



# **Batch control system**

Web-based batch control system for controlling of mixing plants in the process engineering industry.



XAPI XBatch is a freely configurable batch control system for planning and controlling mixing plants. It was developed for batch controlled processes with variable process structure in the process engineerin industry. With its modular design it represents a complete production control system **MES** (Manufacturing Execution System), with the guarantee of a high degree of flexibility and optimal plant utilization. XBatch is universally applicable for the control of dosing and mixing processes, as they occur in many production plants (e.g. solid and liquid mixing plants but also in sequential process sequences). XBatch was developed specifically to meet the requirements of the companies and contains extensive experience from the various industrial and production areas.

**X**Batch is a cost-effective and maintenance-friendly solution, which is used for new as well as for already installed production plants. A complete batch recording and archiving contributes to an increase in product quality, enhances plant safety and uncovers optimization potentials.

## CONTROLLING, SUPERVISION, MONITORING OF THE PRODUCTION IN REAL TIME

As a flexible and efficient batch control system, **XAPI X**Batch provides the user with a structure for planning and realizing the continuous automation of mixing plants in real time. During the conception of **X**Batch the experiences with the previous mixing plant controls, the existing automation and control concept for continuously working processes as well as the recommendations of the standards committee for measurement and control technology of the chemical industry (**NAMUR**) were incorporated. The NAMUR recommendation for batch processes deals in essential parts with the structuring of recipes for the process sequence. Support for compliance with legal regulations is thus guaranteed.

A further basis was the extensive use of standard components to make use of already existing systems. **X**Batch monitors and displays complicated process flows clearly by means of structured process control, increases performance and efficiency and reduces infrastructure costs.

### **BENEFIT FOR THE WHOLE COMPANY**

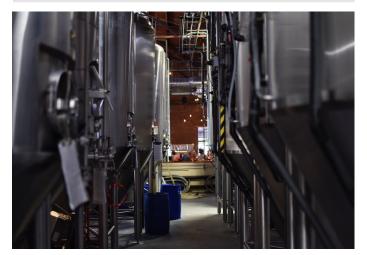
With **X**Batch, the whole company benefits - starting with the production employee, the planner, the maintenance staff, the production management and the controlling up to the management. In today's process engineering industry, the need to eliminate the administrative burden in order to achieve the highest quality standards and continuous optimization of the production level is of utmost importance. Production control systems (MES) form the bridge between operational processes on the production level and overlaying business management systems (e.g. ERP). They bypass the errors of manual and paper-based interfaces and provide supporting information about what is happening at the production level.

## www.xapi.de

#### **FUNCTIONS**

XAPI XBatch offers a large number of functions:

- Simple, convenient creation and administration of recipes (master, basic and control recipes) with the possibility to formulate recipe procedures, operations, functions and partial recipes for process-oriented operation.
- Create, plan (in advance), manage production orders and batches in the order management.
- Central administration, monitoring and control of all batch processes with the handling of all batch-relevant tasks such as configuring and updating the plant data of the basic automation, administration of basic recipes or creation and control of batches. Structural changes during the runtime of a batch are possible.
- The recipe sequence control allows operator interventions during batch production (interrupting and continuing recipe sequences), as well as the direct opening of detailed information. Operator instructions and dialogs support the plant operators during production monitoring with hints for manual interventions and at the same time enable the input of process values, such as laboratory values.
- Central data archiving enables all configuration, recipe, order and production data, as well as recipe and batch protocols, to be secured, and enables simple group-wide access from superimposed evaluation systems.
- The core functions are the automatic weighing, dosing and conveying of solid and liquid media in batch and continuous systems. Devices and other resources are reserved and allocated either during planning or dynamically at runtime.



#### **PURPOSE / BENEFIT**

- The cost-effective and maintenance-friendly solution for using your production facilities and increasing product quality.
- Complex process sequences are clearly displayed and monitored by the structured process control, which increases performance and efficiency and reduces infrastructure costs.
- Several plants and lines can be connected to form one system. The separation of master and control recipe enables a **flexible process flow**.
- **Compliance with legal regulations** is supported by the documentation of required data.
- A simple configuration enables short project maintenance and thus lower investment costs.
- A company-wide, centralised solution for process optimisation: seamless logging serves to ensure quality standards and validation purposes.
- Batch-related evaluations (PDF reports) and trend displays adapted to the process variables map the reporting mechanism.
- Easy sharing of data and documents: Project teams work independently of location on one database.
- A **multilingual tool** for global engineering and international teams.
- Simple user administration and fine-grained rights management allows customer-specific settings for access to the user interface, visualisation and parameterisation and guarantees maximum transparency in complex organisational structures.

## TECHNOLOGY

- The browser application (IE, Google, Firefox, ...) is hardware independent and does not require any software installation at the workstation.
- All functions, processes run on a central server as a web-based client/server system and are thus operated and controlled from any PC that has access to the network.
- Standard products of well-known companies are used as PC and automation components.
- Extensive ERP interfaces as well as SAP, Navision or file sharing, IO interfaces, RFID readers.

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Get in touch with us, we will gladly inform and advise you!

