



INDUSTRIAL CONTROL



setsmart
KEP TECHNOLOGIES



SETSMART

has its origins in Solex Metrology,
part of the French brand Solex.

Acquired from Solex in 2009, I am proud to say that under KEP Technologies, Solex Metrology has developed beyond pneumatic control. With Setsmart, we now offer a wide range of advanced industrial control solutions.

Driven by Industry 4.0 and the digitalization of production lines, Setsmart is now recognized as a supplier of standard and customized automated solutions for industrial control.

Serving a wide range of industries, we have the privilege of working with large clients on a variety of industrial projects. We have contributed to improving their profitability with the integration of new technologies, thanks to solutions entirely designed for better control of parts and assemblies - accurately, reliably and fast.

With a direct presence on four continents, an innovation center in Geneva and a team of experts in robotization, engineering, electronics, dimensional control technologies, artificial intelligence and software, we are at your service to address your production challenges and to help you choose the smartest solution.

Sylvain Calzaroni
Managing Director

INDUSTRIAL CONTROL

COMPLETE SOLUTIONS FOR THE INDUSTRY

SETSMART supports its customers as a true partner in their industrial projects, in fields as diverse as health, automotive, pharmaceutical, plastics and food

We develop standard or customized solutions to meet our client's challenges to optimize their production processes.

This equipment takes the form of workstations, automated machines or fully automated installations.

We provide project management from design through to completion and maintenance.

SERVICES

- Machine automation
- Standardized workstations
- Production and assembly lines
- Robotic cells
- Test benches
- Stacker cranes



TECHNOLOGIES

Contactless pneumatic control
Tactile control
Vision / Optics
X-ray
Laser
Automation / Robots / Cobots
Mechanical engineering
Digital simulation
Electronic development

They trust us

*ADLER ORTHO,
ALCON, APTAR, BAT, BIOMET, BMECA,
BORGWALDT, CEA, CHIESI, COPRECI, COSTER,
DE LONGI, DECOUFLE, ELECTROLUX, FIAT, GD,
GILSON, GROUPE LEPINE, GSK, I PACK, INDESIT,
L'OREAL, LA ROCHE POSAY, LINDAL, LPC, MAHLE,
MBDA, MICHELIN, NESTEC, OTO MELARA, OTTANI
MECCANICA, PROCTER AND GAMBLE, PSA,
RENAULT, RENAULT F1, REXAM, RPC,
SAFRAN, SEEP, SEITA, SMPE, SNECMA,
TURBOMECA, VALEO, VIO,
WALBRO, ZODIAC,...*

MARKETS

We address all industrial markets including:

Aeronautics
Automobile
Defense
Tobacco
Medical
Pharmaceutical
Cosmetic
Food
Packaging
Consumer goods

NOZZLES AND APERTURES

The apertures of some manufactured parts are key functional elements, and therefore their dimensions must meet well-specified tolerances. This is for example the case for nozzles of aerosol sprays, gas injectors or water jet cutting. Our solutions use pneumatic metrology, which is a simple, fast technique and which allows great precision and measurement accuracy.

SHAFTS AND AXES

The axes and shafts used in mechanical assemblies such as engines or transmission systems must respect precise dimensions to, for example, limit the clearance between the shaft and a bore. The multi-point measurement we offer allows rapid and precise control of compliance with the tolerance limits for this type of component.

DIAMETERS

The precise adjustment of the internal and external diameters of parts of many mechanical systems can be critical for their efficiency and longevity. This is for example the case of a piston sliding in a cylinder or a shell sliding in the barrel of a gun. Our solutions using tactile or non-contact sensors make it possible to adapt our control technology to a wide variety of situations (complex parts, high production rates, etc.).

SURFACE DEFECTS

For aesthetic or functional reasons, surface integrity and the absence of visible defects must be checked and guaranteed. Our solutions integrating vision sensors and image processing algorithms guarantee the highest quality products.

FLATNESS

The flatness of a part may be necessary for aesthetic or usage reasons. For example, steel or aluminum sheets may require this criterion to be checked. The flatness of brake discs is also an important quality consideration. With the pneumatic no contact method or by measuring probes, we guarantee high control accuracy. This technology also guarantees a large number of measurements on small areas.

THICKNESS

The control of thickness of plates, ribbons and other strips of material is necessary to ensure their quality or to control material costs. Our solutions use pneumatic metrology, a contactless method, which adapts to fragile and moving materials and is therefore integrated online into the process. It does not have the same constraints as optical measurements, which depend on the color or the brightness of the sample.





COMPLETE MULTIPLE MEASUREMENT SYSTEMS

Automated control, although suitable for mass production, can limit profitability for parts produced in small or medium series. Combining different handling, object recognition and control technologies, our systems offer a perfect combination of precision, speed and modularity, guaranteeing the best possible integration into your production chain.

NON-DESTRUCTIVE X-RAY CONTROL

The control of complex systems or assemblies is sometimes delicate when they cannot be dismantled without being destroyed. Our X-ray vision solutions are particularly relevant for the control of complex parts already assembled.

MATERIALS

As an example, many cutting, grinding, or other tools using hard metals, have properties which depend on their composition in a metallic phase (eg cobalt, nickel, austenite, etc.). The magnetic method we provide allow the non-destructive control of these hard metals and the rapid, precise and exact quantification of the phases concerned.

PACKAGING

Complex packaging, in particular plastic, must meet precise specifications in terms of, for example, its thickness and its external dimensions.

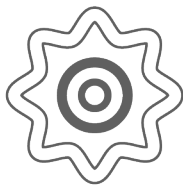
1 STANDARD SOLUTIONS

2 ENGINEERING & CONSULTANCY

STRONG PROJECT MANAGEMENT EXPERTISE

We offer our customers turnkey solutions for automating their processes. This activity can involve all of our engineering capabilities simultaneously. Thus ensuring responsiveness, flexibility and our full innovation capacity stays at the service of our customers.

We are the privileged partner of diverse companies ensuring the **innovative, technically efficient** and **profitable development** of their operations.



PRE-PROJECT

- Summary preliminary study (ADS)
- Detailed pre-project study (PDA)
- Risk analysis studies
- Drafting specifications

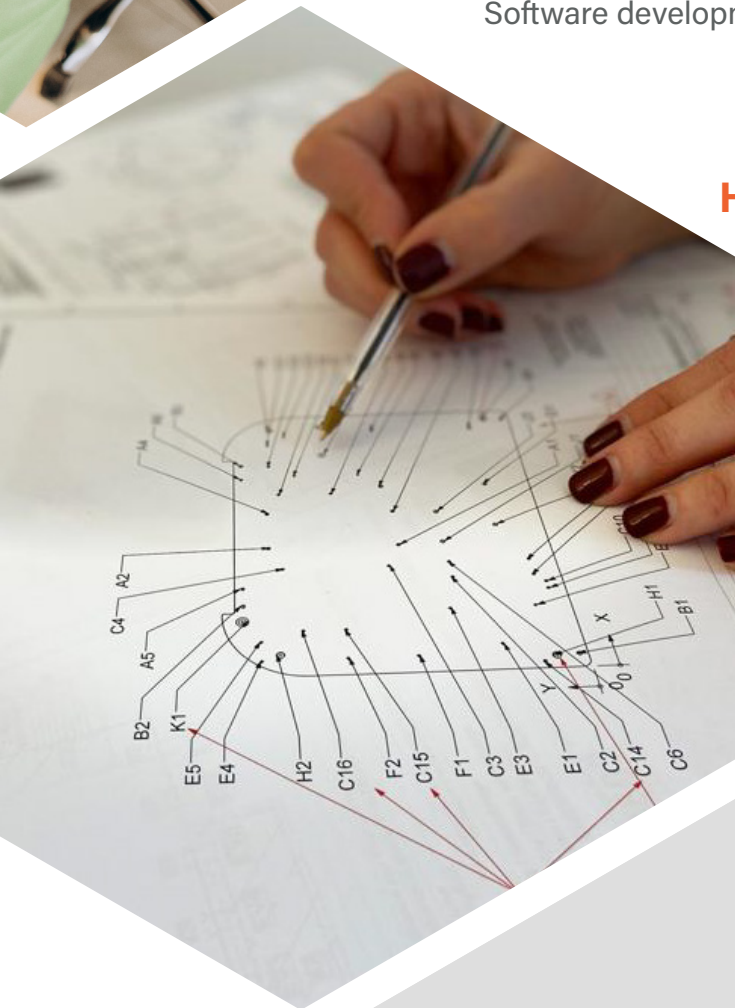
PROJECT

- Planning
- Compliance and monitoring of requirements
- Change management
- Financial management
- Document management
- Training for current or new operators
- Detailed specifications and user guides



PROJECT MANAGEMENT

- Sourcing
- Manufacturing
- Installation
- Commissioning (Tests, controls, qualifications)
- Reception



MULTIDISCIPLINARY TEAM

Our engineers and doctors are specialists in **thermal, mechatronics, automation, IT, calculations, numerical simulation and measurement**. Based in Lyon, France for Engineering, and Geneva, Switzerland for Innovation, our team has a great diversity of skills:

- Hard and soft electronic engineering
- Mechanical engineering
- Numerical simulation
- Industrial data
- Robotics and automation
- Measurement and instrumentation
- Software development

HIGHLY REGULATED ENVIRONMENTS

We also serve customers in nuclear, aeronautical and petrochemical markets, while respecting safety requirements, environmental, seismic and other constraints.

- Risk analysis
- FMEA
- Functional analysis
- Planning
- Budgeting Standards and security
- Nuclear safety

3 SOFTWARE & AI



INDUSTRIAL DATA

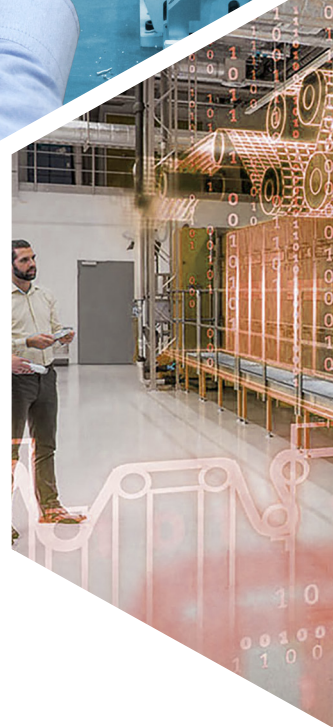
Our software collates a large amount of data, analyzes the results, automates measurements and controls, and generates reliable and sophisticated reports.

Our developments use :

.Net
C++,
Visual Basic,
Labview

Functions :

Industrial data
IT (signal and image processing)
Supervision
Control / Command HMI Network



SMART INDUSTRY

Smart Industry is the application of innovative technology to modernize industrial tools and economic models of companies. Whether its goal is to improve its product offer, seek total quality, improve manufacturing processes, or profitability gains, it is focused on new digital technologies, sensors, robots, cobots, and smart machines.

The solutions we design and install help streamline production processes. They can integrate image analysis control for object recognition, mathematical models to simplify the development of reliable monitoring protocols, alert systems when a part is out of specification, and launch automatic corrective actions for the manufacture of subsequent parts.

We offer comprehensive project management in this area. Our experts analyze your manufacturing challenges and advise you on how to **improve your processes** for the best results, always keeping in mind **technical and financial efficiency**. We design, develop, deliver and install solutions to meet your challenges, not forgetting to train your operators. We then stay by your side for any follow-up questions or maintenance needs.



TRAINING

After installation and commissioning, we are committed to training your teams ensuring perfect operation. Your maintenance engineers, technicians and operators can benefit from training on multiple subjects: Automation, Human-Machine Interface (HMI), Security, Ergonomics, Use of industrial automatons (PLC).



GUIDANCE

Being aware of the perpetual evolution of the challenges of our customers and the needs of the industrial market, we remain at your disposal to propose the most suitable, cutting-edge solutions based on the latest measurement and control technologies.



TECHNICAL SUPPORT AND MAINTENANCE

Our teams of technicians and engineers take care of all assistance and maintenance needs by phone or direct intervention at your production site. For more information, tell us about your maintenance needs and requirements, we will be happy to submit a personalized offer.

As part of your projects, our experts can analyze your manufacturing process and advise you on optimizing productivity and profitability. We design, develop and deliver projects up to installation and training.

Need financing? Contact us!
We will find the best solution.

SUPPORT



Switzerland - France - China - United States - India - Hong Kong
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