

Laboratory Automation Hardware









Here you will find:

- LabManager®-Laboratory Automation Systems
- MSRmanager™Automation Systems
- Interface Cards
- PI Additional Equipment external
- Power Supplies
- Simulation and Test Apparatuses
- Display and Operating Components
- Peripheral Devices

LabManager®-System



The LabManager system is an automation and/or process control system which isspecially suited for laboratory-, mini- and bench plants as well as for pilot plant stations. It is suitable for the automation of virtually all chemical-procedures reaching from batch, semi-batch and continuous processes.

The LabManager system was developed in close cooperation with specialists from laboratories and pilot plant stations of major chemical companies. It has proved its worth in a great number of areas as a standard tool.

In accordance with the requirements of the NAMUR Working Party for research process control computer systems (RPCCS), particular care has been directed to develop a user-friendly man-machine interface, a compact design, and a high application flexibility.

The LabManager RPCCS especially distinguishes by the fact that it is also transparent and easy to handle for personnel inexperienced in automation technique even if they want to go into detail. With help from the graphically programmable recipe control system HiBatch and a unit operation library, a customer without automation-technical knowledge can program the control program for a complex synthesis in a few minutes.

The LabManager systems usually have a pay-back period below one year!

- more intense use of your human and capitalresources
- GLP/GMP raked working method without additional outlay
- optimal reproducibility of your recipes, also after years
- complete documentation of the entire process
- savings during the instrumentation thanks to virtual devices
- release of the lab personnel from routine activities
- shorter "Time to Market" period for your products

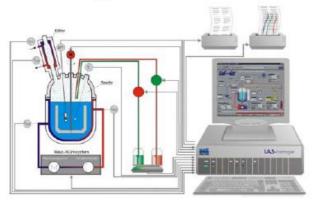
The most significant Results:

- Increase of Quality
- Lowering of danger potentials
- 7 Lowering of Costs

LabManager, the Interface Genius!



Areas of Application



The LabManager is particularly useful in the fields:

- Chemistry
- Pharmacology
- Biotechnology
- Food Technology
- Environmental Technology
- Quality Assurance
- Experimental plants and test beds

Applications

Due to its unique flexibility, the possible applications in chemistry laboratories, in pilot plant stations, for Mini-Plants and in companies are virtually unlimited. Typical applications of the system in the fields of chemistry and pharmacology are:

- Process Development
- Process Optimization
- One and multi boiler plants
- Parallel reactor systems
- High-Throughput-Experimentation
- Bench Plant installations
- Mini-Plant Installations
- Continuous processes
- Batch tasks
- Semi batch tasks
- Syntheses
- Reaction calorimetry
- Exothermic early warning system
- Screening
- Scale-Up
- Polymerization

- Distillation
- Extraction
- Crystallization
- Production oriented Labs (Verification)
- Raw material Control
- Quality Assurance
- Analysis Laboratories

The system offers all the functionalities of the automation systems and process control engineering such as:

- Measuring
- Process control
- Recipe control system
- Automatic control
- Process monitoring
- Process visualization
- Alarming
- Online intervention
- Logging
- Filing

All basic unit operations reaching from dosing up to sample drawing are automated (see Automation with the LabManager), all measured values are collected (see LabManager and Instrumentation), visualized (see LabVision), and automatically evaluated (see HiText and KalDas).

