# INNOVATION PACKAGING

## GROWING FRAGRANCE AND COSMETIC PACKAGING BUSINESS WITH DELMIAWORKS ERP AND MES SOLUTIONS

## Case Study

Innovation Packaging leveraged DELMIAWorks ERP and MES solutions to grow the company's annual revenue 30 percent by improving efficiency, collaboration, profit margins, decision-making, and product quality.

**Challenge:**

Improve operational efficiency, production processes, inventory management, profit margins, collaboration, resource utilization, and decision-making by finding a solution that automates manufacturing and provides real-time access to all production and operational data.

**Solution:**

Replace reliance on Access database and Excel spreadsheets with DELMIAWorks Enterprise Resource Planning (ERP) solutions, including ERP, Finance, Quality Control, Inventory Management, Time & Attendance, Real-Time Production Monitoring, and Manufacturing Execution System (MES) modules.

**Results:**

- Grew annual revenue by 30 percent.
- Cut inventory management costs by 5 to 10 percent.
- Increased efficiency and collaboration, reducing the cost of goods sold.
- Improved profit margins, decision-making, and product quality.

*"DELMIAWorks allows us to be much more precise during estimating and production planning, which helps us make better decisions, improve profit margins, increase throughput, and cut costs. Since implementing DELMIAWorks, we've reduced the cost of goods sold, realized savings of five to 10 percent on inventory management, and improved management of our supply chain. We're now making money on every job."*

— Guillaume De Rosa, General Manager

Innovation Packaging (IPack) is a leading French manufacturer of packaging for customers in the fragrance and cosmetics industries. Producing more than 50 million injection-molded parts, assembling and gluing more than 80 million components, and selling more than 25 million finished products annually, IPack specializes in designing and manufacturing packaging closures, refill and dispensing systems, and caps and magnetic caps, which are used with perfumes and various types of cosmetics. In addition to providing custom and personalized packaging, the company has built a reputation for developing innovative packaging concepts. The manufacturer's Aldoni dispensing closure, for example, provides ease and convenience for its clients' end-use customers, while providing a clean and fast way to refill a perfume bottle.

IPack develops its packaging products and molds for plastic injection-molding with SOLIDWORKS® design software. The company operates 10 high-speed automatic assembly machines, for assembling and gluing products, and 14 plastic injection-molding machines, ranging from 35 to 270 tons of pressure, These are automated with three-axis double-armed robots for part handling, and can handle molds with up to 16 cavities, with or without hot runners. "Most of our products contain multiple, plastic injection-molded components that are assembled together, and we also coat some parts with gold and silver, and brand the caps using hot stamping, engraving, or pad printing," explains General Manager Guillaume De Rosa.

"Until 2017, we relied on Excel spreadsheets at IPack, for organizing and scheduling designs and production, and an Access database for capturing and maintaining product and manufacturing data, but we came to the realization that we needed better access to design, job, and production data in real time to continue to improve our processes, boost efficiency, make good decisions, empower our employees, and grow the company," De Rosa recalls. "Our previous process required inputting sales orders, production orders, BOM [bill of materials] information, material requirements, and scheduling information into an Excel spreadsheet, which we also used for calculating costs, quoting, and inventory management. This was not only time-consuming, but also prevented management from having the information and insights necessary to understand what was going on in our production facility at any moment and if we were making or losing money on a job.

"De Rosa says IPack needed a manufacturing execution system (MES) to automate production and an enterprise resource planning (ERP) system to provide the real-time vision into all aspects of production that management needed to boost productivity, improve quality, and continue to grow the company. "Many of the ERP systems that we evaluated—such as SAP™, Microsoft® Dynamics®, and Epicor®—were general purpose in their approach and not well-suited for our injection-molding operations,"De Rosa explains.
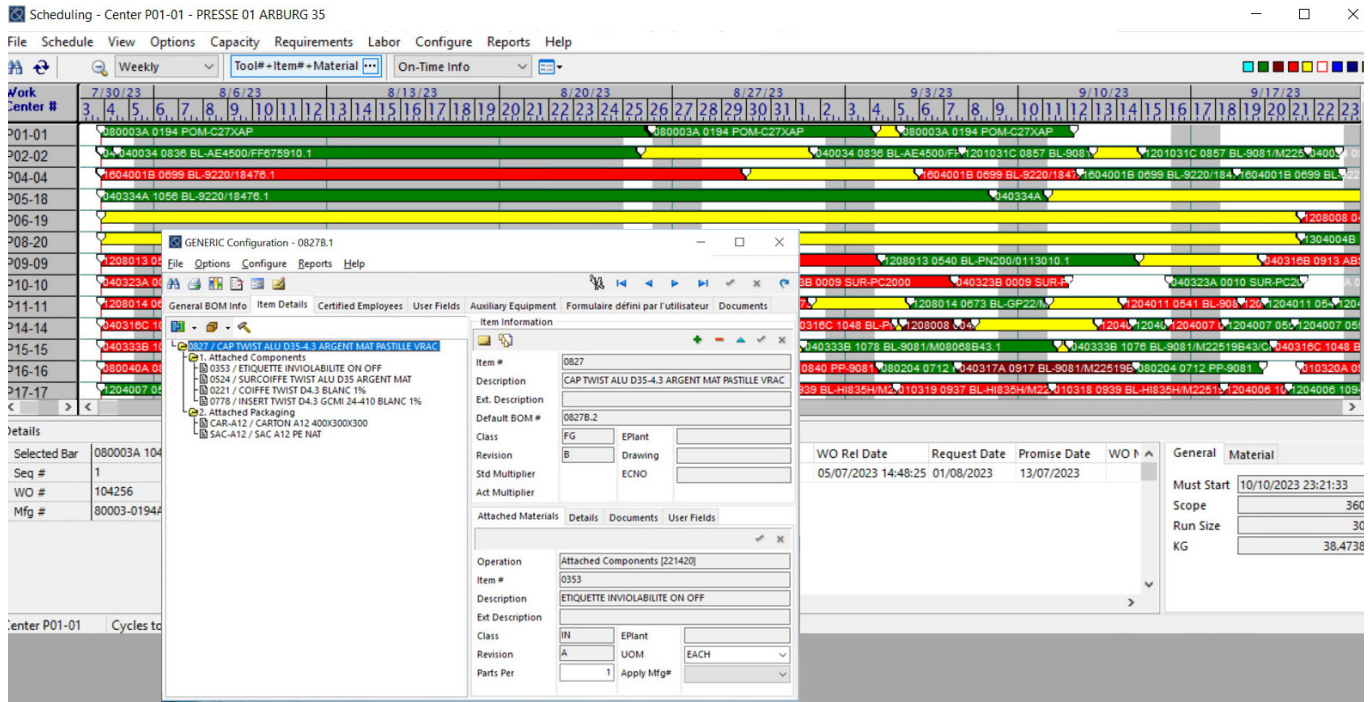


"When we started looking into MES systems, we discovered DELMIAWorks®, which is a shop-floor-first solution with built-in functionality to support process-specific manufacturing processes, including injection-molding, extrusion, stamping, and machining operations, and provides both ERP and MES capabilities," De Rosa notes. "DELMIAWorks was the only system that could output a specific BOM for each job, and we could see how it would help us continue to develop a culture of continuous improvement, collaboration, and empowerment, which is critical to helping us grow."

IPack chose to implement the DELMIAWorks ERP and MES systems—including the ERP, Finance, Quality Control, Inventory Management, Time & Attendance, Real-Time Production Monitoring, and Manufacturing Execution System (MES) modules—because they support process-specific manufacturing processes, including injection-molding, and provide the capabilities that will help the company boost productivity, make better decisions, and continue to grow.



Using DELMIAWorks ERP and MES solutions, IPack has automated its injection-molding operations and monitored all of its manufacturing operations in real time, gaining more accurate insights into its business and resulting in increased productivity, improved quality, and lower costs.

## SURVIVING COVID PANDEMIC ECONOMIC DOWNTURN

The implementation of DELMIAWorks ERP in 2017 enabled IPack management to gain a more accurate understanding of the cost of goods sold and to better manage inventory, which proved to be critically important when the economic downturn associated with the COVID-19 pandemic and related supply chain issues stressed the company's operations in 2020. "We suffered a 25 percent reduction in revenue when the COVID-19 pandemic struck as demand for fragrances and cosmetics plummeted when people worldwide stayed home," De Rosa points out. "At the same time, we had to quickly reorganize to boost production of our 24-410 Ŝirmi drip-free, twist-off, and flip-top caps to serve soaring demand for the hand sanitizer packaging market.

"DELMIAWorks helped us to further automate our operations and have a more precise understanding of the cost of goods sold, and we probably would not have been able to survive the economic downturn associated with the pandemic without it," De Rosa continues. "Things happen on the shop floor, and with DELMIAWorks, we have the real-time view of what's going on and a detailed history on every job. This allows us to pinpoint and address issues, improve operational efficiency, and create a culture of continuous improvement."

## AUTOMATION, REAL-TIME MONITORING BOOST PRODUCTIVITY AND CUT COSTS

With DELMIAWorks solutions, IPack has automated its injection-molding operations, realized real-time monitoring of all manufacturing operations, and gained more accurate insights into its business, resulting in increased productivity, improved quality, and lower costs. "DELMIAWorks allows us to be much more

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precise during estimating and production planning, which helps us make better decisions, improve profit margins, increase throughput, and cut costs," De Rosa stresses.

"Since implementing DELMIAWorks, we've reduced the cost of goods sold, realized savings of five to 10 percent on inventory management, and improved management of our supply chain," De Rosa adds. "We're now making money on every job."

## MAXIMIZING RESOURCE UTILIZATION TO SUPPORT GROWTH

With the automation and data access that DELMIAWorks provides, IPack has been able to maximize resource utilization and increase collaboration, empowering employees to work smarter and help the company grow. "The first year after the pandemic economic downturn, our revenue was near prepandemic levels," De Rosa points out.

"Since then, the industry has come back, and our revenue has increased by 30 percent," De Rosa says. "With DELMIAWorks in place, a culture of continuous improvement has taken hold at IPack, and we are well-positioned for future growth."

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