

Pulsed Light and Yogurt Safety: An Important Advance in Pre-fill Sanitization



The Challenge of Yogurt Packaging

Safety is important in all food industries, and that's especially true in the yogurt business. As a dairy product, yogurt is highly susceptible to contamination by microorganisms that can come from various sources, including the equipment used in production. This makes pre-fill sanitization of yogurt cups a crucial step in a safe production process. It eliminates potential contaminants in the yogurt cup right before filling, ensuring that the yogurt remains safe for consumption and complies with safety standards.

Traditionally, yogurt producers have relied on chemical cleaning for this critical step in the process. Now OEMs are discovering that XENON Pulsed Light offers an effective and superior alternative. If you're an OEM serving this market, Pulsed Light is an opportunity to differentiate yourself in the industry while helping to improve food safety.

The Pulsed Light Solution

XENON Pulsed Light is a chemical-free approach to sanitization that has been approved by the FDA for use with food products. It works by generating short, powerful bursts of high-energy UV light that kills or destroys virtually all known pathogens. All without the hassles or problems of chemicals. And, because Pulsed Light produces little or no heat, it can be used with a variety of materials, including heat sensitive plastics.

All of this makes Pulsed Light ideal for use in pre-fill sanitization of yogurt cups. XENON Pulsed Light systems work at production speeds and are easy to install in a filler machine line, conveyor system or elsewhere in the manufacturing process. And only XENON offers PurePulse™ technology, proven in hundreds of applications around the world.

Pulsed Light Benefits

- **Overwhelms DNA** repair mechanism with more photons fast
- **Effective sterilization:** Inactivates a wide range of microorganisms (3 to 6 log reduction)
- **Chemical-free process:** Eliminates the risk of chemical residues
- **Customizable integration:** Integrates into existing conveyor systems or other parts of the production line featuring one-across housings
- **Environmentally friendly:** Reduces environmental impact by avoiding chemical use and waste.
- **Thermal management:** Low temperature sanitization
- **Energy efficient:** Requires less energy compared to traditional sterilization methods
- **Speed and efficiency:** Faster than conventional methods, enhancing production throughput
- **Safe for more materials:** Ideal for a variety of packaging types, including those sensitive to heat or chemicals
- **Improves shelf life:** Potentially extends the shelf life of the product by reducing microbial load
- **User-friendly:** Simple to operate and maintain, reducing operational complexity



XENON's washdown Pulsed Light housing for installed on a yogurt filling line manufactured by Alfa Machine.

Designed for OEM Success

XENON Pulsed Light systems are easy to configure. You can choose from a wide range of high intensity pulsed UV lamps, housings and other options that let you mix-and-match a system to perfectly fit into any yogurt production facility. Almost unlimited pulse sequencing can be user-programmed, so you can achieve an optimum match of UV light delivery to the target.

Choices include a single-lamp or dual-lamp system. Dual-lamp systems are used to provide more options, such as multiple stations in batch processing applications. Our engineers can help you decide which system is right for your application.



Wash Down Lamp Housings

XENON offers food processors the ability to supplement existing decontamination procedures with the most flexible, effective Pulsed Light system in the industry. The food-grade wash-down lamp housings are constructed of stainless steel, designed to meet IP67 and NEMA 4X standards*. The lamp unit easily bolts onto existing conveyor systems, and can be positioned so as not to interfere with food moving on the belt.

*In a test designed to simulate aspects of IP67 immersion protocol, the wash-down housing window was determined to be waterproof to 0.16-meters. In a test designed to simulate aspects of NEMA 4X and IP66 wash-down protocol, the housing window is approved for the normal activities associated with a high-pressure wash-down utilizing up to 1200psi at a distance of 3-meters from the spray nozzle to enclosure seals.



Work with the Pulsed Light Experts!

With thousands of systems operating on production lines around the world, and over 60 years of experience in Pulsed Light technology, XENON has earned its reputation as the Pulsed Light Experts. Discover how XENON PurePulse™ technology can help your OEM business bring new and innovative solutions to the food processing industry. We can work with any food container that has a wide opening, including bottles and cans.

To learn more visit www.xenoncorp.com



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