



## *The challenges and hidden opportunities of managing mixed cargo.*

### **The mixed cargo seascape**

Modern shipping ports are no longer logistical islands. Now they are critical components within global transport networks and product supply chains. As the importance of shipping ports grows, so does the competition between regional ports.

Since the advent of the cargo container half a century ago, the share of non-containerized, break bulk cargo in worldwide shipping logistics has continued to decline. Until now.

The decline in the share of mixed cargo operations has plateaued as commodities like steel, pulp, paper, and fresh produce are more efficiently transported without the use of containers. Non-containerized cargo consistently makes up more than a third of total general maritime cargo transport.

While mega-ports pursue the container business with a single-minded focus, capitalizing on their economies of scale, growing ports can seize the opportunity that lies in the mixed cargo sector.

Break bulk terminals are not quayside areas offering cargo shifting facilities anymore; instead, they are vital links supporting regional export-oriented businesses and commodity traders. A number of ports across the world are realizing the potential of optimizing terminal operations to handle mixed cargo and adjusting their policies and processes accordingly.

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Mixed cargo is an exciting opportunity for a growing port, but how can you manage it efficiently enough to deliver good returns?

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## The challenges of mixed cargo handling

The opportunity of servicing mixed cargo shippers is not without its challenges.

While port authorities across the world have been focused on developing infrastructure and systems with standard size containers as the central focus, non-standard, break bulk cargo presents a unique challenge. Similar challenges arise when trying to track break bulk cargo with systems and machines that are built to scan and track containers.

The container focus of most yard configurations results in less than optimal space utilization and ship turnaround times. Similarly, the container-biased terminal operating systems (TOS) products lack the flexibility to managing non-standard size cargo. Until now.

## Putting some wind in your sails: The mixed cargo rationale

There are a number of advantages for all stakeholders involved in a port to invest in capabilities for the efficient handling of mixed cargo. Advantages of scale exist from a product point of view—handling the same product both conventionally and containerized can generate operational efficiencies. In addition, a terminal or a shipping line can offer its customers a fuller range of services.

To be competitive, it is increasingly important for the operators of growing ports to demonstrate the ability to combine break bulk and containers. For a port to be competitive in terms of quality, throughput and cost, it all boils down to efficiency of operations and the speed with which ships can be turned around carrying the most optimal loads.

While the challenge of managing containerized and break bulk cargo within the same operational framework may seem daunting at the start, it can be tackled, and indeed can be turned into a lucrative operation, with a sophisticated, state-of-the-art TOS that is customized to the exact specifications of the port.



In the current tough economic climate where capital is constrained for ports, relatively little spending on a sophisticated TOS goes a very long way. A TOS that allows the port to raise efficiency and capital utilization levels, and extract every bit of revenue potential with existing physical infrastructure is a wise investment.

Implementing a TOS customized to the needs of the port has the potential to vastly improve ship turnaround times as well. While a port can merely ‘make do’ with a stock standard TOS developed with a one-size-fits-all approach that focuses only on container cargo management, an ambitious, growing port will excel under a system that is customizable and especially suited to handling containers and mixed cargo.

## Catalyst for change: Efficiencies = reduced costs, increased revenues

Systems designed to manage mixed cargo operations will deliver the right efficiencies, not ad-hoc solutions bolted on to deal with break bulk.

A state-of-the-art, comprehensive TOS efficiently performs all standard processes using bills of lading, positions cargo within user-defined storage areas (with placement restriction capabilities to ensure logical placement of cargo), right through to delivery via rail, road, vessel or packaging into containers for handling.

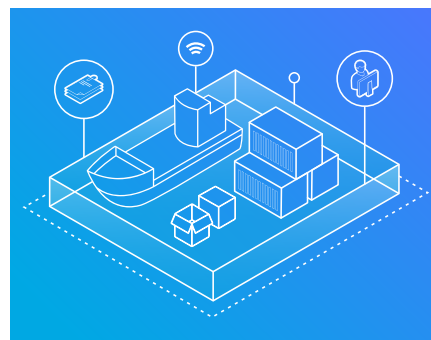
Modern terminal operating systems work on, and with, most standard computing hardware (mobile devices, barcode and RFID scanners, desktops and laptops) negating the need for expensive custom-manufactured devices.

While the advantages of deploying an advanced TOS to handle mixed cargo are numerous, foremost is the visibility of current operations in a simple graphical interface, measurable proof of efficiencies gained with clearly defined Key Performance Indicators (KPIs).

KPI data presented in an easy to understand format allows ports to monitor and analyze performance to improve operations and realize greater efficiencies.

Port-centric operations stand to gain immensely due to the ability to plan further ahead and offer greater visibility of the berths and facilities available for the port's customers.





### Take the next step: Claim your share of the mixed cargo market

Managing mixed cargo can be a challenge, or an opportunity to claim market space. An ambitious, growing port needs a capable systems partner who understands the complexities involved in moving containers as well as vehicles, steel, forestry products and other assorted break bulk, and can help simplify the entire process.

If you're in a team that's leading an ambitious and growing port, the following are some questions to consider when evaluating your systems:

- Is the existing port and terminal infrastructure tuned to maximize efficiencies while handling both containerized and break bulk cargo?
- Is your port using the most advanced, state-of-the-art TOS designed to manage multi-cargo operations? Can it treat each item of general cargo as a separate entity?
- Does the TOS operate in a silo, or does it 'talk' to all the applications within the port ecosystem maintaining synchronization with all systems?
- If you are considering upgrading to a new TOS, how quickly will the port be able to recover the return on investment accruing through resultant efficiencies, reduced costs and increased revenues?

For ports focused on improving efficiencies, competing aggressively for market share and taking the fight to the mega-ports, the answer lies in a terminal operating system that offers flexibility in handling mixed cargo and a high degree of reliability to manage overall operations.

### About Master Terminal from Jade Logistics Group

*Designed to handle all cargo types in one integrated system, Master Terminal is the world's leading terminal operating system (TOS) for mixed cargo ports.*

*Master Terminal is licensed at over 120 terminals worldwide, from vehicle terminals in Italy to steel terminals in North America.*

*Implementation is the key to success, and our implementation record is second to none in the industry. Our proven and robust methodology, partnership approach, thorough training and unrivaled implementation timeframes deliver tangible results fast.*

*Jade Logistics has been designing, building, and supporting innovative logistics software since 1993. Our experienced people understand the global logistics industry and are the foundation on which we build long-term relationships with our customers.*

*We have offices in New Zealand, Australia, USA, the Netherlands, the United Arab Emirates, and Indonesia.*

For more information, visit us at **[jadelogistics.com](http://jadelogistics.com)**