PRECISO

Precision Photonics Platform



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Beyond imaging

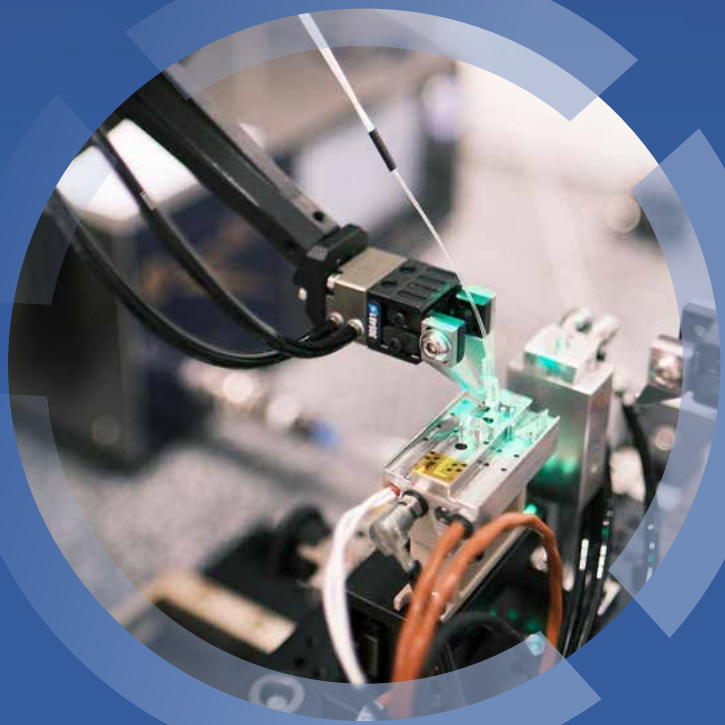


WHERE PRECISION MEETS AUTOMATION

Preciso is a modular photonics active alignment and assembly platform designed to provide a scalable foundation for advanced photonic manufacturing.

Built on a vibration-isolated granite platform and equipped with advanced motion control, machine vision, dispensing, curing, and measurement technologies, Preciso provides a flexible and scalable solution for R&D, pilot production, and low-volume manufacturing environments.

Its modular architecture allows easy customization and future upgrades, making it ideal for a wide range of photonic packaging and optical assembly applications.



KEY BENEFITS

- One modular platform
- Multiple bonding technologies
- Sub-micron active alignment accuracy
- Integrated automation & machine vision
- Scalable for R&D and production
- Upgradeable architecture
- Designed around your process


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ONE PLATFORM, THREE WAYS TO BUILD CONFIDENCE.

Built on a proven architecture, Preciso is available with three dedicated bonding solutions, each designed to address specific manufacturing requirements while maintaining the same levels of precision, flexibility and reliability.

All Preciso configurations are designed in compliance with European safety standards.

PRECISO B

EPOXY BONDING

Designed for active alignment and pigtailing of FAU, lenses and other optical parts to PIC in a wide range of packaging or sub-assembly configurations.
This is our standard system that include a granite base with active vibration isolation, a six-axis submicron accuracy alignment robots, custom grippers, a central positioning stage, a gantry system, a vision system, a proprietary control software suite.
Preciso B is designed and equipped for the use of epoxies (both thermal and UV) for pigtailing. It guarantees flexibility to be adapted to any requests by the customer.

PRECISO W

LASER WELDING

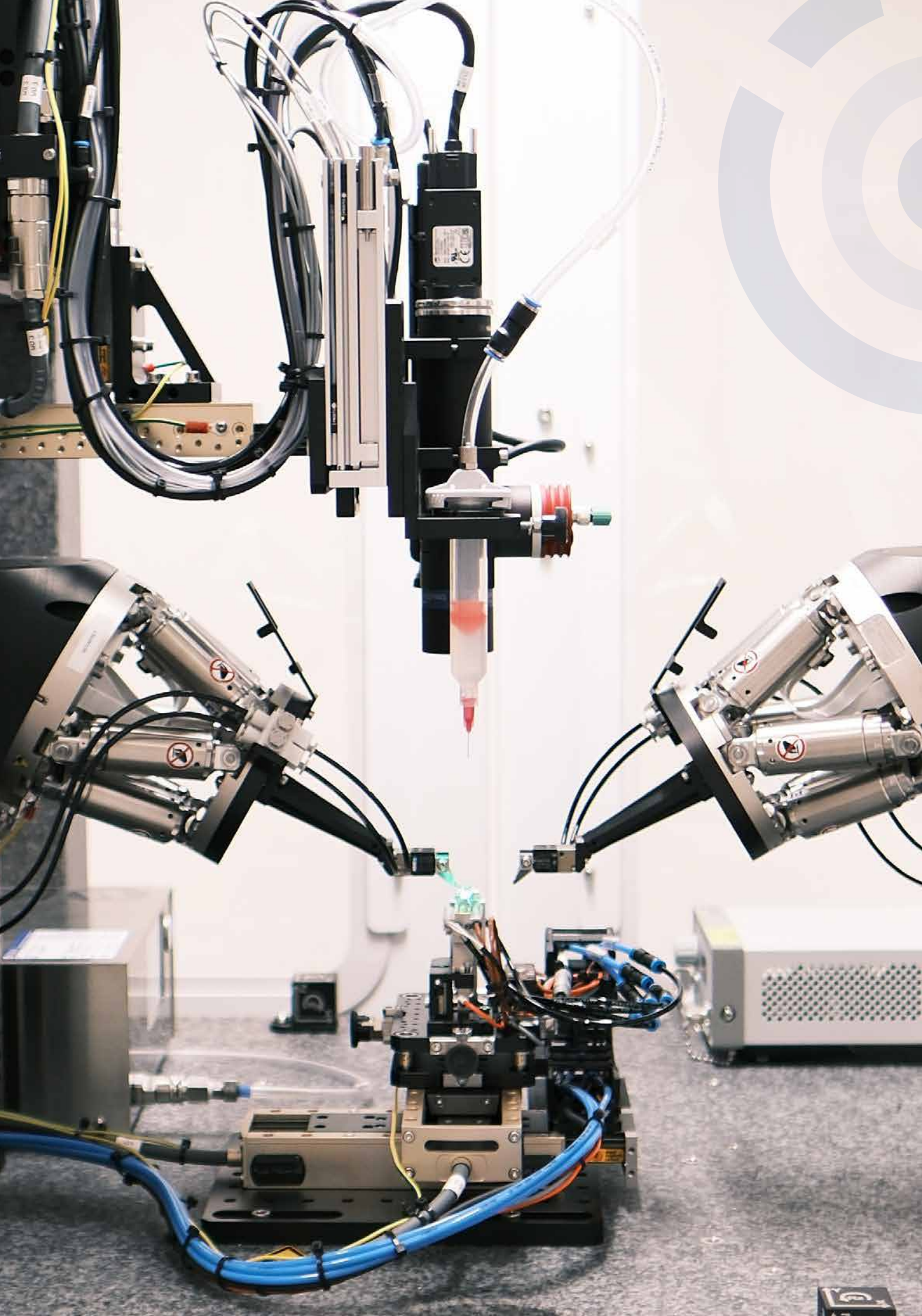
Based on a similar layout and keeping the base technologies as the Preciso B and maintaining its flexibility, this system introduce the capability to realize laser welding of glass based optical parts (glass FAU, lenses) to optical device (PIC) after active alignment.

Still guaranteeing the possibility to use epoxies, it will include a femtosecond laser and all the optical system to deliver the laser beam in free space to the chosen area, using a Galvo head to cover the requested pattern.

PRECISO S

LASER SOLDERING

Building on a layout similar to Preciso B and retaining the same core technologies and flexibility, this system introduces the capability to apply solder balls on a specific point or area of interest after active alignment or for application of soldering metalized fibers to the package ferule for application demanding hermeticity (ie space applications).
While retaining the possibility to use epoxies, it will include an head that, using a laser to melt the solder, will allow solder ball jetting in a clean, precise and flexible way on the target position.



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