

HVAC SYSTEM REDESIGN

ABOUT THE CLIENT

EAD helps a leading provider of ingredients and agricultural solutions enhance the sustainability of the world food chain, supporting their facilities with multi-discipline engineering, project management, and construction management solutions.



SERVICES

Project & Construction Management
Engineering

HIGHLIGHTS

- Served as general contractor of chilled water AHU replacement & HVAC system redesign
- Saved \$270,000 in structural fabrication work
- Provided over \$112,000 in value engineering

PROBLEM TO SOLVE

Faced with a rapidly deteriorating roof, the ingredients and agricultural solutions provider turned to the experts at EAD for engineering design services and to execute the complicated removal and replacement of six chilled water rooftop air-handling units at their facility.

APPROACH & SOLUTION

EAD replaced 32,000 sq. ft. of the roof and employed ground-based structural platforms to reduce the roof load. The work was completed in phases, with the critical construction activities and tie-ins carefully coordinated during facility downtimes to keep the facility operational throughout the entire construction process. A new humidification system with deionized water was installed to enhance the operational efficiencies of the existing facility equipment.

EAD also redesigned and managed the replacement of the rooftop HVAC system, replacing portions of the ceiling and implementing and programming a new HVAC controls unit that tied into the existing system. Through identifying portions of the third party design that could be modified or eliminated, we were able to provide over \$112,000 of value engineering suggestions. We also identified deficiencies in the building structural design related to the existing underground facilities which were addressed through working closely with the building designer.

RESULT & BENEFIT

Although the time needed to perform the work pushed back the project schedule, our advocacy for our client's best interests saved them more than \$270,000 in structural steel fabrication work. At the conclusion of the project, the ingredients and agricultural solutions provider expressed pleasure about the cost savings. They also praised the way EAD managed the complicated construction project with hygienic construction techniques that reduced downtime.

