

Disinfection

 Food &
Beverages Calasiao,
Philippines

Microbiological Contamination Disinfection at Coca-Cola, Philippines

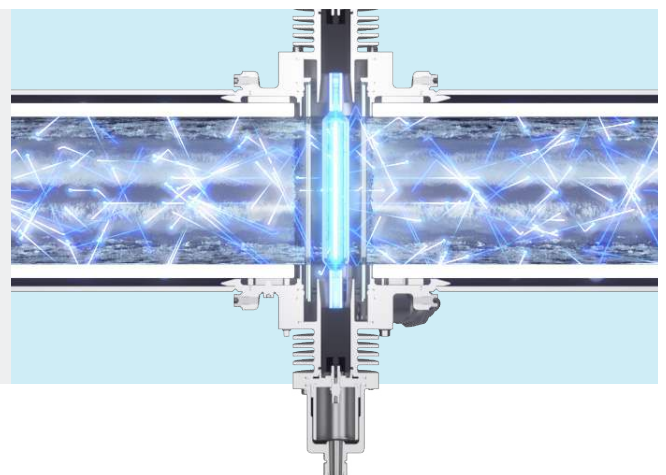
Preventing Microbiological Contamination in Coca-Cola's Philippine Plant

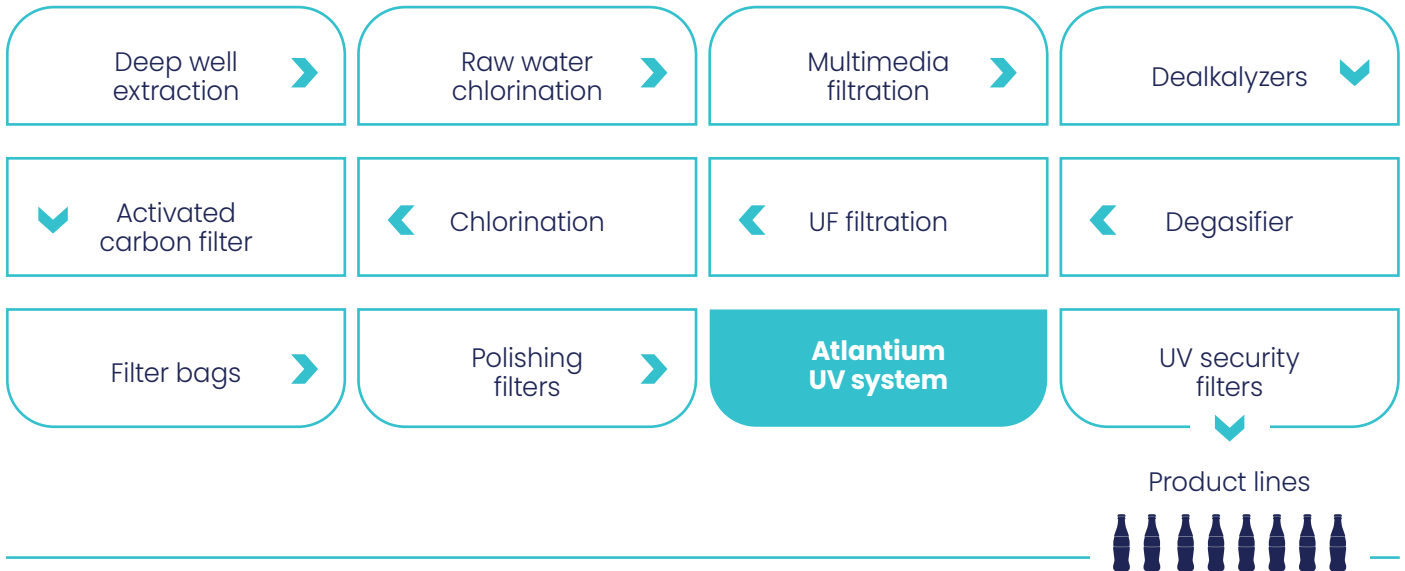
Following deep well extraction, the water used in Coca-Cola's production process underwent an extensive multistage treatment process including chlorination, multimedia filtration, UF filtration, and more. In 2013, one plant of Coca-Cola in Philippines was shut down for few weeks with a major challenge of microbiological contamination caused by *Pseudomonas aeruginosa*, a ubiquitous and opportunistic pathogen often found in natural waters such as lakes and rivers, which can be dangerous to human health. The pathogen's presence in the process water led to the bottling plant being shut down for a number of weeks.

The Solution

To address the issue, the plant coordinated with Atlantium and its local partner, TEXIN Inc., a local water filtration company, and installed the Atlantium RZ163-11 HOD™ (Hydro-Optic Disinfection) UV system within 4 days in February 2014. The system was vertically installed after the polishing filters and before the last processing stage, UV security filters, before the water was transferred to the production lines.

The HOD system effectively inactivates pathogens by combining ultraviolet water disinfection technology with hydraulic and optic principles. The system features the unique Total Internal Reflection (TIR) technology that recycles UV light energy, ensures homogenous UV dose distribution, provides superior power (kW) efficiency compared to traditional UV, and achieves unprecedented micro-organism inactivation.





Results

Following installation, the plant's problem with microbiological contamination was resolved and the plant has continuously operated with no shutdowns due to microbiological contaminants to date. In 2023, the system was changed to a horizontal setup, for easier access during maintenance and to allow easier connection to their security filter after UV.



Atlantium RZ163-11 vertical system installation in 2014 with 250 gpm flow rate



Horizontal system installation in 2023

About us

For more than two decades, Atlantium Technologies has helped to ensure water safety with its innovative HOD™ (Hydro-Optic Disinfection) UV technology and novel approach to performance, monitoring, and control. Atlantium's superior, environmentally friendly water treatment solutions ensure stable, efficient, and dependable production.

With thousands of full-scale installations for leading brands in various industries globally, we're committed to consistently meeting our customers' water quality needs, ensuring pure results.

