



Case study

Excellent hygiene in the food warehouse



Customer

ES3



Location

York (USA)



Sector

Third party logistics



Dust reduction

80 %

At a glance

“Our mission is to use innovative technologies. The installation of the air cleaning devices from Zehnder Clean Air Solutions has helped us enormously and gives us a competitive edge.”

Mark Franke, Senior Director in Engineering & Maintenance

Challenges

Maximum cleanliness is the top priority here in order to satisfy customers and pass audits by the authorities, such as the Food and Drug Administration (FDA). However the high level of dust in the distribution centre led to enormous cleaning costs and massive, costly wear and tear on the equipment. ES3 also wanted to reduce dust to provide a more healthy environment for employees, which often exceed FDA requirements.

About ES3

Its York facility is, at 1.5 million square feet, the largest automated multi-manufacturer food warehouse in the world, serving more than 60 manufacturers. ES3 has the capability to store up to four hundred thousand pallets of non-perishable food items at any one time at this facility, which ships approximately five million cases per week for clients in the food service industry and manages more than 20,000 items.

Benefits

With the installation of air cleaners from Zehnder Clean Air Solutions, the amount of dust in the distribution centre was reduced by 80 %. This has led to very high customer satisfaction, as the goods are delivered in flawless condition. In addition, safety and hygiene have been significantly improved – a must in the food industry. Cleaning is carried out less frequently than before and the machinery needs less maintenance. It all adds up to significant costs savings and a healthier, cleaner working environment.



Challenges

Cleanliness, naturally, is imperative in a facility where food products are stored.

“In addition to maintaining standards that keep our customers and suppliers satisfied, we are regularly subjected to inspections from industry agencies such as the Food and Drug Administration (FDA) and the Association of International Bakers (AIB), as well as audits from individual manufacturers, customers and retailers,” says Mark Franke, Senior Director of Engineering and Maintenance for ES3.

In a facility the size of ES3’s York warehouse – which sees 1,000 trucks in and out every day – keeping dust and dirt away from product and under control had become a major operational issue and expense.

Weekly audits in the pallet resorting area, which is next to an area of the warehouse where product is stored, **showed a significant amount of dust, both airborne and on the flat surfaces, causing numerous problems:**

- High haze levels in localised areas of the facility where pallet handling occurred.
- Physical barriers had to be set up to protect the nearby food storage area from dust.
- ES3 was spending thousands of dollars a day on manual cleaning.

- ES3 was experiencing excessive and costly equipment wear and tear due to the accumulation of dust on pallet jacks and fork lifts.

ES3 needed a solution that would provide the level of dust removal required to create a healthier environment for employees, keep the building food-safe and inspection-ready and meet ES3’s high standards for cleanliness, which typically exceed FDA requirements

Solution

One of ES3’s largest clients solved a similar environmental issue in its European facility by installing Zehnder Clean Air Solutions with great success. ES3 reached out to Zehnder just as the company was looking to expand into the U.S. “We monitored ES3’s York location for 10 days,” says an expert from Zehnder Clean Air Solutions. “We confirmed the pallet and resorting area did, indeed, have high levels of dust.”

Zehnder Clean Air Solutions were installed, along with two remote dust-monitoring sensors that provide real-time feedback.

Results and added value

Within just a few weeks of the installation of the Zehnder Clean Air Solutions, ES3 saw **noticeable improvements:**

- An 80 % reduction of dust in that area of the warehouse.
- A very high level of customer satisfaction with the product being delivered to them.
- Dust levels in the workspace utilised daily by nearly 1,400 ES3 employees no longer presented a safety concern.
- ES3 was able to remove the physical barriers and redeploy sanitation labor to other critical areas of the building.

Feedback from both ES3 customers and employees was immediate and extremely positive.

“Our mission is to leverage innovative technology to eliminate loss and waste,” says Mark Franke. “Clearly, installing the Zehnder Clean Air Solution helped us tremendously to do just that. To have technology nobody else has gives us a competitive edge. We are very much looking forward to expanding our business relationship with Zehnder.”