

## EXPERTS IN CUSTOM-MADE MICROSYSTEMS

MPS delivers cutting-edge solutions in microsystem technologies that meet the demanding needs of its customers. We offer a comprehensive range of services, from development and prototyping, to the industrialization and manufacturing of systems. Explore the links below to discover the diverse markets that MPS serves.



Watchmaking



Medical



Surgery & Traumatology



Optics & Photonics



Aerospace & Defense



Science



Automation



Linear systems



Precision turning





## COMPANY



- Located in Switzerland
- 475 employees
- US\$75 mio



### WATCH

- 163 employees
- Bonfol
- Watch bearings, gear wheels, oscillating mass



### MICROSYSTEMS

- 225 employees
- Bienne, Boston
- Microsystems, ball screws, linear bearings



### PRECIMED

- 40 employees
- Bienne
- Orthopaedic instruments



### DECOLLETAGE

- 47 employees
- Court
- Precision Swiss turning parts

MPS is a part of


**FAULHABER GROUP**


- German Group
- 2,000 employees
- US\$260 Mio






## EXPERTISE & INFRASTRUCTURE

 30,000 sqm production areas spread in 3 locations

 **ENGINEERING**  
R&D  
Testing methods  
Process engineers

 **ASSEMBLING**  
Post processing  
Finishing  
Control & metrology

 **MANUFACTURING**  
Turning  
Milling  
Machining of balls  
Gear cutting  
Rolling machines  
Grinding  
Lapping  
Polishing  
Sandblasting  
Laser marking

 **BIENNE (CH)**  
**BONFOL (CH)**  
**COURT (CH)**  
**BOSTON (US)**





## HISTORY

1936

Foundation of RMB Miniature Bearings Biel

2003

The FAULHABER Group takes over the activities and establishes MPS Micro Precision Systems AG

2008

Inauguration of the new building in Biel on Chemin du Long-Champ 95 in Biel

2013

Founding of MPS Precimed SA

2017

50th anniversary of MPS Watch in Bonfol

2020

Acquisition of a second building for MPS Bienne at Chemin du Long-Champ 93 close to its headquarters

2022

Foundation of MPS USA Inc. based in Boston MA

2000

Emergence of Myonic SA - RMB changes its name to Myonic SA

2008

Foundation of MPS Décolletage SA in Court

2013

Inauguration of the new building in Bonfol.

2015

Creation of the two entities: MPS Microsystems & MPS Watch

2018

10th anniversary of MPS Microsystems

2021

Inauguration of a solar power plant on the roof of MPS watch building in Bonfol





# SCIENCE



Astronomical observation



Fiber positioner for MOONS (VLT)

Fiber positioner for DESI



Fiber positioner for SDSS-V

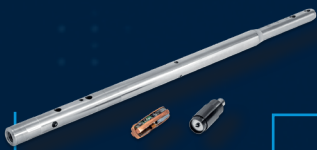




## MEDICAL



Active Implants  
Surgical robotics



Implantable actuator

Heart surgery



Spine surgery

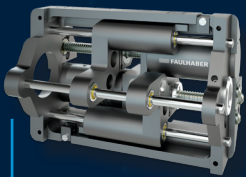




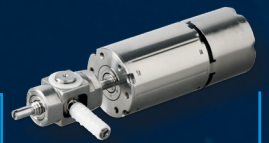
# AEROSPACE & DEFENSE



systems for the guidance  
of unmanned flying objects



Guidance systems



Control Actuation Systems (CAS)





# WATCH

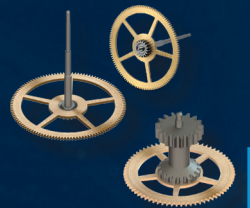


Components for  
mechanical watches



Ball bearings

Wheel trains



Oscillating mass

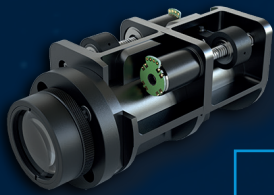




## OPTICS & PHOTONICS

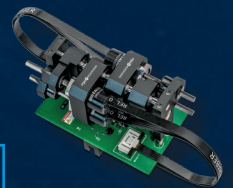


Laser machining  
Optical inspection & metrology  
Microscopy

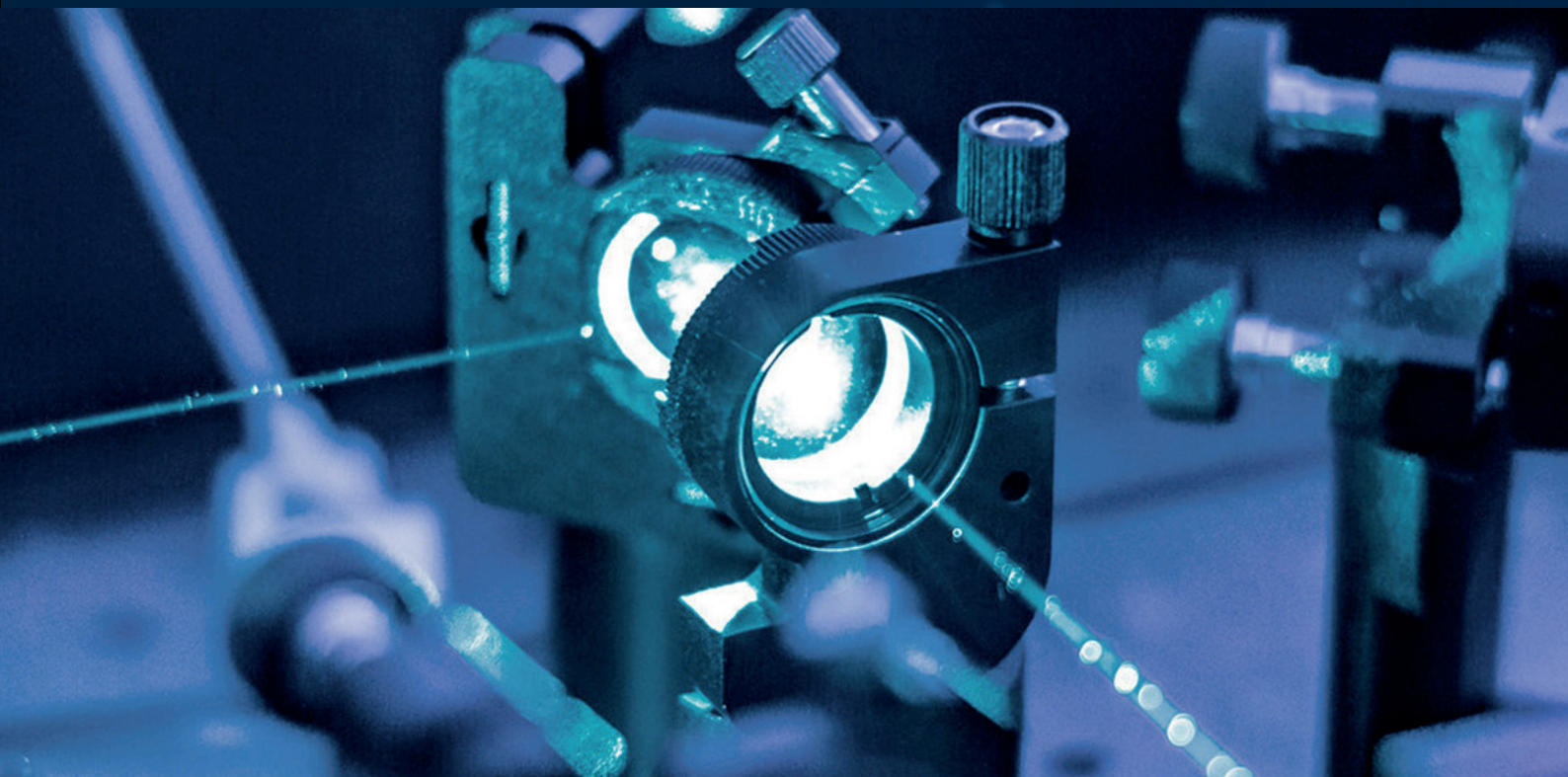


Coaxial lens actuator

Miniature multi-lens actuator



Sealed linear lens actuator





# SURGERY & TRAUMATOLOGY



Cutting tools  
Hand-held instruments  
Hip & knee surgical instrumentation



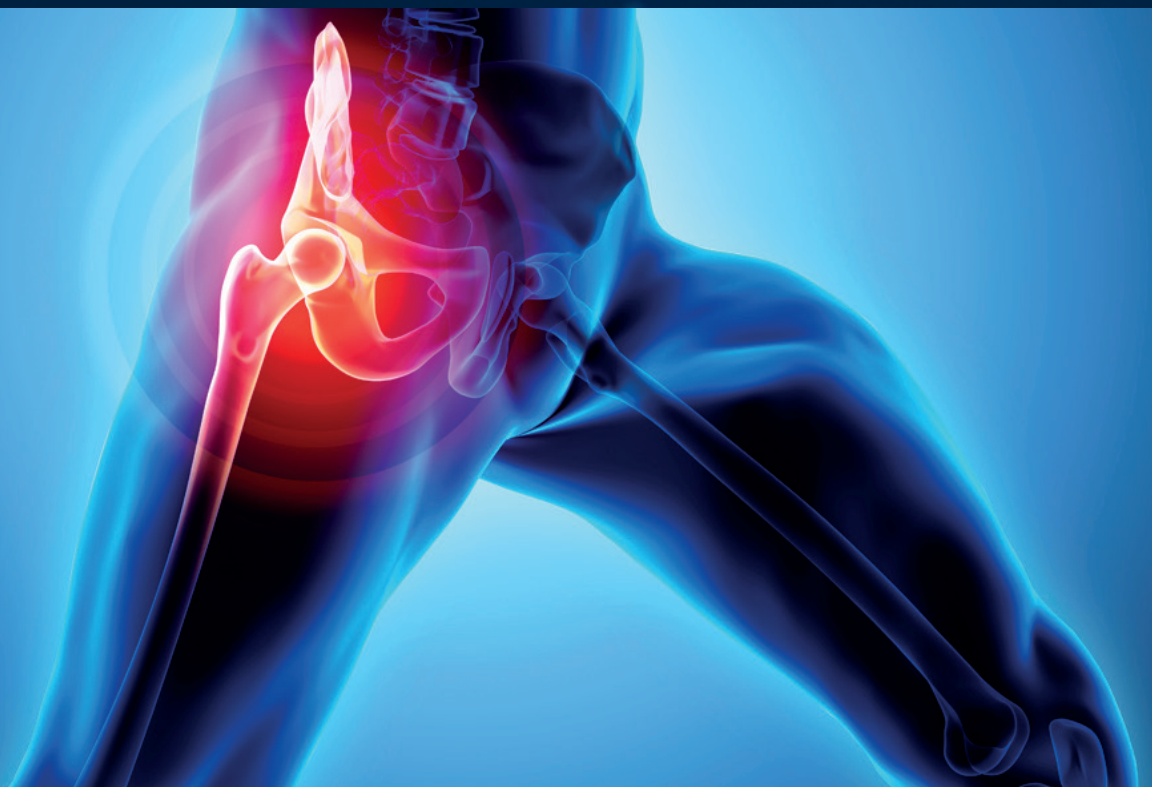
Surgical instrumentation



Orthopaedics



Traumatology





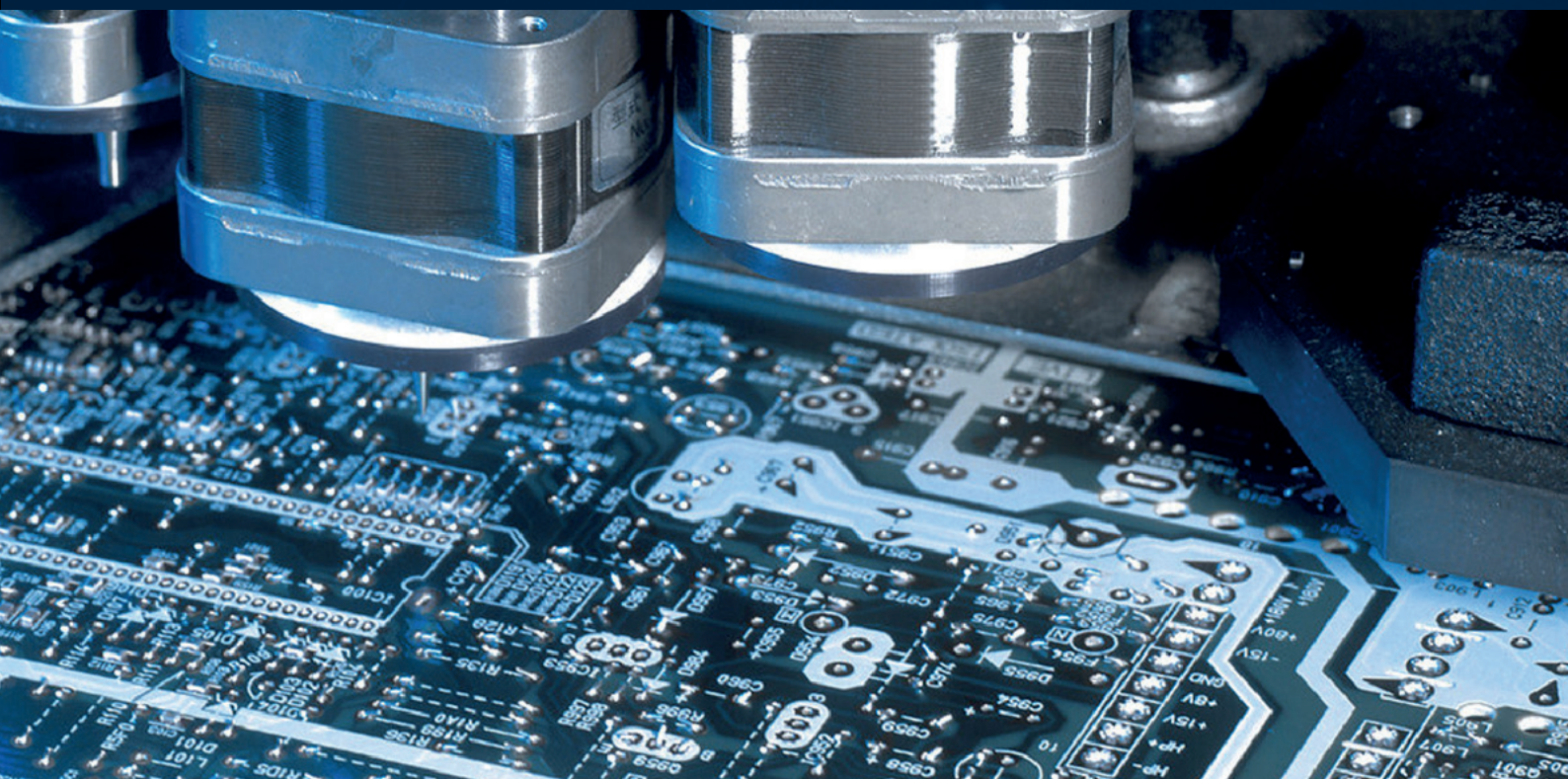
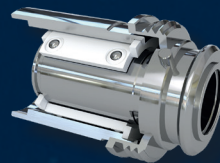
# AUTOMATION



High-speed assembly equipment  
for PCB mounting



Pick & Place heads



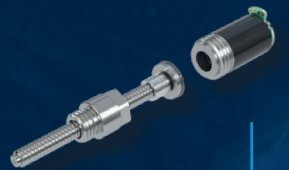


# LINEAR SYSTEMS



Miniature ballscrews  
Linear bearings  
Linear systems

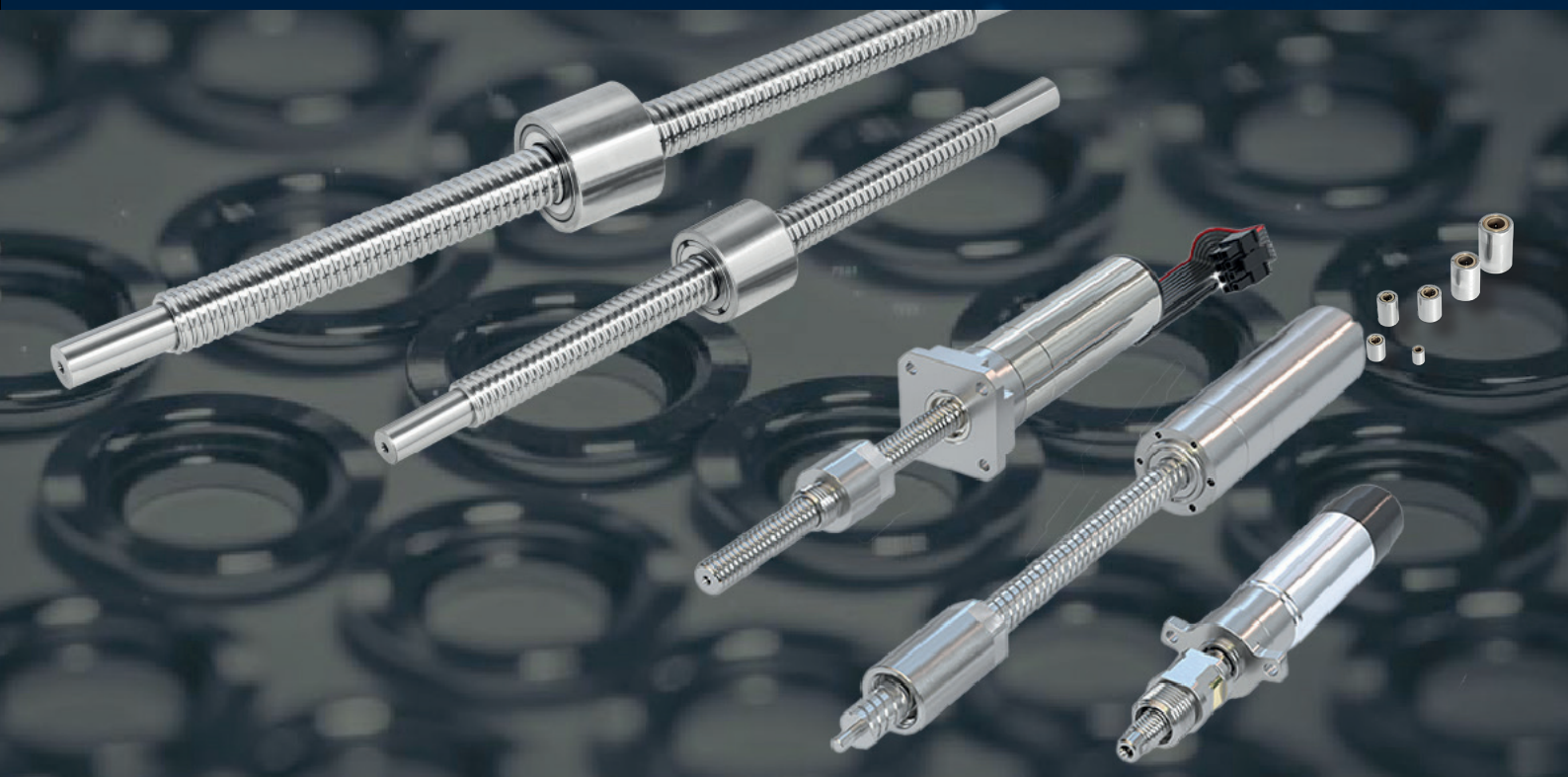
Linear systems



Linear bearings



Ball screws





# PRECISION TURNING



Precision Swiss turning

Turned components  
for watches



Turned components  
for connectors



Turned components  
for medical devices





## MPS COMPETENCES

### RESEARCH & DEVELOPMENT

The high level of training and experience of its microsystems engineers allows MPS to quickly develop innovative solutions that meet the needs of its customers. Our developments and documentation meet the international standards of the medical market.

Fully equipped, the prototyping workshop guarantees the production and modification of rapid prototypes, free from the logistical constraints of mass production. The equipment includes lathes, milling machines, wire erosion machines and grinding machines.

The test laboratory equipment is used to carry out service life tests, noise measurements, traction tests, torque measurements and other mechanical tests.

### MANUFACTURING

(precision as a key value of MPS)

The turning & milling workshop has a series of CNC and EDM machines. Each work bench is equipped with measuring instruments for controlling, at any time, the quality of the products manufactured.

Acquired over many decades, MPS's heat treatment knowledge is essential to achieve the material properties needed for the performance of the systems manufactured. MPS also has expertise in deburring and washing components.





## MPS COMPETENCES

### MICRO ASSEMBLY

MPS specialises in the micro-assembly of complex systems which require specialist knowledge and specific expertise.



The size of parts and the required precision necessitate a controlled atmosphere in the entire assembly workshop, with continual air change and filtration. A clean room ISO 7 is available for implantable medical applications.

Our main skills include the assembly of micro-components, laser welding, laser marking, gluing, precision lubrication, washing and pairing, enabling adjustments of less than 0.2 µm. The workshop is organised according to «lean manufacturing» principles. Dedicated cells are set up when necessary.

### QUALITY

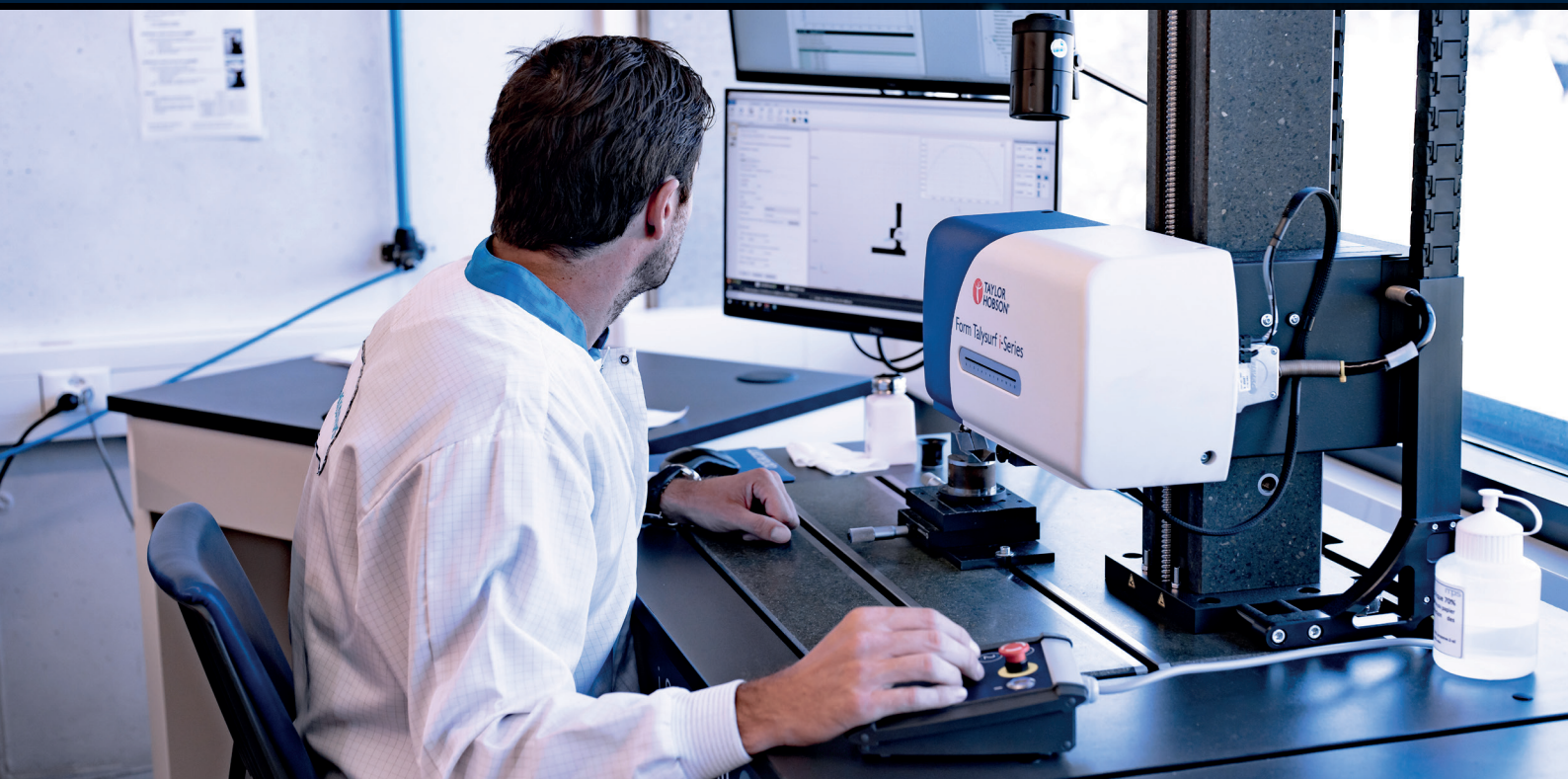
The MPS Quality department ensures the continuation of certification : ISO 9001 - ISO 13485 - ISO 14001.

In order to guarantee the delivery of products that observe legal requirements, MPS prepares the files that are essential for certifications (European Directives 93/42/EC, 90/385/EEC, 21CFRpart820, etc.) and for medical devices to be placed on the market.

### PROJECT MANAGEMENT

In our project development process, customers are in close contact with a dedicated project manager who ensures close communication and coordination with the internal project team and external partners.

The MPS management system integrates the project management process.

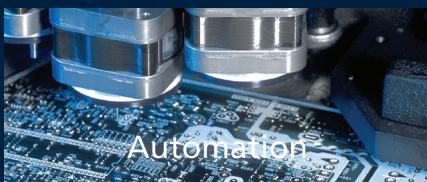
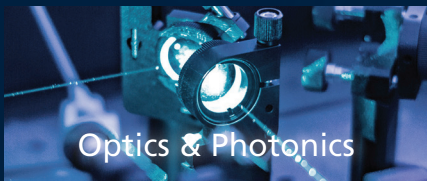






## MPS GROUP

### EXPERTS IN CUSTOM-MADE MICROSYSTEMS



## WHERE TO FIND US

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