

A photograph of industrial water treatment equipment, featuring blue pipes, a blue electric motor, and various valves and fittings. The scene is outdoors on a concrete platform.

INDUSTRY SOLUTION

The AVEVA logo is displayed in white text on a teal triangular background. The logo consists of the word "AVEVA" in a bold, sans-serif font, with a small trademark symbol (TM) to the right.

AVEVA™

AQUIS WATER NETWORK MANAGEMENT PRESSURE OPTIMIZATION MODULE

Minimizes leakages and reduces operational costs in the water distribution network.



Product at a glance

Extending the capabilities of Aquis Water Network Management, the Pressure Optimization Module ensures:

- Correct calculation of time delays in the network
- Correct calculation of heat accumulation, ensuring accurate optimization, for example, in the morning
- Correct calculation of heat loss, including multiple heat sources, for complete coverage of the network
- Easy, quick and affordable start-up

Savings and Other Benefits

- Reduce water loss by 10-15%
- Reduce electricity consumption by 10-15%
- Reduce CO₂ by 10-15%
- Reduce chemical use by 10-15%
- Accelerate Return on Investment to <2 years

The Aquis Water Network Management Pressure Optimization module is designed for use in pressure-controlled zones where the pressure is regulated by pumps and valves. The solution takes into account the fluctuation of consumption in the network and automatically provides the setpoints for the pumps or pressure control valves ensuring a consistent supply pressure.



Operational Stability and Cost Savings

The Aquis Water Network Management Pressure Optimization module can reduce your leakage loss by 10%-15%, reducing water loss and the associated cost of production and chemical treatment. It also reduces the pumping costs and subsequent CO₂ emissions.

Operating 24 hours per day, 7 days per week, the solution allows year-round steady, automatic and optimal regulation based on logical principles.

The Aquis Water Network Management Pressure Optimization module uses SCADA data from the water distribution network, creating the best possible basis for optimization. It takes into account common operational changes, such as valves being opened or closed, large consumers with varying consumption, and variation during weekends and holidays.

Unusual operational interruptions will also be included in the calculation, giving you the right picture of the operation all the time.

The Aquis Water Network Management Pressure Optimization module utilizes consumption data based on, for instance, weather forecast information which is automatically downloaded from the Internet. This results in very accurate optimization.



Aquis Water Network Management Real Time

Your existing Aquis Water Network Management model can be utilized directly. If you are using an alternative modeling tool, this model can be transformed into Aquis Water Network Management.

Implementation of Aquis Water Network Management Pressure Optimization requires initial configuration, but daily operation is easily done by operators.

Aquis Water Network Management real-time functionality can be added, enabling a full and dynamic presentation of pressure, consumption and flow in the network. This gives

you additional context regarding the operation and efficiency of your network. Aquis Water Network Management real-time functionality can also be utilized to send calculated data into the SCADA system. This expands the overview and may postpone or eliminate the requirement for adding new, costly measurement points. Today, Aquis Water Network Management is the most widely used real-time simulation tool for water distribution networks — worldwide.

Further Information

For more information on Aquis Water Network Management Pressure Optimization, please visit

www.aveva.com

