

EXPERION BATCH

Visualize Batch Production Like Never Before





Experion® Batch combines compact Experion distributed control, batch automation, and advanced visualization technology to provide a solution optimized for pharmaceutical, specialty chemical, food and beverage, and similar applications.

Manufacturers are being asked to produce more—and deliver higher quality—with fewer resources.

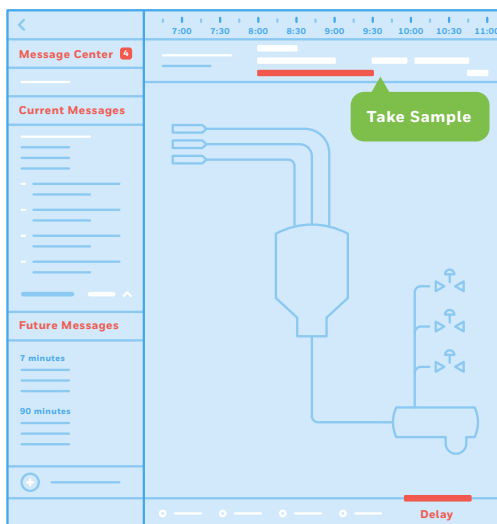
Companies of all sizes are exploring how to increase efficiency and reduce costs associated with their batch applications. Operations personnel are being tasked with squeezing more out of plant assets, being more effective at troubleshooting batch processes, identifying new methods of reducing production costs, and finding more efficient ways to maintain the complex sequencing software required for batch production.

Intelligent Visualization

Experion Batch introduces patent pending visualization technology which automatically constructs look-ahead views. This user interface provides operators with insights to upcoming events or potential delays and the flexibility to conduct more tasks concurrently. This can dramatically increase productivity. Workflow-focused visualization lowers the criticality of operator experience at a time when the skills gap continues to increase in industry. Experion Batch presents the current and future state of operations in a natural intuitive manner, leveraging visual analytics.



Timeline view showing instructive prompts that assist with planning.



Messaging workflow is optimized to reduce delays and assist work planning.

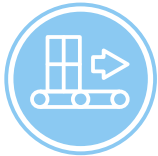
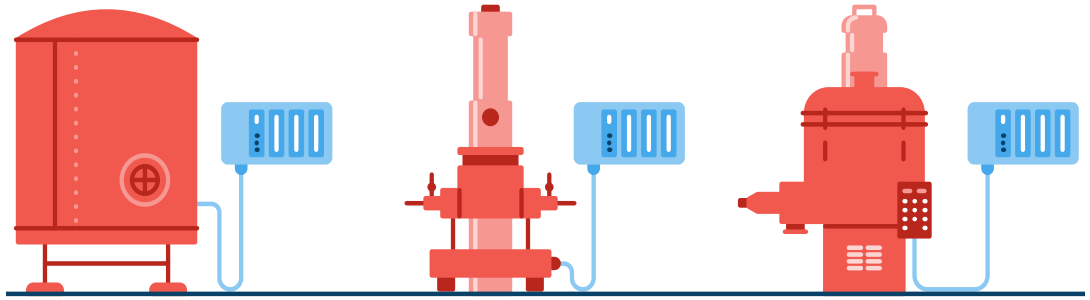
Clear, intuitive displays illustrate batch sequences in an understandable manner which allows users to better anticipate and respond to process deviations or equipment failures. Guided troubleshooting helps them keep the batch progressing. Analysis can uncover best practices that can be deployed across all batches—decreasing cycle time and improving productivity. Visual analytics reduces stress and enables operators to take on parallel tasks with confidence—knowing that there is sufficient time before the next action is required.

This visual intelligence can also be accessed by engineers working in the field using their mobile device if desired. This provides a high-level view of production status and notifications, keeping personnel connected wherever they are.

I “can’t wait to get our hands on” Experion Batch visualization “and watch how our batch is running.”

—Process Control Manager, US-based fine chemicals company

Experion Batch enables distributed batch control for a smarter approach to unit operations.



Maximum asset utilization



Rapid response to interactive instructions



Efficient batch process planning



Efficient troubleshooting, reduced downtime

The Right Fit

Process controllers tend to be oversized for the task of individual unit control, leading to multiple units being allocated to a single process controller simply because they happen to fit. This type of allocation increases maintenance complexity and makes it more difficult to perform updates. A more flexible, unit-based approach reduces these challenges. Our solution provides the small form factor and sufficient power to deploy the controls on a per unit basis.

Experion Batch incorporates the new ControlEdge™ Unit Operations Controller (UOC), reducing hardware footprint with a modular and space-efficient hardware package. Honeywell brings its full DCS batch automation power to a small, flexible form factor. Our UOC and our Virtual Unit Operations Controller extend the Experion control environment to a form factor that fits in even the smallest plant.

The option of executing in a virtual environment is especially useful in pilot plants, laboratories, and cost-sensitive operations. The Virtual UOC also decreases hardware footprint when a physical controller isn't needed and provides increased availability through fault-tolerance where required.

Reduced Testing and Validation Effort

Experion Batch provides enhanced simulation and development benefits. In the past, moving a new or modified configuration from a simulation or lab environment to real-time could require hours of validation and/or an extensive documentation cycle. Today, the same configuration tested in the virtual environment can be downloaded to a physical Unit Operations Controller without change. Experion Batch allows the movement of control strategies from test to production effortlessly, without modification and without reassignment.



Modular Controllers



Clear, intuitive displays enable better, faster decisions.



Flexible Control and Configuration

Manufacturers can either stay with a traditional, centralized batch engine or they can opt for a more ISA- and IEC-aligned, distributed batch environment which distributes risk and supports regulatory requirements. Users are not required to segregate sequence control from continuous control as the UOC environment can run both types of control simultaneously.

Locating batch functionality in unit-aligned controllers allows engineering and maintenance personnel to take a unit controller out of service without affecting the other unit operations. Distributed batch designs remove the requirement for a Windows-based batch server, eliminating the need for upkeep and patching associated with

traditional systems. Meanwhile, redundant modular controllers—designed for batch operations and sequencing—deliver the required level of power and capacity users need, in a cost-effective manner.

A controller-based system is more robust by design. These systems provide a single, common database for regulatory and batch configuration. Additionally, eliminating the server dispenses with associated maintenance, security, and communication latency issues and costs. Ultimately, the critical benefit is increased throughput.

Universal Channel Technology provides flexible, efficient configuration of Universal I/O modules and easy management of spares. With it, engineers can configure I/O quickly and remotely, without needing additional hardware modules.

“Honeywell is really doing something unique with the Virtual UOC compared to other vendor offerings.”

—Process Engineer, Americas-based chemicals company

Units in Scope of Responsibility

Delay Indication

Notification Center: Respond to messages in one place

Current Messages

Upcoming Messages

Predicted Messages

Timeline View showing instructive prompts that assist with operations planning.

A Powerful Batch Solution

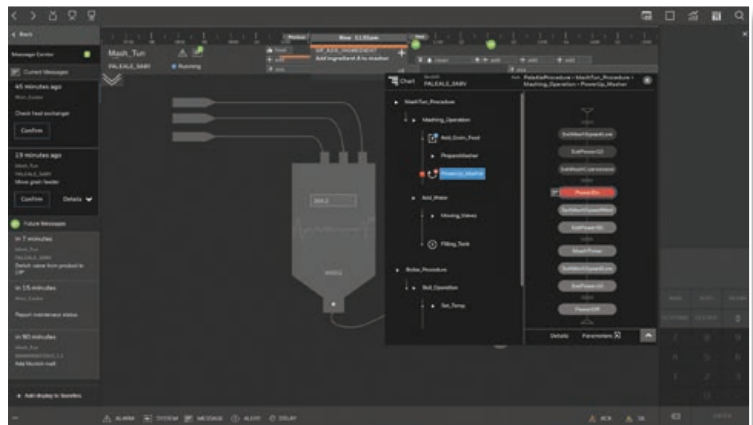
Experion Batch provides Honeywell batch automation in an industry-leading form factor with a revolutionary user interface.

- *Conforms to ISA and IEC recommended practices*
- *Sequence execution cycle time can suit any batch process*
- *Increased throughput by reducing batch execution times and latency between application levels*

From the simplest sequence to the most complex recipes, all the power of Honeywell batch is available to monitor and control your batches. And this automation is delivered in a small form factor that can fit in the tightest areas or in a virtual appliance. UOC shows how even the mightiest control is available to the smallest processes. No matter your batch process or vertical industry, you can leverage the power of Experion Batch.



Experion Batch uses patented technology to enable operators to anticipate more, plan their work and maintain unit uptime and speed.



Procedure Explorer eliminates distractions, simplifies the view, and gets operators to the next step.



Batch control will soon be available on mobile devices.

Experion Batch can be used in a variety of unit-based applications.



For more information

To learn more about Honeywell's Batch solutions, visit www.honeywellprocess.com/Batch or contact your Honeywell account manager.

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