



INTERSNACK

Intelligent snack production with Factory MES

CASE STUDY

CUSTOMER DETAILS

The Intersnack Group is one of Europe's leading manufacturers of salted snacks and produces more than 500,000 tons of the finest nibbles each year. The 8,000 plus employees generate sales in excess of 2 billion Euros.

www.intersnack.com

INDUSTRY

Food & Beverage

APTEAN SOLUTION

Factory MES

CHALLENGES

- Providing key figures in real time to optimise processes
- Time consuming data entry
- Providing a rapid response in the event of faults

BENEFITS

- 5-10% increase in efficiency
- Improved integration of production staff in the continual improvement processes
- Real-time collection of key production figures

The Intersnack Group GmbH & Co. KG (Intersnack), one of Europe's leading speciality snack manufacturers, uses Factory MES to seamlessly monitor their production and processes and to review their key production figures in real-time. This allows the company to continually improve its production processes, making them more cost-effective.

Crisp, crunchy and fresh: these are the words football star Bastian Schweinsteiger uses in a TV ad to promote the delicious potato crisps of market leader funny-frisch. Spicy snack specialities produced by funny-frisch, Chio, ültje, goldfischli or POM-BÄR have been delighting millions of people for decades.

What many are unaware of is that these products are among the brands owned by the Düsseldorf-based Intersnack Group. However, competition is fierce. This is why Intersnack's management are making changes on several fronts to ensure that the company can continue to grow sustainably and profitably in the future.

IMPLEMENTATION OF CHANGE TO IMPROVE PRODUCTIVITY

The business strategy includes continually improving operations in all division by means of tried and tested management methods such as Lean Six Sigma. Especially in production, the responsible managers aim to increase productivity, OEE (overall equipment effectiveness) and to reduce costs in the long term by means of more efficient operations and an optimised use of plant facilities.

REVIEWING KEY PRODUCTION FIGURES IN REAL-TIME

“For our optimisation processes, we need accurate, real-time key figures on the quantities of finished goods, yields and rejects, on OEE or quality feedback from production,” explains Ina Wegener, Director Operational Excellence at Intersnack. This is why the snack manufacturer has introduced Aptean’s integrated manufacturing execution system Factory MES step-by-step since 2009. Following an initial test installation in the Netherlands in 2009, the decision was taken to implement the software throughout all plants in Europe, namely in Germany, the Netherlands, Hungary, France, Poland, Austria, United Kingdom, Romania, Ireland and the Czech Republic.

The IT solution has been seamlessly integrated with the production and packaging lines in the plants. Key production figures including daily key figures, produced volumes, downtimes or data on OEE are now automatically recorded and processed in real-time. The causes of faults are entered on touchscreens by employees. Time consuming manual data-entry from paper documents, internally developed databases and Excel tables is a thing of the past.

In addition to the software implementation, Intersnack was very keen to involve employees during the introduction of Factory MES. The philosophy behind Factory MES goes beyond mere software utilisation. Employees receive intensive training. Ultimately, they are supposed to understand the strategic benefit offered by the system and their own role in the improvement processes.

In cooperation with the Aptean team, a considerable amount of time was spent ensuring that the harvested data could be used easily and efficiently at all company levels.

EFFICIENCY UP TEN PERCENT IN PRODUCTION

Ranging from machine operators to the factory manager and the senior management team, all users can access up-to-date key performance indicators (KPIs) from production at any time. Production times, yields and rejects, defects or net machinery cycle time figures are available in real-time and not several hours or days later.

“As the data is presented in real-time, we are able to selectively improve production processes in real-time and ensure optimal utilisation of plant facilities and manpower,” stresses Jan van den Broek, Managing Director of Intersnack Knabber-Gebäck GmbH & Co. KG. “This enables us to increase efficiency in each plant by between five and ten percent, which is directly reflected in lower production costs.”

“We take decisions on the basis of hard facts and not gut feelings. This also tangibly increases the workforce’s acceptance of the improvement measures.”

Ina Wegener
Director Operational Excellence
Intersnack Group GmbH & Co. KG

MORE TIME FOR CORE TASKS

All key figures and production data recorded in Factory MES are processed and presented graphically on a web-based interface in a clearly arranged and user-friendly way. Machine operators are able to retrieve all relevant key figures at control terminals quickly and conveniently at the press of a button. The causes of defects or faults are recorded directly in the MES solution. In addition, regular checks (approx. every 2-3 hours) are embedded directly in the work flows.

As time-consuming and error-prone manual recording no longer takes place at the end of the shift, the operating staff can dedicate more of their time to core tasks, such as optimising the cycle times of the plant facilities. In-plant paper consumption has also declined noticeably.

PRECISE MEASUREMENT OF IMPROVEMENTS

At the same time, the IT-supported processes create a uniform flow of information from the shop floor to the plant and company management. Traffic light charts clearly and immediately show which plants are operating on or above target.

Those responsible can inform themselves in detail about the causes of faults and downtimes or excessively high set-up and cleaning times with only a few mouse clicks.

Even the regular quality controls at the production facilities are now seamlessly documented in Factory MES via alerts that remind the machine operators to perform the required checks. The scheduled adherence to deadlines can be monitored.

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Intersnack Knabber-Gebäck GmbH & Co. KG

FACTS-BASED DECISION MAKING

Plant and company managers can now perform detailed evaluations of the KPIs recorded using MES by means of powerful analysis tools, thereby creating valid and reliable bases for targeted measures. “We take decisions on the basis of hard facts and not gut feelings. This also tangibly increases the workforce’s acceptance of the improvement measures,” adds Ina Wegener. The analysis results are available in just a few mouse clicks. They are clearly displayed graphically in a dashboard interface and can be processed step-by-step by drill down.

For example, up-to-date analyses of key figures enabled Intersnack’s management to comprehend accurately that equipment efficiency increased in the first three years of using the system, not least due to the reductions in set-up times and unscheduled downtimes facilitated by Factory MES. At the same time, they are shown how efficiency can be increased even further by means of shorter cleaning times.

LINKING THE SHOP FLOOR AND ERP SYSTEMS

The introduction of Factory MES was preceded by an extensive selection procedure. “The MES solution simply satisfied our requirements best, as it includes functions specifically developed for the food industry,” says Jan van den Broek in justification of the decision. “The proven industry and process expertise of the experts at Apteon also convinced us.”

Another important criterion for Intersnack was the need to easily link Factory MES with the various ERP systems they use across Europe, including Apteon’s Ross ERP. Factory provided standard interfaces to easily link the systems together.

ROLLOUT IN 26 PLANTS TO DATE

In close cooperation and using tried and tested methods, the project partners have gradually implemented the MES solution at 26 plants. The in-house project team learned something new with each rollout, meaning that they are as a result able to complete many tasks autonomously.

According to Ina Wegener, the communication between the project partners was “initially slightly bumpy,” but the advisors at Aptean understood Intersnack’s concerns and requirements perfectly. To begin with, individual country versions were not available for all languages, such as in Hungarian. This was a sticking point as the machine operators are only able to operate the MES solution in their respective language. However, Aptean rectified this need promptly.

This has made a major contribution to the high level of acceptance of the MES solution among users and hence the success of the project.

MUCH HAS BEEN ACHIEVED AND THERE IS STILL FURTHER OPPORTUNITY FOR IMPROVEMENT

Jan van den Broek sums the project up positively: “With the aid of Factory MES we have already been able to achieve a great deal, making production more transparent and efficient.”

Intersnack also aims to use the statistical process control functions to record, control and reduce the waste per machine and plant. The use of the maintenance module and its link with the Intersnack maintenance solution will help optimise maintenance processes in the future.

Moreover, preparations are underway for a central dashboard solution that merges key production figures, performance data and analyses from all European plants in aggregated form on a single user interface. In the future, this will give Intersnack’s management an up-to-date overview of the overall situation at any time, enabling it to control improvement processes even more accurately and across multiple plants.

For more information on Factory MES or Aptean, please visit www.aptean.com.



About Aptean: Aptean helps businesses profit, innovate and grow where the work gets done—in the call center, on the floor of the factory, at the end of the assembly line. That’s where Aptean’s CRM, Complaints Management, ERP and Supply Chain software applications enable nearly 5,000 customers to satisfy their customers, operate more efficiently and stay at the forefront of their industry.

Aptean is where software WORKS. For more information, visit www.aptean.com.