

Experion Batch Manager

Product Information Note

Running the entire batch sequence in the controller, instead of the server, can significantly improve production and business results. Honeywell's Experion® Batch Manager is designed to increase users' profitability by optimizing the availability, productivity and reliability of a batch plant.

Improved Speed and Availability in Batch Automation

In many batch processes, there are benefits to executing procedures directly in a controller to reduce complexity and improve availability or speed of execution. Further lifecycle benefits come with integrating the operating and engineering environment seamlessly with the DCS.

Honeywell delivers these unique benefits with Experion Batch Manager:

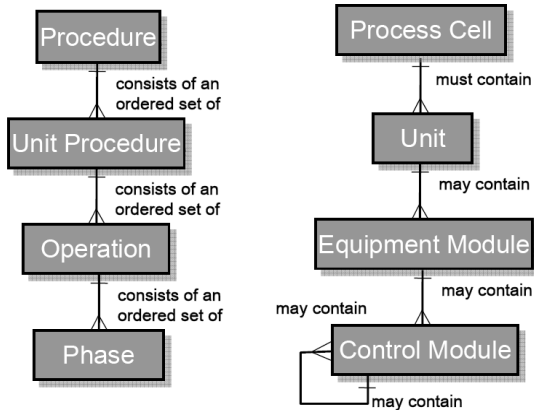
- Increased batch execution availability by executing a complete procedure in a redundant controller in the same environment
- Increased throughput by reducing batch execution times and latency between applications levels
- Improved operator usability through display integration and interactive instructions
- Covers all levels of sequence functionality in the ISA S88 model
- Reduces recipe maintenance through equipment independent master recipes



Experion Batch Manager executes procedures directly in the controller and can increase throughput by up to 3%

FEATURES & BENEFITS

- Increased availability
- Increased throughput
- Display integration and interactive instructions
- Covers sequence functionality in ISA88
- Reduced recipe maintenance
- Equipment independent master recipes
- Sequence execution cycle time is configurable as fast as 50 milliseconds.
- Use for any single or multi-unit process to execute complete procedures without the need for a server level batch application
- The redundant Experion controller offers high availability
- Reduce costs and reduce system complexity



time between completion of one procedural element and commencement of the next. In other fast moving processes with short cycle times, controller execution speed influences the capacity of the plant. The execution time of a procedure and associated recipe elements can be configured to a deterministic value, which can be as fast as 50 milliseconds controller. When implemented in this environment, Batch Manager delivers improved throughput and quality.

Execute batches using multiple batch units from the procedure level downwards in the ISA88 hierarchy

Batch Manager

Batch Manager provides the ability to execute batches using multiple batch units from the procedure level downwards in the ISA88 hierarchy. It executes in the Experion controller, which is optionally redundant, thus increasing the availability of the platform on which the batch executes. Since the batch executes in a controller environment, the sequence execution cycle time is configurable as fast as 50 milliseconds.

A batch is a control recipe composed of procedures, unit procedures, operations and phases. A recipe is configured in the same Experion environment as other Experion control schemes. Recipe elements can be configured in series or parallel and can loop as required. There are no configuration limits on the number of procedural elements, other than the resource constraints of the controller hardware. A recipe has parameters associated with it which are typically used for process set points, raw material quantities, routing information and the storage of process variables for reporting.

Complexity

Batch Manager can be used for any single or multi unit process to execute complete procedures without the need for a server level batch application. Batch Manager can therefore reduce costs and reduce system complexity.

Execution Speed

In some processes, product quality, equipment protection and safety are impacted by the speed at which a batch can execute, particularly the

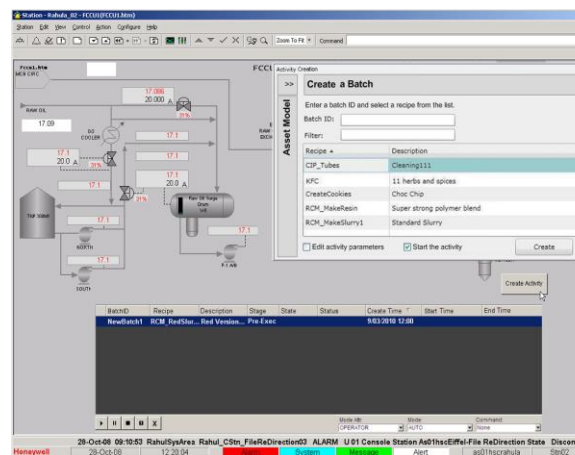
Increased Availability

For some processes, a communication interruption between a server and controller may result in delaying time critical actions or may allow a process to continue beyond the optimum point. The redundant Experion controller offers high availability, passing that availability along to Batch Manager.

Batch Summary

From any Experion station an operator can create, view and control all the batches for which he is responsible from a standard Experion display or from within a custom display. Batches can also be created from an external source then monitored and controlled by the operator.

Master recipes are created to run against any equipment of a particular class for example reactor. The actual equipment used can be selected by the operator as the batch executes based on immediate priorities.



Typical Custom Display with Batch Creation

*Interactive instructions
between operator and
batch system*

Operator Interaction

Batch Manager provides interactive instructions between an operator and the batch system. The operator may be prompted from an Experion Station graphic display to take an action such as adding a raw material, taking a sample, enter a value or changing a product route. Each instruction can include free format details, warnings and the facility to view plant operating procedures. Every instruction and response is recorded in the Experion alarm and event journal. These instructions are configurable without the need for custom coding.

Reporting

Honeywell's Procedure Analyst is optionally available for batches executed by Batch Manager. Procedure Analyst enables sophisticated batch reporting and provides the ability to query the historical database and compare history over multiple executions.

System Requirements

Batch Manager is an option for Experion release 410 or later. The procedures execute within the Experion C300 or UOC controllers. The operator monitors the procedures through the Experion Station or Experion Console Station.

For More Information

Learn more about Experion Batch Manager by visiting honeywellprocess.com or contact your Honeywell Account Manager, Distributor or System Integrator.

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