SYNTAVER
Industrial Automation & Engineering

INDUSTRIAL AUTOMATION & ENGINEERING

Automate from the production cell to the intralogistics flow.

Production automation, vision, agri-food sorting, packaging, intralogistics, retrofit, machine safety and controls - from our base in Northern France for projects across France and North-Western Europe.

Process-first Modular architecture Europe - Asia



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POSITIONING

Two levels to distinguish: client applications and technical capabilities.

We start from the flow and the measurable problem, then combine only the technical building blocks required. The objective is to avoid turning a simple need into an unnecessarily heavy project.

TECHNICAL CAPABILITIES

01	**Targeted automation & robotics**	Cycle, indexing, operator assistance, retrofit
02	**Vision & sensing**	Detection, measurement, sorting, traceability
03	**Controls & software**	PLC, HMI, networks, supervision, data
04	**Safety & compliance**	Risk, safety functions, documentation
05	**Conveying, motion & end-of-line**	Transfer, accumulation, packaging
06	**Europe-Asia technical sourcing**	Qualification, documentation, total cost

INDUSTRIAL APPLICATIONS

A	**Production**	Workstations, cells, existing machines
B	**Quality**	Inspection, sorting, measurement, traceability
C	**Intralogistics**	Picking, routing, conveying, shipping
D	**Agri-food**	Natural products, optical sorting, rejection
E	**End-of-line**	Packaging, labelling, pallet preparation

FLOW COVERAGE

01	02	03	04	05	06
Receiving	Stock / picking	Production	Inspection / sorting	Packaging	Shipping

METHOD

An industrial project starts with a measurable problem.

Before choosing a robot, camera or conveyor, we first determine what is truly limiting the process, how the result will be accepted and which interfaces must be controlled.

01	**Qualify the field condition** Throughput, defects, operator time, downtime, risks, available space and existing documentation.	Output: field survey + open points
02	**Freeze the functional need** What the solution must do, must not do and how performance will be measured.	Output: functional note + criteria
03	**Build the architecture** Technical building blocks, mechanical, electrical, software and safety interfaces.	Output: concept architecture
04	**Prepare execution** Partners, testing, shutdown window, FAT / SAT, restart and support.	Output: project plan + decision

FOR THE CLIENT

A simpler view of a complex project.

One project frame connects process, controls, mechanics, safety, sourcing and commissioning. Responsibilities and interface points are made visible early.

ECONOMIC LOGIC

Total cost before catalogue price.

CAPEX, downtime, maintenance, spare-part availability, scalability and support are considered before freezing a solution.

> A small problem does not need a large project. The right level of automation depends on the need, variability and expected return.



WAREHOUSE & INTRALOGISTICS

Measure the flow before choosing the technology.

For many SMEs, the robust first step is not a fully automated warehouse. It is to automate the information, transfer or recovery points that generate errors and unnecessary movement.

FLOW

Volume & variability

- Orders / parcels per hour
- Daily or seasonal peaks
- SKU mix and batch size
- Cycle time and queues

PHYSICAL

Travel & constraints

- Distances and crossings
- Weight, dimensions, stability
- Buffer areas and available space
- Ergonomics / manual recovery

DATA

Systems & identification

- WMS / ERP, routing rules
- Barcode, RFID, weighing, labels
- Events to trace
- Interfaces with existing stations

EXCEPTIONS

Cases that break the flow

- Urgent orders
- Out-of-gauge / unreadable products
- Reject, recovery and manual inspection
- Degraded mode during failure

> Expected decision: assisted workstation, targeted conveying, automated routing or a wider architecture - only when volume and stability justify it.



AGRI-FOOD OPTICAL SORTING

The product population matters as much as the camera.

A natural product varies in size, shape, colour, maturity, moisture and season. The first task is therefore to build a representative library of acceptable products, reject defects and ambiguous cases.

PRODUCT

Real product population

- Sizes, shapes, orientations
- Maturity, colour, texture
- Wet, dusty or fragile product
- Seasonal / supplier variation

DEFECTS

Decision classes

- Critical defects to reject
- Tolerated defects
- Ambiguous cases to review
- Cost of false reject / false accept

PRESENTATION

Presentation to the camera

- Spacing and overlap
- Orientation and speed
- Lighting, reflections, shadows
- Optics contamination

OPERATIONS

Operations

- Cleaning and washing
- Recipe change
- Reject traceability
- Validation at real throughput

> The vision system should not be selected before a representative library of the real product has been built.

OTHER APPLICATIONS

Production, quality and end-of-line: three frequent entry points.



Production workstations & cells

Targeted automation when cycle time, ergonomics or repeatability limit performance.

- Operator assistance
- Indexing / handling
- Targeted robotics
- Retrofit of existing equipment



Vision & quality inspection

Inspection integrated into the cycle when manual judgement becomes too variable or too slow.

- Presence / conformity
- Defects / measurement
- OCR / identification
- Reject & traceability



Packaging & end-of-line

Improve downstream flow without treating each machine as an isolated island.

- Conveying / accumulation
- Weighing / labelling
- Carton handling
- Pallet preparation

ACCEPTANCE CRITERIA

Defined early

Target throughput, reject rate, availability, ergonomics, format change or safety should become measurable criteria before acceptance.

Tested at the right place

FAT in the workshop where relevant, then SAT on site with real product, interfaces and operating conditions.

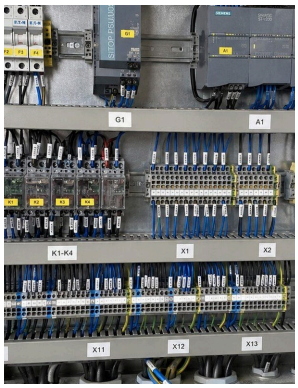
Combine the required building blocks, qualify what comes from outside.

ARCHITECTURE

CLIENT PROCESS	Throughput, product, constraints, existing equipment
VISION & SENSORS	Only where a decision must be automated
PLC / HMI / CONTROLS	Logic, interfaces, data and maintenance
SAFETY	Functions proportionate to risk and project scope
MOTION / CONVEYING	According to flow, buffers and throughput
SOFTWARE / DATA	WMS, supervision or traceability where useful

EUROPE-ASIA SOURCING





01	Functional need and interfaces
02	Identified and traceable manufacturer / supplier
03	Datasheets, declaration of conformity, markings and useful documentation
04	Sample, prototype or FAT according to risk level
05	MOQ, lead time, spare parts, logistics
06	Explicit integration responsibilities

> Sourcing is not presented as a low-cost promise. It broadens the technical choice while keeping compliance, interfaces and total cost visible.

START A PROJECT

No specification yet? A photo, the problem and the current throughput are enough to start.

The first discussion is used to decide whether the next step is a site visit, pre-study, quotation, sourcing task or simply a few additional questions.

01
A photo or layout

The workstation, line, flow or equipment concerned.

02
The observed problem

Lost time, defect, ergonomics, downtime, risk or lack of capacity.

03
Current / target throughput

Even an order of magnitude helps determine the right solution level.

CONTACT

Let us discuss the industrial need.

Operational base in Northern France. Project coverage: France, Belgium, the Netherlands and more broadly North-Western Europe.

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