



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.



Patents pending

The cavitation technology of the DILLIGENT LEGIOTEC unit eliminates organic impurities such as bacteria, germs, yeasts and moulds sustainably.

Over 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