Overview

Production Management & Execution for Food and Beverage improves end-to-end operational efficiency, from order dispatch through execution order fulfillment and batch release. The solution drives efficiency through full paperless operation, 21CFR11 compliance, comprehensive process data capture, analysis, and improvement. In addition, it integrates fully with existing legacy systems, leveraging your investments. Companies deploying Production Management & Execution for Food and Beverage achieve positive ROI in months, instead of years.

The Challenge: Stay Agile and Efficient in a Changing Market

Rising energy, raw material and manufacturing costs, growing and complex customer demands, and increased food safety concerns are challenging realities for the Food and Beverage industry. To maintain a competitive advantage, companies must:

- Reduce liability and risk due to manual errors, reworks, and deviations
- Reduce process variability, increase process reliability and yield
- Reduce order receipt to fulfillment cycle times with reduced work in progress (WIP) and finished product inventory
- Improve overall current Good Manufacturing Practices (cGMP) and 21CFR11 compliance, enabling full paperless operations
- Improve customer service and delivery performance
- Reduce overall cost of goods
“Federal requirements mandate that companies track products one step forward and back in the supply chain, and trace the cause of an incident within 24 hours. Business demands are more stringent as companies including Wal-Mart conduct mock-recall audits of suppliers and demand that causes be traced any number of steps across the supply chain.”

— Bob Sperber, Contributing Editor, Food Processing Magazine (April 2008)

Production Management & Execution for Food and Beverage

The AspenTech Solution: Delivering the Right Products at the Right Time

Production Management & Execution for Food and Beverage is specifically designed to help companies meet these challenges by improving operational reliability, visibility, and flexibility. Production Management & Execution for Food and Beverage delivers major performance improvements by bringing order and control to the “execution gap” that exists between enterprise resource planning (ERP) systems and the many data sources and control systems on the shop floor. The solution delivers:

- **A Roadmap:** Allows the controlled and progressive implementation of site or network-wide solutions, aligned with current business challenges, strategies, and objectives
- **Simplicity:** Reduces complexity through the use of modular, scalable, and integrated products, making deployment easier and faster
- **Lower Total Cost of Ownership (TCO):** Enables customized designs that can be rolled out across multiple sites, avoiding duplication and rework, and delivering a sustainable long-term solution

The solution includes a powerful and configurable workflow engine that delivers “total procedural compliance,” encompassing best practices into interactive Standard Operating Procedures (SOPs) and driving out manual errors. It uniquely enables companies to truly drive operational excellence and assured quality throughout their manufacturing operations.

*Production Management & Execution for Food and Beverage* is based on the internationally accepted ISAS95 workflow model defining all batch manufacturing operations:
### Function

*Production Management & Execution for Food and Beverage* provides a complete manufacturing solution by delivering:

- Track and trace of batch activities – providing historical and genealogical process data
- Full compliance with Food and Beverage regulations – including 21CFR11
- Shop floor planning and finite capacity scheduling – driving asset utilization up and manufacturing cycle time down
- Order dispatching from ERP to shop floor work center – feeding accurate and timely consumption data back to your ERP system
- Order execution via a configurable workflow manager – driving total procedural compliance into manufacturing execution and greatly reducing manual errors
- Full electronic batch record (EBR) – enabling efficient EBR and batch record deviation, QA review, analysis, and batch release
- Routine and extensive process data capture and analysis – driving continuous improvement
- Equipment status management – enabling real-time control of equipment utilization
- Role-based view of production metrics – both process-specific and high-level KPIs
- Integration with client-site systems - ERP, LIMs, DCS, etc.
- Fully modular and scalable solution – accommodating small single sites up to highly complex multi-site operations

### Benefit

Value, measured in millions of dollars, has been realized at many client sites by enabling:

- Higher process yields and overall robustness through SPC and cause-and-effect correlation and analysis
- Reduced documentation and procedural errors through configurable workflow execution and the achievement of FDA-inspected and approved paperless operations
- Optimized shop floor scheduling and resource utilization
- Improved throughput by making it easier and quicker to manage batch deviations/QA review and release
- Improved overall compliance with cGMPs and 21CFR11 requirements, facilitating successful regulatory inspections
- Reduced “virtual,” “rework,” or “hidden” factory activity
- Reduced work in progress (WIP) and finished product inventories
- More agile and responsive “order focused” operations with improved customer supply metrics (including fewer stock-outs and order arrears)
- Rapid integration with existing ERP and LIMS systems

Combined with the proven experience of AspenTech’s industry-leading services team, companies are able to speed up implementation, ensuring a rapid return on investment and low total cost of ownership. Additional support for client IQ/OQ/PQ is also available, as is ongoing and comprehensive user support.
Production Management & Execution for Food and Beverage

Production Management & Execution for Food and Beverage integrates seamlessly with AspenTech’s solutions for planning and scheduling, process engineering, and advanced process control. With years of experience serving the Food and Beverage industry, AspenTech has an established track record of delivering value-generating solutions that meet client needs and have a significant positive impact on their bottom-line. We know and understand the special and unique needs of the Food and Beverage industry.

About AspenTech

AspenTech is a leading provider of award-winning process optimization software and services. AspenTech’s integrated aspenONE™ solutions enable manufacturers to reduce costs, increase capacity, and optimize operational performance end-to-end throughout the engineering, plant operations, and supply chain management processes.

For more information, visit www.aspentech.com.