

Patrick Autocare *Drives Vehicle Tracking with LXE.*

CASE STUDY

PATRICK AUTOCARE Patrick Autocare, a publicly owned Australian integrated logistics service provider, offers processing, storage and distribution of motor vehicles. In partnership with Patrick Stevedores, they provide a total service from vessel to dealers. At their largest facility at Ingleburn in New South Wales, Australia, over 70,000 vehicles are processed per annum. In total, Patrick Autocare tracks more than one million vehicle movements a year with the help of LXE's wireless mobile computers.



If you've ever returned to a parking lot and found it difficult to find your car you can imagine the complexities of managing the location and status of over one million vehicle movements every year throughout an Australia-wide network of processing facilities. This is the challenge facing Patrick Autocare throughout their on and off-wharf facilities, including their 37-hectare site in Ingleburn, NSW Australia.

The Situation

Patrick Autocare offers an integrated service of processing, storage and distribution of motor vehicles and, in partnership with Patrick Stevedoring, provides a total service from vessel to dealer. Patrick Autocare has on-wharf processing facilities in Sydney, Melbourne, Fremantle, Brisbane and Adelaide.

With hardstand storage for over 10,000 vehicles and undercover storage for over 9,000 vehicles, Ingleburn is Patrick Autocare's largest site. Over 70,000 vehicles are processed per annum by this site, which has 85 employees and has been operating since 1996.

At Ingleburn, Patrick Autocare has deployed LXE mobile computers connected to their pioneering and comprehensive Vehicle Tracking System (VTS) by a wireless local area network. This on-line system allows Patrick Autocare to keep track of their vast vehicle inventory in real time. The Vehicle Tracking System (VTS) has been designed and developed by Patrick Autocare to track and report on vehicles processed or transported at any Patrick Autocare branch and provides visibility of a vehicle from the time the ship arrives at the port to being receipted by the dealer. The VTS tracks all vehicle movements from point of entry, wharf transport, stages of processing, dispatch and delivery.

The Solution

Patrick Autocare's staff use the LXE MX1 handheld mobile computers equipped with bar code scanners to scan the bar codes attached to each vehicle when inventory is received onto the site. A similar process is followed when the vehicle is placed into its storage location, or moved between locations. As vehicle processing tasks such as the installation of accessories are completed, the results are keyed into an LXE MX1 computer, updating the Vehicle Tracking System in real time. By recording information in this way, users of Patrick Autocare's VTS Client Interface have up-to-the-minute information on the status of each individual vehicle, giving them the opportunity to enhance their own customer service and reduce administration costs.

The LXE MX1 mobile computers and wireless local area network are Patrick Autocare's 2nd generation of radio frequency bar code scanning equipment, and have replaced older "narrowband" equipment. The new equipment uses the same industry standard WiFi (IEEE802.11b) radio technology that is becoming increasingly commonplace in offices and public spaces to provide wireless internet access.

The Results

Since going live with the new system, Patrick Autocare's employees have appreciated the faster response times that this technology brings and have also praised other LXE design features such as the extra loud beepers in the MX1 and the ability to scan bar codes from over 1 ½ meters.

The 10 LXE MX1 mobile computers used at the site are equipped with wireless local area network adaptors, integrated bar code scanners for scanning identification labels on the vehicles, backlit displays and



phosphorescent “glow-in-the-dark” keypads. Because the operation continues in all types of weather, the fact that the MX1 is sealed against dust and jets of water is critical to reliable year-round operation.

“Our staff will typically take an MX1 computer out at the start of the day and use it for a full shift. The units have stood up to the elements well, and have been well received”, comments Stuart Carlaw, site manager at Ingleburn for Patrick Autocare.

To provide wireless network connections to the mobile computers used throughout the 37-hectare site, LXE needed to install a number of radio base stations (known as Access Points). While the newer WiFi technology provides fast network response times, the radio signal from each base station does not travel as far as with the older narrowband technology. Installing a large number of Access Points in outdoor areas can be prohibitively expensive due to power and data cabling costs. By using specialist antennas and design experience from similar sites, LXE managed to provide wireless network coverage over the 37 hectares of the Ingleburn site with just 6 Access Points. Each Access Point covers an average of 74,000 square meters. Data cabling costs were further minimized by using wireless point-to-point links to connect Access Points in the more remote locations. Even power cabling was eliminated by using solar power at all of the remote Access Point locations.

LXE Australia Pty Ltd, with offices in Sydney and Melbourne, delivered a “turn-key” solution to Patrick Autocare on-time and on-budget, taking responsibility for the installation, commissioning and testing, and support of the system.

“The use of scanning technology is totally integrated into the way we work;” notes Carlaw, “the new LXE system has been live for some months now. During the transition from our old system to the new we haven’t experienced any operational problems whatsoever.”

The Ingleburn site is one of a number of Patrick Autocare’s on-wharf and off-wharf facilities that have been upgraded to the new LXE system. LXE has also installed wireless solutions for Patrick Stevedores and Patrick Intermodal throughout Australia.



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.