

Wireless world

Managing information is as important as any part of modern logistics and, for many companies, overall efficiency can be directly related to efficient data handling. This was clear to WE Dowds (Shipping), a family-owned stevedoring company operating in Newport, South Wales, UK, which has been specialising in handling steel coils – both imports and exports – for the last 15 years.

The company was founded in 1961, and now operates seven warehouses and ten gantry cranes in Newport's north and south docks, under contract with Associated British Ports (ABP) – a new 25-year agreement was signed in mid-2004.

Dowds's warehouses cover nearly 26,800 sq metres and hold 120,000 tonnes of steel coils. Warehouse no 7 (which encloses a connecting rail track) is being expanded from 5,100 to over 8,000 sq metres, and should be finished at the end of this month. The company handles 600,000 tpy of steel, although the tonnage actually moved (ie unloaded, stored, then subsequently despatched) is 2-3 times this volume.

To increase efficiency of both steel handling and customer communications, WE Dowds chose to develop a wireless computer system that relays real-time data between its despatch office, its warehouse staff and its customers. "We set ourselves the task of ensuring that the movement of data through our business was as efficient as the physical handling of steel," says managing director Charles Dowds.

Prior to introducing this system in 2003, communication was by radio link for adjacent warehouses and by fax for the remote ones – which are more time-consuming procedures involving extra paperwork. As the coils passed through the system, they would be tracked by paperwork, with any details of damage, for example, noted manually.

In the new system, all employees carry MX3-CE mobile computer terminals with interactive screens, supplied by LXE of Norcross, Georgia, USA, which were

The installation of a customised wireless data system has improved steel handling at a UK stevedoring company, reports Steve Karpel.



Personal terminals have allowed employees to plan their work schedules more effectively

chosen for their light weight, ruggedness and screen display clarity. These support a Windows CE-based program which was designed by Dowds and consultants MSG Business Systems of Cardiff.

When a coil is unloaded from a vessel, the supplier barcode is scanned by an MX3 terminal and the data entered into the system. The company's own barcode label is then printed out from a wireless printer carried by the employee and attached to the coil, which is then tracked through the system (including its precise warehouse location) via the central database that is accessible from the portable terminals and by the customer via the internet.

There are two ways of transferring data to customers – electronic data interchange (EDI) and extensible markup language (XML) via the internet. The latter is becoming increasingly popular, notes Dowds, for sending regular reports. Alternatively, customers can access the current stock situation at any time via a password on the company's website. In addition an automatic emailing system ensures the regular forwarding of reports every night.

The coil database uses a "traffic light" notation to indicate the status of the steel: a red marker indicates that it is in the warehouse, yellow that it is in the loading bay and green shows that it has been loaded.

Customers can order coils via telephone, fax or the internet. Using the internet, they can view the stock and select particular coils for delivery. After an order is submitted, an email confirmation is sent back to the customer and the order routed to the stock control and despatch departments, while the coils selected (and their location) are displayed on the mobile terminals. This means that customers anywhere in the world can effectively give delivery instructions directly to warehouse employees.

Should an urgent order come in, the priority of orders on the database can easily be changed, and any real-time updates carried out efficiently. Company routines such as stocktaking are also much quicker now, but the most important indicator of efficiency is the one most valued by customers – the time it takes to load a lorry with an order. The majority of these can now be done in less than the target time of one hour, even with a sharply increased number of trucks used.

This is particularly important, adds Dowds, not just for customer service but because of the impending ramifications of the EU working time directive, which could limit the availability of truck drivers.

Some 85-90% of the steel handled has been pre-sold to customers (mainly stockholders), while the rest is consignment stock from exporters that is awaiting a buyer.

The company is evidently very satisfied with the system it has developed, which is said to have virtually eliminated the standard errors that can occur in the shipping business.

As for the future, WE Dowds is now expanding its portfolio: having thus far focused on steel coils of all types – hot rolled, cold rolled and coated – its first delivery of long products arrived at the end of February. ■