

# BatchMaster ERP for Beverages

*Helping you  
bring us a variety of  
great tasting and  
refreshing drinks*



## Introduction

BatchMaster Software offers an industry specific ERP solution that helps you streamline your operations and bring your products to market, faster and cheaper, while complying with ever more stringent FDA and FSMA regulatory mandates. Whether you private-label, co-pack or produce your own line of juices, functional drinks or carbonated beverages, BatchMaster ERP for Beverages supports your unique manufacturing requirements in product development, production, quality, costing, and compliance, while supporting all of your sales, accounting, warehousing and distribution needs.

## Overcome Industry Challenges

Consumer demands for bold new tastes, more natural ingredients, less calories and more nutritional value is driving manufacturers to innovate their recipes. Produce developers are incorporating new ingredients that add flavor and nutritional value to their recipes, while reducing and eliminating artificial ingredients, preservatives and allergens - all with consideration to maintaining their flavor and reducing costs.

Meeting retailer, distributor and consumer demands can be taunting for our beverage manufacturing customers, especially in light of rising agricultural, dairy, water and energy costs that can adversely impact one's margins. Their loyal consumers expect that their brands have the same appearance, taste and price that they like over time. Which means our beverage manufacturing customers must invest in equipment and processes that maintain their high quality standards, while finding ways to reduce overall costs.

Effective sample management is important to those beverage manufacturers who want to quickly develop and introduce products to their retailers, grocery stores, restaurants and end consumers. Allergens, Kosher, Halal, organic, non GMO, expiration dates and shelf life requirements must all be effectively managed during the R&D, inventory allocation and product labeling processes.

Let's address a few challenges that were faced and overcome by many beverage manufacturing customers employing BatchMaster ERP:



## Bring New Products to Market

Manufacturers want to quickly and accurately adjust the ingredients of their base intermediates and finished goods recipes to meet their physical, nutritional and cost target values.

## Run High Volume, Continuous Production

High volume manufacturers with national and regional retail chain and food distributor customers typically run relatively small selection of products through automated production lines. They want to release large batch runs then monitor products and equipment along their automated lines in order to adjust their equipment settings. Their goal is to keep the continuous process flowing with minimum user involvement, such as starting and closing batch jobs at each step or process cell.

## Ensure Product Freshness on Retail Shelves

Dairy, fruit and vegetable manufacturers that produce fresh, perishable beverages want better control over their stored ingredients and shipped finished goods, including mandated QC inspection of received ingredients and stability tests of stored base inventory and finished goods.

## Provide Claim Substantiation

Energy, diet and functional beverages manufacturers want to ensure that their developed recipes meet certain label claims, based upon USDA or Genesis physical and nutritional information, and can generate compliant nutrition fact panels, ingredient and allergen statements.

## Comply with FDA and FSMA mandates

Lot traceability is of major concern to those companies whose products have longer shelf life or contain allergens or ingredients that are historically subject to recall. The creation and assignment of lot numbers at the time of receiving and production is a challenge to many manufacturers, so automating these processes is desirable. When performing a product recall, the ability to quickly track and trace suspect products from suppliers to customers, from customers to suppliers or anywhere within production in minutes, not in days, is a requirement.

## Control Inventory Levels

In order to optimize their resources, manufacturers want more granular, yet easier to use demand planning and production scheduling tools that will consolidate demand, calculate the correct number of batch production orders, and help one balance inventory levels for raw materials, finished goods and intermediates or bases that can yield a variety of finished goods. In addition, they look for assistance in making better informed raw material procurement decisions, such as automating the generation of purchase requisitions.

## Increase Margins and Profitability

To increase the bottom line, companies need to analyze their expected vs actual costs from conception thru production to customer shipments. Managers want better visibility to raw material costs, based upon last purchased, standard and projected prices, and accurately capture and track the static, scalable and tiered costs associated to labor, energy, water and other resources. In addition, purchasing wants to negotiate better terms for those raw materials that demand planning has determined there is a consolidated demand for. And to increase the top line, sales recognize that they can retain existing customers and gain new ones with demonstrated predictability, scalability and compliance across their company's operations.



## Key Manufacturing Features

BatchMaster ERP for Beverages streamlines produce development, production, quality, costing, compliance, planning, and scheduling using preconfigured templates, automated processes, and customized dashboards and reports.

## Lab and Samples

New product requests from internal and external sources can be managed from product development thru production to acceptance, including internal and customer approval workflows and communications. With access to USDA or Genesis product physical and nutritional information, the system identifies those ingredients that cause either an intermediate base or product to exceed caffeine or sugar levels, or fall below vitamin or protein levels for given serving sizes. And when necessary, theoretical items and substitutions can be used in the recipe calculations.

## Separate Recipes and Packaging Bills of Material

In BatchMaster ERP, recipe specifications and packaging bills of material are managed separately. Expected losses and gains expected during production are defined within the recipes. Product developers can perform what if analysis scenarios against a recipe and then compare multiple recipes against each other, side by side. QC tests, special manufacturing instructions, direct and indirect costs can all be assigned to both recipes and packaging BOMs. With visibility to all finished good specifications, one can create intermediate base recipes, which can be made to stock or made to order. Multilevel workflows expedite the review and approval of recipe and packaging specifications across departments.

## Inventory

BatchMaster ERP captures, manages and reports on inventory levels in terms of weight, volume and units, as well as quality statuses, expiration dates, lot numbers, and strengths. An item's organic, Kosher and Halal certification documentation and expiration dates are maintained with BatchMaster ERP.

## Planning and Scheduling

Standing orders, sales orders and forecast entries can be used as finished goods demand inputs; inventory levels, batch production jobs, and receipts can be used as supply inputs. An accurate, detailed plan for batch production orders can be generated down to the various production steps or process cells within the production lines. Planning and scheduling takes into account the rates and capacities of presses, extractors, mixers, pasteurizers, fillers, packagers or other process cell equipment. Real time production adds and cuts, as well as equipment maintenance and changeovers, can easily be entered and managed using the graphical scheduling tools. To ensure these batch jobs yield their expected results, demand planning can generate the required purchase requisitions to avoid shortages or rescheduling.

## Production

BatchMaster ERP aggregates demand for finished goods, creates the optimal number of batch jobs across the production stages or process cells, allocates the best inventory and back schedules the batch jobs. Recipes can be dynamically adjusted to compensate for available inventory characteristics (e.g. pH, sodium, specific gravity, etc) in order to meet specified target characteristics, especially during the mixing, infusion, carbonation and pasteurization processes. Batch job releases and completions can be managed on an individual basis, which initiates all the necessary inventory pulls, QC tests and manufacturing instructions. Certain batch jobs can be linked together and back scheduled or sequenced using the Super Batch feature. Manufacturers can manually capture inventory usage or automatically back flush inventory when closing batch jobs, as well as capture actual costs and other batch job data.

## Quality

System libraries for sample inspections, QC tests, checklists and special manufacturing instructions against recipes, finished goods, equipment and processes can be established. Received goods may be quarantined until associated vendor samples are released by QA. In terms of ensuring the freshness and stability of certain stored ingredients, users can be directed to check intermediate and finished good inventory in storage. Some procedures may just be informative in nature, where others require an acknowledgement or simple data entry. QC tests for microbial, pH, specific gravity, and other conditions require data collection and validation, and may result in further retesting or reworking. In all situations, the manual or system assignment of quality statuses to inventory will determine its disposition and availability. Customizable COAs are generated upon batch job completions.

## Costing

Raw materials costs based upon last purchase price, standard costs, or projected costs are rolled up along with fixed, tiered and scalable labor costs. Cost estimates can be managed during product development of product recipes, including intermediate bases, and packaging BOMs. Actual costs, yields and other KPI's are captured during production, and can be compared against projections in a variety of analytic reports.

## Compliance - Food Safety, Lot Traceability and Labeling

Lot number information is captured or auto generated at the time of receiving, auto generated for intermediates and finished goods, and then validated during finished goods distribution. A bi-directional view

of lot controlled inventory enables users to track the creation and movement of suspect products, such as dairy, fruits and vegetables ingredients, from delivery to shipping, shipping to delivery, and anywhere within production. BatchMaster ERP generates GFSI and GS1 related documents, customized recall reports and personalized customer letters. In terms of production labeling, nutritional fact panels that address non GMO, gluten-free and allergen-free claims can be generated on demand. From an IT perspective, all key transactions are maintained in history logs for auditing purposes, including recipe approvals, batch job changes and QA releases.

## Mobile

Warehouse activities that support receiving through production to shipping tasks, including manufacturing related inquiries, QC related inspections and instructions, can be executed via mobile devices.

## Dashboards and Reporting

Customizable role-based screens provide visibility to critical manufacturing data, including inventory consumption and balances, actual versus expected yields and costs, and quality control results and trends.



## Key Front Office Features

Available as a total financial and manufacturing ERP solution, BatchMaster ERP for Beverages adds a tailored front office suite, including CRM, to its modular manufacturing and mobile warehousing product suite. Front office modules include:

### Accounting and Financials

Capture, measure, analyze and report the cost of doing business, specifically the cost of intermediates and finished goods from the lab through to customer shipment.

### Sales

Convert sales quotations into customer samples, then track and report on the status and profitability of every customer campaign, quote and order shipment, including their discounts and promotions.

### Purchasing

Employ economies of scale to purchase raw materials from approved, certified vendors to feed planned batch production jobs created from demand planning.

### Maintenance

Plan, schedule, and execute predictive and preventive maintenance activities against production line and warehouse equipment to optimize equipment availability and utilization.

### Distribution

Effectively manage store replenishments, inbound and outbound activities across one or more facilities, as well as inter warehouse transfers.



## Recognize These Benefits

By gaining greater control over product development and production, improving planning and scheduling, balancing inventory, and reducing costs and variances, companies employing BatchMaster ERP for Beverage are increasing their profit margins, gaining market share and improving their bottom line.

### Rapidly Develop New Products

In addition to carbonated sodas, consumers are looking for new energy and diet drinks, fresh fruit and vegetable juices, and herbal and functional water based beverages. To satisfy this craving for new tastier, more health conscious products, ones that are low in sugar and calories, high in nutritional value and without unwanted allergens, chemical additives and preservatives, your team of product developers will have the tools to quickly introduce new products to the marketplace. Advanced programming reduces your time spent on tedious, error-prone manual calculations in designing, updating and approving products that meet your targeted physical, nutritional and financial characteristics

### Better Inventory Control

Accurate, granular demand planning and production scheduling optimizes your procurement and production of raw materials and finished goods, respectively, which will give you better control over inventory balances and space utilization within your plants.

### Quickly Scale Up Production

Automation of your batch and continuous flow production processes reduces the need for manual intervention. Dynamic recipe adjustments, auto sizing and scheduling of batch job all work together to streamline production, while reducing the delays, risks and costs of operational downtimes. The establishment of a comprehensive, online quality program allows you to improve current processes, keep production line equipment settings at their optimal settings and ensure your manufacturing processes can meet the increased in demand.

### Avoid Customer and Industry Fines and Penalties

Keep compliant with industry specific and federal regulations, in terms of nutritional labeling, allergen declarations, lot traceability and recall requirements. Bi-directional lot tracing enables you to report on suspect products in minutes, not days - minimizing the scope of the recall. You can now establish effective mock recall programs with your suppliers and customers. By establishing a comprehensive quality program, you can avoid customer chargebacks, buy-backs and returns due to order shortages and shelf life issues. And with a thorough and easily accessible audit trail of key business transactions, you will be in compliance with your auditors' record-keeping requirements.



## Reduce Costs

You have the means to manage costs upfront during product development. Demand planning and production scheduling reduces the costs of excessive labor and inventory, as well as the costs associated to equipment clean-downs and changeovers. And with a quality program enacted at the time of receiving thru customer shipments, you will reduce the cost of spoilage and stales.

## Increase Sales

Leverage BatchMaster ERP's quality, traceability and compliance capabilities not only to retain your valuable customers, but to gain new ones.

## Improve Management Reporting and Analysis

Customizable role-based screens provide you with accurate, real-time visibility to those key metrics that will help you to make better informed decisions, faster, and maintain your competitive edge.

## Take The Next Step

BatchMaster ERP for Beverages gives you greater control over your business, from sales, procurement, and manufacturing to accounting and customer service. Our solution can be rapidly deployed as an add-on to your existing financial solution or as a total financial and manufacturing solution. BatchMaster ERP for Beverages gives you system adaptability, accountability, reliability, scalability and traceability - all the system abilities you need to profitably grow your business.

As an industry focused solution provider, BatchMaster Software is ready to help you meet your business objectives, so please contact us today to discuss your business requirements:

For more information please contact:

BatchMaster Software

India Office: 201, 2nd Floor, Brilliant Solitaire, Plot No. 6-A, Scheme No. 78, Part-II, Indore- 452 010  
Phone: +91 731 4008031/35 • Email: [sales@batchmaster.com](mailto:sales@batchmaster.com) • [www.batchmaster.co.in](http://www.batchmaster.co.in)

Pune Office: Office No 714, 7th floor, Spot 18, Jagtap Dairy Square, Rahatani, Pune - 411017  
Ph: +91-20-27808215/30/31 • +91-75662 01373

Corporate Office: 23191 La Cadena Drive, Suite 101 Laguna Hills, CA 92653 • Tel: 949 583 1646  
[www.batchmaster.com](http://www.batchmaster.com)

International Offices:

Atlanta • Mexico City • Auckland • Dubai