

At Geneva Lakes Cold Storage, -20° F Temperatures *Can't Freeze Out LXE's Rugged Systems*

CASE STUDY

GENEVA LAKES COLD STORAGE, is a family-owned business located in Darien, Wisconsin. They are the primary storage and distribution point for Tombstone, Jack's, and DiGiorno brand frozen pizzas. Geneva Lakes used LXE's wireless network and VX1 vehicle-mount computers to improve inventory accuracy, order picking and processing time, and double the orders shipped.



Geneva Lakes Cold Storage (GLCS) operates over 50 forklifts in their 650,000 square foot warehouse. As business grew, it became more and more difficult to keep track of where product was located in the large, segregated warehouse. Order picking used paper pick sheets and material moves were recorded on paper and later entered into their computer system. GLCS also performed physical inventory, a time-consuming task with questionable results. In addition, GLCS's facility operates at -20° F. This low temperature causes the shrink-wrap on the goods to fog over, making the identification of the goods even more difficult. And since GLCS deals with food products that need to be stored and shipped on a first-in, first-out basis, identifying pallets is crucial to a successful operation. With over 100 truckloads of product shipped every day, properly recording and managing inventory became very difficult. GLCS needed a new, real time data collection solution.

Solution

After an extensive trial and evaluation of the forklift-mounted computers available on the market, GLCS chose the LXE VX1 vehicle-mount computer with the Powerscan industrial bar code scanner. The VX1 offers a large, easy-to-read, backlit display and a keyboard that can be used by forklift drivers wearing gloves. GLCS now has 50 VX1s in use, and all have performed flawlessly in this super cold environment. GLCS's warehouse is large and segregated into many different sections stocked full of pallets loaded with dense food products. Since the building operates as a large freezer, the walls are heavily insulated and lined with stainless steel. This creates an extreme "multi-path" environment. In order to circumvent any problems with coverage in the operating area, LXE performed a pre-installation facility analysis to determine optimal locations for the access points and Spire®

antennas. This insured sufficient access points, antennas and consistent coverage throughout the facility. GLCS also required their new system use 802.11b radio infrastructure. They wanted to have the fastest response time on their RF devices and needed the capability to use laptops throughout the warehouse. LXE deployed Lucent-Orinoco access points to provide total RF coverage throughout the facility. For their software solution, Geneva Lakes utilized their existing Maves system. By connecting to their existing software applications, GLCS was able to save money and accomplish their objectives quickly and efficiently.

The Results

- Inventory accuracy level has reached 99.9%. The computerized system has eliminated manual data entry and human error. Now GLCS has an up-to-the-minute look at inventory levels and locations.
- Order picking and processing has been reduced by 50%. Paper and manual recording have been replaced with faster, more efficient scanning.
- Physical inventory time has been reduced from a few days to a few hours. Scanners eliminate manual paper recording and allow inventory of pallets despite cold temperatures and foggy freezer wrap.
- Daily orders shipped have doubled. By having "real-time" access to customer orders and stock locations, forklift drivers can now make instant decisions on which product to pick and know its destination.
- Pallet identification problem has been eliminated. By installing a bar-coded license plate on each pallet, foggy freezer wrap is no longer an issue. Operators now scan the bar code and know exactly what is loaded on each pallet.

Total return on investment was realized in less than 16 months. By incorporating existing client infrastruc-

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ture instead of replacing the entire system, GLCS was able to realize a faster ROI. In addition, Geneva Lakes has been able to take on additional business. Due to greater efficiency in inventory management, GLCS has more available productive hours and better processes to take on new clients.

Key Learnings

Having Geneva Lakes test a variety of brands on the market was instrumental in the success of the final project. This trial run allowed GLCS to connect the RF

devices to their existing computer system, providing the ability to touch and feel the technology before making the investment. Additionally, this test proved how well LXE products operate in harsh environments (-22°F to 122°F). While other products make this claim, they cannot perform up to the standards of LXE's systems. The facility analysis provided another major factor in the project's success. This analysis allowed for more accurate budgetary figures and gave electricians time to install the necessary wiring. In the two years since the system has been deployed, not one single coverage problem has been reported.



About LXE Inc. LXE Inc. improves supply chain performance by applying over 30 years' experience developing wireless products and solutions. From wireless computers, advanced auto-ID technologies, and wireless network infrastructure, to our award-winning customer support - LXE's easy-to-use products are as reliable as the people who install and support them.

Based in Norcross, Georgia, LXE also offers a full range of turnkey services, including radio integration, project and installation management, network design, technical support, and repair services. LXE is a wholly-owned subsidiary of EMS Technologies, Inc. (NASDAQ: ELMG), and has offices worldwide. For more information, visit www.lxe.com.