# **BIOSTATIQ**

PowerPack STATICON 2023 Catalog



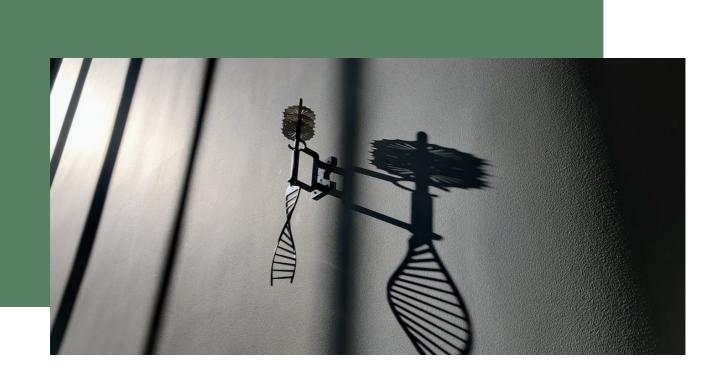
## **BIOSTATIQ**

#### **ABOUT**

BIOSTATIQ is a Danish company that is at the forefront of the sustainable revolution, providing solutions for a variety of industries with a desire to reduce their environmental impact.

The technology has been used for over a decade to prevent grease accumulation, reduce wastewater problems, and treat water systems without chemicals to decrease microorganisms and limescale accumulation.

From our Headquarter in Denmark we are working in close cooperation with the Danish production facility and with our foreign dealers to provide market leading solutions and service.



#### POWERPACK STATICON

PowerPack STATICON has been used for more than 15 years to achieve impressive results in the HORECA, Hospital, and Agriculture industries.

PowerPack STATICON is an electrostatic discharger reacting with liquids, solid materials, and air.

With a large variation in size, shape, and effect the PowerPack STATICON is always produced specifically for each case, as the desired effect and circumstances will vary from each individual case. From Biotech Innovations Danish manufacturing complex it is possible to ensure the product meets the highest demands of the industry.

The PowerPack STATICON is produced to be maintenance-free and is easy to install as it does not require to be built into the machines it is set to react with, but rather mounted on a desired location on the outside of the machine.

#### **Sustainable Development Goals**

PowerPack STATICON is a sustainable solution, as it does not require electricity and is almost maintenance-free. But more important it will reduce grease and chemicals in waste water discharged into the environment.

And by reducing the bacterial count in the water system the health-related problems imposed by waterborne microorganisms will be reduced significantly and can assist securing access to a cleaner water source.













## **GREASE**

#### SG Series 1

SG Series 1 located on the extractor hood provides a cleaner system by reducing grease accumulation within the ventilation system. The fat molecules will decompose into water, carbon dioxide, and a residue material.

SG Series 1 reduces the risk of fire, reduces odor from grease and Hydrogen Sulfide, and breaks down fat molecules into water and carbon dioxide.

- Reduces the need for cleaning the extractor's ventilation system by up to 80%
- Reduces the smell of Hydrogen Sulfide.
- Reduces risk of fire.
- Reduces grease accumulation on fan blades on the motor in the ventilation system which decreases power consumption.

#### SG Series 3

Grease traps form solid and hard grease crusts and coatings within a few months of use. The grease crusts need to be removed regularly and require several hours of maintenance to eliminate the risk of the crust damaging the grease trap.

By decomposing grease from the grease trap, the content of fat in the wastewater is decreased significantly to a level that is accepted by governmental official regulations.

- Decrease the content of fat residue in wastewater.
- Reduces cost of maintenance and cleaning by up to 80%
- Reduces the risk of the grease trap being damaged by hard crust.
- Reduces odor from the grease trap.



#### SG Series 1

We have multiple Power Packs Installed in our amusement park. They work beyond belief and are the best and most cost-effective initiative we have taken to save within the park.

The Power Pack mounted on the extractor hoods prevents grease built-up in the ventilation system and decreases the risk of fire and has reduced the cost of cleaning the entire system.



Bent Knudsen Technical Manager Danish amusement park,

#### SG Series 3

After the SG Series 3 has been installed I can conclude there are no odor nuisances at our facility. Furthermore, we do not need to clean the grease trap 3-times per year which decreases our expenses.

Looking at the great results we can now proceed with our intentions to install more PowerPack STATICONs at our other facilities throughout the region.



Benny Søder Head of Center for Real Estate Rigshospitalet, Denmark

#### <u>BioEraser</u>

"I would like to have the BioEraser installed in all new places. This must be seen in connection with our perception of that it easier to conduct preventive measures against limescale, bad ORP, and high germ counts, than it is to be affected by them and try to treat the problems ongoing. And even when the system is installed on an old water system, we can achieve faster and more efficient cleaning and increase water quality".



Ella Aagaard Petersen Manager Cleaning Department Rigshospitalet, Denmark

## **GREASE**

### SG Series 4

SG Series 4 is used in combination with the SG Series 1 on ovens, fryers, grills, and other industrial kitchen appliances to reduce residue coating from grease on the appliances.

Reducing the thin layer of grease found on appliances after many hours of work decreases the time used for cleaning and increases safety as the risk of fire, slippery surfaces, and smells is reduced to a minimum.

- Reduces the time spent cleaning.
- Reduces the smell of grease.
- Reduces risk of fire.
- Increase work environment safety.



#### SG Series 5

SG Series 5 is mounted on wastewater pipes and will decompose grease particles to  $H_2O$ ,  $CO_2$ , and a residue material.

The measurable content of fat is decreased to a level below governmental official regulation and is safe to discharge into the public wastewater system.

- Reduces the content of fat in the wastewater.
- Reduce the need for a grease trap.
- Eliminates odor from grease.
- Reduce wear and tear of the grease trap.



## SG Series 1

Installed on extractor hood



SG Series 5

Attached to wastewater pipes



## Case Story:

## **Department of Spinal Cord Injuries - Rigshospitalet.**

## The Challenges

- 1. Significant expenses used for cleaning and maintenance of grease traps and wastewater systems.
- 2. Odor nuisances from grease traps which were very noticeable for employees and patients.
- 3. The facility was built in 1952 and has not been modernized in decades. The risk of failure in the wastewater system is regarded as "High-Risk" due to the age and lack of maintenance.

### The Solution

<u>Decomposed Grease</u>: After installing the SG Series 3 in the grease trap, the old grease crust on top of the wastewater was decomposed into a soft mass and after 3 months the remaining grease was decomposed into a mix of water and protein.

<u>Environmentally friendly:</u> Danish regulations dictate that the content of fat in wastewater must not surpass 50mg grease per liter of wastewater discharged into the public wastewater system.

After 3 months the visible amount of grease was reduced significantly and the measured grease mg/ltr. wastewater is now below regulatory requirements.

Achieving this milestone is regarded *very important* as the hospital is working towards being more environmentally friendly and are dedicated to helping protect the local water system and the environment.



## RESEARCH & INSIGHT

STATICON has been tested and validated by several official entities and accredited laboratories to verify the effect.

## Danish Technological Institute (DTU)



A project investigating if STATICON can reduce the accumulation of grease in kitchen extraction systems.

"It was found that STATICON reduces the amount of grease and fat in the extractor hood and ventilation system and thereby reduces the risk of fire, cleaning, and energy consumption."



#### **Furofins Denmark**



Testing the PowerPack STATICON BioEraser system on main water intake and recirculation pump at the department of Spinal Cord Injuries - Rigshospitalet.

Eurofins Denmark performed measurements of the Aerobic plant count, Legionella, and the Redox potential. The test results are gathered in this report and shows a great decrease in the measured values.



## BioEraser

## Non-Chemical Water Treatment

With a BioEraser system from BIOSTATIQ, you will reduce and potentially eliminate the need to add chemicals such as chlorine to the water to reduce bacteria or use a water-softer system to reduce limescale problems.

The BioEraser system reduces the accumulation of limescale internally in the water system which will reduce biofilm created by microorganisms and eliminate the growth of bacteria.

The BioEraser system is a two-part system installed on the main water pipe inlet.

Reducing the accumulation of limescale internally in the water system will reduce general wear and tear of the pipes, water heater, fittings, etc.

- Decreases the levels of microorganisms in the water system (Aerobic Plate Count).
- Increases negative ORP and the levels of Antioxidants in the water system (Redox Potential).
- Reduces limescale accumulation inside the water system and limescale deposits externally.
- Reduces the need for water softeners and keeps the beneficial properties of calcium and other minerals in the water.
- Reduces cleaning expenses as limescale is unable to stick to surfaces.
- Decrease expenses of all materials and components in connection with the water system, as common limescale wear and tear is considerably reduced.



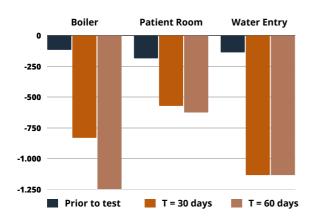
BioEraser system - Exhibition Model

## CASE - Center for Spinal Cord Injuries.

"We have experienced a great improvement in our water quality and can measure a significant decrease in the bacterial count, negative ORP has increased and limescale problems are decreased. This makes cleaning faster and easier. The benefits provide savings on cleaning, and maintenance and have improved the quality of the water.

By addressing the high bacterial count and increasing the negative ORP in the water, we have provided a better work environment and protect our patients and other vulnerable individuals.

Test results from the facility:



Redox Potential (mV)	Without BioEraser (Prior to test)	With BioEraser (T=30 days)	With BioEraser (T=60 days)
Boiler	-116,4	-830	-1246
Patient Room 8	-184,9	-570	-623,4
Water Entry	-136,8	-1132	-1132

\*Source: bit.ly/3Xay5z3

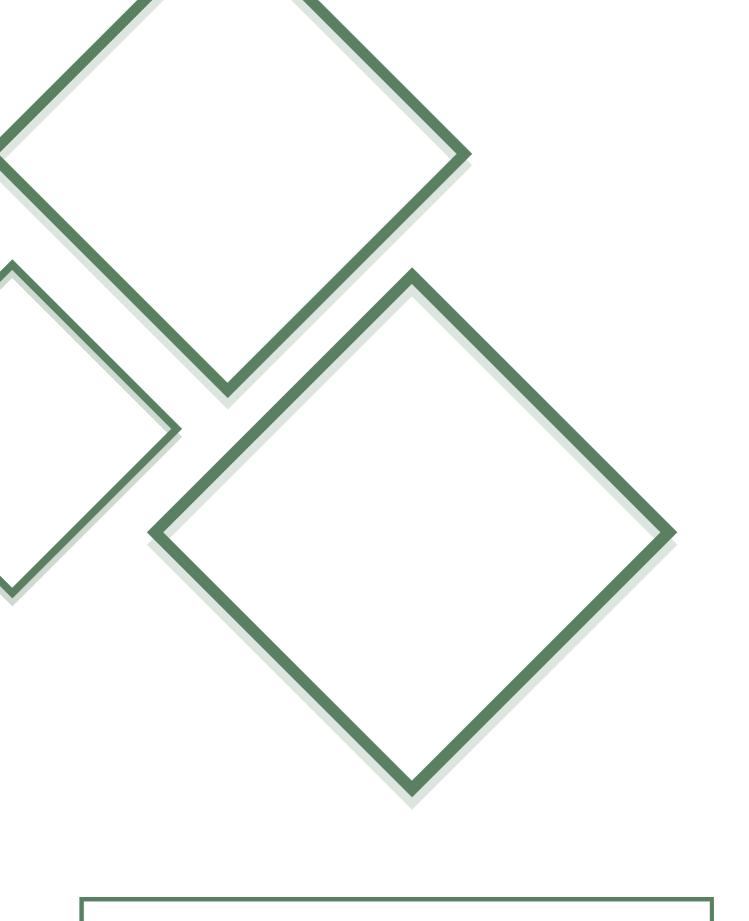


And by reducing the need for strong cleaning detergents to remove limescale the amount of chemicals in the wastewater is reduced.

Products such as the BioEraser system assist companies to reduce their environmental impact and help them prepare for a future with even more focus on the green transition."

Michael Madsen.
Technical operations manager
Rigshospitalet center for spinal cord injuries.





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