



# InBatch™ 8.0—Premier and FlexFormula Editions

Flexible Batch Management for Powering Production Performance

## PRODUCT POSITION

Wonderware® InBatch™ 8.0 is flexible batch management software designed to power the production performance of any batch process. InBatch now offers users two editions: “Premier” and “FlexFormula”. Premier Edition is ideal for processes where product recipes have different procedures and a high level of flexibility is needed. The FlexFormula Edition is ideal for processes where the only variations between product recipes are in the formula and where execution sequences never change.

Both Premier and FlexFormula Editions facilitate the design and implementation of solutions that are compliant with 21 CFR Part 11, the US Regulation on Electronic Records and Electronic Signatures and are consistent with the ISA S88 flexible batch standard. Additionally, both Editions provide comprehensive batch and equipment history, material genealogy and web-based reporting.

## InBatch™ 8.0 PRODUCT DATASHEET

Wonderware® InBatch™ 8.0 is flexible batch management software designed to power production performance of any batch process

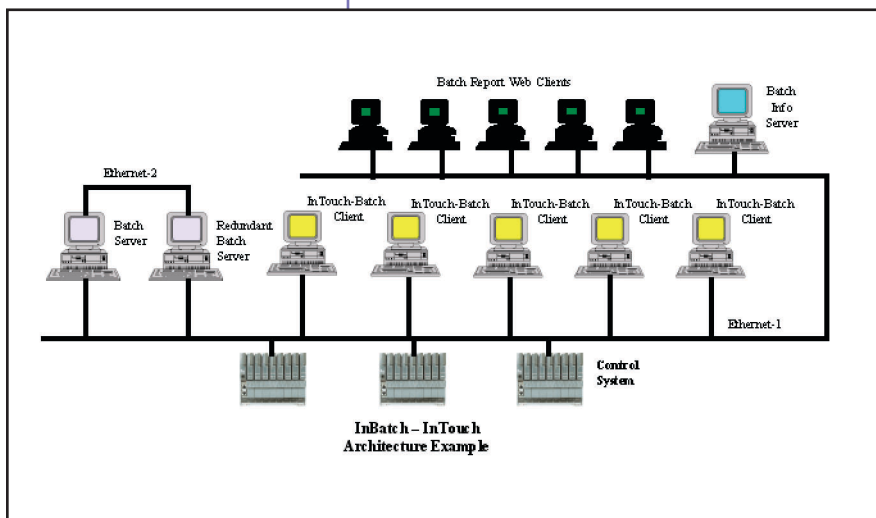
### InBatch Capabilities:

- ▼ Model Your Plant
- ▼ Manage Recipes
- ▼ Record Batch History
- ▼ Record Equipment History
- ▼ Record Security History
- ▼ Track Bulk Materials
- ▼ Schedule and Execute Batches
- ▼ Schedule and View Reports in a Browser
- ▼ Have a Redundant Batch Server
- ▼ Facilitate 21 CFR Part 11 System Design

## APPLICATIONS

### InBatch Premier Edition

InBatch Premier Edition is the original flexible procedure product Wonderware introduced in 1996. As winner of Control Magazine’s Readers Choice Award for Batch Software in 4 of the past 5 years, Wonderware InBatch Premier Edition offers users unparalleled capabilities to automate the most complex batch applications where flexibility and comprehensive history is important.



## InBatch FlexFormula Edition

InBatch FlexFormula Edition is Wonderware's new offering for applications where only the formulas change from product to product, production procedures do not change, or only require small changes. These changes are handled in the control system. InBatch FlexFormula Edition offers comprehensive history, reporting and security capabilities.

Process & Control Characteristics	FlexFormula Edition	Premier Edition
Procedure Execution in Control System	X	
Operator Actions coordinated by Control System	X	
Works with existing control strategy	X	
Batch History	X	X
Equipment History	X	X
Run Multiple Products Concurrently	X	X
Product Recipes have Different Formulas	X	X
Schedule Dispatching	X	X
Product Recipes have Different Procedures		X

## FEATURES AND BENEFITS

The Premier and FlexFormula editions of InBatch provide many benefits associated with improving the performance and efficiency of your batch process including the ability to increase production and improve your product quality.

InBatch automates the execution of production sequences and allows for fast changeovers from product to product resulting in an overall increase in production output. For product quality, InBatch enforces the execution of recipe procedures and verifies that operators execute their activities in the proper sequence, thereby ensuring consistent product quality from batch to batch.

### Flexible Production

InBatch provides an environment that allows manufacturers to react quickly to new products, changing customer schedules and unexpected plant floor events. With InBatch Premier Edition, each recipe has a different procedure and formula. Recipes are scheduled for production on any train

that satisfies the equipment requirements defined in the recipe. This capability to configure how process equipment is used provides manufacturers with the flexibility needed to compete in today's competitive environment.

## Faster Time to Market

### Fast and Easy Recipe Development

The InBatch recipe management system is easy-to-use, allowing production personnel, without costly engineering support, to develop and maintain recipes. Thus, your engineering resources are able to focus on real engineering issues. The InBatch Premier Edition Recipe Editor provides a Sequential Function Chart (SFC) graphical procedure environment while the FlexFormula Edition's Recipe Editor provides a table driven formula editor environment. Both Editions provide libraries for saving and retrieving unit procedures, cut-copy-paste and drag-and-drop editing features.

### Simulate Execution of New Recipes

A user in the plant or in R&D can simulate the execution of new recipes against the process model of the company's production facilities. This addresses scaling issues and to determine if the plant has the required equipment, processing capability and materials to manufacture the recipe. The InBatch simulation capability is also a great operator training tool.

### Validate the Recipe not the Control System

When a new recipe is created, only the recipe needs to be validated, not the control system. The control system never changes when new recipes are added. The time and expense to re-validate a control system is enormous in comparison to the time it takes to validate a new recipe.

## Reduces Life-Cycle Engineering Effort

### Use Existing Control Code with FlexFormula Edition

The InBatch FlexFormula Edition is easily integrated with existing control code, thereby retaining your control system engineering investment.

### Simplify and Reduce Control Code with Premier Edition

InBatch Premier Edition reduces the implementation and maintenance cost by 40-60% by simplifying and reducing the control code needed for unit-to-unit material transfers and unit control. Control code, implemented as phases, is modular and structured. A phase is designed to do a specific function like transfer raw material from Storage Tank 1 to Blender 5, Heat or Mix. The approach of using modular and structured phases for both unit-to-unit control and unit control drastically reduces the initial engineering effort, extends system capabilities and reduces the amount of custom control code.

## Reusable Unit Procedure and Phase Logic Libraries

Unit procedure and phase logic is modular and allows users to create standard control logic libraries enabling reuse throughout the enterprise.

Complete Batch History is Automatic: InBatch automatically stores all batch history to a standard Microsoft® SQL Server database. All batch events, material usage, material production, operator changes, comments, alarms and equipment history are automatically logged. A full complement of standard batch report templates is also provided with InBatch.

## Model Your Plant

Production in a batch plant is based on the execution of recipes. InBatch recipes are based on the plant's information and control capabilities, e.g. the Process Model. The Process Model defines the plant's equipment and processing capabilities as well as its control and information requirements. Once defined, recipes are easily created, scheduled and executed.

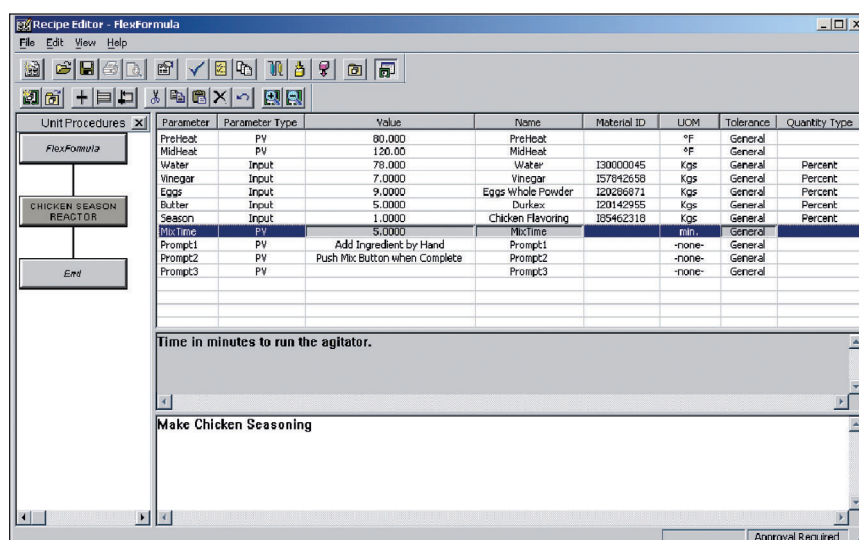
## Recipe Management

### Premier Edition

The Premier Edition's Recipe Editor provides a flexible, graphical (SFC), S88 compliant recipe management environment for creation and maintenance of Master (equipment independent) Recipes.

### FlexFormula Edition

The FlexFormula Edition Recipe Editor provides a very easy to use combination SFC and table driven formula editing environment for creation and maintenance of Master Unit Procedure Recipes.



Parameter	Parameter Type	Value	Name	Material ID	UOM	Tolerance	Quantity Type
PreHeat	PV	80.000	PreHeat		"F"	General	
MidHeat	PV	120.00	MidHeat		"F"	General	
Water	Input	78.000	Water	130000045	Kgs	General	Percent
Vinegar	Input	7.0000	Vinegar	157812658	Kgs	General	Percent
Eggs	Input	9.0000	Eggs Whole Powder	120236671	Kgs	General	Percent
Butter	Input	5.0000	Butter	120142955	Kgs	General	Percent
Season	Input	1.0000	Chicken Flavoring	185462318	Kgs	General	Percent
MixTime	PV	5.0000	MixTime		min.	General	
Prompt1	PV	Add Ingredient by Hand	Prompt1		-none-	General	
Prompt2	PV	Push Mix Button when Complete	Prompt2		-none-	General	
Prompt3	PV		Prompt3		-none-	General	

Time in minutes to run the agitator.

Make Chicken Seasoning

Approval Required

## Batch Management

The InBatch Batch Server is recognized as the most comprehensive and capable batch engine available. The Batch Server is responsible for all aspects of batch management including schedule dispatching, batch control, equipment arbitration, allocation and release, batch history, material consumption, material production and runtime client management.

## Batch Information Management

### Batch Historian

InBatch captures and stores all events associated with the management and execution of batches. This includes all batch events, phase events, equipment arbitration, allocation and release, equipment status changes, operator actions and comments. InBatch also maintains an audit trail of all security system events.

### Reporting

A complete web-based reporting system, including a full set of report templates, is provided. Based on Crystal Decision Inc™ Crystal Reports Professional™ reporting product, users can schedule, generate and view batch reports with any web-browser.

## Batch Client ActiveX Controls

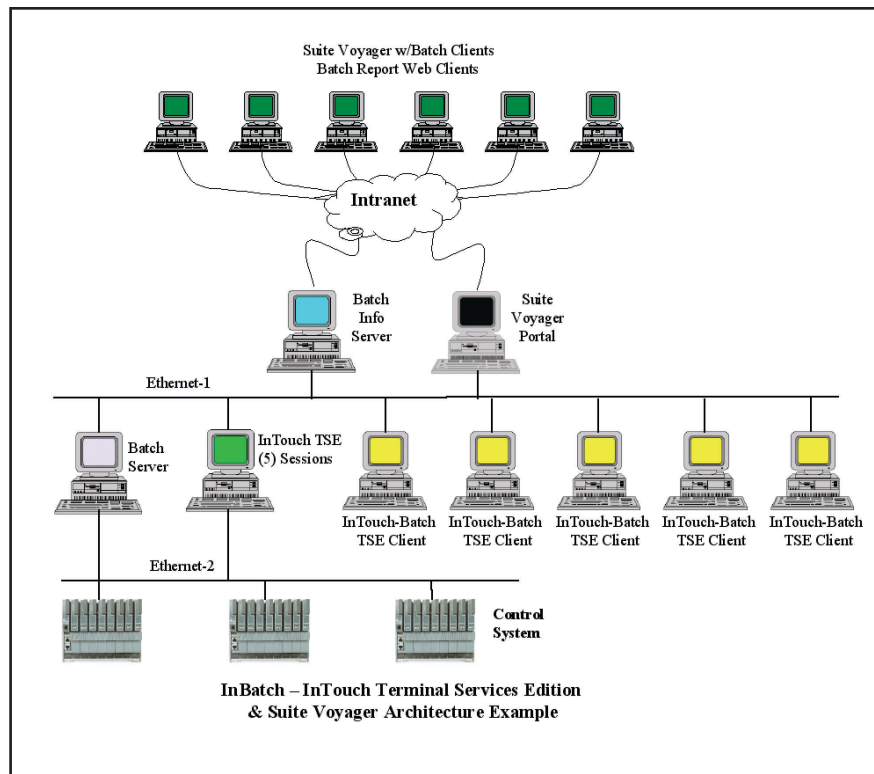
InBatch provides a comprehensive set of ActiveX Controls that are easily integrated into InTouch® process graphic displays to provide operators with a very robust and friendly interface to the batch server.

## Flexible Architecture

InBatch provides scalable client/server architecture for users to design solutions to meet their needs. Architectural elements include:

- **Batch Server:** Host platform for the batch engine and all batch configuration information.
- **Redundant Batch Server (Optional):** Hot backup batch server with automatic switchover support if the primary batch server fails.

- **Batch Information Server:** Host platform for the Microsoft SQL Server based batch historian and Crystal Report Professional based reporting web portal.
- **InTouch Batch Client:** Host platform for standard InTouch using the Batch Client ActiveX Controls.
- **InTouch TSE with Batch Client:** Host platform for InTouch Terminal Services Edition with support for Batch Client ActiveX Controls.
- **Report Web Clients:** Any web-browser that connects to the Batch Information Server for reports.
- **SuiteVoyager™ Portal:** Host platform for the SuiteVoyager manufacturing portal.
- **SuiteVoyager Web Client with Batch Client:** Any web-browser view published using the InTouch XML Export facility that uses the Batch Client ActiveX Controls.



### InBatch, InTouch TSE, Suite Voyager Architecture

InBatch supports InTouch Terminal Services Edition (TSE) and SuiteVoyager- FactorySuite® thin-client technology offering. InTouch TSE with Batch Runtime Client support is a very cost-effective solution for applications that have requirements for a large number of runtime clients. Through SuiteVoyager, InBatch server information is viewed and operator's can interact with executing batches using Microsoft Internet Explorer 5.x web browsers.

## All-In-One Single Node System

The All-In-One Single Node application is only recommended for small pilot projects and non-production development systems. The All-In-One solution requires the InBatch Server, the Batch Information Server, InTouch and the I/O Server be installed on one machine.

### InBatch and InTouch Architecture

Redundant InBatch Servers combined with InTouch offers a cost effective and robust solution for high availability applications. The Batch Information platform supports MS-SQL Server based Batch History and web-based report scheduling and viewing.

## CONNECTIVITY

InBatch Premier and FlexFormula Editions use all SuiteLink™ supported I/O Servers.



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