

A man with a beard and glasses is working on a laptop. The background shows a scenic view of a lake with several small islands. The image is overlaid with a semi-transparent blue filter.

MIPRO WATER & ENERGY SOLUTIONS

SAFETY, AVAILABILITY AND EFFICIENCY
FOR WATER AND ENERGY SECTOR

MIPRO

COMPLETE SOLUTIONS FOR THE WATER AND ENERGY SECTOR

Water and energy supply requires constant preparation and risk management: water purification and clean water distribution must work without interruptions, regardless of the conditions.

Mipro has been developing reliable and advanced solutions for comprehensive management and safety of critical infrastructure for more than 40 years. Our position as a leading system supplier is based on more than 600 delivery projects. We stand out with our knowledge of water and energy supply. We manage processes and the requirements of water and energy supply management across facility and municipal boundaries, producing highest level of safety and quality for our customers.

We are able to cost-effectively utilise the entire life cycle of existing systems and integrate them into an automation system, and act as a system integrator.

We also offer a unique set of services for managing the life cycle of systems and controlling operational activities. Our goal is to establish a long-term partnership with our clients.



Scada system is easy to use in the field with any mobile device.

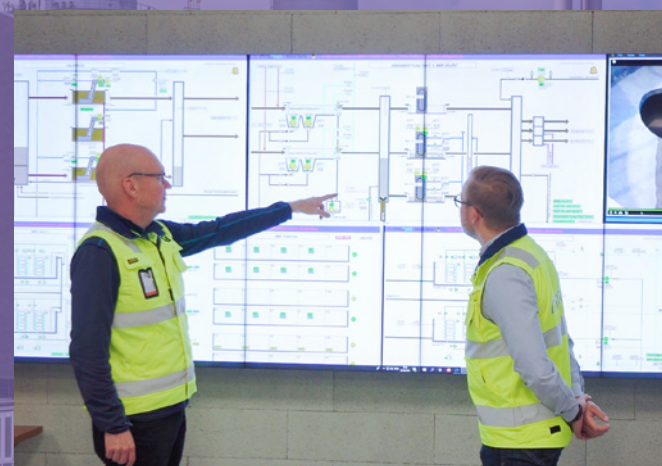
MISONET - COMPREHENSIVE AUTOMATION SYSTEM FOR WATER AND ENERGY SECTOR

MISONET is a competitive automation system developed and produced in Finland for the needs of water supply and energy production. It has been implemented with Mipro's 40 years of experience in Finnish water supply with thousands of deliveries. MISONET automation system manages various water supply processes, purification processes, network distribution, wastewater treatment, district heating plants and networks.

MISONET is the industry leading system in Finland. The scalable system is applicable for various sized organisations and projects.

Features:

- Safety oriented system and automation design.
- Local use, mobile interface and remote connections in the same package.
- Monitoring, control and regulation: An illustrative and easy to use way to manage the process.
- Cybersecurity in both product and solution design.
- Support and maintenance: Automation- and process experts are available 24/7.
- Tools for data driven management.

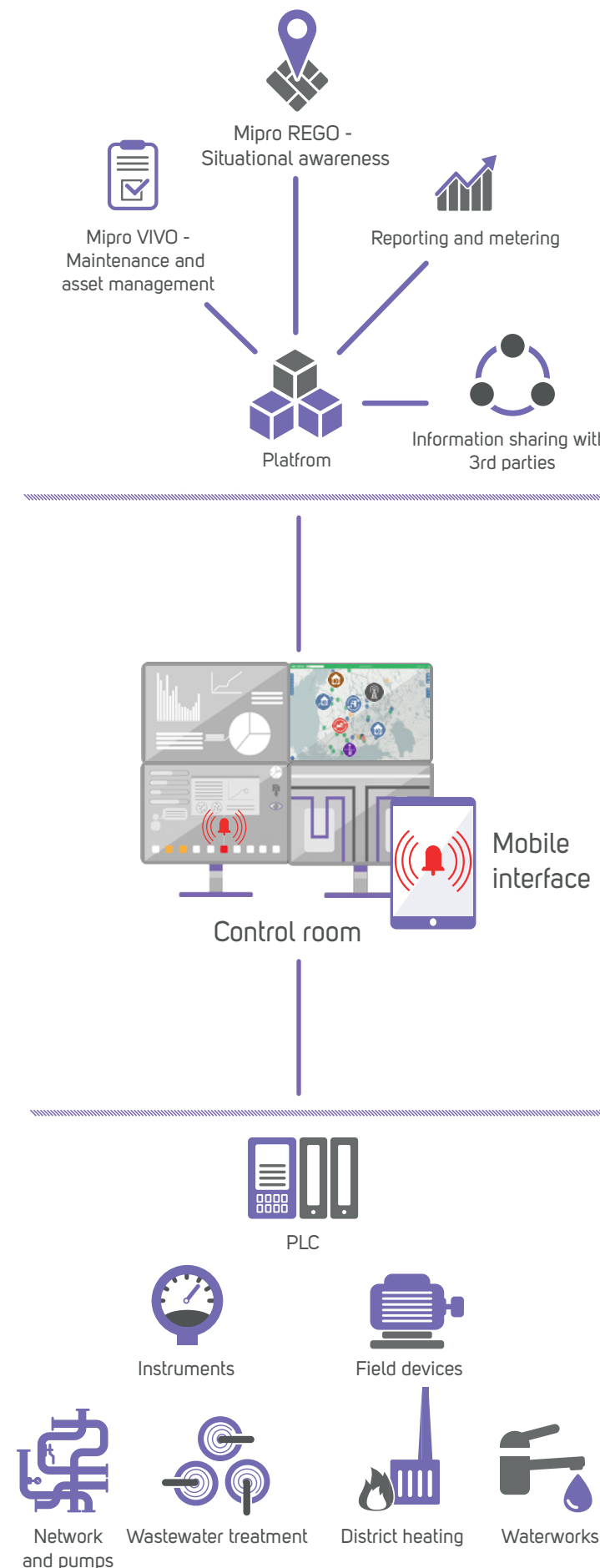


Mikkeli wastewater's main treatment plant control room deep in Mikkeli's bedrock.



Mikkeli Waterworks control room.

PRODUCTS AND SERVICES



DATA DRIVEN TOOLS

Overall view for management

- Situational Awareness system REGO: Clear overall picture of organisations, assets and networks.
- Assets management system VIVO: management of storage, spare parts and pre-emptive maintenance.
- Reporting and analytics: Process- and organisation statuses for different levels of management. Obligational reporting and process improvement measurement.
- Data can be directly shared and managed with third parties, such as officials and research facilities. Data produced by 3rd parties, such as laboratories or power suppliers can be brought to the system and utilised in reporting and process optimisation.
- Integration platform enables data gathering, mining, presenting and sharing – without sacrificing cybersecurity.

SCADA SYSTEM

The center of operations

- Local control room ensures reliable availability even in exceptional situations.
- Alarms: Enable quick response to process problems and emergencies. Alarm messages can reach the on-call service from anywhere and guide the user to assets.
- Trend curves: Illustrate changes in the process and help determine their starting point.
- Communications: Securely controlled and monitored networks.
- All functionalities are available in mobile interface.
- Simple and clear interface enables comfortable user experience.

FIELD

Reliable automation and instruments

- Automation: Process-oriented design guarantees functional and safe process control in all circumstances. We only use PLC components from distinguished providers.
- Instrumentation and measurements: By measuring accurate data the system can operate at its maximum capacity and efficiency. Data integrity must be ensured through the whole system, from instruments to automation to cloud services.
- We operate in the field such as wastewater treatment, district heating and waterworks.

HUNDREDS OF SUCCESSFUL PROJECTS

Each of our projects is modified and completed according to customer needs and requirements.

METSÄ-SAIRILA MBR WASTEWATER TREATMENT PLANT

The Metsä-Sairila MBR wastewater treatment plant uses biological Membrane Bio Reactor (MBR) membrane filtration technology to purify wastewater. The MBR wastewater treatment plant is highly effective and has a high utilisation rate, treating approximately 15 million liters of wastewater per day.

The Mipro MISONET automation system monitors, controls, and regulates the plant's processes for the entire water treatment process. The automation system ensures precise control, which results in excellent purification results. Dual technology ensures high availability and system safety.

MBR wastewater treatment plants are even more environmentally friendly than traditional wastewater treatment plants because they use fewer chemicals and less electricity. The purified water discharged from the Metsä-Sairila wastewater treatment plant into the waterways is cleaner than natural water in Lake Saimaa; in the long run, the plant helps to purify the water in Lake Saimaa.

SAVONLINNA WATERWORKS

Mipro has worked with Savonlinna for over 20 years to ensure the operational reliability of the city's water supply. It was achieved this by taking a process-oriented approach and working closely with the customer to create feasible plans in the design phase. This collaborative approach has helped to reduce the total costs of the projects while ensuring a reliable, water- and environmentally safe process.

Mipro has provided crucial support for Savonlinna's water supply renewal project, which involves transitioning from using surface water to groundwater. Mipro designed and implemented new processes for treating and distributing the water, including state-of-the-art treatment facilities such as the Kulenoisharju groundwater treatment plant. In addition, Mipro has completed other notable projects, including the Savonranta water treatment plant, the Kuhasalmi groundwater treatment plant, and the Savonranta wastewater treatment plant and sludge reception facility.

VALUE FOR THE CUSTOMER BY MIPRO SOLUTIONS

- Efficiency through automation and centralisation
- Availability by modular and redundant system design
- High interoperability with other suppliers' systems and equipment
- Maintenance and modifications without production disruptions
- Real time visibility and analytics to operations
- Life long 24/7 365 customer support
- Proactive and preventive lifecycle planning

MIPRO

Mipro is specialised in railway and industrial systems. Our systems are used for safety management in railway and metro services and industry processes as well as for controlling processes in water and energy management. Mipro is headquartered in Mikkeli, Finland, with offices in Espoo, Oulu and Tallinn, Estonia.

www.mipro.fi
+358 15 200 11, mipro@mipro.fi

Our operations are managed in accordance with an integrated management system certified according to ISO 9001 standard, and an environmental system certified according to ISO 14001.