



Holland Water

Flow metering helps control water treatment



No chance for legionella

Automated water treatment for perfect water quality

The importance of safe water is clear in regard to buildings such as an apartment complex, a hospital or a hotel. Bacteria, including legionella, can be life-threatening following an outbreak.

Legionella bacteria find their way into the respiratory system through the inhalation of small, contaminated water droplets or water spray.

Patented system for legionella control

Holland Water, based in Driebergen-Rijsenburg in the Netherlands, has developed an effective system against the dangers of legionella infestation: HW Bifipro is a patented water treatment system based on copper and silver ionization technology, comprising an easy-to-install water treatment panel and a control unit (HW Tech Control). Placed directly behind the building's water entry point, the system releases precise and miniscule doses of ions into the water, which subsequently spread and treat the entire water installation system. Copper

Holland Water's patented HW Bifipro system is located directly behind the domestic water supply and uses copper and silver ions to ensure legionella-free water.

and silver ions break down and dissolve the biofilm often present in waterpipes, and they prevent the development and colonisation of legionella. Due to the residual effect of ions distributed throughout the water installation, HW Bifipro offers exceptional efficacy against harmful pathogens.

Aside from safe water free from biofilm and legionella, the HW Bifipro system also has other important benefits to offer, including the reduction of the hot water temperature. Holland Water stands for the safety of people and the environment. In addition, the HW Bifipro system is fully certified in compliance with international legislation. Holland Water works together with qualified and professional partners for international distribution.

In the largest hotel in the Benelux countries, the „Van der Valk Hotel Schiphol“, Holland Water was able to solve the legionella problem.

Van der Valk Hotel

Basically, water pipes that are not permanently flushed are ideal breeding grounds for legionella. Therefore, it is obvious that hotel operators in particular want to counteract this health risk actively and sensitively. Where individual rooms are not used for several days, biofilm develops in their hot water pipes, which is a breeding ground for legionella and other pathogens. Special precautionary measures are required to prevent these from entering the lungs via the water vapour when the shower is used again.



” ifm is a partner with whom we have been working since the foundation of our company twenty years ago.

Important for the system: The ifm flow sensor provides the measured value for the exact dosing of the copper and silver ions.



*Maximum transparency:
the process parameters are clearly
shown on the display of the unit.*



Amsterdam Airport is home to the largest hotel in the Benelux countries with 750 rooms: the Van der Valk Hotel Schiphol. In recent years, the building complex has been renovated and expanded – and the water infrastructure has also been modernised, as hotel manager Bill van der Valk explains: *„Our hotel has been around for 30 years. We have detected elevated levels of legionella in the pipes of some of the older rooms, but were unable to achieve a significant reduction with the measures we had taken so far. Then we became aware of Holland Water’s solution, contacted the company and got to work together. With their system, we solved the legionella problem quickly and sustainably.“*

Spaarne Gasthuis

Change of scene. In Hoofddorp, not too far from Amsterdam, the „Spaarne Gasthuis“ hospital can be found. In relation to legionella, the focus here is on both the cooling tower and the drinking water system.

Cor Wegman is the Technical Department’s team leader. With his 15 colleagues, he takes care of maintaining the buildings and facilities and explains:

„We have particularly vulnerable people here in the hospital and a special duty of care towards them. We have a large cooling system here, which also includes a cooling tower. Good water treatment for the cooling tower is crucial, because this is where water vapour can get into the environment. We need to prevent legionella from multiplying. Holland Water’s Bifipro system was exactly the solution we have been looking for. Because we wanted to contain the formation of legionella in a sustainable and environmentally friendly way. The system saves

us the great logistical effort that came with using biosubstrates employed by us for legionella control. With the new system, we can reduce chemical water treatment.“

The hospital even received an award from the environmental authorities for these optimisations in environmental protection undertaken by Cor Wegman’s team.



The „Spaarne Gasthuis“ hospital near Amsterdam uses HW Bifipro® Cool in their cooling system to prevent water vapour which might be contaminated with legionella from entering the ambient air.

ifm successful in the field

These are just two of over 1200 buildings where Holland Water’s legionella protection is already in use. Included in every installation: a magnetic-inductive flow sensor from ifm. And this sensor supplies the measured value that is decisive for the process.

Mark de Vaal, Head of Sales – Hospitality & Leisure at Holland Water, explains the special importance of this sensor:

„We need precise information on the flow in the system. An example: little water is used at night, and in the morning everyone takes a shower, so a lot of water is used. Therefore we have to know exactly what the current flow is so that we can precisely dose the copper and silver ions. In addition to the current flow rate, the ifm sensor also provides peak values as well as the total flow rate, which we can then analyse in our system control on a daily, monthly and annual basis.“

Conclusion

No chance for legionella – with the HW Bifipro system, Holland Water has successfully achieved this objective. It is actively supported by the flow sensor from ifm, which provides the central measured value for this purpose. This is how **Mark de Vaal** sums it up:

„ifm is a partner with whom we have been working since the foundation of our company twenty years ago. We have gone through the entire development process of the HW Bifipro system with ifm. Every time we have questions, we can turn to ifm. And this has been working to our complete satisfaction for years.“