Benefits

- Fast and efficient remote support
- More than 100.000 km saved each year
- New monitoring services based on eWON technology

A new generation of pools

To ensure the water quality in swimming pools is correct, there are complex technical processes going on in the background. Thanks to eWON, service technicians can now react quickly, even at weekends, before problems strike.

There are a whole load of processes going on behind the scenes at swimming pools, spas and hotel pools to ensure that no area becomes a health hazard. The processes used here are similar in all pools:

The water is passed through various filters to remove unwanted materials. The pH value is then measured and acid or alkali added as required to maintain a constant, neutral, skin-friendly level of 7.0 at all times. Also, the chlorine level is constantly checked and corrected to prevent the spread of bacteria.

The technology and arrangement of pumps and nozzles are by no means random, it is calculated precisely. There must be no dead corners of the pool with no flow through them, as the water quality would begin to suffer.

The processes are complicated, this is why there are swimming pool specialists who deal with the associated pumps and controllers.
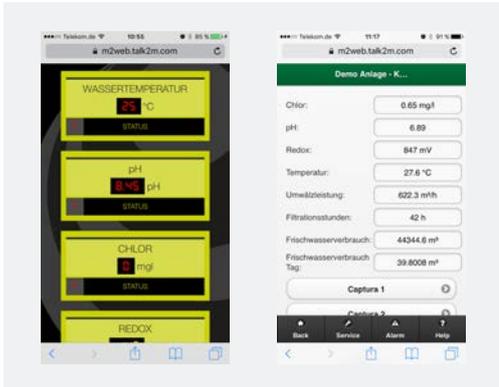
Aquila and its sister company Autech Tesla

Aquila Wasseraubereitungstechnik GmbH, among the German market leaders in Water Treatment, is characterized by its energy-efficient solutions. In order to make the most of this potential, it also offers all the control technology which is configured and commissioned by its sister company Autech Tesla.

Autech Tesla equips all its systems with a remote maintenance option that allows Aquila to keep an overview of all system data, look for problem sources or carry out software updates quickly and inexpensively.
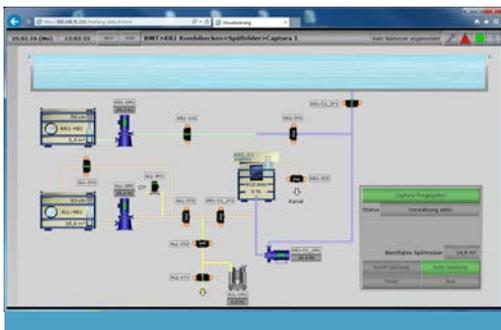
"The option of remote maintenance is essential when it comes to troubleshooting" explains Frank Weiß, Managing Director at Autech Tesla. "We had a case when the PH value could not be brought under control. The customer called us, we looked at the system data and came to the conclusion that the wrong canister had been connected to the system at the pool." This meant we could pinpoint and resolve the problem within a few minutes - if somebody had had to drive to the customer site, the pool would have had to be closed in the interim and the water quality would have suffered dramatically."

The customer is not the only one who benefits from this option. Frank reports:

> **We save more than 100.000 km a year thanks to remote maintenance.**

Solution:
Remote Data

System Integrator: Autech Tesla
Customer: Aquila
Country: Germany

HMS Connecting Devices™

Data from the control systems connected can be visualised on any terminal with a web browser using the M2Web service from Talk2M. This means the system status can be viewed from anywhere at any time.

How the AT Suite displays the system on the screen. Everything is clear and any irregularities can be spotted immediately. The measurements can also be used for operational data recording in line with DIN.

Frank Weiß, Managing Director at Autech Tesla and Fouad Boudraa, Sales Engineer at Wachendoff Prozesstechnik, have been working as a team for many years.

The secure eWON Talk2M connectivity platform

The Talk2M online service portal from eWON ensures ease of use even when the system is live. In conjunction with the eWON routers, it enables access to the many pools that Aquila and Autech Tesla have set up.

❞❞ Talk2M security system even impresses the customers' IT experts. ❞❞

Frank Weiß - Autech Tesla

The decisive added value of the Talk2M online service portal is the complete integration of IT security standards and encryption technology in the form of VPN and HTTPS technology, plus central user and device management. This does not require any changes to the security settings of the IT network on either side, as communication is only via outgoing connections and generally standard ports which are already approved. Numerous additional security mechanisms, such as a key switch or two-factor authentication, ensure additional security. This even impresses the customers' IT experts.

Autech Tesla monitoring services

The eWON Remote Data solution allows data from the connected control systems to be visualized on any terminal device with a web browser. The data is also available in a smartphone app or via the "AT suite" visualization system, both built on top of the eWON platform.

The "AT suite" visualization system, which was developed in-house by Autech Tesla and runs on a panel PC in the system, can be accessed by the pool manager, the control room of council operating the pool or the facility manager in his office. They can all view the system data at any time or receive error messages as e-mails or text messages to their phone via the integrated alarm management system. Additional services such as regular sending of electricity and gas consumption figures can also be included.

For the site itself, Autech Tesla mainly uses the high-speed mobile phone version, which works independently and does not require an on-site Internet connection. The engineer can set everything up, even when the data technology infrastructure on-site is not yet finished.

A large display at the swimming pool is also controlled by the eWON router. Scripting functions are used to convert the data between the control systems protocol and the TCP/IP based protocol for the display.

"Before we started to use eWON, there was a modem solution which was very slow and not compatible with increasing requirements. It could not even implement software updates because of the data volumes." Frank Weiß explains.

Aquila now supports over 300 systems across Europe using the eWON IIoT router and the Talk2M online service portal on a 24/7 basis. "There is always a technician on call who can view the system data from home." Frank Weiß explains. He will continue to rely on the tried and tested eWON technology and the partnership between Autech Tesla and Wachendorff Prozesstechnik for future projects.