Somfy Increases Efficiency and Capacity Using GE Digital's MES

An industry leader in home automation

[Somfy](#) operates in 58 countries and is the world leader in automatic controls for openings and closures in homes and buildings. It offers a range of motorized solutions and control points, and is a key player in smart home systems. The company, founded more than 50 years ago, takes its industry leadership seriously with a commitment to:

- Customer satisfaction through quality and on-time delivery
- Consistent, efficient manufacturing
- Sustainability with a focus on the eco-design lifecycle

To better serve customers, Somfy developed a digital strategy to meet increasing capacity needs and drive consistency across its eight main manufacturing sites, each with 100-200 production lines. This strategy is part of its global "[2030 Ambition](#)" plan, which in terms of digital transformation focuses on the successful implementation of MES and ERP across [Somfy Group](#).

The company partnered with GE Digital representative [CP Solutions](#) and integrator [Premier Tech Digital](#) to deliver a [Manufacturing Execution System (MES) solution](#) based on industry-leading [Proficy Plant Applications](#) and [Proficy Historian](#) software.

The company expects to see gains of:

- Increasing efficiency
- Decreasing breakdown rate by at least 2%
- Increasing capacity with better productivity
- Supporting on-time delivery with real-time overview planning
- Improving quality and reducing waste through improved reactivity and faster analysis
- Enabling improved decision making with real-time data
- Supporting time-to-market goals with product creation/ modification workflows integrated into MES
- Achieving a modern technology infrastructure that appeals to a changing workforce

Piloted at the company's headquarters manufacturing plant in Cluses, France, the MES solution is providing value toward meeting goals in Somfy's assembly manufacturing environment.

Supporting Sustainable Growth and Customer Expectations

While Somfy has long enjoyed high growth and market leadership, the company saw acceleration in home renovation and demand that started during the COVID pandemic. Home automation including motorization systems for smarter homes are in high demand, offering greater comfort, safety and energy efficiency.

"To meet the growing demand of our customers, we need to better use our existing equipment," explained Yannick Mace, Vice President of Manufacturing for Somfy. "Through real-time management, MES helps us to reduce our production cost and improve product traceability and reaction rules in case of failure. With this tool, we will also standardize manufacturing processes across our eight main manufacturing sites."

Somfy also looked to an MES solution as, with growth and increased internationalization of sales, the company saw more complex product flows and the requirement for monitoring and traceability. Additionally, international competition drove a need for a way to further ensure Somfy could continue to meet its unique brand commitments of highest quality, innovation and reliability. Lastly, like most companies around the world, Somfy faced a changing workforce, which underscored the need for robust, simplified and automated processes based on modern technologies.

Commitment to Digitization

According to Stanislas Dupouyet, program manager for Somfy's Digital Manufacturing, Somfy's Digital Roadmap helps to tackle all of these issues with the MES as a critical component. **The roadmap features three axes including:**

- **Axis 1:** The Lean Factory > Standards, fundamentals, modernization of production tools

- **Axis 2:** The Smart Factory > Digitization of processes and procedures

- **Axis 3:** The Intelligent Factory > Dynamic and predictive analysis of industrial data

"With the MES, we can improve the performance and efficiency of our operations, removing non-value added tasks and increasing reactivity with real-time data," Stanislas Dupouyet said. "We can standardize and digitalize our production processes around one unique manufacturing tool. Also, MES is one key to the overall data management challenge to meet our business goals such as customer delivery and stock optimization."
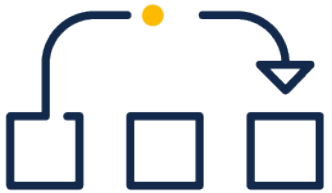
MES Selection and Pilot Deployment

Emmanuel Carmier, lean and change director at Somfy, explained, "We had experience with Proficy and the flexibility and capabilities of the software. Every production environment, every factory is different, and we needed a solution that could adapt to our requirements but also provide reliability and sustainability for long-term use. It is the right balance of software capabilities and company strength."

In selecting a partner for the MES, Somfy benchmarked software solutions available in the industry. The company chose GE Digital's MES based on previous experience with Proficy manufacturing software as well as GE's reputation, product reliability, and company sustainability.

Unlike other companies that implement MES line by line, Somfy implemented Proficy at its Cluses plant across several lines at one time, as the lines are interconnected. This methodology has worked at Somfy in conjunction with carefully managing the project step by step. The team created an "MES school" with simulation of production using the MES, which has supported training workers in the software and how to react. The pilot site is proving that the MES offers a tool to help measure and implement a performance approach.

The software solution provides data management, facilitates real-time reactivity to deviations and faster intervention, and allows the Somfy team to spend less time collecting and formatting data and more time analyzing and managing improvement actions.

From Product Creation to Performance Management

Somfy's manufacturing is an assembly process, bringing together subassemblies. The Proficy solution provides Somfy with functionality in four main areas: product creation and modification, scheduling, production, and performance management.

"We were able to take a specific solution and configure it to our needs and cover a wide range of MES functionalities," Stanislas Dupouyet said. "It's provided a solution capability for our entire complex assembly process. It encompasses our operators, line management, maintenance, quality, and supply."

The Proficy solution supports Somfy's manufacturing with:

- **Product creation and modification**
  - Workflow: control and validation by department until production validation + test mode management
  - Manufacturing data management: Product and process recipes

- **Scheduling**
  - Available production time management and planned activities management (quality control, self maintenance, meetings, etc.)
  - Production order list management
  - Scheduling of work orders (automatic scheduling, manual optimization, send to production, real-time follow up, issues management)

- **Production**
  - Gantt visualization / start-end production / declare production to ERP (SAP)
  - BOM check for component and subassemblies
  - Declare downtimes / manage planned activity
  - Declare defects
  - Component replenishment
  - Modus operandi display
  - KPI display
  - Maintenance / quality alert

- **Performance management**
  - Real-time production dashboard and alerts
  - Data transfer to data lake for business intelligence(BI) reports

Visualization for Supervisors and Operators

Somfy's solution features two types of graphical user interfaces on the production lines, visualizing real-time information:

- Supervisor screens to manage production activity
- Operator screens at workstations with work instructions, data entry, alarms, notifications, etc.

The easy-to-use Proficy screens enable the team to manage production and visualize KPIs, capturing production start and end, planned and unplanned downtime events, quality controls, defects, and more. The team can track reasons for downtime such as breakdowns or part/component inventory issues. Proficy Historian captures all of the OT data, making it available for real-time and historical analysis.

Real-Time Intelligence for the Right Actions

Real-time data and reporting available through Proficy are critical to driving the right actions. As an example, the team has improved quality management and reduced scrap rates using the software for better root cause analysis. However, as Yannick Mace notes, "people won't react because of the information. We have to train them to use the system and to react."

Stanislas Dupouyet agreed, stating, "The challenge is not to use the tool. We needed to reorganize and change the processes to use the tool and drive improvements."

Fortunately, operators are quickly learning the changes and new processes as well as the software solution. According to Stanislas Dupouyet, they have found the new processes and system easy to use and have reduced non-value added tasks – with less paper and manual input and tracking. Operators and supervisors also like the availability of real-time data including KPIs in dashboards such as OEE, yield, defect rates, and changeovers.

With many innovative product specifications, Somfy's manufacturing has frequent line changeovers. Operators perform a changeover every 30-60 minutes. Rapid line changeovers are critical to improved productivity, and the MES solution tracks and reports on changeover times and reasons for delays, providing an opportunity for performance improvement.

Helping to Support Sustainability

In addition to improving production, Somfy expects to use the MES to help support the company's sustainability efforts. Somfy has a deep commitment to eco-design as an overarching process that impacts each stage in the lifecycle of a product – reducing the product's impact on the environment, from the extraction of raw materials to manufacturing, shipping, usage, and even its destruction.

"Somfy is by far the leader in its market, and we have a strong belief that we should transform our industry," Emmanuel Carmier said. "As a whole, the building industry represents one-third of global CO_2 emissions. Being a leader, we have a role to play in driving our sustainable development transformation, not only with our product offering but also with our own footprint.

"Digitalization should help," Emmanuel Carmier continued. "For example, the MES solution is designed to reduce waste, as one benefit. As of today, we are investigating and assessing all of the ways that digitalization can help bring us in the right direction related to sustainability."

Next Steps

What's next for the team at Somfy? Overall, the team is looking to drive performance and create more value with data. Following a successful first deployment, the team is gathering experience feedback from the Cluses deployment and starting to deploy at its next sites. Somfy will integrate the MES seamlessly into its businesses and processes. Stanislas Dupouyet said the project will ramp up from an MES scale to a Manufacturing Operations Management (MOM) level, integrated with the production ecosystem. Also, the team will better define ISA-95 levels.

"What we have seen is that it's not only an MES project. It's really a transformation project of the company," Stanislas Dupouyet concluded. "It impacts a lot of the organization, connecting the IT and OT worlds. It's an opportunity to define a new way of working and new responsibilities. It touches all professionals in the company, quality, maintenance, and so on. It truly is digital transformation."

Stanislas Dupouyet's Recipe for Successful MES

- Start small and learn as you go. Be Agile, there are too many parameters to anticipate and control everything.

- Teamwork and field mindset are the key to solve problems. The devil is in the details, and you will face issues every day.

- Have excellent knowledge of the business/operations within the project team. It's a production transformation not an IT tool.

- But … do not neglect the IT part of the project – in particular the architecture, cybersecurity, alerting, and high availability of the solution.

- Spend time in anticipation on overall data structure of the company to plan for the future. Define the data governance between systems.

- Then anticipate work by building standards (Golden rules) and guaranteeing the accuracy of data (data cleansing workshops).

- Testing the process is long but necessary. Invest time on it! Dedicated environment, data set, test definitions, automated tests, test campaigns with key users, non-regression tests, performance tests, crash tests, release tests, etc.

- Plan in detail the data migration organization and data freeze to not impact your product development and production business.

- Do not underestimate change management – especially at the company level. MES is a bridge between systems and interconnects different worlds / departments which implies new roles and responsibilities (new RACI).

- Plant key users (the doers) are the critical factor for a successful deployment. Onboard them, integrate them into project decisions, create a community.

- "MES school" is a powerful tool. Change presentation, POC demonstrator, use case validation, users training. It is our deployment basecamp.

- It is a terrifying project in its scope, but know that by your action you will fundamentally and profoundly change your company. Don't be afraid one step at a time, it's going to happen!

About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

Contact Information

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