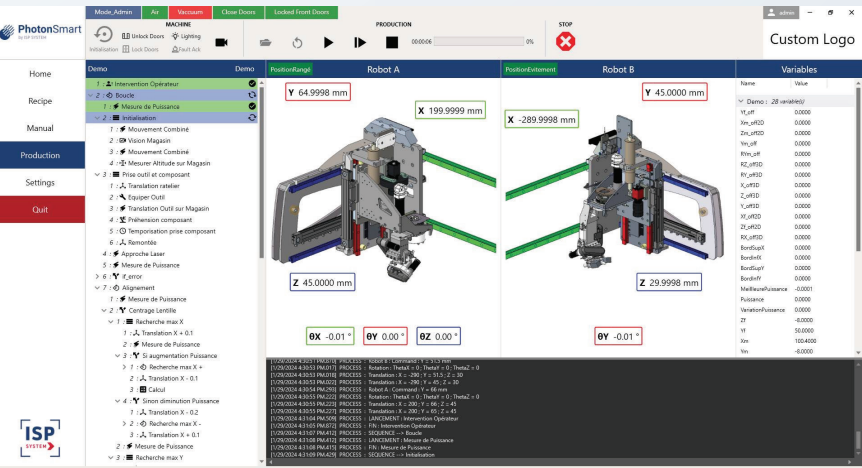


The **open control** PhotonSmart software allows non-automation experts to operate the machine, edit new recipes, and supervise the production.



Just **pick and drop** the pre-developed function blocks into an assembly sequence to **create your own** manufacturing process

- Fine tune your process through the **development mode**
- **Supervise** your production and manage the **traceability**



Discover Photonsmart functionalities in this short video:

