

Case Study

Food Manufacturing Facilities



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This major food manufacturing facility was experiencing issues with performance of its air delivery system. MANN+HUMMEL were asked to help.



PROBLEM

Poor air quality causing unsafe work environment



SITE

Food manufacturing facility in the Northeast



OUTCOME

Products are safe and secure from airborne contaminants and efficiently maintaining their air filtration system

Immaculate air quality in food manufacturing facilities is not only a regulated standard by the FDA but also a great concern and focus for our consumers. At MANN+HUMMEL, our Air Filtration Americas team excels at providing solutions to ensure the purest air and highest level of safety for our customers.

Due to the nature of their facility and the products created there, the manufacturing plant exhausts a large amount of air, and their HVAC unit brings 100% of their air in from outside rather than recirculating the air within the plant. When bringing in that outside air, they must filter out bugs and other airborne contaminants, including those impacting their air quality due to the railroad track located next to the facility.

The food manufacturing facility also produces an excess amount of oil that is exhausted on the facility's roof. The oil clogs the filters, therefore requiring the plant to change their filters as often as every 2 months. Moisture was also a concern for the facility when bringing in outside air. The cardboard frames on the air filters they were using became soggy and as dirt and oil accumulated in the media, the pleated filter failed catastrophically in less than 2 months (see image included).

In addition, the food manufacturing facility also found that their air filters had been shifted of place. This shift occurred due to the moisture causing a catastrophic failure of the filter frame, creating bypass through the space between the pleats given the lack of a tight seal, which meant they were not actively filtering out particles and contaminants entering their building. This created potentially hazardous conditions for their food manufacturing processes and the products they were producing.

They knew they needed to try a new strategy and thought to try the industry known Tri-Dek 2 ply panel. When speaking to the MANN HUMMEL distributor who audited the facility after necessary filtration changes were made, the distributor said, "The Tri-Dek link gives you true system efficiency. The links allow for no gaps and therefore block all contaminants from coming through." After using the Tri-Dek 2 ply panel, the food manufacturing facility's HVAC system efficiency and filtration improved due to the Tri-Dek filters' 'self-sealing' properties, thus eliminating air bypass and reducing the amount of contaminants in the air. The Tri-Dek filters' moisture-resistant properties also helped due to its ability to handle their excess oil and moisture issues.

Now, the food manufacturing plant is keeping its products safe and secure from airborne contaminants, efficiently maintaining their air filtration systems.

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BEFORE M+H FILTERS



AFTER M+H FILTERS



AFTER M+H FILTERS



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