

SIWA^{CIS} PLAN SEWER is a high-performing and innovative module for sewer network control that calculates the best control interventions in drainage systems with the help of optimization methods. This way, SIWA^{CIS} PLAN SEWER assures perfect utilization of the sewer network and reduces the ingress of harmful substances into natural waters. Thanks to the application of a special component library, SIWA^{CIS} PLAN SEWER can be comfortably adapted to almost any sewer network.

The challenge

Targeted interventions into running drain and storage procedures in drainage systems are defined as sewer network control. Such interventions require the control of gate valves, pumps and dams on the basis of current precipitation, water level and drain measurements in a way which insures that the predefined operating targets are affected as little as possible.

SIWA^{CIS} PLAN SEWER helps meet this goal. With SIWA^{CIS} PLAN SEWER, the plant operator can realize a considerable improved capacity utilization of the sewer plant. In regard to the most important target, the minimization of sewage discharge from stormwater overflow tanks, a system optimized with SIWA^{CIS} PLAN SEWER attained reductions of over 15% in realistic test scenarios.



Good reasons for SIWA^{CIS} PLAN SEWER

- Reduction or even complete avoidance of water pollution caused by combined sewage water or stormwater discharge
- Optimization of the sewer capacity thanks to sewer system admission compensation
- Considerable reduction of investment costs for new plant
- Reduction of operating costs, e. g. for pump power
- Easy and modular extension option with further SIWA^{CIS} PLAN products

SIWA^{CIS} PLAN SEWER

Improved economics and increased purification capacity thanks to optimized sewer network control

Water Technologies

SIEMENS

Our solution

SIWA^{CIS} PLAN SEWER is based on the SIWA^{CIS} PLAN OPTIM module, which is applicable for pressure pipe networks. It takes into account, that even with only two stormwater tanks, the tank drains' independent controls may cause problems. For example, scenarios where one tank still delivers sewer despite the following tank being already overflowed, are still a regularly experienced failure. The uncontrolled or locally controlled operation of several tanks is therefore not optimal.

SIWA^{CIS} PLAN SEWER calculates an optimum control strategy for all control elements of a sewer network in consideration of the following components:

- Stormwater overflow tanks
- Reservoir ducts
- Throttle valves
- Sewers
- Sewage plants

Correct reactions at all times

Together with a process connection, SIWA^{CIS} PLAN SEWER can be converted into a high-performing online system that can be easily integrated into existing automation solutions. It enables the operator to react to external impacts, such as stormwater incidents, with appropriate measures.

Optimum minimization of sewer discharges

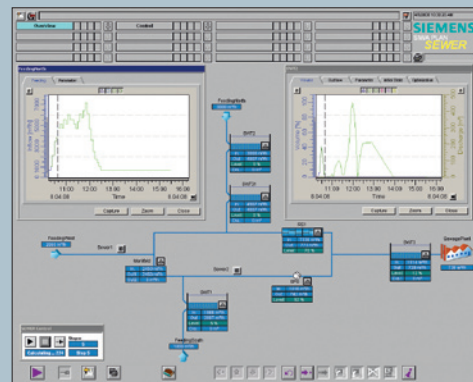
SIWA^{CIS} PLAN SEWER accounts for all important technological and operational restrictions that are relevant for the preparation of optimum plant schedules.

SIWA^{CIS} PLAN – the modular water management system

SIWA^{CIS} PLAN is a water management system with modules for the optimization and simulation of drinking and waste water plants. Thanks to its modular design, SIWA^{CIS} PLAN offers individual solutions for drinking and waste water plants.

For example: SIWA^{CIS} PLAN OPTIM calculates the optimum operating plan for all pumps and tanks of a supply system and is perfectly integrated in the SIWA^{CIS} PLAN modular water management system.

It supports operators of water supply systems in sustainably reducing the operating costs of their plants and increasing operational reliability. At the same time, the plant's availability and supply reliability can be considerably increased by helping to plan an efficient maintenance program.



Particularly convenient: Thanks to its modular structure, SIWA^{CIS} PLAN offers the unique possibility of realizing the most varying combinations of comprehensive total solution approaches completely independent of the control and automation technology in use. The system can thus conveniently be adapted to the specific requirements of the respective plant operator at any time.

It is this in particular which makes SIWA^{CIS} PLAN especially efficient and broadly applicable. As existing technologies are integrated into the overall solutions, SIWA^{CIS} PLAN is a profitable investment which safeguards the value of installed technology. With its industry-specific modules, for example for operating personnel training or circuit diagram optimization for schedule administration, SIWA^{CIS} PLAN perfectly covers all important areas of the water industry.

Completely Integrated Solutions

Completely Integrated Solutions bundle our entire range of products and services for your plant.

In particular, they help you by

- **Optimizing** the entire process chain – with plant solutions including technology, automation, electrical engineering and environmental technologies
- **Connecting** all IT levels of your company – with IT and management solutions from production to the planning level
- **Supporting** you throughout the life cycle – from consulting through commissioning and training onward to modernization.

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