Managing Warehouse Temperatures

Anchor Warehouse Services is a commercial cold storage provider serving growers in California's lush Central Valley. Anchor provides pre-cooling and SO2 gassing services to maintain the optimum quality of all types of perishable produce including avocadoes, kiwis, and quinces as well as large quantities of table grapes and citrus. Anchor operates three state-of-the-art facilities including a 10-room, 100,000 square foot location in Porterville, CA.

Facilities were designed to maintain the highest level of product quality and include enclosed docks and hallways for environmental control, rapid cooling capabilities, and certified rooms for organic produce.

A Powerful Need

The complexity of admitting produce into the facility that had recently been in fields as hot as 100+ degrees and pre-cooling it in a matter of a few hours is immense. Time, temperature, and humidity are just some of the many factors that must be carefully managed, often with little or no room for variance. For instance, garlic can withstand no more than a half degree in temperature change or it will be ruined. In addition to their many stringent processes, Anchor was also facing rising energy costs.

As a result, the company began to explore solutions that would address three critical areas — energy efficiency, demand response, and demand control. Chief among their requirements was a vendor that could provide comprehensive project management. It was also important that the system be accessible from all three of the company's locations and that it be easy to use.

Anchor Warehouse Services, Porterville, CA

Initial Load Management Requirements:

- Cold Room Evaporators and Fans
- Pre-Coolers
- Ammonia Compressors
- Condenser

Powerit Solutions Installed:

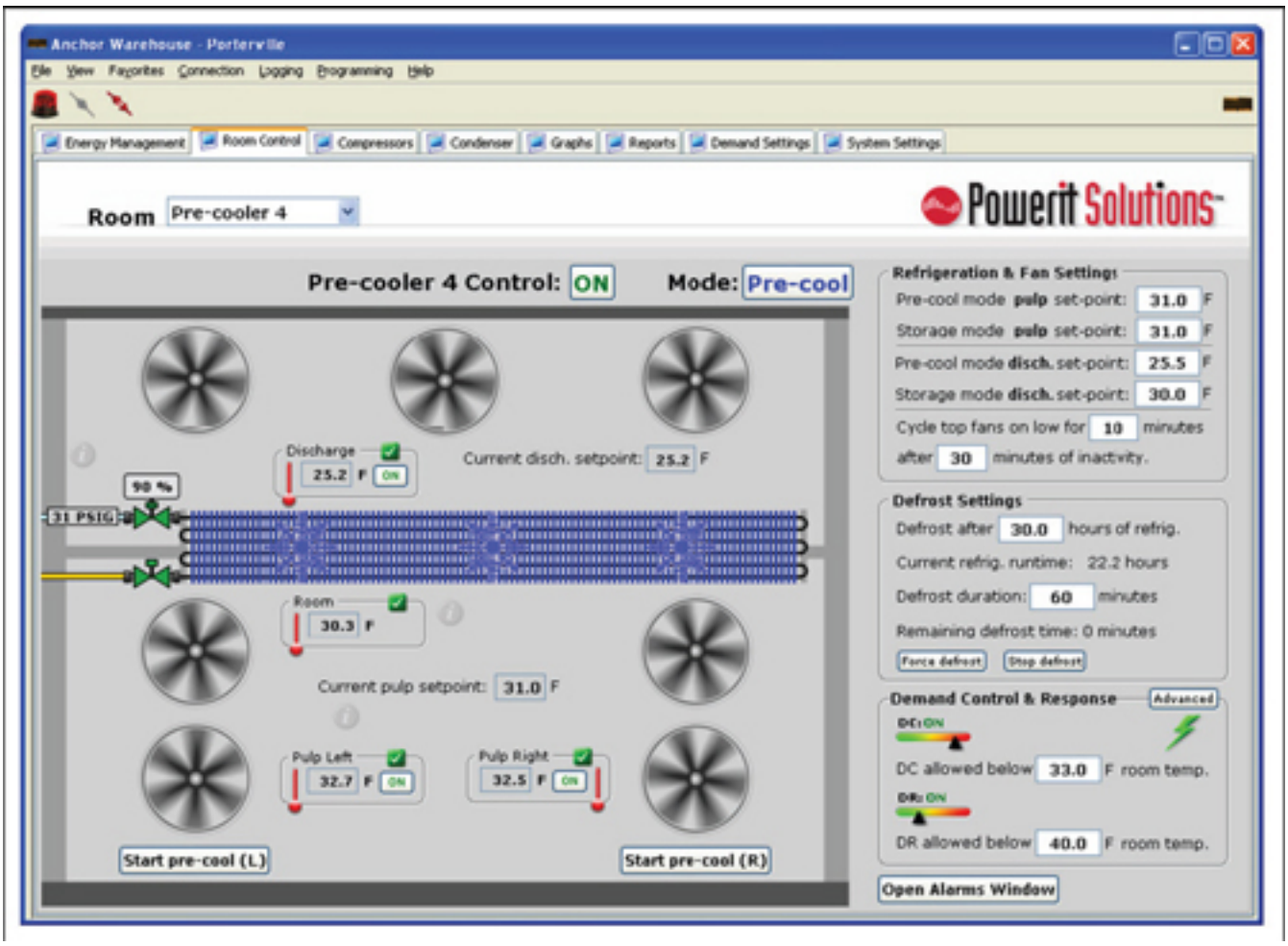
- Energy Management Hardware and Software
- Konnekt™ Wireless IO
- Energy Monitoring and Reporting
- Temperature Monitoring and Reporting

A Powerful Solution

After reviewing a number of technology providers, Anchor chose Powerit Solutions to help lower their energy costs without compromising production quality and partnered with an aggregator. The resulting system was able to seamlessly interface with a number of loads to address each of the three reduction requirements. The results were significant. Their on-peak demand charge was reduced by 35%, demand response capacity was maximized by reducing demand by 84 percent, and overall efficiencies contributed to a monthly cost savings of 17 percent — all while production increased by 15%.

But cost savings were not the only measure of success. The project was managed from start to finish by the Powerit team, including overseeing the rebate process with Anchor’s utility company. The system has proven easy to use with the required flexibility to allow employees, regardless of location, to monitor the system and make any necessary changes.

Garth Ramseier, President, Anchor Warehouse Services says, “I’m not easily impressed, but this was one of the few times I can honestly say the end result was greater than I anticipated.”



Each solution includes a customized online software application that’s proven for predicting and curtailing energy costs.

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