



CaseStudy:

Quick Serve Restaurant

Chateaugay, Quebec

Summary -

Equipment on Site:

20' x 9' x 7' Freezer

Equipment Applied

(1) KE2 Evaporator Efficiency controller

Results

- eliminated icing issues
- reduced defrost cycles by 70%
- more stable temperature
- data logging eliminated need to manually record temperatures

This Quick Serve Restaurant (QSR) in Chateaugay, Quebec is one of the over 4,000 in the chain in the U.S. and Canada. The fast-paced restaurant, which specializes in baked goods and home style lunches, was plagued by a walk-in freezer with severe icing issues that hampered system performance and created a potential hazard to employees.

Réfrigération Amesse, Inc was called in to correct the system's issues. Réfrigération Amesse, a progressive contractor in the Chateaugay area, chose the KE2 Evaporator Efficiency (KE2 Evap) controller to handle the job. Having previously learned about the KE2 Therm product technology, they saw the technology as a major refrigeration breakthrough. To date Amesse has over 200 KE2 Evap installations.

Prior to the KE2 Evap installation, the freezer was experiencing 5-6 defrosts per day. The KE2 Evap reduced that number to only 2 per day. See Figure 1 & 2.

Figure 1 Before

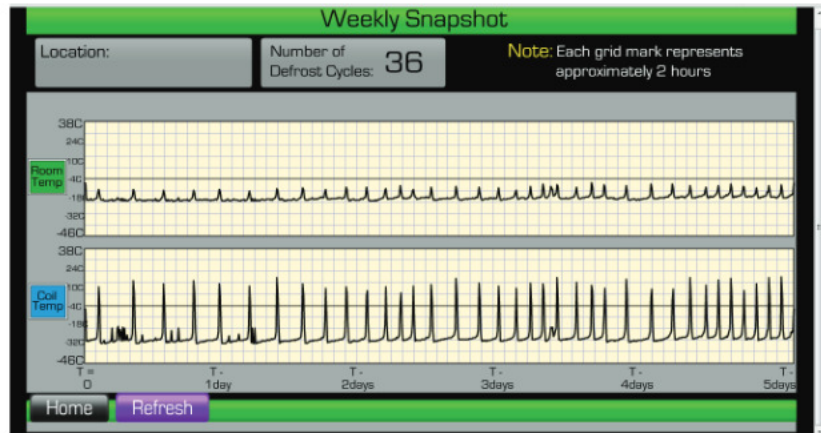
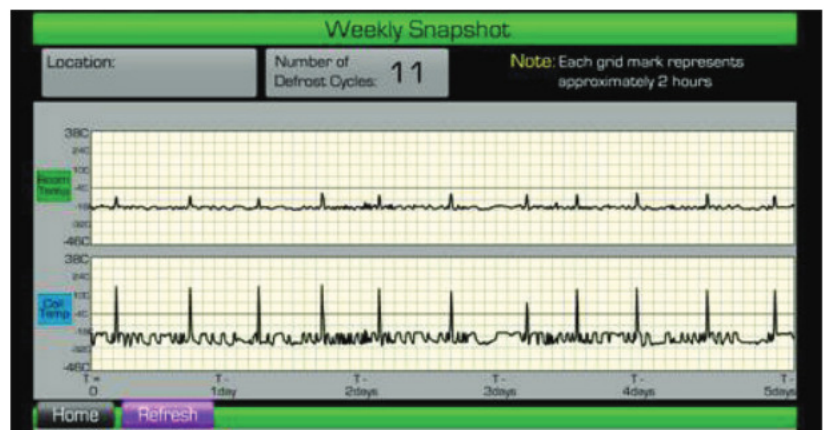


Figure 2 After



At the same time the KE2 Evap was able to eliminate the icing issues. The before and after photos, Figures 3 & 4, show the difference.



Figure 3 - Before - Severe ice problem



Figure 4 - After - Ice is cleared

After 30 days of data was pulled from the controller, the charts revealed more stable temperature, maintaining the desired setpoint, the system additionally was able to shut off for several hours in some cases – saving energy while still maintaining the desired temperature.

Conclusion

The Assistant Manager for the Chateaugay QSR and other employees were impressed with the controller, remarking that in two years they had never seen the walk in without ice on surfaces, including the ceiling, shelves and boxes. Additionally, they were excited to be able record temperature readings using the data logging feature, rather than using their previous manual system.