

The results from a recent evaluation of Inteligistics' IntelliCool™ system showed significant reductions in cooling cycle time, electric power savings, reduced CO2 emissions and overall efficiency improvement of 30%.

According to a statement, Western Growers Center for Innovation and Technology (WGCIT) recently assisted Inteligistics, a WGCIT partner, in studying the system over three years, using over 9,000 vacuum tube cooling cycles on a range of produce commodities at Fresh del Monte facilities in Salinas, CA and Yuma, AZ.

The trials found that the average time to reach optimum temperature was reduced by 4-7 minutes per cycle, electric power savings totaled 109,000 KWh, and CO2 emissions were reduced by 77 metric tons.

Hans Sauter, SVP for Research and Development and Food Safety and Chief Sustainability Officer for Fresh Del Monte Produce Company said: "By transforming this process from manual to electronic [...], we have changed the vacuum cooling process into a climate-smart, dynamic, data-driven decision, instead of one relying on static data and operator experience."

Traditional cooling processes rely on periodic manual measurements of product core temperatures and although Vacuum tube and HydroVac are now standard produce industry practice, they are inexact and require significant time and cost to execute effectively.

However, the patented IntelliCool™ system automates these processes and is the first, and only, system that continuously monitors product core temperatures throughout the cooling cycle.

It combines wireless product core temperature sensors that monitor in real-time and secure cloud-based servers for continuous visibility and analysis. The moment target core temperatures are reached, proprietary algorithms end the cooling cycle, thereby eliminating excess cooling time, increasing quality, efficiency, and throughput.

IntelliCool™ is part of the suite of advanced complex innovative technologies developed and effectively implemented by Inteligistics throughout the perishables industries. A similar technology that is equipped with forced air tunnels is used for cooling small fruits and certain vegetables such as cabbage and cauliflower that employ a different method of cooling.

Walt Duflock, who is Vice President of Innovation concluded that "this thorough evaluation

of IntelliCool™ is our first in-depth case study and is proof-of-concept of the value WGCIT brings to the industry."

WGCIT "was created to help identify industry priorities, assist companies to discover technologies to address those priorities, set up testing, and facilitate industry feedback and communicate progress to California, Arizona and Colorado fresh produce farmers," he added.

Inteligistics, a provider of innovative supply chain digitization and cold chain visibility solutions for the food, logistics, healthcare, and energy monitoring markets, is located within the WGCIT incubator facility in Salinas, CA.