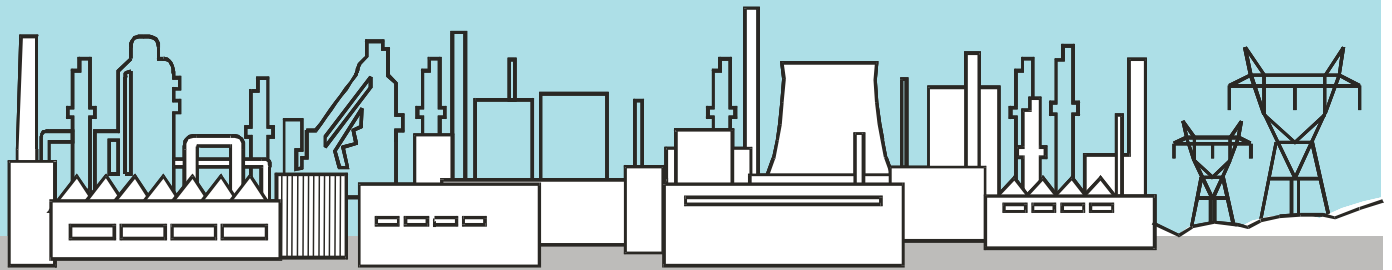


PLCbatch

A tool for batch process control on the PLC platform



Recipe-based control of batch processes according to the S88.01 standard, executed on the PLC platform, without PCs coupled within the real-time control loop.

Recipe creation and management

Creation of batches and control of their execution

Automatic execution of recipes

Simultaneous execution of more recipes

System Configuration

Batch Clients:

- Recipe Editor
- Equipment Editor
- Batch View



Process Network

PLC - Batch Server:

- Batch (recipe) execution engine
- Phase logic interface
- Phase logic
- Basic control



Real time control loop

HMI PLC Support:

- Batch view



Based on the mapping of the SFC recipes to the tabular notation

Benefits

- The execution of recipes is relocated from the inherently unreliable personal computer (PC) platform to the considerably more reliable platform of programmable logic controllers (PLCs).
- Recipe-based batch process control systems are simplified for easier handling, without essentially reducing the expressive power and the abstraction level.

Features

- Simultaneous execution of more recipes with automatic allocation of units.
- Support of parallel (AND) as well as selective (OR) branches.
- Execution of the state-transition algorithm of individual phases, extended by the notion of superstates to improve the abstraction level.
- The programmer is allowed to select a particular subset of the predefined states and superstates, in order to define his/her own model of phase behaviour.
- Configurable behaviour related to propagation of holding transition from phases to recipe and vice versa.
- Recipe vs. physical model consistency check.
- PLCbatch bundle licence for 1, 5 and 15 process units. The bundle consists of software modules:
 - Batch Server
 - HMI PLC support
 - Recipe Editor
 - PLCbatch View