



Application report

WATER TREATMENT SYSTEM WITH CONTROL V430

Partner Aqua Innovation
Area Customized Solutions

Water treatment

Monitor

Control

Automate

Partner

Aqua Innovation specializes in the manufacture of water treatment equipment for use in private homes, various industries or municipal waterworks, focusing on local production and international sales.

Aqua Innovation®
Systems & Technologies

ComatReleco products in use

- SPS M91
- SPS V430

Historic paddle steamers enjoy great popularity as an excursion destination and are therefore kept in technically perfect condition at great expense and modernized in accordance with today's requirements.

The paddle steamer «Stadt Rapperswil» of the Lake Zurich Navigation Company was in the Wollishofen shipyard last year for an overhaul. The technical overhaul also included the installation of a drinking water treatment plant that can generate drinking water directly from the lake water.

Filtered several times

On-site drinking water treatment has the advantage that no water tank is needed, which takes up space and in which germs could multiply. Lake water is treated primarily through filtration. A dual

filtration process eliminates algae, sand and microorganisms, while further filtration through an activated carbon filter neutralizes the taste and odor of the lake water.

The purification process is continuously monitored: flow times and pressure must be within a defined range to achieve an optimal result. In the event of a drop in pressure, automatic backwashing is triggered.

Germ-free

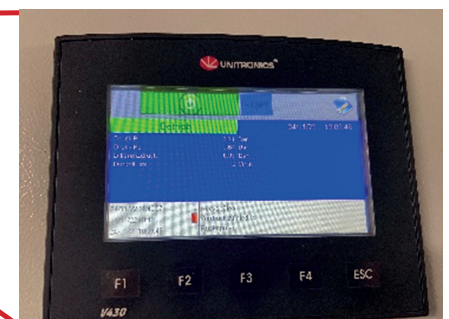
As a final stage, the water is disinfected with UV-C rays and freed from germs, bacteria and viruses. The treated water complies with drinking water regulations and can be consumed without hesitation. For ongoing operation, a small pressure reservoir is sufficient to ensure water for backwashing and to break consumption peaks.

Process control made easy

Aqua Innovation GmbH relies on Unitronics' compact M91 and V430 PLCs to control and coordinate the various cleaning and disinfection steps.

With both controllers, the software programming structure is simple, intuitive and can be mastered in a short time. Company-trained personnel can program, maintain and upgrade the software themselves.

The PLC V430 was used exclusively for the water treatment systems of the paddle steamer «Stadt Rapperswil».



V430 PLC for controlling the reverse osmosis plant for the steam generation of the «Stadt Rapperswil» of the ZSG.