

LXE Reliability and Versatility Fits Ingles Markets to a "T"

CASE STUDY

INGLES. Ingles Markets broke into a well-stored grocery marketplace in 1963 by opening in smaller towns and rural communities throughout North and South Carolina and creating fun, "circus" atmosphere in its stores. The strategy carried the chain into four additional states over the next few decades, expanding to today's 197 stores. Convenience is the hallmark of Ingles' customer service philosophy, so in addition to groceries the chain offers book sections, media centers, floral departments, bakery departments, prepared foods, fuel centers and other unexpected surprises. Ingles self-distributes 64% of its stores' merchandise from its centrally located distribution center in Black Mountain, North Carolina, nearby its headquarters.

The **ingles**
ADVANTAGE™



Ingles' steady growth and expanding product assortments meant the paper-based processes used to move goods throughout its 850,000-square-foot distribution center would no longer suffice. After delaying an investment in a warehouse management system for years, the company finally decided the time had come to automate, and chose Retalix's TRICEPS warehouse management system. A key decision in the implementation process would be selecting WMS-compatible portable and vehicle-mount computers that would also meet Ingles' unique requirements, including the ability to mount removable computers on freight-hauling jacks.

"We knew we were going to get Retalix, which had bought OMI and its warehouse management system," says John Trexler, distribution operation analyst for Ingles Markets. "It just kept getting pushed to the back burner. But with the things that were happening with inventory, we decided it was time to do it." Ingles began implementing Retalix's TRICEPS Warehouse Management System in mid-2007, beginning with the receiving and putaway processes.

The core function of the warehouse management system is delivering real-time data out to warehouse operators who are receiving the shipment, locating open slots, moving pallets, then picking and shipping the orders. Ingles evaluated the premium industrial mobile computer makers in the market, seeking a solution that would fit its needs and deliver excellent performance.

The Short List

The company narrowed its focus to LXE, Symbol and Intermec computers, putting each to the test against a set of very specific requirements, which included:

Maximum data visibility: Anxious to get started



even before the Windows version of Retalix's TRICEPS was ready, Ingles rolled out the Unix-based version of the application. They chose a third party computer emulator, RFlex, to run on the portable forklift computers. "That application likes rectangle screens, with more lines going across than down," says Trexler. LXE's rugged VX6 half-screen vehicle mount computers fit the bill perfectly, unlike some competing models.

Full Function Keys: Retalix TRICEPS also makes maximum use of function keys, using all keys from F1 to F10 to minimize keystrokes for users. Other manufacturers' models did not offer all ten function keys, requiring multiple keystrokes for users. The VX6's backlit keys are also helpful in ensuring warehouse staff can spot the correct key in difficult work conditions.



Freezer Compatibility: With a plan to add a freezer to the distribution facility in the works, the ability for forklift-mount computers to stand up to the cold, then work equally well in the warmer, dryer warehouse, was key. Some makers use desiccant packs to keep their units warm, but the LXE VX6 is available with a heater coil in the screen. "In perishables and the freezer, there were known issues" with other makers' models, says Trexler. "I've heard that when the units come out into the dry air, they fog up. The LXE unit will not."

"Portable" Vehicle-Mount Computers: Like most warehouses, Ingles uses forklifts to raise pallets into slots. But to move them to those locations, they use motorized freight-haul jacks capable of carrying two stacks of two pallets each. Ingles wanted to outfit that equipment with portable computers, but be able to easily remove them for use in other tasks. It was also important that the computers be smaller than the typical forklift-mount unit.

With a couple of quick physical customizations, LXE's MX3X solved the problem.

LXE®

Its small size meant it didn't interfere with the operation of the jacks, and because it's battery powered, the unit would not have to be wired in to the equipment's power supply. Ingles and LXE staff worked together to devise a bracket for the MX3X, and combined that with a **powerful industrial magnet** mounted on the battery case that holds the unit in a horizontal position, creating an excellent user interface for jack operators. Now, "if the equipment is down, we don't lose a computer too," says Trexler. A tethered laser scanner enables users to quickly scan barcode labels no matter their location or orientation.



Voice Compatibility: Ingles plans to implement voice-directed picking later on in its warehouse management system implementation. Because the VX6 units already have built-in voice support, no hardware changes will be required for that stage of the project.



Battery Life: Ingles' busy warehouse operates close to 24 hours a day, so it was essential that battery packs on the MX3X computers would last. Making use of built-in battery conservation capabilities such as low battery mode and a fast-dimming screen setting helped

extend the uptime and allow staff to work without stopping to swap out battery packs, maximizing productivity.

Reliability: News that a large grocery competitor down the street was more than satisfied with its LXE computers was a plus for Ingles, which places a high

value on reputation and reliability. "LXE is rated very highly in tech support, and so far it's been very good," says Trexler.

Even with the warehouse management system only half implemented, Ingles is already seeing impact in its receiving and putaway operations. The LXE computers have enabled operators to be more productive and more accurate, since they gain visibility to inventory and open slots more easily, and can scan labels and slots to ensure inventory can be easily located.

So far, Ingles uses 17 of LXE's MX7 rugged handheld devices for inventory tasks, 51 VX6 vehicle-mount computers and 28 MX3X computers in its facility, but that will likely expand in the near future. Ingles will purchase additional forklift units for its new freezer, and additional MX7s as the company deploys Retalix's yard management function. Trexler also plans to upgrade to Bluetooth-enabled laser scanners for the MX3X computers as they become available.



"Overall, we've been very satisfied with the LXE units," says Trexler. "LXE has been very good for us."

About LXE Inc. LXE Inc. improves supply chain performance by applying over 37 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.