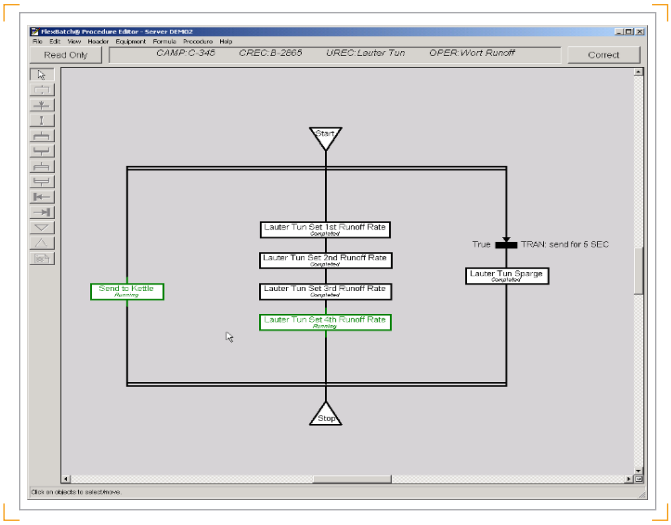
NovaTech®
Bitronics ◆ D/3 ◆ Orion

FlexBatch®

FlexBatch®
Recipe & Batch Control

Control of batch manufacturing and product recipes represents a plant's biggest challenge and greatest opportunity for competitive advantage. After all, efficiency and uniformity impact yield and ultimately R.O.I. Now, you can integrate recipe management and the manufacturing process with FlexBatch®. Your product developers, engineers and production staff can develop and produce documented, executable recipes in a fraction of the time they spend now, and then quickly schedule and manage your production based on these recipes. This speeds your time-to-market and improves your bottom line.



To simplify the creation, maintenance, and documentation of procedures, FlexBatch® uses a graphical procedure editor to create Procedure Charts™ that is based on the IEC 848 standard.

FlexBatch has produced:

- 50% increases in throughput
- 20% reductions in batch cycle times
- 100% conformance to specifications
- 5% increases in production yield
- 80% reuse of software
- Faster changeover times
- Improved equipment utilization
- Lower engineering costs

FlexBatch® stores recipes and batch records in a relational database making it easy to access recipe and electronic batch records from any desktop application using ODBC. In fact, FlexBatch reports are written in Microsoft Access and are fully user-customizable. Plus, since NovaTech actively participates on the ISA SP88 Committee for Batch Control and is a Founding Sponsor of the World Batch Forum, FlexBatch is designed specifically with these standards in mind. Ultimately, FlexBatch provides superior management and documentation of master recipes and the batches produced from them—complete control from R&D to the loading dock.

With FlexBatch:

- Recipes contain a graphical Procedure Chart™ providing the logic sequences to make individual products.
- Chemists or process engineers can easily develop product recipes without becoming control systems experts.
- Procedure Charts greatly reduce the amount of controller programming which reduces life cycle costs.
- Control system programming is confined to equipment-specific knowledge, not product-specific knowledge.
- Process management supports a campaign/batch hierarchy for scheduling production.
- Campaigns and batches can be scheduled for automatic execution or require operator participation at any step of the process.
- You can modify the schedule at any time, assign batches to specific equipment (or let FlexBatch pick the equipment based upon availability) and monitor batch events and production.
- Electronic Batch Records are automatically created as a recipe executes to meet regulatory compliance.
- Software modularity provides improved reliability, lower initial cost, and reduced long-term maintenance.

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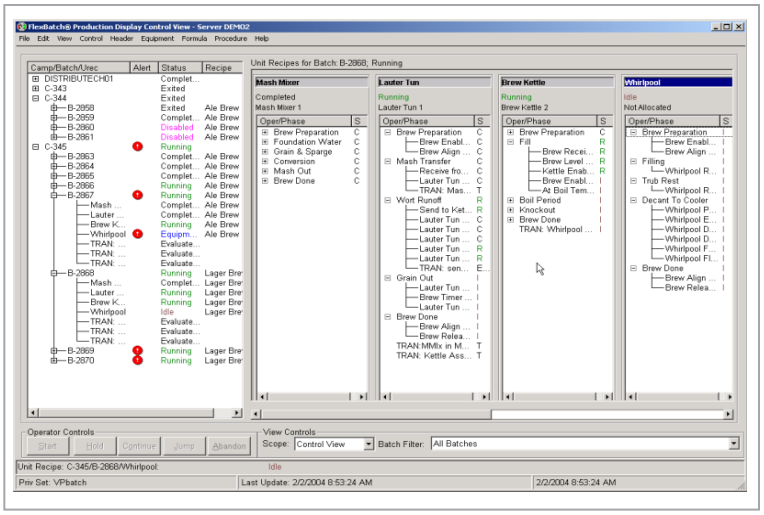
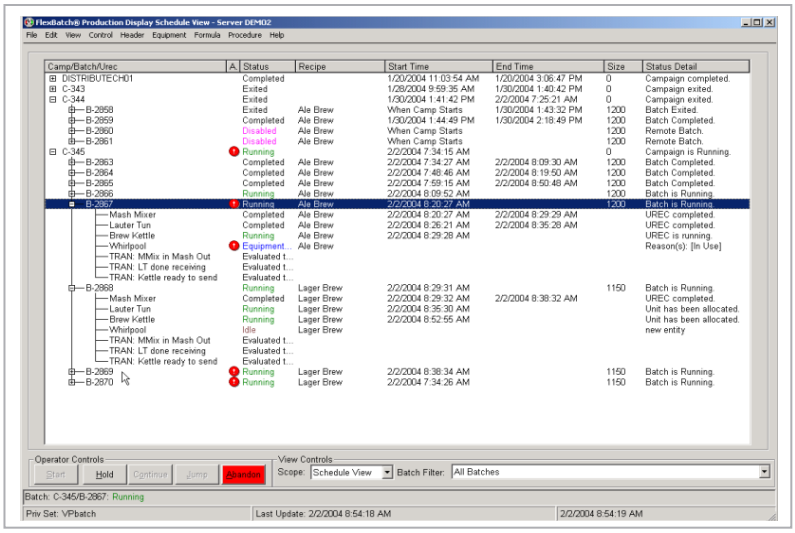


FlexBatch® enables easy scheduling of batch production, generates batch reports, and provides access to batch and recipe information from desktop applications.



The Schedule View is used to create and modify the Production Schedule by scheduling campaigns and batches.

- Master and control recipes containing "Header, Equipment Requirements, Formula, Procedure and Other Information" types as specified in S88.01 are directly supported.
- Integration with enterprise resource planning (ERP) systems, supply chain planning (SCP) systems, laboratory information management systems (LIMS), and equipment control systems is supported.

The FlexBatch® operator interface was designed to simplify monitoring and provide complete control of your plant production. Production Displays are used to schedule campaigns/batches and control batches in progress. Schedule View allows the user to modify the Production Schedule as well as monitor and control production at both the campaign and batch level.

The Control View is used to monitor and control the execution of unit recipes, operations, and phases—providing greater detail than the Schedule View. With FlexBatch, an operator familiar with the process can quickly see the status and interact with all the batches for agility, efficiency, and maximized throughput.

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