

COOLING SYSTEM DESIGN & HVAC SYSTEM UPGRADE FOR PHARMACEUTICAL TEST LABS

ABOUT THE CLIENT

EAD supports a global Fortune 500 health solutions provider, delivering engineering and project management services for small to large-scale capital projects. Our team works remotely and fully embedded on-site to help further their mission to develop innovative medicines, vaccines, and health products that improve the lives of humans and animals.



SERVICES

Mechanical Engineering
Electrical Engineering

HIGHLIGHTS

- Conducted field investigation and developed engineering solution for faulty HVAC system
- Upgraded system and resolved cascading pressure control issues
- Delivered cost savings by eliminating need for additional upgrade projects

PROBLEM TO SOLVE

Our client discovered that the air handling units in a critical vaccine production facility had not been properly upgraded in line with their recent facility system expansion projects. They found it difficult to maintain the required cascading pressure control sequences between the high-hazard areas of their plant and locate spare parts to maintain their aging units.

APPROACH & SOLUTION

EAD conducted a detailed on-site field investigation, collecting information dating back to the previous facility owners' installations to establish a project baseline and document the existing conditions. Our analysis identified not only the anticipated mechanical issues with the HVAC system, but also significant power distribution problems. The project scope was expanded to include the replacement of a transformer and backup generator to support the new HVAC equipment and mitigate the risk of an electrical bottleneck.

RESULT & BENEFIT

By project completion, all four HVAC systems were fully upgraded, resolving our client's issue with maintaining the cascading pressure control sequences. Our engineering solution was so effective that it eliminated the need for additional upgrade projects our client had outlined in their capital expense plan, delivering a significant cost savings.

