



Case Study: Food Service Supplier

Global Food Service Supplier - Sydney, Australia

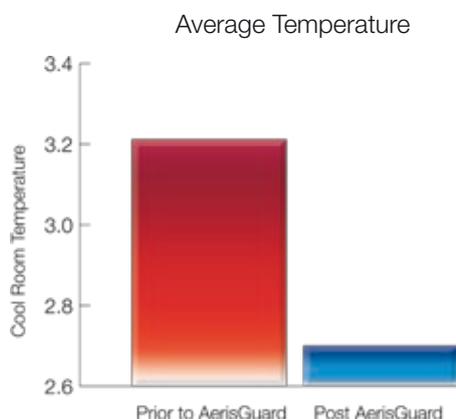
Fantastic! It gets the temperature down faster and holds at set points allowing the compressors to cycle off, making the facility more efficient!

This company is a global food supplier, priding itself in the quality of their goods which span the meat, fruit and vegetables, bakery and other food sectors.

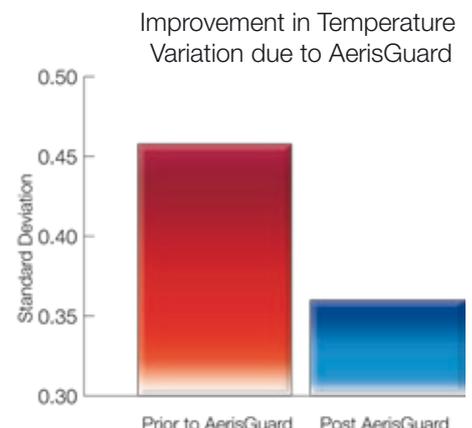
As quality is a major value of this company, they were already maintaining their refrigeration systems when they received an Aeris Hygiene Services recommendation and as a result they were interested to see whether an AerisGuard remediation would improve their cool room efficiency and performance. Post the AerisGuard remediation, they were thrilled with the significant impacts on their units.

Unaware that biofilm was causing such an effect both on energy and on produce - this company has been exceptionally pleased with the benefits, especially the greater capacity of their units. They have expressed interest in receiving regular retreats in the future to ensure their cool rooms continue to perform better.

The AerisGuard treatment delivered dramatic improvements in the units treated in terms of a decrease in average temperature of 16% and a decrease in the temperature variability of 21%. Given that the units are located in the loading dock, the temperature variability is a key indicator of the performance of the refrigeration system.



16% Reduction In Average Temperature



21% Reduction In Temperature Variation

Case Study

Situation Identification

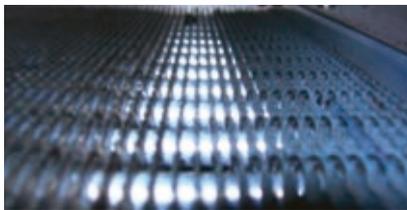
- Aeris Hygiene Services was approached by the Global Food Supplier on the basis of recommendations from other customers
- The refrigeration system already had a preventative maintenance program in place, which included traditional “cleaning” of the system
- As part of their HACCP Food Safety Programme, the customer had noticed that the refrigeration plant was working harder, but that the temperature of the cool room was gradually increasing
- To compensate for the increasing temperature, additional refrigeration equipment was installed
- The processing facility has a large number of cardboard boxes which provide an ideal food source for mould and bacteria
- Initial inspection revealed severe blockage of the coils and significant contamination of the system
- An AerisGuard remediation and treatment was identified as the most effective way to remove this biological contamination and restore system performance
- Work was scheduled to be completed on a weekend to co-ordinate with the normal manufacturing cycle

Methodology

- AerisGuard Coil Cleaner was diluted and applied to the



Before



After

Conclusion

This global food supplier, which was already maintaining their refrigeration systems, was extremely pleased with the greater capacity achieved by the AerisGuard treatment and will continue with regular retreats to ensure their cool rooms are working at their peak.

Aeris Hygiene Services delivers cool room performance solutions through the use of AerisGuard technology which has a residual action, preventing colonisation of cool room surfaces for extended periods.

FDC unit according to the SOP and left to digest the biofilm for around 25 minutes

- The FDC unit was then rinsed with water and allowed to dry, whereupon the AerisGuard Coil Treatment was applied to provide an anti-microbial coating to the unit
- The temperature was logged in the same location at 5 minute intervals for 3 days prior to the AerisGuard treatment and at 5 minute intervals for 3 days after the treatment

Results

The AerisGuard treatment was completed in late November. The average maximum temperature at nearby Parramatta during this time was 30°C. The single maximum temperature observed during the AerisGuard treatment was 38°C.

Post treatment, there was a 16% reduction in the average temperature of the cool room and a 21% decrease in temperature variability. The temperature variability is particularly significant as it measures the system’s ability to be able to respond to heat load. The unit that was studied during the treatment was in the loading dock and is open to the outside air.

The customer is extremely happy and has reported that the compressors are no longer running continuously. The customer has agreed to a schedule of preventative AerisGuard treatments.



Aeris Hygiene
Services
Cool Room Performance Solutions



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