

CASE STUDY

Automated Batching System Improves Chemical Plant Operations

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JOB OVERVIEW

Key Features

- Industrial chemical plant automated batching systems create chemical treatment dips for automotive components
- True batch control system integrated with Wonderware InBatch Software for flexible batching solution

Challenges

- High-level recipe management system with flexibility simplified for future additions
- Formula storage management for a number of mixtures being created daily
- Conversion of manual process to automated mixing system

Impact

- Fully automated batch controls solution of a previously manual process
- Improved safety and reduced risk for line operators
- Improved mixing and tracking ability through the batch controller and desktop recipe editor/ batch scheduler

THE EPIC SOLUTION

The Wonderware InBatch controller accurately controls, and flexibly manages, the various formulas used by the chemical plant. Some of the key benefits of the Wonderware InBatch software include:

- Multiple batches executed simultaneously, with added features for shared equipment and connections with a redundant batch server option
- Batch Markup Language (Batch ML) and standard based recipe import/export
- Comprehensive Electronic Batch Record (EBR) and reporting capabilities
- Extended ISA 88 with Connection and Transfer Management
- Enhanced application capabilities with Arcestra System Platform integration, enabling end-to-end production genealogy
- Lower lifecycle costs and increased reliability by support of Microsoft Hyper-V platforms and virtualization technologies
- Control system independent via state interface and DA servers

Batch recipes change and update often, with over one hundred different recipes existing during install. Liquids leaving the batch manufacturing system are transported directly to the production line or stowed in one of fourteen storage tanks. Large numbers of storage tanks are necessary to allow flexibility in the batch chemical production. The InBatch controller controls the raw material inputs, batch mixing process and utilization of storage tanks.

