Navigating Constant Change Successfully

Five ways an ERP system drives efficiency and profitability for chemical manufacturers
About the Author

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Daniel has been with ProcessPro, a division of Open Systems Adaptable Solutions since 1999. Currently Director, Product Strategy, Daniel focuses on driving overall market success by ensuring the products meet both current and future market demands. Leveraging his extensive understanding of process manufacturing, the unique business trends of this industry and information gathered from market analysis, customer feedback and regulatory compliance, he drives product decisions. Daniel has a passion for connecting the benefits of ProcessPro’s ERP solution to batch process manufacturers and helping to effectively solve their key business challenges.

Previously, Daniel held a variety of positions within the company including implementation, account management, product consulting, product management and sales which has provided him an aptitude for manufacturing and the nuances within the food and beverage, dietary supplement/nutraceutical and specialty chemical industries. His diverse experience with the customer base and within ProcessPro provides a strong foundation for his position.

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Introduction

Only a decade or so ago, an enterprise resources planning (ERP) system was a novel new tool for chemical manufacturers that use batch processing. It helped integrate systems that had never been connected before, such as manufacturing processes, planning and execution, inventory, quality assurance, financials, compliance, sales and more. It gave users a more comprehensive view of their operations along with the ability to store, share and track critical data using one database.

In the report “The State of Manufacturing ERP Systems” by Manufacturing.net, a global news and opinions site, almost 63 percent of respondents had an ERP system that is at least four years old. If you fall into that category – or if you have an ERP that wasn’t specifically developed for batch process chemical manufacturers – you may be missing the chance to take advantage of recent leaps in efficiency, integration and adaptability.

Your ERP system should be helping you develop quality products, ensure efficient and profitable operations and comply with government regulations – and not be getting in the way. The ability to navigate this constant change is even more urgent due to the latest Globally Harmonized System of Classification and Labeling of Chemicals (GHS) standards, the new labeling regulations on containers and Safety Data Sheets (SDS) that companies are scrambling to comply with accurately and cost effectively.

The Bottom Line

You have specific needs and scenarios that can’t be addressed with an ERP designed for other industries.

But you also must be able to generate an ROI that justifies your investment in new solutions. This eBook examines five ways the latest ERP systems can help you operate more efficiently, keep costs low and enhance customer service:

- Real-time lot tracking and inventory visibility
- Intelligent and relevant formula management system
- Regulatory compliance, including GHS standards
- Robust business intelligence tools and reporting
- Ability to adapt to custom requests
ERP For Process Manufacturers

Our robust ERP system is designed for batch process manufacturers. At ProcessPro, we have in-depth experience working with a wide variety of process manufacturers in the chemical industry that include specialty chemicals, polymers, plastics, resins, lubricants, adhesives, inks and paints and more. We also go one step further to provide the chemical manufacturing industry with specific functionality to maintain compliance with ever-changing regulations, including GHS standards.

We develop ERP systems for batch process manufacturers. It’s all we do. With our complete solution, you have the power to make smarter decisions more quickly and profitably.
Lot Tracking and Inventory Visibility

Your biggest asset is your inventory, yet many chemical manufacturers are lagging in the ability to accurately track inventory and lot numbers. Knowing that you have the right materials when you need them is essential for keeping inventory costs low and complying with regulations. This feature should be the backbone of your ERP, not an add-on.

With an integrated ERP system, you have greater visibility into your inventory, which is key for determining the timing and quantity of purchases and production in order to meet demands. Lot tracking gives you a more comprehensive view of your inventory and its state.

You need an ERP provider that knows your industry, speaks your language and understands your specific concerns, such as inventory levels and location for increasing efficiencies and keeping costs low:

- **Real-time updates and on-hand, allocated and projected inventory levels by combining batch tickets, sales orders, purchase orders and current inventory levels allow you to maintain accurate inventory, improve efficiencies and reduce errors.**

- **Connecting lot tracking to inbound materials gives you greater visibility into your operations, including knowing what the material is and its attributes, who sent it, its location, which products it was used in and more.**

- **Alerts inform you of when a material is nearing or past its expiration date.**

- **Track material yield or loss factors for better planning, costing, and margin analysis so you know how much inventory to buy, stage, use and how it is impacting your bottom line.**

- **Constant and accurate communication reduces production delays.**
Formula Management

Perhaps you are a paint manufacturer and your customer wants a new color and sheen. An industry-specific ERP system will help you develop that formula, run cost scenarios, provide a sample to your customer and produce the product once approved. Or perhaps you are developing a product that comes in contact with food. Your ERP system can help monitor and track the information required by the FDA to ensure you are in compliance.

Formula management should be a core function of your ERP system, as it is critical for planning and helps ensure consistency in your manufacturing process and products. Therefore, it is important that the features of your ERP match how you operate, including taking into account mixed units of measurement, ingredient parameters, formula instructions, by-products as well as security and procedures for editing and managing formula information.

Some ERP software providers will try to attach formula management capabilities as an add-on module. With the high stakes of your business and your unique regulatory requirements, make sure the ERP system you are considering includes formula management as a core function. It will manage your quality and all it entails to make sure you are protected, including:

• Ability to create new formulas
• Observe physical property calculations as a formula is developed
• Ability to enter manufacturing usage or instructions
• Set up testing specifications for quality control
• Analyze the formula to determine what is required on the GHS label
• Distinguish costs for material, labor and overhead all from within one program
• Factor in and track landed costs for more accurate profit analysis
Meeting regulatory requirements and staying in compliance are top priorities and concerns for chemical manufacturers, especially when it comes to the latest GHS standards. These new specifications are intended to help standardize the way companies manage and label hazardous material, and may require specific ERP system functionality to achieve compliance.

In today’s hyper-conscious world, standards will be changing and evolving, so detailed tracking of all materials, accurate material labeling and comprehensive reporting capabilities are a must. Whether you work with specialty chemicals, plastics, lubricants, inks, paints or another material, the right ERP software helps ensure you not only weather the transition to new standards, but your business thrives because of them.

- **Labeling:** Inventory traceability and visibility leads to more accurate labeling practices, which are at the heart of the GHS changes. The ability for your ERP software to help you accurately label your materials must go beyond the simple labeling of a pre-determined set of data.

- **Analysis:** Your ERP system can analyze composition data that helps you understand the results of material mixing. For example, if you mix three hazardous materials together, the system knows how to accurately label the hazards resulting from the finished product.

- **Best practices:** ERP software specific to chemical batch processors stresses the importance of best practices along with domain expertise that give you the data intelligence and tools to keep your operations efficient and compliant.

When it comes to compliance, your ERP software should provide you the peace of mind that your business is optimized, not hindered.
Business Intelligence and Reporting

With graphical, real-time data and dashboards, ERP software paired with a Business Intelligence Suite (BI), can be the ultimate tool for tracking your company-specific goals while ensuring compliance. By remaining flexible to your needs, users can create different reports based on their materials or compliance needs, and not be confined into one way of reporting or organizing the information.

Flexible, industry-specific ERP software also allows you to perform self-service reporting, such as the data you need to meet GHS standards, along with your company’s own particular KPIs. You can run reports on lot number, raw materials and more.

- **With industry-specific ERP architecture, you can generate the reports you need in minutes instead of hours.**
- **Reporting and business intelligence tools help you identify problem areas more quickly.**
- **Automated alerts tell you when there is a risk of a reaction or negative effect of the mixing and batching.**

Closely tracking inventory, formulas and regulations isn’t helpful if you don’t have a real-time view of what’s happening within your operations or the intelligence needed to make the right decisions. Alerts, reports and data analysis help maximize the value of your ERP system and your ROI.
New product development is key to your continued success, whether you are developing your own products or creating them in response to a customer request. You must conceptualize it, create it, test it and get the right approvals before going to market. The development process involves many formula adjustments, test runs and cost reviews prior to approval, but it cannot affect the mass production of your original product.

An industry-specific ERP system can help you isolate, test and manage iterations without impacting your mass production side.

- Store new product development information and various product iterations in the ERP system without ever impacting live production data.
- Maintain and manage R&D information; including materials, costing and margins, instead of attempting to maintain this information within your mass production data and fight through the clutter.
- R&D formulas can be copied to the mass production environment once approved.

The flexibility of a top-rated ERP solution gives you the power to evolve as your customers demand - without losing efficiency, reliability or data integrity.
Avoid the headache and costly mistakes of an ERP system that doesn’t understand industry best practices or have the flexibility to respond to your needs. At ProcessPro, we deliver a single, real-time solution with interactive dashboards that provides everything from broad, graphical snapshots of productivity to granular details of project financials.

As a leading mid-market ERP software solution for the process manufacturing industry, we pride ourselves on our ability to serve the unique needs of the chemical industry. Our customers can have peace of mind knowing they have a single source to deal with at every phase – no resellers who lack support or third-party installers who lack knowledge of the software. And rather than off-shore or third-party technical support, we provide live, dedicated assistance from our team at our home office.
ProcessPro Meets Your Business Needs

**Manufacturing**
- Formula and Recipe Management
- Production Planning and Scheduling
- Manufacturing Execution
- Allergen or Other Key Attributes/Chemical Properties

**Financials**
- AR and AP
- General Ledger
- Lot / Batch Costing
- Project Costing
- Payroll / HR

**Quality**
- Quality Control
- Lot Traceability
- Certification and Validation Tools
- FDA Compliance and Validation
- GHS / SDS

**Sales**
- Quoting and R&D
- Order Entry
- CRM
- Contract Management
- EDI

**Inventory**
- Purchasing
- Inventory Control
- Material Requirements Planning
- Warehouse Management
What our Customers Say

“ProcessPro’s implementation staff went beyond the call of duty – working through a blizzard and over the New Year holiday in order to reach our abbreviated go-live date.”

– Shawn Thicksten, Director of Operations, BRANDT

“ProcessPro’s support team is very helpful and patient no matter what issues or concerns we have. I appreciate that ProcessPro listens to their clients and utilizes their feedback in future product improvements.”

– Angel Fekete, Finance Manager, Hampford Research, Inc.

“ProcessPro’s implementation specialist talked us through each stage of the process. He was an excellent teacher and made the start of our project a great one.”

– Jennifer Kalas, President, IRMCO

“Being able to ship complex mixtures within three days of order receipt is a key to the success of Arylessence. Other ERP systems force you to operate your company around them. ProcessPro does what we want by helping us to execute a complex process efficiently. As a result, we gain business while our competitors make excuses as to why their systems won’t allow them to ship as promptly.”

– Bret Tanner, Vice President of Operations, Arylessence, Inc.
Hampford Research, Inc. (HRI) is a custom chemical manufacturer that specializes in photochemicals and radiation-cured monomers. HRI serves the electronics, personal care and dental, printing and imaging, optical lens and curable adhesive and coatings industries.

**Challenge**
HRI was previously operating on a homegrown ERP system that was difficult to maintain and didn’t allow for any upgrades. With a lack of real-time data and complete visibility to all manufacturing operations, they weren’t able to judge what was happening within the company on a daily basis. There was always an information delay, from inventory status to warehouse management to simple financial reporting.

**Solution**
HRI implemented ProcessPro, a fully integrated and industry-specific ERP solution that seized the ability to grow along with their company. Approximately a year after their initial implementation, HRI added additional features including Project Accounting, Safety Data Sheet (SDS) and Warehouse Management Solution (WMS) to further streamline their processes and improve operational efficiencies.

**Software Add-on Applications**
- WMS
- SDS

**Benefit Overview:**
- Real-Time Inventory
- Visibility Across Company
- Streamlined Processes
- Reporting and Data Analysis
Appendix: Hampford Research Case Study continued

Results

Real-Time Inventory

Now with the ability to observe its manufacturing process across the board, HRI has access to live inventory updates and on-hand, allocated and projected inventory levels by combining batch tickets, sales orders, purchase orders and current inventory levels.

Visibility Across Company

Each manufacturing department now has complete visibility of its partnering areas. By sharing reports in ProcessPro’s Business Intelligence Suite (BI), team members are able to make informed business decisions regarding scheduling, lot tracking, inventory and sales.

Streamline Processes

HRI has been able to streamline their processes and reduce operational costs. They’ve eliminated dual recording of a majority of their inventory transactions, cut down on paperwork clutter and removed the frustration of delayed data at month’s end closeouts.

Reporting and Data Analysis

Utilization of BI provides a familiar reporting environment that has enabled HRI to retrieve, analyze and share critical business information allowing them to make better informed, timelier and knowledgeable business decisions. The interactive dashboard provides direct drill-down capabilities to transactions, the ability to export data to Microsoft® Excel and allows for posting of informational reports to HRI’s entire organization.
BRANDT is a leading agricultural company consisting of three divisions – Specialty Formulations, Retail Agronomy and Dealer Support – serving growers around the globe. Founded in 1953 to help Illinois farmers adopt new and profitable technologies, the company has experienced aggressive growth, expanding coast to coast and internationally. BRANDT provides the products and services that provide growers the best opportunity for maximum return while building a healthier and more abundant food supply.

**Challenge**
In 2013, BRANDT acquired Monterey Chemical Company, Inc. (aka Monterey AgResources) which was already a ProcessPro client. At the time, BRANDT was operating on Macola ERP software. BRANDT desired a fully integrated ERP solution that bolstered its growth initiative post-acquisition with robust manufacturing-specific functionality.

**Solution**
BRANDT quickly unified its business processes and began implementing ProcessPro’s ERP solution within its remaining facilities. The solution needed to manage accounting and financial information and provide real-time and accurate inventory and production information. ProcessPro was the answer they needed.

**Benefit Overview:**
- Material Requirement Planning (MRP)
- Real-Time Inventory
- True Accounting Package
- Growth
Results

Real-Time Inventory

With the use of ProcessPro’s real-time physical inventory solution, BRANDT has been able to maintain accurate, manageable inventory levels, reducing waste and lag time. They have experienced improvement in operational efficiency through the use of WMS for inventory transactions. The Inventory Control application simplified the inventory process, automatically tracking balances and lot numbers making it traceable in real-time. This fully integrated feature has produced the needed visibility that BRANDT previously lacked.

True Accounting Package

Combining a complete billing and accounts receivable system, including accounts payable, and the ability to create checks, track credits, discounts, etc. provides BRANDT the capability to effectively manage its business expenses.

Growth

BRANDT needed a software system that would be able to meet their long-term requirements and grow with them, especially after the Monterey AgResources acquisition. ProcessPro offered a fully customizable ERP software system that could handle their current situation and the projected future growth.
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About ProcessPro

ProcessPro’s ERP solution tackles your mission-critical business functions (manufacturing, quality, inventory, financials and sales), while linking all of your information through integrated business intelligence functionality. Gain total information visibility with ProcessPro, a robust ERP process manufacturing solution for the chemical industry – in real-time – so you can run more efficiently and grow more profitable.

Chemical manufacturers operate in a complex, fast paced and highly regulated industry. Products must be high quality, at reasonable cost and oftentimes individualized to the needs of the customer. At ProcessPro, we believe by supplying chemical manufacturers with the right ERP capabilities, you will be proficient in managing these demands while growing more profitable with satisfied customers. With our solution and our team of experts, you will have the essential technologies to tackle challenges at any step in your operations and navigate constant change successfully.