

PRECISION ENGINEERING

Your partner in success R&D, Design, Manufacturing

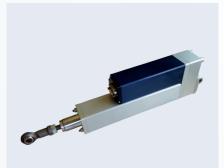
Opto Mechanics

DEFORMABLE MIRRORS & BEAM TRANSPORT



AEROSPACE | AUTOMOTIVE | DEFENCE | ELECTRONICS | PHOTONICS RAILWAY | LOGISTICS | MEDICAL | NUCLEAR | SCIENCE

A partner in precision engineering for your projects over 20 years: Expertise and creativity!







ELECTRIC EMBEDDED ACTUATOR

MICRO-NANO POSITIONING

HIGH PRECISION SPECIAL MACHINE & ROBOTIC

ISP SYSTEM is a comprehensive program in Precision Engineering and is specialized in Design and Manufacturing of High Precision mechanic and mechatronic equipment.

Providing highly innovative and custom solutions is our commitment. Our expertise in precision engineering helps us deliver solutions fitting customer's challenging application needs. Customized products can be offered to fully dedicated turnkey solutions, including design, testing and manufacturing. Our multidisciplinary skilled teams, specialists in their fields, have gained precision engineering knowledge.

ISP SYSTEM delivers annually up to 5 000 embedded actuators to 10 000 micro-positioning devices and opto-mechanism, 50 high precision machines, 2 000 mechatronics modules for medical devices mainly in Europe. ISP SYSTEM has been recently extending its activity all over the world.

ISP SYSTEM provides a spectrum of services including: R&D, Design, Prototype Manufacturing, Industrialization, Mass production, Commissioning, After Sales ... ISP SYSTEM was founded in 1997. ISP Group is a SME of 100 skilled peoples (including its factories), 30 % of them are graduates. ISP SYSTEM is Quality certified ISO 9001 and EN 9100.



BEAM TRANSPORT

ISP SYSTEM is member of competitiveness clusters such as "Aerospace Valley", "Alpha-RLH", "Photonics France", "Optitec" and "EPIC".

ISP SYSTEM's catalogue includes opto-mechanical systems integrating our own micro and nanopositioning actuators.

Motorized mirror mounts and deformable mirrors compatible with any laser beam characteristics are proposed. They can be supplied with or without optics and control electronics.

ISP SYTEM has in-house testing capabilities to validate the optical, mechanical and outgassing properties.

Our products are vacuum compatible. Materials, lubricants and assembly methods are selected for each application in order to fulfill outgassing requirements.

FEM analysis can be performed in case high mechanical stability is required.

On-site installation and maintenance is also proposed.



DEFORMABLE MIRRORS

CUSTOMER APPLICATIONS : INTENSE LASER, IR LASER, SYNCHROTRON BEAM LINE, SPACE TELESCOPE, ...





3PW LASER

10PW LASER

- Wavefront correction of laser beams with aperture from Ø22mm to Ø500mm
- High stability unpowered
- Large stroke (several hundreds of µm)
- High resolution of correction (1nm RMS)
- Compatible with any coating and any angle of incidence
- Tipt-tilt mount available



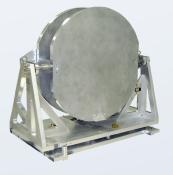
SPACE DEFORMABLE MIRROR

- Adaptive loop software available
- Low outgassing
- Easy maintenance (coated substrate and actuators replaceable)
- DM design and actuator distribution dedicated to each
 application



MOTORIZED MOUNTS

CUSTOMER APPLICATIONS : LASER, BIOTECHNOLOGICAL EQUIPMENT, SCIENCE EQUIPMENT, MICROSCOPY, ...



1,5m GIMBAL MOUNT

High resolution

High stiffness and high stability

• Any aperture from $\frac{1}{2}$ " up to \emptyset 2m

Customization possible for each application









MOTORIZED FLIP MOUNT

- TIP-TILT MOUNT 1/2"
- Control electronics available
- Low outgassing version available
- With or without optics
- Complete beam transport system available

ACTIVE BENDER FOR

X-RAY

OUR REFERENCES

AIRBUS D&S • AMPLITUDE LASER • CEA-DAM • CELIA • CIAE • CNES • CNRS • ELI • ENSTA ESA • FSU • HZDR • GSI • INFLPR • INRS • LBNL • LLE • LLNL • LMU • LOA NATIONAL ENERGETICS ONERA PKU PSI QST SAFRAN LULI · MPQ • . • • . SAFRAN REOSC · SODERN · STFC · SYNCHROTRON SOLEIL · THALES · THALES ALENIA SPACE · TIFR UNIVERSITY OF TEXAS • UNL



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