Resilient Supply Chain

EcoStruxure™ enables trust in the Food & Beverage, Household and Personal Care industries.
We help on every step of the value chain

Efficient facilities
Safer, more available, and greener resources

Resilient supply chain
Manage complexity and improve visibility

Agile manufacturing
Boost manufacturing flexibility & efficiency
… enabled by transversal digital transformation capabilities

**Food Safety & Traceability**
Ensure compliance and increase trust across the whole value chain

**Energy & Sustainability**
Reduce environmental footprint and meet sustainability goals

**Asset Performance**
Maximize return on asset investment

**Workforce Empowerment**
Take teams efficiency to the next level

**Digital Engineering**
Cut time, cost and risks of capital project engineering
Manage complexity and improve visibility across your Supply Chain

Agriculture efficiency & sustainability
Help farmers and agri-business improve productivity, better manage the use of resources and achieve regulation compliance and traceability.

Greater yield
leveraging digital solutions

Warehouse management
Ensure process, control and optimization of warehouse operations to improve efficiency and address ecommerce imperatives.

Increased productivity while ensuring safety

Supply chain optimization
Increase your visibility, improve agility and performance to build a resilient supply chain, end-to-end.

Build a resilient Supply Chain

Product Information Management
Ensure the right information related to the product is available for a seamless omnichannel retail experience.

Product Information
Management

Up to 17% increase in data accuracy

Cold chain monitoring
Manage efficiently your assets tracking, performance and maintenance to optimize your supply chain logistics

Manage complexity and improve visibility across your Supply Chain

Life Is On

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Resilient Supply Chain
Manage complexity and improve visibility across your supply chain

- **Fields & Farms**
  - **Agriculture efficiency & Sustainability**
  - Help farmers and agri-business improve profitability and better manage resources

- **Cooperative**
  - **Supply Chain Optimization**
  - Get visibility into your entire suppliers’ network. Help operational and strategic decisions for efficiency and profitability

- **Manufacturing**

- **Distribution**
  - **Warehouse Management**
  - Ensure Process, control, and optimization of warehouse operations from receiving and shipping product items

- **Retailer**
  - **Cold Chain Monitoring**
  - Manage efficiently your assets tracking, performance and maintenance to optimize your supply chain logistics

- **Consumers**
  - **Product Information Management**
  - Ensure the right information related to the product is available for omnichannel retail

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Warehouse Management
Ensure Process, control, and optimization of operations from receiving and shipping product items

Poorly-managed warehouses can impact business profitability:
- Disjointed teams and employees
- Inaccessible inventory and equipment
- Counterintuitive and redundant processes
- Rigid and restrained lay-outs that undercut productivity
- Important Supply Chain bottlenecks and disruptions

Increased adoption of warehouse automation technologies to keep costs and operational complexity under control while improving efficiency to better answer to:
- E-commerce and online grocery shopping
- Last-mile delivery requirements

During COVID pandemic, USA & France online Grocery shopping increased from 30 - 40% to 60%
Automation technologies & Software Solutions

Ensure Process, control, and optimization of warehouse operations from receiving and shipping product items.

The solution

Business value

- Simplified process and improved machine performance
- Increased process efficiency
- Optimized architecture to reduce space
- Energy savings
- Integrated safety
- High speed
- Robust equipment in harsh condition
- Application flexibility
- Connected and wireless solutions for mobile control
- Increased operational insight and higher reliability of operations

Watch the video
One of the largest Retailer. 1,400 conveyors built by 3 OEMs. 40 roller sensors installed per conveyor

Customer Challenges
• Increase product flow and ensure maximum operating time in automated storage, retrieval systems and conveyors

The Solution
• Sensing solutions from Telemecanique sensors
• Used in Zone Routing: the system routes cases or totes to the appropriate pick zones based on the orders. CASI’s software dynamically controls the flow of the cases and totes to each zone and directs the picking activity for each picking zone.

Customer Benefits
• Shockproof to improve operation costs: embedded within the conveyor frame, unlike reflectors and brackets, prevents product damage, extends lifetime and reduces downtime
• Optimized installation and maintenance: simple, fast with no settings, no alignment, no environment teaching, and optimized mounting with no additional brackets or reflectors required.
• 100% detection: no background or foreground limitations (ideal especially with presence of high-visibility jackets) while detection is effective on the full width of the conveyor.

The Results: Life Is On with... Reduced downtime and increased productivity while ensuring safety
Customer Challenge
- Build a complete automated retrieval system for the production of Milk Powder, automating the storage and delivery (paper box folding machines and conveyor)
- Provide warehouse visualization information
- Interface with Warehouse Management System (WMS) server

The Solution
- EcoStruxure Machine incl.:
  - PacDrive 3 Motion Controller (shrink-wrapping station)
  - Modicon M251 PLC (carton conveyor and pallet conveyor)
  - Modicon M258 PLC (pallet)
  - Altivar Drives
  - AVEVA Edge (InTouch HMI)

Customer Benefits
- Total integrated solution from SCADA to all systems
- Reliable solution

The Results: Life is On with... Complete solution for automated logistics

Milk Powder producer in China.
Customer Challenge
- Solution should ensure 3 basic functions:
  - Infeed & outfeed management with conveyors
  - Elevators station to manage storage at several levels
  - Shuttles to move pallets from infeed/outfeed section to storage position

The Solution
- EcoStruxure Machine Solutions including:
  - Logic controller Modicon
  - Drive controller
  - Altivar drives

Customer Benefits
- Up to 30% saving time in assembly, wiring & commissioning

The Results: Life is On with... Ingenious solutions for all specific requirements
Resilient Supply Chain
Manage complexity and improve visibility across your supply chain

- **Warehouse Management**: Ensure process, control, and optimization of warehouse operations from receiving and shipping product items.
- **Cold Chain Monitoring**: Manage efficiently your assets tracking, performance, and maintenance to optimize your supply chain logistics.
- **Agriculture efficiency & Sustainability**: Help farmers and agri-business improve profitability and better manage resources.
- **Supply Chain Optimization**: Get visibility into your entire suppliers’ network. Help operational and strategic decisions for efficiency and profitability.
- **Product Information Management**: Ensure the right information related to the product is available for omnichannel retail.

Fields & Farms → Cooperative → Manufacturing → Distribution → Retailer → Consumers
### EcoStruxure for Food & Beverage / CPG

#### Agile manufacturing
- Boost manufacturing flexibility and efficiency
  - Manufacturing Operation Management
  - Industrial Information Management
  - Process Control System
  - HMI and data Integration
  - Process Automation
  - Packaging Automation

#### Efficient facilities
- Safer, more available, and greener resources
  - Smart Building Management
  - Power Safety & Availability
  - Power Quality & efficiency
  - Renewable Energy & Microgrids
  - IT Infrastructure Management

#### Resilient supply chain
- Manage complexity and reduce logistics costs
  - Agriculture Efficiency & Sustainability
  - Suppliers Management
  - Supply Chain Optimization
  - Cold Chain Monitoring
  - Product Information Management

### Food Safety & Traceability
- Ensure compliance and trust across the product life cycle
  - Food Defense
  - Cybersecurity Services
  - Digital Calibration
  - Raw material traceability
  - Production traceability
  - Product Identification & Tracking

### Energy & Sustainability
- Reduce footprint and meet sustainability goals
  - Sustainability Consulting
  - Energy Demand Services
  - Strategic Energy Sourcing
  - Enterprise data management
  - Energy as a Service

### Asset Performance
- Maximize return on capital expenditure
  - Assessment and Consulting
  - Enterprise Asset Management
  - Condition Monitoring
  - Predictive Analytics
  - Line & Process Optimization
  - Modernization services

### Workforce Empowerment
- Improve staff knowledge, productivity and collaboration
  - Operator Training Simulator
  - Augmented & Virtual Reality
  - Workflow Management
  - Staff Schedule Management
  - Operator Knowledge Sharing

### Digital Engineering
- Cut time, cost and risks of capital project engineering
  - Electrical CAD
  - Building Information Modelling
  - Integrated Engineering-Design
  - Digital Asset Visualization
Let’s talk about EcoStruxure™ for Food & Beverage