Maximising terminal efficiency

I t does not matter if it is a car or steel coils, whatever the cargo is, it is still valuable and you have to track it through your terminal," said Keith McSwain, business manager Americas for Jade Software, a New Zealand headquartered developer of terminal operating systems (TOS).

Since the emergence of containerised shipping in the 1960s, the vast majority of port innovations have centred on this sector. However, "the world does not fit easily into 20 ft or 40 ft boxes", said McSwain, highlighting the fact that despite garnering less attention than its younger brother, the breakbulk and mixed cargo sector is no less important.

While some TOS developers have focused their attention on the automation of large container terminals: "Jade has pulled away from large scale automation to become the number one supplier for mixed cargo and multipurpose terminal handling," McSwain claimed. "Master Terminal TOS treats all types of cargo similarly, so it makes processing mixed cargo simple.

In July 2015, the UAE's Abu **Dhabi Ports Company** implemented Jade Software's Master Terminal at Zayed Port, the first of seven ports in the region scheduled to be upgraded to the TOS. The new system was implemented at Khalifa Port's general cargo and ro-ro terminals from August 1, and will subsequently be rolled out across the remainder of Abu Dhabi Ports.

"Zaved Port is the first port that will benefit from the improvements that our terminal operating system will bring," said David Lindsay, Jade Software managing director. "Jade's Master Terminal will enable real-time management and control of all aspects of general cargo operations, including bulk, breakbulk, ro-ro and project cargo, and enhance supply chain visibility."

Master Terminal will provide more accurate carao information before vessel arrival so that Abu Dhabi Ports can plan operations well in advance. The software also contributes to the reduction in time required for delivery and queues at the terminal while enabling terminal operators to accurately track and trace cargo in the yard.

Changing parameters

McSwain believes the world is changing. "Every day we see news about a new mega-port ... or who is building the next monstrous container terminal but where does that leave everyone else?" he asked. "Small and medium-sized terminals are trying to find their niche in the market, talking to smaller lines that find value in dealing with smaller brands.

"As such, more and more small and medium-sized terminals are ready to accommodate mixed, heavy lift



More and more small and medium-sized terminals are ready to accommodate mixed, heavy lift and project cargo. - Keith McSwain,

and project cargo - anything to differentiate themselves from the size of an LA/Long Beach type of facility, for example."

However, a terminal that uses a TOS designed for standardised container cargo management will find itself struggling from the outset.

Terminals are in the business of making money. In order to make money you need throughput. The job of a good TOS is to make sure you do it as effectively and efficiently as possible," McSwain pointed out.

Jade Software's Master Terminal TOS is geared to deal with non-standard cargoes, while realising the efficiencies achieved at container facilities.

Terminal information for all types of cargo is presented in real time, which enables a user to effect immediate change, as opposed to waiting until the end of an operation to identify errors or miscalculations.

The highly configurable system runs on Microsoft Windows, and can be accessed by Windows-based workstations and mobile devices, or any modern web-based browser. This access to the latest terminal information enables users to make decisions quickly. The Master Terminal system also supports multiple sites and subterminals through one database.

In order for a smaller terminal to be competitive, the speed at which vessels can be turned around carryina antimised loads is crucial. For that, McSwain stressed the importance of integrating a TOS that is configured exactly to the specification of the terminal in question.

"With a TOS, if you get it right the first time it will fit your business for the long term. However, if you buy a TOS and the product does not fit your business model and you try to adapt it, you have messed up."

In essence, Master Terminal enables a terminal to raise efficiency levels and minimise downtime, and ultimately maximise revenue generating potential within the parameters of the available infrastructure. "You must find a TOS that matches what you do as a business and to do that you should complete a robust evaluation process," McSwain HLPFI concluded.

Software to track cargo and save time

Georgia Ports Authority (GPA) has introduced a new real-time breakbulk tracking system that reduces the time taken for cargo to transit its docks. "The new system means faster service and better communication with our breakbulk customers," said Curtis Foltz, GPA executive director.

The system shows cargo heading for the Port of Savannah, enabling GPA to prepare and expedite the handling of shipments, resulting in faster truck-turn

times and improved cargo visibility. It also allows GPA to detect and schedule deadline cargo as it becomes available at a Savannah rail yard. Efficiencies have been realised in terms of manual data entry and data lag, while providing timely information access to management, administrative and field personnel.

Meanwhile, during Breakbulk Europe 2015, the Antwerp Port Community System (APCS) unveiled its new breakbulk application, Cubix, which it claims has solved the problem of copying and recopying data.

The forwarder initiating the cargo transport makes a single declaration via the app, which generates a unique reference for the consignment. All subsequent parties, such as the ship's agent and terminal operator, then use this information with further instructions made via the app.

John Kerkhof, manager of APCS, said the Cubix app is currently running as a pilot between ArcelorMittal Logistics, Fednav and NHS. A general roll out is anticipated by the end of 2015.