

**APPLICATION NOTE 145**

THE APPLICATION

Many Solutions for Many Problems

Bioionix develops liquid treatment solutions for seafood processing. With proven success in many seawater applications, Bioionix can treat the most delicate of waters needed for seed oysters to the harshest environments found in thaw waters.

There are many advantages when comparing Bioionix to other technologies. Unlike UV, HPP, filtration and other methods, the added benefit to using Bioionix is the residual disinfection it provides making the process more efficient and effective. These residuals have proven to not only continue disinfecting the liquid stream being treated but also disinfect product and equipment that it comes in contact with.

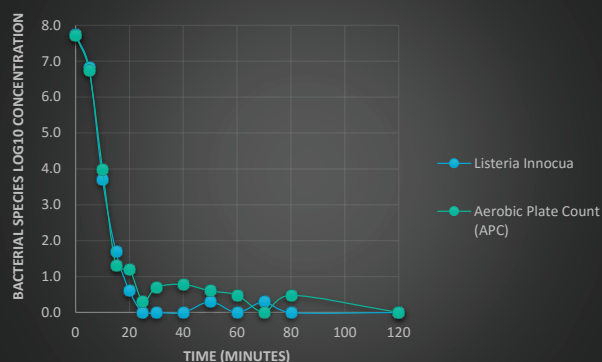
Bioionix can eliminate the need for those large expensive filtration systems or the cumbersome and labor intensive UV “solutions” that are typically used for treatment. Bioionix has the ability to take dirty processing liquids and recirculate them to maximize your operations efficiency or treat it as a



single pass, it's completely customizable to your application.

With our data capturing capabilities and sophisticated automation, you won't even know Bioionix is running. Advanced programing capabilities that are customized to your operation means you can easily intergrate into your existing HACCP program to streamline your operation. With multiple designs, no job is too big or too small for Bioionix to handle your liquid stream treatment needs.

Listeria and APC Disinfection Curves



Powerful Disinfection without Chemicals.

A breakthrough in process water microbial safety and reuse, the Bioionix system uses platinum catalysts to directly disinfect water or brine by generating a powerful combination of reactive oxygen and activated chlorine species right from the liquid itself. These Bioionix SuperOxidants™ attack microbials by complementary methods of action, including direct DNA destruction, cytoplasm impairment and cell wall disruption. Other SuperOxidants provide powerful residual disinfection.

SEAFOOD PROCESSING



Depuration

Used world-wide, depuration reduces the levels of harmful microbials in premium live mollusk product. By treating incoming water, Bioionix systems allow farmers to continuously use fresh or recirculated water encouraging a 24/7/365 farming environment. Unlike traditional treatment methods, Bioionix systems provide a residual effect enhancing operational performance. Also, Bioionix can simplify processes by treating a continuous source of fresh seawater that contains an essential food source for the mollusks.



Fillet Treatment

Further processing of fish increases the risk of contamination prior to packaging and storage. Bioionix spray tunnel systems treat the product all the way to packaging while reducing water usage and eliminating your existing chemical costs. With many operations located near a seawater source, Bioionix utilizes and repurposes this resource as the main source of liquid for your disinfection needs eliminating the need for fresh water.



Thaw Water

Even in the harshest thaw water environments, Bioionix systems can provide treated water prior to freezing product for further processing or straight to market. Through recirculation, Bioionix can continue to re-treat the water source reducing your water usage and eliminating costly and hazardous chemicals.



Grow Water

Many seafood operations require a contained seawater source for growing product. These processes use a large volume of water and require expensive filtration and treatment systems. Bioionix provides your operation with a disinfection step to allow you to re-use your water while not having to worry about the complications and risks of harmful bacteria and viruses destroying your valuable product.

BENEFITS

It's the Answer to Using Your Resources Better, Using Less and Using Again



BENEFIT 1

Bioionix systems are safe, environmentally friendly, and chemical free.



BENEFIT 2

Simple, high-quality design makes our technology easy to operate and maintain.



BENEFIT 3

Our oxidation process can handle the toughest liquid stream challenges.



BIOIONIX

Bioionix, Inc.
4603 Triangle Street
McFarland, WI 53558

T: 608-838-0300
F: 608-838-0301
bioionix.com