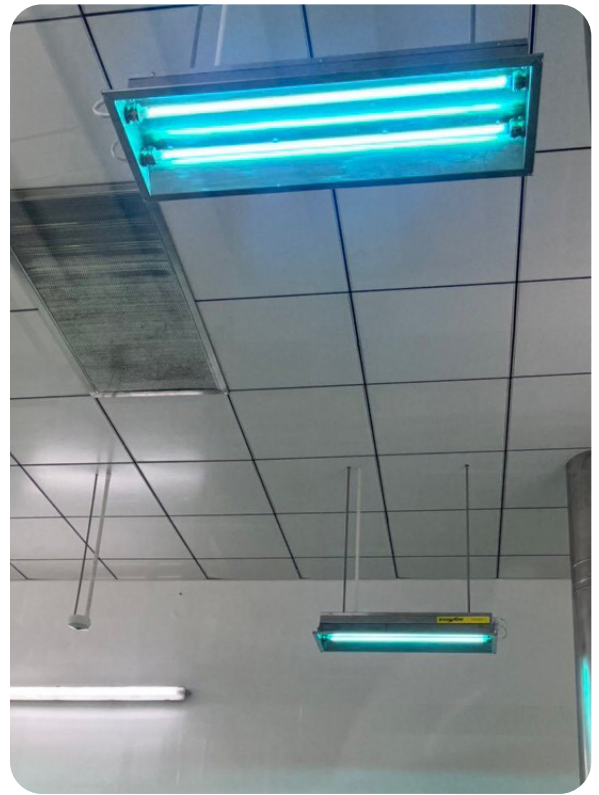




First and Best in UVC for HVAC

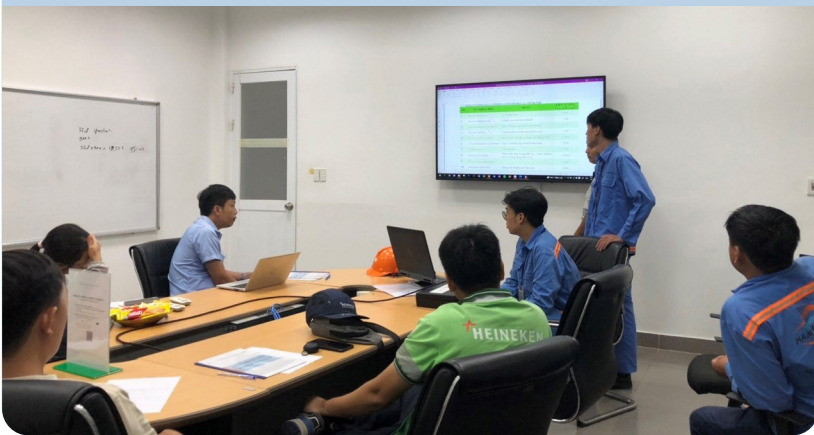
Superior disinfection at Heineken® Brewing utilizing Steril-Aire UVC



Steril-Aire's Double-Ended UVC Ceiling Mounts were the solution of choice, due to KG pre-mix room not having an AC system.

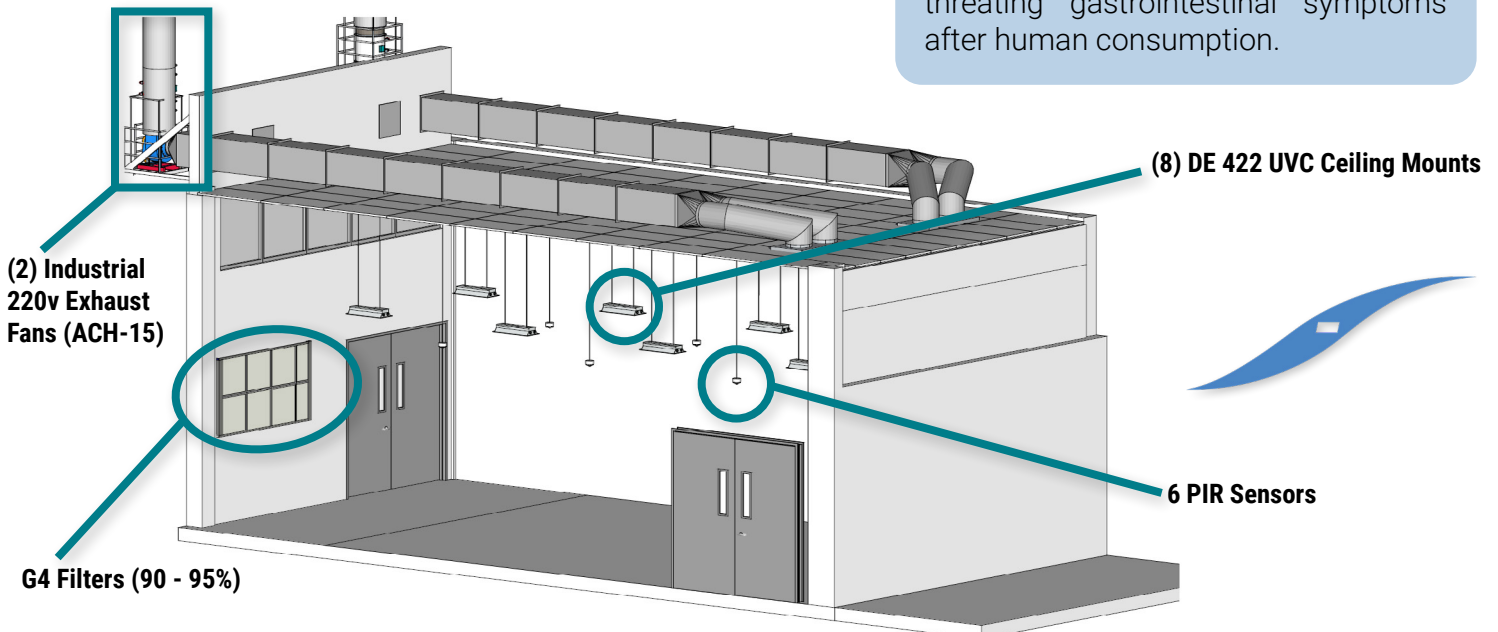
Background

Heineken®, founded in Amsterdam during 1864 by Adriaan Heineken, has been a staple in the world of beer. Now, Heineken® is brewed all over the world in many countries, including five factories in Vietnam. Steril-Aire Partner, Nam Hai Dragon Trading Services Co., Ltd. was elected to bring their expertise in surface and air disinfection with UVC to Heineken of Ba Ria Vung Tau brewing facility. As pictured here, Nam Hai Dragon and Heineken worked closely to develop a high performing disinfection system to maintain the integrity and refreshing taste of their beer.



Problem

Heineken goes through many processes before making it into a chilled glass and quality is important factor for each step. The Vietnam facility found an excess of amount of gram-positive bacteria, *Bacillus subtilis*, in their KG pre-mix room, which although commonly found in soil and human GI tracts, higher levels can affect the flavor and brewing process and can also cause non-life threatening gastrointestinal symptoms after human consumption.





Steril-Aire UVC Solution

Some requirements of the application were to design a solution that can be turned off by an interlock switch or triggered off by the PIR sensors for employee safety as well as to meet FDA food safety recommendations. Nam Hai Dragon and Heineken concluded that eight Steril-Aire Double-Ended UVC Ceiling Mounts with sleeved emitters was the best solution to mitigate the bacterial problem in the KG pre-mix room.



Results

Upon installation of the UVC system and other safety components, the KG pre-mix room was tested through a micro analysis method to determine the microbial criteria. An air sampling was performed by PCA on a mWLN sample plate which was at 2m³ atmosphere and incubated at 30°C for 2 days.

Microbial criteria:

- Air sample after 15 minutes during UVC system on continuously: 0 colonies
- Air sample after 15 minutes during a working shift, UVC system off: less than 5 colonies

Both criteria's have easily passed with Steril-Aire UVC and Heineken continues to have a safe, FDA acceptable level of bacterial amount in their KG pre-mix room, producing high quality, great-tasting Heineken beer.

ZERO bacterial colonies after 15 minute air sample!



UVC Radiometer testing the UVC Intensity



Double-Ended UVC Emitter as seen in the DE Ceiling Mount

STERIL-AIRE®

25060 Avenue Stanford, Suite 160, Valencia, CA 91355
818-565-1128 | salesorder@steril-aire.com | steril-aire.com

Learn More



Registered to
ISO 9001:2015



Registered to
ISO 14001:2015