

# Supreme hotel relies on supreme water disinfection by Grundfos

THE BIGGEST 5-STAR HOTEL IN SOFIA DISINFECTS WATER WITH GRUNDFOS DOSING AND DISINFECTION SYSTEMS.

Kempinski Hotel Zografski is a 5-star hotel located in Lozenets, near downtown Sofia, Bulgaria. It is one of the most luxurious hotels in the capital of Bulgaria. It has 442 guest rooms, 10 conference rooms, 5 restaurants, 3 bars and the only Japanese garden in the Balkans.

The hotel was built between 1974 and 1979 to the design of leading Japanese architect Kisho Kurokawa (1934 - 2007) in the upper-class neighbourhood Lozenets.

As one of the leading hotels in Bulgaria Kempinski Hotel Zografski always strives for the welfare of its guests. Therefore the highest safety standards are applied to prevent eventual infections through showers or cooling equipment.

## THE PROBLEM

Naturally, the water we drink and shower in has to be clean if we are to stay healthy. Unfortunately, one of the most widespread health hazards in drinking water installations worldwide is connected to exceptionally resistant bacteria – legionella.

Legionella exist mainly in hot water systems with a low flow rate or areas of stagnation. A layer of slime in the water pipes called biofilm is the habitat for legionella and other microorganisms. The bacteria live, breed and thrive in biofilm in temperatures between 30 and 50°C and they constitute a severe health risk.

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### TOPIC:

Complete disinfection of drinking and cooling water in commercial buildings

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### LOCATION:

Sofia, Bulgaria

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### COMPANY:

Kempinski Hotel Zografski

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## THE SOLUTION

The Grundfos Oxiperm Pro system is the all round solution to the hazard of both legionella and other kinds of micro organisms. It offers the following unique benefits that remain unmatched by other disinfection methods:

Works on both bacteria and biofilm Affects highly chlorine resistant germs Efficient in areas of the pipe system with no flow (dead ends) No effect on the taste and smell of the water Sustained release effect for long-term disinfection

In 2009 Kempinski Hotel Zografski started its cooperation with Grundfos Bulgaria EOOD for building up new installations for water treatment system. Grundfos delivered and put following system into operation:

1 x Oxiperm Pro 60 g system with built in DDI 60 digital dosing pump 3 x DDI 5.5-10 digital dosing pumps for the three main hot water circuits 1 x DDI 60-10 for the pipeline of the cooling towers system Aqua cell of online measuring of the ClO<sub>2</sub> concentration in the main water supply pipe

On-site this system produces 60 g of ClO<sub>2</sub> per hour and at the same time the Grundfos system doses via self-made manifold from PTFE to the other four dosing stations.

With one generator Grundfos treats three different systems:

Main fresh water Three circuits of the hot water system Cooling water in the cooling towers

## THE OUTCOME

The complete dosing and disinfection system ensures safe and clean water to all its end users and hotel guests.

Hotel General Manager Stefan Schwind states: "Grundfos was very fast in quoting prices, strictly adhered to the delivery time schedule stated in the contract and secured assistance by the company specialists at the time of the start-up and commissioning of the pumps. In addition, the performance of the above mentioned pump equipment was up to our expectations. Grundfos has proved to be a reliable and professional partner and we can recommend it for any activity in the above-mentioned sphere."

## ADVANTAGES AT A GLANCE

The Oxiperm Pro offers superior water disinfection technology for all types of water systems. It has the following, unique features:

Destroys both bacteria and biofilm Use chlorine dioxide, which is extremely efficient, but has no effect on the taste and smell of water The robust design of the Oxiperm Pro

ensures high operation reliability and low maintenance costs User-friendly operation Easy installation with no interruption of the building's water supply