

Greenheck Project Profile

Central Wisconsin Airport (CWA)

Mosinee, WI

- **Engineering Firm:**
JDR Engineering, Inc.
Madison, WI
- **General Contractor:**
J.H. Findorff & Son, Inc.
Wausau, WI
- **Mechanical Contractor:**
Best Mechanical Services
Oshkosh, WI
- **Greenheck Representative:**
Vyron Corporation
Green Bay, WI



Central Wisconsin Airport, Mosinee, WI

The Challenge

- **Improve ventilation in the concourse to increase the thermal comfort.**
- **Add a distinctive look that accentuated the remodeling project.**
- **Eliminate cooking odors.**
- **Expand commercial kitchen capabilities in the concourse.**

Central Wisconsin Airport (CWA) in Mosinee, Wisconsin, is a regional airport offering travelers access to destinations around the world. Safety, comfort, and convenience are reasons why more than 280,000 people use the airport annually. As more travelers use the airport, the need to provide for their comfort grows, prompting the airport to address increasing complaints about cooking odors and thermal comfort in the concourse.

A restaurant, the Blind Rooster Cafe + Market, located in the CWA terminal serves a variety of food items to travelers and people in the surrounding area. The restaurant draws many people, but it is not always convenient for travelers in a post 911 era.

The airport added a small kitchen in the concourse operated by the restaurant. It is quite successful and growing. However, increasing kitchen size to accommodate improved menu offerings also drew increased criticisms about cooking odors from travelers, becoming their most frequent complaint.

Thermal comfort in the concourse area also was a concern. The concourse is a very large, open space with high ceilings and significant use of glass window walls. However, the large space is susceptible to uneven temperatures affecting thermal comfort. Adequate circulation also was a challenge, adding to discomfort for travelers waiting to board flights.



Greenheck's Solution

● (2) High volume low speed (HVLS) fans, model DC-5

CWA updated the 20-year-old HVAC system in the concourse area but uneven temperatures still caused thermal discomfort. Greenheck's DC-5 HVLS fan addressed this issue. The two DC-5 fans with eight-foot airfoils reduced air stratification, providing thermal comfort by gently moving air in the space with a maximum 29,000 cfm. The DC-5 is licensed to bear the AMCA seal for Circulating Fan Performance and weighs less than 100 pounds allowing for easy installation.

Aesthetics was another important consideration. With finish options for every portion of the fan (winglet, airfoil, downtube, hub plate and universal ceiling mount), the DC-5 fans complemented the remodeled interior.

(3) Exhaust fans, models G and CUE

(1) Wall canopy hood, model GHEW

(1) Heat & condensate hood, model GD1



(1) Ansul® R-102 fire suppression system

(1) Vari-Flow air management system

(2) VCD-23 dampers

CWA added appliances in the kitchen to accommodate an expanded menu in the concourse concession area. The new appliances required increased ventilation and fire suppression. Greenheck used several products to achieve the correct ventilation and fire protection. Model GHEW wall canopy hood with the Vari-Flow air management system, and the Ansul R-102 fire suppression system, covered the grease-producing appliances.

The hood, designed for grease-laden cooking, uses the Vari-Flow air management system to regulate airflow to match peak kitchen usage, reducing energy costs. Should a fire happen, the Ansul R-102 with eight nozzles protects the desired cooking equipment, doing so cost-effectively. Two roof-mounted model CUE fans exhaust contaminated, grease-laden air, removing grease and cooking odors from the concourse. The Type II canopy hood (GD1) removed moderate condensation from dishwashing equipment in tandem with the roof-mounted model G fan, exhausting it into the atmosphere.

The Results

Best Mechanical, Inc., project manager, Mike Meehan stated, "We are very satisfied with Greenheck equipment. I wish I could use Greenheck equipment

for every project." CWA airport director, Brian Grefe, was very pleased with the project. The ability to use different colors for the fan was particularly pleasing.

"It matches very nicely with the color scheme of the concourse, and the controls for those fans were very intuitive and easy to use."

