

FlexyConcept

Your Gateway to the World of Chemical Development Controlled Lab Reactors Thermal Process Safety Process Control Systems FlexyCUBE FlexyALR FlexyFlant Automation

A single software platform for complete chemical process development

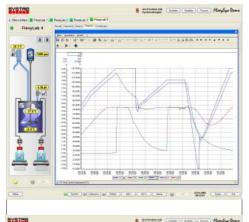
- Operating software FlexySys can be used for process development, thermal safety investigation and pilot plant stage
- Due to the standardised concept, training has to be provided only once, thereafter all users can operate all systems
- Very high user acceptance

- SysGraph: A single graphic evaluation software programme for all applications
- FlexyConcept integrates FlexyLab, FlexyCUBE, FlexyALR, FlexyTSC, Calo2310 and FlexyPlant
- Complies with CFR 21 Part 11 (with SecureX)

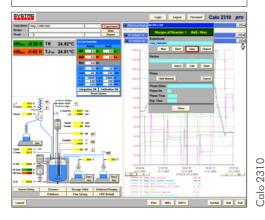


FlexySys

A Philosophy for all Applications



Plany Lab 1 | Property | Property



Uniformity in Variety

A common operating philosophy has been developed for the various applications and synoptic screen layouts. All functions can be accessed by clicking on the function keys of the relevant windows. This provides complete, manual experiment control.

1 to 6 Independent Reactors can be controlled by a Single PC

FlexySys takes into account the limited space available in laboratories. A single PC can control up to 6 reactors.

Simultaneous Operation and Graphics Function

FlexySys allows simultaneous operation and graphics display by using the same screen. This keeps you informed on the total process.

Combination of Manual and Recipe Control

FlexySys has been designed for process development. It can perform recipe sequences, but manual changes can also be made should the sudden need arise.

Automatic Protocol

Whether in manual or recipe mode, an automatic and complete protocol is always performed in the background. Using a word template, individualized layouts can be created.

Remote Control and Maintenance

FlexySys is constructed in such a way that can be operated by remote control from a nearby office, or for control purposes from home. A manual intervention is possible all times. SYSTAG also offers maintenance support when needed for problem solving via the Internet.



OperX

The new SYSTAG Recipe Editor

Advantages

- Drag and drop technique
- Each recipe step can contain up to 5 Basic Operations
- Repetitive procedures can be stored as methods (partial recipe)
- Methods can be conveniently entered into recipes
- Methods allow for most simple execution of SOP's (Standard Operating Procedure)
- Simple to use, operation Windows compatible
- Suitable for CFR21, Part 11 requirements (only with SecureX)
- Designed for FlexyLab, FlexyCUBE, FlexyALR, FlexyTSC, Calo2310 & FlexyPlant

Simple to Use

All Basic Operations appear in the taskbar under "Favorites". They can be displayed in compact or detailed mode to provide an overall view and quick access.

Basic Operations are defined in the corresponding groups such as temperature, dosing, pH, Logic operations etc.

The recipe is generated using "Drag & Drop" techniques. Repetitive parts can be written as "Methods" and entered into any recipe at any stage.

Changes at any Time

A recipe can be simply changed. A double-click on the relevant operation will allow access to the "Edit" mode. Modifications can be performed at any time, even during operation. Recipes that have not been completely provided with all parameters can be stored but will not be released for execution.

Individual Display

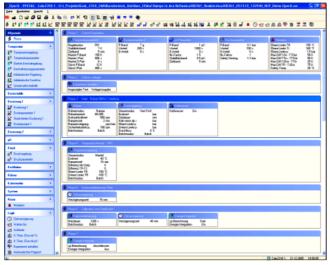
Recipe Editor and Basic Operations can be displayed differently. A choice can be made between tree-views (as in Windows Explorer) or as "Favorites" taskbar. "Drag & Drop" techniques can be used for both.

Print

A recipe displays clearly and unambiguously every single step. For control and documentation purposes a printout can be made for integration into the protocol.

Every Recipe can contain up to 99 steps (or phases). In each step up to 5 parallel Basic Operations are permissible.

Typical Recipe: on the left all Basic Operations, on the right, steps below each other, with up to 5 Basic Operations in parallel $\,$





SysGraph

The universal Graphics and Evaluation Tool

A single Software programme for Graphics and Evaluations

SysGraph utilizes a database and is a comprehensive software tool that not only provides graphic displays but also performs calculations from and with individual graphs, as well as comparisons with time-shifted graph data.

SysGraph provides statistical values from your experiment at the push of a button. Polynomial functions of existing graphs can be obtained for mathematical processing at a later stage as well as derivations, integrals etc.

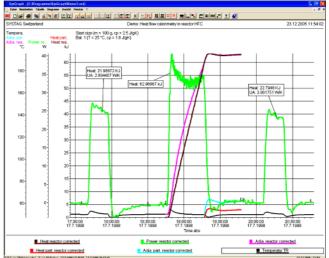
Important Evaluations for Thermal Analysis and **Reaction Calorimetry**

The ThermoGraph module calculates reaction output, TMR, SHR and Arrhenius plot.

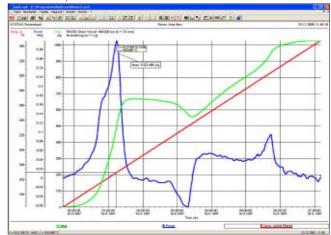
KaloGraph is the isothermal calorimetry evaluation package for reaction calorimetry.

The combined evaluation package for Calo2000 is used for the most modern non-isothermal calorimetry for heat flow and heat balance.

Isothermal KaloGraph Evaluation

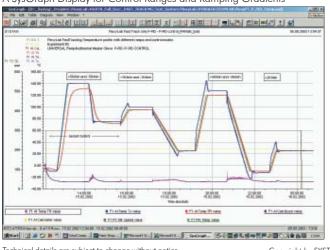


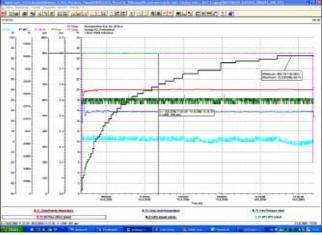
Thermo Analysis – Scan Evaluation



Hydrogenation with Integration in Normal-Litres

A SysGraph Display for Control Ranges and Ramping Gradients





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