

Experion PKS Intergration with Mettler Toledo's JAGXTREME and Q.iMPACT



Optimize Batch, Blending and Filling Operations

Mettler Toledo® is the leading supplier of industrial weighing solutions with weighing technology used in all areas of the production process, from raw material handling and production to packaging and transport.

Honeywell's Experion® Process Knowledge System (PKS) integrates with Mettler Toledo's JAGXTREME and Q.iMPACT weighing terminals. These terminals cover a wide range of weighing applications from straight weighing applications to advanced material feed management systems.

No matter which of the two terminals you choose to optimize your dosing application, it can be tightly integrated with Honeywell's C200 Controller Control Execution Environment through a set of specialized interface function blocks to tighten material transfer control, decrease batch cycle time, and improve production quality.

Open Technology Tightly Integrated

The Q.iMPACT matroller (material transfer controller) and the JAGXTREME scale terminals are integral parts of a larger batch control system. They operate within a tightly integrated subsystem with open connectivity. Mettler Toledo and Honeywell have collaborated to deliver load-and-go integration that operates on standard communication protocols and system I/O to deliver robust and cost-effective solutions.

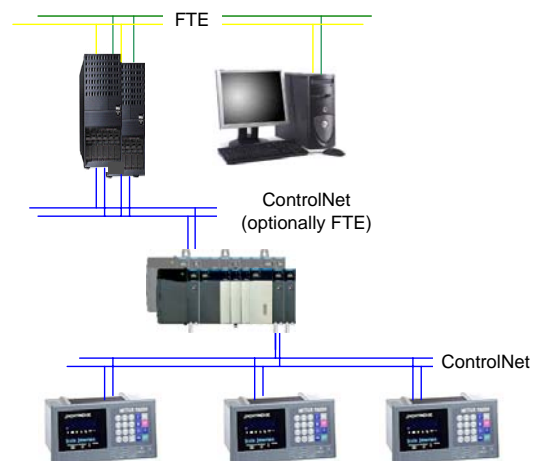
JAGXTREME Integration

The JAGXTREME scale terminal features TraxDSP (Digital Signal Processing) that provides stable weight readings with quick weight response, even while mixing or agitating. Each terminal provides weight information on up to four simultaneous scales. Multiple JAGXTREME terminals can be connected into the control system via ControlNet.

In order to provide an easy-to-use integration solution, two function blocks exist within the Experion C200 controller.

The first block is the I/O Module function block. This block is responsible for establishing, maintaining and monitoring communications with the JAGXTREME terminal.

The second block type is the channel block. It makes the data received from the JAGXTREME terminal available to controller applications and handles commands directed to the terminals from controller applications.



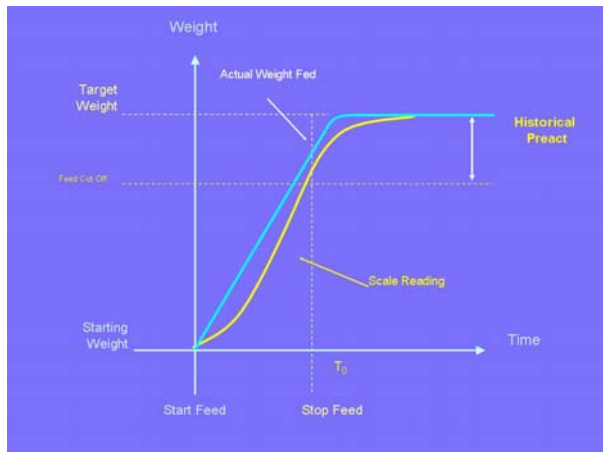
JAGXTREME can easily integrate with the C200 controller.

Reduce Batch Cycle Times with Q.iMPACT Integration

The Q.iMPACT matroller hardware forms the measurement and material transfer control platform. Each matroller not only interfaces with up to four scales, but also interfaces with up to 12 flow meters, where a digital output signal is required. Up to 20 matrollers can be attached through the ControlNet interface, providing a very scalable solution.

This replaces multi-speed material transfer control with simple, fast, single-speed, on-off control. The matroller simplifies the application in the Experion controller by taking over and moving all the material feed functionality into the matroller, thereby optimizing the material transfer performance and timing, and helping to reduce batch cycle times.

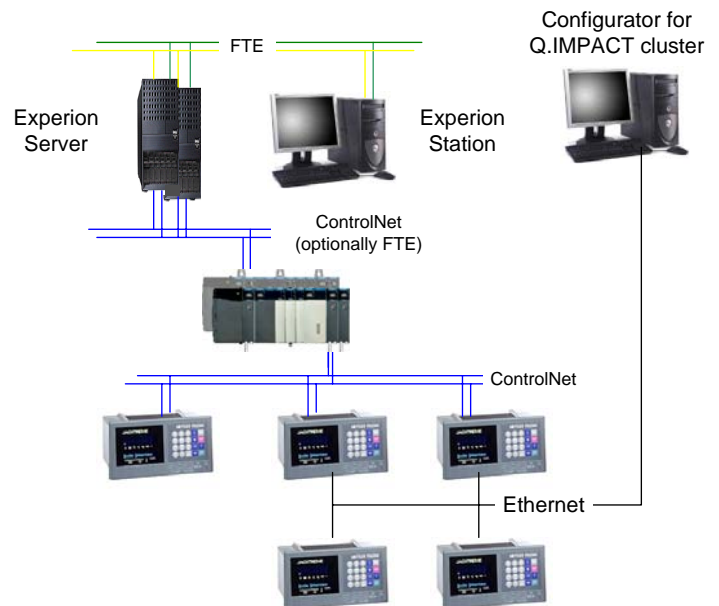
At the heart of the matroller is the Predictive Adaptive Control (PAC) algorithm. It builds a real-time mathematical model of the material transfer process for each material. The algorithms then automatically learn and compensate for process variations in each material transfer.



Q.iMPACT is a single-speed, on-off material feed control system with the predictive Adaptive Control Algorithm.

The Experion system takes full advantage of the matroller capability by integrating it into the C200 controller. A dedicated I/O module function block and channel function block give full access to the material transfer data, commands and I/O data from the terminal connected scales and flow meters.

Through one connected matroller, the application in the C200 controller can access all information from the other matrollers in the Q.iMPACT cluster.



Q.iMPACT cluster integrated with the C200 controller

The Right Information Readily Available

Through bi-directional communication, process data, information, status, and diagnostics contained in the Q.iMPACT matroller and JAGXTREME terminals are available to the Experion C200 controller. Configuration is easily accomplished using the terminal front panels and a standalone PC workstation (for Q.iMPACT only).

Experion function blocks provide the communication, diagnostics and display capabilities required to deliver seamless plug-and-play integration. The standard Experion ControlNet interface card provides connectivity via standard ControlNet protocol. This integrated solution provides customers with tighter material transfer control, decreased batch cycle time, and improved production quality.

For More Information

To learn more about Mettler Toledo integration with Experion, visit www.honeywell.com/ps or contact your Honeywell account manager.

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