

nVent RAYCHEM Heat Management Solutions Provide Energy Efficient and Reliable Airport Jetway Winter Operations

Essential Performance
for Infrastructure



PROJECT DETAILS



Location:
Texas



Applications:
Jetway Water Supply Lines Freeze Protection



Contract scope:
Design and Product Supply



Technology:
nVent RAYCHEM XL-Trace Edge Self-Regulating Heating Cable, Advanced Controllers



Completion date:
2023 First Phase, Subsequent Phases Ongoing

KEY CHALLENGES

Whereas, historically a major airport in Texas didn't need to be concerned with frozen water supply pipes, in December 2022, an extended arctic cold front hit Texas and froze jetway water lines that refill airplanes in between flights. This prevented planes from being able to take off. Since then, the airport officials realized that they needed an efficient winter safety solution that could verify operational status in real time, prevent water lines from freezing, and thus prevent disrupting their essential operations.

SOLUTION

Recognizing the benefits of working with heat management system experts, nVent was awarded this project based upon our proven record of innovative solutions and success with tracing the grease waste lines for the airport's food service areas.

The Airport's Engineering and Management Team collaborated with nVent RAYCHEM design experts to develop a cost efficient and robust solution that would properly protect the water lines from freezing and regularly test and communicate the status to the team. Engineers standardized on RAYCHEM XL-Trace Edge CR self-regulating heating cables and the robust C910 controller solution with automated testing and advanced communication features. The system operates only when ambient temperatures warrant, which allows for the most energy efficient operation possible. The automated testing is set to occur weekly so that any potential issues can be identified and addressed before winter weather rolls in.

PROJECT FACTS

To meet the essential performance needs of this world class Airport Terminal, our nVent RAYCHEM heat management solution included:

- Engineering design experts providing optimized design using TraceCalc Pro For Buildings Software and service support to educate airport personnel on proper inspection and installation/repair procedures
- nVent RAYCHEM XL-Trace Edge cut to length self-regulating heating cable (circuit length varies depending upon jetway size)
- nVent RAYCHEM C910 Controllers (One per jetway)
- nVent RAYCHEM easy to install RayClic-PC Power Connection

BENEFITS

We met the customers' essential performance requirements for jetway safety, operational reliability, automated testing and energy efficiency with our optimized design and proven complete heat trace systems. With our solutions, their jetways were able to deliver water to planes without disruption during the winter of 2023-2024.



RayClic-PC Power Connection



XL-Trace Edge



C910-485

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