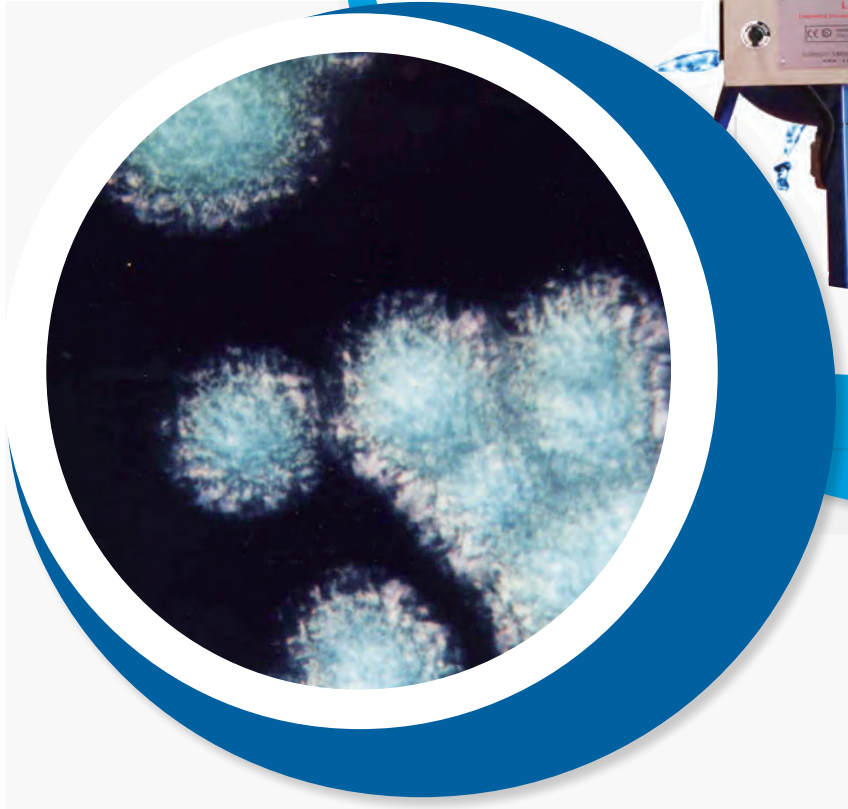


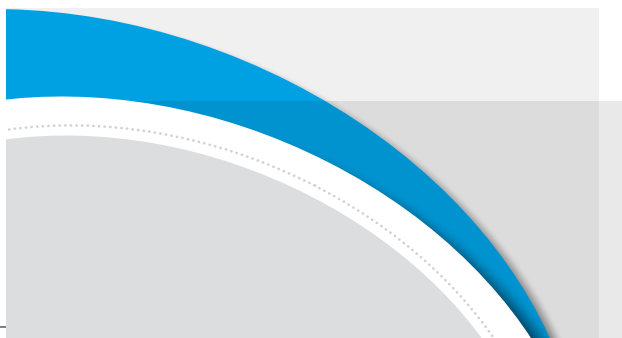


ELGRESSY
ENGINEERING SERVICES LTD.



SUPER L.P.B SYSTEM

Legionella Pneumophila Eradication by
Chlorine Dioxide Production



Super LPB System - *Legionella Pneumophila* Bacteria Treatment system for water systems

Addressing the problems of the *Legionella Pneumophila* (LP) Bacteria

The LP's breeding ground are water systems, both natural and manmade. In manmade systems - including hot water systems the risk of infection is increased greatly.

The LP bacteria is very resilient, reproduces at temperatures of 20°C to 45°C and can survive in water with temperatures of up to 70°C.

The bacteria can result in severe, often fatal, pneumonia to which the elderly, young children, smokers, alcoholics and those with a damaged immune system are particularly susceptible.

Super LPB System Provides the Right Solution at the Right Place

Elgressy's Super LPB system facilitates the automatic control and eradication of microorganisms, including *Legionella Pneumophila* bacteria, in water systems.

The system is based on an electrochemical process, which reduces significantly the buildup of sediment and scale within water systems.

Prevention of scale buildup and precipitation assists in the prevention of LP bacteria growth.

The Super LPB system is suitable for cold & hot water systems.

The system includes a digital chlorine dioxide measurement device, by which any required level of chlorine dioxide production is determined.

The Elgressy Super LPB system is patented in Israel, Europe and in the United States.

Tested and approved by the Spanish and Israeli Health Ministries and in Ensil University in Limoges, France.

Super LPB System Benefits

Removes various harmful bacteria's and health dangers

- By facilitating the efficient eradication of the potentially different kinds of bacteria's, the LPB system provides a safer and healthier environment.

Chemically free water treatment

- No chemicals are used in the process; so there is no transportation or storage of these dangerous and explosive chemicals and so the electrochemical process poses no threat to people or the environment.

Reducing scale build up and sediment

- As a by-pass treatment the system also removes scale buildups.

Prevents LP bacteria re-growth

- The system removes the LP bacteria's favorite breeding ground and ensures a bacteria free water supply.

Lower operating costs and a longer system life

- Operation is more efficient and less maintenance is needed, vital components aren't damaged.

LPB SYSTEM



STIRRING TANK with Chlorine Dioxide Control



L.P.B Installations (partial list)



Super LPB – The Electrochemical Process

The Elgressy Super LPB system destroys buildups of the LP bacteria, and prevents its reestablishment in water subsystems by using an electrochemical process.

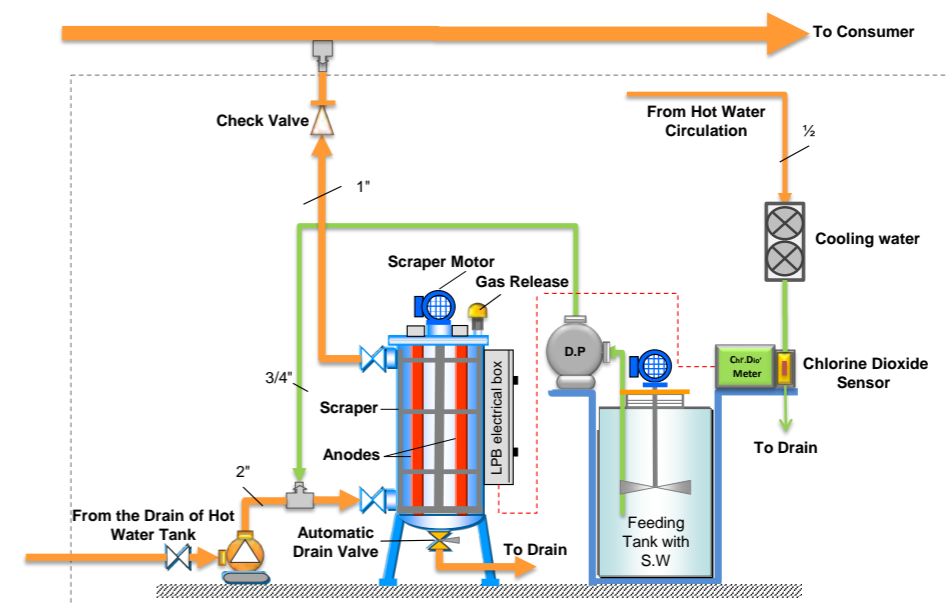
Three Step Process:

- Removal of *Legionella Pneumophila* bacteria growth media**
At the bottom of any hot water tank, there exists the perfect environment for the development of LP bacteria - sediment buildup. The LPB system prevents the buildup of sediment by causing turbulence at the water entry point thus preventing sediment and scale buildup and depriving the bacteria of their growth medium.
- Electrochemical disinfection treatment**
Inside the reaction tank are unique titanium and nickel oxide anodes, patented by Elgressy

Engineering. With a life expectancy of several years, these anodes do not cause corrosion or water contamination. When direct electric current is passed through the anodes a tiny and controlled amount of free chlorine (CL₂) is produced along with ozone, oxygen, radical oxygen and other oxidants which produces chlorine dioxide (ClO₂).

The Super LPB system includes a digital chlorine dioxide measurement device, which continually measure the level of the chlorine dioxide in the water and automatically control the following production level required. The Super LPB systems also precipitate the scale on the reaction tank inlet surface and deprive the bacteria of their growth medium.

- High temperature treatment**
As an additional safeguard, once the water has undergone treatment in the LPB system, it is pumped through heat exchangers where temperatures exceeding over 70°C are attainable and destroy any remaining bacteria.



Elgressy Engineering Services

Elgressy Engineering Services Ltd. has been active in the field of water treatment for over 37 years and has a reputation for innovation, quality and service second to none.

Elgressy develops and markets comprehensive solutions and systems for the treatment and prevention of common water related problems including: scale, bacteria and corrosion. Elgressy also provides solutions for the reclamation of water with a high concentration of organic compounds and waste water and its reuse.

Elgressy maintains a team of highly skilled and experienced professionals to update and develop new systems to meet the changing needs of our clients and the more than Thousands systems installed worldwide.



Elgressy Engineering Services Ltd.

Authorise Channel Partners

Daybreak Group of Companies

Unit No 106, Mahavir Industrial Est, Off Mahakali Caves
Road, Andheri East-Mumbai 400093-India

E: uday@daybreakworld.com

Ph: +91-22-26872217/18

HP: +919820013861/+919320013861

Design: Studio Perach