



DilliGent[®] LegioTec

Chemical-free Legionella prevention
for water circuits –
safe, efficient, long-lasting

The Challenge

It's a growing challenge to guarantee safe water for **drinking, showering and bathing in residential buildings, schools, hotels, public buildings and hospitals**. The 2011 Drinking Water Ordinance and the updated version from 2018 sets down provisions for **regular control** of drinking water in public and in private buildings. According to a parliamentary enquiry (LT-Drs. 15/3734) the annual rate of lung infections due to Legionella bacteria lies at around 32,000; between 5 – 10 % of these cases result in fatality.

Owners and operators are responsible for providing effective and sustainable solutions for the long-term, reliable protection of consumers and residents. In the fight against Legionella and other bacteria the **development of resistance** has become a problem. Conventional methods have reached the limits of their capacity. Heat-resistant Legionella or "sleeper" Legionella can survive even energy-intensive increases of the hot water temperature. **Renewed contamination** is unavoidable.

The Solution

The **Steinhardt DilliGent® LegioTec** uses innovative technology to combat bacterial pollution and to inhibit re-contamination within water circuits long-term. Long years of experience and expertise in the field of water treatment have been invested in the development and application of hydro-mechanical **DilliGent® cavitation technology**. The compact unit functions fully automatically **without the addition of chemicals**. The **DilliGent® LegioTec** units are simply connected to the hot water system and replace the circulation pump.

The Way

The **DilliGent® LegioTec's** mode of operation is based on physical active principles with no added chemicals. A partial hot water flow passes through the **DilliGent® LegioTec** unit for hydro-mechanical cavitation treatment. The bacteria are mechanically destroyed and removed from the water by means of oxidation. The **DilliGent® LegioTec** unit replaces the circulation pump, whereby the flow conditions within the piping system are streamlined. Over



Patents pending

The cavitation technology of the DilliGent® LegioTec unit eliminates organic impurities such as bacteria, germs, yeasts and moulds sustainably.

time, coatings such as biofilm or algae growth are gradually eliminated and re-contamination is prevented. The **DilliGent® LegioTec** unit can be exactly adapted to existing system volumes and is designed for either permanent or intermittent operation.

The Advantages

- fully automatic, compact unit
- can be integrated into any building
- low maintenance and operating costs
- pays off within a very short timew
- operating temperature (hot water) can be reduced by 5-10°C
- durable
- reliable protection for humans and buildings
- removes bacteria
- prevents re-contamination
- complies with permissible limits acc. to Drinking Water Ordinance
- free of chemicals
- no resistance problems