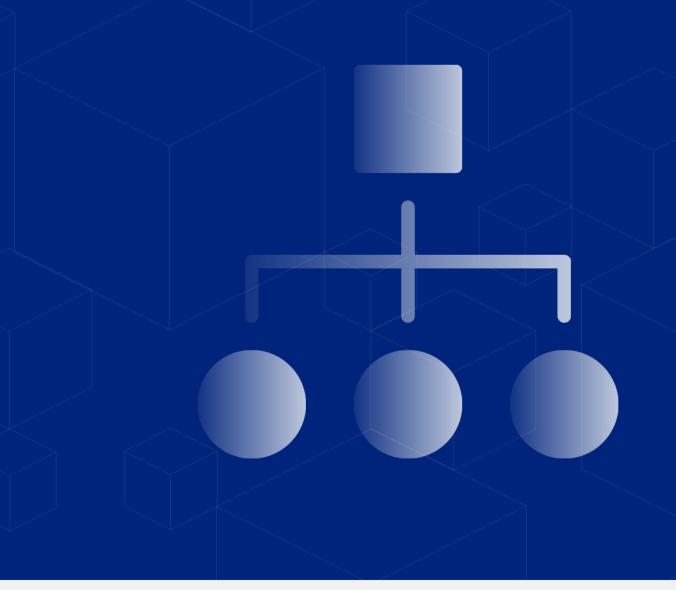
WHITE PAPER

Track and Trace Materials from Supplier to Finished Goods

More Effective Inventory Management Using Real-Time Data





What can tracking a product's Life cycle throughout production add to your manufacturing operations?

In many industries, traceability of raw materials and finished goods throughout the production process is critical for protecting consumers and your brand. As legislation continues to drive attention and focus to manufacturing traceability, global enterprises have included traceability and genealogy as one of the core functionalities of Manufacturing Execution Systems (MES)1.

With track and trace operationally-focused software, companies are able to follow and report on product locations and histories, including:

- Time spent at each facility
- Ownership and hand off
- Packaging arrangements
- Storage conditions and energy use

With the TrakSYS™ software solution from Parsec, animal nutrition manufacturers Premier Nutrition and Navobi are able to detect and report the physical location of a product in real-time and use their stored data as actionable data. Using TrakSYS, these global manufacturers are GS1 Standard secure and able to2:

- Avoid product recalls
- Comply with regulatory requirements
- Reduce business risk beyond legal compliance
- Manage logistics and quality effectively and efficiently

Manufacturers, especially in regulated markets, are able to provide proof a product was made in compliance with correct processes to their customers.

² http://www.gs1.org/docs/gsmp/traceability/Global_Traceability_Standard.pdf



¹ http://mesa.org/en/modelstrategicinitiatives/MESAModel.asp

CAND TRACE MATERIALS FROM SUPPLIER TO FINISHED GOODS

Founded in 1923, Navobi operates independently within the VanDrie Group and produces calf milk replacer in sacks and bulk for internal use as well as for third-party customers.

The health of the calf is the main goal at Navobi. To ensure the highest product quality, Navobi implemented a sophisticated track and trace process that allows sampling and analysis of all raw ingredients and their correlation with the final product.

Goals

Dashboards to analyze Electronic Batch Records (EBR) including:

- Raw materials used and dosing accuracy.
- The correlation between dosing, assets, ingredients, and sources.
- Recipe parameters and tolerances.
- Reducing production cost while elevating product quality.

TrakSYS Solution

The cost of producing calf milk replacer depends primarily on electricity cost and raw materials. To be a low-cost and high-quality producer, managing raw material consumption, process reliability, and efficiency is vital. Focused on improving manufacturing operations, Navobi worked with CGI, a Parsec Partner, to combine their knowledge of powder batch processing with the capabilities of TrakSYS.

Results

- Increased batch throughput.
- Improved product quality through optimized dosing.
- Eliminated key bottleneck constraints in semi-finished operations.
- Increased decision making on new equipment purchases.
- Reduced cost by tightening control of ingredient use.
- ROI was achieved 12 weeks after implementation.

"Using the TrakSYS solution delivered by CGI Netherlands, the bottleneck in the semi-finished goods production was eliminated. Furthermore, by being able to analyze the dosing accuracy reports, we were able to make changes to the process equipment that resulted in faster dosing with almost 80% accuracy improvement. We were very pleased with the significant gains and ROI in a short time of only a few weeks."

Jan Kroes Project Manager, Navobi



Premier Nutrition, a division of AB Agri Ltd, is a producer of animal nutrition supplements and premixes, and a supplier to the world's largest producers of livestock feeds and pet foods. Premier Nutrition is committed to delivering wholesome, safe, and effective products that meet animal's productive needs while maintaining health and welfare. The company's key principles to achieve optimum food safety are; control, traceability, and freedom from residues.

Goals

A completely new production line was needed to replace the paper-based manual operations. The new, fully-integrated line required a robust and flexible Manufacturing Execution System (MES) solution to provide full material management, genealogy, and traceability.

TrakSYS Solution

Parsec Certified Partner, Cimlogic, consulted, designed, and implemented a fully turn-key manufacturing solution using TrakSYS. In addition to advanced process automation; RFID, bar-coding, and labeling technologies were deployed to ensure full material traceability. Cimlogic used the Electronic Batch Record (EBR) functionality of TrakSYS to monitor and record usage of raw materials (amounts and lot numbers) and provided complete traceability of the final product.

Goals

- Improved product safety and full product genealogy
- Leveraged and incorporated operator knowledge and experience in the solution, thereby:
 - Improving plant performance
 - Eliminating human error
 - Reducing waste
- Conformed to regulatory compliance using improved data management and accuracy with EBR.
- Increased throughput, capacity utilization, product quality, and productivity.
- Met the ROI goals established for the project.

"The aim of the MES project was to create optimum traceability and food safety to eliminate the chance of cross-contamination. In order to achieve this, we needed to look at replacing our existing processes from paper-based to electronic.

Our operations are complex and we have variable products for multiple customers. The new TrakSYS based system has helped us to manage these complex operations better, while improving product quality, increasing productivity, and reducing costs. Cimlogic's comprehensive, turn-key solution has created complete transparency within our factory, and improved our data accuracy and management processes."

Randall Warin Project Manager, Premier Nutrition



TrakSYS Track & Trace

Standard process, routing, and operational performance are inclusive of traceability and can be reported with TrakSYS. With traceability and genealogy, you are able to monitor your manufacturing efficiency and focus on continuous improvement while increasing asset utilization and reducing cost. With TrakSYS, operators are able to calibrate, maintain, and operate equipment. TrakSYS functionalities

EBR and task management can be configured to capture electronic signatures as proof of an operator's work or authorization for an exception.

Extend the value of your connected manufacturing operations with a traceability solution from Parsec. For more information on Track & Trace, please visit: www.parsec-corp.com/traksys



About Parsec

Parsec is the developer of TrakSYS™, a proven operations management software application and solution platform designed to significantly improve manufacturing processes. Parsec is committed to providing best-in-class products and solutions to our worldwide community of clients to assist them in optimizing their manufacturing operations. There are thousands of TrakSYS licenses in use around the globe in a wide variety of Industries. TrakSYS helps manufacturers to maximize asset utilization and efficiency, increase capacity with no new capital equipment, reduce production costs, decrease lead time, and improve profitability. For more information about Parsec and TrakSYS please visit the corporate website at www.parsec-corp.com.

