



Striving for greater efficiency

WE Dowds specialises in the handling of steel, especially steel coils. It operates seven warehouses which are served by rail and road. However, major growth in the amount of tonnage that it handles has led to the company installing wireless technology to boost efficiency.

FAMILY-OWNED business WE Dowds operates under a long-term commercial agreement with Associated British Ports in the Port of Newport. Historically the company has handled a variety of cargoes but in the past five years it has dealt exclusively with the import and export of steel and, in particular, steel coils.

There are seven warehouses in operation with a total area of 26,000sq m and storage for 98,000 tonnes. The warehouses are served by rail as well as road and the coils are handled by ten gantry cranes with a capacity ranging from 20 to 40 tonnes.

The total tonnage handled annually is approximately 600,000. As each transaction is scanned in and out the total tonnage moved is therefore double this amount.

At the same time WE Dowds has also been growing its business and the implementation of LXE wireless technology was triggered by the recognition that, in order to manage an increase in tonnage, systems had to be made as efficient as possible.

Charles Dowds, managing director of WE Dowds, says: "We set ourselves the task of ensuring that the movement of data through our business was as efficient as the physical handling of steel."

WE Dowds' despatch office uses both adjoining and remote warehousing facilities. Before the wireless solution was implemented, the company used radio messaging to contact the adjacent warehouses and sent faxes to remote facilities. Although this method was simple, there was no way of following through on load requests and it was also time-consuming as users spent a lot of time checking information over the radio or walking back and forth to the fax machines to pick up instructions.

All employees now carry LXE mobile terminals giving them access to real-time data. Once the order has been confirmed by the despatch office, the instructions are immediately updated on the terminal. The "Warehouse Instruction Prioritisation" screen on the terminal tells the employee exactly which coils are wanted, the coil details and location and the haulier picking up the load.

Once the coils are located, they are moved to the loading bay and scanned. The status of the coil on the screen shows this by changing a marker from red to yellow. The marker then changes again to green when the actual coil is loaded.

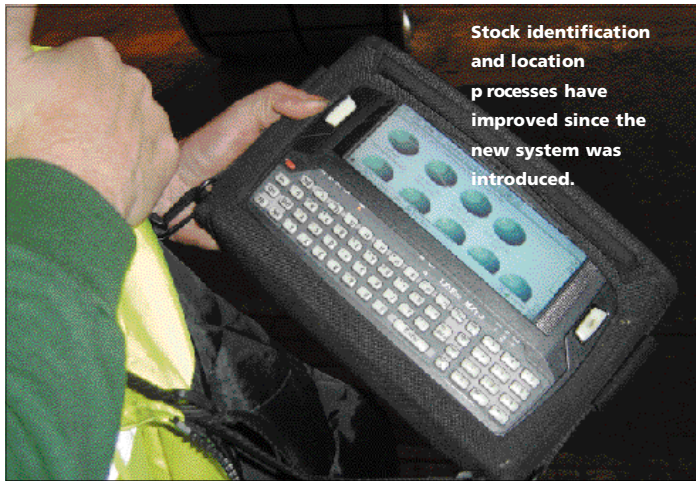
This information can be accessed or amended by the despatch office, for example, to check the status of the load for a customer enquiry or to change the priority of an order. Conversely, if an employee wants to check coil information, he can interrogate the system using his terminal. The ability to view coil locations has increased the operator's involvement, allowing the employee to self-plan a personal work schedule to bring forward coils in the most efficient way.

Selection process

The employees were consulted from the start of the decision making process and were actively involved in the selection of the terminals. Also, it was imperative that the terminal could support a



Right: WE Dowd's decision to have wireless technology was to ensure that the movement of data was as efficient as the physical handling of steel.



Windows CE-based programme, multiple columns and lines of work instructions and had a bright colour display. As they have to carry terminals, printers and radios, the employees also needed a light but rugged unit.

In selecting LXE, WE Dowds had to be satisfied that the computers were suitable for their operation. The chosen terminals – MX3-CE units – had to be suitable for outdoor use and be able to cope with the tough conditions of a port. Dowds explains: “We knew that LXE had proven success in port environments, and we were particularly impressed by the screen size and the colour display of the MX3CE.”

The warehouse staff are also pleased with the mobile computer. The terminal is robust enough to withstand knocks and bumps and the display size ensures that the screens are clear and easy to read.

WE Dowds engaged software consultant MSG Business Systems in Cardiff to design an enhanced port management system. Based on past experiences and on what the company wanted to achieve in the future, the personalised software solution runs over the Internet, in the despatch office and on the mobile computers, and has enhanced data communications both in-house and with customers.

Customers are now offered a number of options when communicating with WE Dowds. Before the system was implemented, orders and

information requests were via the fax or by telephone. Customers can now also contact the company via a password-protected gateway over the Internet and gain access to their data.

One example in which a customer can use the system is to request a coil-off (an instruction to deliver coils) via the Internet, in which they are shown all of the coils in stock for selection. Once selected and submitted, an email confirmation is sent directly to the customer and an internal email is routed to the stock control department and despatch office of WE Dowds so that transport can be arranged. The coils selected are then displayed on the LXE terminals as a warehouse instruction.

Using this method, a customer is in effect giving WE Dowds warehouse personnel a direct instruction to bring forward specific coils for delivery and is also telling employees the location of the coils. As the system is available 24-7, the coil-off request can be made at any time without intervention from any WE Dowds employees.

WE Dowds is using all available Internet technologies to improve the process in the docks, but understands that personal interaction is just as important. Although information is now available via the web, many customers and suppliers continue to maintain the one-to-one relationships it has built with WE Dowds’ staff, and still

communicate over the telephone. They also value the ability, however, to access information over the Internet outside of office hours. They can view real-time details of their despatches, a full-coil history and obtain instant reports in a format of their own choosing at any time, day or night.

Improved processes

Stock identification and location processes have also improved following the implementation of the new system. Before LXE terminals were implemented, a paper-based system was used to track stock. When coils first came off a vessel they were ticked off against a list, any damage was noted on the list and had to be manually entered later. Finally, a reference number was written on the coil to enable tracking. Although employees knew that a coil was in a specific warehouse, they only had a rough idea of where coils from a certain vessel may be. Knowledge was personal and queries often took days to resolve. For example when employees had to cover holiday periods, time was wasted walking up and down rows looking for coils.

Now when a coil comes off a vessel, the barcode of the supplier is scanned and checked via the wireless network against coil data

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held on the database. When the match is found, a barcode label is printed from the wireless printer carried by the employee and attached to the coil. Any damage is noted on the terminal and uploaded to the server. When the coil is moved inside the warehouse, the row number is also entered onto the terminal.

At the end of a vessel discharge operation, the coils scanned can be immediately checked against

the original packing lists for any discrepancies and damage details are immediately available. From this point forward the coil can be tracked by warehouse and by location. Operators can move coils and update locations via their terminals.

Regular stocktaking checks are also carried out with ease since the implementation. Previously stocktaking took two days per warehouse, and involved the hiring of subcontractors who were given lists of coils to find and account for. Warehouse operators now do stock takes by simply scanning the barcodes and the whole process can be completed within three hours without extra labour. A variance report can then be printed out for analysis.

Office staff have also benefited from the introduction of the new system. Routine jobs such as typing packing lists, collating and posting “tickets” to customers, and printing then faxing stock and delivery reports are offered to customers via the web. Packing lists are uploaded automatically, saving the re-typing time.

An automatic report and email routine has also been implemented. Every night data concerning daily activity is extracted from the database and forwarded to customers. A full report is run every Sunday. Also by allowing customers direct access to data, employees are free from sending reports or dealing with routine enquiries, allowing them more time to deal with customer service issues.

The success of the wireless installation has been measured in several areas, but WE Dowds has focused on one issue that customers have identified as the key performance indicator; the time it takes to load a vehicle. It regards haulage supply as a critical resource and in light of the Working Time Directive, wanted to improve this area. WE Dowds believes this has been achieved and, even with a greatly increased number of lorries handled, the project has been a success. ▢