

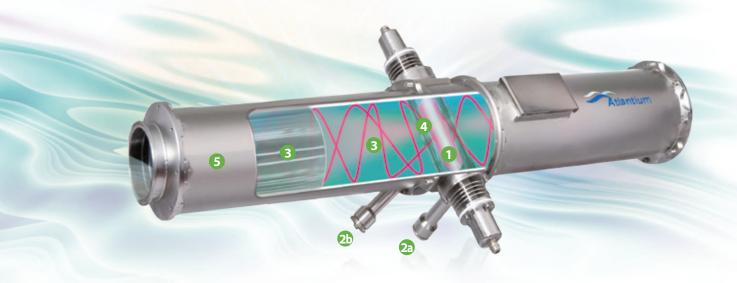
UV Water Treatment

Atlantium Hydro-Optic™ Solutions

Dairy Industry Pasteurize Your Water With Light Only Medium Pressure does more for less!

Sustainable Solution with Quick ROI

Atlantium's Hydro-Optic system can replace heat pasteurization of water for dairy processing. It provides water and energy savings, reduces downtime, streamlines operations, increases efficiency and assures the treatment reliability you need to protect your brand.



PMO Compliant for Dairy Use

- 1 Medium pressure high intensity polychromatic UV lamp with more UV power. Provides enough UV power for inactivating even highly resistant microorganisms and disabling their repair mechanism.
- Control software automatically adjusts the UV power to maintain the required dose all the time.
 - **a** Integrated sensor continuously monitors UV lamp intensity.
 - **b** UVT sensor continuously monitors water quality.
- Quartz disinfection chamber surrounded by an air block traps germicidal UV light rays and reflects them back into the water for longer light paths (more inactivation opportunities per UV photon) and uniform dose, attacking particles from all directions.
- 4 Thick quartz tube separates UV lamp from water chamber for quick & easy lamp replacement and avoids the risk of broken glass and mercury in the
- water.

Stainless steel housing meets industrial standards.

Atlantium applies fiber optic and hydraulic principles to UV system design to change the way UV is delivered, guaranteeing **uniform dose distribution** for complete microbial inactivation.

Fully automated and **engineered for energy efficiency**, Atlantium's award-winning solution has real time monitoring & control of all parameters – guaranteeing water integrity all the time, with automated data logs and regulatory reports.



The monitor displays the status of real-time data, including actual dose delivered

Easy to Use: Designed with the User in Mind

Fully Automated Dose Control

Continuous real-time monitoring of water flow rate, water UVT (UV transmittance) and UV lamp intensity – all factors that determine the actual minimum UV dose that the unit delivers – ensures that the water is receiving the appropriate dose for total microbial inactivation right now.

Compliance Reports at the Touch of a Button

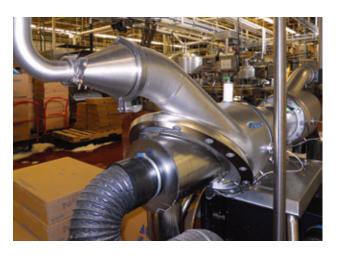
The data logging system enables traceability over time of all key data such as delivered dose, power consumption, UVT and flow rates among others, for analysis and proof of compliance with the PMO criteria including Appendix H electronic recording rules. No calculations – review data and print out reports.

Minimum Down Time

True in-line system using UV lamps securely positioned outside the water treatment chamber for quick lamp replacement (4 minutes) and better safety.

Easily Integrates with Plant Controls

The Hydro-Optic system easily integrates with plant controls. The system comes with many customizable options including external on-off to synchronize the unit with facility processes, as well as remote monitoring with real time access for up to nine Atlantium systems on a single interface, for PC and thin client networks.



About Atlantium

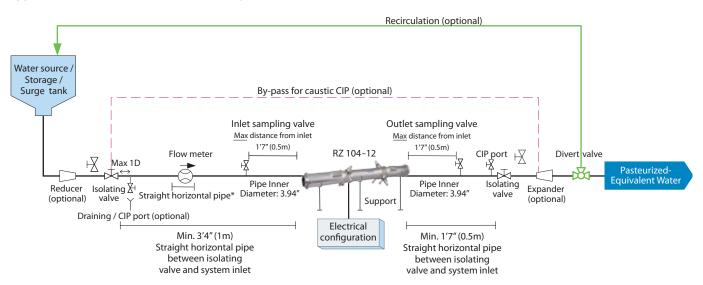
Atlantium Technologies Ltd., founded in 2003, provides water-dependent industries such as dairy, food & beverage, pharmaceutical and aquaculture, as well as municipalities, with UV (ultraviolet) based treatment to meet the growing need for safe water.

The company's cost-effective and environmentally-friendly Hydro-Optic™ solutions deliver unprecedented microbial inactivation, taking water safety to levels never before achieved with other UV systems.

Atlantium's Hydro-Optic system is field proven and validated to the highest regulatory standards including EPA, FDA and PMO. The company has an international customer base with installations all over the world.

For more information, go to www.atlantium.com

Typical Installation for Pasteurized-Equivalent Water



^{*} Per manufacturer's instructions

Take the Heat out of Pasteurization & Reduce your Costs

Atlantium Technologies' Hydro-Optic system delivers field-proven UV solutions for dairy applications. It has been validated to the highest regulatory standards, including the FDA and PMO 2009, for dairy water disinfection and water pasteurization replacement.

Replace Water Pasteurization & Heat Treatments

Atlantium's Hydro-Optic solution meets the PMO 2009 criteria for pasteurized equivalent water which authorizes UV to replace traditional pasteurization if it adheres to specific criteria. Atlantium's system complies, and is verified by third party validation. You get pasteurized-equivalent water on-demand, replacing the costly, energy-intensive heat pasteurization processes.

And if you currently batch pasteurize your water, you can gain a tank – all piped and ready to turn a profit!

Process Water Disinfection

Atlantium's Hydro-Optic system enables high microbial inactivation without the use of chemicals, for use in rinse and CIP applications. It achieve high log reductions and is particularly effective against chlorine-resistant pseudomonas strains.

Atlantium's system operates equally effectively for cold or hot water, no matter what the pH, and can be installed anywhere along the production line.

Primary Product Water Disinfection

Atlantium's Hydro-Optic UV system **inactivates the microorganisms that typically challenge dairy production** including Pseudomonas, viruses, Cryptosporidium and other spore formers, molds and algae.

Replace Chlorine

Atlantium's Hydro-Optic system provides a chemical-free alternative to chlorine for treating source water. It easily **inactivates microorganisms including chlorine resistant pseudomonas, cryptosporidium and giardia,** without carcinogenic or other regulated disinfection by-products. It inactivates viruses and heat resistant spores too.

Replacing chlorine for cottage cheese wash **frees you of the residual taste & smell and pipe corrosion issues** of chlorine use.

Post Active Carbon

Carbon is a breeding ground for bacteria prone to biofouling and, without heavy maintenance, subject to costly breakthroughs.

An Atlantium unit, installed immediately after the carbon filter, **protects against breakthroughs and reduces bio-fouling downstream**, so there is less demand for frequent and aggressive cleaning.



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