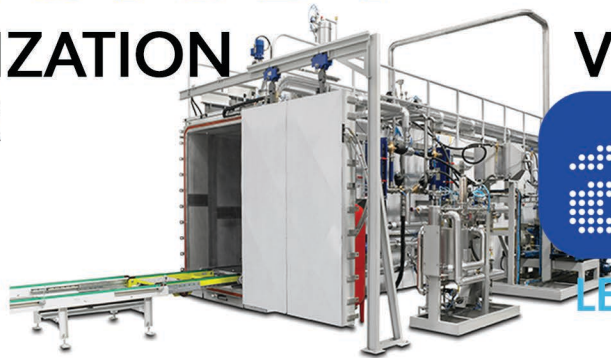


CASE STUDY

EO STERILIZATION CHAMBER



VENTED STRETCH FILM



THE PROBLEM

There is a need to improve efficiencies by reducing the duration of the entire EO sterilization process, without compromising the sterilization level requirements. The current process causes extended lead times and delays in shipping customer orders.

THE PROCESS & ISSUES

The Ethylene Oxide Sterilization Chamber process takes a long time especially when the pallets are wrapped in traditional pallet stretch film – up to 60 hours total.

- Pallets of product are loaded into a sealed chamber, where ethylene oxide (EO) is introduced for 8 to 12 hours.
- When the sterilization cycle is complete, an additional 4 to 8 hours is required to remove the EO gas using an air & water scrubber to ensure air is cleaned to safe levels.
- Next, the pallets remain in a separate enclosed room for another 12 hours for further air scrubbing to eliminate any residual EO gas.
- After this extended process, the pallets are finally shipped to the customer. However, once the trailer returns, it must sit in the yard with its doors open for an additional 24 hours before it can be reloaded for the next shipment.

THE SOLUTION & RESULTS



AIRFLOW vented stretch film allows ethylene oxide gas to circulate freely in and around the cases within the sterilization chamber, reducing the amount of time products need to remain in the chamber and the amount of EO gas used.

Achieved a 50% reduction in overall processing time, enabling faster delivery of products to customers.

Trailers could return to service in just 6 hours instead of the previous 24, significantly improving turnaround.



A dramatic improvement in efficiency has resulted in higher profitability and a stronger bottom line.