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Ingenuity for life

# SIWA Optim

## Operate your water supply in a resource-saving and efficient way

### The challenge

Pumps are by far the largest electricity consumers within the water supply network. Their economic operation represents the major challenge to the suppliers. The expansion of renewable energy is leading to an ever-increasing proportion of volatile electricity supply from wind and solar energy and thus to increasingly fluctuating electricity prices: cheaper electricity rates when ample supply is available, rising rates with low capacities.

To benefit continuously from the best rates and at the same time ensuring a high level of safety in the water supply requires highly intelligent control of pumps and valves. To accomplish this, diverse data must be taken into account and synchronized in real time: previous consumption patterns, available assets such as peak or base load pumps, storage capacities and current electricity rates. And all this, 24 hours a day, 365 days a year.

Under such circumstances, efficient manual operation is no longer possible.

### The solution

SIWA Optim heralds a new era for cost-efficient and reliable water supply. The application enables you as a supplier to achieve the optimal interaction of all relevant assets.

SIWA Optim provides the full range of flexible operation management as well as a cost-effective water supply under consideration of changing electricity prices.

### Your benefits at a glance

- Reduce energy consumption costs of your water supply by up to 15%
- Minimize operational planning efforts
- Ensure sustainable reliability of your water supply even under challenging conditions
- Minimize response times during emergencies and unplanned events
- This engineering tool is also ideal for use by consultants and pump manufacturers

# SIWA Optim

## Reduce energy consumption costs

Pump and valve schedules can be optimized based on the latest plant data and demand forecasts as well as the variable daily energy prices. This enables a reduction of energy consumption costs by up to 15% whilst safeguarding the supply at the same time.

## Continuous safeguarding of water supply

As the optimization is updated every 15 minutes, continuous information regarding current water levels is obtained. In this way, changes in water consumption, for example, due to pipe leakage or pump failures can be quickly adapted to.

## Simple operation planning and implementation during maintenance

When performing maintenance work, the tanks, pumps and capacity needed to ensure a reliable supply can be identified. This app offers efficient decision-making support in terms of timing, type and scope of maintenance works.

## Rapid response during emergencies and unplanned events

The app can be used to quickly search for alternative operation scenarios in order to maintain a reliable supply. For example, supply zones can be connected easily with each other.

## An ideal engineering tool for consultants and pump manufacturers

SIWA Optim allows simulation of different scenarios based on actual operating data. The app is therefore also pre-destined for the creation of case studies and can be utilized as an engineering tool by consultants and pump manufacturers.

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